ETHICS OF RELIGIOUS BELIEF;
A Study in the Application
of the Concept of Rationality
to Religious Faith.

A thesis submitted for the
degree of D. Phil. in the
University of Oxford

by
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Abstract
Abstract

This thesis seeks to answer the question of what it would be for a person to be persuaded rationally to believe that God exists, and tries to explain in a related way the possibility of rationality in Christian faith. I begin by explicating and defending the "ethics of belief" approach to epistemology. Then two competing ethics of belief are described: "Strong Formalism", which holds, through a voluntaristic decision, a deductivist epistemology; and "Soft Rationalism", which contains an informalist epistemology, and rejects voluntarism. Arguments for and against each view are canvassed. But I show that our attempted adjudication is blocked by the "Ultimate Rationality Problem": no ethic of belief seems able rationally to justify its view of rationality. I reduce the Problem to this fact: any view of rationality refutes itself which tries to give a foundational method of epistemic evaluation that both gives a verdict on every proposition and avoids self-justification. I reject several suggested solutions in favour of one which replaces the foundational view of justification by a contextual view. I then generate from the process of justification itself several common epistemic standards, which allow us rationally to favour Soft Rationalism over Strong Formalism. But the former is both foundationalist and needlessly opposed to formalism. I remedy these faults by developing a "Modest Formalist" ethic of belief: a partly formal set of standards for rational metaphysical argument, given in the form of a set of constitutive rules for certain games of interpretive argument. In doing this I defend an improved theory of epistemic probability, and reveal the structure of our substantive views of rationality—as this virtue would be required of believings per se, of actions based on believings, and of actions (such as living a Christian life) based on what I describe as "experimental faith".
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1 Introduction
1. Introduction.

1.1 Our main question.

Is it rational to believe in the existence of God, as described in the traditional corpus of Christian doctrine? To express the question with more bite, ought one, rationally, to believe that the God of Christianity exists? This question is elliptical. Ought who believe, in what conditions, and to what degree? Speaking for myself as the 'who', I do not know the answer to this question, although I believe it to be yes. The task of this thesis, however, will not be to answer that question, but to pursue the more modest and logically prior task of specifying what it would be for a person to believe rationally in the existence of God.

We can narrow our task somewhat. Sometimes we predicate rationality of institutions. But in considering the rationality of Christianity, we shall not be looking at its rationality as an institution. Our interest is in the rationality of Christians. But again, the rationality of a person may sometimes be a virtue in his emotions or character traits, and we shall start out by disregarding these. Instead we shall focus on the rationality of the actions and believings of a Christian. Furthermore, we shall not be centrally concerned with a non-epistemic concept of rationality, one which I shall later call that of practical rationality. This is instanced in our predicking rationality of a believing solely to the extent to which it is in the believer's interest so to believe. We can ignore this concept by narrowing our scope to that of specifying what it would be for a person to be persuaded rationally to believe that God exists.

The generic concept of persuasion is used here rather than the narrower notions of argumentation (a species of persuasion) or, narrower yet, of inference (a sub-species of argumentation). This is
to avoid begging the question against the view that there are meaningful verbal processes within which we cannot discern recognizable inferences, or indeed any pattern of argument at all, but which are yet rational processes because they lead to a rational decision to believe something.

On the other hand, by looking at persuasion we ignore from the beginning such non-verbal processes of belief acquisition as the straightforward perception of physical objects. Because we are trying to construct an epistemology suitable for religious belief, this specialization is quite legitimate; for we do not perceive God— or at least the typical Christian ought not expect to, in this life at least. Some Christians come to regard God as intimately familiar to themselves. But they arrive at this stage not by bumping into him but by responding to their experience as a sign of his reality. It is worth reminding ourselves that the central doctrinal tradition of Judaism and Christianity has held that God is known not by acquaintance but through his Word. The mystical tradition would be an uncomfortably glaring exception to this were it not itself so problematic. Claims to be aware of the Christian God cannot be justified by appeal to numinous experience without considerable interpretation of the latter under descriptions derived from Christian doctrine itself. In that case even the view of preaching and witness which restricts the Christian's role to that of simply challenging the non-believer to look and judge for himself presupposes propositional interpretation. It presupposes that the Christian must first give the non-believer the concepts in terms of which to interpret his experience, by relating to him the Gospel and perhaps by explaining its key terms, such as "Son of Man", "Holy Spirit", etc. In this regard, preaching is analogous to saying to someone,

'I used to see this figure just as a duck, but now I see it as a rabbit also - how about you?' One may always discover that the person addressed doesn't know what a rabbit is, or rather doesn't know what parts of the rabbit (the head and ears) to look for in the figure. Any challenge to look and see cannot be taken up until the person challenged has some idea, however rough a description, of what he is looking for.

I wish to contribute to the development of an adequate epistemology for Christian faith. I shall not claim to offer such a theory in anything like a complete form, let alone try to apply it to actual Christian believings. I refrain from such application in order to keep my task at a reasonable size, not because I believe it is no part of a philosopher's task to engage in such evaluation. To assume that a philosopher should do only impartial conceptual analysis of the tools of rational persuasion which the theist and atheist might employ upon one another would be to beg an important question. The only reason for such a restriction is the belief that his going on to use those tools himself would be an abuse of his professional position. He would be telling people what to believe, not just telling them how to decide what to believe. But this must in turn assume that none of the reasons adduced for or against either Christianity or atheism may be judged good or bad by a fair-minded philosopher without his begging the question against one or the other position. Some of the facts given as reasons for either side may indeed have force only given certain question-begging assumptions, but many may not. It would be unfair to assume from the beginning of our enquiry that there are no neutral considerations within the philosopher's ambit, or not sufficient ones, from which to construct a part of a rationally persuasive case for either theism or atheism.
1.2 The question of the religious propriety of the enterprise.

A systematic answer to the question, what would it be for a person to be persuaded rationally to believe that God exists?, would be in part provided by a theory of knowledge: either a universal epistemology analyzing all instances of human knowledge, which is applied to Christian knowledge-claims; or, if such a grandiose theory be impossible, perhaps because 'knowledge' and kindred terms represent an irreducibly varied family of concepts, then a more limited 'local' theory analyzing the peculiarly religious type (or types) of knowledge claim. As will become clear later, I believe some form of general epistemology is possible. But even its application to a Christian's believing in God's existence would not be sufficient to answer our question. This is because some Christians have questioned the propriety of asking the question in the first place. They have challenged the worth, at least as regards a man's response to the Gospel proclamation, of the ideal of achieving knowledge or rational belief which epistemology simply takes for granted. Now this challenge is made within a wider context of evaluation. This is the context of ultimate goods and of decisions wherein a person weighs up the different allegiances that make claims upon him. Any epistemology (whether global or local) suitable for Christian believing contains implicit within it an assessment of the value of having such knowledge or rational believing relative to the other concerns of faith. Thus any such epistemology rests within a larger substantive position which I call an 'ethic of belief'. The ethic of belief which I shall propose in Chapters 5 to 7 implicitly rejects the extreme fideist's devaluing of the epistemic ideal. Instead, it assumes that a man's personal response to purported religious realities and his intellectual curiosity and integrity may each have its full play without antagonism, indeed that the two dimensions of personality may interact to mutual benefit.
1.3 Outline plan of the thesis.

The thesis falls into three parts. First I shall describe in more
detail what I mean by an ethic of belief. Then two competing ethics of
belief will be identified, one of which I label 'Soft Rationalism'. The
latter is an important and illuminating attempt to provide an epistemology
flexible enough to encompass Christian believing within the class of
possibly rational believings. But I will criticize it, because I do not
think the arguments it provides allow it to fulfill its goal of supplanting
what has been the philosophers' standard ethic of belief. Nonetheless,
it contains valuable insights, and so in my third section I will try to
build these into my attempt to construct an alternative ethic of belief.

1.4 The question of meaningfulness.

Much recent writing in Anglo-American analytic philosophy of religion
has been concerned with determining whether statements expounding religious
positions in general, and Christian doctrine in particular, are cognitively
meaningful. Such concern with the clarification of meanings in theology
Raeburne S. Heimbeck calls "metatheology"\(^1\). My thesis is not directly
concerned with metatheology in this sense, but with epistemology applied
to religious belief. Nonetheless the two types of endeavour are
connected, in the following ways.

Suppose that one accepts the theory of cognitive meaningfulness
which Heimbeck calls the "checkability theory"\(^2\). It would still be
possible to argue that theology is capable of being cognitive. This is
what Hick attempted in *Faith and Knowledge* with his doctrine of
eschatological verification, and is what Heimbeck\(^3\) attempts with his

\(^1\) R.S. Heimbeck, *Theology and Meaning*, pp. 18 - 19.
\(^2\) ibid., pp. 46 - 47; The whole of his Ch. II gives his arguments against
the theory's adequacy.
\(^3\) ibid., Ch. V and VI.
description of what he calls "theological sign-reasoning". Both writers clearly think that providing an adequate religious epistemology answers the meaning-sceptic's challenge. There is also a converse relation between the two types of philosophical study of theology. The definition of 'adequacy', for instance, in a religious epistemology will depend in part upon how stiff a checkability theory of religious meaning is applied to our statement of belief. Must a statement about God be shown conclusively, or just reasonably, to be certainly, or just probably, true or false? To do epistemology in a religious context is therefore one way to do metatheology. Let us, with Heimbeck, give the sceptic his checkability challenge. Then in seeking to construct an adequate religious epistemology, we can also be taken to be trying to answer this challenge. This two-birds-with-one-stone strategem circumvent any objection to the effect that I erect an ethic of religious belief without examining whether such beliefs are capable of making factual sense.

1.5 Apology for my title.

My title sacrifices precision for richness of associations. It may be thought that by an 'ethic of belief' I mean a morality of belief. This is not my intention. Although I follow that tradition in epistemology, exemplified by Chisholm's Perceiving, which treats the subject as the study of the ethics of belief, I do not take this latter phrase unrealistically literally. Again, the obligations which in my view an ethic of belief imposes do not bear, literally and directly, upon our beliefs, but rather upon those acts which constitute our trying to believe or disbelieve. Or again, while my concern is to help to develop an ethic of religious belief, it is not alone religious believing to which my suggestions would be apposite. Indeed we do not come until the very
end of this thesis to the special problems posed by theistic faith, in particular the apparent Christian demand for complete conviction about God's existence.
Definition of an Ethic of Belief
2. Definition of an Ethic of Belief.

2.1 Parallels between theory of knowledge and moral philosophy.

An 'ethic of belief' contains an epistemology, that is to say a theory of knowledge. But what is that? Looked at as a theory, it is a systematic attempt to describe the meaning of the term 'knowledge' and its kindred terms (e.g., 'cognitive' and 'epistemic'). As will emerge later, my particular interest is not so much with the concept of knowledge as with the lesser concept of rational belief. These concepts are closely related, of course. Knowledge is a special kind of rational belief, that is belief which is rational and fulfills other conditions as well. Thus the treatment of both belongs in a complete epistemology. I shall refrain from analyzing in any detail the concept of knowledge, however, because an epistemology adequate for religious belief need go no further than to explicate our concept of rationality in belief. But in the following comments upon the four ways in which moral and epistemic evaluation are similar, I shall let the term 'knowledge' stand in for any of our other epistemic terms.

The first parallel is that moral philosophy and theory of knowledge both analyze the meaning of some kind of value term, for a knowledge-ascription is as much an evaluation as is an ascription of moral goodness. We find then similarities of method in these two areas of philosophy. In the recent analytic tradition of moral philosophy, the philosopher attempts to explicate the meaning of terms like 'good', 'ought', and 'right' (as used in a moral sense) and the natural means to do this is by comparing and contrasting the meaning of such terms with that of other kinds of value term and with that of non-evaluative ones. The similar approach in theory of knowledge is to describe evaluations of cognitive worth and then compare these with, and distinguish them from, other kinds of evaluation of attitudes. The epistemologist may try to
say how knowledge differs from, and how it resembles, fidelity, for instance, or hope. He might also try to distinguish knowledge-ascriptions from non-evaluative predications on persons or their attitudes, to say, for example, what the difference is between the propositions 'The peasant's love for the princess was overwhelming and, as it turned out to his surprise, not unrequited' and 'The peasant lacked any knowledge of the princess' love for him'.

The second parallel which I wish to highlight is a similarity in the range of competing theories in the two areas of philosophy. Furthermore, in both cases the variations in theory result from the same sort of divergence regarding the meaning of the value terms being studied.

In an article on our present topic, R.B. Brandt describes three different approaches to the meaning of a value term which he finds in both areas of philosophy. These are "naturalism" — value terms name observables — "non-naturalism" — they name unobservable synthetic a priori relations — and "noncognitivism". I prefer instead to combine his first two categories into one, 'descriptivism', and divide up his last category into true noncognitivism on the one hand — i.e. emotivism and the performative view — and on the other hand theories intermediate between these two extremes. Descriptivists claim that the criteria of application (whether these are natural or non-natural properties or relations) of a moral term like 'courageous' are contained in, and indeed exhaust, the meaning of the term. Emotivists, because of their logical positivist view of factual meaning, take moral, aesthetic, and religious terms, indeed value terms in general, including that of 'truth', to lack

1. I really mean the propositions expressed by the sentences, but that is too clumsy a phrase to use.
such meaning. Hence such terms are not governed by any factual criteria of application, in the sense that there are no characteristics of objects or situations which render application of the value term to them wrong because of the term's very meaning. Between these extremes are theories such as R.M. Hare's universal prescriptivism which try to find a middle ground by allowing to value terms two types of meaning, one to cover the practical force or action-guiding character of moral language, the other to cover (some of) the reasons, namely circumstantial facts, that are available to justify any ascription of moral value. Moral judgements guide actions, but do so by methods in which requesting and receiving reasons are appropriate. In Hare's view therefore the descriptive part is an important part of the meaning of moral terms. Nonetheless it is not of concern to the philosopher, for substantive standards cannot be captured in a logic, and the philosopher is concerned only with the logic of moral terms.

In epistemology much the same division of theories can be discerned. Roderick Chisholm most nearly approximates to the analogue of the ethical descriptivist. He takes the defining of a moral or epistemic term to be a peripheral task for the philosopher of ethics or of knowledge. He does give a definition of knowledge: a person knows, if he has at a given time a true belief which is evident for him at that time.' But he agrees with G.J. Warnock that such definitions are nearly empty unless supplemented by a specification of an epistemic term's criteria of application. Such criteria are not recipes for people to follow in making epistemic value judgements. They can be discovered, after all, only on the assumption that people already are able to make such judgements. The knowledge theorist's proper task, rather, is akin to

that of the grammarian who seeks to describe the conditions under which people use, for instance, one tense rather than another.\footnote{Chisholm, \textit{op. cit.}, p. 23. The reference to Warnock is to G.J. Warnock, \textit{The Object of Morality}. Warnock implies that moral philosophy might engage in both analysis of moral concepts and the kind of substantive study he attempts (p. viii); but by the end of the book (p. 137), he declares that the immense variety of uses of language in moral discourse renders the study of meaning a lost cause. The subject matter of moral discourse, rather than its logic, remains as the only fruitful focus of study.}

At the other extreme is the view of knowledge implied by J.L. Austin in "Other Minds". He draws a deliberate parallel between the epistemic locution 'I know' and the moral performative locution 'I promise'. 'I know' gives other people my word, or authority, for asserting what I have asserted\footnote{J.L. Austin, "Other Minds", p. 144.}. This is not emotivism, but like the latter it is a non-cognitivist view of evaluation, for Austin urges avoidance of the "descriptive fallacy" regarding epistemic terms and directs our attention to non-descriptive functions of epistemic evaluations.

A 'middle of the road' theory of knowledge would try to acknowledge prescriptive or performative aspects of the meaning of 'know' but would also recognize the necessity of describing currently employed criteria of knowledge. A.J. Ayer's \textit{The Problem of Knowledge} gives such a centrist epistemology. He there tries to answer the question 'What is it to know?' as

\begin{quote}
first that what one is said to know be true, secondly that one be sure of it, and thirdly that one should have the right to be sure.\footnote{Ayer, \textit{op. cit.}, p. 34.}
\end{quote}

But he also tackles the question 'How much do we know?' In thus treating the "marks" or criteria of application of a value term as a proper concern of the philosopher, Ayer is more concerned than is Hare to synthesize into one improved theory the accurate parts of the more extreme theories about value terms. Later in my own theory of the
meaning of epistemic terms I shall follow Ayer in this. But on the other hand, I shall treat their criteria of application as part of their meaning proper, in the way Hare speaks of the descriptive meaning of a moral term. This Ayer refuses to do. He says it is a mistake to build our actual standards for a concept into the definition of that concept. But if we are defining the concept's meaning, then on the view of meaning I shall later suggest (Section 4.533) our criteria are a kind of meaning, and thus need to be included in our definition.

When we notice coincidences in what we can do by using moral and epistemic language, we notice coincidences in meaning. There are also coincidences to note in what we can do with either kind of language. These form my third parallel. They are not coincidences in meaning but in the generally psychological and social effects which we can cause by using the evaluative terms. Such effects are not part of the meaning of the terms because meaning is conventional and a convention cannot determine a causal effect. I have in mind such psychological effects as the hurt feelings we can cause in a person by subjecting him to a negative evaluation. We can notice that the same ego defences are elicited when we call the person irrational as when we call him immoral.

There are also parallels in the 'social surround' of both kinds of evaluation. A man who would become a moral paragon needs to have some specific character traits such as self-discipline, tenacity, etc., (which means he needs to exercise in part that which he seeks); similarly a man who seeks knowledge must have those traits (though in his case they are not part of that which he seeks). Again, moral standards are revised and transmitted within a tradition, a particular moral way of life; similarly, the standards of knowledge or rationality—of intellectual worth in general—are passed on through the generations in traditions
of practice focussed, so to speak, in exemplary practitioners. We learn clear thinking by emulating our teachers. Moreover, the occasional intellectual giant may clarify, extend, or modify the standards of good thinking; his role parallels that of the moral innovator.

2.2 The reason-promissory character of the meaning of evaluative terms.

The fourth and final comparison introduces a topic which is crucial for my later discussion and so deserves here a section of its own. If we discount emotivism in either field, then we can observe that both epistemology and metaethics seek to explain how and why evaluative judgements admit of justification. And the correct explanation, I suggest, is that an evaluative judgement promises, because of the meaning of the value terms used, that reasons will be given if the judgement is challenged.

2.21 The elimination of emotivism.

There are good reasons to discount emotivism in either metaethics or epistemology. Hare gives the most telling argument against such a view, although he is himself sympathetic to what he considers the emotivists' insight: their emphasis on the importance of the action-guiding character of evaluative utterances. His criticism is that the theory ignores the differences between getting someone to do something and telling him to. The difference is not, I think, that between a verbal and a non-verbal route to a desired end - the behaviouristic school of social psychology can probably point out verbal means for causing people to behave in certain ways. Hare takes the difference to be a person's freedom, when you tell him to do some act, to refuse to

2.21 assent, a freedom he does not have if you seek to influence his actions through using phrases rich for him in subliminal associations or linked intimately with his ingrained habits of response. I would simply add that this is identical to the person's freedom to disagree with you when you tell him that something is the case.

2.22 A criticism of Hare's argument.

Hare's argument against emotivism is, then, that it agnores an aspect of the meaning of moral terms which reflects a particular kind of freedom we enjoy. I endorse his argument, but cannot accept his description of this freedom, and this for a reason which is of signal importance for the view of evaluative meaning I shall espouse.

The freedom he describes is the freedom to be arbitrary. The freedom I would rather single out is the freedom to be reasonable. Hare holds that to refuse to assent to being told what to do is to disobey, intentionally not to comply. By contrast, to dissent from someone's factual claim is to disagree, to refuse to believe\(^1\). From this he seems to conclude that the freedom to disobey is the freedom of the autonomous will arbitrarily to direct itself. (And indeed he thinks that the analysis of moral language must leave room for moral autonomy in the sense of unguided personal choice of a substantive moral code\(^2\).)

By contrast, he seems to imply, when one refuses to believe one is not free, but is coerced by the dictates of reason. The difference, notice further, between dissent from a claim and dissent from an imperative marks for him the difference between, respectively, descriptive and

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2. See Hare, op. cit., pp. 54 - 55 for the emphasis on decision in moral reasoning, and Ch. 4 passim for his insistence on the indispensability of decision regarding basic moral positions. The importance of moral autonomy he emphasizes in Freedom and Reason, e.g., pp. 1 - 5.
prescriptive meaning.

But this radical distinction between two types of dissent is surely mistaken. In what sense do the dictates of reason 'coerce' the man who follows them? Being rational, that is to say, consulting one's reasons, does, we would admit, require having ingrained habits of good thinking; but one is always free to over-ride such inclinations and thus deceive oneself, misbelieve, or otherwise be irrational. To take it from the other side, do we not usually disobey for reasons?

More precisely stated, my question is whether the imperative, which Hare says is entailed by any utterance having prescriptive meaning, is a pure 'telling what to do' rather than a 'telling what to do because...'.\(^1\) Hare believes that we can segregate the prescriptive telling from the reasons backing it up; whereas it seems to me that we cannot, and that this is the very reason why a prescriptive only entails, and is not identical with, an imperative. He allows, of course, that moral judgements both tell us what to do and tell us that something is the case. He admits that even 'good', the most general term of commendation and thus the one we might expect to be the most purely prescriptive, can come to have a considerable descriptive meaning.\(^2\) When someone rejects a moral judgement it may be difficult to disentangle his disbelief about the factual component from his disobeying the implicit imperative. Difficult in practice, yes, but on Hare's view possible in theory. In his view, as I understand it, we manage the disentanglement by asking ourselves which part of the judgement leaves the person addressed free to choose and which part does not.

But this appeal to freedom fails. To the extent that a pure

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1. For Hare, prescriptive meaning does not contain any such 'because...'. See Freedom and Reason, pp. 21 - 22.
imperative would be discerned in a moral judgement, its utterer would not be recognising the moral autonomy of the person addressed. Suppose that Jones and Smith have found a £5 note on the street.

Jones: Don't pocket that money!
Smith: Why not?
Jones: Because it would be wrong.
Smith: What do you mean?
Jones: You'd be exploiting the mistake of another person.
Smith: Of course I would; but what's wrong with that?

Jones has now run out of reasons of a certain kind. Any further fact about the welfare of others being affected by this act or by the attitude it would manifest Smith may be expected also to reject as grounds for the wrongness of pocketing the note. Since they disagree about the descriptive meaning of 'wrong', all Jones can do is reiterate to Smith that 'It would be wrong', intending to communicate the term's prescriptive meaning. On Hare's analysis, this is essential if Jones is to allow Smith his personal rights of usage. But then he would have to be saying (if it is prescriptive meaning that guarantees autonomy) something like, 'Well, you know how I use the term; now it is up to you to follow suit or not'. And that is not an imperative any longer; it is a combination of a report and an invitation. If on the other hand Jones' reiteration is analyzed as a simple universal imperative, 'I'm telling you not to!', he cannot logically, by what his words mean, be putting Smith in a position to refuse. What does an imperative do, if not to place the speaker in a position of authority to direct another's actions? 'Do this, please' sets up that authority; but appending 'though of course you may determine your action yourself' takes it away again.

Of course, the recipient of an imperative is in a position to refuse, but not one which results from the meaning of the imperative. It results
instead from the social context surrounding the imperative. To refuse it, he must reject or oppose the whole social context that backs it up, i.e., the parading recruit has to reject the whole enterprise of military discipline in order to disobey the serjeant-major's orders. The recipient of a moral judgement, by contrast, is implicitly given a way out: he may dissent if he has good reasons for doing so; and this permission is implicit in the meaning of the terms used in the judgement.

2.23 An implicit promise of reasons.

We can recognize this element of permission to dissent (if one has good reasons) in the meaning of, e.g., the moral term 'wrong' in Jones' reiterated 'It would be wrong' if we analyze the term's meaning as including an implicit promise to provide more reasons. This is because if 'wrong' here means in part 'I'm telling you not to, because...', then the reasons Jones has in mind might be defeated in further argument by Smith. This possibility would be seen as built into the meaning of the moral term. And it puts Smith in the position of being able to refuse to obey if he has better reasons. I shall say more about this reason-promissory view of the meaning of evaluative terms when I discuss epistemic value words (4.533). Here let us merely note that the virtue of this view is that it allows users of evaluative language the freedom of the use of reason.

We should, however, consider here one objection to this view. It might be asked what could follow the 'because...', since Jones and Smith have exhausted the grounds for the application of the term 'wrong'. But I have admitted only that they have run out of reasons of a certain kind. There are reasons of kinds other than the characteristics of an object in virtue of which we apply a value term; there are ones we may broadly label theoretical, others, practical. Jones might argue that exploiting
others has to be considered wrong under a view of the nature of man that fits into a metaphysical picture that is more reasonable to accept than is the one Smith obviously assumes. Here he would argue that the wrongness of the action is entailed by a large scope theory which he judges to be reasonable to accept when all things are considered. A practical reason would be something like 'because I am your employer, and I do not promote employees who exploit the weaknesses of others'. Notice that though we should say this veiled threat is not a further moral reason for Smith to comply, it is still a reason, and it can be promised in advance by a moral term to the extent that, according to one ethical theory at least, morality is at bottom a kind of elaborated prudence. We are not here back at the point at which emotivism left us; for there is a difference between using language as a threatening stimulus, and reporting, through ordinary descriptive language, the existence of a threatening non-verbal stimulus — in this case, the threat to Smith of non-advancement in Jones' company. Whether these reasons are appropriate, and if so whether they are adequate, are questions for a theory of justification of moral terms. Nevertheless they are reasons. Therefore, any moral philosophy which intends to go beyond emotivism must construct such a substantive theory. Likewise, any epistemology which intends to go beyond an emotivist or performative view of knowledge must try to describe the substantive standards of epistemic worth found in our culture (or: in groups or individuals within it).

Therefore, to the extent that both moral and epistemic ascriptions make claims that invite challenge by promising reasons sufficient for justification, moral philosophy and epistemology face similar tasks. They must describe that aspect of the meaning of the value terms studied which accounts for their susceptibility to challenge and justification. They must say what it is for a value ascription to be justified, i.e., give
a theory of justification. And they must try to say when the value
ascriptions which they study are and are not justified.

2.3 Rebuttal of objections.

2.31 'Epistemology does not study an autonomous realm of value'.

The four parallels I have drawn make a strong case for treating our
two areas of philosophical analysis as first cousins, perhaps even
siblings. But, it might be asked, is not the relationship even closer?
Is not epistemology an offspring of moral philosophy? This has been the
view of all the philosophers who have urged that there is an 'ethics of
belief', to use the term as introduced by W.K. Clifford. He laid down his
version of doxastic ethics in the maxim: "It is wrong always, everywhere,
and for anyone, to believe anything upon insufficient evidence." We
can see that Clifford's "wrong" here is a moral one if we look at the two
claims upon which he based his maxim. The first is that no belief is
totally without some practical repercussion, even if this be indirect —
e.g., a man's accepting a proposition on insufficient evidence weakens
his habit of believing in line with the evidence, thus rendering him
less likely to exercise that disposition in cases of direct moral import
where believing correctly is necessary to acting rightly and following
the evidence is the best means to achieve correct belief. Moreover,
most beliefs held by a person contribute to the general picture of reality
he hands on to succeeding generations, and thus contribute to the
success or failure of the believer's successors in dealing with the
world. Clifford's second assumption is that the moral value of an
action transfers to any belief necessary for its occurrence.

doctrine is outlined by R.R. Ammerman, "Ethics and Belief"; he seizes
upon its strictness to argue against the possibility of an ethics of
belief.
V.A. Harvey makes the same reduction of epistemology into a branch of moral philosophy, although in a subtler form. He takes the moral worth of a believing to derive in part from its causal relations but also to derive more significantly from its evidential status. Our ideal of intellectual integrity he treats as a moral ideal. The best-known reduction, however, is found in Chisholm's Perceiving. He seems superficially more cautious than either Clifford or Harvey, for he says only that statements of epistemic appraisal are similar in significant respects to statements of moral assessment. But it turns out that the only difference he sees between the two kinds of appraisal is in the objects evaluated. The source of both kinds remains the same. I interpret Chisholm in this way on the basis of three facts. In Perceiving, the basic epistemic concept in terms of which he defines all others is one proposition's being more worthy of someone's belief than another. He does not distinguish different senses in which a proposition may be worthy of belief. Furthermore, although he distinguishes his own doxastic ethics from Clifford's, the difference is merely that he is more liberal in attitude: where Clifford rejects all propositions not well evidenced, Chisholm labels unreasonable only propositions for whose contradictories we have adequate evidence; this leaves room, as rationally permitted, for those propositions whose contradictories are as equally poorly, or worse, evidenced than themselves. Chisholm does not dispute the purportedly moral source of our epistemic evaluations. Moreover, in a paper on C.I. Lewis' ethics of belief, Chisholm says that an epistemology or ethics of belief is an attempt at "making explicit those rules which

1. V.A. Harvey, "Is There an Ethics of Belief?".
2. R.M. Chisholm, Perceiving: A Philosophical Study, especially Part I, "The Ethics of Belief".
3. ibid., p. 4.
2.31

the philosopher and others presuppose in appraising and criticizing particular instances of believing and concluding... The principles of right believing are like the principles of ethics — or, rather, like the other principles of ethics". The latter phrase suggests that he thinks that the principles of right believing are among the principles of ethics.

2.32 Rebuttal of this objection.

There are many counter-examples to Clifford's version of the thesis that our interest in having true beliefs is a strictly moral concern, arising from our concern to do good actions. His first claim in support of this thesis is unconvincing; there are kinds of believing which are so distantly connected to our actions that whether we do or fail to do some morally good action is never dependent on whether or not we believe one way or the other on such distant matters. I have in mind matters of theory in abstract disciplines such as mathematics, where whether one believes one way or the other does not, say, affect one's use of the tables of arithmetic, and hence cannot affect any of one's actions, say, where arithmetical calculations are relied upon. Such abstract believings are nonetheless subject to our standards of good evidence, for mathematicians are concerned that they should be true; and so such examples counter Clifford's thesis.

The versions of the reduction given by Harvey and Chisholm are

2. This interpretation of Perceiving is also supported by the fact that in Theory of Knowledge, pp. 12 - 13, Chisholm abandons the attempt to give an "ethical definition of knowledge" in the face of criticisms by Roderick Firth to the effect that we have duties to believe that which we cannot know, so that knowledge cannot be defined in terms of duty. See Firth, "Chisholm and the Ethics of Belief", pp. 496 - 497. I disagree, of course; knowledge can be the object of duty if we are careful to identify the non-moral source of that duty.
harder to eliminate. We feel it is right to follow in our believings what I shall hereafter call the Principle of Proportion, that is the notion that our degree of believing should be proportional to the strength of our reasons for the proposition believed. There is a case for treating this rightness as a moral virtue. But I want to suggest that it is such only in the wider of two senses of 'moral'.

2.321 Two senses of 'moral'.

First I shall distinguish these two concepts. Neil Cooper suggests that an ambiguity in our usage of the term 'morality' requires recognition of two different but related concepts. One is the positive social morality of a culture, a code of rules and ideals that is 'social' not just in that it applies only to group public behaviour, but also in that it is independent of the individual and so is susceptible to criticism and indeed rejection by him in favour of an alternative ideal of his own. But the latter may also be called a morality in the other sense of an autonomous personal morality. This he cannot, logically, criticize because by definition it is constituted by whatever principles he holds most important, and must therefore contain those principles by means of which he would criticize other principles. So if they are consistent as a set, he cannot criticize them. Hare's moral philosophy deals with the language of morality in this broader sense. Let us label it the 'external' sense, for that is how he thinks such language may be identified — by its external characteristics. Moral principles are not identified by their substantive content — e.g., their concern with the welfare of oneself and others — but by their formal characteristics of prescriptivity and universalizability and by their position in the

1. Neil Cooper, "Morality and Importance".
speaker's scale of priorities. The other concept of morality is the narrower one we can identify only by mentioning what the principles say.

If Harvey and Chisholm take the intellectual ideal which the Principle of Proportion represents to be a moral one, in the wider sense, I agree, but note that this is not a very interesting point to make. They must, however, intend 'moral' here in the stricter sense. When Harvey looks at what he calls "the morality of knowledge" he speaks of the modern historian's doxastic morality and calls this the "ideal of critical judgement". It is obvious that this ideal is a moral ideal in the substantive sense, because he justifies part of it, namely the historian's readiness to give evidence for his claims, by reference to the substantive moral notion of respect for persons.

2.322 Epistemic values are autonomous.

There are cases where it is a necessary condition of our acting in a morally good way that we have knowledge or rational beliefs about the condition of the world. But this does not require that our concern to have true believings in such cases be a moral concern. There remains a further alternative, namely that in those cases the obligations we perceive to bear upon our believings are over-determined, that is, they are generated from both a moral and another source. I reject the reductive view, and endorse this alternative, because the former cannot, while the latter can, recognize the conflicts among our obligations which are shown to exist by the examples I shall shortly provide.

First, note that when we speak of obligations upon our believing we must be clear about where the obligation rests. Because an obligation

1. Harvey, The Historian and the Believer, p. 43.
presupposes the ability to act accordingly, it cannot bear upon our believing, where this is understood as a propositional attitude. Such attitudes are not within our conscious control; for, according to the analysis which I shall later employ of believing as valuing a proposition as true, there is an essential connection between believing and taking oneself (rightly or wrongly) to have reasons for what is believed. In this sense of believing, one cannot will to believe. But of course one can will to do actions which affect whether, or how, one believes. For instance, of one had a moral duty to believe one's spouse faithful whatever the appearances, one could obey it, by trying to ignore contrary evidence, by directing one's attention elsewhere, by self-hypnosis, etc. Any obligations we have upon our believing, therefore, are to be understood as obligations upon those actions of ours which can affect our believing.

In that case, we need to draw a distinction between epistemic and moral "ought"s as the only plausible explanation of the following conflicts of obligation. There has recently surfaced in public a dispute among microbiologists as to whether a moratorium should be observed on research that uses manipulation of genetic information through transfer of selected chromosomal material via a 'tailored' virus. Those scientists who resist the ban must feel pulled in two directions: one obligation not to do such research because of its risk to public health, the counter obligation generated both by the moral worth of potential medical spin-offs and by the simple desire to unlock the secrets of gene operation. Another example of a tug-of-war between obligations would be this: what should a government science advisor recommend, if faced with a choice of allocating funds to one (but only one) of two projects in mathematics, where one project seeks to develop some esoteric and totally impractical technique and the other seeks to
apply standard mathematical tools to cancer research? Or again, should an educational psychologist do the kind of research on the genetic basis of intelligence differences between racial populations which A.R. Jensen suggests, when he knows that if Jensen turns out to be correct his own attitudes will have to change in a way that is bound to hurt the feelings of his black friends?

The obligations entering into such tugs-of-war arise, I suggest, from concerns of different kinds, one moral (in the substantive sense), the other epistemic—a love of truth. The only alternative explanation takes these to be conflicting *prima facie* obligations of just one, moral, kind. But here 'moral' is taking on its wider sense, which pertains to whatever value a man takes to be most important; for the obligation which we feel to act so as to believe in line with prudence, or the obligation which some theologians feel to act so as to believe in line with Church dogma, would be 'moral' in this same sense. My point is that the concerns which underwrite all such obligations are all of the same level in relation to the evaluative judgements wherein we weigh these opposed values and try to find the proper balance upon which to act. To avoid confusion, I shall hereafter use the term 'moral' in its substantive sense, and reserve to the realm of value wherein we make such overall, 'all things considered' judgements the label, 'Inclusive value'.

Therefore, in relation to moral concerns in this substantive sense, the love of truth or desire for knowledge is an autonomous concern. The obligations and preferences which it generates form, not a morality of believing, but a set of norms which have structural parallels to morality. We might call it a quasi-morality of believing, or use my term, 'an ethic of belief'.

2.33 Further objections.

It may be objected that even allowing parallels between them is misleading, however. If believing itself is involuntary, something that just happens in response to the way we judge our reasons rather than something we do, how can we be held responsible for it? The answer is that we do have control over the conditions under which our propositional attitudes arise, whether these be believing proper, mis-believing or self-deception, hoping that something is the case, etc. And we are held responsible for mis-believing in that we have so acted or so failed to act that we have come to misbelieve. If we admit the correctness of this moderate involuntarist theory of believing, an ethic of believing is not impossible. It merely must be understood to be, strictly speaking, an ethic of trying to believe, and that is how I shall henceforth regard it.

Another objection is made by Roderick Firth, who directs two arguments against Chisholm's approach in *Perceiving*. The first pertains to Chisholm's particular descriptivist type of epistemology. According to the latter, an epistemic assessment like 'He has adequate evidence for p' means nothing more than 'p is more worthy of his belief than not-p'. But this does not allow us, on pain of uttering an empty tautology, to say what in actual usage we are clearly allowed to say, 'p is worthy of my belief because I have adequate evidence for it.' On Chisholm's definition this becomes equivalent to 'p is worthy of my belief because p is worthy of my belief.' But my reason-promissory view of the meaning of epistemic terms is not purely descriptivist. It includes, as we shall see (4.532 and 4.533), the action-guiding aspects of such meaning. Therefore it will escape Firth's first argument.

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1. Indeed it applies in an epistemic context Hare's argument against ethical descriptivism. See *Language of Morals*, pp. 24 - 25.
His second holds against any interpretation, whether descriptivist or otherwise, of epistemic terms as moral ones. He mentions instances of propositions which on the evidence alone are unreasonable to believe but which are still more worthy of someone's belief than any alternative. The example which is by now the standard one in the literature (it was first introduced by H.H. Price) is that of a married person who, in order to preserve the chances of a continued loving relation with the spouse, must ignore the accumulated evidence of the spouse's infidelity. Firth takes such cases to show that there cannot be even a material, let alone a logical, equivalence, between a term like 'reasonable' or 'rational' and one like 'worthy of belief'. As I noted above, Chisholm accepted this argument and concluded that it is futile to try to define epistemic terms ethically or morally.

I agree. But that does not prevent us from defining them quasi-morally. For example, the faithful spouse case does indeed rule out a moral definition of 'rational'; but it does not preclude a quasi-moral one, one that points out the similarities between the two kinds of evaluation — both have an aspect of their meaning which guides actions by promising to provide reasons — but differentiates them on the basis of that aspect of their meaning which provides the reasons. I have shown (2.322) how we can identify the epistemic concept of worth; so if an epistemology is construed to be investigating this concept, Firth's counter-examples pose no threat to its possibility. They do constitute, nonetheless, a cautionary reminder of how important it is that an ethic of belief should make clear the non-moral basis of the evaluations licenced by the epistemology it contains.

Price, too, thought at one time that an ethic of belief is an

impossible notion, although an economics of belief is not\textsuperscript{1}. He argued that our concern to have true believing comes from self-concern, because true believing are more likely to lead to successful actions than are false ones. My response to this is the same as to the attempt to reduce epistemic values to moral ones: while undoubtedly some cases of individual self-interest, just like some types of moral welfare, require true belief as a necessary condition, there are cases of belief which we would never act upon and yet which we would still desire to be true, and there are also cases where either prudence or moral interest conflict with the concern for truth. All these facts can be harmonized only by taking our epistemic concern to be both autonomous and capable of generating an obligation in concert with other concerns.

2.4 Definition of an ethic of belief.

We are at last in a position to define an ethic of belief, or to speak more strictly, a quasi-morality of trying to believe. It shall be said to:

(1) provide an epistemology, which is

(a) a description of one or more ideals of intellectual behaviour; and/or

(b) a description of one or more doxastic norms: and/or

(c) a theory of epistemic terms, which

(i) identifies the external meaning of those terms, and if that meaning is understood to include an implicit promise to justify, also gives a theory of justification for epistemic valuations; and/or

\textsuperscript{1}In "Belief and Will", at least, he urged that there can be an economics of belief but no ethics of belief. Later, in Belief, he approached nearer to the position which I advocate by allowing that epistemic values might be described as quasi-ethical.
(ii) identifies the substantive meaning, or various versions thereof, of those terms, and may argue for or against some or all of these versions; and

(2) explain why this epistemology does or does not prescribe for actual usage of epistemic terms.

It would be possible with just elements (1) and (2) alone to have a complete ethic of belief, provided that in (2) it is argued that our epistemic assessments never really conflict with moral ones, or with evaluations of other kinds. I do not think such arguments work, as we have seen, so there is need for a further element to deal with such conflicts. But before we come to that, let us notice that even within ethics of belief of the above truncated kind there is room for a great deal of variation. For example, an ethic could be given which avoids the 'linguistic turn' and provides only elements (1) (a) and (b) and (2). Its epistemology would consist simply of an ideal of intellectual behaviour and a doxastic norm. By the latter I mean a list of what specific propositions to believe. By an ideal of intellectual behaviour, I mean a policy for believing, a recipe for how it is best to form and test — if testing is seen as desirable — one's believings, one's other attitudes, one's principles of test themselves, and so on. Another ethic of belief might give all of the above elements except (c) (ii). This would parallel Hare's position in moral philosophy.

Now for the question of how an ethic of belief settles the genuine conflicts among competing obligations of different types which we have seen to occur. An ethic of belief cannot avoid the task. Even a voluntarist ethic of belief's suggestion that those conflicts are ultimate ones is a substantive suggestion for settling dilemmas of conflicting obligation. It would say that, to use our earlier example,
the educational psychologist cannot decide the question of whether to study race-intelligence correlations by referring to any other considerations. He is faced with incompatible basic demands between which he must simply, freely, choose. But this suggestion still provides a means for resolving the conflicts, namely arbitrary choice, and its implicit claim that this is the appropriate means makes an Inclusive-value judgement on the limits of rational justification. Therefore even a voluntarist ethic of belief provides us with a third element,

(3) make Inclusive-value judgements on the status of the source of epistemic justification, or on the status of the type of ground usually used for epistemic justification.

To summarize my notion of an ethic of belief, we may visualize the levels of theory which I am suggesting in a diagram. Figure 1 gives an example of a partial epistemic code or ideal, and of a partial moral code or ideal, and of an Inclusive-value judgement which ranks these ideals and thus resolves a conflict between incompatible obligations upon believing.
Ethic of Belief:

'Having true beliefs is less important than maximizing the welfare of others.'

(Partial) Epistemic Code:

'Have true beliefs.'

(Partial) Moral Code:

'Maximize the welfare of other human beings.'

Statements of principle at lower level of value

Statements of principle at level of inclusive value

Statement of principle

Statements of obligation

Fred ought to believe that the earth is a sphere.
(Bill ought to believe that arsenic is poisonous.)
(John ought to believe that his wife is unfaithful.)

John ought not to believe that his wife is unfaithful.

Mike ought to believe whatever makes most people happy.

(A Conflict of Obligations)

Resolved to:

'John ought not to believe that his wife is unfaithful.'

Figure 1
3 Soft Rationalism

3.1 Introduction.

In this chapter I shall describe and begin to evaluate an ethic of belief which Michael Durrant describes as a "highly important" one "which should be investigated by every serious student of the philosophy of religion and by Christians and non-Christians in general". He refers to the case advanced by B.G. Mitchell in his 1973 monograph, The Justification of Religious Belief (hereafter abbreviated as JRB). This case presents in its most comprehensive form the ethic of belief which I call Soft Rationalism. Therefore, while other writers have expressed some of the same themes and their arguments will be introduced, JRB will be my main 'quarry' (both hunting and mining metaphors intended).

The shape of this chapter is as follows. First we shall take note of the reasons why Mitchell believes a novel ethic of belief is required. Next I shall outline the more or less standard ethic of belief which is found in the traditional philosophical approaches to religion and which he attacks. After considering the virtues and vices of this Strong Formalist ethic of belief (as I call it), I shall describe topic-by-topic the Soft Rationalist alternative, noting arguments in its favour and difficulties it encounters. Of the objections to it, the strongest is the one which I shall develop at the end of this chapter, to the effect that the Soft Rationalist would allow to develop, and cannot himself overcome, an impasse with proponents of the Strong Formalist ethic of belief.

2. Among the writers I have in mind are David Pole, Conditions of Rational Enquiry; P.R. Baelz, The Forgotten Dream; and John Wisdom, "Gods".
3.2 The need for a novel ethic of belief.

Because a topic-by-topic description will be given below of the ethic of belief which JRB espouses, little is required here in detailed exposition of Mitchell's thesis in JRB. But it is necessary first to place his thesis against the background of traditional philosophy of religion, and to mention how he applies his proposals to theology.

He argues that the usual philosophical approaches to the question of God's existence present us with a poverty of alternatives, so that we have the following stalemate. Philosophers have been unable so far to provide a sound deductive proof or an acceptably probabilifying inductive argument for God's existence; nor have they succeeded in deductively disproving it, or showing it unacceptably improbable. This is not the claim that because theism is irrational on standard deductive or inductive principles, then either rationality has nothing to do with such principles (or at least not religious rationality), or stronger still, those principles must be faulty. It is instead the claim that since those principles do not decide the question, we have reason to think that they do not exhaust our concept of rationality in believing and that we need a radically different, informalist epistemology. As we shall later see there is an alternative response: instead of supplementing those principles with radically different ones, we could consider whether we might have failed sufficiently to appreciate their power, especially the power of inductive principles, to help settle the debate between theist and atheist.

If we do take the standard ethic of belief, standardly construed, as leaving us with an epistemic stalemate regarding theism, then it is rational at least to re-assess or perhaps, as Mitchell proposes, to supplement that standard ethic. This is because there are good reasons against both other options available to us. The first option is to
accept the stalemate and remain epistemically indifferent to theism. The good reason against this position is that many wise and rational men whose judgement we would trust in other areas have not been indifferent to theism; they have accepted or rejected it for reasons which they considered adequate. We ought to wonder what we are overlooking.

