

CONCEPTUAL DIVERSITY IN EPISTEMOLOGY

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Rational belief belongs to a cluster of normative concepts that also includes reasonable, justified, and warranted belief. Each of these notions is commonly used by epistemologists, and along with the notion of knowledge, they form a central part of the subject matter of epistemology. However, there is no generally agreed way of understanding these notions. Nor is there even agreement as to whether they are equivalent. Some epistemologists employ them interchangeably; other epistemologists choose to express their conclusions using only one of the above notions and avoid making use of the other notions; yet other epistemologists distinguish among two or more of the notions.

It is generally agreed, however, that beliefs are the appropriate focus for epistemological investigations into these notions, or for some epistemologists, degrees of belief. Decisions, actions, plans, intentions, strategies and many other phenomena are assessed in terms of how rational, reasonable, justified, or warranted they are, but when doing epistemology, the aim is to understand what it takes for a belief to be rational, reasonable, justified, or warranted. To be sure, epistemologists also often refer to propositions, statements, claims, hypotheses, and theories as being rational, reasonable, justified, or warranted, but in general these uses are best understood as derivative. To say, for example, that a theory is reasonable is to say (very roughly) that the relevant evidence is such that were an individual acquainted with this evidence, it would be reasonable for the individual to believe the theory.

Despite the centrality of the above notions for epistemology (again, along with the notion of knowledge), there is an under appreciation of the fact that these notions are often used in the literature in strikingly different ways and a corresponding lack of explicit discussion of what desiderata the accounts of these notions should be satisfying. I will be attempting to correct these deficiencies. In particular, I will be making recommendations for how to distinguish these notions; I will be arguing that what is implicitly assumed in much of the literature to be a key desideratum for accounts of some of the above notions is not in fact a genuine desideratum; on the other hand, I will be identifying several desiderata which have not been adequately recognized in the literature; and finally, I will illustrate how the conceptual distinctions I am recommending fit together in an interlocking system that holds out the hope for a well-integrated and philosophically respectable general theory of rationality.

1. Rational (reasonable, justified, warranted) belief and knowledge.

The enormous impact of Edmund Gettier's 1963 article, "Is Justified True Belief Knowledge?"¹ was dependent on the assumption, common at the time, that

¹ Edmund L. Gettier, "Is Justified True Belief Knowledge?" @ *Analysis*, XXV (1963), 121-

knowledge could be adequately defined as justified true belief. Gettier presented a pair of counterexamples designed to illustrate that such a definition is not adequate. On the other hand, nothing he said cast doubt on the assumption that justification is one of the necessary ingredients of knowledge. Indeed, his article and the responses to it have cemented this assumption more firmly than ever into the literature.

The basic idea behind Gettier's counterexamples is that one can be justified in believing a falsehood P from which one deduces a truth Q, in which case one has a justified true belief in Q but does not know Q. Gettier's article inspired a host of similar counterexamples, and the search was on for a fourth condition of knowledge, one that could be added to justification, truth, and belief to produce an adequate analysis of knowledge.

The search thus presupposed that justification is an indispensable component of knowledge. In particular, the presupposition was that although justification, when added to true belief, is not necessary and sufficient for knowledge, it in conjunction with some fourth condition designed to handle Gettier problems, when added to true belief, is necessary and sufficient.

In the aftermath of Gettier's article, various fourth conditions were proposed, many of which were variants of the idea that knowledge requires one's justification to be either nondefective or indefeasible, where a justification is nondefective if (roughly) it does not justify any falsehood, and a justification is indefeasible if (roughly) it cannot be defeated by the addition of any true statement. However, a secondary but ultimately more influential response to Gettier's counterexamples was to wonder whether something less explicitly intellectual than justification, traditionally understood, is better suited for elucidating knowledge. Justification is traditionally associated with having or at least potentially being able to generate an argument in defense of one's beliefs, but in many instances of knowledge, nothing resembling an argument seems to be involved.

Alvin Goldman played a key role in this secondary response to Gettier's article. He was an early champion of a causal theory of knowledge. In a 1967 article, he contended that knowledge requires there to be an appropriate causal connection between the fact that makes a belief true and the person's having that belief.² This proposal nicely handled the original cases described by Gettier, but it ran into other problems. Knowledge of mathematics, general facts, and the future proved especially difficult to account for on this approach. Nevertheless, Goldman's recommendation captivated many epistemologists, in part because it fit well with the view of knowledge implicit in the emerging naturalized epistemology movement. According to this view, knowledge is best conceived as arising 'naturally' from our complex causal interactions with our environment. To think of knowledge principally in terms of our having a justification for our beliefs is to intellectualize the notion to an unacceptable degree. Some kinds of knowledge, especially highly theoretical knowledge, might involve our having a justification for what we believe, but other kinds typically do not, for example, simple perceptual knowledge. Our perceptual equipment collects and processes information from our environment and adjusts our opinions accordingly, all without argument or deliberation except in unusual cases.

Thus, in the eyes of many philosophers, whatever the specific defects of Goldman's causal theory of knowledge, it at least had the virtue of shifting the focus away from questions of our being able to justify our beliefs intellectually and towards questions of our being in an appropriate causal or causal-like relation with our external environment. The philosophical task, according to this way of thinking about knowledge, is to identify the precise character of this relation. A simple causal connection between the fact that makes a belief true and the belief itself won't do. So, some other 'natural' relation needs to be found.

There has been no shortage of proposals, but it was Goldman again who formulated the view that had the widest appeal, the reliability theory of knowledge. Contrary to what he had proposed earlier, Goldman now argued that for a person's belief to count as knowledge, it is not necessary that the belief be caused by the fact that makes it true, although this will often be the case. It is necessary, however, that the processes, faculties, and methods that produced or sustain the belief be highly reliable.

Reliability theories of knowledge led in turn to new and distinctive accounts of epistemic justification, specifically, externalist ones. Initially, reliabilism was part of a reaction against justification-driven accounts of knowledge, but an assumption drawn from the old epistemology tempted reliabilists to reconceive justification as well. The assumption is that by definition justification is that which has to be added to true belief to generate knowledge, with some fourth condition added to handle Gettier-style counterexamples. Goldman had already argued that knowledge is reliably produced true belief. Relying on the above assumption, he further concluded that epistemic justification must also be a matter of one's beliefs having been produced and sustained by reliable cognitive processes. Because a cognitive process is reliable only if it is well-suited to produce true beliefs in the external environment in which it is operating, this is an

² Alvin Goldman, 'A Causal Theory of Knowing,' @ *The Journal of Philosophy*, 64, 357-372.

externalist account of epistemic justification. By contrast, most foundationalists and their traditional rivals, coherentists, are internalists, whose accounts of epistemic justification emphasize the ability to marshal considerations in defense of one's beliefs.

The proposals by Goldman and others provoked an enormous literature on the relative advantages and disadvantages of externalism and internalism in epistemology.³ Most of this literature assumes that externalists and internalists are defending rival theories and that, hence, both cannot be right. However, a more interesting reading of the dispute is that

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³ For a summary and discussion of the relevant issues, see William Alston, *Epistemic Justification* (Ithaca: Cornell University Press, 1989), especially chapters 8 and 9. Also see Robert Audi, "Justification, Truth and Reliability," *Philosophy and Phenomenological Research*, 49 ((1988), 1-29; Laurence Bonjour, "Externalist Theories of Empirical Knowledge," in French, Uehling, Wettstein, eds., *Midwest Studies in Philosophy*, Vol. V (Minneapolis: University of Minnesota Press, 1980), 53-71; Richard Fumerton, "The Internalism-Externalism Controversy," in J Tomberlin, ed., *Philosophical Perspectives*, Vol. 2 (Atascadero: Ridgeview, 1988); Alvin Goldman, "Strong and Weak Justification," in Tomberlin, ed., *Philosophical Perspectives*, Vol. 2 (1988); and Ernest Sosa, "Knowledge and Intellectual Virtue," in E. Sosa, *Knowledge in Perspective*, 225-244.

