THE THEORY OF EPISTEMIC RATIONALITY

Richard Foley

Harvard University Press
Cambridge, Massachusetts
and London, England 1987
1.1 The Theory of Epistemic Rationality

Suppose a group of people wanted by means of argument to reach agreement concerning what they believe, and suppose in addition they wanted their agreement to be relatively stable. What kind of arguments would be of help to such people in seeking this kind of consensus? Arguments that are sound—arguments that have true premises and a truth preserving form—might be of only little help, since perhaps not every person in the group would recognize them to be sound. The same can be said of arguments that are “inductively sound”—arguments that are likely to be truth preserving and that in addition have true premises. But arguments that merely are believed by all to be sound (either deductively or inductively) might not be of much help either, since they might not generate a stable consensus; it might be that if the members of the group were to reflect for a moment on these arguments, they would come to believe that they are not sound after all. What is needed is not so much arguments that are sound or arguments that are merely believed by the people involved to be sound but arguments that are genuinely uncontroversial for them, in the sense that they would regard the arguments as sound were they to be reflective. The idea, more exactly, would be to look for arguments such that were the people involved to be reflective, they would think that these arguments are likely to be truth preserving and in addition they would think that there is no good reason to be suspicious of their premises. This constitutes an outline of what might be called “the theory of persuasive argument.”

The theory of epistemic rationality, I suggest, is in important ways analogous to the theory of persuasive argument. The most important difference is that the theory of epistemic rationality is a first-person theory and that as such it attempts to describe not the propositions of whose truth two or more persons who are seeking agreement via argument should believe. Rather, it seeks to describe what an individual person should believe insofar as he wants now to have true beliefs and now not to have false beliefs. Even so, one way of thinking about the theory of epistemic rationality is to think of it as a theory of first-person persuasive argument. In particular, I will claim that an adequate theory of epistemic rationality, roughly speaking, implies that it is epistemically rational for an individual to be persuaded of the truth of just those propositions that are the conclusions of arguments that he would regard as likely to be truth preserving were he to be reflective and that in addition have premises that he would uncover no good reason to be suspicious of were he to be reflective. The idea, in other words, is that a proposition is epistemically rational for a person just if using premises that are uncontroversial for him he can argue for the proposition in a way that is uncontroversial for him.

To arrive at this view of epistemic rationality, one need not rely on an analogy with persuasive argument. The same kind of view can be developed in a deeper way by appealing to an Aristotelian conception of rationality and to what distinguishes epistemic rationality from other kinds of rationality.

By an Aristotelian conception of rationality, I mean one that is goal-oriented, one that understands rationality in terms of a person carefully deliberating about how to pursue his goals effectively and then acting accordingly. However, since it can be rational for a person to do something even though he does not take the time to deliberate about how to achieve his goals and even though he does not in fact do this something, we need to broaden this initial idea somewhat. In particular, let us broaden it by thinking of rationality in terms of what a person would have to do in order to pursue his goals in a way that he would believe to be effective, were he to be carefully reflective. According to this conception, from the fact that a person merely believes, perhaps without much thought, that something constitutes an effective means to his goals, it does not follow that it is rational for him to bring about that something. After all, he might believe that Y is an effective means to his goals and yet were he to be even a little reflective he might be disposed to change his mind. It might be that on reflection he himself would conclude that it would be a mistake to bring about Y. Likewise, from the fact that a person is pursuing his goals in a way that actually is effective, it does not follow that it is rational for him to pursue his goals in this way. Y might in fact be an effective means to a person’s goals even though from his
perspective there is nothing to indicate this. If so, it need not be rational for him to bring about \( Y \), even though by hypothesis it effectively would secure his goals.

Thus, according to an Aristotelian conception, rationality is best understood in terms of a person pursuing his goals in a way he would believe to be effective were he to take time to reflect carefully on the question of how best to pursue them. In particular, if a person has a goal \( X \) and if he on careful reflection would believe \( Y \) to be an effective means to \( X \), then, all else being equal, it is rational for him to bring about \( Y \). Of course, in most cases all else is not equal. Perhaps on reflection this person would believe that although \( Y \) is an effective means to \( X \), \( Z \) is an even more effective means to \( X \). Or perhaps he would believe that although \( Y \) is likely to be an effective means to \( X \), there is a small but real chance of \( Y \) bringing about not \( X \) but rather something disastrous. Or he may have other goals and it may be that on reflection he would believe that something other than \( Y \) would do the best overall job of satisfying these goals. In these and other similar cases, it may very well not be rational in the final analysis for him to bring about \( Y \), despite the fact that he on careful reflection would believe \( Y \) to be an effective means to \( X \).

On the other hand, if on careful reflection a person \( S \) would believe that \( Y \) is an effective means to his goal \( X \) and if all else is equal—if none of these complicating factors obtain—then it is rational for \( S \) to bring about \( Y \). Of course, the claim that it is rational for \( S \) to bring about \( Y \) will be of little interest if \( Y \) is a trivial means to \( X \). For example, the claim will be of little interest if \( Y \) is the state of affairs of being that will cause \( X \) to occur or the state of affairs of being that which an omniscient being would try to bring about were he in \( S \)'s position and wanted \( X \). Regardless of his particular situation, \( S \) can know, and know a priori, that such states of affairs are effective means to \( X \). He can know this just because they are a trivial, empty way guarantee that \( X \) will occur. Thus, \( S \) can know a priori that bringing about something that causes \( X \), or something that an omniscient being who wanted \( X \) would try to bring about were he in \( S \)'s position, is an effective means to \( X \), and yet have no concrete idea of what in fact would bring about \( X \).

To rule out these uninteresting claims, let us say that the form rationality takes in the simplest of cases is as follows: A person has a goal \( X \), on careful reflection he would believe \( Y \) to be an effective and nontrivial means to \( X \), and he brings about \( Y \). Under these conditions, the person has brought about what it is rational for him to bring about.

Does this way of thinking about rationality suggest that the goals of an individual are not themselves susceptible to rational evaluation? Does it suggest, in other words, that it cannot be irrational for an individual to have a goal \( X \)? No; given his other goals, it might very well be irrational for him to have \( X \) as a goal, since \( X \) might interfere systematically with his other goals. What this way of thinking about rationality does preclude is the possibility of an individual's goals being coherent, in the sense that there are no systematic conflicts among them, and at the same time being thoroughly irrational. So, if we imagine an individual with coherent albeit perverted goals, this way of thinking about rationality may not allow us to say that it is irrational for the individual to have these goals. Remember, however, that not every failure is a failure of rationality, a failure that results from the individual not being sufficiently rational. Some failures are failures of character, of not caring for the right things. Thus, even if we cannot always say of an individual with perverted goals that it is irrational for him to have those goals, we still can say what is far worse; we can say that he has perverted goals.

It is important to notice also that this way of thinking about rationality allows a natural distinction between what is rational if all of a person's goals are taken into consideration and what is rational if only a subset of a person's goals are taken into consideration. Indeed, it allows a natural way to introduce talk of different kinds of rationality. For example, if a certain subset of a person's goals are grouped together as goals of kind \( K \) and if on careful reflection he would believe that \( Y \) is an effective means to goals of this sort, then in the simplest of cases—in cases where all else is equal—it is rational in sense \( K \) for him to bring about \( Y \). If the goals that are related to a person's material well-being and physical comfort are grouped together as prudent goals and if on careful reflection he would believe \( Y \) is an effective means to goals of this sort, then all else being equal it is rational in a prudential sense for him to bring about \( Y \).

These very general remarks about the nature of rationality and about different kinds of rationality are relevant to the theory of epistemic rationality because they can be applied to beliefs as well as to actions. Thus, if a person has goals of kind \( K \) and if on careful reflection he would believe that having beliefs of a certain sort is an effective means to these goals, then, all else being equal, it is rational in sense \( K \) for him to have such beliefs. What this suggests, in turn, is that if we are interested in identifying a distinctly epistemic kind of rationality, it is necessary to identify a distinctly epistemic goal. What might such a goal be? I suggest that we take it to be what
epistemologists have often said it to be, now to believe those propositions that are true and now not to believe those propositions that are false. Or perhaps better, we can take this to be the goal with respect to those propositions that an individual can understand. In any event, the epistemic goal is not a goal that is concerned with believing propositions that will serve one well with respect to one’s practical concerns (since it might be the case that now believing a falsehood, even a proposition that is obviously false, would serve these practical concerns). Likewise the epistemic goal is not a goal that is concerned with believing propositions that will serve one well with respect to one’s believing truths in a few years or in a few weeks or even in a few moments (since again it might be the case that believing a falsehood, even a proposition that is obviously false, would serve this concern). Rather, the epistemic goal is concerned with now believing those propositions that are true and now not believing those propositions that are false. If a person has this goal and if on careful reflection he would believe Y to be an effective means to this goal, then, all else being equal, it is rational (in an epistemic sense) for him to bring about Y. This is the most general form that epistemic rationality takes.

What, then, might a person on careful reflection believe to be an effective means to his epistemic goal? Since the goal here is a present-tense goal—the goal is now to have true beliefs and now not to have false beliefs—the question of what on careful reflection S would believe to be an effective means to the goal reduces to the question of what S would believe to be an effective “direct” means. We are not to imagine S being concerned with what would bring about his having true beliefs and not having false beliefs in the future, even the near future. So the way to think about something being an effective means to this present-tense goal is to construe “means” in a somewhat extended sense, so that something can be a means to a goal by effectively satisfying the goal (and not just by being causally efficacious in bringing about the goal). Accordingly, if on reflection S would believe that having beliefs of a certain kind would effectively satisfy his epistemic goal of now having true beliefs and now not having false beliefs, then on reflection he would believe that having such beliefs is an effective means, in the stipulated sense, to his present-tense goal. Remember, however, that the means here cannot be trivial. It is, for example, of little interest to know that S on reflection would believe that having true beliefs is an effective way to satisfy his epistemic goal.

With this clarification in hand, I return to the question: What might a person on careful reflection believe to be an effective means to his epistemic goal? This depends upon the person. Consider the most extreme cases first. If on careful reflection a person S would believe that he is infallible (and hence that all of his beliefs are true) and if in addition he would believe that he is omniscient (and hence that every truth is believed by him, or at least every truth that he is capable of understanding), then on careful reflection he would believe that the most effective means to his epistemic goal is to believe precisely what he now believes.

At the other extreme is the radical skeptic, who on careful reflection would believe that no means is any better than any other means as a way of achieving his epistemic goal. On careful reflection he would think that the means by which most of us come to believe what we do—perception, memory, and the like—are no more likely to generate true beliefs and to discourage false beliefs than would deciding what to believe on the basis of what the ouija board says or on the basis of a flip of a coin. Moreover, on careful reflection he would think that no other means holds out any better prospects for achieving his epistemic goal. Since there is nothing that such a person on careful reflection would take to be an effective means to his epistemic goal, there is nothing that is epistemically rational for such a person.

Between these two extremes, the optimistic and the pessimistic, is the middle ground, which is occupied by all (or almost all) human beings. Any remotely normal person on careful reflection would not believe that the conservative strategy of believing all and only that which he now believes is an effective means (or at least the most effective means) to his epistemic goal. He would believe there are ways to improve upon what he now believes. He would not be a radical skeptic either. On reflection he would think that some proposals concerning how to achieve his epistemic goal are likely to be effective and others are not. For example, he presumably thinks, and on reflection would continue to think, that with respect to the goal of now believing truths and now not believing falsehoods, believing the conclusions of certain arguments is appropriate and believing the conclusions of certain other arguments is not. In particular, he presumably thinks, and on reflection would continue to think, that certain arguments have unsuspicious premises that can be used to argue for their conclusions in a way that is likely to be truth preserving while other arguments do not. If so, the former arguments are uncontroversial for him while the latter arguments are not. Thus it is epistemically rational for him to believe the conclusions of the former sort of arguments, while it need not be epistemically rational for him to
believe the conclusions of the latter sort. It is rational, all else being equal, for such a person to believe the conclusions of the former arguments because he on careful reflection would believe this to be an effective means to one of his goals, and it is epistemically rational for the person to believe these conclusions because the goal to which he would believe this to be an effective means is the epistemic one of now believing truths and now not believing falsehoods.

So, if on careful reflection a person would uncover no good reason to be suspicious of the premises of an argument and if, in addition, on careful reflection he would think that if the premises are true the conclusion is likely to be true, then he would think that, all else being equal, believing the conclusion of the argument is an effective means to his epistemic goal. Thus, it is epistemically rational for him to believe the conclusion.

This conception of epistemic rationality is just the one that is reached when the theory of epistemic rationality is interpreted to be the theory of first-person persuasive argument. It is epistemically rational for a person to believe the conclusions of arguments that are uncontroversial for him—those that would be persuasive for him were he appropriately reflective.

Of course, people can and do have goals other than the epistemic one of now believing truths and now not believing falsehoods. Likewise people can and do think that acquiring certain kinds of beliefs will help them realize these nonepistemic goals. Accordingly, just as it can be epistemically rational for someone to believe something, so too it can be rational in various nonepistemic senses for someone to believe something. For example, if a person S has goals concerning his material well-being and physical comfort, and if on careful reflection he would think that believing favorable things about himself is an effective means to these goals (because, say, having such beliefs will build his self-confidence, which in turn will make him more likely to secure these goals), then, all else being equal, it is rational in a prudential sense for him to have such beliefs. Similarly, if S has the goal of having true beliefs in the long run and if on careful reflection he would think that the regular use of belief-acquisition method M is an effective means to his having true beliefs in the long run, then, all else being equal, it is rational in this truth-in-the-long-run sense for him to have those beliefs that method M recommends. However, neither of these senses of rational belief, important though they may be, is a genuinely epistemic sense of rational belief. This is illustrated by the fact that it can be rational in either of these senses for a person to believe p even though from his perspective p is obviously false, that is, even though not p is the conclusion of an argument that is uncontroversial for him. This in turn is possible because the goal that makes it rational in these senses for the person to believe p is not the goal of his now having true beliefs and now not having false beliefs. It is this goal that distinguishes epistemic rationality from other kinds of rationality that can be ascribed to beliefs.

Because people can have various kinds of goals, there can be various senses in which it is rational for a person to believe something. These senses of rational belief can conflict. It can be rational with respect to the epistemic goal for a person to believe p and rational with respect to some nonepistemic goal for him not to believe p. Concerning such conflicts the theory of epistemic rationality is altogether silent. It does not imply that epistemic considerations always take precedence over nonepistemic considerations in determining what it is rational for S to believe. It does not even imply that they ever take precedence. The theory of epistemic rationality seeks only to describe what it is rational for a person to believe insofar as he has the goal of now believing truths and now not believing falsehoods. It implies nothing about what it is rational for him to believe when securing this goal precludes his securing other goals. What it is rational for an individual to believe when such goals conflict is not within the province of the theory of epistemically rational belief. Rather, it is within the province of the theory of rational belief. The theory of rational belief seeks to describe what it is rational for a person to believe, all things being considered—that is, when all his goals (epistemic, prudential, and the like) are taken into account. The theory of epistemically rational belief is but a part of the theory of rational belief. (For further discussion, see sec. 2.8 and chap. 5.)

Consider the opposite kind of problem, not the problem of S having goals that conflict with his epistemic goal but rather the problem of his lacking the epistemic goal. Might not S lack the goal of now believing truths and now not believing falsehoods? Perhaps not. Perhaps this is impossible, at least if the notion of a goal is understood in a suitably broad sense. After all, the vast majority of us are intrinsically curious about the world; we intrinsically want to have true beliefs. And presumably, even if some people do not intrinsically want or need to have true beliefs and not to have false beliefs, they still regard it as important to have such beliefs. In order to have a better chance of obtaining something they do want or need for its own sake, they think that it is important now to have true beliefs and now not to have false beliefs. And insofar as they do think this, it can be regarded as one of their goals.


Epistemic Rationality

However, suppose somehow it is possible for there to be a person S who does not intrinsically want or need to have true beliefs and not to have false beliefs and who also does not think it is important in an instrumental sense to have such beliefs. For such a person, would the theory of epistemic rationality once again be silent? That is, would it imply that because such a person lacks the epistemic goal, nothing is epistemically demanded of him?

Not necessarily, since there is perhaps a sense in which X can be a goal for someone although he neither wants it nor needs it nor regards it as important. Perhaps, for example, it is morally required for S to be concerned with having true beliefs and not having false beliefs, and perhaps an acceptable account of what it is to have a goal would imply that whatever is morally required of S is a goal of S (whether or not he wants or needs it).