When I say that it would be rational to try to avoid epistemic indifference, I mean that if we are sufficiently concerned with truth to be doing philosophy and are intrigued by the apparent ability of wise men to discern truth (or falsehood) where we find only a stalemate, then we ought to have another look at our principles of truth. I am not saying that it would be rational to believe theism despite this stalemate. Some writers do say this, but either they are mistaken about the concept of belief or they intend 'rational' in a very peculiar sense. To exemplify a mistake about belief: William James claimed that given a situation like the above tie in evidential support for competing theories, we have a 'rational' right to believe as our "passional nature" dictates.\(^1\) He was, as we shall later see, correct in thinking that there is a sense of 'rational' which can apply to positive propositional attitudes which go beyond the level of evidential support; but wrong in calling it belief which may thus be rational. Again it may be this same sense of 'rational' which is invoked in Pascal's wager argument, to the effect that given an epistemic stalemate regarding theism, and Pascal's very contentious description of the rewards and punishments attendant upon theistic believing, and a set of normal desires, it is prudent and hence in this context, with all things considered, rational to try to induce theistic belief in oneself.\(^2\) If Pascal really meant belief here, he:

\(^1\) William James, "The Will to Believe", p. 315.
\(^2\) See Blaise Pascal, *Pensees*, pp. 149 - 153.
was wrong, for he asks us to believe that something is the case when we have no epistemic right to do so. What it would be rational to do, of course, would be to continue seeking more evidence for or against theism, or to re-examine our principles of evidence, in order to break the epistemic stalemate. But doing these things is not believing.

To exemplify a peculiar use of 'rational': it is also sometimes said that whatever its epistemic status, theistic belief is rational. But this latter notion is the peculiar one of uniquely religious rationality. Lacking space to engage this view at length, I shall merely indicate my grounds for rejecting it. There are two versions of this view. One is "Wittgensteinian Fideism". Its claim that only someone who participates in the 'circle of faith' can either understand or assess the rationality of theistic claims is rightly criticized by Kai Nielsen for conflating understanding of what is asserted in a kind of discourse with participation in the way of life in which it rests. The more moderate version claims only that theistic discourse sets its own criteria of rationality. But it collapses into the wider version, as follows. It would allow that theism could be both rational and not-rational (which is not to say a-rational), depending on which criteria one uses. Under this treatment, the term 'rational' does not obey the law of contradiction, which would hold that for any object to which the term can apply, that object cannot be both 'rational' and 'not-rational' (if 'rational' is taken to be univocal); or alternatively, that for any proposition and its denial, both cannot be 'rational'. But as I shall later note (7.22 and 7.44), the concepts of rationality and truth are

1. The term is applied by Kai Nielsen in his article of that name.
2. In the sense where 'rational' means more than that the parties to an argument have followed a certain established methodology; for in this methodological sense, two positions, one of which we know must be wrong, can both be 'rational'.
so connected that to relativize rationality as this treatment does entails likewise relativizing truth. But then the truth-value of theism becomes relative to the 'perspective' from which it is regarded. And that eliminates the possibility of its cognitive meaningfulness to an 'outsider' who does not share the theistic 'perspective'. Such relativity of comprehensibility is just what full-blown Wittgensteinian Fideism asserts.

As I noted above, Mitchell's response to the epistemic stalemate resulting from the application of the standard ethic of belief is to supplement that ethic with a novel one. As it stands, in his view, the standard ethic fails to give us sensitive enough tools of epistemic measurement. It requires us to be epistemically indifferent to any theory that cannot be either deductively demonstrated to be true or false or shown to be sufficiently probable for belief or improbable for disbelief. The core of his objection is that this leaves an unrealistically wide central area of epistemic undecidability, for in many cases where the standard ethic would demand indifference we do not display it: we do believe or disbelieve, and take ourselves to have good reasons for doing so. Thus his ethic of belief provides an epistemology that (1) allows epistemic terms of weaker polarity than those of the standard epistemology, and (2) specifies how these apply to arguments which don't measure up to deductive or inductive standards, and (3) rests within an encompassing Inclusive-value position which maps these weaker evaluations onto our actual judgements. Notice that this is a supplementation, not a replacement of the standard ethic. Standard deductive logic is still allowed to discredit theories where it can: if a historian can be shown to have contradicted himself, no amount of 'plausibility' in what he says will save his position until the contradiction is removed.

In part III of JRB he examines the application of his proposals to
the question whether it is possible rationally to argue for traditional Christian theism. I shall follow Mitchell in assuming that the reader will be familiar with the referent of this latter term and will know of the central cluster of doctrines essential to this type of theism.

He considers three problems facing his account of the kind of rational argumentation which he claims is open to the theist. The first is that in treating traditional Christian theism as an explanatory theory, he reduces God to a hypothetical entity. His response (JRB Chapter 6) is that an entity believed to exist is none the less real for that belief's resulting from an inference rather than a direct perception. The second problem concerns the Christian's apparently total commitment to God; how is this compatible with the need to keep one's believing tentative and provisional in order for it to be rationally proportioned to its reasons? His solution (Chapter 7) is to distinguish belief that God exists, which remains tied to its level of support, from the totally committed attitudes of trust and hope that constitute belief in God, and to claim that these are compatible. Thus a certain amount of a Christian's conviction is due to his following his duties as prescribed within the theistic set of values. Not all of it, of course; but the remainder Mitchell attributes to the tenacity which the believer of any large or maximal scope theory must display if he is adequately to test out that theory. Such tenacity, he argues, can be a rational phenomenon in its own right. As we shall see (7.41 and 7.722), if there is a rational phenomenon here, it is not tenacity in believing; and Mitchell's solution is not quite sufficient, for it covers Christian devotion or faithfulness to God, but not the strength and intensity of Christian conviction. In his final chapter he deals, thirdly, with the problem of how to treat as a metaphysical theory doctrines which purport to be (or reflect) God's own revelation of himself. I shall not deal with this
3.2 problem, for there are sufficient other idiosyncracies of Christian belief to occupy our attention first.

3.3 The Strong Formalist ethic of belief.

The most frequent complaint made in *JRB* is that some philosopher or other has assumed that a procedure for judging propositions, or a method of belief acquisition, can be rational only if it is rule-governed. Mitchell suspects that several writers would have arrived, but for this dogma, at a view very like his own. Kuhn, for instance, recognizes that paradigm-choice is not completely arbitrary but guided by values; yet he insists that such guidance is psychological and not rational, and only because he assumes "that a choice between theories (whether scientific or philosophical) is rational if and only if it is possible to specify in advance rules acceptable to both parties in accordance with which the choice is to be made." (*JRB* 84) Had he been able to allow informal choices to count as rational given the restraints he himself imposes, Kuhn would have succeeded in defending his position against the charge of irrationalism (81 - 82).

Exactly what is claimed by the version of this dogma which Mitchell sets forth in order to attack? It holds that any decision about what to believe must be guided by rules in order to be rational. (Sometimes Mitchell refers to these as "criteria which are employed in reaching such a decision" as the abandonment of a metaphysical system (*JRB* 87).)

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1. For another example see Mitchell's comments in "The Justification of Religious Belief" (hereafter abbreviated as "JRB"), p. 223, regarding how close MacIntyre comes to allowing conversion to be a rational process, save for his allegiance to this same dogma.

It claims that "all reasoning is subject to precise and specifiable rules, so that to use words of rational assessment, such as 'probable', 'reasonable', 'satisfactory', 'adequate', 'makes sense', etc., is to apply these rules to the matter at hand". (88) Most contentiously, it claims that these are rules of logic, for as he characterizes it this view makes the assumption "that unless it is possible to specify rules for the making of [theory-] choices, unless, that is, the making of choices is strictly a matter of logic, it can only be material for the psychology of scientists or the sociology of science." (82)

This is not a straw man which Mitchell attacks. (Whether it is the strongest opponent available I shall discuss later.) Let us consider Anthony Flew's position in God and Philosophy. He wrote:

It is often a wise and fruitful tactic of inquiry not to abandon a theory immediately it runs into serious trouble, but to go on with it at least until a better theory becomes available; major obstacles may be left on one side in hopes that some means to dispose of them will later be found. It is a tricky matter of scientific judgement to decide how big the obstacles thus by-passed may reasonably be. A good illustration is found in the history of chemistry, in the massive difficulty which faced atomic theory before the work of Avogadro. But this type of illustration suggests at the same time that it must be unacceptable to describe any theory as a piece of knowledge while it is still impotent to accommodate apparently falsifying facts.

Judgement that such a theory is "reasonable" to act upon he might allow; but he would never permit this to be called knowledge.

Here we have specified part, at least, of an ideal of intellectual behaviour, and also a hint at what Flew takes to be the substantive meaning of the term 'knowledge' (both elements that we might expect to find in an ethic of belief; see 2.4 above). Flew elaborates his view of knowledge in his outline of the three kinds of proof which he thinks could make a proposition a piece of knowledge: valid demonstrative

arguments wherein the proposition is deduced from necessarily true premises; or arguments of the same type wherein the conclusion is deduced from premises which, though contingent, are "obviously beyond serious dispute". Those are the only kinds of reasoning that give knowledge; for he also allows us knowledge of "paradigm cases of warranted empirical certainty", such as one's own existence or the existence of an external world, but I presume he would not call this reasoning, for no procedure is followed — it is just a matter of knowing what words like 'certain' mean. Flew shows throughout God and Philosophy a penchant for proofs of deductive logic, because these alone procure certainty for propositions. This position rests in a respectable tradition in philosophy. For Aquinas, deductive proofs are the only sort of argument to attempt in favour of God's existence (and Flew takes Aquinas as his most significant opponent). Descartes took clarity and distinctness of ideas as the criterion of intellectual worth, the latter virtue being specified as that of certainty. Hume also restricted intellectual credit to the notion of certainty, and for both writers deductive paradigms exhaust good reasoning. I shall label this deductivist ethic of belief 'Strong Formalism'.

3.31 Strong Formalism's assumptions.

It will be useful if we lay bare the assumptions which underlie Strong Formalism. Not all are contentious. Those which are germane to subsequent discussion are five in number.

(1) True belief, for its own sake (rather than as a means to some other goal), is the goal by reference to which epistemic evaluations are made.

1. ibid., pp. 164 and 167 - 168.
2. Though of course their sources of certainty differ.
That this is true I shall myself argue later (7.42).

(2) Epistemic values obey two 'laws of thought':

(i) the law of excluded middle: there are no modes of value other than the positive and negative modes.

Inductivist epistemologies claim that this principle holds only for some groupings of epistemic values, e.g., true and false, for they recognize one grouping where it does not hold: probable, improbable, and equiprobable.

(ii) the law of contradiction: the positive and negative modes of any epistemic value exclude each other.

This latter law is accepted by Soft Rationalism and by inductivist epistemologies. (The latter hold that no proposition can be both probable and improbable—given the same set of evidence.) Since it seems obviously correct we shall accept it as well.

(3) Epistemic values are completely polar, that is, do not admit of degree.

This assumption is independent of the law of the excluded middle, for—however we subsequently judge them—we can conceive of a philosopher holding that there are three values, e.g., 'true', 'false', and 'undetermined', and yet denying that any of them admits of degree; or we can conceive of a philosopher holding that there are just positive and negative values, e.g., 'true' and 'false', and claiming that there are degrees of truth and falsehood. Polarity is rejected by both Soft Rationalism and by inductivist epistemologies such as the one I shall espouse.

(4) Epistemic justification is transitive: if proposition A alone justifies B and B alone justifies C then A alone justifies C.

This and the following assumption are of central interest in my attempt to transcend both Strong Formalism and Soft Rationalism, for both accept
3.31

(mistakenly, as I shall argue) that:

(5) Epistemic justification is Foundational: in order to justify
    proposition C, B must itself be justified by A (unless B is a
    Foundation proposition).

Assumptions (1) and (3) together generate deductivism's taste for
certainty, because the desire for knowledge becomes, under (3), the desire
for certain knowledge.

3.32 Strong Formalism's decisionism.

The position which Mitchell attacks has another element, besides
its claim that all reasoning is rule-governed, which he finds
objectionable. This is its decisionism or voluntarism, the view that
between competing metaphysical systems there can be no rational choice.
As he notes (JRB 75 - 76), the reason usually given for this doctrine
is that since metaphysical systems determine the criteria of rational
assessment, there are no neutral standards with which to judge such
systems\(^1\). Later I shall suggest that none of the actual metaphysical
or large-scope epistemological positions with which we are concerned
really attempt this complete encroachment (see 6.3). But for now the
idea has enough prima facie plausibility for us to take it, with Mitchell,
as a problem to overcome. Both the theist and the atheist seem, for
instance, to disagree over what kinds of support each can give his own
case: the theist will, and the atheist will not, allow that an alleged
revelation of God's purpose has independent epistemic influence on the
question whether, e.g., some saint's healing powers have a supernatural
origin.

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1. He actually calls these "categorial frames" or "conceptual systems"
   but it is clear that he means metaphysical systems.
3.33 An illustration.

For an exemplification of the Strong Formalist ethic of belief at work, here is Flew again:

Even supposing that it were to be allowed as an established fact that the acceptance of the theist doctrine does at least tend to produce a balance of morally splendid effects, effects which are not themselves part of the criterion of truly believing the doctrine, still this would not even begin to show that that doctrine is true. False beliefs can, and... often do, produce good results.

Now false believings sometimes do produce good results, but surely not in the majority of cases. Generally splendid effects of a believing should constitute some evidence in favour of the truth of that believing. The connection is indirect. We do not, of course, take the moral effects of a belief as straightforward signs of its truth or falsehood. Instead we take the high frequency with which true beliefs and morally good effects of those beliefs are correlated to be a sign of the truth of the theistic doctrine, given that its belief is beneficent. Why then does Flew say that the latter fact would not "begin" to show theism true, except because he rejects such correlations as evidence and holds out for nothing short of the strongest evidence possible?

3.34 Reasons in favour of Strong Formalism.

The considerations that may be brought against Strong Formalism are numerous, and I shall deal with these as part of the argument in favour of Soft Rationalism. Here I shall point out two virtues of the former view.

The first is the rigour of a deductivist epistemology. If we take a rule of logic as the basis of the epistemic worth of a proposition, then this value may be predicated only if the argument leading to the

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3.34 proposition displays an instantiation of that rule of logic. Thus for
every proposition there is a determinate answer to the question of its
epistemic worth, because an argument leading to it either does or does
not have the pattern found in the rule, however hard it may be to discern
whether it does or does not. As we shall see, Soft Rationalism cannot boast
such rigour; but perhaps from its point of view the latter is not as
important a virtue as some others.

The other virtue of rules as epistemic justifiers is that they do
this task independently of whoever it is that happens to apply them.
With rules, one man's foibles and pecadilloes have a minimal influence
on the course of the justification process. Of course, this impersonality
is desirable only on the assumption that people's emotions and instincts
are all antithetical to clear thinking, and that their prejudices are
always towards erroneous propositions. Soft Rationalism would be likely
to deny this.

3.4 The Soft Rationalist ethic of belief.
3.411 The need for some such alternative.

Earlier (3.2) I noted that Mitchell takes the standard ethic of
belief to leave us in an epistemic stalemate regarding theism. In
greater detail, his argument for this assumption consists in variations
on a single theme (JRB 19). The classic objections to, and arguments
for, theism all fail; where the failure does not result from misunder-
standing what theism asserts, Mitchell traces it to underlying conflicts
in metaphysical assumptions (JRB 10). But such 'basic' disputes are
pre-eminently the kind of disagreement which deductive or inductive
reasoning fails to settle, as attested by the perennial engagement in
such disputes by men who are conversant with standard techniques of
reasoning and whom we should expect to be able to settle such disputes
with those techniques if this were possible.

For example, consider the allegation that it is inconsistent to predicate of God on the one hand omnipotence, omniscience and perfect goodness and, on the other hand, a Creator's responsibility for a world containing pointless evil. Mitchell takes this allegation to hinge on notions of human freedom and of a Creator's power. A theist will try to answer the allegation by knitting these notions into a complex picture of God's relation to man and his apparently revealed desires for a particular kind of moral perfection in men — the whole picture tending to suggest morally sufficient reasons for God to plant the obstacle of evil in our path. Clearly, then, the resolution of the debate about this aspect of the consistency of 'God-talk' turns on the adequacy of the entire theistic scheme of things as against whatever the atheist has to offer in its place. Or again, he finds that the question whether central theistic assertions (e.g., 'This event fulfills God's purpose for me') have any empirical bite (i.e., do they admit of confirmation or disconfirmation in experience?) devolves on the question of just how stringent is the concept of confirmation employed (JRB 12).

3.412 The concept of a "metaphysical" system.

Crucial to Mitchell's argument as noted in the previous section is the concept of metaphysical assumptions; it is the underlying metaphysical dispute between the theist and atheist which standard techniques of reasoning fail to settle. If we are to endorse his tactic of interpreting the classic questions of the existence of God as questions about the rational credibility of competing metaphysical positions, we ought to clarify to a greater extent than he does the concept of "metaphysical" intended. A theist and atheist dispute the Christian scheme of things, but they may also, as noted above, dispute the nature of confirmation.
In what sense are both disputes similarly "metaphysical"?

Mitchell uses the term, in various passages, in two distinguishable senses. One sense of the adjective denotes the presence of encompassing explanatory system: a "metaphysical" theory contains nascent within it a cohesive set of propositions explaining the objects, laws, and functions employed within other explanatory systems of narrower scope. He has such features in mind when he writes of a metaphysical system paralleling a scientific system in seeking "to explain ... a whole range of different phenomena" (JRB 27); of a "non-theistic world-view" competing with a theistic one to explain such phenomena as the behaviour and power of saints (41); of metaphysical systems that embrace all experience as their explananda (60, 95); and of competing systems of thought (62) which resemble ideologies (162) in their guiding influence on moral and political doctrines through their appeal to the entire personality (122, 134).

On the other hand he describes as "metaphysical" any theory which employs "ultimate categories" (27). What distinguishes such categories, in his view, is that they delimit the very terms — e.g., 'real', 'factual', 'rational', 'credible' — through whose application one would have hoped to evaluate the theory that delimits them (74, 85). We may indeed note, parenthetically, the following test, suggested by Herbert Feigl\(^1\), for identifying principles or standards or value-paradigms which are ultimate in this way: when a person who employs one such is challenged on it, his answer either begs the question by re-applying the principle itself in disguised form, or is the counter-question, 'what does the challenge mean?' The second sense of "metaphysical" therefore means, approximately, "invoking ultimate standards". The dispute about standards

\(^1\) H. Feigl, "De Principiis Non Disputandum...", p. 122.
of confirmation seems to be ultimate in this way. And the dispute between atheist and theist about the existence of God may also seem (though I shall later question this) to be one where both parties lay down their own criteria. Therefore both disputes may be called metaphysical in this second sense.

3.42 Soft Rationalism is not the only alternative to Strong Formalism.

I have set up as Soft Rationalism's opponent a very strict, deductivist ethic, the one I call Strong Formalism, in the knowledge that Mitchell's actual target is much broader: he rejects any version of Formalism. I do this because I judge\(^1\) Soft Rationalism's arguments to be on balance persuasive against a deductivist ethic of belief, but not against an inductivist version of Formalism, or at least the one which I shall espouse. My main reason is that we can surmount Mitchell's criticisms of inductive epistemology as this would operate in metaphysical contexts.

3.421 Mitchell's rejection of inductive epistemology.

He takes Hume's critique\(^2\) to eliminate the possibility of any argument from the universe (or any element thereof) to God as its most probable cause, because we lack independent correlations of God(s) with other universes, or other universes (which cannot exist) with this one. (JRB 29 - 31). And yet, he says the argument from design has weight as an analogical argument to the existence of a Creator of the whole

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1. And I judge informally, a fact which may argue in Soft Rationalism's favour. Later I shall admit the validity of such informal judgement as an at least initial basis for epistemic justification.

2. David Hume, Dialogues Concerning Natural Religion, Part II; Flew gives a resumé of Hume's argument in God and Philosophy, p. 74. Hick summarizes its relevance in Arguments for the Existence of God, p. 29; Hick also attacks the applicability of probability concepts to theistic argumentation in Faith and Knowledge, pp. 151 - 155.
universe from the fact of human creation of entities within it (29 - 30). Or again, the argument from religious experience contributes some weight or "evidential value" as an interpretation of theologically neutral facts (31). And each of these two arguments has more force, each gives stronger epistemic support, if they are compounded together along with the other traditional arguments of natural theology into one large cumulative case. Impressed by Hume's critique, he believes any epistemic support which such a case might give God's existence must be other than strict probabilification. He describes it instead as: giving justification or support "beyond reasonable doubt" (12); as "providing reasonable grounds for a conclusion" (57); as establishing a "preference" (obviously epistemic rather than moral or aesthetic preference) between rival explanatory schemes (27) or interpretations (31); as the making of "a rational case" (34); or as the rational "force" of arguments (59) establishing "'the plausibility of theories'" (40, 115).

3.422 A counter suggestion.

The suggestion I raise here and will develop in Chapter 7 is that the kind of epistemic support which Mitchell describes in such round-about language is really simple confirmation (or 'probabilification' as I shall sometimes say) in the strict sense. The *prima facie* reasons for this suggestion are as follows.

First, by introducing such notions as 'rational force' or 'the plausibility of theories' he adds to our tools of epistemic measurement instead of increasing the sensitivity of the instruments we already have. Extra vocabulary is tolerable if it brings compensating advantages, but it is hard to see what in this case these would be. It might be thought, for instance, that the extra vocabulary has the virtue of reflecting distinctions we make in actual usage. But this is not so.
We do employ terms like 'plausible', 'reasonable' and 'convincing'. However, some of these have special uses different from what Mitchell has in mind. 'Plausible', for example, categorizes a theory or proposition as having enough initial probability that we should investigate it further; but this cannot be the epistemic concept which in Mitchell's view is at issue between the theist and atheist, because both parties start with positions which are plausible in this sense. Those terms which we cannot eliminate in this way, such as 'rational force', we can disregard as simply more colourful equivalents or more colloquial versions of stricter terms like 'probable' or 'sufficiently probable for certain purposes'. Furthermore, Mitchell takes the epistemic support concept which he is trying to describe to signify the truth of any theory to which it is properly applied. But this is the distinguishing mark of the concept of probability which I shall later describe (7.23).

Secondly, Hume's critique of theistic probabilification ignores the possibility that analogy may be a basis for probabilification. As W.D. Hudson points out, the argument from design proceeds to God's existence not from the universe as a whole but from selected parts of it, which are taken to be instances of God's handiwork by analogy with the way created articles are the result of human craft. Thus Hume's argument turns on the question of whether or not an analogy between two events can ground a judgement that there is probably (to some degree) a cause for the one event similar in important respects to the cause for the other event — the latter cause being more familiar to us and one which we judge even more probably to operate. Hume seems to take a statement of the observed frequency of the regular succession of distinct types of event as the only sort of reason that we may give for a claim that

given one situation something else is probably the case. But this is not the only ground of probabilification which we seem to recognize. Consider, for example, the statements 'It is probable that this new airship will fly, because a helium filled balloon of the same size/weight ratio flies' and 'It is probable that this new airship will fly, because it is the latest of a series of identical models which have all flown'. The "because" clause in each statement contains a proposition that justifies the prediction. Although in the first this gives an analogy and in the second a frequency, in both the prediction receives the same value, "probable". That value has just one sense in both cases: a proposition is cited as worthy of belief-as-true and, it is implied, for reasons. A truth-sign (see 7.23) is attached to the prediction as much by the statement of analogy as by the statement of frequencies. And this appears to be a truth-sign of the same kind in both cases, because if, for instance, it be objected that the analogy proposition secures the truth-sign to the prediction only under the aegis of some controversial metaphysical assumption, we may note that the same type of objection is launched by the inductive sceptic against the support given by the frequency proposition. This brief mention of probability will be elaborated later (in Chapter 7). For now, I will claim that Mitchell is right to think that an inductive epistemology fails to settle the rationality of theism only to the extent that the criterion for 'probability' is (unnecessarily) restricted to frequencies.

1. See R.G. Swinburne, "The Argument from Design", pp. 204 - 205 for a persuasive argument that such analogical judgements are a respectable ground for probability claims because they are a pattern common in the current practice of scientific inference.
3.43 Central tenets of Soft Rationalism.

What follows is a topic-by-topic summary of the main claims of this ethic of belief, together with the arguments for and against each point.

I should like to stress that my label "Soft Rationalism" is not intended to impute any woolly-mindedness or flabby thinking on the part of the position's proponents. Rather, "Soft" means here much what it does in 'Soft Determinism' — it denotes a middle option between extremes.

3.431 Outline of this ethic of belief.

This position provides most of the elements which were listed above (2.4) as possible components of an ethic of belief. Element (3) is the Inclusive-value position which an ethic of belief takes regarding the status of its own epistemology. Soft Rationalism's Inclusive-value position is anti-prescriptive. It adopts what we might call a journalistic stance: the proper role of an epistemology is to report or reflect actual usage of epistemic terms, not to recommend changes in such usage. In Mitchell's own words, the epistemology he gives is intended specifically to "do justice to the way in which debate about religious questions actually proceeds and to the role which reason plays in the religious believer's life" (JRB 3). He seeks to describe the actual use of epistemic terms in religious contexts and (as his strategy for showing the respectability of the latter) the very similar use of epistemic terms in non-religious contexts such as scholarly disputes in literature, history, philosophy, and in that of large scope scientific theorizing. This view that epistemology has a modest role is implicit throughout JRB, but is most explicitly stated by Mitchell in his inaugural lecture at Oxford. He notes that a common philosopher's strategy, when dealing with a concept such as necessity, existence, causality, (or rationality) is first to observe its behaviour in uncontroversial settings, second to
clarify and order the concept, and only then to try to apply the re-ordered concept to controversial contexts, e.g., the religious case. But the problem with this strategy, he complains, is that it tempts one to believe that the controversial, e.g., religious uses, have no hope of being recognized as legitimate as they stand.

Element (1) of an ethic of belief is its epistemology. Soft Rationalism's epistemology is in outline this. It gives an ideal of intellectual functioning (element (1) (a)), to which we shall come later. Element (1) (b) is absent, because Soft Rationalism does not try to identify which specific propositions are rational to believe; rather it tries to give us the means to determine these ourselves. Its theory of epistemic terms (element (1) (c)) consists very largely in specifying the substantive meaning of epistemic terms as these are applied to large and maximal scope theories. Nonetheless some hints are given of an implicit view of the external or formal meaning of those terms.

3.432 External aspects of our epistemic vocabulary.

3.4321 The external meaning of epistemic terms.

In section 2.23 I suggested that the meaning of epistemic terms is reason-promissory. The reasons promised would act as justifiers; so what I have suggested is, in other words, that the terms have a certain kind of justificatory meaning. Furthermore, the justificatory aspect is external, not substantive, for regardless of what is being claimed about a belief when we call it, e.g., rational, there remains constant the fact that we make and are understood to make a claim which may need to be defended. Suppose that someone calls irrational a belief which you think is perfectly

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proper, where the difference is in the criteria of application (the substantive meaning) which you and he will recognize. You cannot understand what features of the belief he could single out as objectionable; thus you cannot understand how he would back up his claim; but that he has made a claim to the effect that the belief should not be accepted you can understand. And this is possible because of the term's justificatory meaning.

Mitchell recognizes the justificational aspects of the meaning of epistemic terms. This is evident from "JRB" (pp. 216 and 222 - 223) where he attacks MacIntyre's 'straight line' theory of justification. He clearly does not attack the concept of justification itself. He does not think a model of justification is unnecessary to epistemology; he wants merely to supplement the axiomatic model with his own informal one.

3.4322 Fallibilism.

We can discern one further characteristic of Soft Rationalism's view of the external meaning of 'rational' and its kin. The negative forms of each term 'wear the trousers'. For example, our standards usually concern what beliefs or attitudes would be irrational, and what would be rational is left implicit. Thus Mitchell several times defends the personal judgement of the scholar as rational (and therefore as a proper source for judgements of the rationality of what the scholar believes or himself judges) because it is corrigible. And 'corrigible' here means 'susceptible of being found irrational'. For instance, he says that a historian, art critic, or theologian is prepared to admit that there are circumstances in which he would abandon his theory, even if he cannot identify these accurately in advance (JRB 55). Again, he says that a scholar is irrational if he remains intransigent in the face of serious objections to his theory (89). And J.R. Lucas, whose ideas bear a large influence on Mitchell's, argues that judgements in law and
the humanities can never be completely defended; nevertheless, they can be proved wrong. Soft Rationalism thus dispenses with the notion of complete justification of any instance of believing, where this means defending it as incorrigible or guaranteed for all time. Instead, it allows that any justification may be mistaken. Thus its epistemic concepts have an essential corrigibility or "open-ended" character. This fallibilism is merely an emphasis on the negative forms of epistemic terms, and is to be distinguished from the more radical doctrine which holds that there are no positive forms of the epistemic terms, so that it is not possible to justify a proposition or the believing of it (whether conclusively or only to a degree). Only falsification is possible. This latter doctrine is found in Popperian epistemologies such as that of Bartley. Its great weakness is that it cannot construct, using only the device of falsification, an adequate account of the fact that we do judge, among theories not yet falsified, that some have nonetheless more epistemic worth than others. Soft Rationalism avoids this problem. Mitchell believes, and I think Lucas does as well, that readiness to revise one's stand, susceptibility to criticism, intention to be fair to all the evidence, and other virtues can be present in a man in sufficient strength for him to qualify as sufficiently rational for the task of judgement he faces. So among men none of whom are irrational, some may still be seen to be more rational than others, and these may be taken to be our exemplars of good reasoners.

3. as Lucas calls it in "The Philosophy of the Reasonable Man", p. 103.
3.4323 Durrant's criticism.

While we are considering the external aspects of the meaning of epistemic terms we ought to consider Durrant's central criticism of Soft Rationalism; for this rests on the charge that Mitchell has a mistaken view of the logic of epistemic terms.

Mitchell's strategy is to secure as rational an informal procedure for evaluating maximal scope theories by showing that the same type of procedure occurs and is regarded as rational in both the humanities and the sciences. Durrant believes that underlying this programme, and vitiating its otherwise great significance, is a mistake about the function of epistemic terms like 'rational'. The mistake concerns, he says,

the logic of '...is rational' where the blank takes as a value the specification of a given argument. Mitchell construes the function of 'A is rational', where A is a given cumulative argument occurring in a given field of discourse, as being that of giving us a true (or false) predication concerning A, whereas the function of 'A is rational' is to give us an instance of rationality within that area of discourse. Thus merely from the fact that any particular debate between theist and atheist takes the form of a cumulative argument it doesn't follow that any such particular debate can be said to be a rational one; it depends upon what the canons for such a debate permit. 1

Clearly Durrant wants epistemic terms like 'rational' to apply to religious believing; but to the extent that he restricts the canons of rationality in believing to "the context of a given discipline"2, then he is employing the kind of conceptual relativism which I discounted above (3.2). And I think he must be making such a restriction. Normally to predicate a property as occurring in an object is at the same time to "give us an instance" of that property. The distinction he implies between predicating a property and pointing out one of its instances

1. Durrant, op. cit., p. 234.
2. ibid.
thus must amount to one of two claims. He may mean that our predications admit of being true or false while our pointings do not. But this would be obviously false since one can be mistaken (though perhaps less easily) in ostension as well as in predication. Perhaps instead what he means is that when we say an argument is rational we are not saying anything about it. But what then would we be doing? Evaluating it? Certainly so, but evaluation and property predication are not mutually exclusive; as I noted above in criticism of emotivism (2.21 and 2.22), we evaluate an object by saying something about it, by reporting some of its characteristics. The only other way to interpret his distinction is to take him to be distinguishing context-independent kinds of predication from the context-dependent kind represented when we call something rational. And that is straightforward relativism of evaluation.

Apart from this criticism of Durrant's alternative, there is also a strong positive argument for a predication view of the logic of '... is rational'. This is that the views of Durrant on the one hand and an emotivist on the other would both fail to do what a predication view could do, namely to leave room for the justifiable innovations we do make regarding the canons of rationality (even within a 'field of discourse'). Suppose someone calls a viciously circular historical argument 'rational'. He is not talking strictly nonsense; he is just mistaken, as our standards for historical (and other kinds of) argument now stand. We can come to see what he is talking about and perhaps, if we accept the reasons he might give for doing so, come to change our standards to align with his example. The predication view allows this possibility, because it allows him to be saying something about the argument even if we think he is wrong. Durrant's 'instancing' view does not, indeed it prohibits our saying that he is mistaken; we must
say instead that we just do not understand his utterance at all because he has instanced a paradigm we do not recognize, indeed do not understand. The emotivist view, of course, allows us some understanding, but only of the emotive force of his utterance — we still are not allowed to say, as we do say, that he is mistaken.

3.433 The substantive meaning of epistemic terms.

3.4331 A shift of focus in epistemology.

In JRB Mitchell provides little explicit analysis of the term 'knowledge', perhaps for good reason given the philosophical controversy about the concept. He implies that there is a weak sense of 'know' in which the great religious figures and the humble church-goer as well might be said (were we to discover that there is a God) to have known that there is a God. Characteristically, however, he refers to their (for them) less than certain epistemic state as not knowledge but "rational belief". The net effect of his approach is to shift the centre of gravity in epistemology away from the concept of knowledge to that of rational or reasonable belief (although what he says could be couched in terms of degrees of knowledge and of varying conditions for this concept's application). The good reason why we should follow this shift is that, as we shall later see, there is no religious reason why the epistemic status of the Christian's belief that God exists need be that of knowledge

1. However else we may analyze knowledge — an area I have not the space to enter — it is at least that epistemic status which we give to our believing such that further efforts to improve the epistemic status of our believing would be inappropriate. If I can be said to know that there is no life on Mars, it would not make sense for me to continue investigating the possibility of such life. It is under this aspect of the concept of knowledge that I say that the Christian would never know: he always ought to keep investigating the status of his Christianity.
3.4332 Personal rationality.

The epistemological novelty of JRB lies in the following suggestion. When we are unable, on the standard inductive or deductive principles, to evaluate a theory as supported or not supported by the facts it purports to explain, we may resort to personal rationality. That is to say, we may decide the theory's worth by following the informal judgement of a person who meets the conditions of personal rationality. If we ourselves have this virtue, this means that we follow our own judgement; if not, we must decide on the basis of the judgement of someone else whom we think does have it.

3.4333 Transferability of epistemic value.

The virtues that constitute personal rationality we shall discuss later. Here let us take note of a crucial idea upon which Mitchell's suggestion rests. The personal rationality of some person transfers to his believing of some proposition and to the proposition thus believed. Thus these receive the epistemic worth we are unable to give them on our usual deductive or inductive standards.

How is this transfer effected? First of all, Soft Rationalism says that the procedures for settling disputes about the rational status of a theory include not just the consultation of explicit rules of logic but also the application of individual informal judgement. But it says more than this, for it must ensure that what is settled remains the same under both procedures. So it says that the criteria of application for epistemic terms include both inductive or deductive support of the proposition believed by other propositions known and the fact that the proposition is believed by a rational person. Again, however, it must say more even than this, for it must ensure that the concept applied on the basis of those two kinds of criteria is the same, or basically the same, in both
cases. Otherwise Soft Rationalism has not made good its claim to be extending the Strong Formalist ethic's concept of rationality and not just replacing it with a different concept having application only to (and thus relative to) interpretive theories.

This danger of relativism results from the possibility of significantly different concepts lurking behind the grammatical unity of a single ambiguous term. For instance, not only are the criteria for properly using the word 'football' different in Birmingham, Alabama, and Birmingham, England, but the word refers to types of team sport which though historically and socially related are significantly distinct: the two concepts are never co-instantiated in one event.¹

Soft Rationalism must ensure that the rationality secured to a proposition by the data which support it is the same concept, or at least a variant only in 'local colouring', regardless of which type of criterion is used. So it must say, in addition to the above, that the conditions of doxastic rationality — what we are referring to when we talk of rationality in believing — include not only accordance of the believing with a rule of logic but also judgement of the believing as rationally worthy by a rational person. Given this third claim, the first two fall in place: informal criteria can do the same task as formal ones; and informal procedures can stand in for formal ones. Soft Rationalism implies that this is possible because there is just one kind of rationality secured to a theory, whichever type of procedure does the securing. Therefore, not only does the quality of rationality or reasonableness "transfer ... from particular arguments to particular

¹. What I mean by this is that the concepts of tiger and tabby-cat, for instance, are significantly distinct in never being applicable to one and the same individual, even though they belong to the same taxonomic family of felines; on the other hand, tiger and feline are not significantly distinct in the way I mean, for they are co-instantiated in one individual.
arguers", as Lucas claims\textsuperscript{1}, but it also transfers from particular arguers to the arguments they assert, and also both from an arguer to the conclusion he accepts and from his argument to the proposition that is its conclusion. Soft Rationalism holds that whether predicated of propositions, arguments for propositions, or believers of propositions, rationality is the same quality. Later (7.3) I will note why we may wish to question whether it is exactly the same quality, and thus whether personal rationality has any status other than as a stop-gap—the best we have for now, but a basis for epistemic justification which ideally we should try to replace.

3.4334 Informal reasoning.

The virtues of personal rationality are required not just in theology, claims Mitchell, but in literary criticism, history, social sciences and even the natural sciences, at least where what is at issue is a "paradigm" or large scope system\textsuperscript{2}. In all these areas personal rationality is required to underwrite what he calls "cumulative case" reasoning (JRB Chapter 3 passim). The distinguishing characteristics of a cumulative case, in the sense of a position someone presents, are these: it deals with a relatively fixed body of facts which are not in dispute; typically it seeks to explain those facts (rather than just elaborate on them); its explanation is most naturally called an

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2. He includes the sciences for the following strategic reason. Metaphysical systems are of maximal scope in that they try to explain all human experience and in that they seem to legislate ultimate concepts of assessment. A historian's theories, on the other hand, are of relatively small scope. The difference in scope is an obstacle to the analogy which Mitchell wants to draw between them and on the basis of which he wishes to claim that respectable cumulative case reasoning occurs in metaphysics. So he introduces scientific paradigm-choice as a bridging middle case.
'interpretation', the intended connotation being that alternative explanations of some degree of plausibility may be given (JRB 41); there is usually a tension between the interpretation and the facts—the latter often guide the former, but occasionally a strong interpretation will throw doubt on the authenticity of some previously accepted facts (53); and the interpretation ranges as a unit over the facts and cannot be evaluated piecemeal. The kind of argument in which such a cumulative case properly belongs is identified by these marks: it proceeds by a dialectic of suggestion and counter-suggestion; acquiescence by one or the other disputant comes in a judgement that the opposing interpretation is after all 'sounder' or 'more convincing'; and most important, there are no rules of good cumulative case reasoning, indeed not even any standards of what is a 'convincing' interpretation, specifiable in advance as a formula to follow in judgement.

The title "cumulative case" is a slight misnomer. It is not its cumulativity which puts, e.g., a historian's case beyond the grasp of "a strict proof or argument from probability" (JRB 39). The probability calculus can accommodate the way in which two propositions, which independently give a third proposition a low degree of probabilification, give it a surprisingly large amount of support when combined (see 7.43). What the probability calculus or any formal system seems to have trouble accommodating are our judgements of what 'weights' to give different classes of evidence. The reasoning Mitchell is trying to describe is what we use in such judgements. Therefore I suggest that we may best denote this as 'informal reasoning'. 
3.4335 Arguments in support of informal reasoning.

3.43351 An argument against Strong Formalism.

The proponent of the version of Formalism which I have called Strong Formalism - whom we may title the epistemic Miser - is susceptible to the following objection. The Miser demands preclusion of absolutely all potential for error from our procedures of epistemic evaluation. But we can point out that in that case even axiomatized symbolic formal logic cannot be used by him as a canon of rationality in believing. One can misunderstand, and misapply, even a symbolic language, so that any application thereof is open to a possible error such as incorrectly perceiving the pattern of an argument.

From this argument against the Miser the Soft Rationalist would gain little. For one thing, a less extreme version of Formalism is possible which would require elimination from our methods of epistemic evaluation only avoidable error, not all error whatsoever. There is little anyone can do to prevent perceptual mistakes; but conversely, we are not held responsible for them. Their occurrence threatens no irrationality, then, because to be irrational one must violate some responsibility or other. Secondly, the special kind of judgement which the Soft Rationalist proposes is, in contrast, exposed to an important possibility of error which we can, and are held responsible to, avoid, perhaps by taking special care and caution in our judgement.

3.43352 Soft Rationalism's arguments against Strong Formalism.

Proponents of Soft Rationalism lodge three objections against Strong Formalism in particular and any version of Formalism in general. The first is that any Formalist epistemology prevents not only the humanities,
but also the social and natural sciences, from being susceptible to rational argument, because the arguments in each field are rendered either actually irrational or incapable of assessment as rational or irrational. This result conflicts with our actual judgements that some arguments in such fields are rational. And given Soft Rationalism's anti-prescriptive stance (3.431), such conflict argues against Formalism.

This appeal to the actual arguments that proceed in these disciplines is an argument from the confluence of judgements of the acknowledged experts in those fields. In resisting this argument, what the Miser really fears is the threat of bias and emotional clouding to which personal informal judgement is susceptible. But if we sample the informal judgements of a number of experts in the area who can be expected to vary in temperament, political commitment, degree of amour propre, and all the other factors which could undermine their judgement, then we can trust the result. The effects of whim and caprice cancel out across the sample. Therefore a high degree of agreement, or unanimity, within the sample would suggest that the experts are not misled.

The second objection of Soft Rationalism against Formalism is the charge of misdescription. The Strong Formalist's doctrine that all good reasoning must be rule-governed forces him either to ignore or make a mockery of historical argumentation. This is because, says Mitchell, only in a trivial way does the thinking of a historian follow any

1. Lucas also argues that even in the supposedly purely formal discipline of mathematics reasoning is employed which is necessarily informal. Gödel's theorem, he says in "The Philosophy of the Reasonable Man", p. 99, shows that even deductive inference cannot be completely formalized. However, Lucas's appeal to the Gödel argument seems to be contentious; since the Gödel result applies to the small scale mathematical system of first-order arithmetic, some mathematicians may still hope to be able to formalize richer mathematical systems. I lack the competence in philosophy of mathematics to pursue this question; and since this is not the only argument that even Lucas himself brings vs. Formalism, I shall omit consideration of it here.
discriminable logical steps, each deductively following from the preceding one, when he "weighs a set of miscellaneous factors so as to judge of their effect in a particular situation." ("JRB" 221) A rule of judgement can always be invented after the fact to account for the judgement. But such a rule cannot be independently identified. It cannot be specified other than as the rule which warrants whatever the historian has in fact judged to be the rationally acceptable historical account. This latter point is quite conclusive: the epistemologist must at least start off by taking the historian's informal judgements as our norm. But this does not render futile the attempt to construct a rule that represents that judgement and which can take over its status as an epistemic norm. Such an attempt is not foreseen by Strong Formalism, but it is recommended by the Modest Formalism which I shall later espouse.

Lucas claims that formalism misdescribes the sort of reasoning that occurs in a court of law. Here is his 'good judge' argument to the conclusion that legal argument cannot be rule-governed. A bad judge may either decide on a bad rule, e.g., 'always rule for the party willing to bribe me the most', or decide on a no-rule procedure, e.g., he may flip a coin. But a good judge (giving a good judgement) may not use a no-rule procedure and (by hypothesis) he does not use a bad rule. Hence if he uses a rule at all, it must be a good rule. But a good rule being available, there would be no need of recourse to the judge, save perhaps for the application of the rule, but that would still require his judgement, and the argument then recycles.

Soft Rationalism's third argument against Formalism is its regress argument. This says that infinite regresses of justification develop unless we bring in informal reasoning; such personal judgement is therefore

necessary to the process of evaluation itself. The argument has two parts concerning two potential regresses. According to JRB 89 - 90, if we consider any application of a rule of logic (whether axiomatic or otherwise) we can identify two places where informal reasoning is necessary to cut off an infinite regress of rules governing rules. In the first place, a rule must be properly applied. The question is always logically open whether it has been. Unless we use our intuitive judgement about this, we would need to have a rule that tells us when a rule of logic is properly applied, and then a further rule governing that rule, and so on. In the second place, we use a rule of logic on the assumption that it is normative, and its normative character is due not (or not just) to its occurring in respected logic texts, etc., but to its corresponding to the rules we actually use (or, I would add, its adequately codifying the standards of reasoning we implicitly employ). If there were no such checks on what gets into logic texts, if their authors were "free to stipulate the rules, there is pretty clearly an end of rationality." (JRB 89) But the question is always logically open whether some rule corresponds to our actual rule, or whether it accurately codifies our standards. Unless we use our intuitive judgement to compare the rule in question to the rules then we would need to have a rule governing that rule, and so on. If, then, using rules of logic itself requires the (at least implicit dependence on) "exercise of judgement of this sort, there would seem to be no reason in principle why world-views or metaphysical systems should not be subject to rational comparison." (89 - 90)

Unfortunately, this regress argument makes the assumption, which we shall shortly see to be a mistake, that either the codification or

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1. The same argument occurs in Newell, op. cit., p. 71.
application of a rule intrinsically requires justification. This is
what sets up the threatened regress of justification; but I shall argue
that a mistaken view of justification operates here. Durrant touches
upon the point which I shall emphasize. He says:

Even granted that the procedure for deciding whether a
rule applies in a given problem case is itself rule
governed it doesn't follow that there has to be judge­
ment of the kind Mitchell has in mind here; the rule
by which one decides that a given problem case does or
does not fall under a lower order rule is not itself a
problem case, it is a rule by which one solves problem
cases. The infinite regress argument depends upon
taking the higher order rule as itself a problem case
for the application of a further rule and this is a
false assumption. 1

3.4336 Is Strong Formalism the strongest opponent for Soft Rationalism?

My argument of section 3.43351 holds against strict Strong
Formalism — but this is not the only version of Formalism possible.
Of Soft Rationalism's three arguments against Formalism, I shall show
later that the third fails outright. And the other two can be surmounted,
as follows. Their core complaint is that Formalism does not recognize
the informal reasoning that actually occurs in various areas of intellectual
endeavour. Now this objection is well lodged against Strong Formalism,
but it seems to me that there is a possible version of Formalism which
escapes it and which I shall detail later, namely an epistemology which
seeks only to replace informal reasoning wherever we can with a certain
kind of formal basis of epistemic justification. This basis is that of
a formal rule of good argument.