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a a a 9È·\$ÊP·\$ÊP BINA???? m, that epistemic justification be explicated in such a way that it turns out to be one of the key components of knowledge. Internalists, by contrast, are principally interested in explicating a sense of justification that captures what is involved in having beliefs that are defensible from one=s perspective, but along the way they see themselves as also providing the materials for an adequate account of knowledge, because they too assume that justification is by definition that which has to be added to true belief to get knowledge, with some fillip to handle Gettier problems. So, for internalists, the primary desideratum for an account of epistemic justification is that it provide an explication of internally defensible believing, and it is a secondary benefit that it also capture what has to be added to true belief in order to get a good candidate for knowledge.

The result is two very different ways of thinking about epistemic justification, which are easy to conflate, especially since some of the most influential figures in the history of epistemology thought that one and the same notion could capture both ideas. Descartes, for example, recommended that we believe only that which is altogether impossible to doubt and, hence, internally beyond the possibility of criticism. However, he also thought by doing so we could be altogether assured of acquiring knowledge. Few epistemologists are so sanguine anymore. Descartes= search for an internal procedure that would provide a guarantee of knowledge of one=s external environment proved not to be feasible, but the lesson is not that either the internal or external aspect of Cartesian project has to be abandoned. The lesson, rather, is that there are different, equally legitimate projects for epistemologists to pursue. One project, roughly put, is that of exploring what is required for one to put one=s own intellectual house in order. Another, again roughly put, is that of exploring what is required for one to stand in a relation of knowledge to one=s environment. It is not unusual in the epistemological literature for the results of both kinds of explorations to be reported using the language of justification and rationality, but the terms <justified belief= and <rational belief= have different senses when used by externalists than when used by internalists. The externalist sense tends to be closely connected with knowledge, whereas the internalist sense tends to be closely connected with internally defensible believing. Confusion occurs when epistemologists slide back and forth between the two, sometimes using the language of justified and rational belief to report what has to be added to true belief to get a serious candidate for knowledge and other times to report what is involved in having beliefs that are defensible given the believer=s perspective.

This confusion is encouraged by the methodological assumption mentioned above, the assumption that the properties which make a belief justified or rational are by definition such that when a true belief has those properties, it is a good candidate to be an instance of knowledge, with some other condition added to handle Gettier-style counterexamples. This assumption has unfortunate consequences for both the theory of rational belief and the theory of justified belief, which I will be later distinguishing, because it places them in service to the theory of knowledge. Given the assumption, a theory of rational or justified belief can be regarded as adequate only if it contributes to a successful theory of knowledge. The theories of rational and justified belief are in this way tied more closely to the theory of knowledge than to a general theory of rationality. Correspondingly, the assumption has the effect of divorcing the theories of rational and justified belief from theories of rational and justified decisions, plans, actions, strategies,

etc., and it likewise has the effect of even divorcing them from our everyday concerns about the rationality and justifiedness of opinions, which tend to emphasize who has been responsible in their beliefs rather on who has satisfied the prerequisites of knowledge.

The remedy is for epistemologists, at least at the beginning of their enterprise, to be wary of simply assuming that knowledge can be adequately understood in terms of rational or justified true belief plus some condition to handle Gettier problems, and, correspondingly, to be wary also of the idea that there is a simple, necessary tie between the theories of rational and justified belief and the theory of knowledge. As the theory of knowledge and the theories of rational and justified belief are independently developed, interesting and even surprising connections among them may be revealed, but it should not be simply taken for granted at the start of the enterprise that justified belief or rational belief is by definition a component of knowledge.

Relaxing the tie between knowledge on the one hand and rational or justified belief on the other hand is potentially liberating for both sides. It frees the theory of knowledge from an overly intellectual conception of knowledge, thus smoothing the way for treatments that give due recognition to the fact that most people cannot provide adequate intellectual defenses for much of what they know, and without the need for awkward attempts to read back into the account of knowledge some duly externalized notion of justified or rational belief. Simultaneously, it creates space for the theories of rational and justified belief to be embedded in a general theory of rationality. These notions ought not be cordoned off from other notions of rationality, as if the conditions that make a belief rational or justified had little to do with the conditions that make a decision, strategy, action, or plan rational or justified. The way we understand the rationality and the justifiedness of beliefs ought to be of a piece with the way we understand the rationality and justifiedness of other phenomena.

2. ???Epistemic and non-epistemic rationality of beliefs???

The first step towards a well-integrated theory of rationality is to recognize that rationality is a goal oriented notion. Whether the question is one about the rationality of beliefs, decisions, intentions, plans, or strategies, what is at issue is the effective pursuit of goals. Questions about the rationality of a decision, for example, are in the first instance questions about how effectively the decision seems to satisfy some presupposed set of goals. I say "seems" because it is too stringent to insist that the decision is rational only if it in fact satisfies the goals. Rational decisions can turn out badly. Likewise, it is too stringent to insist that a decision is rational only if it is probable that the plan will satisfy one's goals, since it may be that no one could be reasonably expected to see that the decision was likely to have unwelcome consequences. Considerations such as these suggest a general schema of rationality: A decision (plan, action, strategy, belief, etc.) is rational for an individual if it is rational to believe that it will satisfy his or her goals.

An obvious drawback of this schema is that it makes reference to the notion of rational belief, thus leaving us within the circle of notions we wish to understand and, hence, without an adequate general account of rationality. I will return to this problem later, but I want first to look at some other questions about the schema that also need to be addressed. For

example, the schema makes the rationality of a decision a function of whether it is rational to believe that the decision will have satisfactory consequences, but for whom does this have to be rational to believe. The decision maker herself? If so, under what conditions? Are the relevant conditions the ones that actually obtain, even if given those conditions, she has little or no time to gather evidence or reflect on the decision? Or, is what matters what it would be rational for her to believe were she to have adequate evidence and also the time and abilities to reflect adequately on this evidence? Or perhaps the relevant question is whether it would be rational for most people in her community, were they to be in her circumstances, to believe that the decision would effectively satisfy her goals? Alternatively, perhaps what matters is what it would be rational for the relevant experts to believe or what it would be rational for a perfectly veridical inquirer to believe, that is, someone who had only true beliefs about the relevant circumstances.

There is no single correct answer to such questions. Judgements about the rationality of an individual's decision, plan, strategy, etc. are judgements about whether it is rational to believe that the decision, plan, strategy, etc. will satisfy the individual's goals, but in making these judgements we can and do try to project ourselves into a variety of perspectives. Consider an illustration of this variety. Suppose that Smith, who wants to drive to the shore as quickly as possible, is at an intersection with roads going off in four directions, and he is considering which of the four roads he should take. He has never driven any of the roads. However, he has just seen a car pulling a boat take the northern road. If he were to reflect for a moment on the significance of this, he would conclude that the car is probably on its way to the shore, since it is early morning and in the early morning more people with boats are traveling towards the shore than away from it. However, he does not reflect on what he has seen and instead believes that the eastern road is the one most likely to get him to the shore quickly. Despite what he believes and despite the evidence of having seen a car with a boat in tow heading north, it is common knowledge within the community, of which Smith is a member, that the shore is to the south and that, thus, the southern road is the most direct route to it. On the other hand, unbeknownst to anyone in the community, the southern road has just become temporarily blocked by a rock slide and, thus, it is only the western road that will get Smith to the shore today, albeit much later than he had hoped because of its very indirect route.

Now imagine four scenes. In each, a friend and I are observing Smith's decision at the intersection, and we are aware that he wants to go to the shore. In the first scene, my friend has heard that the shore is to the south but she has also seen the car with a boat in tow head north. As a result, she is unsure whether the shore is to the north or south, but she is confident that the eastern road does not lead to it. As Smith begins to take the eastern road, she shakes her head in wonderment and says, "It's completely irrational for Smith to take the eastern road." I respond, "No; it's just that he's truly convinced that the eastern road leads to the shore. And given that he believes this, it's rational for him to take this road. Indeed, taking either of the other roads would be deeply irrational, since he doesn't believe either of them lead to the shore, and that's where he wants to go today."

In scene two, I am again talking with my friend. Neither of us is sure where the shore is, but as we watch Smith turn eastward, I say to her, "It looks as if he is going east, but given the information he has, it would be rational for him to take the north road. If he were to consider for a moment

the significance of the car pulling the boat going north, he himself would admit that taking the north road is the reasonable choice. Indeed, he himself would be critical of any other decision."

In scene three, neither my friend nor I have been on any of the four roads, but we are both aware that most people in the community know that the shore is to the south and that Smith is a member of the community. As Smith turns east, I say to my friend, "It's common knowledge that the shore is to south. So, if he wants to get to the shore, he has reasons to take the southern road, not the eastern road. It's what a rational person would do in his situation."