On the other hand, if S does not in any of these senses or in any other sense have the goal of now having true beliefs and now not having false beliefs—and, as I have said, this may be impossible—then, strictly speaking, nothing is epistemically rational or irrational for him. He has no epistemic goal, and so it is trivial that nothing can be an effective means to his epistemic goal. Even so, a secondary kind of epistemic evaluation of S and his beliefs can be useful and altogether appropriate. Specifically, it might be useful and altogether appropriate to evaluate S and his beliefs as if he did have the epistemic goal. That is, we might still find occasions to evaluate S and his beliefs with respect to what would be rational for him to believe were he to have the epistemic goal. Of course, given that S in fact does not have this goal, we normally cannot expect such evaluations to move S in any way. We cannot, for example, expect S to be motivated to develop intellectual habits that encourage his believing that which would be epistemically rational for him were he to have the epistemic goal. However, this does not affect the point. Whether or not S has the goal of now having true beliefs and now not having false beliefs, it can be perfectly appropriate for us to evaluate his beliefs as if he did. It can be perfectly appropriate for us to evaluate his beliefs from an epistemic point of view.

Is it also appropriate for us to make such evaluations even if S lacks control over his beliefs? More exactly, does saying that from an epistemic point of view it is epistemically rational for a person S to believe the conclusions of arguments that are uncontroversial for him presuppose that S either now has or did have some kind of control over what he believes? I will argue in chapter 5 that although people ordinarily do have at least some kind of indirect control over what they believe, the answer to this question nonetheless is no. It can be epistemically rational for a person S to believe even that which, given his circumstances or given his limitations as a believer, he cannot believe. It also can be epistemically rational for S to believe that which, given his circumstances, or given his limitations as a believer, he cannot help but believe. Of course, in such cases S should not be blamed or praised for believing what he does. In cases where a proposition that he cannot believe is epistemically rational for him, he should not be blamed for not believing it; and in cases where he cannot help but believe what is epistemically rational for him, he should not be praised for believing it.

So, to say that a person believes something that is not epistemically rational for him or to say that he fails to believe something that is epistemically rational for him is not to say that he has not been as good an epistemic agent as he might have been. To say that a proposition is epistemically rational for a person is to say only that there is an argument for it that is uncontroversial for him. It is not to say that he has control over whether he believes it or not.

However, at least with respect to each particular proposition that is epistemically rational for an individual, this usually is a moot point. We may have only limited control over what we believe, so that we cannot believe at will just anything, but it ordinarily is the case that a person is able in an indirect way to get himself to believe a proposition p that is epistemically rational for him. He can do so by engaging in reflection of an appropriate sort, reflection that would make him aware of an uncontroversial argument for p. For if he becomes aware of such an argument and becomes convinced that it is a good argument, he normally will come to believe p.

On the other hand, even if each particular proposition that is epistemically rational for an individual is such that S is able to believe it, he may very well be unable to believe all the propositions that are epistemically rational for him. The entire set of propositions that are epistemically rational for him may be simply too large for it to be feasible for him to believe every member of this set. For example, any proposition that is epistemically rational for S will imply in relatively obvious ways a huge number of other propositions, many, if not most, of which are likely to be epistemically rational for S (since many, if not most, will be conclusions of arguments that S on reflection would take to be good arguments). Yet S may be unable to believe all of these propositions simultaneously, even if he can believe each one individually. Even so, this is irrelevant for the theory of epistemic rationality; it is irrelevant because even if S cannot believe all of these
propositions, by hypothesis each of these propositions is “worthy” of belief with respect to the epistemic goal. Accordingly, it would be ideal to believe each and every one of these propositions. Of course, given that this ideal for him cannot be met, it is natural to ask which of these propositions it is rational for $S$ to believe. But once again, this is a question that the theory of epistemic rationality cannot possibly answer. The answer to this question lies not within the sphere of the theory of epistemically rational belief but rather within the sphere of the theory of rational belief. It is a question to be decided on the basis of which of these propositions are the most important for $S$ to believe—important, say, from the standpoint of being pragmatically useful or from the standpoint of guiding inquiry so that one’s chances of acquiring truths (or at least important truths) in the future are enhanced.

What I am claiming is that it is epistemically rational for a person to believe a proposition just if there is a way of arguing for the proposition that is uncontroversial for him. To claim this, however, is to provide only the barest outline of a general conception of epistemic rationality. So far, I only have briefly described this general conception—I have not yet argued for it, nor have I yet said how I think it is best to fill in the details. In particular, given this general conception, two major questions need to be addressed: What exactly is it for the premises of an argument to be uncontroversial for a person, and what exactly is it for the premises of an argument to support its conclusion in a way that is uncontroversial for a person? I have already suggested, in broad terms, the answers to these questions. An argument has uncontroversial premises for a person just if careful reflection would reveal to him no good reason to be suspicious of their truth, and the premises of an argument support its conclusion in a way that is uncontroversial for a person just if he would think that the argument is likely to be truth preserving were he to be carefully reflective. However, not just any kind of careful reflection will do here. It needs to be reflection of an appropriate idealized kind. So I will have to try to describe in detail this appropriate, idealized kind of reflection. Then it will be easier to return to the general conception of epistemic rationality to see what there is to be said in favor of it, and what advantages it has over the approaches taken by other epistemologists, including traditional foundationalists, coherentists, and reliabilists. Part of the attractiveness of my approach will derive from the plausibility of the criteria of epistemic rationality it encourages us to adopt; another part will derive from the fact that although these criteria differ significantly from those proposed by traditional foundationalists, coherentists, reliabilists, and others, my approach provides a framework for understanding and appreciating these other accounts. It provides, in effect, a way of giving proper recognition to the worries and considerations that prompt these other accounts.

The hope is that the general conception of epistemic rationality not only will help generate plausible criteria of epistemic rationality but also will provide a way of thinking about epistemic rationality that will allow the insights of other approaches to be preserved; it will allow us to see what is right about traditional foundationalism, coherentism, reliabilism, and so on. If these hopes are realized, this itself will constitute as good an argument as there can be for the general conception. The best way to defend the general conception is to show that the way that it recommends thinking about questions of rational belief provides more understanding and clarity than any other way.

1.2 Arguments That Are Sufficiently Likely to Be Truth Preserving

A proposition is epistemically rational for an individual, I have suggested, just if the proposition is the conclusion of an argument that is uncontroversial for him—an argument that has uncontroversial premises used in an uncontroversial way to support its conclusion. What is it for an argument’s premises to support its conclusion in a way that is uncontroversial for an individual? It is for the argument to be such that were the individual in question to be carefully reflective, he would think that it is sufficiently likely to be truth preserving. For the moment, ignore the question of what kind of careful reflection in which we are to imagine the person engaging, and ignore also the question of what “sufficiently likely” means here. I will return to both questions shortly. Bracketing these questions, the rough idea is that an argument’s premises can be used to argue for its conclusion in a way that is uncontroversial for an individual just if on reflection $S$ would believe that most possible situations in which the argument’s premises are true are situations in which the argument’s conclusion is true. Thus, one way in which an argument can be uncontroversial for $S$ is by being such that $S$ on reflection would believe that it is impossible for its conclusion to be false if its premises are true. For the sake of simplicity, we can say in such cases that $S$ on reflection would believe that the premises imply the conclusion, as long as this is not taken to suggest that $S$ has anything like a philosophical view about what it is for one proposition to imply another. It need not be supposed, for example, that $S$ knows anything about the theory of
implication. It need only be supposed that he has some notion, perhaps rough, of certain pairs of propositions being related in such a way that any possible situation in which the first is true is a situation in which the second is true as well.

Not all arguments that are uncontroversial for an individual \( S \) have premises that \( S \) on reflection would believe imply their conclusions. Some uncontroversial arguments are such that \( S \) on reflection would believe that although their conclusions need not be true in all possible situations in which their premises are true, their conclusions are true in a sufficiently great percentage of possible situations in which their premises are true. Or, at least, their conclusions are true in a sufficiently great percentage of relevant possible situations in which their premises are true. (What constitutes a relevant situation will be discussed shortly.) Of such arguments, we can say that \( S \) on reflection would believe that their premises make probable, or make likely, their conclusions. But again, saying this is simply a matter of convenience. The only presupposition here is that \( S \) has some notion, perhaps rough, of certain pairs of propositions being related in such a way that most relevant possible situations in which the first is true are situations in which the second is true as well.\(^\text{11}\)

So the premises of an argument can be used to argue for its conclusion in a way that is uncontroversial for an individual \( S \) just if, roughly, on reflection \( S \) would think that the argument is sufficiently likely to be truth preserving. And for \( S \) on reflection to think that an argument is sufficiently likely to be truth preserving is for him on reflection to think that a sufficiently great percentage of relevant possible situations in which its premises are true are situations in which its conclusion also is true. However, this is only a rough formulation; it implies that any argument whose premise \( S \) on reflection would take to imply its conclusion is an argument whose premises support its conclusion in a way that is uncontroversial for \( S \) (since he on reflection would believe of any such argument that its conclusion is true in all possible situations in which its premises are true). However, this is not quite right; there are exceptions. The exceptions are arguments with conclusions that \( S \) on reflection would take to be necessarily true or with premises whose conjunction \( S \) on reflection would take to be necessarily false. \( S \) on reflection would believe of such arguments that their premises imply their conclusions, but not every such argument need be uncontroversial for \( S \). Such an argument will be uncontroversial for \( S \) only if he on reflection would take its premises to be relevant to its conclusion. However, for the moment, ignore these kinds of arguments; I will return to them shortly. Then, with respect to arguments whose premises \( S \) on reflection would take to imply these conclusions, it can be said as a rule of thumb that it is epistemically rational for \( S \) to believe these conclusions insofar as the premises of these arguments are uncontroversial for him. The conclusions of such arguments are propositions he can argue for in a way that is uncontroversial for him using premises that are uncontroversial for him.

But things are not quite as simple for arguments whose premises \( S \) on reflection would take not to imply but to make sufficiently probable their conclusions. The complication is that \( S \) on reflection would think that even if the premises of such arguments are true, believing their conclusions involves at least some risk of believing a falsehood. As a result, these arguments are defeasible for \( S \) in a way in which arguments whose premises he takes to imply their conclusions are not. Accordingly, it need not be epistemically rational for \( S \) to believe the conclusions of such arguments even when their premises are uncontroversial for him. Suppose, for example, that the argument \( \{e_1', e_2', \ldots e_n'; \text{ thus, } p\} \) is such an argument. Then it need not be epistemically rational for \( S \) to believe \( p \) even if \( e_1', e_2', \ldots e_n' \) are uncontroversial for him, since the support these latter propositions give \( p \) can be overridden; it can be overridden by his having defeating information.

Only some of the arguments that are uncontroversial for \( S \) are such that on reflection he would think it is impossible for their conclusions to be false if their premises are true. Correspondingly, only some of the arguments that are uncontroversial for him are such that he is epistemically committed to believing their conclusions if their premises are uncontroversial for him. Nevertheless, something analogous is true for these other arguments: \( S \) is epistemically committed to believe their conclusions if their premises are uncontroversial for him and if in addition all else is equal.

This is an important point, since it places a restriction upon what arguments are uncontroversial for \( S \). For example, suppose \( S \) believes that almost all fire engines are red. Nonetheless, \( S \) on reflection need not believe that in a sufficiently large percentage of relevant possible situations in which something is a fire engine chosen at random, it also is red. After all, there are many possible situations in which most fire engines are not red. On the other hand, if \( S \) is like the rest of us, he presumably would believe on reflection that in a sufficiently large percentage of possible situations in which something is a fire engine chosen at random and in which almost all fire engines are red, the thing in question also is red. If so, the argument \( \{X \text{ is a fire engine} \)
chosen at random; almost all fire engines are red; thus, X is red is likely to be uncontroversial for S even if the argument (X is a fire engine chosen at random; thus, X is red) is not. But then, if the premises of the former argument are uncontroversial for him and if all else is equal, the conclusion that X is red is epistemically rational for him. He can argue for this conclusion using premises that are uncontroversial for him in a way that is uncontroversial for him. However, this need not be so for the latter argument; its conclusion need not be epistemically rational for him even if its premise is uncontroversial for him and all else is equal.

The point here becomes clearer when it is understood what “all else being equal” means. What it means is that there is no defeating proposition that is uncontroversial for the person S. A proposition \( d \) is a defeater of an argument for \( S \) if adding \( d \) to the premises of the argument results in a new argument that does not even prima facie support its conclusion. So, suppose the argument \( (e^1, e^2, \ldots, e^n, p) \) is uncontroversial for \( S \) even though \( S \) would not think that its conclusion is implied by its premises. Suppose, in other words, he believes \( p \) is true in a sufficiently high percentage of relevant possible situations in which the propositions \( e^1, e^2, \ldots, e^n \) are true. Proposition \( d \), then, is a defeater of this argument for \( S \) if the argument \( (e^1, e^2, \ldots, e^n, d; \text{thus, } p) \) is not in this way uncontroversial for \( S \). In particular, it is a defeater if \( S \) on reflection would believe that \( p \) is not true in a sufficiently high percentage of relevant possible situations in which \( e^1, e^2, \ldots, e^n \) and \( d \) are true.

Thus, if the argument \( (e^1, e^2, \ldots, e^n; \text{thus, } p) \) is uncontroversial for \( S \), \( S \) on reflection would believe that \( p \) is true in a sufficiently high percentage of relevant possible situations in which \( e^1, e^2, \ldots, e^n \) are true. Accordingly, from an epistemic point of view, there is a presumption in favor of \( S \)'s believing \( p \) if \( e^1, e^2, \ldots, e^n \) are uncontroversial for him. What this means, in turn, is that in such situations it is epistemically rational for him to believe \( p \) as long as all else is equal—as long as there is no defeater proposition that is uncontroversial for him.

To return to the earlier example, even if \( S \) believes that in fact almost all fire engines are red, the argument (X is a fire engine chosen at random; thus, X is red) need not be uncontroversial for \( S \). For he on reflection might very well believe that there is a significantly large percentage of relevant possible situations in which most fire engines are not red. And if so, the information that something is a fire engine does not by itself provide him with any kind of presumption at all, even a defeasible one, that it is red. Thus, it need not be epistemically rational for him to believe that the thing is red even if it is uncontroversial for him that the thing is a fire engine and even if in addition he has no other information about its color. On the other hand, the argument (X is a fire engine chosen at random; almost all fire engines are red; thus, X is red) presumably is not like this. It presumably is uncontroversial for \( S \). Consequently, if its premises are uncontroversial for him and if he has no other relevant information (and hence no relevant defeating information), its conclusion is epistemically rational for him.

However, an important question arises with respect to arguments such as this one that does not arise with respect to arguments whose premises \( S \) takes to imply their conclusions. How likely must \( S \) on reflection believe the conclusion of such an argument to be, given the truth of its premises, in order for the argument to be uncontroversial for him? That is, in order for such an argument to be uncontroversial for \( S \), what percentage of the relevant possible situations in which its premises are true must be situations in which the conclusion is true, according to \( S \) on reflection? No doubt the percentage has to be at least fifty (otherwise \( S \) on reflection would think that believing the conclusion is less likely to satisfy his epistemic goal than believing the conclusion's negation), and it is plausible to think it has to be significantly greater than fifty (otherwise \( S \) on reflection might believe that neither believing the conclusion nor believing its negation would be sufficiently likely to satisfy his epistemic goal). But this still leaves the question of how much greater than fifty the percentage must be.

With arguments whose premises \( S \) on reflection would take to imply their conclusion, this question poses no problem, since \( S \) on reflection believes it is impossible for the conclusion to be false given that the premises are true. Thus, he on reflection believes that the premises support the conclusion as strongly as is possible. In all situations in which the premises are true the conclusion is true. However, with other arguments the situation is different, since \( S \) on reflection believes it is possible for their conclusions to be false even if their premises are true. So with them there is a problem—how likely \( S \) on reflection must believe the conclusion of an argument to be (given that its premises are true) if the argument is to be uncontroversial for him?

This problem can also be expressed in terms of \( S \)'s epistemic goal, his goal of now believing truths and now not believing falsehoods. The two aspects of this goal tend to pull \( S \) in opposite directions. One of the aspects, believing truths, encourages him to believe the conclusion of an argument, in order to prevent his failing to believe a truth. The other, not believing falsehoods, discourages him from believing the conclusion of the argument, in order to prevent his be-
Epistemic Rationality

believing a falsehood. The question, then, is how these two aspects of the epistemic goal ought to be weighted in deciding whether the argument is sufficiently likely to be truth preserving. Should they be weighted equally, or should preference be given to one of them?