I shall make a prima facie case for this alternative version of
Formalism by suggesting that it is inherently more plausible than the
Strong version which is Mitchell's target. In attacking 'rule-governed

1. Durrant, op. cit., p. 236.
rationality', he assumes that the rules of logic, e.g., the rules of inference in some system of deductive logic, may be understood as rules to follow as a guide for deciding whether to believe the conclusion of some presented argument. This is a contentious position in the philosophy of logic, however, and even a cursory examination of it reveals its misdescription of the actual practice of logic.

Stephen Toulmin describes four competing views of logic: (1) logic tries to develop laws governing the thinking processes of individuals; (2) it is concerned to describe not the function of any individual human mind but the habits of inference common in a society or social group; (3) it is a science, but one concerned not with the nature of thinking but with a set of 'logical truths' or, to put it in a more modern way, with a special class of relations called 'logical' ones, and (4) logic is not a science alone, but an art as well — in effect, an attempt to provide rules of thumb or recipes to follow in order to be rational.

There are good reasons against the first three views. To treat logic as a purely descriptive enterprise (as the first two do) is to ignore the question of which individual's thinking processes, or which social conventions of inference, are to be described. Logic is concerned with norms, not just with facts about reasoning. But then even if it tries just to describe these norms without recommending changes, it must also first select the ones for description. The third, 'logical truths' view also ignores this normative concern, again to its detriment as an adequate description of the discipline. This is because logical relations among propositions, while they may indeed be studied in themselves, also exist as values and require to be studied as such. We can see this from one logician's characterization of his activity:

1. S.E. Toulmin, The Uses of Argument, pp. 3 - 5.
The logician is not in the least concerned with the dark ways by which the mind arrives at its conclusions during the actual process of reasoning. He is concerned only with the correctness of the completed process. His question is always: does the conclusion reached follow from the premises used or assumed? 1

The logician, notice, not only establishes the presence or absence of the "following" relation, but he also thereby establishes the correctness of the reasoning, and that is a further matter.

The fourth view remains, that of rules of logic as guides for reasoning. It is the one Mitchell has in mind when he attacks the view that reasoning is the following of logic. But it is not a convincing view to begin with. It does have the advantage over the other three of making manifest the normative status of the inference patterns provided by any system of deductive logic. But as a description of what these norms do, its claim that they simply provide recipes for decision-making is false. Toulmin notes that:

"Inferring, in a phrase, does not always involve calculating, and the canons of sound judgement can be applied alike whether we have reached our conclusions by way of computations or by a simple leap. For logic is concerned not with the manner of our inferring, or with questions of technique: its primary business is a retrospective, justificatory one — with the arguments we can put forward afterwards to make good our claim that the conclusions arrived at are acceptable, because justifiable, conclusions." 2

Therefore, my present complaint against Mitchell is that he does not attack the strongest opponent available. With one exception (JRB 87) he consistently challenges the 'rule-bound rationality' dogma from the point of view of someone looking for a means to make a decision, for a technique for making an inference. But there is (at least) one other way to interpret the inference patterns of our standard logic which less

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1. Irving Copi, Introduction to Logic, p. 5.
2. Toulmin, op. cit., p. 6.
obviously ignores the justificatory role of those patterns, and which also properly labels them 'rules'. It is in fact Toulmin's own, fifth view, to the effect that these inference patterns are neither laws of psychology, nor maxims of method, but rather "standards of achievement which a man, in arguing, can come up to or fall short of, and by which his arguments can be judged."\(^1\) As I shall suggest in Chapter 5, these "standards of achievement" can properly be described as rules of a certain kind, despite the fact that Toulmin himself does not do so.

This clarification of the doctrine of 'rule-governed rationality' is useful because with it we can agree with Mitchell that there is a source of rationality which does not, as it presently functions, consist in the application of rules; while at the same time we can suggest that we seek rules — in something like Toulmin's sense — which underlie that source's operation. This improved doctrine of 'rule-governed rationality' I shall call 'Modest Formalism'.

3.4337 Soft Rationalism's arguments for informal reasoning.

In addition to its arguments against Formalism, Soft Rationalism provides four main defences of the rationality of informal procedures for making epistemic evaluations. The first is that it sees informal procedures as dialectical, whereas deductivism is blind to the dialogue form. Our actual arguments are dialectical; and Soft Rationalists take as their model of argumentation such dialectical procedures as advocacy in a court of law (as in Lucas's 'good judge' argument)\(^2\). More important, our actual arguments do not seem on the surface to proceed in the neat steps which the deductivist imagines, with agreement reached at each

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2. See also John Wisdom, "Gods"; and David Pole, op. cit., p. 89, for a description of the working of the actual process of dialectic.
stage before the parties proceed to the next. Soft Rationalists allow for this with their idea that informal reasoning operates holistically: each side gives a total interpretation—"a full picture"—of all the facts which it recognizes as needing explanation\(^1\), and then each makes suggestions and counter-suggestions about how the interpretation of this or that fact is "strained" or unconvincing. "The typical connective of argument is not 'therefore' but 'but'\(^2\) or "'yes, but'"\(^3\).

In chapter 6 I shall construct a partly formal Dialectic which tries to represent the back-and-forth pattern of our actual arguments. However, there we shall see that in order to capture the standards of good argument (or some of them at least) it is not necessary to adopt holism.

Secondly, Soft Rationalism claims that informal procedures of evaluation are rational because they are cognitive. That is to say, the interpretation we get in an instance of informal reasoning is either true or false. Mitchell argues for this in the following way. The fact that our procedures for assessing its truth-value are not clear-cut, and are difficult to describe—how may an art historian explain how he judges the authenticity of a painting?—does not impugn the interpretation's possession of a determinate truth-value. \(^{JRB~55~57}\)\(^4\)

Now he thus wishes to show that ill-definable assessment procedures are compatible with the possibility of such assessment, i.e., with a theory's having a determinate truth-value. But all he does show is that for any theory there are conditions of truth, namely, what it asserts to be the case being the case. He does not notice the distinction between

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1. "JRB" p. 223.
4. See also R.W. Newell, The Concept of Philosophy, p. 17, for another version of the argument that the capacity for direct (informal) comparison of cases can settle matters of fact, and is indeed the logically fundamental kind of human knowledge.
truth-value and truth-conditions. These are different; for this difference is the factor which distinguishes an epistemic sceptic from an epistemic nihilist. The latter says that there is not and cannot be such a thing as a condition of truth; the former says only that while truth-conditions exist we have no access to them and so can make no evaluations of truth and falsehood. With this distinction in mind, we can observe that, like any other value, a truth-value depends for its existence in part on someone's predicating it: it resides, so to speak, in the predication. But from this it follows that if the procedure for making and checking truth-value predications on a theory is indeterminate and in principle indescribable in detail, then the truth-value predicated thereby is not clear-cut either. The Soft Rationalist may be ready to tolerate indeterminacy in some epistemic values, e.g., 'probable'. But can he do so for the central epistemic value of truth?

I would argue that the fact that people do treat informal procedures as cognitive argues prima facie that these are so, and hence are also rational. But this argument would be countered by the admission that such procedures are in principle indeterminate. Therefore, in order to assume that they are cognitive procedures, we ought also to assume that they are in principle capable of being made clear-cut.

Soft Rationalism's third defence of informal reasoning is that it is quasi-experimental. The proponent of an interpretation must in its view submit his position to the authority of the facts to some degree; for although his position reads the facts in a certain way, these can be stretched only so far. The point at which an interpretation becomes wild or absurd may be imprecise but it exists nonetheless. Furthermore, when we apply informal reasoning to an interpretation we may discover new facts in the data, that is new ways of organizing the data, as we come to appreciate better the interpretation's claims. I think we would
agree with JRB 55 that there is something like a genuine experiment here.

Fourthly, Mitchell claims that personal informal judgement is capable of being objective, and this argues for, indeed is the main constituent of, its potential rationality. 'Objective' here does not mean 'warranted by independently agreed facts', because between two competing interpretations there may not be sufficient agreement in how to read the facts needing explanation out of the data to determine which interpretation is more 'objective'. Instead, Mitchell urges in several of his writings\(^1\) that objectivity in such contexts is impartiality. This virtue consists not in the absence of any influence of value commitments on one's judgement, but rather the presence of the right sort of influence, namely, the influence of a commitment to fair and sympathetic understanding of both sides in an argument. This is an example of how the rationality of the informal type of reasoning rests for Mitchell on the virtues which make up the personal rationality of the reasoner.

3.4338 Constituents of personal rationality.

What are those virtues which are constitutive of personal rationality? I do not have the space to detail these, except where my particular arguments turn on them; it will suffice to note that the ones Mitchell has in mind are summed up in his phrase "a trained and sensitive judgement open to rational persuasion." (JRB 55) The important point about them is this. Although they can be described in general terms, it is not possible to give detailed criteria for discerning their presence in a person. We cannot say what are the marks of, e.g., sensitivity of judgement; we must instead use our own informal judgement to pick out those people who exemplify this virtue. Therefore, the procedure of

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1. "Neutrality and Commitment", pp. 16 - 22; see also "Commitment Need Not Prejudice Objectivity".
appealing to personal rationality in support of an epistemic evaluation requires itself the operation of personal rationality; therefore, personal rationality would function differently from rules of logic as a basis of doxastic rationality in one important respect — it matters very much who it is that brings that basis to bear.

In support of the adequacy of these personal virtues for this task of justifying epistemic evaluations of believings, Soft Rationalism has two arguments. First, there is the persuasive Wisdomian point that comparative, i.e., informal, rationality is logically prior to rule-bound rationality, because there is no way other than reference to a scholar's actual judgement in which to formulate a rule which might explain that judgement. Mitchell says:

> We can, if we like, say that in judging as he does the philosopher follows a rule of inference; but it would be more apt to say that the rule follows him, in that it can only be formulated in terms of the way he judges. ("JRB" 222)

Lucas gives a second argument, from the stability of dispositions. The virtue of reasonableness or rationality rarely breaks down\(^1\). The reason for this is that the virtue is a complex one, composed of a number of more or less independent dispositions, which are unlikely all to collapse coincidentally in one instance of judgement. The possibility of collapse is not serious enough to worry us. The Miser would, of course, disagree; but only because even a chance of error in our epistemic evaluations is too much for him, given his assumptions (see 3.31). His worry represents yet another retreat to his basic position.

On the other hand, personal rationality has three drawbacks. First, it seems irreducibly mysterious — irreducibly, because it is just our inability to pin down exactly what are its constituent virtues that makes

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the whole category of informal judgement important to Soft Rationalism, since we can identify those virtues in the end only through its use. Secondly, in Mitchell's view (JRB 55) the rationality-making virtues include one's having and using a sound education. One must be well-trained both technically, in the sense of having a wide and deep knowledge of many fields of academic study, and in one's attitudes, in the sense of having the proper desire to change one's intellectual inheritance tempered by a respect for its achievements. Now this concept of rationality is clearly not the same as our further idea of rationality as an attitude of caution and 'healthy scepticism' attainable even by quite stupid individuals. In this latter sense rationality is akin to a moral virtue, in that its practice requires self-denial, an inward watchfulness, and so on. This latter virtue of rationality may, like the first, be instantiated only in people who have been educated; but here the education is one in attitudes. It would be training of the heart, not of the mind. Thus this is a kind of rationality which, unlike personal rationality (at least in the latter's finest exemplifications, such as the Wise Man), is available even to the person who lacks even an average intelligence.

Thirdly, in laying out his view of personal rationality, Mitchell if often at pains to remove the rigid distinction between the intellectual and emotional life of a man. (JRB 128 - 132; "JRB" 215 - 216) In this he clearly wants to give Wittgensteinian Fideists their due, recognizing the influence of the emotions in reasoning—his favourite reference in this regard is to Edmund Burke's notion of rational prejudice—and thus

1. i. e., Soft Rationalism can give some vague specifications of these virtues, but whether they are instanced in a person we can only decide with confidence by using informal judgement.
2. e.g., JRB 125 - 126; "Indoctrination", pp. 357 - 358; "Neutrality and Commitment", p. 11.
giving to cultural traditions or to 'forms of life' what he takes to be their proper role in forming those emotions which in turn influence our reasoning powers. But this is only an influence on, not a complete determination of, the judgements a man makes. Burke's doctrine is of 'prejudice with the reason involved'. Mitchell makes clear that he has not said "(as some religious apologists wrongly do) that positive commitment to a religious position is a necessary condition of understanding it." (JRB 103) The question is, however, whether he has said, or got himself into the position of having to admit, that positive commitment to theism is a necessary condition of evaluating it as rational. He does say that certain virtues, which can be nurtured only in a certain way of life, are necessary for the exercise of rational personal judgement. It remains only for us to notice that any way of life is supported by a metaphysical system — e.g., theism — for the circle to close. If such circularity cannot be avoided, then it leads Mitchell first to a relativism of evaluation, and then to what that logically entails (as I mentioned above, 3.2), the very relativism of understanding which he abjures.

Our verdict on these arguments for and against personal rationality as a basis of doxastic rationality should not, I think, be either that it does or does not have that epistemological status. There seem good reasons to allow it, but dangers in keeping it; why not then grant that it is a prima facie basis, but one that we should replace where we can?

3.4339 The rationality of tenacity of believing.

Adherents to maximal scope explanatory theories such as theism often display a high degree of conviction. Mitchell believes that this may be explained as tenacity in believing. (I shall challenge this in chapter 7.) Tenacity in believing occurs when one's epistemic evaluations (and
hence one's believing) remain stationary despite the accumulation of new
evidence or changed reasons. He argues on two counts that part of this
tenacity reflects the operation of our rationality. The first argument
is from the pervasiveness of maximal scope theories. These typically
undergird entire ways of living, "determining a man's priorities and
decisively shaping his attitudes and interests, and helping to make him
the sort of man he is." ("JRB" 218) In order adequately to test such a
theory, a whole way of life must therefore be canvassed, and this takes
time, during which it is only rational for one to go on believing as
before. The second argument proceeds from the fact of human limitation
to the same result (JRB 138). Tenacity in believing is rational because
without it we should not be able adequately to appreciate or test a
theory of such scope and intricacy (such as theism or any of its
competitors) that few individuals have the intelligence and energy to
test such a theory 'all at one go'. In chapter 7 I shall argue that
these arguments indeed support the rationality of tenacity in some
propositional attitude, but that this cannot be the attitude of believing
per se.

3.44 An impasse.

All of the above arguments pro and con incline us, as I have just
noted, to give a qualified endorsement to Soft Rationalism. But the
serious weakness in this ethic of belief and the reason we shall need to
redevelop its insights in an alternative Modest Formalism is its failure
decisively to defeat through its own resources the epistemic Miser. The
Miser at several points retreats to his basic fear of error. And with
the Miser and Soft Rationalist then offering us alternative understandings
of epistemic value, we seem to face an impasse, as I shall show in the
remainder of this chapter. There is a solution to the impasse; but it
does not come from within Soft Rationalism. Indeed as we shall see in the following chapter, it comes only when we abandon a major element in Soft Rationalism.

3.441 The 'Ultimate Rationality Problem'.

Strong Formalism adopted decisionism as a solution to the question of how it could justify as rational its own specification of the grounds of rationality. This question I call the 'Ultimate Rationality Problem' and in fuller detail it goes as follows.

In the realm of moral values there is an analogy to this Problem, although it does not present such extensive difficulties. Suppose that we identify someone's 'ultimate' moral standards or attitudes, using Feigl's criterion (3.412). If challenged to justify these, the person has two possible appeals, one internal and the other external. The internal appeal is to some standard lower down in his hierarchy of principles, or to some fact, such as the consequences of adopting those basic moral standards or attitudes. For an ethical descriptivist, those consequences justify his basic attitudes only because he takes a moral attitude towards those facts. For an ethical non-descriptivist, the facts will justify his standards only on the assumption of some of those latter standards. Either way, internal justification is circular. But this, though an irrational result, is not a morally improper one (unless we conflate these two realms of value — improperly, as I have argued — by making irrationality necessarily immoral). External justification would claim, e.g., that it is prudent, or that it is in accord with God's will, to have the basic moral standards one has. With such external justification there may be a problem, for it will be morally wrong if the basic moral standards thus justified forbid such justification. But they need not forbid this, and if a particular set do not then external
justification of that set will not be morally wrong because by hypothesis there are no further moral standards that could be violated by such extra-moral appeals.

In the realm of epistemic value, by contrast, both kinds of justification are necessarily improper. If we have, using Feigl's criterion, correctly identified the complete set of basic epistemic standards or attitudes of a person at some time, then among these will have to be the very standards necessary to warrant any external appeal to the moral, prudential, religious, etc., worth of his having those standards. Hence such appeal would not be external justification at all, but internal. If instead he just states that it is, e.g., morally right to be rational, he is being irrational by refusing to offer justificatory argument. If he attempts internal justification, then he commits the kind of vicious circularity which our usual sets of rational standards all forbid. The injunction against circularity arises because without it justification becomes absurd. Any proposed set of rational standards would have a guaranteed means — simple self-assertion — for justifying itself¹.

Given this Problem of how rationally to justify ultimate criteria of rationality, there are just two options. One is decisionism, to the effect that it is not appropriate to try to justify them, for they are simply a matter of choice. Strong Formalism takes this route. The other is to appeal to a non-inferential canon of epistemic justification in order to warrant our inferential standards. Soft Rationalism takes this option; for Mitchell proposes informal reasoning as the basis for

¹. Notice that this rejection of absurdity reflects at least one standard of rationality common to all serious epistemologies. And the existence of this standard suggests that there might be a solution to the Ultimate Rationality Problem.
justifying choices which are metaphysical in his second sense (3.412), and a choice of epistemology would be one such.

3.442 Soft Rationalism also faces the Problem.

I shall now argue that Soft Rationalism's option is no real answer to the Problem, for it faces its own version. Our conclusion will be that we must look again at the Problem itself, particularly its notion of justification, in order to dispel it.

Soft Rationalism provides as much a Foundationalist epistemology as does Strong Formalism. That is, both accept assumption (5) (see 3.31). To see that this is so, let us note what each ethic of belief provides. The Strong Formalist ethic of belief envisioned a set of rules for rationality in believing which would be applied to any problematic instance of believing through a near-mechanical procedure to produce a verdict on the believing's epistemic value. Let us call the set of rules a canon, and this plus the procedure for applying it a method of evaluation. Soft Rationalism's proposal, notice, is composed of much the same elements. It suggests as its method of evaluation the procedure of using our informal judgement. However, we can take our judgement's verdict to secure the epistemic worth of that which is judged only if we assume that we are personally rational. In effect, we are Soft Rationalism's canon; or to be more accurate, a type of person (which we happen to instantiate), rather than a type of argument (as in Strong Formalism) or a type of proposition, makes up its canon. The novelty of Soft Rationalism is a procedural one. Under Strong Formalism, the canon of a rule of logic is applied by inspecting the form of a proposition. Under Soft Rationalism, the canon of a type of personal virtue is applied by our instantiating that virtue when we evaluate the proposition. That difference in procedure noted, we may nonetheless claim that Soft
Rationalism as much as Strong Formalism proposes a method of epistemic evaluation which depends on a canon of rationality being recognized by all parties as an epistemic Foundation.

There are points at which Soft Rationalism greatly emphasizes the fallibilist idea that rational justification consists in showing that a person's believing remains critical and open to persuasion. But, I would argue, the possibility of this kind of rational justification still requires that there should be (even if it would not be explicitly invoked) a commonly-recognized canon of rationality — namely, the self-critical personality. Furthermore, the Soft Rationalist may not look as though he depends on any canon, for if you challenge him on a particular rationality assessment which he has made his response will be an invitation to go over the issue point-by-point. True enough, he here would make no explicit appeal to a canon; but in assuming that you will abide by the result of an informal mutual reappraisal of the issue, he assumes that you accept as epistemically normative the (presumed) personal rationality which you both must manifest in such reappraisal. And this amounts to his implicitly invoking a canon of personal rationality for the purpose of justification.

In that case the Miser is able, it seems, to ask the Soft Rationalist how he would defend his proposed canon of personal rationality against challenge. The Soft Rationalist rejects voluntarism so he cannot evade the question that way. He cannot appeal to some special covering rule or principle, for that is to abandon his informalism. Can he invite the Miser to judge for himself? No, for this would invoke the very method of epistemic evaluation he is trying to justify. And it would be fruitless, because the Miser's judgement differs from his on just this

contentious point of which ethic of belief to accept. Nor would it do to hop back and forth between the rule-governed and informal procedures whenever either threatens to become a Foundation; for that would produce a justificational procedure which, if it is not exactly a circle, is still a vicious closed circuit. Indeed it would be a figure-eight:

![Figure 2](image)

Notice, parenthetically, that in setting up the Ultimate Rationality Problem I have not begged the question against Soft Rationalism, which says that rationality is fundamentally a matter of personal virtues, not a matter of rules, when I invoked Feigl's criterion. The latter picks out not just which rules of inference a man takes as his epistemic Foundation, but also which attitudes and habits have that status for him. The attitudes and habits of personal rationality are thus Soft Rationalism's epistemic Foundation.

The fact that Soft Rationalism is Foundational is the reason why its regress argument against Strong Formalism fails. This is because the regress threat comes not from the Miser's use of rules as the canon of epistemic justification, but from the fact that he tries to employ justification while he is making assumption (5). Any epistemology which assumes that an entity (whether a rule or a type of judgement) can justify another only if it is itself justified faces the threat of an infinite chain of justifications which can only be severed by invoking a Foundation. This goes for Soft Rationalism: to bring in informal judgement to stop a regress of rules only opens up the possibility of a regress of informal judgements, unless informal judgement is taken as
Therefore our impasse is this. The Soft Rationalist seems to be able to raise the Ultimate Rationality Problem against the Miser and claim that the latter's voluntarist solution is inconsistent: it offends the spirit of rationality which requires that all our choices be rational. The Miser seems able to raise the same Problem against the Soft Rationalist and claim that the latter's informally-reasoned choice of Soft Rationalism is question-begging. Until we remove this apparent ability of both parties to launch unanswerable attacks on one another, we cannot decide between Soft Rationalism and Strong Formalism.
4 The Breaking of the Impasse

4.1 Introduction.

In this chapter I eliminate the impasse which we seemed to face at
the end of the previous chapter. My strategy is to show that the Ultimate
Rationality Problem, which either of our competing ethics of belief
seems able to raise against the other, and which thus creates the impasse
between them, rests on a faulty view of justification. The shape of this
chapter therefore is as follows. After recapitulating the Problem, I
describe three intuitive assumptions about rationality which taken in
concert give rise, as I show, to the Problem. Of several available
solutions, the only viable one requires purging some aspects of those
assumptions. Indeed what I call the Foundations assumption turns out
largely to be the troublemaker. I endeavour to dispense with the view
of epistemic justification which this assumption employs. In its place
I propose a particular version of a contextual theory of justification.
This version tries to avoid the difficulties suffered by another contextual
theory, that of Carl Wellman, by invoking a theory of the meaning of
epistemic terms which gives to reasons their proper place.

4.2 The Ultimate Rationality Problem.

4.21 Recapitulation of the Problem.

Let us recall the role of the Ultimate Rationality Problem. Mitchell
used it in his argument against the Strong Formalist ethic of belief.
He pointed out that the Miser's presentation of his view represents the
sort of metaphysical argument for which there do not seem to be any
rationality-determining rules of the kind the Miser demands. He takes
this to show that the Strong Formalist ethic must finally either admit
that some crucial beliefs cannot be justified as rational (which is to
accept a version of decisionism) or countenance the kind of personal
rationality which Soft Rationalism suggests as a legitimate basis for justification of belief. But we saw that the Miser could turn the same reasoning against Soft Rationalism. The latter recommends as a method of epistemic evaluation for certain kinds of belief the procedure of appeal to personal rationality. But such appeal, says the Miser, works only to the extent that personal rationality is recognized as a canon by all parties to the debate. With this in mind, the Miser asks the Soft Rationalist how he would, if challenged, justify as rational his recommendation of the informal method. If the response is that by using that method itself we can judge the method to be rational, the Miser may rightly observe that the Soft Rationalist would have begged the question. Any theorist should practise what he preaches — but not while trying to justify what he preaches. The other two options available to the Soft Rationalist are to try to justify his position in the Miser's terms — e.g., by showing it to be deductively sound — or to admit that it cannot be rationally justified, and accept a version of decisionism. Thus he too, the Miser objects, must face a version of the Ultimate Rationality Problem. The possibility that either party to the debate may raise this Problem against his opponent creates the impasse described at the end of the previous chapter.

This is an impasse which we must break by solving the Ultimate Rationality Problem. Otherwise our present enterprise grinds to a halt; for if I go on even to attempt to discuss possible principles of rational believing, let alone to propose a codification of these, whenever I raise a factual example and assume that the reader will accept it I will be presupposing such principles. Someone inclined to reject my discussion as unrealistic, or my proposals as faulty, will be able, it seems, to lay the charge that I, too, face a version of the Problem. And I may be able to point out in reply that in making that challenge he exemplifies
the kind of rationality I am proposing, so that he too is caught on one of the horns of the Problem.

4.22 Three notions about rationality.

Our Problem is the result of the incompatibility of three notions we seem to have about rationality, each of which generates a prima facie condition of adequacy which any attempted theory of rational justification must meet.

In the first place, we expect a theory of good reasoning to include injunctions against such fallacies as affirming the consequent, or the fallacy of petitio principii, and to include such patterns of good reasoning as the inference rule modus ponens. What grounds this expectation? It cannot be our respect for deductive logic, because some of these principles resist subsumption under present systems of such logic. Petitio principii, for instance, is technically valid; that is to say, in no instantiation of an argument form in which the proposition to be justified is the sole proposition doing the justifying — and this is the most obvious form of the fallacy — can falsehood follow from the truth. Nonetheless a repetition of some premise in the conclusion most of us regard as failing in any way to help an argument; and the case where all the premises recur in the conclusion is a complete non-starter. Our reason seems to be that since an argument is paradigmatically intended as a procedure for reaching agreement\(^1\), we cannot contribute to our desired end of bringing a person to a belief that something is the case by relying, as part of the process for doing so, on his already believing it\(^2\).

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1. Other uses, e.g., our employing fictional or real arguments in order to teach a person logic, are clearly parasitic upon this basic use.
2. This is essentially the explanation of the fallacy of petitio principii given by J.A. Barker, "The Fallacy of Begging the Question".
We object to the necessary futility of question-begging, the logical impossibility that such a procedure should achieve its objective. Any other futile pattern we would reject as well, out of our disdain for futile procedures in general. To repeat, then: our first requirement of any theory of rational justification which purports to reflect our present norms is that it should contain, or provide all the material we need to generate, injunctions against all futile argument forms, one of which is 'p, therefore p'. Let us call this requirement the 'Injunctions Against Futility' expectation.

We also seem to require that any theory of rational justification be complete. This Completeness requirement is satisfied by a particular theory at a particular time if we do not know at that time of any proposition to which we could not if we tried give an epistemic value (either positive or negative) using the method provided by the theory. This requirement represents our unwillingness, given unlimited time and resources, to leave completely undecided the question of a proposition's epistemic worth. This is by no means a compulsive disposition, for given our actual conditions of limited time and energy, we are often prepared to forgo settling the question — when, for instance, the proposition is pragmatically trivial. This disposition reflects instead our assumption that any proposition whatsoever receives some value under our epistemic standards (which means, given the law of excluded middle, some positive or negative value), however much trouble we may have in ascertaining in particular cases what those standards say that that value is. The value need not be exact. Our standards may be so imprecise that many propositions have only an approximate value according to them — a value expressed as a range along part of a continuum. What we do not seem to be prepared to tolerate, save for pragmatic pressures to do so, is having to live with a proposition for which our standards cannot give even an approximate
answer. Discovery of such a proposition provokes us to revise our standards.

The third demand which we — or at least the Miser and Soft Rationalist — seem to make on any epistemology that tries to capture our actual norms of rationality is that it should give a Foundational method of epistemic evaluation. This Foundations requirement rests upon two assumptions. The first of these is developed from the Miser's assumption number (4) (3.31), which holds that epistemic justification must be transitive. With this transitivity in mind, it is held that epistemic values must, so to speak, stand constant back along any line of justification. What I mean is that we do not consider one proposition to be justified as having an epistemic value by another proposition if the latter does not also have that value. The second must have the same value as the first, so let us call this the Equi-Valence assumption. Second, from the Miser's assumption (5) we get what we might call the Endless Questions assumption. It holds that when a justification occurs, the question is implicitly and immediately raised, what is the justification for that which justifies? An endless regress is opened up, and since this regress would render futile any attempt at justification (and that violates our injunction against futility), it must be blocked off. For this purpose Foundationalism proposes a special class of propositions. These have epistemic value of a required degree — and hence (because of the Equi-Valence assumption) can justify other propositions to the same degree — without themselves being justified. Foundationalism posits, in effect, a special kind of epistemic value possessed only by these Foundation propositions and which simply inheres in them — it does not admit of, nor need, justification in order to apply to a proposition.

The metaphorical description most natural for this class of propositions is that of the foundations of the epistemic edifice. But
notice that this metaphor combines two concepts. The foundation of a building contributes support, against some force, to another part of the building; but it also contributes sufficient support, else it fails as a foundation. Similarly, the notion of epistemic foundations combines two concepts. One is the notion of epistemic support, against the force of doubt, by one proposition of another. This reflects our Equi-Valence assumption, and is not problematic. The other is the notion that a certain kind of sufficiency of support is required. Perhaps this idea results from pursuing the building metaphor too far and supposing that permanence and rock-like immovability are required because one builds one's epistemic edifice for all future intellectual weather; however that may be, the notion reflects the Endless Questions assumption, and this assumption is problematic as I shall later show.

4.23 How these three notions generate our Problem.

Our Problem is created by the fact that these three prima facie acceptable requirements make incompatible demands of any theory of rational justification which we might propose. A general schema for such theories would be:

Any member of a given class of propositions is rationally justified to the extent that it is judged rational through use of a method of epistemic evaluation, M...

(where there follows a specification of that method). To accommodate the above three requirements we modify the schema so that it gives the general form of any theory of rationality which meets those demands:

(S) Any proposition is rationally justified just to the extent that it is judged rational through use of a method of epistemic evaluation, M..., provided that it does not justify itself and that any propositions appealed to, under M, as justifying, are no less rational.
By "propositions appealed to, under M, as justifying", I mean the propositions stating the canon and the procedure for applying it which method M provides, plus any propositions which that canon will admit as giving positive evidence or other reasons.

We can by plugging in a specification of M turn S from a schema, which has no truth-value, into a theory-stating proposition — call this T — which has a truth-value. Then in T the Completeness requirement is covered by the description of the reference class as "any proposition", the Injunctions Against Futility requirement is covered by the non-self-justification clause, and the Foundations requirement is covered by the final clause.

We can avoid the Problem by omitting one of the requirements. For instance, if we exclude T from its own reference class through one device or another — e.g., by imposing a hierarchy of levels of language — no problem arises in terms of the other two requirements, because the rationality of T is then not decidable by T. But, quite apart from the problem that the idea of a hierarchy of object- and meta-languages seems ad hoc, having no point for our use of English other than to escape problems akin to the present one, such exclusion would mean that T is incomplete. We would have encountered in T a proposition whose epistemic value cannot, in principle, be assessed on the theory, and no excuse is given. If we eliminate the non-self-justification clause, no problem

1. Even if I am wrong in holding that T is the kind of proposition which can have a truth-value, and it is instead one which lays down, rather than describes, a norm, my subsequent argument could be adapted without essential change. Even if T did not purport to be true or rationally justified, it would still purport to be a "rationally held" proposal for using our epistemic vocabulary — and the latter (to satisfy Completeness) would have to include the term, "rationally held". In that case there arises a version of the Problem similar to the one which follows.
arises under the Completeness and Foundations requirements because \( T \) would then provide itself with a rational value (thus satisfying Completeness) which is automatically of the same degree as that which justifies it, namely itself (it is its own foundation). If we remove the Foundations clause, both of the other demands are satisfied by \( T \): if \( T \)'s proponent does not have to justify doing so, he can freely admit that \( T \) is irrational; so then \( T \) has a determinate, namely negative, epistemic value (thus satisfying Completeness); and because it is thus not justified as rational it is in no danger of justifying itself (thus satisfying Injunctions Against Futility).

But if we retain all three requirements, \( T \) becomes self-refuting, and that is our Problem. That is to say: first, someone who asserts \( T \) asserts it as rationally justified (for that is intrinsic to assertion); but, secondly, \( T \)'s content is such that someone who asserts it must also be prepared to assert that it is not rationally justified. The first point is implicit in what I argue later. To assert \( T \) is to claim that \( T \) is true. But because of what in 4.533 I call the "attitude-governing aspect" of the meaning of 'true', to claim that \( T \) is true is to promise to provide adequate reasons for it, if challenged — which is (in part) to claim that \( T \) is adequately justified by reasons.

The second point results as follows. Theory-stating proposition \( T \) begins with a general reference, "Any proposition...". It thus entails any of its instances, that is, any proposition which results when we name some particular proposition to replace the general reference. But \( T \) itself is a particular proposition, and when we plug its own name into \( T \), we get

\[
(t) \quad T \text{ is rationally justified just to the extent that it is judged rational through theory } T\text{'s method of epistemic evaluation (namely,...)},
\]

provided that \( T \) does not justify itself and that any propositions
appealed to, under T's method, as justifying, are no less rational.

Proposition t is saying, in its first part, that T is rationally justified only if T is judged rational through T's own method (i.e., only if it is self-justifying). However, T's being self-justifying implies — according to the first proviso clause in t — that T is not rationally justified. So t implies that T is rationally justified only if T is self-justifying and that if T is self-justifying then it is not rationally justified. The preceding statement we may symbolize, using "S" for "T is self-justifying" and "J" for "T is rationally justified", as

\[ t \vdash ([J \Rightarrow S], [S \Rightarrow \neg J]) \]

But from that statement, using two theorems provable in any system of natural deduction, we can derive the statement: t implies that T is not rationally justified. The derivation is:

1. \( \neg S \)
2. \( t \)
3. \( t \vdash ([J \Rightarrow S], [S \Rightarrow \neg J]) \)
4. \( [J \Rightarrow S], [S \Rightarrow \neg J] \)
5. \( J \Rightarrow \neg J \)
6. \( \neg J \)

Thus T entails t which entails that T is not rationally justified. So anyone who asserts T refutes himself, for he must be prepared to assert that T is not rationally justified, and yet he has already implicitly asserted that it is.

4.3 Attempted solutions to the Ultimate Rationality Problem.

4.31 An ad hoc solution rejected.

One way to surmount our Problem would be to propose a special epistemic

1. I use here the apparatus of, and theorems 26 and 20 in, Kalish, D. and Montague, R., Logic: Techniques of Formal Reasoning.
value, let us call it 'indifference', which we could apply at those points where the Problem arises. This proposal would reject the law of excluded middle (in a way parallel to, but distinct from, what an inductivist does when he proposes that we use the values 'probable', 'improbable', and 'equiprobable'). For instance, suppose that we use a method of epistemic evaluation to assess some other method of evaluation as truth-preserving. The Problem looms when we ask ourselves whether the method we use is itself truth-preserving. It seems that we would be able to avoid this Problem if we could answer that the method is neither truth-preserving nor not truth-preserving, but epistemically indifferent. Thus we would place the method in a temporary epistemic limbo. This would not be to say that the method has some unknown positive or negative epistemic value. It would be to give it a known, but special, value, namely a neutral point between the extremes.

But there is no need for such a peculiar value. Unlike the concept of equiprobability, this value's sole function would be to ward off the Problem, and I shall later suggest that we can more easily solve the Problem by better understanding the activity of justifying evaluative claims.

4.32 Price's pragmatic justification of epistemic 'policies'.

It may be queried whether it is a mistake to ask the question whether T is rational. The basis of this query is crucially important. The solution I shall propose comes very close to making this query, but it does so for reasons very different from those provided by the suggested solution we shall look at next.

H.H. Price makes some comments in Belief regarding the status of our

1. Price, Belief, pp. 112 - 129.
canons of epistemic value. When discussing the idea of taking the testimony of others as a (justificationally) primitive form of evidence, he says, "The principle which we seem to follow in the great majority of cases appears to be something like this: what there is said to be (or to have been) there is (or was) more often than not."¹ We will not get far in justifying this as a rationally-believed empirical generalization, because in so far as we test it by first-hand verification, we remove the very need for non-first-hand verification which this principle of authority is supposed to meet. He suggests we treat it instead as a policy for assessing assertions as rational or irrational. To accept such a policy is not to believe that anything is the case. Therefore we do not have to defend it as rationally asserting anything. When we accept it, we believe in it. Of course, says Price, we do have to justify our believing in it; but not as rational, only as practically warranted in the following way. Given a world of limited time and intellectual resources (limited perceptions, imperfect memory, etc.) and our desire for as much knowledge as possible, our accepting the principle of testimony makes 'economic' sense. (There is a sense, the means/end sense of practical rationality, in which this would be a 'rational' justification, but this is not obviously or directly the sense of rationality with which we are here concerned.)

Price's suggestion restricts epistemic evaluation by making an implicit division either between propositions and policies (which are not propositions) or between two types of proposition, factual and policy-stating, and then barring epistemic evaluation of the second categories in either case. This is at variance with our actual practice. The perennial dispute between the traditions I personify in the Miser and

¹ ibid., p. 114.
Soft Rationalist shows that philosophers are loathe to refrain from discussion, which they take to be potentially rational, of theories of rationality. Price must believe this to be a mistake, a confusion of the possibility of rational justification with that of 'economic' justification, only the latter of which exists for such theories. But, I would argue, if the former is not available, neither is the latter, for it presupposes the former. Consider an example of the kind of pragmatic justification Price suggests, e.g., the justification for his principle of authority. If we adopt such a principle, it is said, we increase the likelihood of some desirable outcome — in this case an increase in our knowledge. But this justification depends upon showing this result to occur. To this end evidence has to be given, and for a strong case it is likely that at some point this evidence will have to be data which we accept on authority. If Price were to respond that he has other epistemic principles — e.g., reliance on memory and perception as basic sources of evidence — which could by themselves (thus avoiding the circle) warrant evidence strong enough to make the pragmatic case, we can point out that this response merely relocates the problem. It becomes the problem of non-circularly justifying the set of epistemic principles. As long as we follow the Completeness requirement and the Endless Questions assumption, the whole set has to be assumed to be rationally justified, because the whole set could potentially be challenged as to its rationality — but then how could such challenge be met? The principles could no longer come to each other's aid.

Even were Price correct that statements of our epistemic standards cannot be valued as true (or as false), would the sole alternative be that they are valuable only as useful? Why not instead take them to be valuable as rational in the sense of truth-giving? The presumable objection to this is that "truth-giving" here would have to be justified by reference
to the epistemic standards at issue. But if we abandon the Endless Questions assumption and modify the Completeness requirement, as I shall suggest, then this objection could be escaped.

4.33 Bartley's non-justificational rationalism.

Our Ultimate Rationality Problem is generated by the attempt to justify as rational any theory that tries to capture our standards of rational justification. The most radical solution on offer is the denial that justification is essential to rationality, such as we get in W.W. Bartley's "Comprehensively Critical Rationalism".\(^1\) Being critical is essential to being rational, in his view, while having a justification is not. The rational man will thus be "one who holds all his beliefs, including his most fundamental standards and his basic philosophical position itself, open to criticism; who never cuts off an argument by resorting to faith or irrational commitment."\(^2\) Essential to this approach is its removal of the focus of epistemic value from the proposition believed to the believer, a reorientation we noticed also in Soft Rationalism. Essential also is its restriction of epistemic values to negative ones. Bartley does not allow us ever to say that a person's believing is rational. The best we can say is that it has not yet been shown irrational. This reflects a doctrine more radical than the Fallibilism we observed within Soft Rationalism. That was simply the recognition that any epistemic justification is subject to retraction, and is obviously compatible with, indeed presupposes, a justificational view of epistemic evaluation. To admit, e.g., that a proposition may not in the end be true even though it now appears to be would not prevent

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2. *ibid.*, p. 146.
one from claiming that there is now sufficient evidence for its truth to warrant one's present degree of belief that it is true. Bartley claims that the justificational view is wrong, that a proposition cannot be justified but can only be shown to have survived all criticism so far. Thus 'false' is the only fundamental epistemic value he recognizes. This falsificationism he claims to hold critically, hence rationally, but not, of course, justifiably. His critical attitude to his own theory is reflected in his specifying what would count as a refutation of it: showing that some of his own critical standards are uncriticizable.

But there are four very good reasons to reject Hartley's view.

(i) If epistemic evaluation has no justificatory function, then the interesting parallels between rational and moral justification upon which rests the plausibility of there being such a thing as an ethic of belief evaporate. But if moral evaluation is recognized to be justificatory, and it seems to be, then Bartley is faced with explaining away its very strong structural parallels with epistemic evaluation.

(ii) Falsificationism ignores the fact that among competing explanatory propositions none of which are successfully criticized we do nonetheless discriminate regarding their epistemic worth. Consider, for example, two hypotheses invented to explain a set of data. Each, if true, would indeed account for the existence of the data. But one, let us suppose, is a markedly simpler hypothesis than the other, in that it proposes a much more efficient causal process involving fewer causal agencies for the production of the observed events. Prior to engaging in experiment as an attempt to falsify one or the other hypothesis, we are already able to prefer the simpler one as more likely to be true. Falsificationism cannot account for the rationality of this preference.

(iii) If Bartley thinks the rationality of his view lies in his willingness to countenance criticism, he is making 'rationality' into a
non-infirmable predicate. This is because his surrender of his proposal before a very serious criticism would show better than could any other result just how very rational was his proposal in the first place, for his rationality is thus maximally reinforced. Indeed, on this view the most rational standards are those held by the man who is maximally self-critical, namely the man who changes his mind at the slightest whiff of criticism (often self-generated). This result demonstrates the insensitivity of this 'critical' view to the role in the critical process of standards of adequacy for the justifying reasons employed in that process.

(iv) If Bartley takes the rationality of his proposal to lie, on the other hand, in some property not of himself but of his theory, then either he renders the value, again, non-infirmable, or he smuggles rational justification into the process of criticism. I shall detail these criticisms in order. If by criticizability he means the susceptibility of the theory to criticism, then he encounters the problem that, as J.W.N. Watkins points out¹, any statement is trivially criticizable — if analytic, for being trivially true; if meaningless, for being meaningless; and if neither of these, then still for some substantive reason, no matter how silly, which can be found against it. Hence every statement is rational. Even were Bartley to specify some criterion of seriousness or severity of criticism, the making of a serious criticism would still establish that the theory is susceptible of criticism, hence rational.

If by criticizability he instead means the non-dispositional status a proposition would receive from surviving all criticism up to the time of predication, then Bartley has allowed de facto rational justification. We take a proposition to be justified when we judge that it has achieved a required degree of virtue of some kind, or passed a threshold of worth,

or overcome some hurdle. Bartley's own notion of the status, 'has survived criticism', is a similar threshold notion. The predicate 'is subjected to criticism' is not a threshold predicate; but the predicate 'survives criticism' is. And Bartley allows the latter predication as part of the act of criticism. But in that case he allows that judgements of adequacy of epistemic worth are made. Hence the problem of how to justify the standards of adequacy which do the justifying will arise for him as much as for the Miser or the Soft Rationalist.

There is no doubt that a critical frame of mind is an indispensable part of the character of the rational man, but this says nothing about whether or not assessments of epistemic worth are attempts to bestow or deny justifiedness. (It seems obvious that they are.) There is no doubt that the activity of criticism is the pragmatic locale wherein our standards of rationality take their grip. But this is compatible with taking such standards to be justificational; indeed the activity of criticism is simply the converse of the activity of justification.

4.4 Our intuitions about rationality examined.

Once we have seen that it is the three earlier-mentioned requirements of a theory of rationality which generate the Problem, the most obvious solution is to drop or modify one of those requirements. Let us consider them in order. The Injunctions Against Futility requirement is the most secure of the three, for it can be grounded in practical rationality. By the latter I mean that capacity of human beings first to identify, and secondly to enact, means appropriate to achieve ends they desire. Argument is an intrinsically purposive activity. Given that a particular argument has a particular purpose, then there are moves which the arguers might make, or policies which they might follow, which are incapable of furthering the achievement of that goal. Then a practically rational person, able
normally to discern such futile moves and policies and able normally to make and enact decisions, will normally try to avoid such moves and policies. (I say "normally" because there are circumstances, such as interference from force of habit, weakness of will, etc., which we recognize as exceptions and which do not falsify a claim that a person is rational in this practical sense.) Arguments are typically aimed (at the least) at persuasion, in which case practical rationality demands a specific form of injunction against futility, namely the injunction against justification in a circle, because only fortuitously will a circular argument persuade.

Presuming that means/end rationality does not need justification, I move on to the other two requirements. I argued above (4.32) against Price's attempt to exempt a theory of rationality from its own jurisdiction. I suggested there that our standards of rationality may be evaluable as rational in the sense of truth-giving, or irrational in the sense of truth-preventing. If we can foresee that a given set of such standards would lead to false beliefs (false on some other set of standards), then although it would not be a strictly false set of norms, it does have an objectionable potential for engendering false beliefs. Anyone concerned to avoid false beliefs — to be rational in a substantive sense — ought not, as a matter of practical rationality, to employ those norms. By allowing here appeal to some set of epistemic standards other than the one being evaluated, I assume that the latter would not be a complete set. Thus I seem to disregard the Completeness requirement as stated; but on the other hand I do not think we can abandon it altogether. This is because we do feel that the rationality of a theory of rationality is a legitimate issue under certain conditions, and this feeling underlies our desire to have some form of a Completeness requirement. The question is, what form, that is to say, what are the conditions under which the question of a theory of rationality's rationality may be properly raised?
This leaves us with the Foundations requirement, or rather (because the Equi-Valence assumption is not problematic) the Endless Questions assumption underlying it. This latter assumption reveals an implicit theory of the nature of justification. I shall now show this theory to be faulty and suggest a better one.

4.5 A theory of justification.

4.5.1 Criticism of Foundationalism.

Keith Lehrer explains the development of Foundationalist epistemologies on the part of both rationalists and empiricists (though each specifies different types of Foundation) as resulting from their common conception of justification as being a guarantee of truth...