In scene four, my friend and I see Smith take the eastern road and shake our head in disapproval, since we are both aware that it is common knowledge that the beach is to the south. We then go off to the local cafe, where later over coffee we hear that the southern road has been closed by a rock slide and that the slide occurred prior to Smith's decision at the intersection. Being aware that Smith was desperate to get to the beach today, I say, "Well, what do you know. The western road turned out to be the only route open to the shore today. So, contrary to what we thought, Smith had good reasons to take the western fork. Only it stood any chance of getting him to the shore today. Neither he nor we knew it, but it was rational for him to take the western road."

In each of the above scenes, I am evaluating Smith's decision in a way which we commonly evaluate the decisions of others, and in each of the scenes I report this evaluation using the language of rationality and reasonability. In none of the scenes am I using that language in an extraordinary way. What I say, given the context, is not unnatural, nor is it clearly and unambiguously mistaken. And yet, in one scene I say it is rational for Smith to take the east road; in another, I say it is rational for him to take the north road; in a third, I say it is rational for him to take the south road; and in the fourth, I say it is rational for him to take the west road.

Each of these claims can be appropriate, because claims of rationality are best interpreted as presupposing not only a goal (or set of goals) but also a perspective which can vary with the context. There are a variety of concerns, interests, and purposes that we bring to our evaluations of the decisions (plans, strategies, etc.) of other people, and these concerns, interests, and purposes help fix the perspective from which the decision is being evaluated. When we express these evaluations using the language of rationality, we are making a claim about whether from the given perspective, it is rational to believe that the decision effectively satisfies a goal (or a set of goals).

Sometimes we are interested in evaluating decisions, plans, strategies, etc. from the person's own current perspective. In the first of the above scenes, for example, I am concerned to point out that relative to what Smith believes, it is appropriate for him to take the east road. He believes that the shore is to east and, thus, relative to this belief, it is rational for him also to believe that taking the east road will satisfy his goal of getting to the shore and that taking any of the other roads will not satisfy this goal. I express this observation by saying that it is rational for him, in this radically subjective sense, for him to take the east road.

Other times we are not content with merely pointing out that the person's decisions, plans, strategies, etc. make sense given his current

perspective. We want also to evaluate that perspective. An especially effective way of doing this is to point out that the person is not meeting standards that he himself would acknowledge were he to be reflective. This is the way I am evaluating Smith's decision in the second of the above scenes. I point out that he has information that on reflection he himself would regard as indicating that the shore is to the north. Thus, were he to be reflective, he himself would believe that taking the north road holds out the best hope of achieving his goal, and he thus would be critical of his decision to take the east road. Once again, I make this point using the language of rationality. I say that it is rational for him to take the north road, because this is the only decision that does not make him vulnerable to self-criticism on reflection.

Still other times we are not so concerned with evaluating a person's decisions, plans, strategies, etc. in terms of his own perspective and standards, not even those that he would have were he to be reflective. We are instead interested in looking at his decision in terms of the perspective of his community and in terms of standards that are *Ain the air* in that community. In legal contexts, for example, what often matters is whether the defendant has exercised reasonable care and diligence, and the various legal arguments about the defendant's actions are often framed in terms of what a hypothetical reasonable individual would have done in the circumstances at issue. This hypothetical individual is conceived as someone who has abilities and information which are relatively standard in the community. We make judgements of this sort outside of legal contexts as well. In the third scene above, for instance, both my friend and I are aware that it is common knowledge that the beach is to south. Thus, relative to this perspective, it is appropriate to believe that the best way for Smith to achieve his goal is to take south road. I express this observation by saying it is rational for him to drive south; it is what a standard, reasonable person in his community would do.

On yet other occasions, we are not interested in evaluating a person's decisions, plans, strategies, etc. in terms of his own perspective or even those of his community. We are instead interested in determining which of the alternatives has the best objective probability of achieving the goals in question, regardless of what the decision-maker himself or others believe and even regardless of what information is available to them. In effect, we want to evaluate the decision from the perspective of a veridical believer, that is, one who has only true beliefs about the relevant circumstances. If it would be rational for such a veridical believer to regard one of the alternative as having a better chance than the others of achieving the goals in question, then there are good objective reasons to prefer that alternative over the others. In the fourth scene, for instance, I want to emphasize that unbeknownst to Smith and other people in the community, taking the western road provided Smith with the best chance of getting to the beach. Once again, I report this observation using the language of rationality. I say it is rational, in this objective sense, for him to take the south road.

In the above example, I have assumed that the only relevant goal is that of getting to the shore, but of course in many instances we are interested in evaluating a decision, plan, strategy, etc. with respect to how effectively it promotes a set of goals, not all of which are equally important. In such cases, the rationality of a decision is a matter of its estimated desirability, where this is a function of both of what it is rational to believe about the effectiveness of the decision in promoting these goals and of the relative value of these goals. But in these cases as in the simpler cases, 'it is rational' is to be understood in terms of a perspective.

Depending on our purposes and the context, we are sometimes interested in what is rational to believe concerning the effectiveness of a decision from the perspective of the decision-maker himself, or perhaps the perspective he would have were he to be appropriately reflective; other times we are interested in what it would be rational to believe about the effectiveness of the decision from the perspective of a typical reasonable person in the community; still other times we are interested in the perspective of one who knows the actual, objective probabilities.

In everyday discourse, the perspectival element in claims about the rationality of a decision, plan, strategy, etc. is rarely explicit. To be sure, sometimes the context makes the perspective obvious. For example, if someone says, "I don't care how things seem to you or anyone else, the rational thing for you to do is ___", we can pretty well assure that the person is presupposing an objective perspective. But on other occasions the perspective being presupposed won't be so obvious, and when it isn't, we are always entitled to ask of someone making a claim of rationality, "from what perspective, from what viewpoint, is this supposed to be a rational (or irrational) thing to do?"

There are other questions about the schema which also have to be addressed. For instance, for a decision, plan, strategy, etc. to be rational, must it be rational to believe that it does a better job of achieving one's goals than any of the alternatives, or might something less than the very best do? As I will be using the terms, <reasonability> admits of degrees whereas <rationality> does not. In particular, reasonability varies with the strengths of one's reasons, and the rational is that which is sufficiently reasonable. This usage has the welcome consequence of leaving open the possibility that several options might be rational for an individual even though there are reasons to prefer some of these options over others. A decision, plan, strategy, etc. is rational if it is rational to believe that it will do an acceptably good job of achieving one's goals.

To say that a decision, plan, strategy, etc. will do an acceptably good job of achieving one's goals is to say its estimated desirability is sufficiently high, where estimated desirability is a matter of what it is rational to believe about its probable effectiveness in promoting one's goals and the relative value of these goals. More precisely, a decision, plan, strategy, etc. is rational if its estimated desirability is acceptably high given the context, where the context is determined by the relative desirability of the alternatives and their relative accessibility. The fewer alternatives there are with greater estimated desirabilities, the more likely it is that the decision in question is rational. Moreover, if these alternatives are only marginally superior or are not easy to implement, then it is all the more likely that the decision, plan, or strategy is rational. It will be rational because it is good enough, given the context.

I have been arguing that rationality claims are to be understood as claims about whether it is rational from a given perspective to believe that the decision, plan, strategy, etc. will do an acceptably good job of achieving one's goals, where the perspective we presuppose varies with our interests, concerns, and purposes. In a similar way, the set of goals we take into account when evaluating a decision, plan, strategy, etc. varies with the context. We are sometimes in assessing what it is rational for an individual to do, all things considered, and we thus take into consideration all of the individual's goals. In other contexts, however we take into consideration only a subset of his goals, because we are interested in a specific type of

rationality. For example, we may want to evaluate someone's actions with respect to goals that concern his or her economic well-being. If we judge that doing A would be an effective means of promoting this subset of goals, we can say that A is rational, in an economic sense, for the individual. We can say this even if, with respect to all the person's goals, both economic and non-economic, it is not rational to do A.

Thus, the general schema of rationality can be refined: A decision (plan, strategy, etc.) is rational in sense X for an individual if it is rational from perspective P to believe that the plan will do an acceptably good job of satisfying his or her goals of type X.