When the problem is expressed in this way, it again is clear that with respect to arguments whose premises $S$ on reflection would take to imply their conclusions, there is no difficulty. With respect to them, $S$ on reflection would believe that on the assumption that their premises are true, he is certain to believe truths if he believes their conclusions. However, with other arguments the case is different. He believes that even on the assumption that the premises of these arguments are true, it is not certain that by believing their conclusions he will be believing truth. For such arguments it is important to know how small $S$ takes the risk of error to be, if the argument is to be uncontroversial for him.

There is no general, quantitative answer to this question. It is not possible, for example, to stipulate that if a person $S$ believes that the conclusion of an argument has an 80 percent, or 90 percent, or an even higher chance of being true, given that its premises are true, then the argument is uncontroversial for him. This is not possible for two reasons. First, for many (and perhaps even most) arguments that $S$ considers, he may have in mind no such numerical estimate of how likely it is that the conclusion is true, given that its premises are true. Indeed, he might even be at a loss as to how to go about trying to make such an estimate. Nevertheless, some such arguments $S$ might find unproblematic; that is, some such arguments might be uncontroversial for him.

For example, suppose $S$ considers the argument (I seem to remember my being at the zoo last Saturday, my memory seems to be generally accurate—there seem to be no large gaps in my memory nor any glaring inconsistencies in what I seem to remember; thus, I was at the zoo last Saturday). Or suppose he considers the argument (I seem to see a cat on the mat, there seem to be no perceptual cues indicating that my visual equipment is not now reliable; thus, there is a cat on the mat), or the argument (I do not remember ever having seen a nonblack crow, I do not remember anyone else telling me that they have seen a nonblack crow nor do I remember anything else that would indicate there are nonblack crows; I do remember seeing lots of black crows; thus, most crows are black). It is hard to see how $S$, at least if he is at all like most of us, would calculate in precise numerical terms the likelihood of the conclusions of such arguments being true, given that their premises are true. How would $S$ approach the problem of calculating these likelihoods? How would he start? How, for example, would he begin thinking about what precise percentage of the relevant possible situations in which he seems to see a cat on the mat and in which his vision seems to him to be in good working order are situations in which he actually does see a cat on the mat? What would make him think, for example, that 70 percent of such situations are situations in which he sees a cat, or that 90 percent of such situations are like this, or that some other percentage of the situations are like this?

If $S$ is like most of us, he would have no idea of how to begin making such calculations. However, this need not mean that he thinks arguments of the above sort are bad arguments. To the contrary, he might very well think that they obviously are good arguments. But if so, what arguments are uncontroversial for a person $S$ is not something that can always be specified quantitatively, in terms of how likely he believes the conclusion to be, given the truth of its premises. Rather, an argument can be uncontroversial for a person $S$ even though he neither is prepared nor on reflection would be prepared to specify quantitatively exactly how likely the conclusion of the argument is, given that its premises are true. Were he pressed he might be prepared to conclude that the likelihood is very high, or perhaps even overwhelming, but he need not be prepared to say in numerical terms what "very high" or "overwhelming" means. Accordingly, we must be content with saying that such an argument is uncontroversial for $S$ just if $S$ on reflection would believe the conclusion is true in a sufficiently high percentage of possible situations in which its premises are true, where "sufficiently high" cannot be reduced to some specific percentage.

But suppose I am wrong about this. Suppose, contrary to what I am claiming, that a normal person $S$ is such that for most, or even all, arguments that he is capable of considering, he either does have or would have on reflection an estimate in numerical terms of how likely its conclusion is, given that its premises are true. Moreover, suppose we had a list of these estimates. This still would not tell us what arguments are uncontroversial for $S$. What arguments are uncontroversial for $S$ is also a function of what attitudes $S$ on reflection would have toward epistemic risks, and this is not something that we impose upon him. He on reflection must decide for himself whether in his search now to have true beliefs and now not to have false beliefs, it would be appropriate for him to believe the conclusion of an argument whose premises he believes make the conclusion likely to a certain degree. He must decide, that is, whether or not the con-
clusion would be true in a high enough percentage of relevant situations in which the premises are true to make the risk of believing a falsehood in such situations an acceptably low risk, insofar as he wants to believe truths and not to believe falsehoods. If on careful reflection he would decide that the risk of his believing a falsehood would not be too great, then on the assumption that the argument's premises are uncontroversial for him and all else is equal, his believing the conclusion is rational from an epistemic point of view.

So even if for each argument he is capable of considering, S generates, or would on reflection be prepared to generate, a numerical estimate of how likely its conclusion is, given the truth of its premises, this alone is not sufficient to produce a list of arguments that are uncontroversial for S. It also is necessary to know how S, on careful reflection, would weight the possibility of believing a truth against the risk of believing a falsehood. There is no need for this weighting to be constant. For certain kinds of arguments, perhaps arguments concerning highly theoretical matters, S on reflection might take a relatively daring attitude toward the risk of believing a falsehood. For other kinds of arguments, perhaps arguments concerning the truth of his perceptual beliefs or memory beliefs, he might take a relatively conservative attitude.

Just as we do not impose upon S an attitude toward epistemic risks, so too we do not impose upon him a view about what kinds of possible situations are relevant to a determination of whether the premises of an argument make its conclusion sufficiently probable. What situations are relevant is determined by what S himself on reflection would think about the likelihood of various situations. If he on reflection would regard a situation as sufficiently likely to occur as to be of concern when deciding whether believing the conclusion of the argument is an acceptable epistemic risk, the situation is relevant. Otherwise it is not.

How then are we to imagine S deciding whether a possible situation in which the premises of an argument are true is probable enough to be of concern in assessing the truth-preservingness of the argument? We are to imagine S making the decision on the basis of his current beliefs and, in particular, on the basis of his various general beliefs about the world—beliefs about the laws of nature, about what kinds of entities there are, and so forth. These beliefs in effect function as a kind of anchor, preventing situations that S regards as too distant from his current situation from being of concern when deciding whether believing the conclusion of an argument is an acceptable epistemic risk. In particular, for most arguments the relevant range of possible situations for assessing its truth-preservingness will include only situations in which at least many of these general beliefs are true; these ordinarily will be the situations that S, on reflection, would take to be of concern in deciding whether or not his believing the argument's conclusion is likely to be an effective way for him to satisfy his epistemic goal. By contrast, possible situations in which the premises of the argument are true but which S takes to be highly unrealistic (say, because the laws of nature are radically different from what S takes them to be or because he is under the control of an evil demon) are unlikely to be relevant; S is unlikely to think that such situations are relevant to the question of whether insofar as he is interested in now having true beliefs and now not having false beliefs, it is a good idea, all else being equal, for him to believe the conclusion of this argument. And this in turn is so because S on reflection would believe that these situations are so highly unlikely to obtain. They are, he would think, too bizarre and too far removed from any situation that is likely to occur to be of any concern.

There are, however, some complications. Suppose, for example, that the premises of an argument conflict in an obvious way with a number of S's general beliefs about, for example, the laws of nature and what kinds of entities there are. Such arguments are unlikely to be of much use in determining what is epistemically rational for S, since the premises of such arguments will not be uncontroversial for him. Nonetheless, it is instructive to note what situations are relevant for the assessment of the truth-preservingness of such arguments. In particular, it is instructive to note that for such arguments, the relevant range of possible situations cannot include situations in which the general beliefs with which the premises conflict are true. On reflection, S would think that none of the situations in which these general beliefs are true are situations in which the premises of the argument are also true. So what possible situations are relevant for purposes of evaluating the truth-preservingness of this argument? The relevant range of possible situations is determined in the same way as for other arguments. It is determined by what S, on reflection, would think about the likelihood of various possible situations in which the premises of the argument are true. The only difference is that here even the most probable of these situations are those that S, on reflection, would regard as improbable; they are situations that he on reflection would regard as being distant situations, far removed from anything that is likely to happen. For example, the range of relevant close possible situations here might consist of those situations in which the premises of the argument are true (and hence in which
his general beliefs that conflict with these premises are false) but in which his other general beliefs are true. Such situations, albeit improbable, might well be what S, on reflection, would take to be the least improbable of those possible situations in which the premises of the argument are true. Accordingly, it may well be that S, on reflection, would regard such an argument as one that is sufficiently likely to be truth-preserving. For, although he, on reflection, would regard the argument’s premises as being improbable, he nonetheless might think that if he were to find himself in a situation in which these premises were true, believing the conclusion of the argument would be an effective way (all else being equal) of satisfying his epistemic goal. He might think, in other words, that in the unlikely event that these premises were true, it would be likely that the conclusion is true as well.

Something like the reverse is true of arguments whose conclusions imply in an obvious way the truth of one or more of those general, background beliefs that S, on reflection, ordinarily might be disposed to use in deciding what situations are relevant for assessing the truth-preservingness of other arguments. The general beliefs whose truth the conclusion obviously implies presumably would not be used by S, on reflection, to determine what situations are sufficiently probable to be relevant for assessing such an argument, since the argument itself is at least in part concerned with the probability of such beliefs. Indeed, if S were to use these beliefs to determine what situations are relevant, it might very well turn out to be trivial that the conclusion is true in most relevant situations in which the premises are true (if, say, the conclusion just is the claim that these general beliefs are true). Rather, for such an argument, S, on reflection, is likely to determine the relevant range of situations by appealing to his other general beliefs, those whose truth the conclusion does not imply. A situation will be regarded as irrelevant, then, just in case relative to these other general beliefs, S, on reflection, would regard it as so improbable as to be not worth worrying about in reaching a decision about the truth-preservingness of the argument in question.

The most general and most important point here, however, is that for such arguments, as with all others, what counts as a situation that is relevant to the assessment of the truth-preservingness of the argument is something that an individual is to decide for himself on reflection. He himself must decide whether a possible situation in which the premises of the argument are true is so unlikely as not to be relevant to the question of whether the premises of the argument make sufficiently probable its conclusion—that is, sufficiently prob-
of an argument are true, no matter how improbable the situation, is
likely to be a situation that S regards as relevant. The only situations
likely to be relevant to an assessment of the truth-preservingness of
most ordinary arguments are those that the individual S, on reflection,
would not regard as vastly improbable. Even so, this does not mean
that all such situations are likely to be relevant. It does not mean that
an individual S is likely to regard as relevant all possible situations
in which the premises of an argument are true and which are, in broad
outline, not drastically different from what he takes to be the actual
situation. On the contrary, many such situations, perhaps most, are
likely to be regarded by S as irrelevant. Suppose, for example, S
considers the argument (I seem to see a cat on the mat, there seem
to be no perceptual cues indicating that my visual equipment is not
reliable; thus, I see a cat on the mat). Notice that there may well be
uncountably many possible situations in which the premises of this
argument are true and its conclusion false. There even may be un-
countably many such situations that S would not regard as being
drastically different from the actual situation. But from this it does
not follow that there are uncountably many relevant possible situa-
tions of this sort. Suppose that S imagines a relatively close situation
in which the premises of this argument are true but its conclusion is
false; suppose, for example, that he imagines a situation in which
the premises of the argument are true but in which he mistakes some
other kind of small animal for a cat. There may well be uncountably
many variations of this situation—a situation in which S mistakes a
dog that weighs exactly 10.00 pounds for a cat, a situation in which
S mistakes a dog that weighs 10.01 pounds for a cat, a situation in
which he mistakes a raccoon that weighs 10.02 pounds for a cat and
in which there are exactly 138,345 aardvarks on earth, and so on.
To be sure, these are distinct situations, but they need not be regarded
by S as distinct relevant situations. And they presumably would not
be, at least if S here is like most of the rest of us. For if he is, he
would not take the precise weight of the animal on the mat to be a
relevant factor in judging whether the above argument is likely to be
true preserving. Although the approximate weight of the animal on
the mat may be relevant, it does not matter whether the animal weighs
exactly 10.00 pounds or 10.01 pounds. A fortiori it does not matter
how many aardvarks there are on earth.

The point here, most generally expressed, is that when we imagine
S considering various possible situations in an effort to decide whether
an argument is sufficiently likely to be truth preserving, we need not
imagine him considering maximally specific situations. In effect, we
need not imagine him considering various possible worlds, where a
possible world, for present purposes, can be thought of as a special
kind of possible situation, one that is defined by a maximally con-
sistent set of propositions. Indeed, we not only need not imagine S
considering maximally specific situations, we need not even imagine
that the situations he considers are highly specific; they need not be
situations that are defined by a very large set of (what S takes to be)
consistent propositions. Instead, the situations that we imagine S con-
sidering can be relatively broad; they can be situations that are defined
by a relatively small set of (what S takes to be) consistent propositions.

So, although there may well be uncountably many possible situations
that would make the premises of the above argument true and
that in addition in broad outline resemble what S takes to be the
actual situation, not all of these situations (and certainly not an un-
countably large number of them) need be situations that S, on reflec-
tion, would regard as being relevant for an assessment of the truth-
preservingness of the argument. Not all of them, in other words, need
be such that S, on reflection, would think that they are relevant for
determining whether believing the conclusion of the argument is an
acceptable epistemic risk if its premises are true. Indeed, just as a
general rule it is safe to assume that S here would regard as irrelevant
possible situations that he takes to be radically unlike the actual
situation (for example, a situation in which the laws of nature are
radically different from what he takes them to be), so too as a general
rule it is safe to assume that he would regard as irrelevant possible
situations that contain highly specific or gratuitous details (such as
situations defined by the precise weight of the animal on the mat or
situations defined by the number of aardvarks, where the argument
in question has nothing to do with aardvarks).

This is not to say, however, that it is altogether impossible for an
individual S, on reflection, to regard as relevant for the assessment of
most ordinary arguments all possible situations in which the premises
of these arguments are true. Suppose that S, on reflection, would think
this. What then? Then there are likely to be fewer arguments whose
premises support their conclusions in a way that is uncontroversial
for him. In the most extreme case, he may even be a skeptic, one who
thinks almost no argument (or at least no nondeductive argument) is
sufficiently likely to be truth preserving.11

Fortunately, it is presumably safe to assume that few, and perhaps
no, people are like this. Few of us, and perhaps none of us, on reflec-
tion would think of most arguments that each and every possible
situation in which their premises are true is to be treated as relevant
for assessing whether these arguments are sufficiently likely to be truth-preserving, sufficiently likely to make believing their conclusions an acceptable epistemic risk. Likewise, few of us would think that the only situations that are relevant for assessing the likely truth-preservingness of most ordinary arguments are situations that are almost identical in every detail with what we take to be the present situation. All, or at least almost all, of us presumably fall somewhere between these two extremes.

But whether or not this is so, the important theoretical point is that in general an argument has premises that support its conclusion in a way that is uncontroversial for an individual S just if S, on reflection, would think that its conclusion is true in a sufficiently great percentage of relevant possible situations in which its premises are true. However, there are exceptions—arguments whose conclusions S, on reflection, would take to be necessarily true and arguments whose premises are such that S, on reflection, would take their conjunction to be necessarily false. If the conclusion of an argument is a proposition that S, on reflection, would regard as necessarily true, then S, on reflection, would think that it is impossible for its premises to be true and its conclusion false. And he would think this regardless of what these premises are, even if they are propositions that he would take to be altogether irrelevant to the conclusion. Similarly, if he, on reflection, would think that the conjunction of the premises is necessarily false, he would think that it is impossible for these premises to be true and the conclusion false, and he would think this regardless of what the conclusion is. Since S, on reflection, might think that the premises of these kinds of arguments are irrelevant to their conclusions, such arguments need not be uncontroversial for him, even though by hypothesis he does think that it is the case that there are no possible situations in which their premises are true and their conclusions false. Arguments of these kinds require a special treatment.

For arguments whose premises are such that S, on reflection, would regard their conjunction as necessarily false, the treatment is straightforward. Let us stipulate that an argument can be uncontroversial for an individual S only if he, on reflection, would think that there are possible situations in which all of its premises are true. This is a prerequisite of an argument being uncontroversial for him. Accordingly, no argument with premises whose conjunction S, on reflection, would regard as necessarily false can be uncontroversial for S. And this is so despite the fact that by hypothesis he, on reflection, would think that the premises of such arguments imply their conclusions.¹⁹

However, matters cannot be so straightforward for arguments whose conclusions an individual S, on reflection, would regard as necessarily true. Some but not all of these arguments will be uncontroversial for S; some but not all, in other words, will have premises that can help make their conclusions epistemically rational for S. To distinguish those that are uncontroversial for S from those that are not, let us say that in order for the premises of such arguments to support their conclusions in a way that is uncontroversial for S, it must be the case that S, on reflection, would think that these premises are positively relevant to the conclusion. With ordinary arguments, this requirement is automatically satisfied if S, on reflection, would think that the conclusion of the argument is true in most relevant possible situations in which its premises are true. But for arguments with conclusions that S, on reflection, would take to be necessarily true, this special requirement is needed. The way to think about this special requirement is in terms of S, on reflection, bracketing his conviction that the conclusion is necessarily true, in order to concentrate upon the relation between the premises and the conclusion. More specifically, if the argument is to be uncontroversial for him, it must be the case that on reflection he would think that its premises can be used to show why it is impossible for the conclusion to be false. Or alternatively, it must be the case that he on reflection would think that the premises provide him with good "inductive" support for the necessary truth of the conclusion. Consider each of these cases in turn.