Since one condition of knowledge is truth, it follows that no belief constitutes knowledge unless it is true. Thus, if our justification fails to guarantee the truth of what we believe, then it may leave us with a false belief. In that case, we lack knowledge. So justification sufficient to ensure us knowledge must guarantee the truth of what we believe.

We should note, parenthetically, that this desire for a guarantee of truth does not result solely from a desire for knowledge. We can find an appeal to Foundations even in an epistemology, like that of C.I. Lewis, which analyses not knowledge in an ideal sense but rather empirical belief which is epistemically justified but still open to theoretical uncertainty. Lewis believed that a probability judgement is worthless unless some 'sense certainty' underlies it at some point to ensure that the probability judgement itself is not just probable.

Lehrer spends three chapters of his book attacking Foundationalism.

His basic complaint, however, is this. Whatever specification may be given of the class of propositions or beliefs or experiences that operate as the Foundation, that specification involves the application of terms or concepts, and to be completely justified in such application, one requires the information justifying one in concluding that the conditions are the kind in which such a term or concept is correctly applied. Hence, the only way to save the doctrine of basic beliefs is to allow that such additional information itself consists of basic beliefs. In short, one must add that it is a basic belief that certain beliefs are completely justified and guarantee their own truth.

But this, implies Lehrer, is a manoeuvre which is open to the advocate of any set of Foundational propositions whatever: he can simply claim that their justificational priority is itself a basic commitment. Notice the fittingness here of the term "commitment". It is this which rankles against the spirit of rationality— the possibility which Foundationalism raises of unassailable commitment to even the wildest speculations.

4.52 Wellman's contextual theory of justification.

The problem with Foundationalism is not just its retreat to basic propositions or experiences, but the view of justification which makes this retreat necessary, namely the idea of justification as the guaranteeing of a proposition's truth (or probability). Lehrer suggests an alternative view:

If we suppose that justification is a response to a query or demand, then there is no reason to suppose that the argument need proceed beyond the point at which agreement is reached. Hence, even if all completely justified beliefs are justified by evidence, not all claims to know, employed to defend some other such claims, need themselves be justified. They only need to be justified when they engender disputation.

2. ibid., p. 152.
3. ibid., p. 16.
A contextual theory of justification like that sketched here by Lehrer is worked out in some detail by Carl Wellman. The conclusion of his deliberations is that "justifying a statement [or, as we might put it, an assertion of a proposition], belief, attitude, emotion or action is meeting challenges to it." Of course, for Wellman a challenge is not just any protest against an utterance, and a justification is not just any response. He has in mind protests against the giving of some value \( x \) to some object and responses in which such an evaluation is defended. (Here "\( x \)" is a variable ranging, for Wellman, over the categories of truth, truth-valuability (the capacity for being valued as true or false), meaningfulness, validity, and validity-valuability.) However, the protests against, and defences of, such evaluations concern not the making of the evaluation, but whether or not the object has that value. So to be more accurate we should state Wellman's view to be: justifying as having a value \( x \) a statement, belief, etc., is meeting challenges to its having \( x \). (Very often we do use the general term, saying just that the statement, belief, etc., is justified simpliciter. But from the context it will be clear in which dimension of value the justification occurs, and this could always be made explicit by saying, e.g., the belief is justified as prudent.)

Wellman seems to try to analyse the concept of justification without analysing that of adequacy of justification. I do not think that this can be done. Should a theory of epistemic justification try to answer the question, was someone's response to a challenge an adequate response?, it would change tasks. It would move from the enterprise of describing the structure of the activity of justification, what happens when it occurs (and this is what the formula 'justifying is guaranteeing truth'

tries to do), to the normative enterprise. This latter is the task of describing and endorsing or replacing the substantive principles or habits of judgement manifested in the challenges and responses people actually make (e.g., what people take to be a guarantee of truth). Now I suggest that an epistemologist can hardly avoid pursuing this latter task if he wishes to eliminate Foundationalism. Wellman tries to defeat the regress argument which gets Foundationalism going solely by pointing out that justification is the meeting of challenges. But this is not a sufficient counter because people feel a need for Foundations only when they consider if an apparently successful justification was indeed a proper one. In this they evaluate the apparently successful justification by applying to it their norms of adequacy. And one of these is the Foundational assumption itself. So to counter Foundationalism we will have to raise against it substantive principles of rationality; Wellman's approach is not strong enough, indeed as we shall see it manifests its own version of Foundationalism. As a prelude to showing this, I shall describe, and attempt to remedy, a serious fault in Wellman's description of the structure of an episode of justification.

He fails to explain why any utterance which implicitly or explicitly evaluates, say, a proposition, should raise a challenge from its hearers (if it does so). Suppose that a person tells me that an Irish monk was the first European to discover the New World. I am sceptical about this. But why should I challenge him, which is to say initiate an argument with him, rather than, perhaps, attempt to brainwash him, or hypnotize him, in order to bring him to surrender his belief? The answer is that I presume (and anyone in my position presumes) that people have reasons to back up claims they make. Given this presumption of reasons, as I shall call it, the most appropriate (and hence practically rational) course to follow in seeking to correct the person's false belief is to
discover and correct his reasons for his belief—and that requires argument, which I initiate by challenging him.

4.53 A theory of meaning for epistemic terms.

4.531 Wellman's theory of meaning.

This lacuna in Wellman's account stems from his view of meaning for epistemic language, and I shall try to fill it by giving a more satisfactory theory of the meaning of epistemic terms. The predicate 'is true' shall be our focus. The value 'true' is of central importance in epistemology, and is crucially important for my purposes.

In discussing what he calls the "critical meaning" of epistemic terms, Wellman ignores what I have called the presumption of reasons. He does recognize that some factor like this presupposition operates. He does recognize the necessity to have reasons. But he treats it as a "semantical presupposition" of the meaning of epistemic terms. The presumption does not reside in the "critical" meaning of, e.g., 'true' but in the background to this, the conditions for the predicate's meaningfulness. In effect, however, such conditions amount to criteria of application for the term 'true', and so Wellman's position is the epistemic equivalent of a prescriptivist ethical theory, in other words, a "middle of the road" view (see 2.1) of the meaning of 'true' which identifies two distinct types of meaning. One of these is action-guiding, or 'gerundive', or 'directive' meaning. The other is 'criterial', or 'descriptive', or 'substantive' meaning.

To defend my categorizing him this way, I shall point out the similarities between his view and the view advanced by Toulmin, which is an obvious translation into the epistemic realm of a prescriptive theory.

of moral language. Toulmin wants to distinguish two separate aspects of the use of an epistemic modal term like 'probably', the force on the one hand and the grounds or criteria on the other. He refrains from calling these different types of meaning only because he does not wish to use this latter term at all, but for our purposes we can regard him as dealing with meaning. He sums up his analysis of the force of 'probably' thus:

> When I say '*S is probably P*', I commit myself guardedly, tentatively, or with reservations to the view that *S is P*, and (like-wise guardedly) lend my authority to that view.

He does not analyse 'true', but what he says about the practical contradiction inherent in the phrase 'improbable but true' suggests that in his view, when one says '"S is P" is true', one does what one does when one says '*S is probably P*', but without the reservations. He insists that the criteria of 'probable' (and hence of 'true') are not to be confused with the term's force; because keeping them separate, he says, enables us to notice that while force remains constant, the criteria vary from one field of argument to another.

Wellman makes some improvement to Toulmin's view. He criticizes the latter's assumption that epistemic terms always have directive meaning, i.e., that their force always lies in how the person addressed is to regard either the proposition evaluated or the person who has asserted that proposition. Wellman points out that, depending on where it occurs in an argument, the utterance 'p is true' may instead have the force of challenging a person to attack one's assertion of p as true, or of reaffirming one's earlier evaluation of p as true, or (on the lips of the attacker) of capitulating in the face of the asserter's presentation

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4. *ibid.*, pp. 76 and 82.
of his reasons. Nonetheless, this improvement is within the same dimension of meaning as Toulmin's 'directive' meaning. Wellman is simply more sensitive to the varieties of force which epistemic terms can have; his "critical meaning" amounts to a genus containing different species of 'gerundive', or as I will call it, 'attitude-governing' meaning. And his view still maintains a separate, further genus of meaning containing the presuppositions of evaluation.

4.532 Criticism of the 'two types' theory of meaning.

Earlier (2.22) I criticized Hare's 'two types' theory of meaning for moral language. It fails to encompass the crucial relationship between a moral judgement's telling us to do something and the reasons that could be given by its proponent why we should do it, i.e., the crucial relationship between the attitude-governing meaning and the substantive meaning or the criteria for the proper application of the moral terms used. My complaint against the 'two types' theory of meaning for epistemic terms is the same: the hard distinction made between force and criteria (by Toulmin), or between critical meaning and conditions of meaningful use (by Wellman), is too abrupt.

The classic argument in support of the 'two types' theory is the argument from, as we might call it, absent tautology. This is most often culled from Moore's argument against the naturalistic fallacy in

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1. I use this notion in preference to that of action-governing meaning. The reason is that evaluative terms thus will be seen to have this type of meaning in cases where action is not possible or germane. E.g., the hearer is called upon to act but is unable to for some reason—here we can expect him to at least have the attitude that he would so act if he could. Or again, the hearer is called upon not to act at all, but to believe in a certain way, or so to act that he comes to believe in a certain way—here we can expect him, if he responds to the call, to have that belief, which is a propositional attitude. Therefore, to cover all three types of case, 'attitude-governing' is the best label for this type of meaning.
ethics\textsuperscript{1}. The argument takes the adequacy of any definition of the meaning of an evaluative term to be tested in the following way. We apply the evaluative term to some object and link this with a 'because' to a formulation of the definition in terms of that object, for instance, 'p has value x because it is the case that...' where what follows is what the definition of x would say must occur for p to have x. If we do not get a tautology, we know that the definition is inadequate. We have instead one of the 'because' statements that we do in fact use non-truistically all the time.

I cite for illustration Toulmin's use of this argument from absent tautology. He observes that a definition of the meaning of the term 'probable' in terms of, say, observed frequencies or proportions of alternatives, and these alone, fails this test. We can in fact make the non-tautologous assertion 'p is probable because q says that some A is a B and the proportion of A's which are B's is very high'. The use of a term like 'probable', he concludes, has an aspect (which he here\textsuperscript{2} does call its meaning) not captured by a definition which mentions what are properly only criteria of application.

The 'because' in the testing sentence appears to be a wedge which forces apart two types of meaning. But need it have this effect? This 'because', after all, is the 'because' of justification. The natural use of the sentence which is adapted in the above argument to be a testing sentence would be as a defence of our evaluation of p as having x against some challenge to that evaluation. How shall we describe the sentence in this more natural setting? We might say that it gives the reasons which we have held in readiness all along. But it would be better to make it

\textsuperscript{1} See, for example, Toulmin \textit{op. cit.}, p. 68 and Hare, \textit{Language of Morals}, pp. 84 - 85.

\textsuperscript{2} Toulmin, \textit{op. cit.}, p. 68.
clear why we are thus prepared. So it is better to say that the sentence fulfills the promise to give reasons which we implicitly made in the original evaluation. What I suggest here is that the force or attitude-governing meaning of epistemic terms is reason-promissory as well as "critical". We must recognize, with Wellman, how that meaning is connected to the activities of making, and responding to, challenges to evaluation. But we must go further than Wellman, to recognize that these activities proceed as they do only because the participants are able to make to one another, and keep, a certain kind of promise. At least when someone judges a proposition true there arises in us the expectation that he will give adequate reasons if we challenge him; and the closest analogy I can discover for this is the expectation we have when someone promises us something.

The activity I have in mind as that which establishes reason-promissory meaning is not just that of promising to give reasons. I mean the whole process of making such promises, trying to fulfill them, and granting their fulfillment (in the same way that Wellman means by critical meaning that which holds under the activity not just of criticizing, but of claiming to survive criticism, applying it, and granting that survival has occurred). Thus 'true' still has reason-promissory meaning when someone challenges one's evaluation, because his act of calling for one's reasons is just the reciprocal to the act of promising these. More important, indeed crucial to an argument I will give later, when someone who understands this entire activity challenges my evaluation he will understand that he himself is making an implicit promise to provide reasons for his challenge if it is in turn challenged. This is obvious enough when his challenge takes the form, as it well may, of a counter-assertion to my original evaluation. It may not be so evident when he has simply asked 'Why?', or otherwise apparently just called for my reasons, without himself making
any assertion. But even here, if he was in a position to have accepted my original evaluation, then his not doing so, but instead asking for my reasons, has the effect of denying it, either by a straight contradiction or by suggesting that neither the evaluation nor its denial, but rather a third alternative, is correct. Either of these de facto claims would need defence by reasons if challenged. There is one exception: where the challenger and I are playing that interesting intellectual game in which, in seeking for the truth of some matter, we agree that I shall propose the best hypotheses I can and he shall push me to examine the reasons for these until I find I cannot go further — I will then have the best answer possible, given the reasons which I am able to bring to bear. But this is such a recognizably unusual process that we hesitate to call it an argument at all. The oddity lies in the fact that by the rules of this game the challenger is not allowed to advance any position of his own. But then he is never in the position to accept any evaluation of fact — any assertion of a position as true — that I may make. His sole role indeed is as a foil for my conjectures and a stimulus to self-examination. So this apparent exception poses no threat to my claim that the use of an epistemic term like 'true' always has a reason-promissory aspect.

That claim explains the following functions of the justificatory 'because'. The occurrence of the term signals that the asserter is going to follow out the responsibilities of assertion and to cash, so to speak, the epistemic 'I.O.U.' he issued when he promised to give reasons. The 'because' also (and here we follow Wellman's insight) serves notice that he tries to make good in this justificatory sentence his implicit claim in his original assertion to have adequate reasons. Thus this 'because' makes the further claim that the attempt to give adequate reasons will succeed. (This is not to predict, but rather to claim, that it will.) We can improve here even on Wellman's insight, for this latter claim
represents not a flippant boast, but the asserter's serious attempt to fulfill his responsibility to defend the adequacy of his reasons now that this is challenged.

4.533 The 'unified' theory of meaning.

An objection to the view I have just suggested would be: a promise to give reasons is indeed implicitly made by the evaluation, 'is true', but why do I account for this presumption of a promise by including it in the meaning of 'is true'? In other words, what do I mean by the 'meaning' of epistemic terms? I shall not here attempt to give a complete theory of meaning, but I will sketch out the bare bones of the one which I believe is most accurate.

For any application of the predicate 'is true', we can consider:

(1) the analysis of truth;
(2) the meaning of 'is true';
(3) the usual criteria for the proper application of 'is true'; and
(4) the conditions of truth, i.e., what is being said by an application of 'is true'.

Some philosophers take the analysis of an epistemic concept like truth to be an enterprise different from theorizing about the meaning of 'is true', restricting analysis to specification of (4), the necessary and sufficient conditions of truth's occurrence. Lehrer, for instance, makes this distinction between the analysis of a concept and the specification of a term's meaning when he sets out to analyze the concept of knowledge¹.

But in the broad sense in which, as we shall see, I wish to construe the idea of meaning, the necessary and sufficient conditions of a proposition's

¹. Lehrer, op. cit., pp. 5 - 7.
being true, or rather our ideas of these conditions, are part of the meaning of the epistemic term 'truth'. Some philosophers, such as Toulmin in at least one place\(^1\), seem to distinguish meaning from criteria of application, but my opinion is, again because of my broad view of meaning, that there is no warrant for this. Nor, for the same reason, is the fourth element above separable from the second.

I will take it as uncontroversial that it is helpful in trying to define the meaning of a term to look at the way that term is used in our discourse and other activities in which we use language. (What would be controversial, because subject to obvious counter-examples, would be the view that the meaning is the use.) One possible version of such a context-using definition is the specification of a term's meaning as whatever you know when you have mastered the language in which the term occurs. But this definition is useless for our purposes, since it employs one of the set of epistemic terms — 'know' — whose meaning we are presently trying to explain. Furthermore, it is too broad. Part of knowing how to use your native tongue is knowing what effects you can achieve with certain words. I know, for instance, that great strings of polysyllabic words will very likely bore a reader or listener. But we are not inclined to say that I know this in virtue of the meanings of those words. It seems that a context-using definition of meaning will have to rely on a distinction between features of an occasion of the term's use which are essential, and those which are accidental, to its meaning.

Fortunately this distinction can be made. We recognize it readily enough. For instance, the effects on a person's psyche which you bring about by labelling one of his assertions as false are not relevant to the meaning of 'is false'. The predication means what it does whether he is

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stung or not. On the other hand, whether or not you can be said to have challenged his evaluation by predicating falsehood of whatever he has asserted as true does determine part of the meaning of 'is false'. The distinction can be marked as follows: effects of an utterance which are accidental to its meaning are those achieved with or through the uttering of it; essential effects are those which obtain by or in virtue of the uttering of it. This distinction is grounded in the possibility of a convention. Where the effect of an utterance obtains due to a convention, such an effect is germane to the meaning of the terms used. For example, it is not possible to have a convention or unwritten rule to the effect that when I call someone's assertion false his psyche is thereby hurt. His intellectual reputation is indeed thereby impugned, and a convention brings this about; but his psychological reactions to my aspersions are in a different, causal, dimension. The mastery-of-language definition is too broad because if I know my language I know the causal effects of using certain words as well as the conventional effects.

The notion of convention in fact gives us the key to a more promising context-using definition of the meaning of epistemic terms. I define the meaning of a term as those aspects of its employment which can be governed by a convention. This does not equate meaning with a convention. The meaning is, rather, subject to conventions, or norms, or understood rules. As to the question, what is meaning?, the answer would be: a set of expectations, common to the speaker and any comprehending listeners, which are raised by the term's use. If I had more space, I should go into various refinements of this specification. I would have to show, for instance, how we can describe as "expectations" those obligations and responsibilities which the utterer recognizes to impinge upon him in virtue of his making the utterance. But we can forestall such questions, for the crucial point has been made: since the presumption of reasons exists in
virtue of a convention, it belongs in the meaning of the epistemic terms. A convention brings it about that in the act of using a term like 'is true', a promise to give adequate reasons is either made, or challenged, or followed out, or granted as having been fulfilled.

Therefore, if someone makes an utterance which purports, or which I can take, to be an assertion of p as true, then if I know the meaning of 'is true' I recognize the promise he has given me to provide reasons for p's truth, and indeed, because he also implicitly claims adequacy for his evaluation, reasons which he values as adequate. In other words, I expect of him certain responses if I challenge his assertion, and this is not just a psychological reaction but a conclusion licenced by the conventions covering the attitude-governing meaning of 'true'.

The third and fourth elements above, namely the criteria of application for 'is true' and the conditions of truth, are also included as elements of the term's meaning on my view. Let us take them in order. In defending against challenge his assertion of p as true, the first reasons that a person is likely to adduce will be further propositions that he believes, i.e., evaluates as true. But even his introducing such data constitutes his giving reasons for the truth of p only under standards of truth, that is criteria for the proper application of 'is true', upon which he and his challenger agree. The parties will have, in other words, a common expectation that these criteria are the ones that would be produced if either party requested them; and the fact that this common expectation arises from a convention (because it could be made the subject of a rule) suggests that these criteria are part of the meaning of 'is true'.

There is, however, one wrinkle to smooth out here. It may not seem readily apparent how these criteria belong to the meaning of 'is true', for they are introduced only in the process of justifying, as 'adequate', reasons given in defence of a truth-claim. They would seem to compose,
rather, part of the meaning of the term 'adequate', at least regarding this term's application to reasons given in support of truth-claims. But I can accommodate this by allowing that the meaning of 'is true' contains the meaning of 'is adequate' relative to reasons for truth-assertions. I have left room for this accommodation, where (4.532) I have followed Wellman in recognizing two critical claims in any epistemic evaluation, one the claim that some object has an epistemic value, the other that one's assertion of this is responsible, i.e., that one's reasons for it are adequate.

When someone evaluates p as true then we have a further expectation, in addition to our expectations that he will try to fulfill his implicit promise to give adequate reasons if we challenge him, that he has some reasons which he considers adequate, and that they will be reasons somewhere within a range of possible ones. This further expectation accounts for the fourth element of the meaning of 'true': the conditions of truth. We have an expectation about what the utterer 'has in mind' when he evaluates p as true. If we know what 'true' means, then we know what would be the necessary and sufficient conditions of p's being true. Logical positivists think that these conditions are identical to the criteria of proper application for 'is true'. But this is not so. I, and everyone else who uses the term, have in mind, and may understand one another as having in mind, a relationship between the proposition p (that which the sentence "p" says is the case) and whatever is the case, when we evaluate p as true. That we should so understand one another could easily result from the operation of a convention. I suggest that it does. To this it may be objected that, as is often noted, we cannot observe this relationship in any direct sense, so we can never guarantee that it exists. But, I reply, this fact merely signifies that our meaning exceeds our grasp. It is not inconsistent to take a predication to posit a state of affairs (in
this case, the existence of a correspondence between what a sentence says
and whatever is the case) while admitting that the propriety of that
predication can never be fully assured because the best means we have for
settling this are still not identical with the state of affairs posited.
Furthermore, there is no absurdity in supposing that when we learn to use
and to judge other people's use of a term like 'true' we should come
habitually to expect the idea of the truth of a proposition to be the idea
of a state which is distinct from our means to learn of it.

Not only do we lack a good reason against taking this common idea or
concept of truth to be part of the meaning of 'is true', there is a
positive reason for doing so. Without it we cannot understand fully the
attitude-governing meaning of 'is true'. My account so far describes this
meaning as the expectation that the use of 'is true' claims the status of
'true' for a proposition, by promising to give adequate reasons if
challenged, and claims the status of 'adequate' for the reasons thereby
promised. But this does not tell us what the claimed status of 'true'
consists in. What, for instance, does my opponent in an argument do when
he finally capitulates before my reasons and agrees that p is true? Part
of the answer is that he praises, in a sense, the proposition (and indirectly
the asserter of the proposition). "Praise" is not exactly the right
concept, because the term 'true' is the analogue more of a decoration or
medal than of a simple gift of praise. A medal is given for reasons.
But my opponent does more even than praise p (and my believing of p) for
certain reasons. He praises p as possessing a virtue — truth — (and hence
me as having a virtue — something like 'truth-believer') in the same way
that rewarding a person with a medal honours him as having some virtue,
e.g., selfless courage, on the basis of commonly recognized reasons, e.g.,
for having risked his life to save a drowning man. Therefore, the claimed
status, 'true', consists in a proposition's having a virtue. A virtue is
a property which is valued by someone. And here is where the conditions
which the utterer of 'is true' has in mind come in, to specify what
this property is. For the term 'true', if we adopt Mackie's theory of
simple truth, these intended conditions will be the proposition's standing
in the relation to the world wherein things in the world are as is proposed
in the proposition.

Now we are in a position to see that it is misleading to go on speaking
of separate types of meaning for the epistemic term 'true' — e.g.,
attitude-governing meaning, and 'criterial' meaning. Conventions establish
the meaning of 'true' by governing expectations about an utterer's (and
challenger's) responses to challenges. And these expectations form a
cohesive set. For instance we expect someone who asserts p as true not
just to have reasons, but to have adequate ones, which presupposes that
we understand the criteria of adequacy, i.e., that we have an expectation
of what the range is within which the asserter's reasons will be found.
On the other hand, to appreciate a range of possible reasons as reasons
we must know what they would be reasons for, namely a critical claim
(determined as such by conventions we must thus understand) that p has a
certain virtue (understood, again, only through knowing a convention).
The meaning of epistemic terms like 'true' has distinguishable aspects,
then, but needs to be recognized to be a unified entity. For this reason
I label the view of meaning here sketched the 'unified' theory.

I summarize it as follows. When someone evaluates p as true, if
we know what the term means then:

1. Mackie, op. cit., p. 50. Any other theory of truth would be equally
useful here as long as it is applicable to propositions — i.e., takes
what a sentence says as a truth-bearer — and allows the evaluation
of a proposition as true to be the predication of some property to
the proposition.

2. Similar summaries could be given for its meaning when it occurs in
someone's challenge to p's truth, or his capitulation to it, etc.
(a) we expect that he has some property in mind as the virtue he is attributing to $p$, namely the correspondence of what $p$ proposes is the case and what is the case (call this the intentional aspect of the meaning of 'is true');

(b) (the attitude-governing aspect:) we know that he has claimed that $p$ has this virtue, by implicitly promising to provide adequate reasons for $p$'s truth if challenged; and thus know that he has further implicitly claimed that those reasons which he has are adequate; and so expect him to give them if challenged;

and (c) (the criterial aspect:) we expect that those reasons fall within a range of possible justificatory considerations as this is determined by the meaning, particularly the criterial aspect of the meaning, of 'adequate' as this term applies to reasons for truth-claims.

The meaning of 'adequate', which is included within the meaning of 'true', will follow the same pattern; but, of course, its criterial aspect will depend in turn on the criterial aspect of the meaning of 'adequate' as this applies to reasons for adequacy-claims for reasons for truth-claims.

We have here the beginnings of an indefinite regress of meanings for 'adequate'. But such a regress is not vicious in the context of trying to give a definition of the meaning of a term; dictionary definitions carry such regresses on virtually every word used in the definition.

This unified theory of meaning fits into Wellman's contextual theory of justification, but by placing within the meaning of the epistemic terms the activities of promising and giving and having accepted one's reasons for evaluation, it remedies the inability of Wellman's theory to explain that presumption of reasons inherent in epistemic evaluations which makes justification an issue at all for makers of such evaluations. More important, the suggested view of meaning, when added to a contextual
theory of justification, provides a means for eliminating Foundationalism, as we shall shortly see.

4.54 The failure of Wellman's attack on Foundationalism.

I suggested above (4.52) that we cannot eliminate Foundationalism through simple examination of the structure of the activity of justification, but must raise substantive principles against it. I will elaborate upon this now by showing how Wellman's attempt to dispose of the regress argument which generates Foundationalism depends crucially on the introduction of a substantive position, in the form of a particular method and canon for epistemic evaluation. And the fatal shortcoming of Wellman's attempt is that this method is itself Foundationalist.

He wishes to eliminate the idea that "every reason which can be given in reply to the question why one should accept some conclusion as true raises a new question why"¹, for it is this idea which supports the belief that a question 'why' - a challenge to an evaluation - never gets answered unless there are ultimate, unchallengeable reasons. He points out that every new 'why' question that an answer opens up is a new one. "It is not a [single] question why which remains unanswered throughout the unending regress, but a series of different questions."² This comment by Wellman is not sufficient for his purposes, for there is nothing wrong, at least on his showing so far, with asking such an unending series of questions. So he makes a further comment:

For every truth-challenge there is a response. That this response can itself be challenged does nothing to show that it is not a response to the original challenge. That challenge, at least, has been met. ³

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2. ibid.
3. ibid., p. 149.
Now to say that a challenge has been met, and that, e.g., a truth-claim has been justified, is either to say that the challenger has succumbed to persuasion or to say that he has succumbed because the response has been adequate. If my 'unified' theory of the meaning of a truth-claim is correct the first of these alternatives would be an enfeebled description of what happens in justification because it ignores the role of reasons and of standards of adequacy of those reasons. Wellman himself recognizes that if one claims that one's belief is true one does more than predict that any challenger will succumb to one's reasons. One also claims a particular status of validity for one's assertion. To claim validity for one's assertion "is to claim that when subjected to an indefinite amount of criticism it is persuasive for everyone who thinks in the normal way." Wellman's term 'valid' is equivalent to the term 'adequate' I used in defining the meaning of 'true' above.

Now his definition of validity is an attempt to show that the values we appeal to when we justify an epistemic evaluation are 'open-ended', that is, subject to theoretical uncertainty. The possibility of further challenge is left open. Our justificatory evaluations are, in other words, both dubitable and sufficient for justification actually to occur. This is a valuable insight of Wellman's, for the regress argument works from the assumption that dubitables are not sufficient. But unfortunately he rests their sufficiency on the simple fact of persuasion. He does not include the crucial idea of persuasion-for-reasons. His motive for trying to stop with a simple psychological fact is perhaps that as long as reasons remain at work then the possibility of challenging them and thus generating a regress haunts us. But norms of good justification are crucial to justifying validity or adequacy, and so the possibility of challenging

1. ibid., p. 90.
these has to be squarely faced and eliminated. We shall not lay this ghost by ignoring it.

Wellman does say himself that to define validity by reference to the fact of persuasion of the challenger(s) is not to suggest that that fact can be appealed to as the reason supporting a validity-claim. Rather, he says, the fact of agreement in judgement by the challenger with the asserter — the fact that there is a "normal way for the human mind to work" — simply is the factual precondition of there being a process of criticism and justification. But in that case what are the reasons which in his view determine validity? He avoids specifying them, for he notes that adequacy or validity of a response is judged by weighing it up against the relevant challenges to it. Validity does not require criteria, he says. We can apply this value term on the basis just of our ability to weigh up the response and the challenge, that is, to weigh up the reasons for each. We need, then, only to be able to think through the argument. If someone challenges the way we have thought through the argument, that person has a further basis for settling that challenge, namely again thinking through the argument for himself.

This should sound familiar to us, for Wellman is back at the position of Soft Rationalism, which shifted the method of assessing epistemic value from the invocation of accepted criteria to the application of a personal faculty of trustworthy informal judgement. And my complaint against this shift remains the same: it avoids a Foundationalism of standards or rules or criteria only by accepting a Foundationalism of method. The method

1. ibid., pp. 96 - 97.
2. ibid., p. 78.
3. Exactly the same result occurs in Lehrer's epistemology; see op. cit., Chapter 8 passim. He bases his theory of epistemic justification "on the subjective integrity of a veracious inquirer and the internal relations among his beliefs." (p. 189) So he too trades a criterial Foundationalism for a Foundationalism of method — the method of consulting the "veracious inquirer".
of informal judgement may very well resolve someone's challenge to our "thinking through" of the evidence for an evaluation. It may also resolve a dispute about certain of the standards we might use in evaluations of the type involved. But it could not, without begging the question, resolve a challenge (an apparently genuine challenge) to the epistemic trustworthiness of that method of informal judgement itself.

4.55 The revised contextual theory of justification.

Despite its central failing, Wellman's contextual theory of justification does contribute two further insights into the nature of justification which we should note. The first is that justification is an activity which remains within the boundary of what Lehrer calls "the circle of belief". Lehrer notes that a person seeking justification of a believing can find it in nothing other than some further believing(s) — both believing about states of affairs and believing that those believing have so little chance of being in error that they are trustworthy.

To restrict justification to the circle of believing does not make the sentence 'p is justified (or shown to be adequately or validly supported) as true' mean just 'I believe that p' in the sense of a report of one's valuing of p as true. Were the sentence to be thus construed the distinction would be lost between what a man believes and what he believes being so. We want to preserve this distinction, for we want to be able to ask, 'He values p as true, but is p true?' But notice what we would be asking here: we wonder whether we, who ask, can believe that p or value p as true ourselves. The resolution of our puzzlement will consist not in the proposition p's having a property (for whether it has it or not is independent of our puzzlement). It will consist in our coming to

value $p$ as true (or false). Of course, what we have in mind (due to the intentional aspect of the meaning of 'true') in asking after $p$'s truth, is $p$'s having this property. But our only access to this state of affairs, the only way it affects us, is through our believing that $p$ (on the basis of other believings, that is, reasons). Thus the sentence 'p is justified as true' means, for instance as uttered by the challenger at the end of an argument, 'I, the challenger, in response to adequate presented reasons, believe that $p$'; and this is no simple belief-report but a capitulation and granting of status to $p$.

I should emphasize that the preceding point does not undermine my earlier affirmation of the intentional aspect of the meaning of epistemic terms. This is because our valuing (or not valuing) a proposition as having an epistemic virtue is a condition for testing someone's predication of that virtue. It is not what he says, or we ourselves say, by making that predication. We say rather that something is the case, where this is something other than that we value the proposition in a certain way.

The other important point we gain from a theory like Wellman's is the recognition that a reason is a justifying consideration only for the person who asks for and accepts it. Nothing more is needed to make it a reason than its acceptance as such by the person who asks, for notice: the first objection which springs to mind, to the effect that we are always free to challenge whether that person ought to have accepted it, displays exactly the proposed fact about justification. If we do challenge whether he ought to have accepted the reason, in other words seriously ask for further reasons, we presume that this challenge would be met under certain conditions. What could these conditions be but our acceptance of whatever reasons are forthcoming? (Again, this is not 'raw' acceptance but acceptance for further reasons yet.) This fundamental point explains why a regress of the kind envisioned by the Foundationalist does not
develop every time a person tries to justify an evaluation to someone else: acceptance by the person seeking the justification is sufficient (on the proviso that he does so for reasons – and this proviso holds because in accepting the reasons as adequate he makes the implicit promise to justify doing so if challenged in turn). Of course, a regress does develop if the person requiring the justification will always ask for more reasons, and we have still to deal with such regresses if we are to avoid Foundationalism.

It may be objected that this theory in which the context of believings gives the process of justification its whole point amounts to a form of conservatism. The objection asks, does this theory say anything more, finally, than that someone's valuing $p$ as $x$ is justified by my valuing $p$, period? Yes, it says more and crucially so. There is, first of all, no 'raw' valuing of $p$; there is only valuing $p$ as having some virtue. Secondly, for the epistemic virtues like truth, at least, to value $p$ as true is to value it as true for reasons; indeed the connection is so close here — part of the meaning of 'true' — that we should strictly say, "to value it as true-for-reasons". This is so, in turn, because the verbal expression of such valuing is the speech-act of evaluation, and not that of reporting one's state of mind. Even if you try simply to report your belief that $p$, you end up making an evaluation: for when you say 'I believe that $p$' you imply 'I believe that $p$ is true' and we will regard it as a kind of practical self-contradiction (as we would not if you were simply reporting your state of mind) if you append '...but don't ask me to defend the truth of $p$'. Thus the theory of epistemic justification I endorse lays the weight of justification not upon a person's having a certain state of mind, but upon his having a position (actual or

1. See Bernard Williams, "Deciding to Believe", p. 96.
potential) in a critical process. This position he can express only in evaluative (claim-making) language. So it is not possible for him honestly to close off the possibility of further challenges. Dogmatism, the fear of which is the motivation behind the present objection, is thus anathema to my theory.

To sum up that theory: I restrict the process of justification to the realm of believings, and analyze that process as one's defending of an evaluation against a challenge by fulfilling the promise, implicit (because of their meaning) in one's use of the value terms, to provide adequate reasons for the evaluation. We may codify this analysis as follows:

A person has justified his assertion of \( p \) as having epistemic value \( e \) if and only if a challenger of \( p \)'s having \( e \) says (or does or says anything which under the proprieties of argument means the same as) the following:

'In response to your presentation, as implicitly promised, of reasons which I value as adequate, I now value \( p \) as having \( e \).'</n

4.6 The elimination of Foundationalism.

We have observed that when the Foundationalist raises the possibility of an indefinite sequence of challenges, he does not do violence to our notion of the structures of epistemic justification. Nothing in the account which I have given of the dynamics of an instance of justification rules out the possibility that a certain kind of sceptic might give a series of challenges, each one aimed at some part of the answer given to his previous challenge. It is this possibility against which the Foundationalist tries to prepare. However, now that we have observed there to be several aspects — particularly the criterial aspect — of the meaning of epistemic terms, a means is available to us for meeting such
a series of challenges, should they occur, without resorting to a set of in-principle unchallengeable propositions or of equally-unchallengeable informal judgements. We can convict the sceptic who engages in such a manoeuvre of misunderstanding, or (more seriously) of abusing, the meaning of the epistemic terms.

What I shall call the Foundationalist's 'sceptical incubus' may be of two kinds: scepticism about facts and scepticism about warrants. If the Foundationalist has in mind a person who always asks for further facts whenever we present him with reasons for our previous evaluation of some proposition as factual or true, we can dismiss such a possibility in a fairly obvious way. At some point this imagined sceptic's unending questions would betray a sheer stubbornness on his part rather than a genuine puzzlement. This point would usually be signalled by the absence of any apparent systematic connection among the questions he is asking.

We can be sure (as sure as is possible) that it has been reached by asking him for his reasons (an entirely legitimate move, given the promissory nature of the meaning of the epistemic terms he uses in his questions) and receiving the reply that he simply will not accept our evaluation. He just does not want to. This is the only reason he can give. But this is also an inadequate, because irrelevant, reason. What he wants has nothing to do with the truth or falsehood of propositions about parts of the world other than his state of mind. Of course, he could challenge our claim here that what he wants is irrelevant — but that would make him a different kind of sceptic. And our factual sceptic will reach this point because there is not an unlimited number of further facts relevant to any issue of fact. Sooner or later he will have to start creating new facts in support of his further challenges by challenging the standards of relevancy. Thus the factual sceptic is no serious threat; he turns out at bottom either to be ignorant or wilfully blind to what we recognize as
standards of relevance, or to be a sceptic about those standards.

The Foundationalist's real sceptical incubus must be instead the challenger of all standards of adequacy of reasons. How shall we deal with him? I suggest that we can dismiss him as an impossible figure, as follows. He is supposed to challenge the epistemic worth of every warrant we employ in defending our previous evaluation. Fairly soon (because there are not that many levels of principle, each one governing the preceding) one of us parties may be tempted to shift the discussion up to a large scope philosophical position from which our epistemic principles are generated. But the regress arguments at which this present discussion of Foundationalism is aimed, namely the ones which the Miser and Soft Rationalist seem able to raise against one another, are already at this level of large scope system, and represent a dispute at that level. At this level, there is no further place to shift the discussion to. In that case, the warrant-sceptic, whom we are supposed to imagine, has only one type of move open, namely to keep on challenging warrants.

But as with the sceptic about facts, there comes a point at which we can employ a reason which the warrant-sceptic himself accepts to catch him out. In this instance, it is a reason inherent in the very process of justification, and he must accept this reason because he sincerely enters with us into that process. At some point again he will run out of principles for his challenges, so if we ask him for his reasons, all he can say is that he simply does not accept the principle we have asserted and which he has challenged. He admits that the fact that he does not accept it would not be usually taken to be relevant to its acceptability, so that his challenge seems frivolous or simply stubborn. But, because he is a warrant-sceptic (and for no other reason) he is prepared to make an exception in this case, and take his bare commitment or his wants to be normative. Here is the real danger of the warrant-sceptic, in his apparent
ability to make this move — it is in fact the danger of the possibility of decisionism.

But we can point out that, on his own admission, in other cases bare commitment does not count. In all his previous questions it was open to him to back his challenge by appeal to the fact of his just wanting to challenge, but he did not make that move, presumably because it would not have been in his view an adequate appeal. His readiness to make that appeal in the present case is inconsistent. Thus he violates an epistemic standard which I am going to suggest is built into the very process of justification. I shall call this standard the Injunction Against Ad Hoc Reasons:

No reason-giving proposition is an adequate justification by person A of some proposition p if there is some other proposition q, similar in all relevant respects to p, for which he does not claim (or would not claim) that it is also an adequate justification.¹

Now if he admits that he is inconsistent, but proceeds to challenge the respectability of the principle of being consistent, we can object that this cannot be a genuine challenge. This is because it cannot have any reasons behind it at all; and this in turn is necessitated by the reason-promissory nature of the meaning of whatever epistemic terms he uses to express the concept of respectability which he denies to the principle. The impossibility that he could have reasons results from the fact that

1. This Injunction does not prevent us from changing our mind about the adequacy of some reasons for an evaluation, because as long as we recant any earlier justifications we have made using them we are not being ad hoc. Also, if for an apparent contradiction between reasons you can give further reasons to explain the discrepancy, then you are not violating the Injunction. Notice that the imagined warrant-sceptic does not have such escape routes. He retreats in one case to a commitment which he takes to be irrelevant in other similar cases, but his only excuse for the discrepancy is that he has exhausted principles of his own to which to appeal; and this is no real excuse.
unless the just-denied principle is smuggled back in and thus not really
denied, his elimination of non-contradiction removes the possibility of
his giving or having reasons for any proposition whatsoever. Whatever
proposition \( q \) he might try to say is a reason for another proposition \( p \),
\( \neg q \) may now be equally as good a reason for \( p \). 'Reasons', among which
we cannot discriminate better from worse, would not be reasons in our
normal sense of this concept. Let proposition \( p \) here be his denial of the
principle of non-contradiction; then because he could not give reasons for
that denial, his making the latter would not be a genuine challenge to
the principle.

The Foundationalist's sceptical incubus is, therefore, an illusory
spectre. No opponent in an actual argument could challenge every criterion
of adequacy or inadequacy of reasons, because some, such as the above
Injunction Against Ad Hoc Reasons, result, as we have just seen, from the
reason-promissory nature of the language he must use in the very process
of challenge. What I am suggesting, in other words, is that there are
some common elements, like the above Injunction, within the criterial aspect
of the meaning of the epistemic terms as understood by all users, some
universally accepted criteria of application for 'adequacy' of epistemic
evaluations — mostly negative criteria, like the Injunction, telling us
what kinds of reasons would be inadequate. These criteria would have to
come up sooner or later, which renders the complete warrant-sceptic an
unrealistic figure, that is, one completely ignorant of, or unimpressed
by, the common substantive meaning of our epistemic terms. The only
criticisms against which an epistemologist needs to prepare are actual
ones, actual genuine challenges to his position, not imaginary ones.

4.7 The elimination of the Ultimate Rationality Problem.

More realistic than the fear of a complete warrant-sceptic would be
the worry that there might not be sufficient number of criteria of sufficient strength held in common between a theorist and an actual challenger to allow resolution of their dispute. This possibility is permitted by my theory of justification. It is particularly acute for a dispute between epistemic theorists such as that between the Miser and the Soft Rationalist, for the parties here are trying to lay down criteria, or sets of criteria, of adequacy for reasons given in defence of epistemic evaluations.

But at least for the dispute between the Miser and Soft Rationalist this worry is unfounded, for, as I shall now try to show, the common ground between these parties is extensive enough to resolve their dispute. The crucial point to note is that the two parties do not disagree about all the criteria of good reasoning about reasoning. I mean here more than that the Soft Rationalist allows to the Miser his insistence upon rules, at least for some types of issue about rational value, namely those where formal logic is usefully applicable for the resolution of the dispute, and insists only that where rules are not available rationality may still be assessed. I mean also that even in their dispute over whether informal judgement is a proper method, and purported epistemic virtues of character a proper canon, of epistemic evaluation, the two parties do not question (indeed continue to hold in common) further criteria which form a partial common canon.

There is nothing to suggest that either the Miser or the Soft Rationalist rejects the Injunction Against Ad Hoc Reasons, nor that either rejects the necessity (inherent in evaluative language) to have some reasons for any challenge he makes. This is because both parties seem to enter sincerely into the attempt to justify to each other their respective positions. Furthermore, they would agree that each should give way only before reasons he considers adequate, and each should challenge only upon
reasons he considers raise a real problem for the evaluation he challenges. Further still, they share some common criteria of such adequacy. I suggest that both would accept that an evaluation of a proposition p as having some epistemic virtue e gains no defence from the suggestion that it might stand up against unspecified criticisms. Equally it might not survive them. There is a corollary of this obvious principle. It is that if one evaluates p as lacking e and thus challenges someone else's assertion that it has e, one cannot defend this challenge by claiming that the assertion that p has e might have to be retracted in the face of unspecified criticisms. We can state the principle and its corollary in the form of another epistemic standard, which I again claim is a common standard arising from the nature of challenge and justification. I shall call it the Injunction Against Unspecified Criticisms:

No proposition p may be adequately justified by the claim that it might stand up to future, unspecified challenges; nor may it be genuinely challenged by the claim that it might be retracted in the face of future, unspecified challenges.

Now observe what happens when we apply this Injunction Against Unspecified Criticisms to the debate between our two theorists as summed up at the beginning of this chapter. The Soft Rationalist actually does challenge the Miser on his use of informal reasoning in the presentation of his own case. But the Miser's response, which attempts a tu quoque counter-accusation of question-begging against the Soft Rationalist, remains in the hypothetical. He says: if the latter were challenged about his Soft Rationalism, he would have to rely circularly on the method of evaluation it recommends. The Miser is employing the Foundationalist's sceptical incubus here, by suggesting that the Soft Rationalist would show himself as irrational in trying to prepare himself against possible
sceptical attack. The above Injunction Against Unspecified Criticisms, however, declares this suggestion to be an inadequate reason for challenging Soft Rationalism. If this is the Miser's only reason for his challenge, then he hasn't made a genuine one.

However, the Miser may have another, more substantial, reason in mind. His basic trait is a minimal tolerance of error, and applied to the question of what canon of epistemic evaluation out to be accepted, this becomes his specific worry that including personal rationality within our overall canon would allow too much potential for error. The dispositional nature of character traits leaves a logical possibility that in any exercise of Soft Rationalism's proposed method of epistemic evaluation the dispositions of character constituting personal rationality might break down, and thus that the verdict produced might be mistaken. A "logical possibility" of error here means simply that there is nothing self-contradictory in saying, 'In all other uses of this method we have been right, but in some present application it turns out we are wrong.'

But the "logical possibilities" are really no help. We could point out that the Miser's own method of evaluation, the application of rules, admits of the logical possibility of error; but he could rightly reply that this error would be of an unavoidable kind different from that which worries him in the informal method. Instead, let us apply a criticism drawn from Wellman¹. The mere possibility of error in a particular application of the informal method is balanced by the mere possibility of its achieving a true verdict. The Miser's challenge to the propriety of that method implicitly denies that the mere chance of truth in the use of that method counts towards its epistemic credit. By corollary, he ought not to claim that the mere chance of error counts against its epistemic

¹ Wellman, op. cit., p. 146.
credit. But he does claim this, we are supposing; and thus violates the Injunction Against Ad Hoc Reasons which he has already accepted. Therefore we can claim that the Miser's challenge to the Soft Rationalist can be backed only by reasons he himself should regard as faulty, and thus that his challenge is not a genuine challenge.

The Miser's opponent, on the other hand, is not in such a weak position. He can challenge the Miser's view of epistemic evaluation for the rather good reason that the Miser can have only the informal method in reserve as the means to justify his implicit claim that his position is rational; for the Miser does not present any rules for adjudicating his own position. The criterion of adequacy which the Soft Rationalist here invokes would be: a defence of a positive evaluation of a theory must not employ an alternative and competing theory — which is just a version of the Anti-Futility principle. And since such a principle is not at issue between our two disputants, the Soft Rationalist can rely on it and does not need to be prepared to invoke his own special informal canon. Thus he can challenge the Miser without having to be ready to beg the question. When we abandon the Foundational view of justification, the Soft Rationalist loses from his repertoire other arguments against the Miser, particularly the regress argument. But his tu quoque against the Miser remains.