This distinction among different types of rationality is especially important for epistemology. When assessing each other's beliefs, we are typically not interested in the total constellation of our goals. Rather, our interest is typically in those goals that are distinctly intellectual. For example, as a rule, in assessing what it is rational for you to believe, we would typically regard as irrelevant the fact (if it is one) that were you to believe P, it would make you feel more secure. More notoriously, in assessing whether it might be rational for you to believe in God, we are unlikely to join Pascal in regarding as relevant the possibility that you might increase your chances of salvation by being a theist. Or consider another example. Believing that the workmanship on American automobiles is better than that on other automobiles would presumably increase the likelihood of my buying an American car and thus encourage at least in a small way the prospering of the American economy, which we can stipulate is one of my goals. Even so, if you and I are discussing what it is rational for me to believe about the workmanship on American cars, we would ordinarily regard these potential benefits of belief as irrelevant. We might be willing to grant that the goal of promoting the American economy gives me at least a weak reason to buy American cars, but we are unlikely to take this goal into account when we are discussing what I have reasons to believe.

Examples of this sort can be multiplied indefinitely. I have a friend who is convinced there is life elsewhere in the universe,, because he thinks that not all of the reported sightings of extraterrestrials can be explained away. By contrast, I do not think that these sightings are strong evidence for there being life elsewhere, and the two of us have had friendly arguments over the issue. But in addition, my friend has remarked more than once that his belief that there is life elsewhere in the universe has had various beneficial effects upon him. He says that it has made very long-term scientific projects seem more natural to him; it has heightened his environmental sensitivity, including his appreciation for the diversity of life on earth; and in general it has proven an effective antidote to what he regards as his general tendency to parochialism. In making these remarks in an off-handed way, it was clear that he was not offering them as reasons in defense of his belief that there is life elsewhere in the universe. Nor did he intend to be offering them as reasons for me to believe this. Of course, it may well be that my friend was exaggerating the impact that his belief has had on him, but still, it is at least arguable that the belief has had these beneficial effects for him. Moreover, it might well be the case that the belief would produce similar benefits for me. Nevertheless, it never occurred to either of us to regard these possible benefits as either a reason for him or a reason for me to believe there is life elsewhere. But why not? Why is it that in our deliberations and discussions about what to believe, we so rarely consider the practical benefits of belief, even though in principle there seems nothing amiss in doing so?

To say that in deliberating and debating over a claim we rarely take into consideration the pragmatic benefits that would accrue to us from believing it is not to say that such benefits do not play a significant role in shaping what we believe. They often do. It is just that they typically exercise their influence in a less than fully explicit way. Think of issues which are relevant to our own self-image. It is a commonplace that about such issues many people have a tendency to believe that which is most reassuring to them. They do so not so much because they have consciously decided that this is a good policy. On the contrary, if asked, they would probably reject such a policy as ill-advised, but it nonetheless does seem to be a policy that many people unconsciously follow. Indeed, there is empirical evidence of their doing so. Studies of so-called <overconfidence bias= document that in wide variety of circumstances subjects consistently overestimate their own abilities. In an enormous survey of one million high school seniors, students were asked to evaluate themselves as average, below average, or above average in leadership ability. Accurate self-assessments would be expected to result in roughly equal percentages of students in the highest and lowest categories, but the actual self-assessments were strikingly different. A full 70% of the students viewed themselves as being above average in leadership ability, whereas only 2% regarded themselves as being below average. Even more remarkably, when asked to rate their ability to get along with others, virtually all the students thought they were above average, with 60% evaluating themselves in the top 10% and 25% evaluating themselves in the top 1%. Similar studies have been conducted on adults with similar results. For example, a hugely disproportionate percentage of adult drivers rate themselves as better than average drivers. Yet another survey, with special relevance to academia, revealed that a stunning 94% of university professors assessed themselves as better at their jobs than their average colleagues.⁴

So, pragmatic benefits do seem to play a significant role in determining what people believe, even if the people themselves are often unaware of this role. This is an interesting point, but in itself it is not terribly surprising, given that people are often not fully aware of the reasons which motivate their behavior and opinions. What is surprising, and indeed even puzzling, is that in our discussions and deliberations about what it is rational to believe, the working assumption seems to be that the practical benefits of belief are not even relevant to the issue of what it is rational for us to believe. There is no comparable assumption at work in our discussions and deliberations about what it is rational for us to do. We commonly decry those who act in a narrowly self-interested way, but we pointedly do not assume that self-interested considerations are beside the point. However, in discussions about what it is rational for us to believe, we ordinarily do assume this. Indeed, we assume that even the social usefulness of a belief is beside the point.

⁴ Thomas Gilovich, *How We Know What Isn't So* (New York: McMillan, 1991), 75-87. For a summary of research that has been conducted on illusions about one's self, and an argument that these illusions are often psychologically useful, see S.E. Taylor, *Positive Illusions: Creative Self-Deception and the Healthy Mind* (New York: Basic Books, 1989).

On the face of it, this seems puzzling. After all, beliefs have consequences for the quality of our lives and the lives of those around us. So, why shouldn't such consequences be taken into account in deliberations about what it is rational to believe? Yet, our intellectual practice is to regard these consequences as irrelevant to the rationality of our beliefs.

This is not a new puzzle. It is merely the most general form of the dispute over Pascal's wager. There are two main points that Pascal wanted to make about the wager, one about reasons for belief generally and one about reasons for belief in God. The general point is that the practical benefits of a belief can be relevant to its rationality. The second, and more specific point, is that the potential benefits of belief in God make it rational for us to have this belief.

I will be arguing that Pascal is right about this first point. I do not think that he is also right about the second point, but I won't be arguing this issue here. More specifically, I will be proposing a general theory of rationality, and then within the context of this theory I will illustrate how the practical consequences of a belief can potentially affect the rationality of our having that belief. However, within the context of the general theory, it is also possible to defend our intellectual practice of generally not taking the practical benefits of a belief into account in our deliberations and debates about what to believe. This general practice is defensible, I will be arguing, because in all but a few cases, our overriding pragmatic interests are best served by having beliefs which are accurate and comprehensive. In other words, in all but a few extreme cases, our pragmatic reasons for belief reinforce our epistemic reasons for belief. It is this fact which provides a resolution to the above puzzle.

3. The epistemic goal

In evaluating the rationality of beliefs, epistemologists have traditionally been concerned with not just any intellectual goal, but rather a very specific goal, that of now having beliefs which are both accurate and comprehensive. This goal has two aspects, either of which could be championed more easily on its own than in tandem with the other. If the goal were only to have comprehensive beliefs, the strategy would be to believe as much as possible, whereas if the goal were only to have accurate beliefs, the strategy would be to believe nothing which is not maximally certain.

It is important to note the synchronic character of this goal. The goal is not to have accurate and comprehensive beliefs at some future time but rather to have such beliefs now. To understand the significance of characterizing the goal in this way, imagine that one's prospects for having accurate and comprehensive beliefs in a year's time would be enhanced by believing something for which one now lacks adequate evidence. For example, suppose a proposition P involves a more favorable assessment of my intellectual talents than my evidence warrants, but suppose also that believing P would make me more intellectually confident than I would be otherwise, which would make me a more dedicated inquirer, which in turn would enhance my long-term prospects of having an accurate and comprehensive belief system. Despite these long-term benefits, there is an important sense of rational belief, indeed the very sense that traditionally has been of the most

interest to epistemologists, in which it is not rational for me to believe P.

Moreover, the point of this example is not affected by shortening the time period in which the benefits are forthcoming. It would not be rational, in this sense, for me to believe P if we were instead to imagine that believing P would somehow improve my prospects for having accurate and comprehensive beliefs in the next few weeks, or in the next few hours, or even in the next few seconds. The precise way of making this point is to say that in such a situation, it is not rational in a purely epistemic sense for me to believe P, where this purely epistemic sense is to be understood in terms of the present tense goal of now having accurate and comprehensive beliefs.

I am assuming here that goals can be concerned with current states of affairs as well as future states of affairs. However, if this usage to thought to stretch the standard meaning of <goal= too far, it is easy enough to devise alternative terminology. <Goal= can be replaced with <desideratum= or <value,= and epistemic rationality can then be understood in terms of what it is appropriate, or fitting, to believe, insofar as it is a desideratum (that is, a valuable state of affairs) for one now to have accurate and comprehensive beliefs.