To help illustrate the first, contrast the argument (all right triangles have a ninety-degree angle; all equilateral triangles are equiangular; thus, no right triangle is equiangular) with the argument (if it rained yesterday, then either it rained or it snowed yesterday; 2 + 2 = 4; thus, no right triangle is equiangular). Suppose that S believes, and would continue to believe on reflection, that the premises as well as the conclusion of each of these arguments are necessarily true. Since on reflection he would regard the conclusion of each argument as necessarily true, he would think that the premises of each argument imply its conclusion. But if S is at all like the rest of us, he, on reflection, would think that only the first of these arguments has premises that are relevant to the claim that no right triangle is equiangular. And in particular, on reflection he presumably would think of the first argument but not of the second that its premises if jointly understood could be used to provide him with an understanding of why it is impossible for the conclusion to be false.¹⁹ He presumably would think, in other words, that understanding the information contained in the conjunction of the premises is enough to allow him to see why the conclusion has to be true and that, accordingly, there is in this
sense a kind of internal connection between the truth of the premises of the first argument and the truth of the proposition that no right triangle is equilateral. On the other hand, he presumably would not think this of the second argument; rather, he presumably would think that their premises are at best only externally connected with the truth of this proposition; although the premises imply this proposition, there is no way of using them (without assuming the necessary truth of the proposition) to show why it cannot be false.¹⁹

Arguments whose premises and conclusions are both such that S, on reflection, would regard them as necessarily true are uncontroversial for S only if he, on reflection, would think that their premises could be used to provide him with an understanding of why the conclusion cannot be false. Moreover, this same requirement applies to arguments whose premises and conclusions are such that S, on reflection, would regard them as necessarily true if true at all (where this leaves open the possibility that even on reflection S may not be sure whether they are necessarily true).

What about arguments whose premises S, on reflection, would regard as being necessarily true? And what about arguments with premises that S, on reflection, would regard as either necessarily true or necessarily false (although even on reflection he might not be sure which)? Consider, for example, an inductive argument for Goldbach’s conjecture.²⁰ Suppose S has tried very hard to find an even number greater than two that is not the sum of two primes but that he has failed to do so. Moreover, suppose he is aware that numerous other mathematicians also have tried to find such a number but that they too have failed to do so. Then, even if S cannot prove that every even number greater than two is the sum of two primes, he is likely to have an inductive argument for this claim that on reflection he would regard as a very good argument. But unlike other inductive arguments, his thinking that this argument is a good one cannot be a matter of his thinking that the conclusion is true in most relevant situations in which the premises are true. After all, by hypothesis he, on reflection, would think that Goldbach’s conjecture is either necessarily true or necessarily false. So, on reflection he would think that either the conclusion is true in all possible situations in which the premises are true or that it is true in no possible situation in which the premises are true. And even after ideal reflection, he may not be sure which is the case. Moreover, there is a problem here even if we grant that although S on reflection is not likely to be able to prove that Goldbach’s conjecture is true, he (presumably like many of the rest of us) on reflection nonetheless would believe that it is necessarily true. For then, even with respect to what he, on reflection, would regard as bad inductive arguments for Goldbach’s conjecture—for example, an argument based on an examination of just a couple of even numbers, say the number 4 and the number 8—he would think that the conclusion is true in all possible situations in which the premises are true. So here once again, S’s thinking that he has a good argument for Goldbach’s conjecture cannot be a matter of his thinking that in most situations in which the premises of the argument are true the conclusion also is true.

What then is it for him, on reflection, to think that his argument for Goldbach’s conjecture is a good one? It is for him on reflection to think that the argument is a kind of argument that is likely to have a true conclusion. Of course, any argument will be an instance of countless different kinds of arguments. But just as we left it up to S himself, on reflection, to decide what situations are relevant for determining the likely truth-preservingness of ordinary arguments, so too let us leave it up to S, on reflection, to decide what arguments are relevant for an assessment of his argument concerning Goldbach’s conjecture. The idea, then, is for S to consider relevantly similar arguments, where he is the judge of what counts as a relevantly similar argument, for other conclusions that, like Goldbach’s conjecture, are either necessarily true or necessarily false. For example, he would be likely to consider possible arguments for various other mathematical claims, arguments the truth of whose premises he would not take to be so unlikely as to make them irrelevant to an assessment of the argument, and whose premises in addition contain inductive support for their conclusions that is comparable to the massive inductive support he takes himself to have for Goldbach’s conjecture. He then is to ask himself if the conclusions of most such arguments are true. If, as is likely to be the case, he, on reflection, would think that a sufficiently great percentage of the conclusions of these relevantly similar arguments are true, then his argument for Goldbach’s conjecture is uncontroversial for him; it is a kind of inductive argument that he, on reflection, would think is sufficiently likely to have a true conclusion.¹¹ On the other hand, on reflection he is unlikely to think this of other arguments for Goldbach’s conjecture—for example, inductive arguments based on an examination of just a couple of even numbers greater than two. But if so, these arguments are not uncontroversial for him, and they are not uncontroversial for him even if on reflection he would believe that their premises imply their conclusions.
Unlike arguments whose premises and conclusions $S$, on reflection, would take to be contingent, arguments whose conclusions $S$, on reflection, would take to be necessarily true do not automatically become uncontroversial for him by virtue of the fact that on reflection he would believe that their conclusions are true in a sufficiently great percentage of possible situations in which their premises are true. For unlike arguments of the former kind, he, on reflection, might believe this of an argument of the latter kind even if he also, on reflection, would believe that its premises are altogether irrelevant to its conclusion. (Nevertheless, for the sake of simplicity, in what follows I will ordinarily characterize uncontroversial arguments as those that the individual, on reflection, would believe to be sufficiently likely to be truth preserving.)

A final word of warning. My remarks about $S$’s attitudes toward epistemic risks, about what kinds of possible situations an individual $S$, on reflection, is likely to regard as relevant for assessing an argument, and about arguments whose conclusions $S$, on reflection, would regard as necessarily true should not be taken as implying that $S$ has a whole battery of sophisticated epistemic concepts. Thus, for example, in saying that $S$’s attitudes toward epistemic risks as well as his views about what counts as a relevant possible situation are crucial in determining what arguments are uncontroversial for him, I do not mean to say that $S$, on reflection, would have some sophisticated way of determining what is an appropriate attitude toward epistemic risk and what is a relevant possible situation. Indeed, as I hinted earlier, in order for an argument to be uncontroversial for him $S$ need not have any very sophisticated epistemic concepts at all. For most arguments he need only be sophisticated enough to be able to decide whether the conclusion of the argument would be true in enough of the relevant (not vastly improbable) possible situations in which the argument’s premises are true to make believing it a good epistemic bet—a good epistemic bet in a situation in which its premises are true. And for arguments with conclusions that he, on reflection, would regard as necessarily true, he need only be sophisticated enough to be able to decide whether the premises are relevant to the conclusion, where this is a matter of deciding either that most relevantly similar arguments have true conclusions or that the information in the premises is sufficient to allow him to understand why the conclusion cannot possibly be false.  Even so, we can represent his decisions about these matters in terms of certain, relatively sophisticated epistemic notions. For example, with respect to ordinary arguments, we can represent $S$’s decision as manifesting $S$’s way of weighting the two aspects of his epistemic goals, believing truths and not believing falsehoods, and as manifesting what possible situations he regards as relevant to an assessment of whether the argument’s premises make sufficiently probable its conclusion. Most important, we can take it also as manifesting whether the argument has premises that support its conclusion in a way that is uncontroversial for him.

1.3 Believing on Reflection That an Argument Is Sufficiently Likely to Be Truth Preserving

Arguments that are uncontroversial for a person, I have said, are arguments that on careful reflection he would regard as sufficiently likely to be truth preserving. But in what kind of careful reflection are we to imagine a person engaging? The answer is: Reflection that reveals the person’s own deepest epistemic standards. This answer, of course, merely pushes the question back a step. The question now becomes: What kind of reflection reveals a person’s own deepest epistemic standards? The answer is: Sufficient reflection from an epistemic point of view.

I will have more to say shortly about what is involved in being sufficiently reflective, but first consider what is involved in reflection from an epistemic point of view. To reflect from an epistemic point of view is to reflect upon an argument solely with the idea of deciding whether the inference recommended by the argument is sufficiently likely to be truth preserving. It is to reflect solely with the idea of deciding whether or not the conclusion of the argument is true in a sufficiently great percentage of relevant possible situations in which its premises are true, sufficiently great to make believing the conclusion an acceptable risk (with respect to the epistemic goal of now believing truths and not now believing falsehoods). Nevertheless, in imagining a person engaging in such reflection, we need not imagine him reflecting only on the argument in question. In particular, we need not imagine him reflecting only on various possible situations in which the argument’s premises are true in an effort to decide whether its conclusion is true in a sufficiently great percentage of these situations that are relevant. Rather, we can imagine him reflecting on any consideration at all that he might think important to the epistemic assessment of the argument. So, for example, he might reflect upon other arguments, in order to compare and contrast the argument in question with these arguments. Presumably, the more similar the argument in question is to other arguments that he thinks are sufficiently
likely to be truth preserving, the better the chances are that he will approve of it. Correspondingly, the more similar the argument is to other arguments that he thinks are not sufficiently likely to be truth preserving, the worse the chances are that he will approve of it. He also might reflect upon various abstract argument schemas and then evaluate the argument in question against what he is inclined to think of these schemas. However, all these reflections take place against the backdrop of his trying to decide whether the argument in question is sufficiently likely to be truth preserving.

In imagining a person reflecting upon an argument, we are to imagine him deliberating over any consideration—whether these be other arguments, argument schemas, or whatever—that he deems relevant to the question of whether the argument is sufficiently likely to be truth preserving. Were he to engage in such reflection, conflicts might very well emerge. Some of the considerations upon which he deliberates might suggest to him that the argument is sufficiently likely to be truth preserving; other considerations might suggest to him that this is not so. For example, it may be that on reflection he would become convinced that the argument in question is sufficiently likely to be truth preserving. In the case of such a conflict, we are to imagine him correcting the conflict in the way that seems best to him from an epistemic point of view. For example, he might upon further reflection conclude that although at first glance the two arguments seem very similar, in fact they are not. He might find some feature of the argument in question that distinguishes it from similar-looking arguments of which he is inclined to disapprove. Or he might resolve the conflict more straightforwardly, by altering his initial judgment of the argument in question or his initial judgment of the argument he thinks is relevantly similar to it. Thus, in some such cases he might be sufficiently confident of his initial judgment concerning the argument in question that he would be prepared, on reflection, to alter his initial judgment concerning the argument he thinks is relevantly similar. Other times just the opposite might occur; he would alter his initial judgment concerning the argument in question rather than alter his judgment about the truth-preservingness of the argument that seems relevantly similar. Regardless of which is the case, the point is that we are to imagine how, given his present dispositions and given the epistemic goal of his now believing truths and now not believing falsehoods, he would decide such conflicts were he to be sufficiently careful in his reflections. If upon being sufficiently reflec-

tive, the argument in question seems to him to be one that is sufficiently likely to be truth preserving—sufficiently likely to make believing its conclusion an acceptable risk in situations in which its premises are true—then the argument reflects his own deepest epistemic standards.

What, then, constitutes S’s being “sufficiently reflective”? How much reflection is required before his opinion of an argument is indicative of his own deepest epistemic standards? Is it enough for him to reflect for a few minutes, or for a few hours, or for a few days, or what?

The answer is that strictly speaking there is no limit. We imagine him reflecting until his view stabilizes, until further reflection would not alter his opinion of the argument in question. This by definition is the point at which the person is not susceptible to further self-criticism. It is by definition the point at which had the person reflected still more, he would not have changed his opinion with being mistaken in his earlier evaluation of the argument. If at this point the person would believe that the argument is sufficiently likely to be truth preserving, then the argument conforms to his own deepest epistemic standards. Further reflection would not prompt him to think he was mistaken in his assessment of the argument.

To determine whether an argument is genuinely uncontroversial for an individual, we imagine him reflecting from an epistemic point of view upon the argument in question and upon various other arguments and argument schemas and upon any other consideration he, on reflection, would take to be relevant. Moreover, we do not impose a limit on this reflection. In effect, we imagine him reflecting until he has considered any proposal that might occur to him concerning how best to evaluate the argument. Or at least we imagine him reflecting on such proposals until reflection on any other proposals would not alter his opinion of the argument in question. In this way, the arguments that are uncontroversial for him are arguments that conform to his ideal epistemic standards, where his ideal epistemic standards in turn are a function of what he now is disposed to think about these arguments were he to be sufficiently reflective. So, if an individual on reflection is disposed to think that the argument is sufficiently likely to be truth preserving and in addition he is so disposed that further reflection would not change his mind about this, then the argument conforms to his own deepest epistemic standards. Accordingly, the premises of the argument support its conclusion in a way that is uncontroversial for him.25

Given that the notion of an uncontroversial argument is understood
in this idealized way, it may be difficult for the rest of us to know whether an argument is uncontroversial for a person S. Indeed, with respect to many arguments, it will be difficult for S to know this about himself. Moreover, these difficulties are not eased any by the fact that there is nothing in principle to prevent an argument from being uncontroversial for S at one time but not at another.

However, difficulties of this sort should not be exaggerated. For many arguments, especially relatively simple ones, it will be clear that they are uncontroversial for S. It will be clear, in other words, that S thinks that they are sufficiently likely to be truth preserving and that further reflection would not alter S’s opinion of them. Further reflection might alter his opinion concerning the truth of one of the premises of such an argument, but that is not what is at issue here. What is at issue is whether further reflection would alter S’s opinion concerning whether the inference recommended by the argument is likely to be truth preserving, and at least for many simple arguments we can be confident that further reflection would not alter his opinion.

Moreover, for more complex arguments, if we can determine what S’s opinion of them would be were he to reflect carefully upon a relatively wide range of possible situations and a relatively large number of similar arguments, we can be relatively confident that further reflection on slightly different arguments and situations would be unlikely to alter his opinion. So we need not try to determine exactly what might be S’s reactions to these other arguments and examples.

But might not there be arguments such that there is no point at which S’s opinion of them would be unswayed by further reflection? With continuing reflection S’s opinion of such arguments might oscillate between acceptance and rejection. Or short of this, continuing reflection might result in continuing indecision on his part. Thus, S might be so disposed that no matter how much he reflected upon the argument, he would not arrive at a stable decision concerning whether the argument is sufficiently likely to be truth preserving.

Perhaps there are such arguments, arguments about which S would not reach a stable, final decision. Perhaps no matter how long he reflected he would be perplexed, not knowing what to conclude, or perhaps he would continue to change his mind. Such arguments might be complex enough or for some other reason confusing enough that S as he is now would not be able to reach a final decision concerning them no matter how long he were to reflect upon them. (Analogously, we could imagine presenting to a person a sentence such that no matter how much he reflected, he would not accept it as being grammatically well formed and likewise would not reject it as being grammatically ill formed; instead he would simply be perplexed, whether by its complexity or by some other feature.)

Arguments of this sort, about which a person S would not reach a stable decision no matter how long he were to reflect, are not uncontroversial for S. They do not conform to S’s own deepest epistemic standards. An argument meets S’s own epistemic standards just if he would regard it as sufficiently truth preserving were he sufficiently reflective. But by hypothesis, arguments about which, on reflection, he would reach no stable decision as well as arguments which, on reflection, he would reject outright fail to meet this standard. So from an epistemic viewpoint it need not be rational for him to believe the conclusions of such arguments even if all of their premises are uncontroversial for him and all else is equal.

Arguments that are uncontroversial for S, I have claimed, are arguments that S would regard as sufficiently likely to be truth preserving were he to be sufficiently reflective. Suppose, however, that S’s reflections affect his opinions of arguments in some unusual way—via, say, an external source. Suppose, to take an extreme example, an evil scientist is prepared to alter S’s opinions of various arguments were S to reflect upon them. Suppose the scientist is able to do this by stimulating S’s brain in appropriate ways. If S were to reflect on considerations that he otherwise would regard as counting in favor of an argument A, the scientist would stimulate S’s brain in such a way that these considerations would no longer seem favorable to S and in this way would cause S to disapprove of A. Under these conditions, then, if S were to be reflective, he would disapprove of A. The scientist by being prepared to manipulate S ensures that this is so.