4.8 Some loose ends.

The Foundationalist assumptions which generate the Ultimate Rationality Problem can now be removed from our three requirements of a theory of

1. Of course, in practical terms there is an asymmetry between our concern to avoid error and our concern to achieve truth. Sometimes for instance, a man's life depends on his avoiding error; whereas almost never will his life depend upon his achieving truth. But such practical considerations, as I shall note in Chapter 7, affect a proposition's rational, all-things-considered, credit, and not its purely epistemic credit in the sense of its truth-value.
rationality. The Anti-Futility principle has not been questioned. Equi-
Valency remains, but in a modified form. In the statement of this
requirement, "we do not consider one proposition to be justified as having
some epistemic value by another proposition if the latter does not also
have that value" (4.22), the latter "if..." clause should be replaced by
"...if the latter is not also claimed to have that value." It will then
be necessary to show that it has that value only if the justifying
proposition is challenged — and that challenge is a question different
from the original challenge. The Completeness Requirement will also
require modification. We have seen what happens if a theory of rationality
lays down exhaustive criteria of rationality: it becomes impossible to
challenge. This is because the act of challenge presupposes that criteria
of rational adequacy govern the reasons promised in the meaning of the
terms used to make that challenge. In that case, those criteria are
necessarily either ones licensed by the theory challenged — which would
make the challenge employ the very standards it attacks — or ones outside
the theory challenged, and hence ones which it (being universal in scope)
would deny — which would make the challenge futile and hence irrational on
our Anti-Futility Injunction. On the other hand, if a theory of rationality
says nothing about certain criteria of rationality — for instance, the
ones which I have claimed are built into the very institution of
justification — then it leaves those as a possible basis for resolving the
disagreement between the theory's proponents and opponents.

The question is, how can we exact from theories of rationality this
proper modesty without licensing inadequacy? We want such theories to
give criteria to cover all propositions except those specifying external
standards of epistemic worth. Why not then place upon the Completeness
Requirement a blanket exception for all propositions which state any
standard of epistemic worth? Would we thereby purchase needed epistemological
modesty at the cost of being now unable to epistemically evaluate epistemologies? No. This would happen only if there were in fact no standards which the parties to an epistemological debate share. But I have tried to suggest that there are such standards (e.g., saying what would not be a genuine challenge) and that for our subject debate these are strong enough to decide the matter (against the Miser, on the grounds that his *tu quoque* challenge is not genuine).

Suppose we ask, 'the Miser fails, but might not someone else succeed in giving a genuine challenge to Soft Rationalism?' Does not the Soft Rationalist have to defend his method of evaluation at some point by using it? But this is to raise again the imaginary threat of the complete warrant-sceptic. Either that, or it is the prelude to a new challenge. But we must observe that this cannot be a challenge that will force the Soft Rationalist into circularity. (It might, of course, lead on the other hand to an unresolvable dispute, but we do not have to try to outflank this possibility in advance.) If the new challenge is to be genuine it will have to presuppose some common criteria of adequacy — and with these the Soft Rationalist can try to defend his position.

The above resolution of the Ultimate Rationality Problem in the Soft Rationalist's favour avoids resorting to the sort of dictatorial strategy Bartley's solution involved. Where he took the rationality of his Comprehensively Critical Rationalism to reside in the fact that it remains unchallengeable, the above argument secures to Soft Rationalism whatever degree of epistemic credit it does provide not just because the theory remains challengeable, but because while it remains challengeable, it has not been properly challenged by the Miser.

My solution also differs in a crucial way from that suggested by Price. He proposed that the propositions composing a theory of rationality, or central ones among these, are of such a logical type that asking after
their epistemic worth does not make sense. But I do not wish to make such epistemological propositions logically special. Their autonomy is, rather, a temporary result of procedural exigencies. As we happen to conduct our arguments, our theory of rationality lies in an assumed background where it takes the role of that upon which we rely in justifying our epistemic evaluations. In that role it is secure from being attacked in the original question which provoked the justification into which it enters. This is true simply because to question the criteria of rationality is a further question. That security is not necessarily permanent, because no logical barrier prevents such further question – as long, of course, as this is a genuine challenge; particularly, as long as the challenger has in mind as the basis of his challenge criteria of rationality which are external to the debate.
5 Summary and Prolegomenon
5. Summary and Prolegomenon.

5.1 Summary.

After weighing up in Chapter 3 most of the arguments for and against both ethics of belief on offer, we saw that epistemic Miserliness came out worst, although Soft Rationalism was by no means without serious difficulty. We could not decide in favour of the latter, however, because of an apparent impasse. In Chapter 4 we saw that by abandoning the Foundationalist theory of justification we could resolve that impasse in favour of the Soft Rationalist's thesis that personal rationality is a valid initial source of epistemic justification. The contextual view of justification which I developed showed that it is wrong for an epistemologist to practise what he preaches only if he does so in the course of justifying his position against an actual challenge which is genuine. As for common standards of what a genuine challenge would be, we have seen that the reason-promissory nature of the attitude-governing meaning of epistemic terms entails that certain elements will have to be present in the criterial aspect of those meanings (no matter how else that aspect is construed). That is to say, some criteria of adequacy for epistemic evaluation will be universal because they are required by the nature of justification — specifically, they are required by the nature of the making of a challenge. One of these, the Anti-Futility principle, can be used, as we have seen, by the Soft Rationalist to challenge the propriety of the Miser's negative evaluation of the proposed canon of personal rationality on the grounds that it presupposes that very canon. Another criterion, that of the Injunction Against Unspecified Criticisms, can be used by the Soft Rationalist, as we have also seen, to rebut the Miser's main counter-argument, his attempt at a *tu quoque* rebuttal.

We have achieved this possible vindication of the validity of personal rationality, however, only in spite of the theory of Soft
Rationalism. We had to abandon the Foundationalism it maintained (for instance in its use of the regress argument) in order to escape the impasse. And so my main criticism of Soft Rationalism has been that its Foundationalism, shared with the Miser, allowed the latter apparent recourse to a non-existent *tu quoque* argument. Therefore we cannot accept Soft Rationalism with its Foundationalism intact.

It has another serious disability, in its willingness (3.4338) to leave nearly unspecified the virtues of character constitutive of the canon of personal rationality. Corresponding to this is its tendency to leave as totally undescribed (perhaps undescribable) the epistemic method of making an informal judgement of epistemic worth. But because we bring the canon of personal rationality to bear on some issue by ourselves manifesting it in our use of the informal method to judge how the issue ought to be resolved, it is vital that we know how to use it. Our knowledge of it is necessary not just for using the method as a guide to judgement, but also in justifying our judgement after we have made it, for what we appeal to in such justification, implies the Soft Rationalist, is our manifestation of the canon. Can we be content to leave our knowledge of the method as simple 'know-how', a skill which is passed on from one person to another quite unconsciously? Not, it seems to me, when this method of assessment plays the very important role it does of helping to determine our metaphysical beliefs, and hence of helping to establish the way of life we live. And also not while it is open, as it seems to be, to dangers such as the following. Reliance on the experts' judgement as a measure of rational worth may become simple reliance upon unexamined authority. Or again, cultural inculcation of the virtues taken to be those of personal rationality may with time ossify into indoctrination of attitudes which are purely conventional (in the pejorative sense).

The Soft Rationalist may well claim that these risks can be avoided
with careful exercise of the faculty of informal judgement. But I would ask, while we might be able to check up on each other, how would we discern if we ourselves judge carefully? By using our own judgement again? That should not reduce our suspicions, for if our dispositions are malfunctioning in one judgement, they may very well do so again in our judgement about that judgement. Here an external constraint becomes necessary, such as would be provided by at least a careful specification of the traits involved in personal rationality and a detailed description of how to apply this canon in practice. So there is, I think, a need for an articulation of the informal method; and yet it seems to resist such elaboration.

The Soft Rationalist might reply that despite this objection he can make a strong case that we should be content to view personal rationality as a tacit skill. He can make use of the three-faceted 'unified' theory of meaning I myself have proposed to argue as follows. He agrees that under Soft Rationalism what I call 'criteria of application of "is true" to interpretive theories' are not capable of complete description. He admits that this entails (given my argument in 3.4337) that the meaning of 'is true' becomes correspondingly indeterminate under such applications, but only in the sense that the criterial aspect of its meaning becomes vague. No problem about the intelligibility of 'is true' arises as long as the attitude-governing and intentional aspects of its meaning remain clear, particularly the latter. When we call an interpretive theory true, he suggests, we have a tolerably clear idea of the conditions we intend by this — things being as the theory says they are — even if we cannot describe the criteria upon which we decide if those conditions are fulfilled.

But I reply that these are aspects of a unified meaning of the term 'true'. Our meaning can exceed our grasp, but the reason for this must
not be that the intentional aspect of meaning is totally unrelated to our criteria of application. We would not be interested in the latter as signs of truth if we did not believe them to be states of affairs closely related to the intended conditions of truth. But to know that any such relation holds, we must entertain a description of both items related. One of the related items is the set of virtues making up personal rationality. Therefore we need a careful description of these.

There is a further reason why this specification should be detailed. Prima facie, the condition of a person's character, which the Soft Rationalist suggests (e.g., JRB 55 - 56) can function as one of the signs of the truth of the propositions the person accepts, is much less obviously related to whether things are as that proposition describes than is the condition of there being evidence for the proposition. In explaining away this obvious difficulty, the Soft Rationalist will need to have clear descriptions of the conditions of character which do, and those which do not, justify truth-claims.

Were the Miser's ethic of belief the only alternative, we should have to accept Soft Rationalism and try to live with, perhaps to remedy, these disabilities. But (to use Mitchell's own most fruitful strategy) ought we not to see if there is a further, mediating alternative? I suggest that there is: one built, as I mentioned at the end of 3.4336, upon a doctrine of rationality I there called "Modest Formalism". The remainder of this thesis will be aimed at working out this position.

5.2 Prolegomenon.

5.21 Outline of the Modest Formalist ethic of belief.

The characteristics of the ethic of belief I wish to propose are the following. First, it starts from the 'unified' theory of meaning I have outlined for epistemic terms, and since this meaning owes its character
the recognized procedures of making and justifying epistemic claims, it gives the modified contextual theory of justification which I have suggested. Secondly, it takes itself both to respect current criteria of adequacy for epistemic terms, by reflecting actual usage of those terms, and to make legitimate improvements to those criteria. To accomplish this, it tries to accept the legitimacy of both formal and informal methods of evaluation, and the validity as canons of epistemic worth of both rules of logic and virtues of character. And instead of giving one canon absolute priority over the other, it grants personal rationality priority as the basic source of our evaluation while recommending the attempt to replace it as far as possible with explicit criteria.

This may look like having one's epistemological cake and eating it. But as we shall now see, there are no reasons why there should not be such a 'buried logic' within the informal method, and there is one good reason why we should keep looking for it.

5.22 The lack of reasons against the possibility of 'buried logic'.

Soft Rationalism would describe as follows the rational man's informal judgement about the rationality of an interpretive theory. He responds to different elements in the theory by considering some more carefully than others and producing a verdict consistent with verdicts he would give for other theories also featuring those elements (or a proportion of them). Thus: (1) we can identify the elements in the theory to which he responds, e.g., what the theory claims, the confidence with

1. In terms of the general schema for an ethic of belief given in 2.4, the first characteristic mentioned here would represent element (1)(c)(i), and the second would represent elements (1)(c)(ii) and also (2) and (3).
which it is presented, etc.; (2) we can represent in a preference list his ranking of those elements as revealed in the fact that he gives some more attention than others; and (3) we can try to explain his habit of judging consistently theories with similar elements by supposing that he follows a rule. None of the Soft Rationalists we have canvassed has argued that there is any logical fault in this suggestion. Mitchell does argue that we would need to use the informal method to identify in the first place the paradigms of good reasoning before we can codify these, but I have granted this. And giving this strategic priority to personal rationality does not render logically absurd an attempt at codification of it.

Neither is such an attempt contingently futile. What may suggest that it would be is Mitchell's further point that an interpretive theory, for instance a historian's theory, is so complicated that the rules we might specify for its adequacy could have no generality. Complication, however, is no deterrent to logic. The real sources of this apparent futility lie elsewhere: in the variety in logical type of the elements of a theory which a historian takes as relevant to its rational worth; and in his apparent ability to rank their importance according to the weight he gives to each type. He will, for instance, take the simplicity and other quasi-aesthetic features of a theory to be less relevant to its rationality than the evidence for and against it, and he will take some types of evidence to be less useful than others. However, if we could provide a systematic representation of how an individual historian apparently gives different weights to various kinds of evidence over a series of cases, we would have achieved some degree of codification. (And later, in 7.43, I shall suggest that we can do this within the framework of the calculus of epistemic probability.) The codification would be incomplete, because personal rationality would still be the source of justification of the historian's judgement of the support given
5.22 to the theory by each of the pieces of evidence (of whatever type) in its favour. But for one judgement – the totalling of individual support judgements under his 'weighting' – personal rationality can be replaced by the formally-represented 'weighting rule' we have constructed for him. In this way we would make justification of his judgements more mechanical (in a metaphorical sense). We might then go on to accomplish more, to express as common 'weighting rules' such agreement among historians as exists about how to weigh up evidence of different types. In doing so we would be constructing a (partial) logic for historical judgement.

5.23 An argument in favour of searching for 'buried logic'.

There would be justificational utility in increasing in the above way the formalization of epistemic evaluation of interpretive theories. In the first place, doing so would start to shift the concept of the rational worth of interpretive theories from that of a unique quality discernable only by the highly trained and gifted intellect to that of a composite virtue systematically derived from other qualities discernable by the less sophisticated and experienced mind. In short, the rationality of theories becomes more recognizable by the 'plodder'. This cannot but be a desirable result, for increased discernability should not decrease the desirability of rationality as a virtue of a theory.

In the second place, even if rules of extreme particularity were the best we could give to represent some respected historian's habits of judgement, these would still be worth producing. While they might be useless as guidelines for other cases, they could nonetheless facilitate justification of the represented instances of judgement to some challenger. The kind of rules I have in mind would lay out the components of the judgements in a systematically related way. Such presentation may be
all the challenger needs to see exactly where he has been disagreeing with the historian, and to see whether or not his worries are groundless.

I should emphasize one further point. The rules we might propose in constructing a (partial) logic for historical judgement need not be cast in symbolic form. Whether they are or not depends on how we balance the competing demands upon our mode of expression of precision as against convenience. The rules will be symbolizable to the extent to which they are systematic, because for any system which we understand we can usually find an apparatus of symbols which will represent it. And I do claim that they will be fully systematic, as far as they go. This is because they take the verdicts of informal judgements about logically more basic values and combine these in a regular and repeatable way.

5.24 Excursus on rules.

Modest Formalism, in order to be realistic, will grant that the historian does not usually consciously employ the systematic principles of combination which it claims are manifested in his judgements. In what sense, then, can we call those principles rules, and how may we defend our supposing him to "follow" them, when the term 'rule' connotes guidelines, directives, or instructions?

My answer is that they are constitutive rather than performance rules. I shall elucidate these adjectives as follows. Moral philosophers discuss a distinction between 'constitutive' and 'regulative' moral rules. Any rule whatsoever may be consciously employed to guide some activity (as Warnock correctly notes). But (as he fails to notice) if a rule is used only in this way, in other words if the activity might very well

1. See, for example, Dorothy Emmett, Rules, Roles and Relations, pp. 56 ff., and Warnock, The Object of Morality, pp. 37 - 38.
have occurred (though perhaps not have occurred in the same way) were the rule not to exist, we can call it a purely regulative rule — or, as I would prefer, a 'performance' rule. Constitutive rules, by contrast, partly determine that a set of events counts as such-and-such an activity ¹, whether or not they also facilitate its performance by guiding those who (consciously or unconsciously) respect them to act in certain ways.

Constitutive rules, then, may guide conduct; but not all rules which guide conduct also define that conduct as a particular activity, and the ones that do not are performance rules. Team sports best illustrate this distinction. Ice-hockey players, for instance, 'make it a rule' not to try to clear the puck from the back corners of their own end of the ice by passing it in front of their own net. It is experience, however, and not the official rule book, which teaches this — such a move usually gives an opponent the chance to intercept the puck in front of the net and take a clear shot. By contrast, it is the recognized set of conventions of the game, or the official rules which codify these, which alone permit us to call two hours of a particular activity on a sheet of ice an ice-hockey match ².

1. That is to say, they help to make an activity the activity it is, even though they alone are not sufficient for this. In addition to the rules governing an activity, its particular nature will be determined also by our attitudes towards it, the social roles it plays, etc., — what Schwyzer, after Wittgenstein, calls the 'grammar' of the activity, and which he distinguishes from its rules. See Hubert Schwyzer, "Rules and Practices". He makes the extreme claim that an activity is in no way shaped as the activity it is by the rules governing it. This is obviously false. The rules of chess, for instance, help to make it the game it is (as distinct from other games) even if they are not sufficient to determine all its characteristics (e.g., that it is a game rather than a religious rite).

2. In The Object of Morality, pp. 45–46, Warnock allows that constitutive regularities are 'rules', but he prefers to call what I label performance rules instead 'customs' or 'conventions'. Now for Warnock the crucial determinant of a rule is that the player believes he is to follow it in any case whether or not he can see good reasons for doing so in that case. But hockey players, for instance, 'make it a rule' not to clear the puck in front of their own net in just this sense. Therefore I shall persist in talking of performance rules.
The idea of treating arguments as games I shall shortly discuss. There are certainly strong analogies between the two. On the basis of these analogies we can proceed to describe as constitutive rules of an argument about a historian's interpretive theory any formal principle which we might identify as underlying the parties' informal judgements during that argument. There are four considerations in support of that description.

In the first place, the players, coaches, and referees in an ice-hockey match may follow both types of rules without conscious thought, as a matter of habit or knowing-how. More important, a referee may call, and a player may accept, a penalty without either person thinking of the official injunction against play of that kind. Similarly, a historian may not have consciously in mind a principle of combination when he judges as rational another historian's claim, but this does not preclude that principle's operating as the underlying basis of justification for his judgement.

Secondly, the two types of rule typically produce injunctions of different force. A player shouldn't break the performance rules of hockey, unless he is so skilled he can get away with short-cuts, dangerous passes, etc. But he must not break the constitutive rules of the game, or he and his club suffer. And there are no exceptions to this on grounds of skill or strategy. Similarly, we can recognize the distinction between the sorts of move in an argument which a journeyman historian should not make and the kinds of move any historian must not make. When a historian provides evidence in support of some claim which a critic has challenged he will recognize (if he is well-trained and takes care over his defence) that he should not bring in too many data of an only marginally significant kind. Too many data will cloud the issue. (If he is skilled enough, it may not be imprudent for him to bombard his critic
with all his evidence since this will very likely convince the man without further ado.) He will also recognize, however, stronger restraints, such as the wrongness of 'affirming the consequent'. (This is rational, not moral, wrongness, although of course the latter may also be involved, e.g., if he employs this fallacy in order to deceive his opponent.) Therefore the kinds of standards of achievement in argument, such as the injunction against logical fallacies, which I have in mind are constitutive rules if they are rules at all.

Thirdly, constitutive rules in hockey function to arbitrate disputes over the propriety of some move by a player or team. Performance rules do not. They settle questions about the usefulness of a particular move for winning hockey matches, or for pleasing the crowd, but not questions of legitimacy. In the same way, the violation of the injunction against fallacies in argument arbitrates against a move in a way that violation of a rule of thumb for effective argument does not. Dispute can continue for some time over whether or not bombarding a particular critic with a great deal of data was a strategically useful move. But once we see that a historian's assertion committed some fallacy the illegitimacy of his move is settled — unless, of course, we move the discussion to a different plane altogether and question the normative force of the injunction against fallacies.

Lastly, constitutive rules in a competitive sport can be changed only with difficulty, requiring league meetings, etc., whereas performance rules are affected by the creativity of the master player. Similarly, standards of epistemic achievement are much harder to change — although they do develop over time, of course — than they would be were they simply

1. And such standards of achievement in an argument would, furthermore, fit Warnock's definition of a rule. See op. cit., p. 46.
performance rules. Simple unilateral action by one logical innovator as often results in academic ostracism as in recognition and agreement by his peers (this being independent of whether he is right or not). I conclude from these four considerations that it is illuminating to treat any principles we can find to underlie judgements in informal arguments as rules of argument, provided we describe them as constitutive and not performance rules.

5.25 Budget of problems.

I follow Soft Rationalism in treating Christianity or any of its fellow-contenders for the hearts of men (Islam, liberal humanism, Marxist dialectical materialism, etc.) as providing maximal scope systems of explanation. Before the Modest Formalist ethic of belief which I propose could even pretend to be sufficiently rich and comprehensive to adjudicate among these systems, a great many topics require consideration. I shall not deal with all of these, but will look at the most immediate problems in order to give a partial picture of how Modest Formalism would answer our initial question (1.1), what would it be for a person to be persuaded rationally to believe that God exists?

There are five issues to consider. In the first place, Modest Formalism is intended to cover interpretive theories, whether of maximal scope, as in the case of Christianity, or of modest scope, as in the case of the theory a historian uses in explaining a particular set of events. I shall have to suggest, as applicable to choice among interpretive theories, a novel kind of formal approach that has not already been tried and seen to fail. This will be my task in the following chapter.

Secondly, Modest Formalism must deal with the tendency of maximal scope interpretive systems to encroach upon all possible confirming or disconfirming data or upon all possible criteria of evaluation. I shall
suggest that the problem here is only apparent.

Thirdly, Modest Formalism wants to move away from the deductivism of Strong Formalism, without adopting a completely informalist epistemology like that of Soft Rationalism. The theory of inductive inference is the middle alternative it seeks. Therefore Modest Formalism must show that it is legitimate to use inductive inference in our choices among interpretive theories, or rather a particular form of this, namely inference to the best explanation. We must look, then, at the relations among the concepts of truth, probability, and rationality as these would apply to interpretive theories.

It must also tackle the problem, fourthly, that large scope systems of explanation employ such varied data that the support the latter render to them does not seem to be properly described as probabilification. Fifthly, there is the question of how any inductivist epistemology can cope with the fact that the Christian has faith in God as well as belief that he exists.

We shall be able to treat these latter three topics simultaneously. I shall develop a view of the concept of rationality as applied to propositional attitudes, a large component of which we shall see to be the concept of epistemic probability which applies to believings. This concept of rationality is suitable for epistemic adjudication among interpretive theories. In the final chapter my task will be to develop this concept and to outline the criterial aspect of the meaning of 'rational' as it applies to the believing of a large scope system. In doing so I shall also be able to suggest how we might secure the possibility of rationality in faith as well as in believing.
6 (Partly) Formal Dialectic

6.1 Dialectic: the theory of argument.

The natural place to begin our search for a logic buried within informal judgements of epistemic value is in the process of argument. This is because the analysis of the meaning of epistemic terms which I gave (4.53) tied the attitude-governing and criterial aspects of such meaning to that context of assertion, challenge, and response which we find in arguments.

When I write here of "the process of argument" I refer to the (largely verbal) exchanges between (typically) two persons. There is also a use of the term 'argument' to refer to the contents of such exchanges, e.g., one party's giving an argument for his position. Sometimes this locution will be useful, but for the most part I shall mean by 'argument' the larger interpersonal context.

Not every verbal exchange, of course, is an argument. To pick out those which are we must navigate between two extremes. One is to describe an argument as any and only those exchanges between two parties which can be represented as a series of premises-to-conclusion steps. This will not do, because we can represent in this way exchanges which are not arguments, such as between a teacher who writes on the blackboard a set of sentences leading to a conclusion and his pupil who repeats them aloud, where the pupil is trying to learn the story by rote. As C.L. Hamblin notes, the theory of argument must go beyond the study of premise-conclusion form to consider the pragmatic dimension of the circumstances in which the premises and conclusion are presented. But the theory of argument must not go to the other extreme of taking 'argument' in its colloquial sense of any heated verbal exchange, because in that case it would be rhetoric — the

study of the art of emotional manipulation through language. The proper
study of argument, which Hamblin calls 'Dialectic', is akin, rather, to
that of formal logic: the maintenance, indeed achievement, of true
believings through the fostering of good habits of thought and expression.
Indeed, if cast in symbolic terms Dialectic becomes a desirable extension
of the boundaries of formal logic.¹

6.2 We focus on one type of argument.

6.21 Varieties of argument.

The number of different types of argument which a Dialectic purporting
to be complete would have to encompass is very large. There are many
dimensions along which arguments may vary. There can, for instance, be
two or more 'sides' to an argument, two or more competing positions taken
up regarding the question at issue, and each side may be taken by one or
more persons. But we can ignore many such complications, for we can
identify a type of argument which is relatively simple yet is common, minor
variations aside, to disputes involving interpretive theories in both
historical studies and metaphysics. And we can see that the problems in
which we are interested arise in either case. Arguments of the type to
which I refer are as follows.

(1) Two-role (rather than 'two-person', because one person, when
'arguing with himself', can take in turn both sides in the
argument). This is a simpler case than ones where several
positions are on offer.

(2) Epistemically competitive, in the sense that if one party wins
from the epistemic point of view, the other loses (e.g., if one's
position is correct, the other's is incorrect).

¹ ibid., p. 254.
(3) **Interpretive**, both in the sense that each of the alternative positions has some initial degree of plausibility\(^1\), and in the sense that the data requiring explanation are more or less fixed and no new datum is introduced as a basis for settling the argument. Resolution is instead a matter of one party's so organizing the data into facts through application of his theory that he constructs a story more convincing than his opponent's.

Through point (2) I restrict our scope to competitive arguments and ignore the many two-role dialogues that are epistemically co-operative (e.g., **mutual** efforts to discover truth). My reason is that such enterprises do not count as arguments at all (although their participants may use mock arguments among themselves as ways of exploring new leads).

I shall in fact narrow our scope even further, to the range of two-role arguments over **contradictory** interpretations. In effect, then, we will be taking this type of argument as a paradigm for the wider class of epistemically competitive arguments, so that what we learn about the former may be applied straightforwardly to the wider class.

My justification for thus narrowing our attention is two-fold. First, it is not the logical character of the positions advanced by the two parties which gives an epistemically competitive argument its win-lose character, but the participants' assessment of their positions as the sole plausible alternatives. Sometimes there are, both logically and epistemically, alternatives to the two positions (i.e., when those positions are logical contraries). A Christian and a Zoroastrian, for instance, may argue over the number of aspects or 'persons' in the Deity (three and two, respectively), yet they could both be wrong. There is, at the least, the third, Muslim, alternative that the Deity cannot display any such divisions. The Christian

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and Zoroastrian reject this alternative, and all others, because they judge all these as non-starters. However, even in cases of (not contrary but) contradictory positions such as where a Christian claims that the Deity is triune and his opponent simply denies this, there is still an epistemic alternative to these two positions which the two parties must be ruling out. That alternative is drawn or suspended judgement: "Either the Deity is triune, or this is false, but I don't know which." Presumably the Christian and his opponent ignore this alternative because each takes himself to have sufficiently good reasons to avoid such fence-sitting. So it is not the logical character of the positions, but the fact that the parties judge there to be no more than two positions worth considering, which makes an argument epistemically competitive.

It is thus almost for convenience that I concentrate on arguments over contradictories. I say "almost" because such arguments do have a further special centrality (and this is the second point in justification of my narrow scope). If we do look at the logical structure of the positions in epistemically competitive arguments (setting aside cases of contraries), we find great variation. Particularly, many will not have the form of a simple assertion of p by one party and denial of p by the other. Some, for instance, will have the form of an assertion that p by one party and a simple denial by the other party that the reasons given for p are adequate (with the second party either accepting p or suspending judgement on it). I admit this; nonetheless I shall proceed to theorize about all epistemically competitive arguments on the basis just of those with the simple structure, 'p' vs. 'not-p'. My reason is that the more complex ones can be analyzed into one or more simple arguments over contradictories. Consider as an

1. This is distinct from "Either the Deity is triune, or this is false, and I know which", which would be compatible with either party's assertion.
example an argument that begins thus:

Mr. White: There's life on Mars.

Mr. Grey: I agree with you; but why do you believe this?

As yet the dialogue is not epistemically competitive. Grey isn't rejecting anything White has said, but is only asking for his reasons.

White: My reason is that the instruments aboard the Mariner space-probe were inappropriately designed.

White has now claimed, directly or implicitly, four different things: there is life on Mars; the instruments were badly designed; that latter fact is a reason for the former, i.e., gives it epistemic support; and the epistemic support given is adequate to justify his belief in life on Mars. (The latter two claims can be presumed to be implicit here, the first because he has not presented his belief as one he holds without reasons, and the second because any insecurities he had about the adequacy of his reasons would – if he is rational – correspondingly diminish his belief itself. And under my broad theory of meaning (4.533), these two claims are part of the meaning of White's utterance.) There are a number of different responses in which Grey would be opposing White, and from which point their argument would become epistemically competitive. But each of these possible responses will amount to a denial – or a sequence of several denials – of some claim(s) of White's. For instance, the response,

Grey: Well, though I think you're right about the instruments, that's no reason at all for there being life on Mars, let alone an adequate reason – it's only a reason against the view that the Mariner results prove there's no life on Mars, and hence at best a reason for simply remaining agnostic,

contains denials of White's two implicit epistemic claims. Unless one of them immediately surrenders, the parties can proceed from here only by defending what they've implied or said about each of the two disputed
points; and for each point their argument will have the form of an argument starting from an assertion by one party and its denial by the other.

I shall hereafter avoid the clumsy term "epistemically competitive" by borrowing from the jargon of game theory the more precise term "zero-sum". By this will be meant that if the winner's epistemic gain is expressed as a positive real number and the loser's epistemic loss as a negative one, the sum of these is zero.

6.22 A representative example of two-role, zero-sum, interpretive arguments.

I suggested above that we can see arguments of this type within disputes at the levels both of small and of maximal scope interpretive theory. But in the following exposition I shall take as my example a debate at the level of small scope interpretive theory. This is the discussion in the historical journal *Past and Present* of Professor H.R. Trevor-Roper's essay "The General Crisis of the 17th Century" between the author and the one among his respondents who expresses the most disagreement, Mr. E.H. Kossman. My reason for concentrating on this example is that it presents in microcosm the four features of a maximal scope interpretive theory which would be epistemically important.

First, maximal scope interpretations rely on a great variety of data; but so, to a lesser extent, does the historian's explanatory theory. His judgement rests on data garnered in many sub-disciplines, e.g., epigraphy, paleography, archeology, economics, strategic studies, sociology — as Van Harvey puts it, history is a "field-encompassing field".

Secondly, a maximal scope interpretation is so complex and tries to

1. See R.D. Luce and H. Raiffa, *Games and Decisions*, p. 64.
explain such a great amount of data that no individual at any moment comprehends all of its ramifications. (See JRB 133) But a historian's theory can become quite as dauntingly extensive in the relative sense of sometimes exceeding even its proponent's grasp, even though it is not as extensive in the absolute sense since it does not purport to give the same "unitary account of whatever occurs" as does a metaphysical explanation.

Thirdly, metaphysical interpretations, says W.H. Walsh, resist empirical refutation because of their "remoteness from actual empirical enquiry... [The metaphysician] can always live for a time on hope. He can feel confident, that is to say, that an awkward fact which has not yet been explained on lines which fit his theory will in time be explained in just this way." But historical explanations likewise take a surprisingly long time to perish before countervailing facts, and, I suggest, for the same reason. Walsh takes the metaphysician to provide "categorical principles", e.g., 'nothing happens except for a reason', which are read into, not out of, our experience and which organize it in different ways. Does not the historian similarly organize the data into a coherent story by applying the principles of his theory? His principles are on a smaller scale, of course, but his procedure is the same.

Fourthly, maximal scope interpretations, at least of the kind religious systems offer, involve the whole person. They underwrite moral systems. But similarly, a historian's interpretation of some event, while it clearly has no such deep and comprehensive influence on the way he lives his life, can nonetheless alter his other attitudes and perhaps influence his decision on some momentous matter. I imagine an example of an Ulsterman, who happens to be a historian, deciding whether or not to remain a Protestant

1. W.H. Walsh, Metaphysics, p. 78.
2. ibid., p. 80.
3. ibid., Chapter 10.
on the basis of a detailed investigation into the events and actual principles at issue in the Lutheran Reformation. It seems that if we admit that the practical necessity of choosing (but choosing rightly) some stance in life has some consequences for the rational status of the metaphysical position underlying that stance (and, as we shall see, we should admit this) then we should likewise admit that similar though less demanding pragmatic restraints can influence the rational standing of a historical theory.

There remain two apparent disanalogies between historical and metaphysical interpretations. A theistic metaphysic proposes in God a unique explanatory entity, and this raises the Humean critique of any attempt to probabilify God, a problem which a historical explanation does not have to face. Nonetheless, the concept of epistemic probability which I shall develop to cover a historian's inferences can surmount this Humean objection. God is a unique referent, but not a uniform one. That is to say, he has properties, in virtue of which his existence possesses whatever explanatory power it has, and we predicate those properties by analogy with characteristics of beings, namely persons, with whom we are more familiar. And probabilification, in the epistemic sense I shall outline, can cross such bridges of analogy.

The other disanalogy lies in the fact, noted by I.M. Crombie, that in attempting to give a unitary explanation of all of human experience, an interpretive theory such as theism provides lacks an external area of knowledge to control the interpretation, such as the historian, by contrast, has in his general knowledge of human nature. But shortly I shall suggest that metaphysical systems are not completely all-embracing, and do admit

1. "Rational" is used here in the sense I shall introduce in Chapter 7.
of some external control of their interpretations, even if it is not
empirical control. And here I want to suggest that the historian's
"general knowledge of human nature" is largely a matter of contentious
typey rather than undisputed fact. This, combined with the tendency of
competing historical interpretations to 'colonize' all the data within
their restricted horizon of concern, suggests again that historical and
metaphysical explanations are alike in their basic structure, and differ
only in scope. Therefore I shall concentrate on the mentioned example of
historical debate as a representative instance of interpretive argument
of whatever degree of scope.

6.3 Are maximal scope interpretations epistemically normative?

This is an appropriate point at which to tackle the problem of
encroachment which appears to beset maximal scope interpretive theories.
Evidently enough the theses urged by a historian in a debate with a
colleague do not include principles for assessing those very theses. Indeed
when he has recourse to a methodological or epistemological principle in
the course of the argument, he shifts the debate 'upwards' towards a higher
level of theory. But at the highest such level, so the suggestion goes,
a position will lay down the criteria of its own evaluation, or at least
will determine concepts which in turn determine such criteria along
particular lines.

But I question whether even maximal scope theories do attempt to set
the epistemic standards pertinent to their own assessment. It is desirable
that they should not. I noted above (4.2) that any theory of rationality
(and the epistemology containing it) must be properly modest lest it cut
off the possibility of genuine challenge to itself. This was because any
epistemology which presents itself as worthy of rational acceptance refutes
itself if it does not leave some principles of rational assessment (or some
habits of judgement) outside its scope. To the extent that a maximal scope interpretive theory includes or implies an epistemology, part of its epistemic worth, namely its freedom from self-refutation, depends on its epistemology being modest in this way.

Fortunately, it is hard to find interpretive theories of maximal scope which penetrate into our epistemic norms. At least, the sort of explanatory system which Christianity provides does not have this monopolistic character, to judge by examples. The Russell/Copleston debate, for instance, presents an articulate conflict between the latter's traditional theistic position and Russell's agnostic (and perhaps less systematic) alternative, regarding the keystone proposition in the theistic scheme, namely 'God exists'. Copleston relies upon both a metaphysical proof of God's existence, in the form of a Leibnizian argument from contingency, and arguments from mystical and moral experience to God as the best explanation of those experiences. (He does not notice the possibility that the argument from contingency, should it fail as a strict proof, might nonetheless be taken also to be an argument to the best explanation.) He believes his crucial move to be the Leibnizian proof, and this rests on two assumptions. One is the principle of sufficient reason. The other is the assumption that the terms 'necessary' and 'contingent' may be applied not just to propositions but also to beings. Russell rejects the latter assumption because of his theory of logic. He also either rejects the principle of sufficient reason — the idea that if you can identify an event or object then it must be explained — or rejects the possibility of applying that principle to the universe — for he denies that you can identify anything as 'the universe'. Now the ideas that there is a universe in the sense of a totality of things and that this totality needs explanation are two of Walsh's "categorial presuppositions". Hence the disagreement between Russell and Copleston is a "metaphysical" one in Walsh's sense.
Is there any evidence of penetration into these competing metaphysical positions (or the epistemologies these would generate) by the overall theistic and agnostic positions of the disputants? I suggest not. The metaphysical issue of whether one can treat the totality of entities as requiring the same sort of explanation that any particular entity requires is an issue to be argued (and, we hope, settled) on what would seem to be philosophical grounds neutral to this surrounding debate about the existence of God. Neither theism nor atheism are epistemically presupposed if, for instance, one claims that there is a universe in Copleston's sense. This is because, while there must be a particular relation between the proposition stating that there is a universe needing explanation and the proposition stating the theistic explanation for it before the former can epistemically support the latter, we needn't know of that relation when we know that there is a universe. We do not have to know that God exists in order to know that the world is contingent and needs explanation. Hence the theistic theory does not penetrate the metaphysical question in the sense that it is not presupposed by either answer to the question.

This suggests that while the interpretive theories provided by Christianity and its alternatives are of maximal scope in terms of the amount and kinds of data which they try to explain, they are nonetheless not monolithic structures. Their proponents can employ, while arguing for them, metaphysical and epistemological doctrines which do not properly belong to the theories themselves. As a result, external standards are applicable to them. What then of those cases where a theist relies upon an epistemic principle whose acceptability does presuppose the acceptability of theism? He makes a mistake, as does any atheist opponent who relies upon a similarly biased epistemic principle. Either party courts either self-refutation or decisionism just insofar as his position encroaches upon the standards of epistemic assessment of positions of that
6.4 Games of argument.

Now we can return to the task of developing a novel approach to making formal inroads into the apparently informal nature of judgements about the epistemic worth of an explanatory theory such as a historian might make. The sources for my idea here are two. Stephen Toulmin suggests that our common standards—such as they are—of epistemic value for arguments of any logical type and in any field of human knowledge do not refer to the form of what some party says in the argument. Rather, he says, our standards concern whether or not that party observes the formalities required in presenting his case. The analogy he exploits here is jurisprudential. A judge may assess a claim-at-law partly on the manner in which it has been advanced and defended. Likewise, so the analogy goes, we may assess (some elements of) the epistemic worth of a theory by looking at the way in which someone argues for it. This suggestion requires for its plausibility the assumption that if a theory is false for certain reasons (though not if it is false for other reasons) its falsehood will force the person who argues for it to commit telltale procedural blunders. These improprieties we take to be signs of the falsehood of the theory argued. This assumption gains respectability from its similarity to the assumption we make when we accept formal logic as a method of epistemic assessment, namely the assumption that the form of a proposition can be a sign of its falsehood.

Once we have noticed these procedural proprieties, it is easy to

1. Do I thus prejudice the case against the theist? No. The principle I propose here comes not from any atheist assumptions, but rather from our reflections on the nature of justification.
2. Toulmin, op. cit., p. 43.
3. ibid., p. 7.
compare them to the (constitutive) rules of a game$^1$. And in that set of rules we have the sort of system that lends itself to formal codification. The kind of formal codification I suggest comes from my second source, J. Hintikka's game-theory approach to the semantics of our logical words (such as 'all', 'every', 'if...then'). He treats our operations with these logical concepts as moves in a game. Universal and existential quantification, for instance, he interprets as moves in a game of search-and-find played between, on the one hand, a knowledge-seeker, and on the other, the state of affairs in the world personified as the player, Nature$^2$. I suggest that in a similar way we treat some of our dialectical concepts as applying to moves made by players in games of argument. I shall here mention, and later elaborate upon, an important qualification on my suggestion. Not every epistemic evaluation of an argument can be treated in the way I shall presently suggest, any more than every such evaluation can be adequately captured by rules of logic.

In likening an argument between two parties to a game between two players (or player-roles) I intend no more than a metaphor which illuminates the constraints that guide argument. I do not claim that argument is a game. Except for exceptional cases which we recognize as instances of insincerity, arguments are never frivolous; whereas most games are. Those games which are not frivolous are nonetheless always pursued with entertainment as our primary goal in mind. An argument is never, by contrast, aimed solely or primarily at diversion, although its participants

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1. We cannot, of course, compare them to performance rules. To see why, consider again the jurisprudential analogy. A lawyer will have a store of rhetorical techniques which are useful for winning cases; but the judge is concerned not with the use of such rules of thumb — unless they infringe on fair conduct of the trial — but with determining their outcomes, i.e., whether the lawyer makes a good enough case to win.

2. J. Hintikka, Logic, Language-Games and Information, Chapter 3, "Language-Games for Quantifiers".
may be stimulated by the cut and thrust of debate. Neither is an argument of the kind with which I am concerned (see 6.21) ever aimed just at winning in the sense of making one's opponent capitulate. As I have described it, rather, in this type of argument the parties compete to achieve for their positions a status which holds only in virtue of reasons. And these reasons exist independently of what the parties do in the argument. Indeed without this reference to realities outside of the moves of the participants, we have not an argument (in my sense) but a mere exchange of prejudices or confrontation of postures. In several ways, then, an argument is not a game. On the other hand, there are interesting analogies to draw between the two, particularly in the way both are shaped in their character by constitutive rules.

6.5 The limitations of formal Dialectic are recognized.

In the paragraph previous but one I stated that my present approach cannot exhaustively encompass all of our epistemic standards of good argument. One reason for this limitation becomes clear when we consider the goals of the kind of argument I have in mind.

Much of the character of a game is due to its goal or aim. A person seeking entertainment plays a competitive game to win, the entertainment value residing either in the winning or in the challenges of trying to win. We can usually decide with such a game whether it achieves its goal or not solely by reference to the constitutive rules of the game: what these define a 'win' to be. But with an argument the goal is more than just winning, that is, achieving capitulation by one's opponent. It aims at achieving capitulation for good reasons.

For an exact parallel in a competitive sport to this more complex type of goal, we should have to imagine, for instance, that two ice-hockey teams decided they wanted to 'win efficiently'. No longer are they satisfied
just with winning; they want to achieve this with skill and economy. While skillful and well-paced play undoubtedly contributes (as performance rules would tell them) to winning simpliciter, it could also be — and we are imagining it is — made an end in itself imposed on top of the end of winning the match. Because they impose a 'higher' goal upon themselves, the complete definition of the satisfaction of that goal — an 'efficient win' — will not be found among the rules of ice-hockey. In a similar way, the criteria of truth or rationality which must be satisfied for a person rationally or truly to convince his opponent in an argument will not all be found among the constitutive rules governing the procedural proprieties of argument. This is because the latter deal only with the moves the arguers make, not with the content of those moves, and truth or rationality pertains to content. Nonetheless, procedural proprieties can have epistemic import; for, just as the form of a self-contradiction signals its necessary falsehood, the failure to respect the formalities of argument which we shall later observe to constitute most cases of petitio principii signals a similar lack of content. Therefore, because it can encompass such fallacies as petitio, a formal Dialectic is worth constructing.

6.6 A (partly) formal Dialectic for two-role, zero-sum, games of interpretive argument.

6.61 Our example in detail.

The following is my précis of one section of the overall argument between Professor Trevor-Roper and Mr. Kossman, a section which has a fruitful range of sub-sections without being unmanageably complex. For the sake of simplicity, I shall ignore quantification and other logical subtleties within each of the propositions asserted, labelling each of the latter simply with upper case letters.
Trevor-Roper:

Because:

(1) Between 1500 and 1650 European culture displays the optimism of the Renaissance, whereas after 1650 the seriousness of the Enlightenment is evident (A);

(2) After 1620, the tenor of many and divergent textual sources expressed the widespread view that society as a whole was in crisis, and in art and literature there reigned the tight, cramped baroque style which expresses a lack of confidence in the future (B);

(3) After the depression of the 1620's political upheavals occurred throughout Europe (C);

(4) All the European monarchies had a similar social structure, composed of an extravagantly self-indulgent Crown, and an expanding bureaucracy of Court making increasingly oppressive demands on the Citizenry (D); This structural situation had a deep instability sufficient to produce general crisis (E); Therefore all these countries had a similar potential for revolution of Citizenry against Crown and Court (F);

(5) Revolution, however, is produced not just by structural weakness, but by that weakness producing a general crisis which in turn erupts through breaks in the continuity of society which appear under the stress of particular political events (G); And some monarchies so reduced their bureaucracies as to defuse the potential for revolution, such as in Holland in the late 1500's (H), and in France with the reforms of Richelieu and Mazarin (I); Therefore the absence of extended violent revolution in a country is no disproof of the

1. Trevor-Roper, op. cit.: point number 1 in my précis represents his discussion on pp. 38 - 39 and pp. 33 - 34; point 2, pp. 31 - 32; point 3, pp. 31 - 32; point 4, pp. 46 and 50 - 51; and point 5, pp. 51 - 57.
existence there of the general crisis in European society (J);

Therefore,

(6) There was a general crisis in the European world from 1620 - 1660 (K).

Because:

(1) (A) above allows that the crisis could have begun any time in the period cited, so it is possible that it began quite late (A⇒L); But B and C suggest it started no later than 1620 ((B.C)⇒M); But if it is equally possible that it started at either time, then (lacking a fixed reference) the thesis of a general crisis loses its plausibility ((L.M)⇒¬K);

(2) Trevor-Roper claims that there was a general crisis (Trevor-Roper K); He also allows exceptions in Holland and France, and these imply there was no general crisis (Trevor-Roper !(H.I).(H.I)⇒¬K); Thus he contradicts himself (Trevor-Roper !K...!¬K).

(3) The minor revolts in France known as the Frondes represented, not a revolt of Citizenry against the Court and Crown, but a rebellion of the Parlements (one part of the Court) against the executive and Crown (N); Therefore (F) above is false (¬F);

Therefore,

(4) There was not a general crisis in the European world from 1620 - 1660 (¬K).