There are different views about what exact properties a belief must have in order to be epistemically rational, but for my immediate purposes, what matters most is that it is a desideratum that the notion of epistemically rational belief be explicated without reference to any other notion of rationality (or any related notion, such as justified, warranted, or reasonable belief. In general, it is implicitly accepted in the literature that this is a desideratum. For example, foundationalists try to understand epistemic rationality in terms of a notion of basic belief and a set of support relations by which other beliefs are supported by the basic ones, and they would view it a defect if in their explication they had to make reference to a notion of rational belief (or justified, warranted, or reasonable belief) in characterizing basicity or the support relations. Coherentists try to provide an explication of epistemic rationality in terms of a set of deductive and probabilistic relations among beliefs and properties such as simplicity, conservativeness, and explanatory power, but they too would view it a defect if their explication smuggled in any reference to a notion of rational belief. Similarly for proponents of other accounts of epistemically rational belief.

This point is relevant to the general schema of rationality, according to which, a plan, decision, action, strategy, etc. is rational in sense X for an individual if it is rational from perspective P to believe that the plan will do an acceptably good job of satisfying his or her goals of type X. This schema makes use of the notion of rational belief, and it thus leaves us within the circle of notions we wish to understand. However, precisely because accounts of epistemically rationally standardly do not, and should not, themselves make use of the notion of rational belief or any of its close cognates, they provide the schema with a potential escape route from circularity.

In particular, with an account of epistemically rational belief in hand, the general schema of rationality can be further refined: A plan, decision, action, strategy, etc. is rational in sense X for an individual just in case it is *epistemically rational* to believe from perspective P that the plan, decision, action, strategy, etc. will do an acceptably good job of satisfying goals of kind X.

This refined schema still leaves for room for ambiguity with respect to the perspective. If we substitute into the schema the perspective of an

omniscient observer, the result will be an account of when, from a fully objective perspective, it is epistemically rational to believe P. If we substitute into the schema a perspective which is associated with the individual himself (his current perspective, the one he would have were he to be reflective, etc.), the result is an account of when, from the perspective of the individual himself, it is epistemically rational to believe P. For the moment, I will simply assume that we are interested in the perspective of the individual himself, so that I can focus on another point. Namely, according to this refined schema, other kinds of rationality are understood in terms of epistemic rationality, whereas epistemic rationality does not itself presuppose any other kind of rationality. The refined schema thus illustrates how epistemic rationality can serve as an anchor for other kinds of rationality. Moreover, the schema is perfectly general. It applies to all phenomena (plans, decisions, strategies, and so on) and to all forms of rationality for these phenomena (economic rationality, rationality all things considered, and so on). Most relevant for my present purposes, the rationality of belief is itself an instance of the schema. Even epistemically rational belief is an instance. For example, inserting the epistemic goal into the general schema for <goals of type x= results in the following: Believing P is rational in an epistemic sense if it is epistemically rational for one to believe that believing P would acceptably contribute to the epistemic goal of one=s now having accurate and comprehensive beliefs.

This instantiation of the general schema is compatible with all the major theories of epistemically rational belief. Every belief which satisfies the requirements of the proposed account of epistemic rationality is also an instance of the general schema, where the relevant goal is that of now having accurate and comprehensive For example, according to coherentists, it is epistemically rational for one to believe that believing P would acceptably contribute to the epistemic goal of one=s now having accurate and comprehensive beliefs only when the proposed coherentist conditions are met with respect to the proposition P, that is, only when P coheres appropriately with one=s other beliefs and hence it is epistemically rational to believe that P is true. According to foundationalists, it is epistemically rational for one to believe that believing P would acceptably contribute to the epistemic goal only when the recommended foundationalist conditions are met with respect to P and hence it is epistemically rational to believe that P is true; and similarly for other views.

4. Epistemic and non-epistemic rationality of belief reconsidered

A decision, plan, strategy, etc. is rational in sense X if it is epistemically rational for one to believe it will do an acceptably good job of satisfying goals of kind X. Recall, however, that >X= here can refer to all of one=s goals or only a subset of them. This creates a risk of confusion. If we take into consideration only economic goals, for instance, we may judge that it is rational (in an economic sense) for one to do X, but if we take into consideration all of one=s goals, both economic and non-economic, we may well conclude that it is not rational (all things considered) for one to do X.

These same possibilities for confusion arise when it is the rationality of beliefs which are at issue. Beliefs can be assessed in terms how well they promote the epistemic goal, but in principle they also can be assessed in

terms of how well they promote one's total constellation of goals. If it is epistemically rational for an individual to believe that believing a proposition P would effectively promote his or her overall constellation of goals, then it is rational for the individual to believe P, all things considered. There are two notions of rational belief at work here. The first is the anchoring notion, the notion of epistemic rationality, defined in terms of the purely epistemic goal. The second is a derivative notion, defined in terms of the anchoring notion and one's total constellation of goals. As mentioned earlier, there is nothing improper about evaluating beliefs in terms of this second notion, but in fact it is rare for us to do so. The puzzle is why this should be so.

In thinking about this puzzle, the first thing to notice is that many of our discussions and debates concerning what it is rational to believe take place in a context of trying to convince some person, perhaps ourselves, to believe some proposition. In an effort to persuade, we point out the reasons one has to believe the proposition in question. But notice, insofar as our aim is to get someone to believe something that she does not now believe, the citing of practical reasons is ordinarily ineffective. Even if we convince her that she has good pragmatic reasons to believe a proposition, ordinarily this is not enough to generate belief. By contrast, if she becomes genuinely convinced that she has good epistemic reasons C that is, reasons that indicate, or at least purport to indicate, that the proposition in question is likely to be true C this often is enough to generate belief.

A belief is a psychological state that, in Bernard Williams' phrase⁵, "aims at truth". John Searle makes essentially the same point in terms of direction of fit. Beliefs, he says, have a mind-to-world direction of fit: "It is the responsibility of the belief, so to speak, to match the world . . .".⁶ When we propose practical reasons for belief, we are not even trying to meet this responsibility. Our reasons do not aim at truth, and as a result, they normally do not prompt belief. At best they prompt the person to get herself into an evidential situation in which belief will be possible. Think of Pascalians who resolve to attend church regularly, surround themselves with believers, and read religious tracts in an effort to alter their outlook in such a way that belief in God will become possible for them.

Thus, insofar as our concern is to persuade someone to believe some proposition, there is a straightforward explanation as to why we are normally

⁵ See Bernard Williams, "Deciding to Believe," in Bernard Williams, *Problems of the Self* (Cambridge: Cambridge University Press, 1973).

⁶ John Searle, *Intentionality* (Cambridge: Cambridge University Press, 1983), 8.

not interested in the pragmatic reasons she has to believe the proposition C namely, it is normally pointless to cite them, given that they are not the kind of reasons that normally generate belief. Similarly, in our own deliberations about what to believe, we ordinarily do not consider what practical reasons we might have for believing something, and the explanation for this is similar to the third-person case. Deliberations concerning our practical reasons for belief are ordinarily inefficacious and hence pointless. Hence, our practice is to ignore them in deliberations about what to believe.

This is not an idiosyncratic practice. We have analogous practices with respect to deliberations about what to choose, try, or intend. Just as the reasons we cite for believing P are ordinarily ones that purport to show that P is true, so the reasons we cite for intending to do X are ordinarily ones that purport to show that doing X is worthwhile. Still, there can be reasons for intending to do X that do not even purport to indicate that doing X is worthwhile, just as there can be reasons for believing P that do not even purport to indicate that P is true. Imagine a situation in which the intention to do X will itself produce benefits, that is, it will produce these benefits even if in fact you do not do X. Consider an extreme example. Suppose someone offers me a million dollars if tomorrow I form an intention to drink a toxin on the day after tomorrow. If I form the intention tomorrow, I will get the money whether or not I actually drink the toxin on the day after tomorrow.⁷ Something analogous, even if less dramatic, can be true of everyday intentions. They too can have consequences that are independent of the intended acts, and if these consequences are sufficiently beneficial, they provide us with reasons to form the intentions in question. Nevertheless, our general practice is not to take such reasons into account when we are forming intentions or in arguing with others about the rationality of their intentions.