Does this then mean that argument A does not conform to S’s deepest epistemic standards? Does it mean that in a situation where argument A’s premises are uncontroversial for S and all else is equal, A’s conclusion might not be epistemically rational for him? Not necessarily, for the phrase “what S would believe were he to be sufficiently reflective” should be understood in such a way that it precludes S being manipulated in this way. In particular, this phrase should be understood in a way that ensures that S’s beliefs are self-generated. The situation in which we are to imagine S, in order to determine whether argument A conforms to his deepest epistemic standards, is not a situation in which there is an external source altering S’s beliefs.
or dispositions. Nor is it even a situation in which S is taught or shown that argument A is likely to be truth preserving. Perhaps he could be taught this. But even if he could, it does not follow that if left on his own to reflect he would have reached this conclusion. Rather, the situation in which we are to imagine S, in order to determine whether A conforms to his deepest epistemic standards, is one in which S as he is now with his present dispositions, habits, and inclinations, reflects upon argument A without any external source altering these dispositions, habits, and inclinations.

However, it is admittedly difficult to find an absolutely precise way to distinguish situations in which S as he is now (with his present dispositions), on reflection, would approve of an argument and situations in which S, on reflection, would approve of the argument, because such reflections would trigger some external event (such as the actions of an evil scientist) that in turn would alter what he is disposed to think of the argument. The problem here is the difficulty of finding an absolutely precise way to distinguish between a person having a disposition and his acquiring a disposition. It is especially difficult to distinguish situations in which a person has a secondary disposition—a disposition to acquire a new first-order disposition—from situations in which he acquires an altogether new first-order disposition. For instance, although S may be initially disposed, on reflection, to favor an argument A, it might be that his initial reflection on A and his initially favorable response to it normally would trigger further reflection that ultimately would lead him to disapprove of it. So, S here has a secondary disposition that would be triggered by and that would override his primary disposition (his initial inclination on reflection to approve of A). This sort of case, involving secondary dispositions, needs to be distinguished from cases in which his reflections are controlled by an external factor—the evil scientist sort of case. In the latter, the scientist is prepared to alter S's dispositions—perhaps both his first-order and his higher-level dispositions—if he reflects on considerations that otherwise would incline S to approve of A. In the former, any alteration in S's dispositions is self-generated, via his reflections triggering higher-level dispositions.

The two kinds of cases can be intuitively distinguished, but it may be difficult to find an altogether precise way of explicating the distinction. Nonetheless, in the vast majority of cases the distinction is clear enough, and even in problematic cases nonarbitrary decisions ordinarily can be made. For example, suppose we assume that the evil scientist already has tampered with S. Suppose he yesterday tampered with S's brain so that the reflection on A by S that otherwise (had the scientist not tampered) would have inclined S to approve of A will instead result in his disapproving of it. So, today S would disapprove of A were he to reflect sufficiently upon it. In this and similar situations a plausible case can be made for the claim that the tamperings of the scientist yesterday changed S's epistemic standards. Before yesterday, given S's dispositions, he, on reflection, would have approved of argument A, but the tamperings changed this. The tamperings have altered S in such a way, that, given the way he is now (that is, given no further tamperings), he on reflection is disposed to disapprove of A. Given the way he is now, it need not be epistemically rational for him to believe A's conclusion even if its premises are uncontroversial and all else is equal. This case, then, stands in contrast with the case discussed earlier, in which the scientist has in fact not tampered with S but is prepared to do so were he to be reflective. Since the scientist in the earlier case has not yet tampered with S, he has not yet altered S's epistemic standards. Accordingly, in that case it is epistemically rational for S to believe A's conclusion, assuming that A's premises are uncontroversial for him and that all else is equal.27

1.4 Definition of “Tends to Make Epistemically Rational”

If the phrase “sufficiently reflective” is used to pick out the above-described process of ideal reflection from an epistemic point of view (where one is solely concerned with the truth-preservingness of the argument in question) and if the phrase “sufficiently likely to be truth preserving” is used in the way described above (where an argument is sufficiently likely to be truth preserving just if, given the truth of the premises, the conclusion is likely enough to make believing it worth the epistemic risk) and if the term “relevant” when applied to arguments whose conclusions an individual on reflection would regard as necessarily true if true at all is used in the way described above (where if such an argument has necessarily true premises, the premises are relevant to the conclusion just if the premises can be used to show why it is impossible for the conclusion to be false, and where if the argument has contingent premises, the premises are relevant to the conclusion just if the argument is a kind of “inductive” argument that is likely to have a true conclusion), then the following defines what it is for an argument to be such that its premises can be used to argue for its conclusion in a way that is uncontroversial for a person S at a time t:
Propositions $e^1, e^2, \ldots, e^n$ can be used to argue for proposition $p$ in a way that is uncontroversial for $S$ at $t$. If $S$ at $t$ were to be sufficiently reflective, then (i) he would believe that an argument with $e^1, e^2, \ldots, e^n$ as premises and $p$ as its conclusion is sufficiently likely to be truth preserving, (ii) if he would believe that $p$ is necessarily true if true at all, he also would believe that $(e^1, e^2, \ldots, e^n)$ are relevant to $p$ and (iii) he would not believe that $(e^1$ and $e^2, \ldots$ and $e^n)$ is necessarily false.

Or expressed more simply, we can say that given these conditions, propositions $e^1, e^2, \ldots, e^n$ tend to make $p$ epistemically rational for $S$ at $t$, where "tend to make epistemically rational" is defined in terms of the definition above:

Propositions $e^1, e^2, \ldots, e^n$ tend to make $p$ epistemically rational for $S$ at $t$. Propositions $e^1, e^2, \ldots, e^n$ can be used to argue for $p$ in a way that is uncontroversial for $S$ at $t$.

1.5 Epistemically Insecure Propositions

A proposition $p$ is epistemically rational for an individual $S$ just if using propositions that are uncontroversial for him he can argue for $p$ in a way that is uncontroversial for him. What this means, in the terminology I have adopted, is that $p$ is epistemically rational for $S$ just if propositions that are uncontroversial for him tend to make $p$ epistemically rational for him and there are no defeater propositions that are uncontroversial for him.

What is it for a proposition to be uncontroversial for an individual? As an initial characterization, we can say that a proposition is uncontroversial for an individual just in case the individual believes it with such confidence that nothing else he believes with comparable confidence gives him a reason to be suspicious of it. So, at a minimum the individual needs to be convinced of the proposition's truth if it is to be uncontroversial for him. He needs to believe it. This does not mean, however, that he needs to be explicitly considering the proposition. Five minutes ago I was not explicitly considering the proposition that I then was alive, but I then did believe this proposition. Propositions can be believed in either an occurrent or in a nonoccurrent sense.

However, believing a proposition, either occurrently or nonocurrently, is not enough to make a proposition uncontroversial for an individual. In addition, it must be the case that the individual would uncover no good reason to be suspicious of the proposition's truth were he to engage in an appropriate kind of reflection. What is the appropriate kind of reflection? It is reflection upon the other propositions that he now believes and upon the arguments that are uncontroversial for him. The idea is that a proposition $p$ that $S$ believes is uncontroversial for him only if reflection upon his doxastic system and his epistemic standards would give him no good reason to be suspicious of $p$'s truth. How might $S$'s doxastic system and his epistemic standards provide him with a good reason to be suspicious of $p$? By providing him with the "materials" for an appropriate argument against $p$—an appropriate argument in terms of what else he believes and in terms of what arguments he would regard as sufficiently truth preserving were he to be reflective.

This explicature can be made more precise by describing what constitutes an appropriate argument against a proposition $p$. But first something must be said about the strength with which an individual believes various propositions.

The strength with which a person believes a proposition is a matter of how confident he is of its truth. Some propositions he will believe with great confidence; others he will believe with considerably less confidence. Moreover, this is so for propositions he is explicitly considering as well as for those that he is not; five minutes ago I believed with great confidence the proposition that I then was alive, even though I was not then explicitly considering this proposition. It is sometimes claimed that the strength of a person's beliefs can be measured by engaging him in situations in which he bets on the truth of what he believes, with the odds he is willing to take determining how confident he is of that truth. However, whether or not this is so, the notion here is familiar enough; people believe certain propositions with greater confidence than they believe certain others.

The confidence with which an individual believes a proposition is relevant to the question of what propositions are uncontroversial for him, because the more confidently an individual believes a proposition the more likely it is that the proposition is uncontroversial for him. This is not to say, however, that confidently believing a proposition is enough to make it uncontroversial. On the contrary, it is possible.
for a proposition \( p \) to be believed by an individual with great confidence and yet be controversial for him, since he might believe with equal or greater confidence other propositions that can be used in an uncontroversial way to argue against \( p \). For example, suppose there are propositions \( e^1, e^2, \ldots, e^n \) each of whose truth a person \( S \) feels as sure, or even more sure, than he does of \( p \)'s truth, and suppose in addition that these propositions tend to make \( \neg p \) epistemically rational for him. Consider the simplest cases of this sort. Suppose that \( S \) on reflection would believe (although perhaps he does not now believe) that these propositions imply \( \neg p \). Under these circumstances, proposition \( p \) is epistemically insecure for him, in the sense that given what he now believes and the confidence with which he believes it and given also his current epistemic standards (that is, given the arguments that are uncontroversial for him), he has a good reason to be suspicious of \( p \).

Situations that do not involve arguments with premises that \( S \) on reflection would take to imply their conclusions are somewhat more complicated. Suppose that propositions \( e^1, e^2, \ldots, e^n \) tend to make \( \neg p \) epistemically rational for \( S \) but that he on reflection would believe that these propositions do not imply but rather only make sufficiently probable \( \neg p \). Suppose further that he believes all these propositions with as much confidence as he believes \( p \). Under these conditions, there is a presumption that \( p \) is controversial for him, since he has an argument against \( p \) that has premises he believes as confidently as \( p \). There is only a presumption here, however, because the argument in question is not one whose premises he, on reflection, would take to imply its conclusion. So the premises of the argument give him a reason to be suspicious of the conclusion only if all else is equal. On the other hand, if we suppose that all else is equal—if we suppose that there is no convincing defeater proposition—then the proposition \( p \) is controversial for him.

What makes a proposition a convincing defeater of an argument that threatens to make \( p \) controversial? This question can be answered by distinguishing a potential defeater of such an argument from a genuine or convincing defeater of the argument. A proposition \( d \) is a potential defeater of an argument that threatens to make \( p \) controversial just if adding \( d \) to the premises of the original argument generates a new argument whose premises do not tend to make \( \neg p \) epistemically rational. Thus, if the premises of the original argument are \( e^1, e^2, \ldots, e^n \)—if \( S \) on reflection would believe that \( \neg p \) is true in a sufficiently high percentage of relevant possible situations in which propositions \( e^1, e^2, \ldots, e^n \) are true—then \( d \) is a potential defeater of this argument if \( S \) on reflection would believe that it is not the case that \( \neg p \) is true in a sufficiently high percentage of relevant possible situations in which \( e^1, e^2, \ldots, e^n \) and \( d \) are true.

What makes \( d \) a genuine, or convincing, defeater? Think of the question in this way: Since an argument with \( \neg p \) as its conclusion makes \( p \) controversial for \( S \) only if its least strongly believed premise is believed as strongly as \( p \), a proposition \( d \) will be a convincing defeater of such an argument only if it is believed at least as strongly as the least strongly believed premise. In other words, the argument with \( \neg p \) as its conclusion—the argument with premises \( e^1, e^2, \ldots, e^n \)—will be defeated (preventing it from making \( p \) controversial) only if there is a potential defeater \( d \) that is believed by \( S \) at least as confidently as some proposition in the set \( \{ e^1, e^2, \ldots, e^n \} \).

In addition, for \( d \) to be a convincing defeater of the argument, it must not beg the question against that argument. So, for example, the defeater \( d \) cannot be \( p \) itself. The fact that \( S \) believes \( p \) as confidently as some proposition in the set \( \{ e^1, e^2, \ldots, e^n \} \) does not convincingly defeat the argument. Likewise, the argument cannot be convincingly defeated by the fact that \( S \) believes that \( p \) is probable. Assume for present purposes that the expression "\( p \) is probable" is elliptical for something like "\( p \) is probable given the total relevant available evidence." Often an individual \( S \) will believe, albeit perhaps nonoccurrent, that \( p \) is probable if he believes \( p \) is true; believing \( p \) and believing that \( p \) is probable are in this way intimately linked. So resorting to the proposition that \( p \) is probable to defeat the argument for \( \neg p \) begs the question against the argument just as much as resorting to \( p \) itself. Accordingly, neither the proposition \( p \) nor the proposition that \( p \) is probable can be used to convincingly defeat the argument. Nor can a convincing defeater be a proposition that has the proposition \( p \) or the proposition that \( p \) is probable as part of its "content." This again would beg the question against the argument for \( \neg p \). Moreover, the defeater cannot have as part of its content any "relevant" part of \( p \)'s content. For example, propositions \( e^1, e^2, \ldots, e^n \) may tend to make \( \neg p \) epistemically rational because they tend to make epistemically rational the negation of a proposition \( p^1 \) that is part of \( p \)'s content. If so, the argument against \( \neg p \) cannot be defeated by a proposition \( d \) that has as part of its content this proposition \( p^1 \). Once more, this would beg the question.

These remarks can be made more precise by introducing a notion of entailment that is distinct from a broader notion of implication. A proposition \( p \) implies a proposition \( q \) just if it is impossible for \( q \) to be false if \( p \) is true. On the other hand, in order for \( p \) to entail \( q \), the
relation between \( p \) and \( q \) has to be not just "logically intimate" but also "conceptually intimate," so that the "content" of \( p \) includes the "content" of \( q \). Let us say that a proposition \( p \) entails a proposition \( q \) just if \( p \) implies \( q \), and necessarily whoever thinks \( p \) also thinks \( q \), and necessarily whoever believes \( p \) also believes \( q \) and believes it with at least as much confidence as he believes \( p \). Thus, the proposition that it is raining implies but does not entail the proposition that it is either raining or snowing. A person can think (entertain) the first without thinking (entertaining) the second. Likewise, the proposition that Jones is thinking of a number that is the sum of two primes is not entailed by the proposition that either Jones is thinking of a number that is the sum of two primes or he is thinking of an even number greater than two. The first is implied by the second (assuming Goldbach's conjecture to be true), and necessarily whoever thinks the second thinks the first (since the first is a "component" of the second), but it presumably is not the case that whoever believes the second believes the first and with as much confidence. It presumably is possible to believe the second and yet either not see that it implies the first or be in doubt whether it implies the first. On the other hand, the proposition that it is cold and raining both implies and entails the proposition that it is raining. No one can think the first without thinking the second; no one can believe the first without believing the second; no one can believe the first with more confidence than he believes the second.

Given this notion of entailment, reconsider the question of what makes a proposition \( d \) a convincing defeater for an argument that threatens to make \( p \) controversial—an argument with premises \( e_1, e_2, \ldots, e_n \). We now can say that \( d \) is a convincing defeater just if (1) \( d \) is a potential defeater of the argument, (2) \( d \) is believed by \( S \) as confidently as some proposition in the set \( \{e_1, e_2, \ldots, e_n\} \), and (3) \( d \) does not "beg the question" against the argument \( \{e_1, e_2, \ldots, e_n\} \); thus, \( \neg p \), where \( d \) begs the question against this argument just if either (i) \( d \) entails the proposition \( p \) or (ii) \( d \) entails the proposition that \( p \) is probable or (iii) \( d \) entails some proposition \( p' \) such that \( p' \) is entailed by \( p \) and such that propositions \( e_1, e_2, \ldots, e_n \) tend to make \( \neg p' \) epistemically rational for \( S \) or (iv) \( \neg d \) entails the proposition \( \neg p \) or the proposition that it is not the case that \( p \) is probable or some proposition \( \neg p \), where \( p' \) is entailed by \( p \) and where \( e_1, e_2, \ldots, e_n \) tend to make \( \neg p' \) epistemically rational for \( S \).