Trevor-Roper:

Because:

(1) A general historical process can begin in different places at

1. E.H. Kossman, op. cit.: Point 1 is his p. 8; point 2, pp. 8 - 9; point 3, p. 9.
2. Trevor-Roper, "Reply...": Points 1 and 2 are on p. 34 and point 3 is on pp. 39 - 40.
different times, and have different durations, while still being quite real (P); Therefore, it is not the case that being indefinite about its origin undercuts the reality of a general crisis $(\neg ((L.M) \rightarrow \neg X))$;

(2) If a revolution were produced solely by structural weakness, then the English revolution would have broken out in the 1620's, and it did not, therefore revolutions have several causes $(\neg (G \rightarrow Q) \cdot \neg Q \rightarrow \neg G)$; So the failure of revolutions in several places does not disprove the contention that in those places a potential cause of revolution existed $(\neg ((H.I) \rightarrow \neg X))$;

(3) Our inability to separate strictly the Court and Country, as instanced by the ambivalent position of the Parlements in Kossman's example of the Frondes, results from the multiplicity of interests within one society (R); and indeed "social crises are caused not by the clean-cut opposition of mutually exclusive interests but by the tug-of-war of opposite interests within one body" (S); Hence, despite the situation of the Frondes, the revolutionary potential described earlier existed in France as much as elsewhere $(\neg (N \rightarrow \neg F))$; Therefore,

(4) Kossman's counters do not stand up, and (K) holds.

As is usual with such actual debates, this one is in fact inconclusive, because neither party has capitulated. To make this a useful example, let us suppose that Mr. Kossman does give in and grant that Trevor-Roper has made his case.

---

1. This may lead us to question whether the occurrence of non-occurrence of revolutions is really evidentially relevant, as Trevor-Roper continues to regard it to be, to the existence of societal structural weakness. However, I shall not elaborate on this because I am more interested in using his position as an illustration than in criticizing his historical reasoning.

Kossman:

Because:

(1) I agree with (R) and (S) above, hence that \( \neg(N \supset \neg F) \), and hence that (F);
(2) And I have agreed that (J), and have surrendered my claim that \( \neg K \);
Therefore,
(3) Because of (A), (B), (C), (F) and (J), I agree that (K).

6.62 Conventions for symbolizing arguments.

In labelling the propositions asserted in the above argument I have used some peculiar-looking symbols, which I shall now explain, along with the others which we shall need.

(i) Let \( x, y, z, x_1, y_1 \), etc., be variables, bound by a quantifier, which range over the names of parties to the argument. This convention will be useful when we come to symbolize the constitutive rules of our game of argument.

(ii) Let \( A, B, C, \ldots, Z \) be the names of propositions.

(iii) Let \( p, q, r, \ldots, w, p_1, q_1 \), etc., be bound variables ranging over propositions. Again, this convention will be useful for symbolizing the rules of our game.

(iv) Let \( g_A, g_B, g_C, \ldots, g_Z \) be the names of games of argument regarding propositions \( A, B, C, \ldots, Z \) respectively. Therefore '\( g_F \) to Trevor-Roper' would mean 'the game of argument over proposition F goes to player Trevor-Roper'. We shall allow meta-games of argument which take other games of argument as their object, e.g., \( g_A \).

In point number 2 of Kossman's challenge, I label Kossman's claim that Trevor-Roper contradicts himself thus: "Trevor-Roper !K...!\( \neg K \)". Here the exclamation mark represents Trevor-Roper's making, or implying, an assertion. More generally, this convention shall be:
(v) Let \( \text{lp} \), preceded by the name of a party or variable for this, represent that party's sincere assertion, in the context of the argument, of \( p \). By sincere assertion of \( p \), I mean that he utters '\( p \)' to his opponent when he believes that \( p \). Later I shall mention that to believe that \( p \) is simply to value \( p \) as true. So it is important to make it clear at this point that while '\( x!p \)' is an explicit expression of person \( x \)'s valuing \( p \) as true, it is not an evaluation, not an explicit utterance of '\( p \) is true'. The latter would rather be represented by '\( x!q \)', where \( q \) names the proposition, '\( p \) is true'.

(vi) Let the sign '?' mean that the utterer asks for his opponent's reasons for his assertion. When it occurs alone, such a request is a simple inquiry; it does not express a claim one way or the other about the opponent's assertion. But I will also use the '?' operator following either an agreeing assertion or a denying one in order to represent the player's wish that the argument should continue. That is (to refer back to 6.21), in

\[
\begin{align*}
\text{White} & \quad \text{IM} \\
\text{Grey} & \quad \text{IM} ; ? \text{M}
\end{align*}
\]

Grey is agreeing with White about life on Mars, but is also asking for his reasons for believing. Likewise, in another argument,

\[
\begin{align*}
\text{White} & \quad \text{IM} \\
\text{Black} & \quad \text{IM} ; ? \text{M}
\end{align*}
\]

Black is not just making a flat denial of White's claim, but is both

---

1. Here my system of formal Dialectic differs from that of Hamblin. In *Fallacies*, especially pp. 257 and 263 - 264, he interprets the statements of the parties to an argument as representing their commitments, but not their beliefs. "We do not believe everything we say; but our saying it in the context of argument commits us whether we believe it or not." (p. 264) But if we assume sincerity of assertion, we can make our formal Dialectic sufficiently stronger to cover arguments about propositions believed, not just uttered. And I shall assume sincerity of assertion, because people do normally understand each other's utterances to represent the utterer's believings.
denying it and returning the onus of argument to his opponent.

(vii) Let '/.\:', preceded and followed by names of propositions or variables for these, mean 'in conclusion, therefore'. The sign '/.\:' is not intended to be an interjection or interpretation on our part, but instead represents an integral part of the assertion. In \'{x!{q/.\:p\}}\', person x asserts both his reason, q, and his conclusion, p; but he also asserts the propriety of his giving q as a reason for p, and it is this claim which the '/.\:' sign covers. (The propriety claimed may be that of q's being a good reason for p, or it may be that of q's being a good and adequate reason for p—see 6.21. Hereafter I shall presume that a player who is trying to back up a claim with reasons is claiming that those reasons are both good and adequate.) Notice, parenthetically, that where the contents of an assertion are complex, for clarity I enclose the assertion within special assertion brackets — { }. The scope of the '/.\:' sign is all the contents between assertion brackets on one line. When laying out an argument symbolically, where a player cites reasons for reasons within one utterance, we will keep the '/.\:' signs on separate lines, e.g.,

\[
\text{John } \{(A.B)/.\:C} \\
(\text{C.D)/.\:E}\}, \\
\]

which says "John asserts that A and B, in conclusion, therefore, C; C (repeated) and D, in conclusion, therefore, E."

(viii) Let 'silence betoken assent'. That is to say, where one party does not make any challenge to a proposition asserted by the other, we may, in the interests of clarity of symbolization, portray his failure to put up a challenge as an explicit endorsement of the proposition asserted. This may seem artificial, for usually our silence at some point in an argument signifies our neutrality or lack of opinion. For some types of argument this is a legitimate state, and one which I should have to
recognize by allowing a convention for expressing an agnostic response to an assertion, such as 'x!{(A\lor\neg A) and only (A\lor\neg A)}', and allowing that sometimes a player's silence should be represented as such indecision. But we are dealing for convenience with games of argument in which the players assume that indecision or drawn judgement is an untenable position (see 6.21). Given this assumption, a player's failure to challenge signals his assent. Explicit endorsement (the expression of assent) I shall mark off in the symbolization of an argument by boxing the agreed propositions, e.g.,

\[
\begin{align*}
\text{John} & : \{(A\Rightarrow B) & .A/\vdash B \\
\text{Fred} & : \{(A\Rightarrow B) & .\neg C .(\neg C \Rightarrow \neg B)/\vdash \neg B; ?B
\]
\]  

(ix) Let us mark the finish of a game of argument (as defined in its constitutive rules) by enclosing all the moves in the argument in a box, and interjecting in the following line of the symbolization our comment explaining that result, e.g.,

\[
\begin{align*}
1. & \text{John} : \{(A\Rightarrow B) & .A/\vdash B \\
2. & \text{Fred} : \{(A\Rightarrow B) & .\neg C .(\neg C \Rightarrow \neg B)/\vdash \neg B; ?B \\
3. & \text{John} : \{D/\vdash .B \} \\
4. & \text{Fred} : \{D/\vdash .B \} \\
5. & \text{!}g_B \text{ to John}
\]
\]  

Our historians' argument is complex. There are many evidence-giving propositions upon which Trevor-Roper rests his case, and he employs several different kinds of principle in making his case, including a highly general theory about the causes of revolutions; and all these are included in one set of moves in the game of argument. The various elements in Kossman's objection and Trevor-Roper's reply are similarly lumped together. If we represent the steps in the argument in exact parallel to the order of these complex utterances, we will too easily lose track of which propositions counter which, and which are intended to defend against which. Therefore I suggest we impose a particular structural re-ordering through use of a further convention, number (x), the convention of sub-games.
6.62 (This convention will also help us to analyze a complex argument that is
epistemically competitive into a sequence of arguments over contradictories,
as I claimed is possible in 6.21.) We start our symbolization of the
argument by drawing up the lines of battle, by having the parties state
their contradictory conclusions. Then the proponent (e.g., Trevor-Roper)
gives his main reasons for his claim, and the opponent follows with a
statement which first grants whichever among those reasons he accepts but
then records his rejection of the other reasons. (We shall for convenience
group agreed propositions at the beginning of lines, wherever they may
have occurred in the actual utterances.) The opponent's rejection of some
of the reasons opens up one or more sub-games of argument, one for each
disputed reason. After taking these in order, we recapitulate the argument
as it stands at that moment by having the proponent restate his claim,
with whatever reasons are left to him as a result of the sub-games played
so far. Then we have the opponent raise any further reasons of his own
against the proponent's claim (which has the effect of switching their
roles, thus giving each player 'equal time', so to speak, with the onus
of proof).

6.63 Symbolization of our example.

Following the conventions just suggested, we can put in symbolic terms
(and at the same time structurally re-order) the argument between Trevor-
Roper and Kossman as follows, in Figure 3 (overleaf).
Figure 3

1. Trevor-Roper ∴K
2. Kossman ∴¬K
3. T-R ∴\{ \{A.B.C\} .F.J/ ∴K\} 
4. Kos ∴\{ \{A.B.C\} .¬F .¬J/ ∴¬K\} ;¬F ;¬J
5. T-R ∴\{ D .E/ ∴F\} 
6. Kos ∴\{ D .E/ ∴¬E\} ;¬E
7. T-R ∴\{ N .R.S/ ¯¬(N ⇒ ¬F)\} 
8. Kos ∴\{ N .R.S/ ¯¬(N ⇒ ¬F)\} 
9. I\{g_F to T-R\}
10. T-R ∴\{ G .H.I/ ∴J\} 
12. T-R ∴(¬G ⇒ G) .¬G/ ∴G 
13. Kos ∴(¬G ⇒ G) .(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K) /∴(¬G ⇒ (H.I) ⇒ ¬K)
14. I\{g_J to T-R\}
15. T-R ∴\{ A.B.C.F.J/ ∴K\} ;¬K 
16. Kos ∴\{ A.B.C.F.J/ ∴K\} ;¬K 
17. T-R ∴\{ (L.M) ⇒ ¬K/ ∴K\} 
18. Kos ∴\{ P/ ∴(L.M) ⇒ ¬K\} 
19. I\{g_K to T-R\}
20. I\{g_F, g_J, g_K to T-R\). (T-R's facts are correct). (T-R's warrants are proper) ∴g_K to T-R}
I shall point out some of the ways in which this symbolization reflects the actual debate. In line 3 I show Trevor-Roper asserting his overall argument, with the conclusions of his subsidiary arguments given here as single reasons (propositions F and J). In the following line I represent the reasons which Kossman accepts (and the agreement is boxed) and his rejection of the others ("\(^F\land\neg J\)"), together with his claim that this rejection supports his rejection of the hypothesis K, and his implicit call for the reasons for F and J. Immediately we begin the sub-game of argument over proposition F, that is, the proposition that all the European countries had a similar potential for a revolution of Citizenry against Crown and Court. In line 6, Kossman raises (in proposition N) the counter example of the internecine Frondes in France, which counters E by suggesting that it is not the structural situation which Trevor-Roper has described in D and E, but some other one, which had the deep instability sufficient to produce general crisis. And this in turn undermines F. He invites Trevor-Roper to defend E. In line 7, Trevor-Roper does so by elaborating (through propositions R and S) what more exactly he had meant by talking of a Europe-wide social structure of Country vs. Crown. He claims that the failure of exact division into his categories of the antagonists in a particular situation is not incompatible, indeed rather supports, his thesis of a common, revolution-producing societal organization. Our uncertainty over how to categorize the historical antagonists supports his thesis, because it simply reveals that the tug-of-war is within one (social) body. To my knowledge Kossman has not made a further challenge to this response, so I have invented a capitulation on his part to bring this sub-game of argument to a close. The finish is noted in line 9 by our interjection to the effect that sub-game \(g_F\) goes to Trevor-Roper.
6.64 Points of interest in the example.

Salient points to note in the remainder of the argument are these.

(a) Kossman accuses Trevor-Roper of inconsistency (in the published discussion he actually suggested, more politely, that Trevor-Roper's essay shows a paradox). This is captured in line 11 in his claim that Trevor-Roper's strategy in $g_K$ (by this I mean the series of moves he makes) is in part "!K,...!\lnot K". Kossman's reasons are that (H.I) imply \lnot K, and that in $g_K$ his opponent has asserted (H.I). His justification would be the Injunction Against Futility of argument (see 4.23). Any argument in which a party asserts one thing and asserts or implies another runs off in opposite directions at one time, hence is futile.

(b) In line 2, Kossman is not simply asking for Trevor-Roper's reasons for K, but is doing so after denying that K. (Thus he is clearly not trying simply to show that Trevor-Roper hasn't made his case for K.) So we have here two positions which are logically contradictory. Furthermore the positions are epistemically exhaustive, for in the argument, at least as I have described it here, Kossman does not invoke any further alternative hypothesis which he favours. Therefore when I provide a conclusion to the argument, it is that of Kossman's capitulation and agreement - there is no other epistemic position available.

Am I being fair to Kossman in taking him to have capitulated? It may be objected (recalling Mitchell's idea mentioned in 3.4339) that a proper recognition of the limitations of a person's understanding, in particular of his understanding of all the good reasons which there in fact are for a large scope system which he accepts, argues for the rationality of that person's standing firm even when his given reasons fail. Our historians' explanatory systems are relatively small in scope. But, the objector asks, are not the reasons for them still complex enough that our historians' refusal to capitulate one to another can be properly described as this
phenomenon of rational tenacity? So the suggestion is that Kossman's failure to capitulate to Trevor-Roper represents rational tenacity, and in that case my suggested conclusion to the argument is inappropriate.

My response is that my suggested conclusion would still be the sole kind of conclusion possible because, even should each party maintain to this day that his opponent is mistaken, each would have a further reason for doing so, namely his belief that he does have some further good reasons for his position even if he cannot find them at present. Each, as Mitchell notes (JRB 134), has 'faith' in his position or tradition or school of thought. If each regards this 'faith' as reasonable, then each will judge that his tradition's past record is a reason to stand firm, and so all his reasons have not fallen, and there is a further sub-game of argument still to play.

We may suppose then, that the unfinished character of our historians' actual debate results not from stubbornness (such a supposition would be uncharitable) but from a rational suspension of argument. Yet we need not suppose that this impasse lasts forever – that would be sheer stubbornness on the part of one or both players. Therefore, in order to have a place in our example for the operation of the rules for terminating games of argument which I shall shortly describe, I have invented endings for the sub-games, and main game, of argument in our example. If we found with other arguments that we do need a way of signalling the rational tenacity of 'belief' of one or both players, then we could develop and add to our conventions some sign meaning an agreement by both parties that the game is 'to be continued'.

(c) I have employed our historians' debate as an example of a game

1. I shall later argue (see 7.41) that there is no such phenomenon as tenacity of belief, although there is tenacity of other propositional attitudes.
of interpretive argument, but it is only partly so. This is because sub-
game $g_j$ is not interpretive in my sense, since it requires a further factual
reference for its settlement. It is settled by Trevor-Roper's invoking
both a point of epistemic principle and a point of fact. Against Kossman's
objection that the exceptions of France and Holland undermine the thesis
of a general crisis, he repeats and strengthens (at the beginning of line
12) his claim (G) that revolutions have several contributing causes. He
strengthens it by claiming "($\forall G \Rightarrow Q \wedge Q \therefore \neg G$", that is, if structural
weakness were its only cause ($\forall G$), the English revolution would have
occurred earlier than it did, namely in the 1620's ($Q$) and it did not
occur in the 1620's ($\neg Q$), hence a revolution is caused by more than
structural weakness alone ($\neg \forall G$). Here the point of epistemic principle
is whether from $\neg p \Rightarrow q$ and $\neg q$, one can validly infer $\neg \neg p$, and from that
validly infer $p$. (And one can, by modus tollens and by double negation.)
The point of fact is whether the English revolution did or did not occur
in the 1620's. The latter point is vital to Trevor-Roper's defence here.
Therefore $g_j$ is not interpretive. On the other hand, sub-games $g_F$ and $g_{\Rightarrow K}$
are interpretive. Trevor-Roper settles $g_{\Rightarrow K}$ by invoking proposition P,
which is not a factual statement but a very general historical truism.
He settles $g_F$ by adducing R and S, and these are not further evidential
propositions, but rather elaborations of his basic hypothesis.

(d) I believe that my system of symbolization allows a fully mechanical
way of recording the dialectical moves made in an argument. For instance,
whether a player has capitulated to his opponent may be defined as whether
or not he has agreed with a claim of his opponent in a previous line and
with all the cited reasons for it. The pragmatic finish of a game is in
turn definable as the capitulation of one player to all his opponent's
claims in that game.

However, I admit that my system does not give a fully mechanical way
of checking the propriety of the reasons — specifically, the warrants — behind the players' moves. Sometimes we can read off from a symbolization that some player's capitulation was epistemically warranted, for instance when the pattern of his strategy shows a self-contradiction. This would be one case where part of a principle of rationality, namely the Injunction Against Futile Argument, can be expressed formally. But I am presuming that much stronger epistemic principles underlie both our historians' judgements, and underlie our own third party judgements (in lines 9, 14, 19 and 20). These stronger principles are, I admit, 'below the surface' of my symbolic representation of the game of argument. They lie hidden within the support connection sign, '/.'.  

Nonetheless, if we can formalize such stronger principles then my system of symbolization will allow us to introduce them explicitly. For instance, we can make a deductive inference rule fully explicit in the symbolization of an argument by constructing a proof of the deductively valid argument invoked. In line 16 for example, Kossman asserts 

"...(L.M)\cdot((L.M)\Rightarrow \sim K)/.\sim K" .

This we can expand into

"...(L.M)\cdot((L.M)\Rightarrow \sim K)/.\sim K"

| 1. (L.M)          | Premise |
| 2. (L.M)\Rightarrow \sim K | Premise |
| 3. \sim K         | 1, 2, by Modus Ponens |

The final "/.\sim K" of his assertion here remains necessary, for the "/." part of it is not redundant. This is because he not only asserts the formal validity of this argument (in the technical sense of 'argument' used in formal logic, namely the boxed lines and the cancelled 'Show' 

1. I give an example of a proof from the system of propositional logic set out by D. Kalish and R. Montague in Logic: Techniques of Formal Reasoning, because their convention of boxing completed proofs aligns with (indeed it suggested) my method of boxing a game of argument when it is finished.
clause) but also implies that the sufficiency of that formal validity and
the truth of his premisses allow him to conclude that \( \neg K \). This implication
is covered by the support connection sign.

Thus, where the reasoning behind a player's move is deductive, we
have a mechanical way to determine not only when a dialectical finish to
a game has occurred, but also when the game has achieved a certain kind of
epistemic success — when, that is, a player has capitulated to a proposition
that must be true if its premisses are.

To the extent that we can codify in terms of the form of the
propositions used in an argument any stronger, non-deductive inference
rules, these could be included in a symbolization of an argument in the
above way. To the extent that they remain resistant to formalization,
requiring for their application an ineliminable act of informal judgement,
their operation cannot be mechanized. But as long as we, and the players
in the argument, could describe such principles, and put a name to them,
we could at least make them manifest by listing them, in an annotation
to the right of the line in the symbolization in which each operates (as
the warrant underlying the '/...:' sign).

(e) In my fourth symbolization convention I mentioned meta-games of
argument. Lines 9, 14, 19 and 20, which are interjections wherein we pass
epistemic judgement on the object game of argument, are thus moves in such
a meta-game, \( g \). They make assertions which invite challenge from anyone
who disagrees with the epistemic evaluation which they express.

(f) Finally, it may be objected that my system of symbolization leads
me seriously to misrepresent our actual historians' argument. Trevor-
Roper intends all his reasons to be considered together, so that they have

---

1. Not fully mechanical, of course; for even deductive logic does not give
us a fully mechanical means of epistemic assessment — we still need an
extra-logical method of determining the truth of the premisses.
a cumulative effect. Does not my "structural re-ordering" impose a false, step-by-step pattern on the argument? This objection suggests, in effect, that we really cannot proceed past line 4 in my symbolization.

My response is that while I do break down an interpretive argument into sub-games I also require an operation of recombination of the verdicts of those sub-games, as in line 15 of our example. There may be some special cumulative effect in an interpretive argument which occurs only when the pieces of evidence are compared all together, and is lacking when they are considered alone or in small groups. But the recombinant judgement allows the opportunity for this effect to express itself.

There might be two other reasons why it may seem pointless to proceed past line 4. One would be that in responding to, e.g., Trevor-Roper's reasons in $g_F$, Kossman must consider his reasons in $g_J$. But this is not how the actual argument proceeded: Kossman took on his opponent's reasons point by point. The other reason would be if the verdicts of the sub-games are not recombined in any systematic way to produce the overall verdict. But there is no reason to suppose this. Even when Mitchell describes, with his parable of the two explorers (JRB 43-44), the way in which the elements of a cumulative case reinforce one another, he does not claim that this effect has no systematic character. Logically he could not, for if there were not systematic relationships within this cumulation phenomenon, however dimly perceived they may be, he could not give illuminating parables about the phenomenon. His claim instead is that those relationships resist explication. And I maintain that we can at least begin to show these relationships to constitute a transformation, under the influence of other factors, of the support verdicts from each of the sub-games of a game of argument. But more of this in the final chapter.
6.65 Constitutive rules for two-role, zero-sum games of interpretive argument.

In making their moves in the game of argument, Trevor-Roper and Kossman 'observe the formalities', that is to say, they follow certain proprieties of argument. These make their game the type of game it is; and thus we may treat them as constitutive rules for such games. I shall begin to list these here. I do this because, although we cannot yet construct a complete list because I have not yet looked for strong principles of epistemic worth for interpretive argument, some of the rules we can give even at this point are of epistemological interest.

**Rule 1:**

(Start definition:)

Game $g_p$ starts if and only if some person asserts that $p$; symbolically,

$$\text{Start } g_p \equiv (\exists x)(x!p)$$

(Rules of Play:)

**Rule 2:**

Parties take moves in turn. (A move is one or more assertions made without interruption by the other player.)

**Rule 3:**

For any $p$, $q$ and $r$, the only proper responses to $?p$ are

$$\ldots!(q/\therefore p) \text{ or } \ldots!(r/\therefore p)$$

**Rule 4:**

After responding to his opponent's request for reasons, a player may keep the argument going by requesting reasons for one or more of his opponent's claims.

We see rule 4 operating in, e.g., line 3 of

1. $x!p$
2. $y!\neg p;?p$
3. $x!(q/\therefore p);?p$
Rule 5:

(Injunction against complete scepticism about warrants)

No player may challenge ad infinitum every warrant provided in succession by his opponent; symbolically, for any p, q and r, and any x and y,

If: \( x \{q/\cdot.p\}, y \{q/\cdot.p\};?\{q/\cdot.p\} \), \( x \{q/\cdot.p\}, y \{r/\cdot.q\};?\{r/\cdot.q\} \),

and so on ad infinitum;

then y has an improper strategy.

Rule 6:

(Injunction against complete scepticism about facts)

No player may challenge ad infinitum every reason provided in succession by his opponent; symbolically, for any p, q and r, and any x and y,

If: \( x \{q/\cdot.p\}, y \{q\};?q, x \{r/\cdot.q\}, y \{r\};?r, x \{s/\cdot.r\}, y \{s\};?s \),

and so on ad infinitum,

then y has an improper strategy.

Rule 7:

For the purposes of applying any Rule (with one noted exception), one player may interpret the other's assertions in accord with the following interpretation rules:

(i) Where '0' means 'asserts nothing',

for any x and y, and any p, if \( x!p, y!0 \), then \( x!p, y!p \);

(ii) For any x, and any p and q, if \( x!\{q/\cdot.p\} \), then \( x!p \) (except with Rule 10);

(iii) For any x, and any p and q, if \( x!\{q/\cdot.p\} \), then \( x!q \) (except with Rule 10).

Rules 5 and 6, I would point out, reflect the truisms observed in my section on the elimination of Foundationalism (4.6): complete scepticism...
about justifying facts or about warrants is impossible for anyone who employs terms of epistemic evaluation, because of the reason-promissory nature of the meaning of the terms involved. In playing the game of argument, a person employs epistemic evaluation (it is implicit in his making an assertion), and so he must respect these truisms.

Interpretation rule (i) reflects our assumption that silence betokens assent. Rules (ii) and (iii) allow a player to interpret his opponent's reason-giving assertion as the assertion individually of the reason or of the conclusion. It might be thought that these could be combined in one rule, namely,

For any x, p and q, if x!{q/\:.p}, then x!q, x!p, and x!(/'.)

But this is not possible, because "/.'" alone has no assertable meaning—it is a connective, and cannot be divorced from what it connects. (Like all logical concepts it has meaning, but not assertable meaning.)

Our rules so far tell us how to play a game of argument (of the type at issue). Now we need to describe the rules that govern how such games terminate (if they terminate— for if Kossman had not in line 2 invited Trevor-Roper to give his reasons, their argument would have reached an impasse before it got started). Above (6.5) I noted that such an argument aims at more than just a win by one or the other player. It also aims at that win having an epistemically desirable character. The termination rules for games of argument will come in two lots, then; those which define when a game has reached a pragmatic conclusion—let us call these Finish Rules; and those which define when a game has achieved its epistemic objective, e.g., rational capitulation by one of the players—let us call these Success Rules. The former kind of rules defines the conclusion of a game formally, that is in terms of the pattern of the moves the players make, irrespective of the content of their assertions. Success Rules, as we shall see, do not share this characteristic in full measure; they require
a substantive judgement about content. But the important point is that
despite being mechanical, Finish Rules can ground some epistemic
evaluations.

(Finish Rules:)

Rule 8: (capitulation)

\[ g_p \text{ is finished if:} \]

(8a) For some x and some y, and some p and some q,
\[ x!p, y!\neg p;?p, \ldots y!(q/\vdash q), \ldots x!(q/\vdash q) \]

or

(8b) For some x and some y, and some p and some q,
\[ x!p, y!\neg p;?p, \ldots x!(q/\vdash p), \ldots y!(q/\vdash p) \]

Rule 9: (cheating)

If a player violates any of the rules of play (Rules 2 to 6), then
the game goes to his opponent.

Rule 10: (self-contradiction)

If a player contradicts himself — symbolically, if
\[ \ldots x!p, \ldots x!\neg p \]
then the game goes to his opponent.

Rule 11: (begging the question)

If a player asserts as a reason for a proposition either that
proposition itself or another which presupposes it — symbolically, if

(11a) For some x and some y, and some p,
\[ x!p, y!\neg p;?p, \ldots x!(p/\vdash p) \]

or

(11b) For some x and some y, and some p and some q, where q presupposes
\[ p, \]
\[ x!p, y!\neg p;?p, \ldots x!(q/\vdash p) \]
then the game goes to his opponent, (i.e., y).
The epistemological importance of these Finish Rules.

Rules 10 and 11a describe mechanical ways to read off from the pattern of moves in a game of argument that a pragmatic terminus has been reached. But the application of these two Rules can also provide the warrant for judgements about the epistemic worth of the player's assertions, as I shall now show, taking each Rule in turn.

When a player contradicts himself, he pragmatically terminates the game because he puts his opponent in the position of no longer knowing what the errant player really means to assert, so that one of the preconditions of having an argument no longer is satisfied, namely that the players have some issue to argue over. As a result there is no point in continuing the debate. Notice, parenthetically, that the strategy "...x!p,...x!^p", is a contradiction, and not a mere capitulation to player x's opponent. This is because, under Rule 8, capitulation happens when one endorses not just one's opponent's conclusion, but also his reasons and his claim that these are good and adequate reasons. Furthermore, initial endorsement straight away of one's opponent's claim, e.g., "x!p, y!p", is not self-contradiction as defined by Rule 10; that would be, instead, "x!p, y!^p;p, ...y!p". ¹

But self-contradiction is also epistemically significant. At least, it is in the context of those games of argument, such as in our example, which operate on the presumption that one of the two parties is correct in his belief. Given that presumption, when one party contradicts himself and moves thus from a position of asserting, e.g., ^p to a position of asserting nothing, then we shall suppose this has occurred because of the

¹ Parenthetically, I should explain that the reason interpretation rules (ii) and (iii) are not to be used with Rule 10 is that, if they were, a proper capitulation like "...y!q;p, ...y!(q:/:p)" could be interpreted as the self-contradictory strategy, "...y!^p, ...y!p".
strength of the reasons thus far given by his opponent against \( \neg p \) and for \( p \). The ground the errant party thus gives up therefore represents a gain for his opponent, in favour of \( p \)'s being true or otherwise epistemically worthy.

There is however a general objection against taking self-contradiction always to be rationally wrong: it is sometimes suggested that inconsistency of assertion, even self-contradiction, is in certain circumstances rationally warranted\(^1\). The 'paradox of the preface' specifies such circumstances.

My response is that such a paradox is produced only by mistakenly analyzing a single game of argument down into two illusory sub-games. Suppose a philosopher has excellent inductive evidence, such as discovery of errors in his previous books, knowledge of his own intellectual bad habits, etc., for asserting in his preface that at least one of his major claims in the text is very probably wrong. Yet he may also have excellent inductive grounds, in remembering that as he went through each major claim it seemed unexceptionable to him and was challenged by no one, to assert in the conclusion to his text that each claim is very probably true. Now as long as we imagine two different arguments in which these two different claims might be made, with different opponents interested in different goals and cognizant of different types of evidence, no problem arises (for the claims do not contradict one another in the sense of Rule 10 until we bring them into the common context of one game of argument). We can imagine on the one hand his defending his admission in his preface to his publisher, who seeks to gauge the market for the book and who knows little philosophy but has read the reviews of the philosopher's previous efforts. We can imagine, on the other hand, that in a full debate with a

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1. See, for example, Hamblin, op. cit., pp. 263 – 264, and D.C. Makinson, "The Paradox of the Preface".
philosophical colleague covering all the major points in his book he adequately defends each one on philosophical grounds, and so re-asserts his correctness claim. No paradox arises, until we imagine an argument between the philosopher and someone able to appreciate both kinds of evidence, biographical and philosophical. Here, it would be suggested, the parties play different sub-games for each of the different types of evidence, and this could lead to equally well-supported, but contradictory, conclusions regarding the truth of all major claims in the text, which when the verdicts of these sub-games are recombined (as they must be) produces a paradox. But this suggestion is mistaken. In my system of symbolization and re-ordering of an argument, we introduce sub-games to deal, not with different types of evidence, but with evidential propositions which are disputed. There is no reason to treat the consideration of different types of evidence as different sub-games, because the one proposition about the truth of the text is at issue all the while. What we would have in the imagined situation is the more ordinary case of a tie in evidence for and against a proposition. Parties to an argument handle this perhaps by searching for more evidence; they do not reach the paradoxical conclusion that the proposition at issue is, and is not, true or otherwise epistemically worthy.

Now to discuss Rule 11. In any case where a player begs the question the game is terminated, because his opponent has already denied the proposition which the errant player offers here as a reason. Unless he has some other reason yet to give (and he's already had the opportunity to present it), it is futile to proceed with the debate. The game is

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1. Here I am not, of course, trying to deal with the genuine paradox which results if the preface is imported into the text, producing the statement "At least one of the statements in the class of which this statement is a member is false."
terminated in his opponent's favour, because in re-presenting as a reason a proposition the opponent has already rejected, he invites him, or tries deceitfully to cause him, to contradict himself, and thus wrongly to trick him into losing the game under Rule 10.

Begging the question is also rationally wrong, for a reason similar to that which I gave to explain why self-contradiction is epistemically vicious. If we suppose that the errant player is forced to make such a move under pressure of his opponent's reasoning, then we may have increased respect for the soundness of that reasoning.

I shall explain why Rule 11 has two parts. 11a gives a nearly purely mechanical way of detecting petitio principii where this is reassertion of the same sentence as reason for itself. Because my rules cover propositions and not sentences, 11a also covers petitio where this is reassertion of one proposition in support of itself, but disguised through expression in a different sentence. But there are also strategies, as J.A. Barker points out, whose pattern would escape the grasp of Rule 11a, but which we nonetheless recognize as clear cases of petitio. For example, in the argument,

Smith ! "The creative force behind the universe is either male or or female."

Jones ! "Is that true?"

Smith ! "Well, the creative force behind the universe is male, and therefore it is either male or female."

Smith's strategy is " !{MvF},...!{M/..MvF} " .

"Clearly," says Barker, "the question is begged despite the fact that the conclusion is not identical to the premise or any part thereof."

1. J.A. Barker, "The Fallacy of Begging the Question".
2. ibid., p. 245.
If we try to account for our recognition of *petitio* here as a reflection of a rule that forbids us to argue from a proposition which is either *identical* to or *logically equivalent* to our conclusion, we end up banning as question-begging all deductively valid assertions of reasons. To avoid this result, Barker describes the rule instead as forbidding argument to a conclusion from a proposition which is either identical to it or which *presupposes* it. Rule 1lb follows Barker's solution for these peculiar cases. By the presuppositions of a proposition Barker means, I think, the sets of premisses from which the proposition could be inferred¹. Thus to deny a proposition is to deny each of those sets. In the present example, Smith adduces a one-membered set, namely "M". But this is one of the sets of reasons Jones has already implicitly denied. And so Smith wrongly invites Jones to contradict himself and thus to be irrational.

This solution avoids making ordinary deductively valid reasons question-begging. For example, in the argument

Smith !{(AvB)}

Jones !v{(AvB)}; ?{(AvB)}

Smith !{(C=A).(D=B). (CvD) / : (AvB)} ,

Smith offers Jones reasons which deductively entail (under Constructive Dilemma) his conclusion. In denying "AvB", Jones had denied collectively that set of reasons (among others). But here, unlike in the previous example, Jones has a choice; he can accept the whole set and retract his earlier challenge — this would be capitulation in the face of conclusive reasons; or he can maintain his challenge by denying at least one of Smith's reasons — this would open up a new sub-game (under Rule 1).

1. These are more than just the sets of premisses the opponent has in mind. Thus Barker avoids the subjectivist approach to the fallacy, which takes its occurrence to be a relative matter of the beliefs of the person who happens to be the opponent in the argument. See, for example, David Sanford, "Begging the Question".
Neither option makes his strategy self-contradictory.

Therefore 11b is necessary, but also sufficient, to make Rule 11 a complete codification of our injunction against the fallacy of begging the question. Unfortunately, 11b is informal, requiring for its application a relatively significant informal judgement as to whether one proposition presupposes another.

6.7 Conclusion.

I have still to specify those constitutive rules for two-role, zero-sum games of interpretive argument which I called Success Rules: ones which define when a game of argument both finishes and also achieves its epistemic objectives. In the next and final chapter I shall begin to specify these, first by describing the epistemic concepts they would employ, in particular the concept of rationality, and secondly by outlining aspects of the criteria of rationality which we seem to employ in our judgements of the epistemic worth of interpretive theories.

1. I say "relatively significant" because even fully formal rules such as Rule 10 require for their application the low-grade informal judgement of 'seeing' that the pattern as specified in the rule. But as I have noted before, this type of informal judgement is of little epistemological interest.
7 Rules of Rationality

Our questions in this chapter are: what are the epistemic value concepts which enter into the warrants which, e.g., our historians have ready to back up the support connection signs, '/··', in the symbolization of their moves (e.g., the '/··' in line 15 of the symbolization of our example)?; and what are our criteria, or at least what are the considerations which enter our criteria, for proper application of those support connectives?

7.1 Explanatory inference.

My first step towards answering the first question is to point out that most of the assertions made by Trevor-Roper and Kossman in our example have a degree of tentativeness which does not emerge in my system of symbolization as it stands so far. Part of Kossman's assertion in line 16, for instance, is "{(L.M)·(L.M)⇒^K}/··^K". However, as the argument actually went, he did not claim quite "¬K", i.e., he did not straightforwardly say that K is false, but rather claimed only that K had lost its "plausibility". Clearly, if he had thought that he had disproved K he would not have raised further objections to it, unless he desired epistemic 'overkill'. Again, in lines 3 or 15, it would be a mistake to take Trevor-Roper to assert that his reasons entail his thesis. We are in danger of so taking him in my symbolization unless I add, as a qualifier on the assertion of his conclusion, K, some appropriate epistemic modal term. The appropriate qualifier is needed because of the particular kind of inference which we typically employ in interpretive arguments. Therefore we can start to understand the character of the epistemic modal term at issue by identifying the kind of inference which is typical of games of interpretive argument, as follows.

The connective support relation between A, B, C, F and J on the one
hand, and \( K \) on the other, in lines 3 and 15, is this: thesis \( K \) purportedly best explains the data \( A, B \) and \( C \), while \( F \) and \( J \) help it to do so. The explanation is accomplished in part by implicit invocation of a theory about the causes of revolution which allows Trevor-Roper to link the political revolutions alluded to in \( C \) to the kind of underlying structural crisis in society described by the theory mentioned in \( K \). Two sub-clauses of this theory are explicitly adduced, in propositions \( F \) and \( J \), to render the theory applicable to the European situation of the 1600's. \( F \) elaborates how a general societal crisis causes a political upheaval — it creates a potential for revolution of one part of society against another. \( J \) specifies an exception condition to the theory, according to which the absence of a revolution in a country (e.g., as in Holland) need not (because of interfering factors) argue against either the existence of a potential for revolution in that country, or the presence of a societal crisis causing this potential. Trevor-Roper's inference from his reasons to his thesis is thus of a type we may call explanatory inference, or inference to the best explanation.

Two apparent objections which arise at this point can be eliminated. One would be that in allowing that our historians qualify their claims, I remove the zero-sum character of their game of argument. But this is not true. The use in a game of argument of epistemic values of a 'lower' order than certain truth, e.g., probability, will not alter the game's zero-sum character. It will be zero-sum if, e.g., the players are contradicting each other (so that there is no logical middle ground) and

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1. Peter Achinstein introduces the term 'explanatory inference' and distinguishes it, as a slightly broader notion, from that of inference to the best explanation. But because the difference is largely that the former is inference from facts to a hypothesis that someone could find a good explanation (rather than to a hypothesis someone actually does find a good explanation), we can ignore it for our purposes. See Achinstein, *Law and Explanation*, pp. 119 - 123.
are assuming that suspense of judgement must be avoided (so that there is no epistemic middle ground). Now if they achieve agreement that one player's view is (not true simpliciter but) likely in some degree to be true, even then they must reject the other player's former view as unlikely to a corresponding degree to be true. Hence (as they judge it) the proponent of the rejected proposition loses, epistemically, and the other party wins, even if not quite as resoundingly as had the winning proposition been judged, not just very probable, but indubitably true.

The other apparent objection is that within the concept of explanatory inference I introduce non-epistemic desiderata, for the goal of an explanation can be a pragmatic objective irrelevant to the truth of the proposition providing the explanation. I admit that an explanation is intrinsically relative to the actual or possible pragmatic context of some person's needing that explanation. Indeed the definition of a proposition's being explanatory would be: there is or would be some person for whom believing that proposition does or would provide understanding of some matter of 'why?', 'how?', 'where?', etc. But of course one important kind of pragmatic context is the kind of game of argument which our historians play, namely, one aimed at one player's convincing the other of the true or probable explanation of some data they both recognize.

Furthermore, while there are many ways to promote understanding, in most of these for the person to understand a proposition it is (conceptually) necessary that he grasp what it would be for the proposition to be true (even if it isn't). And those cases where explanation does not thus presuppose truth we can identify and eliminate as instances of a kind of explanation which I label explication, following Renford Bambrough:

Explanations and modes of explanation, like instances and modes of knowledge, truth, and reason, form a family. Besides causal explanation there is also the distinct sense of explanation in which we explain (or expound, or explicate —
Now historians (and theologians) may attempt to explicate their theory (or their doctrine) to an opponent in an argument. But their aim in so doing is just to ensure that he understands clearly and fully the meaning — the references, the connotations, etc. — of their claim. This is a necessary but not sufficient condition of their achieving their primary task of removing the opponent's puzzlement about why the data should have occurred. That can come about only if they also go beyond explication, and explicitly claim (or imply) that their theory best explains the data (and, of course, if the opponent agrees that it does).

7.2 The concept of probability.

7.21 Other epistemic modal terms are rejected.

What are the epistemic modal terms available for use as the qualifier to insert into lines 3 and 15? Trevor-Roper intends us to believe more than that it is just possible that there was a general crisis in the 17th Century. On the other hand, he does not make a claim to certain truth. There remain available, however, several different interpretations of his claim: as a claim that K is probably true; as the assertion that the claim that K is true is a plausible one; as the assertion that the claim that K is true is a credible, or rational, or reasonable one; or as some conjunction of these assertions.

We can narrow the field very quickly. The usual connotation of 'plausible' when applied to a hypothesis is that it is not improbable, that the hypothesis has enough initial probability on the relevant evidence to be worth further investigation. This is the term's sense in "But that idea isn't even plausible" or "Both theories here are plausible, so let's

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investigate to see which is really the better one." As we see, this notion of 'plausible' relies on the more basic modal notion of 'probable'.

Perhaps there is another use of 'plausibility' in which the term expresses a rather vague idea of epistemic worth of an order lower than certain truth. But in that use, plausibility does not rely on, but is, probability.

In either sense, then, plausibility can be understood only if we understand probability. This latter concept is important, but only as a component of the one we ultimately seek. The reason is this. We recall from 6.21 that Mr. White had implicitly claimed that the poor design of the Mariner instruments was a good and adequate reason for the existence of life on Mars. Not only is it a good reason, it is good enough to justify his belief about life on Mars. (He was implicitly claiming this because he gave that reason in response to Mr. Grey's request for such a justification.) The modal term we seek in order to accommodate this further notion of adequacy is, as I shall show, 'sufficiently probable in the circumstances', or in a word, 'rational'.

7.22 The term 'probable'.

We shall first deal with the crucial concept of probability and then consider the concept of sufficiency of such probability.

The term 'probable' is obviously not equivalent in meaning to the term 'true', but it is importantly related in function. Both refer primarily to properties of a proposition, albeit different properties. Both can be applied to the believing of a proposition in virtue of being applied to the proposition: if a proposition is true or probable, to that extent so is the believing of it. And both do not, in contrast with, e.g., the term 'rational', transfer further to the believer of the proposition. The main differences between the concepts are that truth obeys the law of
excluded middle while probability does not (3.31) and that probability
admits of degrees while truth does not. At least, truth as a virtue of
a proposition is an all-or-none property, whereas one proposition may
possess the virtue of probability more than does another. Despite this
difference, the use of the two terms is closely connected, as follows.
We are interested in a proposition's probability only to the extent that
we are interested in its truth.

7.23 The meaning of the term 'probable'.

We can account for these similarities and differences between
'probable' and 'true' by considering the meaning of 'probable' as analyzed
in a way parallel to my analysis of the meaning of 'true' (see 4.533).
The meaning of 'probable', that is to say, has intentional, attitude-
governing and criterial aspects, each one related to the others.

First, I emphasize that 'probable' does have intentional meaning; in
particular, it refers to a virtue. (A virtue is just a property that is
valued as such-and-such.) Thus the term has an objective referent. This
is sometimes denied, for instance by adherents of the subjective theory
of probability. For them the term refers to the level of confidence with
which its utterer believes a proposition. But this cannot be the proper
referent for the term, because the epistemic status of a confidence-report
and that of a probability judgement are different. In general we take the
believer himself to be the final authority as to how strongly he believes,
so that if Trevor-Roper has a particular degree of confidence that K and
Kossman the same amount of confidence that \( \neg K \), they just have different
feelings and 'there's an end on it'. This sort of first-person authority
is lacking with probability judgements, however; when Trevor-Roper and
Kossman judge probable K and \( \neg K \) respectively, a third party is entitled
to intervene and, giving reasons, to declare that one or the other position
only seems probable (given the total available evidence). In effect, the subjective theory makes it impossible for us to distinguish, whereas we often in fact can distinguish, what seems from what is probable.

That the term 'probable' has any referential meaning at all is denied by those who go even further than subjectivism, and claim that the term has instead only expressive or emotive or performative meaning. Toulmin, for instance, takes the adjective 'probably' as simply a way of committing oneself guardedly to some predication. It functions as an invitation — with warnings attached — to one's hearers to commit themselves in a likewise limited way. The two sentences 'S is probably P' and 'S is P' is probable' clearly are not identical in meaning; the latter mentions a proposition, the former does not. Toulmin takes the former to contain the logically prior form of the term, with the noun form providing a merely apparent description. But this view of the meaning of 'probable' has two great drawbacks. The first is that it does not allow our criteria of probability anything substantial to be criteria of; we are not allowed to have (as we do seem to have) anything 'in mind' when we say 'S is probably P' other than what grounds we could if challenged adduce for our limited commitment. The second is that on this view the only sorts of grounds that we could appropriately adduce would be reasons for an action — namely, the action of committing ourselves. But there are broadly speaking just two kinds of reasons for action, and the reasons we typically do provide to support probability statements are of neither kind. First, our reasons for an action may be extraneous, e.g., the prudential risk to us if we do not so act. But such prudence as may attach to our committing ourselves qualifiedly in a probability statement would not be recognized as justification for such a statement. Secondly, our reasons for an action

1. Toulmin, op. cit., p. 81.
will concern what we believe to be the case and what we desire should obtain, since we view our actions as appropriate means to our goals given the believed circumstances. But if a probability statement is simply a kind of guarded speech-act, then the reasons of this second kind which would be apposite would be, e.g., one wants to have another person commit himself guardedly to the predication of P on S, and given his character, training, etc., the best way to do this is to say 'probably'. But what one wants is never recognized as a ground of probability, nor is the character of the person addressed. In sum, the trouble with Toulmin's and kindred views is not that they eliminate reasons for probability statements, but that they allow only the wrong kind of reasons. They do this because they too sharply divide the 'force' of the term 'probable' from the other aspects of its meaning.