The puzzle, like the corresponding puzzle for belief, is why this should be so. Moreover, the solution to this puzzle is similar to the solution sketched above for the puzzle about belief. Namely, becoming convinced that one has these kind of reasons is ordinarily not enough to generate an intention to do X. So, insofar as we are trying to persuade someone to have this intention, it will normally be pointless for us to cite such reasons. By contrast, if we convince the person that actually doing X is worthwhile (as opposed to its being worthwhile to intend to do X), this often is sufficient to generate an intention to do X. Consider again the toxin puzzle. Even if I know that I can win the million dollars by forming an intention tomorrow to drink the toxin the day after tomorrow, this will normally not be sufficient to generate a genuine intention to drink the toxin. It may well be sufficient to generate an intention to act as if I were going to drink the toxin (in hopes of fooling the sponsor) but not a genuine intention to actually take the toxin.

There is a second, reinforcing, explanation as to why in general we do not deliberate about the pragmatic reasons we have for believing something.

⁷ This is Gregory Kavka's example. See Kavka, "The Toxin Puzzle," *Analysis* 43 (1983), 33-36.

It is that such deliberations are ordinarily redundant. Although we do have pragmatic reasons as well as epistemic reasons for believing, ordinarily our overriding pragmatic reason with respect to our beliefs is to have and maintain a comprehensive and accurate stock of beliefs. All of us are continually faced with a huge variety of decisions. Since we do not know in advance in any detailed way the kinds of decisions that we will need to make, we likewise do not know in advance the kind of information we will require in order to make these decisions well. This might not be terribly important were it not for the fact that a large number of these decisions are ones that will need to be made quickly, without the luxury of time either to engage in lengthy research or seek expert opinion. Instead, we will be forced to draw upon our existing resources and in particular upon our existing stock of beliefs. If that stock is either small or inaccurate, we increase the likelihood that our decisions will not be good ones.

So ordinarily, the system of beliefs that is likely to do the best overall job of promoting our total constellation of goals is one that is both comprehensive and accurate. Only by having such beliefs are we likely to be in a position to fashion effective strategies for achieving our various goals. But then, since by definition beliefs which are epistemically rational for us are beliefs which are rational for us insofar as our goal is to have accurate and comprehensive beliefs, it is ordinarily rational, all things considered, that is, when all of our goals are taken into account, to believe those propositions which it is also epistemically rational for us to believe. Thus, for all practical purposes, taking this phrase literally, we can usually safely ignore pragmatic reasons in our deliberations about what to believe.

To be sure, there are conceivable cases in which our epistemic reasons and our overall reasons for belief are pulled apart. Suppose you are aware that a madman will kill your children unless you come to believe, and not merely act as if you believe, some proposition P which it is clearly epistemically irrational for you, that is, irrational insofar as your goal is to have accurate and comprehensive beliefs. In such a situation, it presumably is rational for you to find some way of getting yourself to believe P. The importance of saving your children overrides other concerns. However, in the vast majority of cases, where the benefits of belief itself, regardless of accuracy, are not so powerful, there are pressures that keep what it is rational to believe, all things considered, from being in conflict with what it is epistemically rational to believe. Moreover, these pressures are made all the more intense by the fact that typically it is epistemic reasons, not other kinds of reasons, which persuade us to believe something. So, if we are to find a way of believing a proposition which is not epistemically rational, we may need to manipulate ourselves and our situation so that we eventually come to have what we take to be genuinely good evidence for the proposition. However, doing so may well involve maneuvering ourselves into what we would now regard as a misleading evidential situation. For example, suppose my friend convinces me that a belief in there being intelligent life elsewhere in the universe would have highly beneficial consequences for me, such as increasing my environmental sensitivity, enhancing my appreciation for the diversity of life on earth, and discouraging any tendency to parochialism. Then, I may well recognize that I have reasons to believe that there is intelligent life elsewhere, but even so, these reasons will ordinarily not be sufficient to prompt belief. So, how would I go about getting myself to believe this proposition?

The most straightforward approach would be to commit myself to an impartial investigation of the issue in hopes of eventually uncovering good evidence of life elsewhere. Unfortunately, insofar as I now lack good

evidence for this proposition, I will usually also lack good evidence for thinking that an impartial investigation will uncover evidence of its truth. Or to express the point from the other direction, if I did have good evidence for thinking that a fair investigation would reveal good evidence for the truth of the proposition, this itself would ordinarily constitute good evidence for the truth of the proposition.

The alternative to a thorough, impartial investigation is to plot against myself so as to get myself in what I would now regard as a worse evidential situation. In particular, I could try manipulating myself and my situation so that I come to have misleading but nonetheless convincing evidence. Unfortunately, such plottings are unlikely to be narrowly contained. Beliefs ordinarily cannot be altered in a piece-meal fashion. Rather, significant clumps of belief have to be altered in order for any one to be altered. Thus, a project of deliberately worsening my evidential situation in hopes of getting myself to believe a hypothesis for which I now lack good evidence is likely to involve my changing my opinions about an enormous number of other propositions as well. Moreover, in order for such a project to be successful, it must hide its own tracks. A measure of self-deception will be necessary, whereby I somehow get ourselves to forget that I have deliberately manipulated our situation in order to garner data favoring the hypothesis. Otherwise, at the end of my manipulations I will not be convinced by the resulting evidence set. I will be aware that it is biased in favor of the hypothesis instead of being random, impartial evidence.

Although there is nothing in principle irrational about my plotting against myself in this way, the costs will usually be unacceptably high relative to the benefits of the resulting belief. After all, these plottings require considerable effort, and in addition they are likely to affect adversely the overall accuracy of my beliefs and thus the overall effectiveness of my decision making. Hence, they are likely to affect adversely my attempts to fashion effective strategies for securing my other goals and needs. So, except in those rare cases in which huge benefits are in the offing, it will be irrational to manipulate myself so that ultimately I will come to believe what we now lack adequate evidence for believing.

Again, there is a parallel with reasons for intending, trying, choosing, and the like. I can have reasons to intend to do X that are not reasons for regarding X as worthwhile, but ordinarily considerations of this sort will not be enough to generate a genuine intention. Ordinarily, I need to be convinced that doing X is worthwhile. Still, considerations of this sort might give me a reason to engage in manipulations of my situation in hopes that I eventually would come to regard X as worthwhile, which in turn would lead to the intention. On the other hand, this project is itself likely to have significant costs. It is likely to require even a measure of self-deception. These costs help ensure that ordinarily I have reasons to intend only that which I also have reasons to do, just as analogous costs help ensure that I ordinarily have reasons to get myself to believe only that which we have epistemic reasons to think true.

The lesson, then, is although although what it is rational for one to believe, when all one's goals are taken into account, can in principle be at odds with what it is epistemically rational for one to believe, in practice this tends not to happen.

5. Pragmatic constraints on inquiry

Pascal's wager envisions one way in which pragmatic considerations might affect the rationality of our beliefs, but there are other, more common ways in which they do so. They indirectly influence the kind of deliberations and investigations we undertake. This is not a matter of our non-epistemic goals giving us reasons to get ourselves to believe a proposition for which we currently lack evidence. It is rather a matter of pragmatic considerations helping to determine the extent of evidence gathering and processing it is rational for us to engage in with respect to a particular issue. Such considerations shape what it is reasonable for us to believe, but they do so in an indirect rather than direct way. They impose constraints on inquiry, but subject to these constraints, our aim is to determine what beliefs are true, not what beliefs are useful.

We rarely engage in Pascalian deliberations. We do not commonly weigh the pragmatic costs and benefits of believing as opposed to not believing some proposition. On the other hand, it is anything but rare for us to weigh the costs and benefits of spending additional time and resources investigating a topic. In buying a used car, for example, I will want to investigate whether the car is in good condition, but I need to make a decision about how thoroughly to do so. Should I merely drive the car? Should I look up the frequency of repair record for the model? Should I go over the car with a mechanic, or perhaps even more than one mechanic? Similarly, if I am interested in how serious a threat global warming is, I need to decide how much time to spend investigating the issue. Should I be content with looking at the accounts given in newspapers, or should I take the time to read the piece in *Scientific American*, or should I even go to the trouble of looking up articles in the relevant technical journals? And if it turns out that in order to understand these articles, I need to brush up on my statistics, should I do that?