Consider an example to illustrate how these conditions work. Suppose \( S \) believes proposition \( p \) but that he also believes with the same confidence as \( p \) the proposition that Jones, who normally is highly reliable about these matters, says that \( \neg p \) is true. Call this latter proposition \( e \), and suppose that \( e \) tends to make \( \neg p \) epistemically rational for \( S \). Accordingly, the argument \( \{e, \neg p\} \) threatens to make \( p \) controversial for \( S \). We now want to know whether there is a convincing defeater of this argument. Is there a defeater that prevents this argument from making \( p \) controversial for \( S \)? The above conditions tell us that neither \( p \) itself nor the proposition that \( p \) is probable can be such a defeater, even though they are potential defeaters that may be believed by \( S \) as confidently as \( e \). Since every proposition entails itself, conditions (3ii) and (3iii) respectively preclude these propositions from being convincing defeaters. Likewise, condition (3i) rules out the possibility that the conjunctive proposition \( \{p \text{ and } 1 + 2 = 3\} \) is a convincing defeater. What about the disjunctive proposition \( \{p \text{ or } 1 + 2 = 4\} \)? This proposition is likely to be a potential defeater (since the second disjunct is necessarily false, the proposition is true just in case \( p \) is true) and yet neither (3ii) nor (3iii) nor (3iiii) rule it out as a convincing defeater. For example, (3i) does not rule it out, since this disjunctive proposition presumably does not entail \( p \); it presumably is at least theoretically possible for it to fail at \( 1 + 2 = 4 \). But if so, it is possible to believe the disjunction \( \{p \text{ or } 1 + 2 = 4\} \) without believing \( p \). Short of this, it presumably is possible for one to believe the disjunction more confidently than he believes \( p \) (since he might not be absolutely certain that \( 1 + 2 = 4 \) is false). However, condition (3iv) does prevent this disjunction from being a convincing defeater, since the negation of the disjunction entails \( \neg p \).

By way of contrast, the proposition that Jones in this situation is not in a good position to judge the truth of \( p \) (say, because his vision is temporarily impaired) might very well be a convincing defeater of the argument for \( \neg p \). It is presumably a potential defeater of the argument, thus satisfying condition (1). It might be believed by \( S \) as confidently as \( e \), thus satisfying (2). And it does not seem to beg the question in any of the senses specified by (3).

Consider another example. Let \( p \) be the proposition that there are unicorns, and let \( e \) be the proposition that Jones, who normally is highly reliable about these matters, says that \( \neg p \) is true, where \( p' \) is the proposition that there are animals with horselike heads and a single horn. Suppose that \( e \) tends to make \( \neg p \) as well as \( \neg p' \) epistemically rational for \( S \), and suppose that \( S \) believes \( e \) with the same confidence as he believes \( p' \). Accordingly, the argument \( \{e, \neg p'\} \) threatens to make \( p \) controversial for \( S \). The above conditions—specifically condition (3iii)—tells us that \( p' \) cannot be a defeater that prevents this argument from making \( p \) controversial for \( S \). It cannot
be such a defeater even though it is a potential defeater that is believed by $S$ as confidently as $e$. For $p$ is a proposition entailed by $p$ and $e$ tends to make its negation epistemically rational.

So, if propositions $(e^1, e^2, \ldots, e^s)$ tend to make not$\neg p$ epistemically rational for $S$ and if these propositions are believed by $S$ as confidently as $p$ and if finally there is no convincing defeater proposition, where a convincing defeater is a proposition that satisfies conditions (1), (2), and (3), then the proposition $p$ is controversial for $S$. It is controversial for him because given what he now believes and the strength with which he believes it and given also his epistemic standards (the arguments that are uncontrovertial for him), he has a good reason to be suspicious of $p$. Propositions of whose truth he now feels as sure as he does of $p$'s truth tend to make not$\neg p$ epistemically rational for him and moreover there is no proposition of whose truth he feels equally sure that is a convincing defeater. Thus, the fact that there are such propositions $e^1, e^2, \ldots, e^s$ makes the proposition $p$ prima facie controversial for him, and the fact that there is no convincing defeating proposition indicates that there is nothing to override the prima facie controversial status that $p$ has for $S$. Accordingly, $p$ is controversial for $S$.

Details aside, then, a proposition $p$ is controversial for an individual $S$ if there is an argument for not$\neg p$ that he on reflection is likely to regard as truth preserving and that has premises that he believes as confidently as $p$. Under these conditions, his present doxastic system and his present deepest epistemic standards combine to give him a reason to be suspicious of $p$, preventing it from being uncontrovertial for him. Moreover, the reason that makes $p$ suspicious for him here is a reason that $S$ himself would uncover were he to be ideally reflective about what he believes and about what arguments are likely to be truth preserving.

The idea here is that in determining whether a proposition $p$ is uncontrovertial for an individual $S$, we begin by holding fixed his current doxastic system, asking whether, given what he currently believes, he has a reason to be suspicious of $p$. We do not, for example, imagine $S$ reflecting directly upon what he believes with the purpose of deciding whether he has a good reason to be suspicious of those propositions that he believes. Were $S$ to engage in such reflection, his belief system no doubt would be altered in various ways. He might cease to believe certain propositions, come to believe others, and believe still others with a different degree of confidence. However, this is irrelevant here. The idea here is not to determine whether $S$ would have a reason to be suspicious of $p$, given his present epistemic standards and given what his doxastic system would be were he to reflect upon it in an effort to improve it or to correct it. Rather the idea is to determine whether $S$ now has a reason to be suspicious of $p$, given his present epistemic standards and given his present doxastic system.

So far, what I have claimed is that one way in which $S$'s epistemic standards and doxastic system can give him a reason to be suspicious of $p$ is by providing him an argument whose premises tend to make not$\neg p$ epistemically rational for him and in addition whose premises are believed by him as confidently as is $p$. This is sufficient to make $p$ controversial for $S$. It is not necessary. Another way in which $p$ can be controversial for $S$, given his epistemic standards and given his doxastic system, will be introduced shortly. According to this other way, even propositions that do not tend to make not$\neg p$ epistemically rational for $S$ can play an important role in making $p$ controversial for him. For example, suppose there are propositions that $S$ believes as confidently as $p$ but are such that $S$, on reflection, would think these propositions just barely miss making not$\neg p$ sufficiently probable. Therefore, these propositions do not tend to make not$\neg p$ epistemically rational for $p$ tend to play an important role in making $p$ controversial for him. For example, suppose there are propositions that $S$ believes as confidently as $p$ but are such that $S$, on reflection, would think these propositions just barely miss making not$\neg p$ sufficiently probable. Therefore, these propositions do not tend to make not$\neg p$ epistemically rational for $S$. Accordingly, the requirement above—that there be no argument for not$\neg p$ whose premises $S$ believes as confidently as $p$—is not violated in such a case. And yet intuitively it seems as if in such a case $S$ might very well have a good reason to be suspicious of $p$, given his epistemic standards and his doxastic system. The requirement to be introduced shortly will explain how such propositions, those that cannot be used to argue for not$\neg p$, can make $p$ controversial for $S$.

However, it is important to note first how the requirement above might be violated even in situations where at first glance it might not seem to be. Consider, for example, a situation in which there are propositions that tend to make not$\neg p$ epistemically rational for $S$ but of whose truth $S$ feels less sure (perhaps only slightly less sure) than he does of $p$'s truth. Suppose, for example, that propositions $e^1, e^2, \ldots, e^s$ tend to make not$\neg p$ epistemically rational for $S$ but that $S$ believes one of these propositions—say, $e^1$—with a little less confidence than he believes $p$. Then strictly, according to the requirement above, these propositions do not make $p$ controversial for $S$. But even so, closely related propositions might. In particular, if $S$ believes $e^1$, he also is likely to believe (at least nonoccurrenty) a proposition about the likelihood of $e^1$, and he might believe this proposition as confidently as $p$. For instance, he might believe as confidently as $p$ the proposition that $e^1$ is highly probable. Moreover, substituting this propo-
sition for \( e^1 \) in the original argument might generate another argument whose premises tend to make not \( p \) epistemically rational for \( S \). If so, this argument will make \( p \) controversial for \( S \) (assuming there is no convincing defeater).

Similarly, suppose \( S \) has a number of arguments with not \( p \) as their conclusions but that each such argument contains a premise of whose truth he feels less sure than he does of \( p \)'s truth. Might not the fact that he has so many (individually weak) arguments of this sort nonetheless make \( p \) controversial for him? Yes, for he might very well believe with as much confidence as he does \( p \) the proposition that at least one of these arguments is a good one, and this proposition in turn might itself be capable of being used to argue against \( p \). Suppose, for example, that each of the following sets of propositions tends to make rational not \( p \)—the set \( \{ e^1, e^2, \ldots, e^r \} \), the set \( \{ f^1, f^2, \ldots, f^s \} \), and the set \( \{ g^1, g^2, \ldots, g^t \} \)—but that each set contains at least one premise that \( S \) believes less confidently than \( p \). Nevertheless, \( S \) might very well believe the disjunction of these sets as confidently as \( p \) and this disjunction might tend to make not \( p \) epistemically rational for \( S \). If so, \( p \) once again will be controversial for \( S \).

Thus, if either of these tactics—the tactic of "probabilityifying" a weakly believed premise in an argument with not \( p \) as its conclusion, and the tactic of disjoining the premises of several such arguments—or some other tactic—generates an undefeated argument with premises that \( S \) believes as confidently as he does \( p \), then \( p \) is not controversial for him. (Each of these tactics also can be used to generate convincing defeaters of an argument that threatens to make \( p \) controversial.) Unfortunately, there is one exception to this general rule (which I discuss in section 1.6), an exception that allows \( p \) to be uncontroversial for \( S \) even though there is an undefeated argument for not \( p \) with premises that \( S \) believes as confidently as \( p \).

### 1.6 Epistemic Basicity

One way of summarizing the discussion is to say that a proposition \( p \) is uncontroversial for an individual \( S \) only if it is "argument-proof" for him, in the sense that all possible arguments against it are implausible. In particular, all such arguments fail to give him a good reason to be suspicious of \( p \), either because their premises do not tend to make not \( p \) epistemically rational for him or because he feels less sure of the truth of one of their premises than he does of \( p \)'s truth or because there is a convincing defeater of the argument.

However, there is an additional way in which \( S \) can have a good reason to be suspicious of a proposition \( p \) that he believes. He might have no good epistemic reason to think that \( p \) is likely to be true. For a proposition \( p \) to be genuinely uncontroversial for \( S \)—for it to be a proposition that he has no good reasons to be suspicious of, given what he believes and given his epistemic standards—it is not enough for him to lack an argument for not \( p \). He must also have reasons in favor of \( p \). For if \( S \) were to have no good reason to think that \( p \) is true (as well as no argument for not \( p \)), withholding judgment on \( p \) would be his best option. But then, \( p \) would be controversial for him; he would have a good reason to be suspicious of \( p \) by virtue of lacking a good reason for thinking that \( p \) is true.

So for \( p \) to be genuinely uncontroversial for \( S \), he must have no good reason to be suspicious of \( p \), given what he believes and given his epistemic standards. And in order to have no good reason to be suspicious of \( p \), he must have a good reason to think that \( p \) is true, given what he believes and given his epistemic standards. How then might his beliefs and his epistemic standards give him such a reason? There is a seemingly obvious answer to this question, but it will be instructive to consider first some less obvious answers. For example, one possible answer is that if \( S \) cannot argue for not \( p \) using propositions that he believes as confidently as \( p \), then, given his beliefs and given his epistemic standards, he has no good reasons to think that not \( p \) is true and this itself constitutes a reason to think that \( p \) is true.

A view of this sort amounts to an endorsement of arguments ad ignorantiam. It is an endorsement of the idea that a lack of reasons for not \( p \) always constitutes a good reason for thinking that \( p \) is true. But of course, this is not so. Let \( p \) be the proposition that the beaches of Cape Cod have an even number of grains of sand on them. Presumably most of us lack reasons for thinking that \( p \) is true, but this does not imply that we have good reasons for thinking that not \( p \) is true. It does not imply that we have good reasons for thinking that the beaches of Cape Cod do not have an even number of grains of sand on them.

What other answers might be given to our question, the question of what might give \( S \) a reason for thinking that \( p \) is true, where \( S \) believes \( p \) and where no other proposition that \( S \) believes with comparable confidence can be used to argue against \( p \)? Another possible answer is simply the fact that he believes it. In other words, one answer is that whenever an individual believes a proposition \( p \), regardless of what \( p \) is, he thereby acquires a reason for thinking that \( p \) is true.

But why is it: all plausible to think that simply by believing a
proposition $p$, whatever the proposition $p$ is, $S$ inevitably acquires a reason for thinking that $p$ is true? After all, people can believe some very odd propositions, and $p$ here might be one of these. Moreover, $S$ himself, on reflection, might very well think that the mere fact that he believes $p$ is no indication that $p$ is likely to be true.

Perhaps we should say that although mere belief is not enough to give a person a reason for thinking that what he believes is true, belief coupled with the fact that he has no argument against what he believes is sufficient to give him a reason. In particular, perhaps we should say that if an individual $S$ believes $p$ and if in addition nothing else that he believes with comparable confidence can be used to argue for not $p$, then he has a reason to think $p$ is true.

But why is this suggestion any more plausible than the suggestion that mere belief always provides a reason for what is believed? Again it is worth remembering that people can have very odd beliefs, and sometimes these will be such that nothing else that is believed with comparable confidence can be used to argue against them. Indeed, people can even have momentary surges in the confidence with which they believe a proposition, coming to believe with tremendous confidence a proposition about which only moments earlier they had significant doubts and about which only moments later they again will have significant doubts. Moreover, these propositions might be such that if the person (as he is now) were to be reflective, he himself would agree that the mere fact that he believes them with great confidence is no indication that they are likely to be true. But if so, it is hard to see how such a surge in the confidence with which an individual believes a proposition $p$ is enough in itself to give a person a reason for thinking that $p$ is true, even if it is enough to ensure that no comparably believed propositions can be used to argue against $p$.

Thus, we still lack a convincing answer to our question of how $S$’s beliefs and epistemic standards might plausibly be thought to give him a reason for thinking that $p$ is true, where $p$ is a proposition that he believes and where in addition nothing that he believes with comparable confidence can be used to argue against $p$. However, as I suggested earlier, there is a seemingly obvious answer to this question. The other propositions that $S$ believes might give $S$ a reason for thinking that $p$ is true. Suppose, in particular, that $S$ believes propositions that tend to make $p$ epistemically rational for him. Might he not then have a good reason for thinking that $p$ is likely to be true? Accordingly, might not $p$ be genuinely uncontroversial for him? In other words, might not $p$ be genuinely uncontroversial for $S$ if, given what he believes and given his epistemic standards, there is a good argument for $p$ as well as no good argument against $p$?

Unfortunately, answering yes to this question seems only to push our problem back a step. It is hard to see how other believed propositions can make $p$ uncontroversial for $S$ unless they themselves are uncontroversial for him. It is hard to see, that is, how these propositions can ensure that $S$ has a reason to think $p$ is true unless he has reasons to think they are true. But if so, we are faced with a second question: What gives $S$ a reason to think these other believed propositions are true? Moreover, the answer to this question cannot simply be that they are believed with such confidence that they cannot be argued against using propositions that $S$ believes with comparable confidence.

Of course, to answer this second question, one might try simply repeating the answer given to the original question. That is, one might try insisting that what makes these other believed propositions (the propositions that tend to make $p$ epistemically rational) uncontroversial for $S$ is still other believed propositions that tend to make them rational. And if questions are then raised about these latter propositions, the same sort of answer can be given about them, even though this may very well involve citing proposition $p$ or one of the other believed propositions cited at an earlier “level.”

However, at best this kind of reply is puzzling. It is puzzling to claim that by using otherwise suspicious propositions to argue for one another the suspicions attaching to each of these propositions somehow disappear. How can propositions that $S$ otherwise would have no reason to think true be used to argue for one another in such a way that there are reasons to think that each is true? At first blush, this would seem to be the epistemic analogue of creation ex nihilo. Of course, the situation would be different if we could assume that some of the propositions that $S$ believes are propositions that he has reason to think are true. Then the fact that these propositions tend to make epistemically rational others that he believes might plausibly be thought to give him a reason to think the latter are true as well. Unfortunately, in the present context we cannot simply assume that some of the propositions that $S$ believes are propositions that he has reasons to think are true.