I suggest instead the more complicated, but more realistic, view that the guarded commitment or commendation, or whatever we accomplish by using the term, is achieved through our predicating a property of a proposition. This property is not hard to describe. It cannot be the propositional virtue of truth, for this does not admit of degree. We are left, then, with nothing other than the relations a proposition has with other propositions, and whatever virtue those relations can produce in the proposition. The producing of that virtue occurs only through our valuing one of those relations in a particular way, according to a criterion of probability.

Now, what is this "particular way" in which we value this relation so that it produces the epistemic virtue of probability? For the answer we must bring into our focus the believing of a proposition as well as the proposition itself. A.J. Ayer says,

while we are normally more interested in the truth of our judgements [believings] than in what I have called their respectability, still, in the cases where we do not know
them to be true, their respectability is all we have to
go by. But a judgement is respectable, in this sense,
just to the extent that one has good reason to accept it. 1

By a "judgement" here Ayer means a proposition as it is believed. So his
"respectability" here refers to a virtue of a believed proposition. The
"believed" is important. We do not talk of the respectability of the
proposition in itself, so to speak, but only of the proposition in the
context of its being believed, or being offered for belief. Now let us
recall that a person's believing that p is just his valuing p as true. In
that case, Ayer's comment that respectability is a second best when we
cannot know that p is true suggests that in his view respectability in a
believed proposition is a virtue which acts as an indicator of the truth
of that proposition. But then his concept of respectability coincides with
the concept of probability as I shall use it: epistemic probability.
Probability, in its epistemic sense, is a truth-sign.

In sum, the intentional aspect of the meaning of the term 'probable',
what we have in mind in using it, is a property which attaches to the
proposition in virtue of a particular set of relations with other
propositions, and which signifies in some degree the truth of the
proposition. It is the fact that signification can be more or less
accurate which accounts for the fact that epistemic probability admits of
degree; while it is the fact that it is truth which is signified which
accounts for the virtue's following the law of contradiction (3.31).
Furthermore, because truth is signified, the epistemic probability of a
proposition gives a truth-seeker some reason to believe it (whether enough
reason is a further question). When we apply the term 'probable', in other
words, we have, as it were, one eye on what it would be for the proposition
to be true and the other on the relations with other propositions which gives

to the proposition the property of a sign of truth which tends to direct our believing.

The attitude-governing aspects are the same as for the meaning of the term 'true', but with a degree of tentativeness added, because 'probable' is predicated only as a truth-sign. The criterial aspects of the term's meaning are the standards which determine those among the proposition's countless relations with other propositions which support the sign of its truth. In other words, this support is rendered through a principle, rule, convention, standard, criterion — however we may describe it — which helps to justify against some actual challenge our asserting in some particular degree the truth of the proposition.

7.24 **Epistemic probability.**

Probability is being described now as an epistemic virtue, and the concept is not to be confused with such other ideas as the propensity of an atom (assuming the laws of Quantum Mechanics) to disintegrate, or the proportion of observed peas which have been both green and smooth-skinned.¹ Philosophers generally agree that there is a specifically epistemic concept of probability. They differ in offering several competing theories about the specific character of that concept, e.g., is it subject to the mathematical axioms of probability? I shall survey these briefly as an introduction to that synthesis of the strongest points in each which, I shall suggest, is the most accurate theory to adopt. The physical propensity, statistical frequency, and classical theories of probability are, because of various good reasons², inadequate as accounts of our

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¹ For the distinction between, on the one hand physical and statistical probabilities, and on the other hand epistemic probability, see R.G. Swinburne, *An Introduction to Confirmation Theory*, Chapter 2.
judgements of epistemic probability. That leaves us with three serious contenders currently on offer, the subjective and logical theories and the view suggested by Ayer which we might call the 'absolute' theory\(^1\).

7.241 The subjective theory.

Pure subjectivism is obviously false, for it fails to accommodate the fact that 'probable' has reason-promissory meaning. A more sophisticated subjective theory\(^2\) would allow that the use of the term promises reasons of a sort, for example, that the probable proposition coheres with the speaker's present body of believed propositions. To this there is an objection similar to that raised in 7.23, namely that first-person probability judgements do not have the epistemic privilege that first-person reports of belief-set coherence would. There is also the following objection. By 'believing a proposition' subjectivism means 'being willing to act on it, particularly to bet on it'. So 'coherence' among a person's beliefs is explicated by sophisticated subjectivists as the impossibility of the believer's suffering a "dutch book". By this they mean a situation in which whatever may be the outcomes upon which his bets win or lose, the believer cannot win, and might lose. But notice: these outcomes cannot be ascertained through the man's present beliefs/bets. They represent, rather, empirical discoveries perhaps, or information provided by propositions believed by himself and the book-maker to be **true** or **probable** (in a non-subjectivist sense both of "believed" and of "true" or "probable"). Therefore if coherence of a believed proposition justifies calling it probable, this is only because it rests upon there being inter-subjectively agreeable outcomes. If sophisticated subjectivism tries to

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recognize this fact, it has to surrender its subjectivism. It does have
the value, however, of reminding us of the attitude-governing aspect of
the meaning of 'probable'. That is, when someone says 'p is probable',
he addresses our propositional attitudes by inviting us, perhaps requesting
us, to believe that p.

I note parenthetically that from my earlier claim (4.55) that
epistemic justification cannot escape from the circle of believing, it
follows that justification of a probability judgement can appeal to nothing
other than further believings. But this does not commit me to subjectivism.
The reasons that one promises to supply, if challenged, in support of a
probability judgement are, of course, propositions believed by oneself and
also, one hopes, ones that the challenger would believe. Nonetheless those
reasons are objective in the sense that they are not relative to oneself
or the challenger: they function as justifying reasons only (according to
my contextual theory of justification) through the agreement of asserter
and challenger as to the epistemic support they give to the proposition
judged probable. Justification, as I view it, never ends with the fact
that the asserter believes some further proposition to be a good reason,
but rather with the fact that the asserter and challenger agree in so
believing.

7.242 The logical theory.

This theory is applied to the epistemic concept of probability by
R.G. Swinburne:

On Logical Theory there are probability propositions which
state a relation which holds between evidence and hypothesis.
These propositions state how much certain evidence renders
likely a certain hypothesis. Clearly...there are such
propositions of epistemic probability.

The logical theory has in its favour two points. First, it accounts for our judgements of the epistemic support which evidence gives an explanatory hypothesis better than does, say, the statistical theory. Suppose, for example, that we know that a coin is biased by having either two heads or two tails, but we do not know which; we have, perhaps, picked it out of a box marked 'two-sided coins' in a joke shop, but have not looked at it. We can judge that, on the basis of what we know about it, the epistemic probability of the next flip of the coin being heads is $\frac{1}{4}$. And we can judge this without knowing any statistical frequency reports at all, so clearly epistemic probability is not a statistical concept.

Secondly, the logical theory correctly observes that once we understand the various propositions constituting both the reasons and the hypothesis, then whether the former renders the latter epistemically probable is not a matter requiring any further empirical investigation. It is a matter of what our criteria, or informally-understood standards, of epistemic worth dictate. For instance, once I remember what the label on the box of coins said, and recall that there are generally two kinds of side to a coin, and if my epistemic standards include a principle of indifference (all these being my reasons), then the epistemic probability judgement noted above follows automatically.

There is, however, one serious objection to the logical theory. It holds that a judgement of epistemic probability asserts its grounds or reasons. According to Swinburne, "when we assert a proposition of epistemic probability, we are...asserting a proposition about the relation of evidence to hypothesis." Often we do say no more than that the hypothesis is probable, and make no obvious reference to the evidence that makes it so.

1. The example comes from ibid., p. 13.
2. ibid., p. 13.
But Kneale explains this away on behalf of the logical theory as follows:

"The reason why we may easily overlook the relation of probability to evidence is that in ordinary life we commonly state probabilities in relation to all the knowledge we have at the time and therefore feel no need to specify the evidence. In other words, our probability statements are commonly elliptical."¹ Now it is quite true that when we state an epistemic probability judgement, the basis of our judgement is indeed (typically) "all the knowledge we have at the time" and the relation of this to the proposition at issue. Our judgement claims for the hypothesis the epistemic virtue of probability and implicitly claims that its possession of that virtue rests upon some basis. But it does not follow from any of this that our probability judgement is an assertion (elliptical or explicit) of that basis. Logical theorists appear to think that this does follow, but it could not, for if it did this would mean that the grounds of a probability statement form part of the meaning of that statement. This is impossible. The meaning of a term used in a statement is fully governed by convention (4.533), and what particular grounding propositions a person could adduce is an empirical matter and cannot be laid down in advance by the conventions he obeys. The criterial aspects of the meaning of the term 'probable' do indeed restrict the range of propositions that could be admitted as grounds. In other words, the standards shared by the maker and hearer of a probability judgement determine what propositions they can in common accept as reasons that would justify the judgement. But those standards do not determine what the judgement maker does have as his particular reasons in the case at hand, nor whether the hearer does accept those particular reasons as justifying. This is a matter of the beliefs which the two parties happen to have; that is, if they agree on the crucial

¹ W. Kneale, Probability and Induction, p. 10.
issue of evidential fact, and share criteria, they will also agree (save for emotional interference, etc.) on the judgement of epistemic probability.

Note that in the process of reaching such agreement both criteria and grounds play a necessary role. Note also that while they are distinct, they are also connected, in that a person's criteria are what render his grounds propositions which he believes but which he would otherwise fail to remark as ones which probabilify some other proposition.

To recapitulate: if we do indeed share an understanding of the meaning of the term 'epistemically probable' with someone who makes a probability judgement on p, we will know: that he is claiming that p is to some degree signified as true by a set of reasons; that those reasons are some other propositions he claims to know and a proposition about a set of relations between those purportedly known propositions and p; and that such-and-such are the standards or criteria which make those reasons for him the reasons they are. But we will not know (pace the logical theory) what those reasons actually are. We will not know exactly which background and evidential propositions he claims to know nor, as a result, exactly which logical relations he is using as the basis of his claim that p is probable (even if, on the basis of our shared criteria and what we know of his circumstances, we can make a good guess). We can come to know these only by asking him for them, or by so challenging him that under the proprieties of argument (6.62) he must make his reasons explicit. His response to such a challenge, in which he tries to make good his initial implicit claim that he has reasons, I shall label an 'epistemic-probability-justifying proposition'.

The logical theory, it turns out, gives a largely correct analysis of the meaning, not of an epistemic probability proposition, but rather of an epistemic-probability-justifying proposition. This observation is reinforced if we notice that the word 'given' in the logical theory's
analysis, 'the probability of p, given e and k, is such-and-such', really has the force of 'because of', where this is the 'because' of justification. The argument for this is that the 'given' could be equally rendered as 'assuming', and the invocation of assumptions (presumed to be held in common with the challenger) is one of the ways one tries to justify a claim. I admit that occasionally one's initial probability statement will contain such a 'given', or 'assuming', or 'because of' clause. But this fact does not support the logical theory against my view, for what one is doing in such cases is making an epistemic probability judgement by producing the epistemic-probability-justifying proposition which would defend that judgement against some (anticipated) challenge.

7.243 The 'absolute' theory.

My above objection is reinforced by a comment of Toulmin's, although his own theory goes to the opposite extreme from the logical theory. He says,

> the conclusion we come to about h in the light of evidence at our disposal, e, namely, that we are entitled to bank so far on h, is no mere repetition of the support which e gives to h: it is...a moral drawn from it.

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A minor objection to this is that the belief-worthiness given to h by e need not be expressed in such behaviouristic terms as our being "entitled to bank so far on h"; but we do not need to pursue such an issue, for there is another problem more germane to our present concerns. While the logical theory errs in taking epistemic probability judgements to assert the grounds upon which they are made, the theory which Toulmin holds errs in the other direction by taking such judgements to ascribe the virtue of probability — and to do nothing else. This idea that such judgements are simply about

1. Toulmin, op. cit., p. 81.
what it is reasonable to believe, or are simply "estimates of what is likely to happen", is the theory that epistemic probability is "absolute probability". Ayer says,

[Moore] concludes, rightly, that there is an absolute sense of words like 'probable', 'highly probable', 'more likely than not', etc., in which when we say that $p$ is probable, we are not saying that $p$ is probable, relatively to $q$... Even if what we meant by saying that $p$ was probable were most commonly that $p$ was probable relatively to $q$, we should still need some other means of expressing the opinion that one such judgement of credibility was superior to another as an estimate of what was likely to happen.

My first objection to this 'absolute' theory is this. In concentrating on the idea of a proposition's value when it is in some circumstance the best one to believe among alternatives (an idea I do intend also to emphasize, as the propositional virtue of rationality), the absolute theory ignores that quite distinct idea of the virtue those alternatives possess which makes each indeed an option for belief in the first place. This virtue is the proposition's being given by its reasons some amount of signification-as-true, which has a corresponding tendency or power to guide our believing.

This is, I propose, the virtue to which our term 'epistemic probability' should refer. It is only a constituent in the virtue to which the absolute theory is referring, for that is the virtue of 'sufficient epistemic probability in the circumstances' for us actually to believe a proposition. It is only when we make a judgement on what I call a proposition's rationality that there enters the notion of a strong enough degree of signification-as-true (relative to that possessed by alternative propositions) actually to oblige us truth-lovers to believe the proposition.

1. Ayer, op. cit., pp. 57 and 60, following Moore's absolute sense of 'probable'. For this sense of 'probable' Ayer also uses the term 'credibility'. He recognizes two other notions of probability: the statistical notion and the 'a priori' notion found in gambling examples, which is the 'classical' notion of probability.

2. Ibid., pp. 57 - 58.
7.243 My second objection to the absolute theory is that it omits that nuance of meaning which I earlier labelled "reason-promissory". It misses the sense in which when we ascribe epistemic probability to a proposition we thereby attribute to it the virtue not simply of being signified-as-true, but that of being signified-as-true-for-reasons. We should not analyze the probability judgement as asserting its grounds, but neither may it be understood to leave unmentioned their presence. Surely the solution is to recognize that it claims that there are justifying reasons, producible upon challenge — in other words, it promises to produce these if they are needed.

7.244 A unified theory of epistemic probability.

As the preceding sentence suggests, the insights of the two extreme theories may be synthesized at a stroke if we recall my three-fold but unified theory of meaning for epistemic terms (from 4.533). The absolute theory emphasizes the force or attitude-governing aspects of the meaning of 'probable' — where the propositional attitude governed is that of believing. But the theory neglects to distinguish simple signification-as-true from sufficiency, for belief, of signification-as-true. It also fails to see that signification-as-true is signification-as-true-for-reasons, hence fails to see that 'probable' could in any case affect our believing only by promising to provide reasons or grounds as determined by our criteria. Thus it fails to see that any force 'probable' has is dependent on the criterial aspect of its meaning. On the other hand, the logical theory does recognize the importance of having grounds as these are picked out by criteria; but its mistake is to assume that those grounds are asserted in the initial judgement of epistemic probability, whereas they are actually asserted only in attempted justifications of that judgement. Thus it misses, as I have noted above, the nuance that the 'given' is really a 'because of...'. I do not say that there is no relativization of
probability to evidence. I insist only that such relativity is not part of the virtue of probabilty itself, but belongs to attempts to justify any ascription of that virtue. The ascription does not have to assert its grounds, it needs only to promise to provide them. And this is made possible by the criterial aspects of the meaning of 'probable', because the presence of such standards, presumed by the utterer to be shared with his hearers, allows that his promise can be fulfilled (if his grounds are licenced as good grounds by those standards).

As for the intentional aspect of the meaning of 'probable', this in effect draws upon the other two aspects. What we have in mind in applying epistemic probability to \( p \) is not just that \( p \) has the virtue of being shown likely in some degree to happen and thus tends to direct our believing. Nor is it just that \( p \) has that virtue because of the logical relations which our criteria say is required and which we do believe to hold. What we have in mind is that the evaluation, '\( p \) is probable', signifies (to a degree) \( p \) as true because of that logical relation.

7.3 Epistemic probability and rationality.

My character Mr. White in 6.21 was construed to be making four claims: that there is life on Mars, that the Mariner instruments were badly designed, that the latter is a good reason for the former (actually a false claim, as Grey pointed out), and that it is a good enough reason to justify White's belief in Martian life. The epistemic modal term 'probable' as just described can be used in a statement to present claims of the third sort. White could have explicitly claimed, 'The bad design of the Mariner instruments makes life on Mars probable'. But that would not yet be the claim that the probability delivered is sufficient, e.g., the claim that it so outweighs any improbability given to the proposition by other considerations as to justify White's believing the proposition. And clearly
in an argument situation White makes such a claim to justified belief. This is one reason why the term 'probable', all on its own, is not the one we need to enrich our Dialectic. The other reason is that the assertions in many arguments, e.g., most of those in our historians' game of argument, have further nuances not yet captured by my system, as follows.

Trevor-Roper clearly does not simply believe that there was a general crisis in the 17th Century (hence he would not be claiming just that his evidence justifies his believing). He believes it enough to be willing to propose and defend it in a publication and, we may presume, also enough to be ready to act upon it in the sense of taking it for granted in his future writing. It is natural, then, to interpret him as judging that there is sufficient epistemic probability attaching to \( K \) because of his reasons to warrant his braving the risks to his reputation in making his belief known. This being so, we have to re-interpret my "!" sign, using it to represent not just a player's believing of a proposition but his believing it strongly enough to assert it in print. We now need an epistemic modal term to capture the notion of 'epistemic probability sufficient for some particular purpose'. It seems to me that 'rational', in one of its common senses, satisfies this need.

'Rational' thus used of a proposition or the believing of it does not say the same thing as 'epistemically probable', for two reasons. First, 'rational' is a threshold term in a way that 'probable' is not. Rationality is a concept which imposes upon a continuum of the various degrees of epistemic probability the effect of other valuings. (It does so, of course, under a criterion of rationality.) In Trevor-Roper's case, these other valuings would be such non-epistemic ones as the prudential risks to his career if he turned out to be wrong, the moral worth of the expected results of his acting upon his believing that \( K \), and so on. (The latter moral outcomes are difficult, but not impossible, to imagine.)
Someone might suggest by way of objection that the concept of epistemic probability can admit of this threshold effect as well. That is, it might be suggested that sometimes positive evidence may accumulate without reaching a level necessary, in the practical context, for belief, or that some (moral or prudential) circumstances may depress the level of positive evidence required for belief.

But such circumstantial influences upon believing are not possible, given the concept of believing which I am employing. Someone's believing that probably \( p \) is, in my view, his valuing \( p \) as signified-as-true-for-reasons. This propositional attitude is concerned with the epistemic virtue of truth and with no other, non-epistemic, matters. The reason is that were it aimed at desiderata other than truth, those desiderata would be reflected in the grounds of epistemic probability which our criteria recognize — and they are not. Consider why some condition, such as the property attaching to a proposition through its logical relations with other propositions, counts for us as a ground of epistemic probability. It is for us the basis of a truth-sign just because we are able to use it to help to justify truth-claims. And we can do so only because we and those who challenge our truth-claims believe (in common) that that condition has a requisite degree of connection to the condition of truth. (The latter condition is that of things being as the proposition says they are.) Now, propositions which we take to be evidence for or against a hypothesis describe states of affairs which we can connect in obvious ways with the state of affairs described by the hypothesis. Again, propositions about the character of the believer may have a similar connection with the hypothesis (although it would be a less obvious one, and for this reason we intuitively prefer not to have to rely upon personal rationality as a basis for justification of claims of propositional rationality). But, for propositions about the moral or prudential effects of believing it is
hard to see how there could be any such direct connection at all. The truth-conditions of the claim that a Victorian wife's believing her husband faithful, come what may, exemplifies great fidelity (see 2.33) do not overlap with the truth-conditions of the proposition she believes. Therefore, non-epistemic considerations do not enter our criteria of probability, and hence have no effect upon our believing. Of course, there are propositional attitudes other than believing, but similar to it in motivating people to act, upon which such considerations do impinge. I have in mind the attitudes of: being prepared to act as if one believed in order to test the proposition at issue (or in order to deceive others); or self-deception, wishful thinking, or other misbelievings.

The second reason why rationality is not equivalent to epistemic probability is that the latter cannot transfer over as wide a range of objects as the former seems to, as I noted above (7.22). Probability extends from a proposition believed to the believing of it, but no further. The rationality of an action, on the other hand, extends to the belief from which it stems, to the proposition believed, even to the believing agent. Furthermore, to say that Trevor-Roper has won rationally would sound, if not idiomatic, at least more natural than to say he has won probably. (There is a legitimate sense — but requiring a quite different context — in which we can say that, e.g., probably he won the game rationally.)

One way in which the concepts are alike is that they are both compound concepts, although composed of different sub-concepts. With epistemic probability, we have one eye on the logical relation and one on the tendency of that relation to direct our believing. With our usual substantive notions or rationality (for the purpose of some action) of rationality (for the purpose of believing) we have one eye on the different epistemic probabilities given to a proposition by different sets

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1. Of course an indirect connection is possible; indeed I suggested one in 3.33.
of evidence, and the other on which one(s) of these probabilities, if any, is or are adequate to justify the believing of that proposition, or to justify a particular action (or action-producing attitude) based upon the believing of that proposition.

7.4 Rebuttal of objections.

I have suggested that rationality is the epistemic modal concept appropriate to our historians' claims and, to generalize, to claims made in interpretive explanatory argument of whatever scope. I shall now discount the major objections that may be raised against this suggestion. These are as follows. (1) My concept of rationality would not allow the phenomenon of tenacity in believing ever to be rational, whereas Soft Rationalism has made a strong case that it sometimes is. (2) Does any interpretive and explanatory hypothesis aim just at truth?; and does a historical interpretation aim even at that? (3) In order to secure the possibility of further formalization, my unified theory of epistemic probability would endorse the logical theory's application of the mathematical axioms of probability to judgements of epistemic probabilification of one proposition by another — but there are facts about such epistemic support which oppose this application. Finally, (4) with the notion of rationality I introduce pragmatic notions that do not belong.

7.41 Tenacity in believing?

Soft Rationalism urged that because of the personality-involving character of large scope interpretive theories, and because of the enormous number and wide range of types of evidential propositions relevant to their epistemic worth, it is rationally necessary (in order to give such a theory an adequate test) to maintain belief of it to some particular degree even in the face of new counter evidence. But what I say above (7.3) about the
irrelevance of practical evaluations to one's attitude of believing would seem to undercut the rationality of such tenacity of believing, based as this is in the present argument on just such practical considerations.

My response is that the phenomenon of tenacity in believing cannot be rational because there cannot be such a phenomenon. The tenacity is not in believing — if my view of believing[^1] is correct, one cannot, by definition, believe against the evidence or other reasons. It must be in some other propositional attitude. Earlier (6.64) I pointed out that our historians' reluctance to capitulate to one another might result from each having a further reason for his position, namely a well-grounded faith in his tradition; but in that case they do not provide us with an example of tenacity in believing, for they do not believe beyond the level of support by their available reasons — the apparent reasonableness of his tradition counts in each historian's mind as a further reason for belief. We can find other apparent examples of the phenomenon, but they turn out to involve tenacity of 'acceptance', in the sense of preparedness to act as if one believed, or tenacity in some other attitude, rather than tenacity of believing. A scientist, for instance, does not drop his hypothesis, which he believes to some degree because of its prima facie warrants, at the first negative experimental result. He goes on trying to test it; but in order to test a theory it is not necessary to believe it (or believe it as much as one did previously). In order to be fair even to a highly complex and ramified scientific theory by not abandoning it too early, we need not continue to believe it to a constant degree in the face of counter-evidence. It is enough not immediately to disbelieve it. And this is possible. There is, in other words, a third, alternative propositional attitude besides

[^1]: Namely that to believe that p is to value p as true (for reasons), and to believe that probably p is to value p as signified-as-true (for reasons).
belief and disbelief which one can adopt in such situations of fair
testing. It is a kind of suspense of judgement — a refusal to value
epistemically\(^1\) — combined with the intention to seek further deciding
reasons. This propositional attitude is open to the non-epistemic
evaluative pressures which I have mentioned. If for instance a hypothesis
is vital to the kind of overall style of life one adopts, then one's
intention to find the good reasons that can resolve an epistemic impasse
over the hypothesis should (rationally) be very strong indeed.

The Soft Rationalist may reply with the following suggestion. There
may be states of affairs of such a character that our cognition of them
depends on our prior believing that they exist. Is it not epistemically
fruitful, and hence rational, to so believe in their existence as to reveal
it further? My reply is that we must distinguish two kinds of case.
Examples of the first kind are these. The campaign workers' belief that
their candidate will win may be a necessary condition (because of the crucial
role of their resulting enthusiasm) for that belief coming true\(^2\). C.S. Lewis
gives the example (in The Abolition of Man) of a child being taught to
swim. The child's evidence is mostly against the proposition that he will
be able to swim, but the confidence that makes the difference between his
sinking or swimming depends on his positive belief. These are instances
where the fact that some reality is there for us to know depends on our
believing it to be. They are interesting in their own right, but not
germane to our concerns here, because neither the historian nor the
theologian supposes that the existence of his explanatory entities is
affected by anyone's state of belief.

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1. which is not to be confused with an evaluation of 'epistemically
   indifferent'. See 4.31.
2. See M.G. Singer, "The Pragmatic Use of Language and the Will to Believe",
   p. 27.
In the second kind of case, we can come to know or rationally to believe to a high degree in the existence of a particular reality only by first believing to some substantial degree. William James suggested that the religious realities of the world could be discovered only by the man willing to meet them halfway by believing with some conviction that they are there. Mitchell claims (JRE 117 - 118, 125 - 126) that a political viewpoint such as that of liberal democracy comprises a system of beliefs that one can fully test only by acting in ways possible only if one has the confidence that comes from genuine strong believing. But it seems to me that it may well be some other propositional attitude, rather than believing, which motivates a person in the latter kinds of situation. An attitude of hope that something is the case may very well be strong enough to release a person's capacities and the hidden resources necessary for adequate testing of the theory. My suggestion here may not cover the Jamesian case very well. Discovery of Divinity may depend not on whether we try hard enough, but whether our attitude satisfies Divinity enough for it to reveal itself to us. But, if we are talking about the God of Christianity, why need this required attitude be belief? It is more consonant with at least the Protestant part of the Christian tradition to describe it instead as faith — if we understand this as in part a propositional attitude akin to hoping that God exists. Later (7.723) I shall elaborate this suggestion as our only solution to the problem that, if real believing in excess of one's recognized epistemic support is a necessary condition of one's being able to confirm highly certain types of theory, such confirmation is necessarily beyond our grasp, because we logically cannot believe (but can only mis-believe) in that way.

1. William James, "The Will to Believe", p. 325. It is important to distinguish this suggestion of James' from his preceding suggestion that in some cases faith can help create the fact.
7.42 Truth is affirmed as the ultimate epistemic goal.

I have throughout my description of a partly formal Dialectic for games of interpretive explanatory argument taken truth to be the sole characteristic of believings which such games seek to produce to the extent that they seek epistemic success. I have admitted (in 7.3) that non-epistemic values (i.e., virtues other than truth) do enter the calculation of a proposition's rationality (for some action). But I hold that the different valuings which enter the calculation of a proposition's rationality (for believing) are all epistemic valuings — namely, different judgements of the proposition's epistemic probability based on different sets of evidence. Thus I have divorced questions of how to balance truth against other virtues as reasons for action from questions of how to balance various significations of truth against one another as guides to rational belief. Now this may be questioned; it may be suggested that we recognize, as goals to seek in our believing, epistemic desiderata other than truth.

The suggestion would go as follows. The historians of our earlier example are capable of believing, to an appropriate degree, that something is the case even when the reasons for it are not conclusive. But then does not this capacity reflect their response to some concern other than simply that of having true beliefs? If truth were their sole aim, they would never believe except on conclusive reasons.

This point has often been noted by epistemologists, but its consequences have often been misconstrued. Elliot Sober says that we have two epistemic goals, the truth of our theories and what he calls their "informativeness". He has two definitions of this term, a looser and a tighter one. In the tighter definition, it refers to a theory's capacity to anticipate our experience, to render the world less surprising and educative. But if this

1. Elliot Sober, Simplicity, p. 33.
is what he means by the concept, then it is not co-equal with the concept of truth as a primitive epistemological notion. Rather, it depends on the concepts of truth and truth-signification (i.e., probability) and thus is a further goal we graft onto these. This is because the notions of experience, surprise and education in the definition are epistemically loaded. By this I mean that our interest in, e.g., a theory's capacity to render experience redundant would be an interest in its ability to give us the same knowledge, or the same rational level of belief, as the experience would. Clearly then a theory's truth or probability is our (logically) prior concern.

In Sober's looser definition, informativeness is a theory's ability to give some answer to a question (regardless of correctness). This concept is equivalent to Isaac Levi's concept of 'content', which is a measure of the degree to which a theory provides "relief from agnosticism". In its simplest form, Levi's suggestion is as follows. Consider, for example, a political pundit who tries to predict which of politicians X, Y or Z will win an election. He is not interested in who places second or third, or how many votes each gets, and so his "ultimate partition" is the set of three propositions, 'X will win', 'Y will win' and 'Z will win'. Levi lists next the hypotheses available to the pundit, that is, the relevant answers to his question. These are: the members of his "ultimate partition", the conjunction thereof, and all the possible disjunctions thereof; namely,

\[(i) \quad X \lor Y \lor Z\]
\[(ii) \quad X \lor Y\]
\[(iii) \quad X \lor Z\]
\[(iv) \quad Y \lor Z\]

2. I take the example from ibid., pp. 32 - 36 and 56 - 90.
(v) X
(vi) Y
(vii) Z
(viii) X and Y and Z

The "content" of any hypothesis (i) to (viii) is the ratio between the number of elements in the ultimate partition which are inconsistent with the hypothesis in question, and the total number of elements in the partition (which in this case is 3). For the second hypothesis, this ratio is \( \frac{1}{3} \); for hypothesis (vii), \( \frac{2}{3} \); for hypothesis (viii), \( \frac{3}{3} \) or 1. Were the pundit fanatically cautious and concerned only with truth, he would choose hypothesis (i). He would need no evidence for it, and yet it is true since it is a tautology (assuming that at least one member of the ultimate partition is true). But in terms of his need to make a forecast, choosing (i) would amount to suspense of judgement. On the other hand, the pundit is not unconcerned with truth and interested in content alone, for then the self-contradiction (viii), which has the maximum content, would be the (again a priori) choice. What the forecaster will choose is the one hypothesis among hypotheses (ii) to (vii) (and there will be one, unless there is a tie in probabilities) which has the optimal combination of probability and content. Probability is presumably here the epistemic probability as he can judge it. Optimality is then determined by the forecaster's personal "index of caution", a measure of how much relief from agnosticism he needs.

Now undoubtedly, in seeking one of hypotheses (ii) to (vii), and of these in particular one of (v), (vi), (vii), the pundit responds to some goal other than simply that of having true believings. The question is, must this goal be understood, as Levi and Sober understand it, to be an epistemic goal? Levi, for instance, incorporates our concern for this
goal into his rule for inductive acceptance. This rule says that the acceptability of a hypothesis for an individual is its epistemic probability (expressed numerically) minus the content of the negation of the hypothesis, times the individual's index of caution. But notice, this is a rule for acceptance in my sense (7.41) of preparedness to act upon the believing in certain circumstances, and not a rule for believing per se. (Levi himself takes it to be, but then he equates acceptance and belief.) Swinburne raises very persuasive counter-examples against this rule's functioning as a criterion of epistemic probability, and suggests we take it as a rule for rational acceptance instead. This seems an accurate re-interpretation, if we look at our example. We can expect that the epistemic probability, on the usual kinds of evidence which pundits use, would be higher for the hypothesis (ii), "X or Y", than for (v), "X". The pundit thus believes (ii) more than (v). Nonetheless the former hypothesis is much less useful than the latter for his purposes of making a public (and impressive-sounding) forecast.

Furthermore, even as a principle of rational acceptability, Levi's rule is unrealistically narrow. What it is rational for the pundit to forecast (as opposed simply and privately to believe) depends on much more than just his need for relief from agnosticism. Or rather, I would urge, this need is really a need to optimize the utility attaching to the various forecasts open to him to make. This utility is compounded of several, often competing, types of evaluation - e.g., moral, prudential, political, etc. These factors are not countenanced in Levi's rule.

The lesson we learn from the preceding discussion is that philosophers suggest epistemic goals other than truth on the basis of certain examples

1. ibid., p. 36.
2. ibid., p. 25.
only because they confuse or conflate belief with acceptance in those examples. This same confusion underlies the further suggestion that truth is not very important even as an epistemic goal, at least in some areas of inquiry. J.L. Gorman urges that the acceptability of a historical account is not determined solely by the truth of its constituent propositions. Indeed, he claims that when we are comparing two such accounts we may judge one whose constituents we know to be all false as more acceptable, because more balanced, than one we know to be totally true. What is crucial to the balance or objectivity of a historical account is, he says, "the selection of statements": the presence of statements, regardless of their truth or falsehood, about evidence that is centrally 'relevant' (in a sense that Gorman does not explain).

But 'objectivity' or 'balance' in this sense of 'touching all the bases' on one's way to a conclusion must be one of two kinds of virtue. If it is a virtue which we take to signify the truth of a historian's account, then it is simply one of the determinants of epistemic probability recognized by our criteria of such probability for historical accounts. The other type of virtue it could be (I see no other alternatives) is a virtue we demand of a historical account with an eye, not to its truth, but to its pragmatic function as a stimulus to further research, as a helpfully suggestive reading of events. In other words, when a historian is searching for a suggestive hypothesis for his fellow historians to consider, then he may be more interested in getting the balance right regarding the points requiring explanation than in giving a true explanation of those points. But when he asserts his hypothesis in the way, e.g., Trevor-Roper or Kossman do, he is not just 'running it up the flagpole'. He is instead expressing some considerable degree of belief in it, that is, expressing his valuing

1. J.L. Gorman, "Objectivity and Truth in History".
7.42 it as signified as true.

7.43 The apparent problem of weight and varieties of evidence.

I have saved until this point the most difficult problem for my theory of epistemic probability. The Dialectic developed in Chapter 6 provided an apparatus for only partial formalization of epistemic worth. Progress in our current enterprise of uncovering the logic which we hope is buried within epistemic-probability-justifying judgements (and rationality-justifying judgements) requires their further systematization. The obvious system to consider is the mathematical calculus of probability. Therefore I am attracted to the application, by the logical theory of probability, of that calculus to such judgements. The logical theory so interprets the calculus as to provide a set of axioms (and theorems derived from these)\(^1\) which represent the criteria which we use in justifying certain among our judgements of epistemic probability. One assumption made by this interpretation is that our comparative epistemic-probability-justifying judgements (where one proposition is said to be more probable on a specified set of evidence than is another, on the same evidence) may be expressed numerically. Swinburne notes that even without such an assumption, the calculus, although in a modified, strictly non-quantitative form, is still applicable\(^2\). Let us agree with him and accept the assumption.

Two theorems in the calculus are particularly useful for our purposes, since they bear much (though not all) of the burden of justification of our judgements of the epistemic probability which an interpretive theory receives from the occurrence of data which it would (if true) explain. These are an application of Bayes' Theorem and a principle derived from

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1. See Swinburne, *op. cit.*, pp. 34 - 52, for a listing of these axioms and theorems.
this, Mackie's "relevance criterion." The reason I say that not all of
the burden of justification is borne by these theorems is that their
application has a 'lower' limit. They do not pretend to represent those
initial and informal judgements of epistemic probability from which they
proceed to build up (justificationally, not psychologically) more complex
judgements.

Now comes the hard objection. This claims that the limits of
formalization are reached much sooner than the theory would suggest, for
our epistemic-probability-justifying judgements do not display even the
relationships set out in these theorems. Swinburne acknowledges and
attempts to circumvent the examples which would be given in support of
this objection. I shall not (for want of space and competence) deal with
these classic problems of confirmation theory nor with the viability of
Swinburne's solutions to them. I shall admit that if the latter fail, thus
allowing the counter-examples to stand, my Modest Formalist ethic of belief
is only weakly formalist, for all it can then boast is a partly formal
Dialectic.

Instead, in the hope that solutions can be found to keep the calculus,
or some variant of it, in line with our informal epistemic-probability-
justifying judgements, I pass on to a further argument which might be raised
in support of the Informalist's objection. This argument needs to be
removed if we are to apply even a calculus free of the above problems to
epistemic probability judgements such as our historians make.

1. See ibid., pp. 42 - 48, and J.L. Mackie, "The Relevance Criterion of
   Confirmation", p. 27. It should be noted, since this will be of
   importance later, that only a part of Bayes' Theorem is concerned with
   probabilification through explanatory inference. The 'prior probability'
   part of it is not directly relevant to such inference.
2. See Swinburne, op. cit., Chapters IV and X regarding the 'ravens'
   paradox of confirmation, and Chapter VI regarding the objections of
   Schlesinger, Harré, and Cohen.
The argument is as follows. The historian may be able to give a quantitative estimate of the epistemic probabilification rendered to his hypothesis by particular pieces of evidence, or by sets of evidence if their members are all of one type. Suppose that at line 15 of our symbolized example Trevor-Roper can do this for propositions A, B and C. Nonetheless, his combination of each individual probabilification of K into a single overall estimate of epistemic probabilification of K by A, B and C cannot be represented under the combinatory axioms and theorems of the calculus. This is because he assigns different 'weights' to different types of evidence.

Notice that this objection does not trade on the scholar's inability to tell us in advance how he will give weight to different types of evidence. We can overcome this problem, if we make two assumptions. If we assume that he is consistent in his judgements; and if we assume that these judgements are accurate responses to objective facts about the propositions, facts which he takes, under his informal epistemic standards, to constitute epistemic virtues; then we can determine his profile of weights for him. We can do this by recording his judgements on a number of experimental cases we present to him involving, in pairs, the different kinds of evidence. The heart of the objection comes, then, from his preference for some types of evidence over others, and not from the fact that he may be unable to express this preference.

Another apparent source of the objection needs to be eliminated. I noted earlier (3.4334) that this notion of weighting, and not the notion of cumulativity, was really at the bottom of Soft Rationalism's claim that the epistemic support employed in explanatory inference to interpretive theory is not probabilification. The calculus of epistemic probability

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1. This development of the calculus I owe to R.G. Swinburne.
can accommodate cumulativity as follows. We wish to account for the augmentation effect wherein two independent pieces of evidence, which separately contribute little support, when conjoined greatly increase the probability of the theory which explains them. A development of Bayes' Theorem will do this. That theorem says:

If \( P(e/k) \neq 0 \), then

\[
P(h/e.k) = \frac{P(h/k) \times P(e/h.k)}{P(e/k)}
\]

i.e., the posterior probability of a theory, \( P(h/e.k) \), equals the product of the prior probability of the theory, \( P(h/k) \), and the measure of its explanatory power, \( P(e/h.k) \), if we assume, of course, that the divisor here is not equal to zero. Suppose that we have two pieces of evidence, \( e_1 \), Jones' fingerprints are on the murder gun, and \( e_2 \), Smith owns the gun and normally keeps it on his person. We calculate, using Bayes' Theorem, and relying on our background knowledge (which includes the fact that Jones and Smith are close friends), the degree to which each piece of evidence taken separately probabilifies the hypothesis that Jones and Smith conspired to murder the victim:

\[
P(h/e_1.k) = .4 \times \frac{.4}{.3} = .533
\]

\[
P(h/e_2.k) = .4 \times \frac{.3}{.2} = .6
\]

Now if in fact when we conjoin the two pieces we informally judge the confirmation they give to the hypothesis to be much higher, this augmentation may be represented in a formula which adds the probabilification which \( e_2 \) provides to that which \( e_1 \) already provides. We get this formula from Bayes' Theorem by replacing \( P(h/k) \) by \( P(h/e_1.k) \) and by including \( e_1 \) as one of the grounds in the measure of explanatory power, i.e., by replacing \( \frac{P(e/h.k)}{P(e/k)} \)
with \( \frac{P(e_2|h,e_1,k)}{P(e_2|e_1,k)} \).

Thus we get:

\[
P(h/e_1,e_2,k) = P(h/e_1,k) \times \frac{P(e_2|h,e_1,k)}{P(e_2|e_1,k)}
\]

Suppose that we estimate the likelihood that Smith owns the murder weapon, given that Jones has never owned one and that they are close friends, to be slightly positive e.g., .55; but that it would be much higher if we knew that the two friends had conspired to murder the victim, e.g., .8. In that case our formula gives us:

\[
P(h/e_1,e_2,k) = .533 \times .8 = .775
\]

The value, .775, represents considerably greater confirmation than either .533 or .6.

For an exposition of the real source of this objection from the phenomenon of 'weight', I refer to John Hick's explanation why probability theory cannot explicate our judgements of the epistemic support given to theistic or atheistic "total interpretations" by evidences of different types. He asks:

Can we say that there are, say, ten items of prima facie evidence in favour of theism and eight against, so that theism wins by two points; or vice versa? Clearly no such mechanical procedure will do, for the conflicting considerations do not form units of equal weight. Can we perhaps however place each item in its position on an evidential scale in which, without being assigned numerical value, they are nevertheless listed in order of importance? To some extent this is feasible as a separate operation on each side of the debate. In many instances we can accord a greater weight to one item of theistic (or of antitheistic) evidence than to another, and can thus at least begin to construct two parallel lists. But we still have no agreed way of weighing an item on one list against its opposite number on the other list nor, therefore, of evaluating one list as a whole in relation to the other. There are no common scales in which to weigh, for example, human wickedness and folly against the fact of man's moral experience, or the phenomenon of Christ against the problem of human and animal suffering.
Judgements on such matters are intuitive and personal, and the notion of probability, if it is applied, no longer has any objective meaning. 1

My response is that here Hick confuses two different alleged facts about epistemic support. If, when he says that the conflicting considerations "do not form units of equal weight", he means units of equal epistemic support, he is trivially correct. Different pieces of evidence typically do give a hypothesis different degrees of probabilification, so that they are of unequal worth as justificational props. But if this is all that he means, then the last sentences in the quotation must be taken to claim that the theist and atheist share no common criteria of epistemic probability, that their judgements of how much a proposition supports their hypothesis always manifest different standards. This radical relativism is very probably false, if for no other reason than that the theist and atheist will share epistemic criteria in many other areas of judgement, so why should their theological argument be a complete exception?

On the other hand, and more sensibly, we may take Hick to mean by unequal units of weight the fact that the support contributed to a hypothesis by pieces of evidence of different types is sometimes not comparable. The theist and atheist are arguing over the same hypothesis – the existence of God – but do so by reference each to different types of evidence. They share their criteria of support as regards each type of evidence; but since each appeals to different sorts of consideration, Hick may be suggesting, those criteria are never jointly applicable.

Now it is true that some probabilifications are not commensurable one with another. We may judge that the existence of a general crisis in 17th Century Europe is quite probable on the evidence as presented by Trevor-Roper; and that the General Theory of Relativity is very probable

on current scientific evidence; but we should be hard pressed to judge which is on its own evidence the more probable. Fortunately, these are not the sorts of comparison which a historian must make in deciding whether, e.g., there was a general crisis in the 17th Century. The types of evidence Trevor-Roper might have employed would have been physical traces (burned-out buildings, etc.) of the events of the period and records (works of art, writings, etc.) by people cognizant of those events and of their effects. These are not very dissimilar kinds of evidence. True enough, theoretical items are also introduced by Trevor-Roper as justifying reasons. But the probabilification these render to his thesis will not be incomparable with the support given to it by the evidence. This is because the theories in their turn are finally justified against their critics by appeal to historical evidence of the two types just mentioned.

The metaphysician deals with a wider range of evidence than does the historian, but if we look at examples again incommensurability of probabilifications is no problem. Suppose that in his debate with Russell, Copleston had included, among his evidential considerations whose best explanation (as he might have claimed) is the existence of God, not only moral and religious experiences of people but also the existence of a general crisis in the 17th Century and the truth of the General Theory of Relativity. It is very hard to imagine in detail how he might plausibly have argued that these latter facts confirm to some degree the existence of God. But it might have gone something like this. The general societal crisis was in fact caused by God as part of a prophetic warning to the people of the time to return to Christian principles in the organization of society, indeed just the sort of warning which we would have expected at the time, if God is as described under certain doctrines. The truth of Einstein's theory is a necessary condition, so the argument might go, for heaven, as it is described under certain doctrines, being in an independent
time and space truly 'not of this world'. However fanciful these suggestions, the point is that we can see how very different types of data are made to epistemically support an explanatory, interpretive theory: through elaboration of subsidiary hypotheses within the theory, so that confirmation of these by the data in question is passed along to the theory as a whole. It is no wonder, then, that if we were just to try to compare directly the amounts of probabilification which the different data give to the theory as a whole, we should find it difficult to do so. This becomes possible only when we look for the complicated route through subsidiary hypotheses which such probabilification takes.

Perhaps what Hick really has in mind is the fact that we take some considerations to confirm a theory more than others solely because of the type of reason they represent. But since this preference is exercised as a preference for one piece of evidence as a truth-sign over another, this preference should be manifested in our estimates of epistemic probabilification by data of different types where one single hypothesis purports to explain each (and thus provides a single context of explanation). Suppose that one day a historian finds a piece of physical evidence for hypothesis h which he judges confirms it to degree .8. On another day he hears a verbal report which he judges is confirmatory of h to degree .8. When he remembers the first piece of evidence, and ponders the comparative value of each piece, we should expect him to judge them as equally confirmatory. But a philosopher like Hick may suggest that this is not true, and that he can judge the physical trace to be more confirmatory, because its falsification would leave a bigger hole in his reasons than would the discarding of the verbal report.