The reasonable answer to such questions is a function of how important the issue is to me and how likely additional effort on my part is to improve my epistemic situation. As the stakes of being right about the issue go up and as the chances of for improving my epistemic situation go up, it becomes increasingly reasonable for me to make the additional effort.

Related considerations help explain the importance of the so-called theoretical virtues in our intellectual lives: simplicity, fertility, problem-solving effectiveness, and the like. Consider simplicity, for example. Let us agree that the simplicity of a hypothesis is a function of such considerations as the number of entities it postulates, the number of different kinds of entities it postulates, the number of laws it postulates, and the number of variables related in these laws. When understood in this way, it is notoriously difficult to understand why the simplicity of a hypothesis should be construed as evidence for its truth. It is difficult, in other words, to see why the simplicity of a hypothesis gives us an epistemic reason to believe it.

Nevertheless, considerations of simplicity do play a role in shaping what we believe, but not the positive, fine-grained role that philosophers have sometimes thought they play. For example, if we are deliberating the merits of two hypotheses and neither is terribly complex, considerations of simplicity will normally not play much of a role in our deliberations about which of the hypotheses to believe. They won't play much of a role even if one hypothesis is simpler than the other. On the other hand, considerations of simplicity do commonly play a less fine-grained role in our deliberations. They do so because we have only limited cognitive abilities and only a limited time to exercise these abilities, and as the complexity of hypotheses

increases, it requires increasingly sophisticated abilities and increasing amounts of time and energy to gather evidence about it, test it, deliberate about it, and so on. Indeed, if a hypothesis is complex enough, it may not be possible for us to understand it. So, it won't even be a candidate for belief. It will be filtered out automatically. Even among those hypotheses that we are able to understand, some will be so complex that it would be impractical for us to take them seriously. It would take far too much time to deliberate about them, much less use them in making predictions and constructing other hypotheses. They are so complex that they would be of little value to us even if they were true. So, they too will be filtered out. We won't take them seriously. We will simply ignore them.

The simplicity of a hypothesis can give us a good reason to commit ourselves to it, that is, to use it in designing experiments and constructing other hypotheses, and in committing ourselves to it, we may well generate adequate evidence to believe it. Our intellectual practices, however, are such such that the simplicity of a hypothesis is rarely cited as a direct reason to now believe that it is true. Instead, simplicity typically enters into our deliberations more subtlety and indirectly. It has a filtering function. It limits the number of hypotheses we take seriously.

Moreover, this is the model a model for the ways in which non-epistemic considerations in general affect the rationality of our beliefs. It is rare for them to do so in the crass, direct way that Pascal's wager envisions, but it is not at all unusual for them to shape our investigative and deliberative practices. Within these intellectual practices, we in general regard it as irrelevant whether or not belief in a hypothesis would be useful. The internal practice encourages to be concerned only with the truth or likely truth of the hypothesis, but the practices themselves are thoroughly shaped by our needs, interests, and abilities. They are thoroughly shaped, in other words, by pragmatic considerations.

6. Justified belief as responsible belief

A common complaint against epistemology is that its issues are too rarified and of little relevance for the everyday assessments we make, and need to make, of each other=s beliefs. However, there is no reason why this has to be the case. What does have to be admitted is that epistemic rationality is concerned with a very specific goal, that of now having accurate and comprehensive beliefs, whereas in reality all of us have many goals. Nevertheless, this is not so much a criticism as an acknowledgment that epistemic rationality is an idealized notion. But this has its advantages. Its idealized character makes the notion suitable as a theoretical anchor for other notions of rationality, including other notions of rational belief that are less idealized and, hence, potentially more relevant to our everyday intellectual concerns.

The catch, as we have seen, is that the most straightforward way of introducing a derivative notion of rational belief is too crude to be of much relevance for our everyday intellectual concerns. According to the general schema, it is rational, all things considered (that is, when all of the individual=s goals are taken into account), for an individual to believe P if it is epistemically rational for him or her to believe that the overall effects of believing P are sufficiently beneficial. I have been pointing out, however, that it is rare for epistemically rational belief and rational

belief, all things considered, to come apart in a crass Pascalian manner. There are powerful pressures that keep the two from being in conflict with one another in all but unusual circumstances. So, if non-epistemic goals, values, and needs are to be used to fashion an account of rational belief relevant for our everyday intellectual assessments of belief, they will have to be introduced in a more subtle way.

Our everyday evaluations of each other's beliefs tend to be reason-saturated. We are interested, for example, in whether one has been *reasonably* reflective, *reasonably* attentive, and *reasonably* cautious in forming one's belief. The standards of reasonability at work in these assessments are realistic ones. They reflect the fact that all of us have non-intellectual interests, goals, and needs, which impose sharp limitations on how much time and effort ought to be devoted to intellectual inquiry and deliberation.

Only a non-idealized notion, which is sensitive to questions of resource allocation, is capable of capturing the spirit of these everyday evaluations.

Indeed, since we evaluate each others' beliefs in a variety of contexts for a variety of purposes, perhaps several notions will be needed. Still, at least many of our everyday evaluations can be understood in terms of a notion which I will call 'justified belief,' where as I use it, this term is to be more closely associated with the everyday notion of responsible belief than the notion of what is required to turn true belief, absent Gettier problems, into knowledge. Following the usage of Alvin Plantinga, I will reserve the more technical term, 'warranted belief,' for what turns true belief into a serious candidate for knowledge.⁸

As I use the term, justifiably believing a proposition is a matter of its being rational to have acquired (and subsequently retained) the belief. This characterization itself makes reference to rationality (or irrationality), but this is not an insurmountable problem, since the notion of epistemically rational belief can be used as a theoretical anchor to explicate the relevant sense of rational. The result will be theoretically respectable account of justified belief, that is, an account that make no ineliminable use of a notion of rationality or any of its cognates.

More specifically, I shall say that one justifiably believes a proposition P if one believes that one's procedures with respect to P have been acceptable, that is, acceptable given the limitations on one's time and capacities and given all of one's goals, and moreover this second belief is itself epistemically rational. Thus, if an individual has an epistemically rational belief that he or she has spent an acceptable amount of time and energy in gathering evidence about P and evaluating this evidence and has used acceptable procedures in gathering and processing this evidence, it is justifiable for the individual to have this belief. (Note to non-negligent belief).

The notion of justified belief is less idealized than the notion of epistemically rational belief. Given the relative unimportance of some

⁸ See Alvin Plantinga, *Warrant: The Current Debate* (New York: Oxford University Press, 1993).

topics, the scarcity of time, and the pressing nature of many of our non-intellectual ends, it would be inappropriate to spend an enormous amount of time gathering information about these topics and thinking about them. Indeed, we acquire many beliefs with little or no thought. I believe that there is a table in front of me because I see it. I do not deliberate about whether or not to trust my senses. I simply believe. Most of our beliefs are acquired in an unthinking way, and in general this is an acceptable way to proceed. Unless there are concrete reasons for suspicion, it is foolish to spend time and effort deliberating about what we are inclined to believe spontaneously. It is better to keep ourselves on a kind of automatic pilot and to make adjustments only when a problem manifests itself.

This is not an endorsement of intellectual passivity, however. We ordinarily have good reasons, both intellectual and otherwise, to seek out people, situations and experiences that will challenge our existing opinions.

We likewise have good reasons to be vigilant in monitoring whether our standard repertoire of intellectual methods, practices, and skills is serving us well. The point, rather, is that any intellectual project will make use of an enormous number of opinions, skills, and habits, most of which we must rely on without much thought. The bulk of our intellectual proceedings has to be conducted in a largely automatic fashion. We have no realistic choice in this matter. Only a fraction of our intellectual methods, practices, and faculties, and only a fraction of the opinions they generate, can be subject to scrutiny. Our real difficulty is to identify that which is the most deserving of our attention.

Indeed, every new situation presents us with new intellectual challenges, if only because we will want to know the best way to react to the situation. We are thus swamped with potential intellectual projects and questions, but given the total constellation of our goals, some of these projects are more important than others, and likewise, given the scarcity of time, some are more pressing than others. These are the ones most deserving of our attention and time.