Thus, there might seem to be a dilemma here. We are looking for some way in which $S$’s beliefs and epistemic standards can plausibly be said to give him a reason for thinking that $p$ is true, where $p$ is a proposition that he believes and where in addition $p$ cannot be argued against using comparably believed propositions. But if we say that $S$
has a reason to believe \( p \) by virtue of believing other propositions that tend to make \( p \) epistemically rational, we seem only to push our problem back a step. For then we will want to know what gives \( S \) a reason for thinking that these other propositions are true. On the other hand, if the other propositions that \( S \) believes do not give him a reason to think \( p \) is true and if we are to find this reason for \( p \) in \( S \)'s doxastic system and in his epistemic standards, then it apparently must be the very fact that he believes \( p \) that gives him this reason. Unfortunately, this at first glance does not seem plausible either. It does not seem plausible to say that the mere fact that he believes a proposition \( p \), whatever \( p \) may be, gives \( S \) a reason for thinking that \( p \) is true.

Is there a way to avoid this dilemma? I think there is. We can do so by finding some consideration in \( S \)'s doxastic system or in his epistemic standards that plausibly indicates that some, but not all, propositions are such that by believing them \( S \) acquires a reason to think that they are true. We can do so, in other words, by finding some consideration that can plausibly be taken to indicate that some but not all of \( S \)'s beliefs tend to be self-justifying. Suppose, for example, that \( S \)'s belief \( p \) is such a belief. Then his having a reason for thinking that \( p \) is true will not be dependent upon his believing any other proposition that tends to make \( p \) epistemically rational for him. So our problem of understanding what gives \( S \) a reason to think \( p \) is true is not pushed back a step to the problem of understanding what gives him a reason to regard as true some other proposition that he believes. Moreover, if we can find a consideration of the sort described, we also will not be committed to saying that just any proposition is such that by believing it \( S \) acquires a reason to think that it is true. Accordingly, we will have avoided both horns of the dilemma.

How then can we plausibly distinguish propositions such that \( S \)'s believing them gives him a reason, albeit not necessarily an indefeasible reason, to think that they are true, from other propositions that \( S \) believes? We can do so by appealing to \( S \)'s own epistemic standards. Suppose \( S \)'s epistemic standards imply that his believing \( p \) is epistemically significant. Suppose, more exactly, that \( S \), on reflection, would think that his believing \( p \) makes \( p \) sufficiently likely to be true. Suppose that the proposition that \( S \) believes \( p \) itself tends to make the proposition \( p \) epistemically rational for \( S \). Then \( S \)'s own epistemic standards imply that all else being equal \( p \) is sufficiently likely to be true when he believes \( p \). Accordingly, \( S \)'s own epistemic standards imply that this proposition \( p \) (as well as his belief \( p \)) has a special status for \( S \). His own epistemic standards imply that the fact that he believes this proposition \( p \) is itself enough to make \( p \) sufficiently likely.

Are there any propositions like this? Are there any propositions such that \( S \)'s believing them tends to make them epistemically rational for \( S \)? (This question is discussed in detail in chapter 2, especially the first two sections.) For now it will do simply to assert that if \( S \) is relatively normal, the answer would seem to be yes. For example, most people presumably think, and on reflection would continue to think, that most relevant possible situations in which they believe they are in pain are situations in which they in fact are in pain. Likewise, they presumably believe this of many of their other conscious psychological states as well. Accordingly, it is plausible to think that the proposition that they believe they are in such a state tends to make epistemically rational for them the proposition that they are in this state. Similarly, it is plausible to think that most people believe, and on reflection would continue to believe, that most relevant situations in which they believe that they see (or hear, touch, smell, taste, or remember) something are situations in which they in fact see (or hear, touch, smell, taste, or remember) that something. For example, it is plausible to think that most people believe, and on reflection would continue to believe, that most relevant possible situations in which they believe that they see a cat on the mat are situations in which they in fact see a cat on the mat. But if so, their believing they see a cat on the mat tends to make epistemically rational for them that they do see a cat on the mat.

In addition, the propositions that a person \( S \) believes, and on reflection would continue to believe, to be necessarily true are like this. Indeed, it trivially will be the case that \( S \), on reflection, would think that propositions of this sort would be true in most situations in which he believes them. However, it is not trivial that he, on reflection, would think that his believing such a proposition is relevant to the truth of the proposition. Recall that if an argument with a conclusion that \( S \), on reflection, would regard as necessarily true is to be uncontroversial for him, he, on reflection, must regard the premises as being relevant to the conclusion, where for arguments with premises that he, on reflection, would take to be necessarily true his thinking this is a matter of his thinking that the premises can be used to provide him with an understanding of why the conclusion cannot be false; and for other arguments, his thinking this is a matter of his thinking that the premises of the argument, albeit contingent, provide him with
good inductive support for the necessary truth of the conclusion. Arguments of the form (S believes p; thus, p), where S, on reflection, would regard p as necessarily true, have a contingent premise, and hence resemble inductive arguments for conclusions that are necessarily true if true at all; they resemble, for example, an inductive argument for Goldbach’s conjecture. Even so, let us assimilate such arguments to those whose premises an individual, on reflection, would regard as necessarily true, treating them as special and particularly “pure” instances of such arguments. In particular, let us insist that S's believing p tends to make p epistemically rational for him, where p is a proposition that he, on reflection, would take to be necessarily true, only if it is the case that, on reflection, he would think that understanding the proposition p is itself enough to provide him with an understanding of why p must be true. It must be the case, in other words, that S, on reflection, would think that p is in this way self-evident for him; he, on reflection, would think that all he needs to do in order to see why p cannot be false is to understand p. If S, on reflection, would think this of p, then his believing p is relevant to p for him; it gives him an epistemic reason in favor of p. For he cannot believe p without understanding p.

Are there any propositions about which S, on reflection, is likely to think this? Again the answer would seem to be yes, if S is relatively normal. Any relatively normal individual on reflection would be likely to think that any number of simple mathematical, logical, and analytical propositions are like this—for example, the proposition that 2 + 2 = 4, the proposition that if it is either raining or snowing and it is not cold enough to be snowing, then it is raining, the proposition that every square is a rectangle, and so on. By way of contrast, a relatively normal individual S is not likely to think this of, say, Goldbach’s conjecture. He is not likely to think, in other words, that understanding this proposition is itself enough to provide him with an understanding of why it cannot be false. And he is not likely to think this even if he, on reflection, would believe that Goldbach’s conjecture is necessarily true.

So for these kinds of necessary propositions and for the former kinds of contingent propositions, and perhaps for other kinds of propositions as well, it is plausible to think that S’s believing them tends to make them epistemically rational for him. Propositions of this sort are special for S. Unlike other propositions, he can have a reason for thinking such propositions are true even if no other proposition that he believes gives him this reason. The fact that he believes them is itself enough to give him such a reason. The fact that he believes them (his own epistemic standards imply) is itself enough to make them sufficiently likely to be true. In this sense, S’s beliefs in these propositions tend to be self-justifying.

Suppose p is such a proposition for S. Then his believing p is enough to give him a reason for thinking that p is true. This is not to say, however, that S might not also have other reasons for thinking that p is true. He may very well have other reasons. It is only to say that he would have a reason to think that p is true even if he did not have these other reasons; his believing p is enough.

To illustrate this, consider a case that is likely to be confusing. Suppose that S believes p and that his believing p tends to make p epistemically rational for him. But suppose that in addition to believing the proposition p, S believes the proposition that he believes p. By hypothesis, this latter proposition (the proposition that he believes p) tends to make p epistemically rational for S. Thus, if we assume that S has a reason for believing this latter proposition, his believing it might give him a reason to believe p. Even so, his having a reason for p is not dependent upon his having this second-order belief. Even if he did not believe that he believes p, he would have a reason for thinking that p is true. Unlike most propositions, p is one that he can have a reason to regard as true even if no other proposition that he believes gives him this reason. His own deepest epistemic standards imply that p is special for him. His own epistemic standards imply that unlike most propositions that he believes, the mere fact that he believes p is enough to make p likely to be true. So, unlike most propositions that he believes, S can have a reason for thinking that p is true without having an argument for p, an argument whose premises he believes and whose premises tend to make rational for him its conclusion.

Of course, there is a sense, albeit an extended sense, in which S here has a reason to think that p is true only because there is a good argument for p. Namely, S has a reason to think p is true only because the argument (S believes p; thus, p) is one that conforms to his deepest epistemic standards—one that he, on reflection, would think is sufficiently likely to be truth preserving—and only because in addition he in fact believes p. However, the point is that this argument, unlike other arguments for p, can give S a reason to believe its conclusion even if he does not believe its premise. It is enough that the premise be true.

Alternatively, we perhaps could say (if it is not stretching the notion
of argument too much) that S here has a special kind of argument for p, a kind of "zero-premise" argument for p. The argument perhaps can be represented as (---; thus, p), the idea being that in order to have a reason for p, S need not believe any premise; it is enough for him to believe the conclusion of this zero-premise argument.43

There may be yet other ways to interpret the claim I am making. But the key idea, however we interpret it, is that for a certain select set of propositions, S's own epistemic standards imply that there is a special relation between S's believing the proposition and the proposition being true, and this is enough to give S a reason for thinking that the proposition is true.

On the other hand, if a believed proposition p is not like this—if S's epistemic standards do not imply that it is special in this way—then S (all else being equal) has a reason to be suspicious of p. He (all else being equal) has a reason to be suspicious of p by virtue of the fact that (all else being equal) he has no reason to think that p is likely to be true. At least his believing p does not give him such a reason. For were he to be reflective, he himself would not think that p is true in a sufficiently large percentage of relevant possible situations in which he believes p. So his own deepest epistemic standards suggest that in situations where he believes p, there may well be (all else being equal) a significantly large risk of error.

Of course, all else may not be equal. He may have other information indicating that p is likely to be true. In particular, once we have identified a certain select set of propositions such that S's believing them is itself enough to give him a reason for thinking that they are true, we open the possibility that these propositions might provide S with a reason for thinking that other propositions that he believes, such as p, are likely to be true. For propositions belonging to this select set might tend to make p epistemically rational for S. However, if it is such propositions that give S a reason for thinking that p is true, p will lack an important kind of epistemic basicality that these other propositions possess. These other propositions merely by being believed acquire (all else being equal) a positive epistemic status for S; the fact that S believes these propositions gives him a reason to think them true. They need not be supported by other uncontroversial propositions to have this status. Proposition p by contrast is not like this.

But what difference does it make how a proposition becomes uncontroversial for him? If a proposition is believed by a person S and he has a good reason to think it true and has no good reason to be suspicious of it, is it not uncontroversial for him? Does it matter how a person comes to have a good reason for thinking it true? Does it matter whether this reason is generated by the fact that he believes p or by the fact that p is supported by other propositions that are uncontroversial for him?

It does matter, and it matters because the task here is to identify those propositions whose truth S uncontroversially can assume in order to argue for others, and because propositions that are uncontroversial simpliciter need not be uncontroversial when used as premises. In particular, propositions that are uncontroversial for a person—propositions that the person S has a good reason to think true and no good reason to be suspicious of—and that do not need to be supported by other uncontroversial propositions in order to have this status are uncontroversial for S to use as premises. They are epistemically basic for him. On the other hand, uncontroversial propositions that do need to be supported by other uncontroversial propositions in order to be uncontroversial themselves are not epistemically basic. Correspondingly, they might not be uncontroversial for S to use as premises. Using them as premises to argue for other propositions is problematic in a way in which using epistemically basic propositions is not.

The explanation for this is that there can be situations in which a person S has good evidence for a proposition p but in which p itself cannot properly be added to S's evidence and used to argue for other propositions. The fact that a person has good evidence for a proposition that he believes and no good evidence against it is no guarantee that the proposition can be used properly as evidence for other propositions. It is no guarantee, in other words, that it is uncontroversial for him to use such a proposition as a premise in arguments for other propositions.

Suppose, for example, that S believes proposition p and that there is no argument against p that gives S a reason to be suspicious of p. Moreover, suppose he also has a good reason for thinking that p is likely to be true. Then p is uncontroversial for him. However, suppose that S has a reason for thinking p is likely to be true only because propositions e1 and e2, which tend to make p epistemically rational for him, are uncontroversial for him. Now imagine the following to be the case: Proposition p and another proposition that is uncontroversial for S—call it e3—can be used to argue for proposition q but the propositions e1, e2, and e3 cannot be used to argue for q. If proposition p simply by virtue of being uncontroversial can be un-
controversially assumed as a premise and used to argue for \( q \), then by hypothesis \( S \) here will have an uncontroversial argument for \( q \)—the argument \((p, e^3; \text{thus}, q)\). Intuitively, however, it seems that he need not have an uncontroversial argument for \( q \). After all, \( S \) has a reason to think \( p \) is true only because \( e^1 \) and \( e^2 \) are uncontroversial for him, but these propositions (along with \( e^3 \)) cannot be used to argue for \( q \).

To make the case more concrete, let \( e^1 \) be the proposition that \( S \) remembers John saying a number (he remembers not which) between 1 and 16, let \( e^2 \) be the proposition that 75 percent of the numbers between 1 and 16 are between 1 and 12, let \( p \) be the proposition that John said a number between 1 and 12, let \( e^3 \) be the proposition that 75 percent of the numbers between 1 and 12 are between 1 and 9, and let \( q \) be the proposition that John said a number between 1 and 9. Suppose \( e^1 \), \( e^2 \), and \( e^3 \) are uncontroversial and basic for \( S \). That is, suppose each of these propositions is such that it is believed by \( S \), he has no plausible argument against it, and his believing it gives him a good reason to think it is true. On the other hand, suppose that \( p \) is uncontroversial for \( S \) but not basic for him. Specifically, suppose that \( S \) has a reason for thinking that \( p \) is true only because \( e^1 \) and \( e^2 \) tend to make \( p \) epistemically rational for him. Finally, suppose that \( e^3 \) and \( p \) tend to make \( q \) epistemically rational for \( S \) but that \( e^1 \), \( e^2 \), and \( e^3 \) do not tend to make \( q \) epistemically rational for \( S \).

The point of this example is that if we grant that the proposition \( p \) by virtue of being uncontroversial simpliciter for \( S \) is also uncontroversial for \( S \) to use as a premise, then, all else being equal, \( S \) will have a good argument for \( q \). Accordingly, all else being equal, \( q \) will be epistemically rational for \( S \). Moreover, all else might very well be equal. Propositions \( e^1 \) and \( e^2 \), for example, need not be defeaters. If \( p \) and \( e^3 \) tend to make \( q \) epistemically rational, then presumably \( p \), \( e^1 \), \( e^2 \), and \( e^3 \) also tend to make \( q \) epistemically rational. For, if the proposition \( p \) is true—if John in fact said a number between 1 and 12—then the propositions \( e^1 \) and \( e^2 \) are not particularly relevant for determining the likelihood of \( q \). Of course, they would be relevant (in conjunction with \( e^3 \)) if \( p \)'s truth cannot be assumed. They would be relevant if \( S \) cannot properly assume that John said a number between 1 and 12. However, if this is not so—if \( p \) is proper to assume—\( S \) might very well have an argument that makes \( q \) epistemically rational for him.

This is counterintuitive. \( S \) here does not have an uncontroversial argument for \( q \). He has a reason to think \( p \) is likely to be true only because \( e^1 \) and \( e^2 \) are uncontroversial for him. But given these propositions and \( e^3 \), \( q \) has only a slightly better than even chance of being true. So even if, relative to \( p \) and \( e^3 \), \( q \) has a relatively good chance of being true, \( S \) nonetheless lacks an uncontroversial argument for \( q \). He lacks such an argument because, although \( p \) may be uncontroversial simpliciter for \( S \), it is not uncontroversial for him to use it as a premise. He has a reason to be suspicious of using \( p \) as a premise to argue for other propositions, propositions such as \( q \). The reason derives from the fact that \( p \) is not epistemically basic for him.

This is not to say that every proposition that is not epistemically basic will be like \( p \) here. Sometimes it will do no harm to add to one's evidence a proposition \( p \) that is uncontroversial but that is not epistemically basic. That is, sometimes it will do no harm to assume such a proposition \( p \) as a premise in an argument for another proposition \( q \). Specifically, it will do no harm in those cases where the propositions that make \( p \) uncontroversial can themselves be used to argue for \( q \). But then, the nonbasic proposition \( p \) is not needed to argue for \( q \).

In cases where the propositions that make a nonbasic proposition such as \( p \) uncontroversial for \( S \) can themselves be used to argue for a proposition such as \( q \), \( S \) need not assume \( p \)'s truth—he need not use \( p \) as a premise—in order to argue for \( q \). On the other hand, in cases where these propositions cannot be used to argue for \( q \), there is a reason for \( S \) to be suspicious of assuming \( p \)'s truth in order to argue for \( q \). If the considerations that give him a reason to think \( p \) is likely to be true cannot themselves be used to argue for \( q \), this gives him some reason to be suspicious of resorting to \( p \) to argue for \( q \).