Because of the relative unimportance of some topics and the pressing nature of many of our non-intellectual ends, we can have justified beliefs about these topics even we have spent little or no time deliberating about them. Indeed, we can have justified beliefs about them even if we are in the possession of information which, had we reflected upon it, would have convinced us that what we believe is incorrect. This is one of the ways in which, as I am using the terms, justified belief and epistemically rational belief can come apart. Even if an individual has evidence that makes it epistemically irrational to believe *P*, he or she might nonetheless justifiably believe *P*, since given the unimportance of the topic, it might be perfectly appropriate for him or her not to have taken the time and effort to sift through this evidence.

The lesson here, obvious as soon as it is stated, is that it is inappropriate for us to be fanatical in our epistemic pursuits. Of course, it is also inappropriate to be lackadaisical. We usually have good reasons, intellectual and otherwise, to be active in trying to ensure that our belief systems are both accurate and comprehensive, but we shouldn't get carried away and spend all of our time on intellectual matters. The unreflective life may not be worth living, but neither is the overly reflective life. Time is a scarce commodity, and many of our most important goals are not intellectual ones.

The result is a call for moderation. Having justified beliefs requires

one to be a responsible believer, where this in turn requires one not to be slovenly in one's intellectual pursuits. However, it does not normally require one to exercise extraordinary care either. More exactly, it does not require this unless the issue is itself extraordinarily important. The standards that one must meet if one's beliefs are to be responsible slide up or down with the significance of the issue. If nothing much hangs on an issue, there won't be a point in going to great lengths to discover the truth about it. Accordingly, the standards one must meet are low. These are the kinds of cases I have been focusing on up until now, ones in which the standards of justified belief tend to be lower than those of epistemically rational belief. On the other hand, when weighty issues are stake, it takes more to be responsible and, hence, the standards of justified belief become correspondingly high. Indeed, they can be more stringent than those of epistemically rational belief. The more important the issue, the more important it is to reduce the risk of error. For example, if having inaccurate opinions about a given topic would put people's lives at risk, one should conduct especially thorough investigations before settling on an opinion. If one fails to do so, the resulting beliefs will not be justifiable even if they are epistemically rational.

This is possible because epistemically rational belief does not require certainty, not even moral certainty, whereas moral certainty sometimes is required for one to be a responsible believer. To be epistemic rational, one does need to have evidence that reduces the risks of error to an acceptable theoretical level, that is, acceptable insofar as one's goal is to have accurate and comprehensive beliefs. But the risks might be acceptable in this theoretical sense even if one's procedures have been unacceptably sloppy, given that people's lives are hanging in the balance. If so, the beliefs in question will not be justified despite the fact that they are epistemically rational.

The intellectual standards it is appropriate for one to meet vary not just with the importance of the topic at issue but also with one's social role. If it is your job but not mine to keep safety equipment in good working order, the intellectual demands upon you to have accurate beliefs about the equipment will be more serious than those upon me. My belief that the equipment is in good working order might be justified even if I have done little, if any, investigation of the matter. I need not have tested the equipment, for example. A cursory look might suffice for me, but this won't do for you. It would be unreasonable for you not to conduct tests of the equipment. The standards of responsible and, hence, justified belief are higher for you. You need to do more, and know more, than I in order to have a justified belief about this matter.

One's social role can be relevant even when the issue at hand is primarily of theoretical interest. For example, my justifiably believing that the principle of conservation of energy is not violated in the beta decay of atomic nuclei is a very different matter from a theoretical physicist justifiably believing this. My familiarity with the issue derives mainly from brief, popular discussions of it. This kind of appeal to authority is presumably enough for me to be a responsible believer; no more can be reasonably expected of me. On the other hand, much more is reasonably expected of the authorities themselves. They are part of a community of inquirers with special knowledge and special responsibilities, and as a result they should be able to explain away the apparent violations in a relatively detailed way.

Non-epistemic ends thus determine what one can justifiably believe, but they do not do so in the way that Pascal envisioned. The idea is not they give one good reasons to believe a proposition for which one lacks good evidence. Rather, they define the extent of evidence gathering and processing that it is reasonable to engage in with respect to a particular issue. They thus shape what it is justified for one to believe in an indirect way rather than a direct, Pascalian way. They do so by imposing constraints on inquiry, but subject to these constraints one's aim will be to determine which beliefs are true, not which beliefs are useful.

As I observed earlier, although it is rare for us to deliberate on Pascalian questions about the practical costs and benefits of believing as opposed to not believing some proposition, it is common for us to deliberate on questions about the costs and benefits of spending additional time and resources investigating a topic. And as I also observed earlier, the reasonable answer to the latter questions is a function of how important it is for me to have accurate opinions about the matter at issue. As the stakes go up, so too should my standards. The above notion of justified belief can be used to express our answers to these questions. Given this notion, the standards of justified belief are significantly different for different issues. They can even be different for a proposition and its contrary. If I am picking wild mushrooms for your dinner tonight, the costs associated with my falsely believing that this mushroom is poisonous are relatively insignificant. After all, there are other mushrooms to pick and other foods to eat. On the other hand, the costs associated with my falsely believing that this mushroom is nonpoisonous are much more significant. So, the standards for my justifiably believing that the mushroom is not poisonous are higher than the standards for justifiably believing that it is poisonous. More is required for me to be a responsible believer in the former case than in the latter, given that there are heavy costs associated with a false negative while only relatively light ones associated with a false positive.

7. Conceptual diversity in epistemology

I have been recommending an interlocking system of conceptual distinctions for epistemology, where the system itself is part of a philosophically respectable, general theory of rationality. At the heart of the general theory is a schema: A decision, plan, strategy, etc. is rational in sense X for an individual if it is rational from perspective P to believe that the decision, plan, strategy, etc. will do an acceptably good job of satisfying his or her goals of type X. Different kinds of rationality, and associated different notions of reasons, can be understood in terms of different goals and perspectives. Epistemic rationality and reasons can be distinguished from, say, economic rationality and reasons, and both of these can be distinguished from rationality and reasons, all things considered, by reference to the distinct goals that define these different kinds of rationality. And then within each of these categories, different perspectives can also be presupposed, allowing to us talk of what is rational (epistemically or economically or all things considered) from an objective perspective or from the perspective of an average person in the community or from the perspective of the person himself being evaluated.

A obvious drawback of this schema is that it makes reference to a notion of rational, thus leaving us within the circle of terms we wish to understand. On the other hand, because accounts of epistemically rational belief standardly do not, and should not, make use of any other notion of rationality or any of its close cognates, they provide the schema with an escape route

from circularity. The notion of epistemically rational belief can serve as a philosophically respectable theoretical anchor for introducing other, derivative notions of rationality. In particular, I argued that the general schema of rationality be further refined as follows: A plan, decision, action, strategy, etc. is rational in sense X for an individual just in case it is *epistemically rational* to believe from perspective P that the plan, decision, strategy, etc. will do an acceptably good job of satisfying goals of kind X. This schema is altogether general: It applies to all phenomena, including plans, decisions, strategies, beliefs, and so on, as well as to various kinds of rationality, kinds which are formed by varying the relevant goals (economic goals, the epistemic goal, the total constellation of the individual's goals, and so on) and by varying the perspective (a purely objective perspective, the perspective of a normal person in the relevant community, the perspective of the relevant individual himself, and so on).

I then used this schema to explain and to provide a defense of our intellectual practice of in general not regarding pragmatic reasons as relevant for our deliberations and debates about what it is rational to believe. Pragmatic considerations do significantly shape inquiry, only they do so in an indirect way, not in a direct Pascalian way, and I introduced, again using the above schema, a notion of justified belief that does justice to the way these considerations figure importantly in our everyday deliberations and our everyday evaluations of each other's belief.

The result, I claim, is an approach to epistemology that is both theoretically respectable and relevant to our actual intellectual lives. The approach is theoretically respectable in that it is based on a perfectly general schema of rationality that can be explicated without recourse to any further notion of rationality or any of its cognates. The approach is relevant to our actual intellectual lives, because it provides a basis for introducing various derivative notions, including a notion of justified belief which captures at least many of the everyday concerns which we have in evaluating our own and each other's beliefs. These concerns tend not to focus on whether we have met all the prerequisites of knowledge but rather on whether we reasonably careful, reasonably cautious, and reasonably thorough in our opinions, where the standards of reasonability can vary from one situation to another and from one belief to another. The result, in other words, is a respectable epistemology which also does deals with issues that actually matter to us.