Accordingly, when a proposition \( p \) is uncontroversial for \( S \) only because it is made so by other propositions, it is controversial for \( S \) simply to assume its truth. The proposition can and should be argued for rather than simply assumed.\(^{44}\)

Thus, propositions that are genuinely uncontroversial for \( S \) to use as premises are those that are not only uncontroversial simpliciter but also epistemically basic. They are, in other words, propositions that are believed by \( S \) with such confidence that nothing else he believes with comparable confidence can be used to argue against them and that in addition are such that \( S \)'s believing them gives him a reason to think that they are likely to be true. They are epistemically basic as well as epistemically secure.

One additional condition has to be met in order for \( p \) to be uncontroversial for \( S \) to use as a premise. Not only must \( S \)'s believing \( p \) give him a good reason for thinking that \( p \) is true, but also this reason must not be convincingly defeated. This additional condition is needed because \( S \)'s believing \( p \) need not provide an indefeasible
reason for \( p \). Accordingly, if there is a convincing defeater, \( S \) in the final analysis may lack a good reason for thinking that \( p \) is likely to be true. And if he does lack such a reason, \( p \) will be controversial for him.

What kind of proposition would be a convincing defeater of the reason that \( S \)'s believing \( p \) provides for \( p \)? It must be a potential defeater of the argument (\( S \) believes \( p \); thus, \( p \)); it must be believed by \( S \) as confidently as he believes \( p \); and in addition it must not itself be convincingly defeated. Thus, suppose \( d \) is as confidently believed by \( S \) as is \( p \), and suppose in addition that \( d \) is a potential defeater of the above argument. Then, \( p \), all else being equal, is controversial for \( S \). He has a reason to be suspicious of using \( p \) as a premise, unless there is a proposition \( d \) that convincingly defeats \( d \)'s defeater status—where \( d \) convincingly defeats \( d \)'s defeater status just in case (1) \( S \) believes \( d \) as confidently as \( d \), (2) the propositions (\( S \) believes \( p \), \( d \), \( d \)) tend to make \( p \) epistemically rational for \( S \), (3) \( d \) does not beg the question against \( d \), where \( d \) begs the question against \( d \) if either (i) \( d \) entails the proposition \( p \) or (ii) \( d \) entails the proposition that \( p \) is probable or (iii) \( d \) entails some proposition \( p' \), where \( p \) entails \( p' \) and where \( d \) is a potential defeater of the argument (\( S \) believes \( p \); thus, \( p' \)) or (iv) not\( d \) either entails not\( p \) or entails the proposition that it is not the case that \( p \) is probable or entails some proposition not\( p' \), where \( p \) entails \( p' \) and where \( d \) is a potential defeater of the argument (\( S \) believes \( p \); thus, \( p' \)).

Consider an example. Let \( p \) be the proposition that \( S \) sees a red ball in front of him. Suppose nothing else that \( S \) believes with as much confidence tends to make not\( p \) epistemically rational for him, and suppose \( S \), on reflection, would believe that the argument (\( S \) believes \( p \); thus, \( p \)) is sufficiently likely to be truth preserving. Accordingly, his belief \( p \) tends to be self-justifying. Nevertheless, \( S \) might still have a reason to be suspicious of \( p \). Suppose, for example, he believes as confidently as \( p \) the proposition that he has been given a hallucinatory drug that prompts about half of the people to whom it is given to have radically false but coherent perceptual beliefs. Call this proposition \( d \). Proposition \( d \), notice, presumably does not tend to make not\( p \) epistemically rational for \( S \), since it implies that the drug prompts only about half of the people to whom it is given to have hallucinations. Nevertheless, \( d \) presumably does give \( S \) a reason to be suspicious of \( p \); it does this by defeating the reason he has for \( p \), the reason that he has (all else being equal) by virtue of believing \( p \). More exactly, it gives him a reason to be suspicious of \( p \) unless \( d \)'s defeater status is itself convincingly defeated. For example, the proposition that \( S \) belongs to the half of the population for whom the drug in question does not produce hallucinations or the proposition that he has been given an antidote might be a convincing defeater of \( d \), provided that \( S \) believes it as confidently as he does \( d \). On the other hand, \( p \) itself cannot convincingly defeat \( d \)—condition (3i) rules this out—nor can the proposition that \( p \) is probable—condition (3iii) precludes this. Similarly, the proposition that \( S \) sees something red in front of him cannot convincingly defeat \( d \); condition (3ii) rules this out. And condition (3iv) prevents the disjunction (\( S \) sees a red ball or \( 1 + 2 = 4 \)) from convincingly defeating \( d \).

Notice that intuitively the above proposition \( d \) gives \( S \) a reason to be suspicious of \( p \), all else being equal, by virtue of giving him a reason for withholding judgment on \( p \). In effect what the above restriction does is to allow what we intuitively would regard as reasons for withholding on a proposition \( p \) as well as what we intuitively would regard as reasons for disbelieving \( p \) to make \( p \) controversial for \( S \). They can do so by defeating \( S \)'s reason for thinking that \( p \) is true. In particular, they can do so by defeating the reason that \( S \)'s believing \( p \) provides for \( p \).

Consider another example. Suppose that \( S \)'s belief \( p \) tends to be self-justifying but that \( S \) has an argument \( A \) for not\( p \) with premises whose truth he feels as sure of as he does of \( p \)'s truth. However, suppose also that \( S \), on reflection, would think that this argument falls just barely short of being sufficiently truth preserving. So the premises of \( A \) do not tend to make not\( p \) epistemically rational for him; they do not give him a good reason to think that not\( p \) is true. Nonetheless, it seems as if these premises might be enough to keep \( p \) from being uncontroversial for \( S \). The restriction above explains how; they might do so by virtue of the reason that \( S \)'s believing \( p \), all else being equal, provides for \( p \).

One last wrinkle remains, one that concerns an exception referred to in section 1.5, an exception to the general rule that a proposition \( p \) is uncontroversial for \( S \) only if there is no argument for not\( p \) whose premises \( S \) believes as confidently as he does \( p \). It now is possible to see that not just any such argument will make \( p \) controversial for \( S \). In particular, an argument will do so only if the conjunction of its premises is a potential defeater of the argument (\( S \) believes \( p \); thus, \( p \)). In other words, it will do so only if the conjunction of its premises tends to defeat the reason that \( S \)'s believing \( p \) tends to generate for \( p \). Consider an example to illustrate why such a restriction is needed. Suppose that \( S \) believes with great confidence that he now sees a giraffe directly in front of him, and suppose that this belief tends to be self-
justifying for him. Let this perceptual proposition be p. However, suppose S believes with equal confidence two other propositions, q and r, where q is the proposition that S is now standing on Wall Street and where r is the proposition that almost never are there giraffes on Wall Street. Suppose finally, as is not implausible, that q and r together tend to make rational for S the proposition that there is not now a giraffe on Wall Street, as well as the proposition that he does not now see a giraffe. So q and r here threaten to make p controversial for S. They are believed by S as confidently as p and they tend to make not p rational for him. Moreover, there is no obvious defeater here. The proposition p itself cannot be a defeater, for example; it begs the question against q and r. Accordingly, it looks as if q and r here might very well make p controversial for S. Yet intuitively this does not seem right; it seems as if when S believes with great confidence that he sees a giraffe in front of him, this proposition might very well be uncontroversial for him even if he believes with equal confidence that he is in a situation in which, all else being equal, he is unlikely to see a giraffe. Or at least this would seem to be so unless S has some independent reason to be suspicious of his vision.

The way to handle this difficulty is to require that the premises of any argument that threatens to make p controversial for S, where S's belief p tends to be self-justifying for S, be such that their conjunction is a potential defeater of the argument (S believes p; thus, p). In the giraffe case, the proposition (q and r) is unlikely to be a potential defeater of this argument; S, on reflection, is likely to think that his believing that he sees a giraffe makes it probable that he does see a giraffe even when he is in a situation in which, all else being equal, there are unlikely to be giraffes. And if so, p might be uncontroversial for S despite the fact that he believes q and r with as much confidence as p.  

1.7 Propositions That Are Uncontroversial to Assume and Propositions That Are Epistemically Rational

A proposition p is epistemically rational for an individual S just if he has a genuinely uncontroversial argument for p. S has a genuinely uncontroversial argument for p, in turn, just if propositions that are uncontroversial for him to assume as premises can be used to argue for p in a way that is uncontroversial for him. When can a set of propositions be used to argue for p in a way that is uncontroversial for S? When the propositions constitute the premises of an argument for p that S, on reflection, would regard as sufficiently likely to be truth preserving. Under these conditions the propositions in question tend to make p epistemically rational for S. When is it uncontroversial for S to assume a proposition as a premise? When the proposition is both epistemically secure and epistemically basic for S. What, then, makes a proposition epistemically secure? A proposition p is epistemically secure (or uncontroversial simpliciter) for S just if he believes p, there is no argument for not p that gives him a good reason to be suspicious of p, and there is a good reason for him to think that p is likely to be true. Finally, if p is epistemically secure for S and if, in addition, his believing p gives him a good (undefeated) reason for thinking that p is likely to be true, then p is epistemically basic for S as well as epistemically secure for him. It is, in other words, uncontroversial for him to assume p as a premise.

More precisely, the following defines what it is for a set of propositions e1, e2, ..., en to threaten to make p controversial for S; this notion in turn can be used to define what it is for a proposition p to be uncontroversial for S to assume:

Propositions e1, e2, ..., en threaten to make p controversial for S at t = df

1. Propositions e1, e2, ..., en tend to make not p epistemically rational for S at t.

2. Each proposition in the set (e1, e2, ..., en) is believed by S with as much confidence as he believes p.

3. If the argument (S believes p; thus, p) is an argument whose premise tends to make its conclusion epistemically rational for S at t, then the proposition (e1 and e2 ... and en) is a potential defeater of the argument for S at t.

It is uncontroversial for S at t to assume p = df

1. S at t believes p.

2. If there are propositions e1, e2, ..., en that threaten to make p controversial for S at t, then there is a proposition d such that (i) S believes d as confidently as at least one of...
the propositions \( e^t, e^i, \ldots, e^n \), and (ii) \( d \) is a potential defeater for \( S \) at \( t \) of the argument \( (e^t, e^i, \ldots, e^n; \text{thus, not} \, p) \), and (iii) \( d \) does not beg the question against this argument.

3. The proposition that \( S \) believes \( p \) tends to make \( p \) epistemically rational for \( S \) at \( t \), and if there is a proposition \( d \) such that \( S \) believes \( d \) as confidently as \( p \) and \( d \) is a potential defeater for \( S \) at \( t \) of the argument \( (S \) believes \( p \); thus, \( p) \), then there is a proposition \( d^t \) such that (i) \( S \) believes \( d^t \) as confidently as \( d \), (ii) the propositions \( (S \) believes \( p, d, d^t) \) tend to make \( p \) epistemically rational for \( S \) at \( t \), and (iii) \( d^t \) does not beg the question against \( d \).

This latter definition can be simplified by leaving unspecified the exact nature of convincing defeater propositions.\(^{31}\)

It is uncontroversial for \( S \) at \( t \) to assume \( p \).

\[
\text{1. } S \text{ at } t \text{ believes } p.
\]

2. If there are propositions that threaten to make \( p \) controversial for \( S \) at \( t \), then there is a convincing defeater proposition.

3. The proposition that \( S \) believes \( p \) tends to make \( p \) epistemically rational for \( S \) at \( t \) and there is no convincing defeater proposition.

These definitions express what it is for a proposition to be such that it is uncontroversial for \( S \) to use it as a premise. They in conjunction with the previous definition of "tends to make epistemically rational," which expresses what it is for propositions to be such that they can be used to argue for another proposition in a way that is uncontroversial for \( S \), can be used to say what it is for a set of propositions to make epistemically rational another proposition for a person \( S \) (as opposed merely to tend to make the proposition epistemically rational):

Propositions \( e^t, e^i, \ldots, e^n \) make \( p \) epistemically rational for \( S \) at \( t \).

\[
\text{It is uncontroversial for } S \text{ at } t \text{ to assume } e^t, e^i, \ldots, e^n \text{ respectively, and } e^t, e^i, \ldots, e^n \text{ tend to make } p \text{ epistemically rational for } S \text{ at } t, \text{ and there are no other propositions } d^t, d^i, \ldots, d^n \text{ all of which are uncontroversial for } S \text{ at } t \text{ to assume and which in addition are such that } (d^t \text{ and } d^i \ldots \text{ and } d^n) \text{ is a potential defeater for } S \text{ at } t \text{ of the argument } (e^t, e^i, \ldots, e^n; \text{thus, } p).
\]

Alternatively, we can say that propositions \( e^t, e^i, \ldots, e^n \) make \( p \) epistemically rational for \( S \) at \( t \) just if these propositions tend to make \( p \) epistemically rational for \( S \) at \( t \), they are all uncontroversial for \( S \) to assume, and all else is equal (that is, they are not defeated by any proposition that is uncontroversial for \( S \) at \( t \) to assume or any conjunction of such propositions).\(^{32}\) In terms of this definition, the propositions that are epistemically rational can be identified:

It is epistemically rational for \( S \) at \( t \) to believe \( p \).

\[
\text{Either it is uncontroversial for } S \text{ at } t \text{ to assume } p \text{ or there are propositions that make } p \text{ epistemically rational for } S \text{ at } t.
\]

Since every proposition (or at least every proposition that \( S \) understands) tends to make itself epistemically rational for \( S \), this definition can be further simplified:

It is epistemically rational for \( S \) at \( t \) to believe \( p \).

\[
\text{There are propositions (or a proposition) that make } p \text{ epistemically rational for } S \text{ at } t.
\]

And then, the epistemic rationality of withholding judgment can be defined:
It is epistemically rational for $S$ at $t$ to withhold judgment on $p$. = df It is not epistemically rational for $S$ at $t$ to believe $p$, and it is not epistemically rational for $S$ at $t$ to believe not $p$.

These definitions provide the details that fill in the general conception of epistemic rationality I sketched at the beginning of this chapter, a conception that is motivated by an idealization of an Aristotelian conception of rationality. According to an Aristotelian conception, rationality is a function of an individual pursuing his goals in a way that he, on reflection, would take to be effective. Since epistemic rationality is concerned with the epistemic goal of now believing truths and not believing falsehoods, the Aristotelian conception suggests that it is epistemically rational for an individual $S$ to believe $p$ just if he, on reflection, would think that believing $p$ is an effective means to his epistemic goal. This in turn motivates the idea that $p$ is epistemically rational for $S$ just if he has an uncontroversial argument for $p$, an argument that he would regard as likely to be truth preserving were he to be appropriately reflective, and an argument whose premises he would uncover no good reasons to be suspicious of were he to be appropriately reflective. The definitions above constitute my suggestions concerning what kind of reflection is appropriate for characterizing epistemic rationality. With respect to the truth-preservingness of the argument, the suggestion is that it be ideal reflection from an epistemic point of view. If an argument is such that $S$ would regard it as sufficiently likely to be truth preserving were he to be ideally reflective from an epistemic point of view, then the argument reflects $S$’s deepest epistemic standards and its premises tend to make its conclusion epistemically rational for him. With respect to the premises of the argument, the suggestion is that the appropriate kind of reflection is reflection upon what else $S$ believes and upon his deepest epistemic standards (that is, upon the arguments that he would regard as sufficiently truth preserving were he to be ideally reflective). In particular, if these premises are believed by $S$ and in addition are such that (1) $S$ would have no good reason to be suspicious of their truth were he to reflect upon what else he believes and upon the arguments that he on ideal reflection would take to be sufficiently truth preserving and (2) $S$ on ideal reflection would think that his believing them makes them sufficiently likely to be true, then these premises are uncontroversial for him to assume as premises. Accordingly, on the assumption that there are no defeaters, these premises make the conclusion $p$ epistemically rational for $S$. The definitions above can be regarded as embodying the formal part of a theory of epistemic rationality—the theory proper. But there is also a substantive part of the theory generated from the theory proper together with plausible assumptions about our nature as believers. The substantive part of the theory seeks to articulate what kinds of propositions are likely to be epistemically rational for relatively normal people. This substantive part of the theory is one of the main concerns of chapter 2. The goal is for the substantive part of the theory to generate intuitively plausible results about what kinds of propositions are likely to be epistemically rational for us. But in addition to being intuitively plausible, there will be something else to recommend the results generated by the substantive part of the theory. These results are generated by plausible assumptions about our nature as believers and by a formal account of epistemic rationality that in turn is motivated by a plausible and a perfectly general conception of rationality, an Aristotelian conception.