But to the contrary, since the same hypothesis h is involved in both judgements, if the historian is consistent and systematic in his epistemic preferences, then any leaning towards physical evidence as such should
have surfaced in his original estimates of probabilification. This is because, according to the "relevance criterion" included within Bayes' Theorem, namely

\[ P(h/e.k) > P(h/k) = P(e/h.k) > P(e/k) \]

the epistemic probabilification which a piece of evidence renders to a hypothesis which explains it is proportional to the epistemic probabilification which that hypothesis would (if true) render to the piece of evidence. For instance, in order to estimate how much the physical trace confirms hypothesis h over its probability on his general background knowledge, the historian must judge how much more likely it is that he would find the physical trace (supposing he had not already done so) given h and his background knowledge together than given the latter alone. Similar inverse reasoning is employed in estimating the probabilification by the verbal evidence. In either case, it is the same hypothesis which enters the calculation, in the second half of the relevance criterion, of the value of \( P(e/h.k) \). Therefore, if our historian is consistent in the epistemic-probability-justifying judgements he makes by referring to that "h.k", then his preference for physical over verbal evidence must show up in those judgements.

In this way our epistemic-probability-justifying judgements encompass our preference for one type of evidence over another. The fact that a piece of evidence is of a certain type becomes a ground for a judgement of comparative justification of epistemic probability wherein it is taken as a better truth-sign than a piece of evidence of another type. However, our evidence extends beyond physical traces and verbal reports. The historian, for instance, will recognize as relevant to the epistemic worth of his hypothesis a further non-historical consideration — his contemporary knowledge of what is physically possible\(^1\). The epistemic support rendered

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1. Swinburne notes this further type of reason in *The Concept of Miracle*, Chapter 4.
to a hypothesis by its concordance with current understanding of the field(s) in which the hypothesis operates clearly does not fall under the 'explanatory power' element in Bayes' Theorem, namely

$$\frac{P(e|h.k)}{P(e/k)}$$

because the evidence which our current knowledge provides is not evidence which the hypothesis h purports to explain. To use an important and famous example, whether it is physically possible (according to our present biological knowledge) to restore fully functioning life to a human body one and a half days after its death is a matter of fact which the hypothesis that Jesus rose from the grave would not purport to explain. (Of course, the biological issue does affect the probability of the Resurrection issue, and vice versa, since if the latter claim were known to be true we would have to discard our biological commonplaces.) However, confirmation or disconfirmation of a hypothesis on the basis of present knowledge can be included under another part of Bayes' Theorem, that is in the calculation of 'prior probability'.

$$P(h/k)$$

because k here, our background knowledge, can include present understanding of the physical possibility of the events, entities, and operations postulated by the hypothesis.

In these ways, I suggest, the phenomenon of giving different weights to different types of evidence can be understood as the normal operation of our faculty of judging epistemic probability, in the sense of this virtue which the calculus of epistemic probability seeks partially to analyze. The idea behind my suggestion is to turn to our advantage the apparently uncomfortable tendency of interpretive theories (of whatever scope) to encroach upon all the data that might otherwise have provided a basis for epistemic evaluation. To accomplish such encroachment the theories must
elaborate subsidiary theories. But then when we come to consider how much confirmation is provided by rather disparate kinds of data, it is these latter subsidiary theories with which these data have the initial confirmation relationship. And so the phenomenon of subsidiary elaboration helps to explain the phenomenon of apparent incommensurability of types of evidence for a theory. I advance this as a suggestion only, because I am aware that description of the relations of confirmation from explained evidence up through the parts of a complex explanatory theory, and the analysis of what changes, if any, this would require in the calculus of epistemic probability, are topics deserving another entire thesis.

7.44 Pragmatic concerns and rationality.

By proposing to use the word 'rationality' as a term of epistemic assessment, I may appear to be allowing into epistemic evaluation concerns for something other than the truth, namely the pragmatic concerns that often help determine the rationality of an action. This is just an appearance, for the reasons that follow.

It is true that the rationality of an action is in part determined by moral, prudential and other pragmatic evaluations of its nature and consequences. It is also true that the rationality of an action is the source of the rationality, for the purpose of that action, of the proposition the believing of which underlies the action. It is further true that I am applying the same term, 'rationality', to a proposition with regards to the believing of it as with regards to the acting upon it. But it does not follow from all this that the grounds of the rationality, for the purpose of believing, of a proposition can include moral, prudential and like evaluations. The reason is that although the same word is used, the same concept is not. To be more precise: some but not all aspects of the meaning of 'rational' carry over from 'rational (for some particular action)' to
'rational (for believing)'. The commendatory force of the term is constant. The intentional aspect of its meaning also remains the same, because our core notion of rationality amounts to the idea of 'proper proportion', whatever it is that the proportion holds between; that is, in saying a proposition is, e.g., rational (for some particular action based on it) we are saying that a proper proportion holds between the action's qualities and its reasons. What does not carry over from our saying of a proposition that it is 'rational (for some action)' to our saying that it is 'rational (for believing)' is the criterial aspect of the term's meaning; for it is in the criteria of rationality that the core idea of 'proper proportion' gets spelled out. In particular, what these criteria recognize as relevant types of reason will be different with 'rational (for some particular action)' from what they are with 'rational (for someone's believing)'. With the latter, only one type is recognized -- epistemic probability judgements; for here I mean believing as such, and not believing as a necessary condition of some action. So there is no reason to suppose that here considerations other than those of truth or probability would be the ones among which our criteria of rationality require a 'proper proportion' to be found. Thus rationality judgments do not always invoke pragmatic concerns — it depends on that to which they are relative.

Can we ever say that some proposition is 'rational, period', instead of 'rational (for some particular action or other pragmatic context)'? No. Rationality assessments on propositions must be relative, for two reasons. First, removing the relativity would assume that rationality can be an intrinsic property of a proposition. But in 7.3 I mentioned that the rationality of a proposition is derived by extension from, e.g., the rationality of some action that stems from the believing of that proposition. The virtue can be applied to a proposition only with an eye to its origin. Secondly, it seems impossible that we could ever arrive at a net rationality verdict for a proposition cumulated from the rationality verdicts on each
of the actions that the believing of that proposition could lead to, because there is an indefinitely large number of such potential actions for any one proposition.

7.5 A Success Rule for two-role, zero-sum games of interpretive argument aimed at rational belief.

It will be recalled from 6.65 that the Finish Rules in our partly-formal Dialectic are addressed to the simple question of who gives in to whom in a game of argument, although some of them also have epistemic significance. But we can also provide Success Rules which determine when a game of argument has further achieved its epistemic objective of rational capitulation by one of the players. I have now noted three different things to which a rationality judgement on a proposition may be relative, namely someone's believing of that proposition, someone's acting upon his believing of it, and someone's adopting, upon his believing of it, some action-producing attitude (other than belief). Hence there will be correspondingly different types of epistemic objective for games of argument. For instance, when the game of argument aims at, and produces, agreement of the players in believing some proposition, then whatever rationality the game has will derive from the rationality (for the purpose of either party's believing) of the proposition at issue. Or, when the game results in like action (or like intention to act) on the part of both parties by producing agreement on some proposition upon which such actions rest, then the game's rationality will derive from the rationality (for either party's action) of the proposition at issue. I shall construct in turn Success Rules for the rationality of games of argument of the two types just instanced. Later I go on to indicate how these rules might be adapted to apply to games aimed at producing rational motivative attitudes other than believing — e.g., certain kinds of faith.
The rationality of a proposition for the purpose of someone's belief is, I have argued (7.44), determined by epistemic considerations alone, so that the balancing that goes on in a judgement of such rationality is a weighing up just of various epistemic probability judgements. These latter judgements fall into two classes: those pertaining to the proposition at issue; and those pertaining to alternatives to that proposition which might be believed instead.

We canvass the first class for this reason. We know that not every other proposition is relevant to some proposition's probability and that from the ones that are relevant (those that form evidence for and against the proposition at issue) we can construct narrower or wider sets. We do not want important considerations (either for or against) omitted; so before we grant that an evidence set which tends to direct our belief indeed ought to do so, we need to be assured that it contains all the evidence available to us. Here then is one type of ground upon which we can fault the participants in a game of argument. One party may have convinced the other with reasons; but if those omitted a significant counter-argument against the proposition agreed upon, that agreement was not rational.

For the following reason we also consider the second class of epistemic probability judgements, those pertaining to alternatives to the proposition at issue. If our believing of a proposition were guided solely by its degree of epistemic probability on the total available evidence, we would encounter paradoxes in belief. One is the lottery paradox. Another is the situation where the total available evidence provides a number of hypotheses with different, but all rather low, epistemic probability ratings, so that we are disinclined to believe any of them — yet where that evidence also indicates strongly that some one of the hypotheses must be true, so that we are inclined to believe whichever hypothesis is least improbable. We can avoid such problems (whose detail I do not here have space to consider)
by describing judgements of the rationality (for someone's believing) of a proposition as not absolute, but relative; that is, not in terms simply of its epistemic probability, but in terms of its epistemic probability compared with that of its alternatives.

Hence we have:

**Rule 12:**

A two-role, zero-sum game of interpretive argument aimed at rational belief is rational to the extent that it is rational for the players to believe the winning proposition; and that proposition is rational for such believing if and only if its epistemic probability on the total evidence (available to whoever makes this judgement) is greater than that of any alternative.

It bears emphasizing that a third party making a judgement on the rationality of some such game of argument becomes, in effect, another player in that game, and as such is entitled to criticize its present termination as irrational because of failure of the original parties to make correct probability judgements, or to consider some further significant evidence, or to consider some alternative which is more probable than their positions.

7.6 A formal rule of rationality for two-role, zero-sum games of interpretive argument aimed at rational action.

7.61 A rule more formal than substantive.

As was noted earlier, our historians' published debate was not concerned just with what Kossman and Trevor-Roper believe about the state of European politics in the 17th Century. The debate had much wider, pragmatic features. We may presume this is true also of a debate between a theist

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1. This follows the solution proposed by Swinburne, *op. cit.*, pp. 184 - 188.
and an atheist. They will typically be arguing about not just which interpretive theory to believe but which to take as their 'guide to life'. To make the Modest Formalist ethic of belief reasonably complete it is necessary to provide rules of rationality for games of interpretive argument which aim at rationality in actions such as choosing and following a 'guide to life'. Such rules would attempt to codify those judgements of rationality into which enter all types of evaluation, not just purely epistemic judgements.

However, I shall stop short of giving such rules. Instead I shall provide a largely schematic rule into which fully substantive criteria may be fitted to produce actual, usable rules. I do this because our actual substantive criteria seem so contentious, and endorsing one or another of these would deserve more argument than I have space to give. For example, and referring to Price's 'faithful spouse' case (2.33), it would be by no means universally accepted that a person has a duty towards an errant partner to 'forgive and forget', that is to act towards him or her as if the offense had never occurred. Some people might claim that the offended spouse has every right to act upon his or her (rational) beliefs alone: once he or she knows or rationally believes the offense has occurred, he or she may properly thereafter treat the spouse with the contempt deserved. This retributive moral stance gives a much larger role to one's beliefs about one's spouse, taken as the basis for attitudes and actions, than does an ideal of charity. I do not wish to deal here with the question of which is the proper weight to give to one's beliefs. Therefore I shall instead try merely to outline the general form which specific answers to that question would take.

7.62 An informal description of a judgement of a proposition's rationality (for a particular action).

The goals of our historians' game of argument include the pragmatic
objectives which any academic pursues in taking his views to print. Hence Trevor-Roper is (implicitly) claiming in, for instance, line 15 of the symbolization, not just that $K$ is epistemically probable to some degree, and not even just that $K$ is rational for his and Kossman's believing of it, but that $K$ is rational for the specific action of assertion in print (i.e., that that action is rational).

What sort of considerations might he adduce in support of this claim? Points that come immediately to mind are these: the positive value for the believer — e.g., his satisfaction — if $K$ is true; the pleasure of discovery experienced by others who hear or read the assertion of $K$ (and this might be a reason to assert $K$ whether it is true or not); the benefits derived from $K$'s usefulness as a working hypothesis (if true); the benefits to Trevor-Roper's reputation and career if he is right (or partially right, or even 'helpfully wrong') as against the damage if he is wrong, or so wrong that his claim does not even suggest useful ideas to other historians; the benefit of continued employment (and hence benefits to his dependents) which publishing in reputable journals helps to bring (a benefit which obtains whether he is right or wrong); the moral danger of leading some reader into error (if $K$ is false) as against the moral goodness of educating others (if $K$ is true); the ideological value of the thesis, in the sense of the support it gives to some analysis of the 'meaning' of historical events; the prudential cost of the labour Trevor-Roper has to perform to get his article into print, weighed up against the intrinsic dignity of such labour and its value on other counts; and so on. The list is incomplete, but these seem to be the main considerations we might realistically expect to be involved.

The first thing to note about these various considerations is that they belong to different areas or realms of value. There are, I think, seven distinct such realms of value which can bear upon rationality: the
epistemic; and the prudential or self-regarding (which I shall represent by the letter \( s \)), aesthetic \((a)\), moral \((m)\), economic \((e)\), ideological or political \((i)\), and religious or divine \((d)\). It may be that this list is too short, or it may be too long, containing redundant members. But in either case the use I make of its members in my later schemata could be amended without affecting my basic ideas — unless there were shown to be just one fundamental type of value, in which case my schemata would be seriously mistaken.

Of course, very few actions are such that we can make significant positive or negative evaluations upon them in every realm of value, and the published assertion of \( K \) is obviously not one of these. For instance, it is hard to see how asserting in print the existence of a general crisis in the 17th Century could have any significant positive or negative religious value. But a standard rule for calculating the rationality (for any particular action) of any particular proposition would need a 'slot' into which evaluations from every realm would fit. To make such a rule applicable to such actual actions I will adopt the useful fiction of supposing the action to have a 'neutral' rating in the irrelevant realms of value.

The second thing to note about the evaluations that enter into a calculation of the rationality of an action is that they apply to four different objects to produce four distinct determinants of rationality, as follows.

The epistemic worth of the proposition \( p \) upon which the action is based. I have been treating the proposition as the bearer of the virtues of truth or epistemic probability (or the vices of falsity or epistemic improbability). In that way the proposition itself is subject to epistemic evaluation. But this is the only realm of value in which the proposition may be evaluated. To suppose that it could be judged morally, or aesthetically, good or bad (and to suppose further that such evaluations bear upon the rationality of
the action based upon the proposition) would be eccentric, to say the least; indeed, it would seem to confuse the proposition either with its written or uttered expression or with the state of affairs which it purports to describe. As to the first of these confusions: sentences written or spoken may well have moral or aesthetic or religious characteristics; but anyone who thought that these in general affect the rationality of the action based upon the proposition would not be using any concept of rationality that can be found in our culture. (And even if I am wrong here, my later schemata could be modified in obvious ways to accommodate the rationality judgements which such extremely eccentric ideas would generate.) As to the second confusion: the moral and other virtues or vices possessed by a state of affairs do bear upon the rationality of an action intended to bring about that situation. But they enter as consequences of the action itself, and have nothing to do with the believed proposition underlying the action.

Very few actions will be based upon just one believed proposition. But we can circumvent this otherwise unwieldy complication by treating the proposition upon which the action is based in such cases as a compound proposition, perhaps a simple conjunction of a wide range of believed propositions. One obvious sort of subsidiary proposition that does affect the rationality of an action, and which can be included under the present device, is the agent's estimate of the likely success of his action in achieving its goal.

The (moral, prudential, aesthetic, etc.) worth of the believing that p. It is conceivable that certain views of rationality would base the rationality of an action in part on the moral or other worth of the underlying believing. Such views seem bizarre if we think the rationality of an action lies, for instance, in its being an appropriate means to an end, or in its being based on a true believing. But when we think this we are taking one substantive view of the criterial aspects of the meaning of "rational" as it applies
to actions, that is, spelling out the core notion of 'proper proportion' in a definite way (e.g., in the first view, we would be demanding a proper proportion between an action and the likelihood of its achieving a desired end). In other words, we are taking a substantive view about wisdom or overall goodness or "optimum Inclusive value" (see 7.63) in actions. And though they would not be our usual substantive view, other views on such wisdom are possible. For instance, it could conceivably be held that a particular action is irrational because so acting would require the agent to have an unworthy (e.g., morally reprehensible) belief. Our schematic rule will have to be able to encompass the rules of rationality which such views would produce, so it will have to leave a 'slot' in the calculation it represents where the assessments of the moral or other worth of the agent's believing could enter.

The worth of the intention to do the action, for the similar reason that it may be important under some views of rationality, will likewise be a determinant we must include in our schemata. Those views would treat it as important in somewhat the way that many views of the morality of an action treat that virtue as dependent partly on the character of the intentions of the agent.

The worth of the action itself, in all the realms of value save the epistemic (we do not speak of a 'true' action in the epistemic sense), is the fourth determinant.

Parenthetically, we might note that the latter three determinants will have both intrinsic and consequential aspects. For instance, a person's belief (however well grounded) that his spouse has been unfaithful may be judged from a particular moral perspective to be intrinsically morally wrong, as a violation of trust, and may also be seen as having morally bad consequences other than via the action it leads to, such as weakening that person's character. The overall moral value of the believing would then
be composed in some way from both aspects. I have no space to consider
the structure of such calculations of overall worth, and omit it from our
schematic rule.

The third major point to note is how evaluations within some particular
realm of value contribute to an evaluation of the rationality of an action.
As our schemata will make clear, those evaluations may be usefully conceived
as distributed over some of the four objects I have just described. (The
way they combine with one another and with evaluations from the other realms
of value is what our schemata will be trying to make perspicuous.) Let us
take for our example moral evaluations and note how these contribute to the
rationality judgement on Trevor-Roper's action of publishing his thesis
that K is true (labelled as q1).

Above I implied that it would be a mistake to suppose that the
proposition K itself has any properties relevant to our moral concerns.
And above I implied further that while the state of affairs in 17th Century
Europe, in virtue of which K is either true or false, itself has morally
significant properties, these are irrelevant to the question of q1's
rationality. This is because even were it a morally good thing that there
was a crisis in 17th Century Europe, such goodness would not affect whether
it is an overall good thing to discuss it in historical journals.

This leaves us with Trevor-Roper's believing that K, his intention to
do q1, and q1 itself. Among the considerations I listed at the beginning
of this section, the moral ones mostly centre on q1, as either intrinsic
to it (e.g., the dignity of the labour involved in q1) or consequent upon
it (e.g., its helping to support his family). But intentions may also be
relevant. His intention to publish K may reflect his strength of will,
desire to enlighten others and other noble aspects of character; or it may
instead reflect undesirable egoistic concerns; but in either case we would
say that his intention thus has moral significance. I can, furthermore,
see that such moral import should bear upon the overall goodness of \( a_1 \), given my own substantive view of what is overall best. I would hold, for example, that insofar as some action requires of its agent an ignoble intention then, \textit{ceteris paribus}, such action is unwise or wrong (in a very broad sense). Again, Trevor-Roper’s believing that \( K \) represents his mental industry, the successful overcoming of our universal human temptation to intellectual sloth, and to that extent seems to me a morally good thing. But here, unlike the previous case, I cannot see any way that this affects the overall goodness of his action.

However, these judgements are derived from my substantive view of rationality, which (for lack of space) I do not intend to set forth and defend here. All I seek is a schematic format by means of which we can organize that, and any other, substantive view of rationality. What I must not do, then, is so restrict the structure of our schemata that they cannot apply to substantive views different from my own.

7.63 The formal schematic rule.

Now I develop our final rule — to repeat, it is not a substantive one but a general schema for generating substantive rules of rationality usable in games of interpretive argument aimed at rational action. It will present the systematic relations which exist among the determinants just enumerated (however those determinants may be filled in by any particular view of rationality). Because those relations are complex and easiest to express arithmetically, the schema (and its sub-schema) will use symbols that I shall shortly introduce. Several points need to be mentioned as a prelude.

First, this schema will display the transfer, commented upon earlier, (7.22 and 7.3), of the virtue of rationality from an action to other objects. The rationality of a game of argument aimed at rational action will be said to be directly proportional to the rationality (for a particular
action) of the proposition at issue in that game, which will be directly proportional to the rationality of the believing of that proposition (taken as the basis for that action), which will be directly proportional to the basic measure here, the rationality of that action. When I say that someone's believing that \( p \) is the 'basis' of his action, I mean that that believing is a necessary condition of his doing that action. (Another necessary condition — at least for actions of the kind that can be called rational — is his having the intention to achieve whatever the action will bring.)

Secondly, for the moment the proposition-action link along which the virtue of rationality transfers will be the fact that the action is based on the believing of the proposition, rather than some other possible basis, such as the propositional attitude of being prepared to act to test \( p \). Such other propositional attitudes I shall come to later.

Thirdly, I wish the notion of an action mentioned here to be understood broadly. We would not ordinarily hesitate to call Trevor-Roper's publishing his historical interpretation an action, even though precision might demand talk of his 'set of actions'. Furthermore, we may not be able to decide — and it may not matter — whether it is an action, or a set of actions (or the attitude of readiness to do any of that set), to which the rationality judgement is made relative. When an agnostic challenges a Christian on the rationality of his theism, what he's looking for (in part) is justification of the rationality of a set of Christian doctrines as a 'guide to life'. What particular attitudes and actions make up the rather extended action of adopting and following those doctrines is likely not completely unforeseen.

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1. Specific actions are not the only pragmatic contexts relative to which we judge the rationality of a proposition. Specific attitudes, such as readiness to do a type of action, would be another context. But for simplicity's sake I shall deal here only with rationality, for some action, of a proposition.
by either Christian or agnostic; but surely their rough ideas of what is involved will suffice.

On the other hand, fourthly, we do not want the notion of action mentioned here to extend beyond possible actions of parties to the game of argument. Suppose that Trevor-Roper knows of a graduate student in California who uncritically accepts most of Trevor-Roper's published views and who is writing a thesis about 17th Century European bureaucracies. Clearly, if Trevor-Roper's claim that K (that there was a general crisis in 17th Century Europe) is badly wrong and his published assertion of it helps to cause that graduate student to make a laughing stock of himself before his thesis committee, Trevor-Roper would bear some responsibility (however partial) for that debacle. Such a consideration would enter his (and our) estimate of the rationality of his publication of K (and hence of the rationality of K for such public assertion). Notice that the foreseeable bad consequences of the student's action of using K uncritically as the cornerstone of his thesis do (in some general guise) enter Trevor-Roper's estimate; but they enter, via his judgement of the overall moral import of going to print, as somewhat extended consequences of his publishing K, should K be wrong. They would also be partial determinants of the rationality of the student's action of using K; but it is not in this role that they would be relevant to the rationality of Trevor-Roper's action.

My fifth preliminary point, then, must be to introduce a convention for symbolizing the particular actions of parties to an argument. I shall use $a_1$, $a_2$, $a_3$, etc., as names for these, on the understanding that the only actions which shall be so named are ones available to one or more parties to the argument — in other words, actions about whose rationality they could argue with an eye to the proponent or challenger (or both) thereafter doing them. For example, '$a_1$' could represent the action, "Trevor-Roper's asserting K in print'. The believing upon which $a_1$ is based
will be represented by \( \beta^{a_1} \). Since the description of the action includes a reference to who the agent is — namely, one of the parties to the argument — the believing upon which the action is based will be that agent's believing. We can also now label a game of argument where the rationality of an action is at issue by naming that action in a subscript, e.g., \( q^{a_1} \).

I mentioned above that intentions as well as believings are a necessary condition of an action, and that the net worth of intentions may enter into a rationality calculation. For my sixth preliminary point, I introduce the convention of using the Greek letter \( 'i' \) with, as a superscript, the name of the action — e.g., \( '{i}^{a_1} \) — to represent the intention or set of intentions that are a necessary condition of the action.

The final point is to note a further but necessary complication. Any virtue within any realm of value is composed of a property or state of affairs which we value. For most of the determinants of an action's rationality (e.g., the moral worth of the action) we do not know for certain that those determinants actually obtain in a particular case. The virtues or vices which we weigh into our calculation are instead predicted or expected with some degree of probability. This fact we must note by employing a further type of symbol for 'expected utility'. For example, the expected moral utility of a believing which leads to an action \( a_1 \) (that is, the predicted or probabilified moral virtue or vice attaching to the believing, by the agent who does \( a_1 \), of the proposition upon which \( a_1 \) is based) would be represented as \( P_m(\beta^{a_1}) \). (We will not, of course, have to use this type of symbol in connection with the epistemic worth of a proposition — for it would be redundant to speak of the probable epistemic probability of a proposition, i.e., \( P_p P_p \).

We are now in a position to develop our schema. I have identified seven realms of evaluation and four categories of determinant for the rationality of an action. There will be a way to cumulate the evaluations
within each realm for the believing, the intention, and the action, and of course there will be available through the application of Rule 12 a verdict on the rationality (for believing simpliciter by the parties to the argument) of the proposition at issue. Hence one (though not the only) way logically to break down a rationality judgement on an action is to see it as composed in an ordered way from those cumulated verdicts of net worth within each realm of value. That "ordered way" is the key.

A judgement of net worth, for instance of net expected moral utility, will be represented as

\[ Pm(\alpha_1^a \cdot i_1^a \cdot a_1) \]

As a first step towards our schema, we need to develop a sub-schema that shows how the expected moral utilities \( Pm_{\alpha_1} \), \( Pm_{\alpha_1} \), and \( Pm_{\alpha_1} \) are combined to produce this net worth judgement. If we are able to discern the importance which the person who makes the judgement gives in that judgement to any one of the determinants over any other, we can express this preference quantitatively as a set of 'weight' factors. As a convenient though arbitrary stipulation, I require that these weights sum to 1.0. Doing so will keep between 0 and 1.0 the verdict of the net expected worth (for some realm of value) of the determinants of an action's rationality. The calculation of this net worth will then be a 'weighted addition': (again taking net expected moral worth as our example)

\[
Pm(\beta_1^a \cdot i_1^a \cdot a_1) = Pm_{\beta_1}^a \times w(Pm_{\beta}) + Pm_{\alpha_1}^a \times w(Pm_{\alpha})
\]

(where \( w(Pm_{\beta}) \), for example, is the weight factor given (as a matter of principle or policy) to the expected moral worth of believing which underlies any action as a determinant of the rationality of that action). If we replaced the symbol \( m \) here with a suitable variable, such as \( v \), which would cover \( m \) and all other names for realms of value, we would have a
general schema to use (along with an appropriate set of weight factors) to
generate all the judgements of net worth that enter into the following
larger schema.

This will be the schematic form of our rule of rationality for two-
role, zero-sum games of interpretive argument aimed at rational action. It
will show the calculation of the rationality of \( a_1 \) as following a similar
pattern of 'weighted addition'. But with this calculation, more addenda
are combined than in the above one, and of course a different set of weight
factors is used. In this case the weight factors represent the relative
preferences, of the person doing the judging, regarding the relevance of
the various realms of value to the action's rationality.

Schematic Rule 13:

The rationality of \( q_{a_1} \) is directly proportional to the rationality of
the believing that \( p \) upon which \( a_1 \) is based, which is directly
proportional to the rationality (for \( a_1 \)) of \( p \), which is directly
proportional to the rationality of \( a_1 \) (i.e., \( ra_1 \)); and

where all parties to the argument believe (as the basis for \( a_1 \)) that \( p \),
where \( a_1 \) is an action (based upon \( p \)) possible for some party to the
argument, and

where "\( r \) (for \( \beta^p \)) of \( p \)" is the rationality of \( p \) for the believing
(simpliciter) of \( p \) by the parties to the argument (as determined by
Rule 12),

\[
ra_1 = Ps(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times ws
+ Pa(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times wa
+ Pm(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times wm
+ Pe(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times we
+ Pi(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times wi
+ Pd(\beta^{a_1} \cdot i^{a_1} \cdot a_1) \times wd
\]

+ \( r \) (for \( \beta^p \)) of \( p \times w(r \) (for purposes of believing) \).
In this rule, "\( ws \)" for example, represents the weight given to prudential considerations. And "\( w(r_{\text{for purposes of believing}}) \)" represents the weight given to the kind of doxastic rationality which Rule 12 covers. Because the weight factors are again assigned so that they sum to 1.0, \( r_{w} \) will be between 0 and 1.0. Since these weight factors represent the relative degree and order of preference which the person making the judgement gives to the different realms of value, they represent what I earlier (2.322) called an "Inclusive" value judgement or policy. Our schema thus brings out the fact that a judgement about the rationality of an action is a judgement about optimum Inclusive value, given the action's nature and circumstances. The rationality then transferred to the proposition acted upon represents the credit which the proposition deserves for being sufficiently epistemically probable to help justify acting that way.

If a person plugs into the schema presented in Rule 13 his actual Inclusive value policy (and plugs into the net-worth formulae his sets of weightings) he will have a fully substantive rule for the rationality of actions, since all he then needs to generate a verdict on the rationality of some particular action is to plug his verdicts of expected utility into the net worth formulae and then the resulting verdicts of net expected worth for each realm of value (plus his verdict from Rule 12) into the rule.

Such a fully substantive rule would contribute to the possibility of his justifying his rationality verdict to a challenger. He would do this by presenting, in a rationality-justifying proposition (parallel in form to an epistemic-probability-justifying proposition), that rule together with his verdicts of net expected worth. If the challenger agrees with those verdicts and shares the Inclusive value policy he will (if he is consistent) grant the justification. Furthermore, if it turns out that most people whom we consider to possess personal rationality in Soft Rationalism's sense have very similar Inclusive value policies, and if we
can specify these as a set of weight factors, then we shall have codified
the principles underlying their common personal rationality. In other words,
if (as Lucas claimed) Reasonable Men judge alike as to which actions optimize
Inclusive value, and we can portray this as a common Inclusive value policy,
then we shall have revealed the 'buried logic' which they use.

7.64 Defensive comments.

Four defensive comments are in order. First, it is only given a large
assumption that we can take the above apparatus to explicate the basis upon
which we justify the rationality of a proposition believed or acted upon.
This is the assumption that the verdicts of net expected worth for each
realm of value, and both weighting policies (the one giving weights to
determinants, the other to realms of value) may be expressed in comparable
numerical terms. It must be admitted that there are two hindrances to such
an assumption. One is that a person might be able to express an order, but
not any degree, of preference within some realm of value. For instance, he
may be able to give an ordinal ranking of the moral worth of actions,
intentions and believings, but not a cardinal ranking, for he cannot say
by how much his predications differ in value. We can, however, surmount
this difficulty. As long as we remember to qualify as very approximate
the results of any calculations we proceed to make, we can assign a fictional
set of numerical rankings between the extreme negative (0) and positive
(1.0) which retains his ordinal preferences but uses an arbitrary unit of
moral worth. And in fact, our number assignment will not be arbitrary if
the person can make at least one quantitative comparison — e.g., saying
that he judges one object to be twice as morally valuable as another —
between objects to whose moral worth he can compare that of all the other
objects at issue.

The other hindrance is that even if we can make such number assignments
to his preferences within each realm of value, he cannot numerically rank
verdicts in different realms. But if he can rank comparatively the maximal
verdicts he gives in each realm, we can again assign fictional (and if he
can make one quantitative comparison, more-than-fictional) numbers to these
realm rankings. Then (always assuming his judgements to be consistent) we
can multiply the numerical value of any object within its realm of value by
the realm's assigned ranking number, and so numerically compare that
verdict with verdicts in different realms.

A second comment is needed to defend against the apparent inability
of my apparatus to codify the rationality judgements of the man whose
Inclusive value policy is something like the following: 'I always give
precedence to considerations of probability, except where these are just
about balanced for and against; then, I follow the verdict of net expected
moral utility, unless this is more or less balanced between the alternatives;
for in that case, I look to prudential considerations', and so on. But
we can accommodate this difficult policy within Rule 13, by treating it as
a series of different sub-policies to plug into Rule 13, governed by a rule
for shifting along the series. So while some people may have a fixed
Inclusive value policy, e.g.,

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others may have one with sub-policies 'lexically' ordered, e.g.:

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unless \( .4 \leq Pp \leq .6 \), in which case

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unless \( .3 \leq mp \leq .7 \), in which case

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1. A counter-example raised by R.G. Swinburne in private conversation.
Either kind of Inclusive value policy may be fitted into Rule 13.

The third comment concerns the question of how we would justify an Inclusive value policy. An ethic of belief will have to contain such a policy, at least implicit within it, because such Inclusive valuings have to be shared by all parties to an episode of justification. The source of conflict between two ethics of belief may then in some cases be a disagreement over Inclusive values. I would expect Kossman and Trevor-Roper to share an ideal of rationality which would be in turn opposed to that held by, e.g., a Soviet historian and loyal member of the Communist party. How might a proponent of either policy justify it, against its competitor, to some challenger?

If we reapply the lesson of epistemological modesty which we learned earlier (Chapter 4), we can say that he ought not to claim both that his policy is complete and universal in scope and that it is rational to adopt. Doing so would be self-refuting, hence would be futile, hence would be irrational in the practical sense. It seems to me that he might be able to refer 'upwards' for justification instead. That is to say, his Inclusive value policy may be generated from a description of the nature of man and the world and their interrelations. He may appeal to this for justification, if his challenger shares it with him. And even if his opponent disagrees there too, he might be able to argue for his 'world-picture' or 'over-view', against his opponent, using principles of good argument common to their respective epistemologies.

However, I do not yet understand the connection between a man's 'over-view' and his ideal of rationality. So I can not yet give the details of operation for the kind of justification which I am suggesting might be open.
For the same reason — that I would not know how to defend it — I shall not here lay down any Inclusive value policy as the correct one.

The fourth comment concerns the value of a schematic rule like Rule 13. Is this rule so formal as to be devoid of interesting content? No. Rule 13 is intended adequately to accommodate any substantive view of optimal Inclusive value. Hence it does not discriminate among these varying views of rationality. But to the extent that it does provide a structure in which real differences between them can be expressed succinctly — they amount to different weighting policies — Rule 13 is a theoretical advance.

7.7 Religion and rationality.

7.71 An answer to our initial question.

Our constitutive rules for the two-role, zero-sum game of interpretive argument about explanatory hypothesis K, played by our two historians, would answer the question, what would it be for a historian to be persuaded rationally to publicly agree that K? Rules 1 to 11 explicate the proprieties of play for this game. They also specify the conditions of its rational termination in the sense of practical rationality. This is because Rules 3 to 11, the Finish Rules, say when it is no longer practically rational for the players to continue making moves. If we take the pragmatic context of the game to be slightly larger, to include also the epistemic goal of producing rational believing (simpliciter) by the two players, then Rule 12 specifies the conditions of its rational termination, where rationality is here relative to those believings. If we expand the pragmatic context yet again, so that it encompasses all the pragmatic concerns which our historians could have had in mind, then the conditions of the game's rational termination relative to its goal of rational action would be specified by a rule generated out of schema 13. We would have a rule for our historians' argument which would be both formal and substantive as soon as we plugged
into Schematic Rule 13 weighting policies which the parties share.

But for the answer to the question asked at the beginning of this thesis, namely what would it be for a person to be persuaded rationally to believe that God exists?, we need not proceed past Rule 12. I suggest that the partly formal Dialectic for two-role, zero-sum games of interpretive argument provided by Rules 1 to 12 provides the method for answering that question — given some assumptions, of course. Among these are:

1. that the existence of God may be treated as an explanatory hypothesis resting within a maximal scope interpretive theory;
2. that the concept of epistemic probability is as outlined in my 'unified' theory, and the concept of rationality is as I have described it; and
3. that the objections to applying a mathematical calculus in justification of judgements of epistemic probability can be surmounted.

Given those assumptions, a person is persuaded rationally to believe that God exists if his opponent in a game of argument about this issue wins that game and if we judge that it achieves epistemic success — all according to Rules 1 to 12.

7.72 Our initial question is not the only important question.

The preceding answer is likely to leave the theist unsatisfied. He may feel that a Modest Formalist ethic of belief still makes such strict demands on believing that the kind of believing a Christian typically manifests can never be fully justified as rational. I shall conclude this thesis by offering a possible solution to this perceived problem.

Modest Formalism retains the Principle of Proportion. That is to say, it condemns as irrational any believing (taken as believing simpliciter) beyond the level of epistemic probability provided by the believer's
reasons. Let us call this 'over-believing'. According to Modest Formalism, over-believing is mis-believing. It will countenance as rational not over-believing, but only the various kinds of acting as if one believed more strongly than one does. The theist may resist Modest Formalism because over-believing seems to be exactly what faith (i.e., worship, prayer, etc.) demands of the Christian.

7.721 Apparent Christian over-believing.

For example, Hick and others¹ take an inductivist religious epistemology to be misguided from the beginning, whether or not it achieves any apparent success, because the typical Christian is putatively aware of God, rather than simply being of the putative opinion that an inferred entity called God exists. We can remove one element from this objection at once. As Mitchell points out (JRB 112 - 116), an entity, which a man takes rationally to be the best explanation among alternatives (though of course not a perfect explanation) of his experience, can legitimately be said to be encountered by that man in his experience, and this despite his admission (and ours) that he might be wrong in so interpreting his experience. So the core of Hick's objection must not be the kind of object God is regarded to be, but rather the way the Christian typically regards him. To believe in the existence of God to a degree proportional to some (non-maximal) level of epistemic probability leaves a residual propositional attitude of doubt, however niggling this may be. That attitude is incompatible with the propositional attitudes demanded by faith. As Penelhum puts it, the condition of Christian believers is such that if God does exist and the grounds to which they appeal in support of their belief

¹. John Hick, Faith and Knowledge, especially part II; Terence Penelhum, Problems of Religious Knowledge, pp. 112 - 125; Alasdair MacIntyre, 'The Logical Status of Religious Belief". 
are as they claim then Christian belief is knowledge. In other words, if it is rational at all, it must be rational to the maximum possible degree, because the belief is of the greatest degree possible.  

7.722 Attempted solutions to the problem.

Apart from judging such demands of faith to be straightforwardly irrational, there are five possible solutions to the problem posed by apparent Christian over-believing.

(i) Believing-in vs. believing-that. Mitchell employs this approach in the third part of JRB. He takes the unconditional attitudes expected of the typical Christian to be the non-propositional attitudes of believing in God — e.g., unrestrained attitudes of trusting reliance upon, and personal fidelity to, his God. These attitudes may fail or lapse while the Christian nonetheless continues to believe that God exists; therefore the latter is an attitude distinct from the non-propositional attitudes of faith. Because of this distinction, Mitchell suggests, the unwavering character of the Christian's loyalty need not carry over to his propositional believing. Complete commitment, in the sense of the strongest intention to make and keep the promises required in accepting God's offer of salvation, can be combined with a believing in God's existence that is merely confident, not convicted. Furthermore, he argues in Chapter 7, complete commitment may be a rational attitude to take if it is a necessary condition of adequately testing a system of explanations such as Christianity offers.

Now as long as we remember that this latter rational attitude cannot be that of tenacious believing (see 7.41), but must rather be the set of moral and other attitudes dictated by the propositional attitude of 'intention to test fully', Mitchell's approach may be fruitful. But it

1. Penelhum, op. cit., p. 132.
does not completely circumvent the objection from the intensity of Christian believing. This is because part of that objection proceeds from the fact of Christian conviction, not just Christian devotion — and there is a difference. Hick argues not just from the Christian's sense of moral duty to be faithful to God, but also from the lack of reserve in his worship, the total sincerity of his prayer, the loss of self-consciousness in his contemplation of God's majesty.

(ii) Another possible approach would be to deny that the unconditional conative and emotional attitudes involved in worship logically presuppose unconditional propositional attitudes about the object of that worship. But I do not see how this denial could be sustained. The strongest part of the Hick/Penelhum case is this question: how could a person fling himself upon the mercy of God, or praise to his fellows God's sacrificial love, if he is not quite sure of God's existence? He may of course make a show of public worship, like the Pharisees; but if he has even residual doubts, how can he in his heart worship, pray, or otherwise address God? His doubts must suggest to him that there is no one to hear his petitions.

Furthermore, the emotional components of an act of worship are not open to conscious control. Penitence, sorrow, celebration, or exultation are experiences we undergo in response to what we believe to be the situation. This suggests that an act of worship of very great emotional intensity can result from nought but a correspondingly strong belief in the presence of the object of worship.

(iii) A third approach would be to admit that some Christians do over-believe, but also to deny that the typical Christian really must do so. Ordinary Christians do not stand rock-firm and unwavering in their allegiance to or belief in God. This is true; but it is something they must confess. It represents a shortfall from an ideal of Christian behaviour and thought. If the average believer does not greatly over-believe, this is not for
want of trying.

(iv) A further solution which might be tried\(^1\) would be to give over-believing the chance of respectability under an inductivist epistemology by opening up the admissible grounds of epistemic probability for a theory. If we could do this, then some instances of over-believing could be seen as ordinary believing backed to the requisite degree on grounds of the newly-recognized type.

On our usual criteria of epistemic probability, the grounds we recognize are of two types: the state of the evidence for and against a theory; and the simplicity, elegance, etc., i.e., systematic virtues, of the theory as it is fully elaborated. The present suggestion is that we recognize a third source of probabilification of a theory, one which augments the confirmation given by the other two sources. This third source would be our reflecting upon the theory once we believe it to some extent.

This source must be distinguished from another phenomenon, one which poses a puzzle specifically for confirmation theory. Reflection upon the consequences, or appreciation of the intricacies, of a theory (of any type) may lead us to revise our judgement of its epistemic probability. Confirmation theory must decide whether this reflection is a source of new confirmation (after all, nothing has changed except our appreciation of the theory) or merely a recalculation of our previous estimate.

The present suggestion refers not to this problem, which arises for a theory of any type, but to the following effect, which seems possible only with theism. Once a person has a rational belief to some degree that God exists, he may reflect upon God's offer of complete salvation to him.

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1. At one time I believed that this solution would work. But I have abandoned it because of the objections to be mentioned which are in part due to comments by members of the Department of Philosophy, Dalhousie University, Halifax, Canada, on a paper entitled "Rational Theistic Over-belief" which I read to them in September, 1976.
This offer holds out freedom from all risk. May not that freedom include freedom from the residual epistemic risk of being wrong which the man would run were he to over-believe? If it does, then the existence of God entails the existence of an epistemic guarantee, to the effect that the over-believer is not at any real risk of being wrong. We are assuming the existence of God to be rational to believe to some degree. Any entailment of God's existence is likewise rational to believe to that degree. This applies to the belief that an epistemic guarantee exists. But what is that belief other than the judgement that the epistemic probability of God's existence is not just what it appears to be upon the evidential and simplicity considerations, but is really 1.0? If the man proceeds to over-believe completely by thinking it certain that God exists, might he not justify it through this source of extra probabilification?

This extra source is different from simple improved appreciation of a theory. The latter lends intrinsic probability to any theory at any time. The 'theoretical feedback' presently suggested, by contrast, only works for a theory positing an entity capable of giving an epistemic guarantee, and only after that theory can be rationally believed to some extent on other grounds. Justification from this source is not available, let us note, for a person's over-believing from an initial position of judging the existence of God to be less epistemically probable than the alternatives.

Unfortunately, this suggestion founders. It is logically impossible that God should be able to provide an epistemic guarantee. He cannot do, and should not be expected to do, the logically impossible. And it is logically impossible to change the logical relations between the theistic hypothesis and the propositions we take as evidence for (or against) it or as reasons of other kinds for or against it. Upon these relations rests the over-believer's initial estimate of the theistic hypothesis' epistemic probability. Of course, it is logically possible for God to cause the man
to hold different epistemic criteria. But surely this is not how the
divine epistemic guarantee would work (for it would interfere with the man's
freedom). The basic problem with the suggested 'theoretical feedback' is
that it would not posit any additional facts about the world or any useful
and possible attributes of God which we could take as signs of the truth
of the proposition that he exists.

7.723 'Experimental faith'.

The fifth solution, which is here proffered quite tentatively, would
be to question whether the demands of the Christian ideal of achieving
unreserved faith do really bear upon the issue of believing, as I have
strictly defined this concept. Does even the ideal Christian have to over-
believe, if he finds his reasons for belief in God's existence to be less
than conclusive? I suggested earlier (7.41) that faith, understood as a
propositional attitude distinct from the aspects of trusting reliance, etc.,
is akin to hoping that something is the case. But it is more than hope,
for, like the intention of the scientist to continue testing a hypothesis,
it motivates a search for more evidence or further reasons that will push
the issue of God's existence one way or the other. Therefore let us label
it the propositional attitude of 'experimental faith'.

It would require another entire thesis to investigate, through careful
description of historical examples of faith, analysis of Christian doctrines,
etc., whether what appears to be simple Christian over-believing may be
treated instead as experimental faith. I here simply suggest that it might,
because such experimental faith seems to admit of the possibility of being
rational along lines similar to the way outlined above in which believings
can be rational. It does sound peculiar to call any faith 'rational'. But
much of this oddness disappears when we notice that even though experimental
faith differs from believing in being susceptible to the influence of
non-epistemic valuings, this susceptibility is ordered and regular. The factors underlying it operate systematically. And that is at least a pre-condition of there being in it the sort of balance and proportionality which is the heart of all our notions of rationality.

7.724 An index of experimental faith.

Schematic Rule 13 above pertains to the rationality of an action based on the believing of some proposition. How shall we apply it or adapt it to cover the rationality (if there is such) of an action based, not on the believing of that proposition (call it q), but on the experimental faith that q? We can apply it in calculating an index of experimental faith, and then the rationality of experimental faith can be expressed as a threshold on that index.

The key is to notice that we can express the experimental faith which we believe underlies a person's action in terms of two hypothetical believings that q. Given what he believes to be the pragmatic consequences of his action and the expected utilities he assigns to these (which judgements we can solicit from him), we can judge the degree of rational believing that q which it would take to act with the degree of confidence he has shown. We can also judge the degree of rational believing that q which the person would have were he concerned solely with truth, for we can ask him how he judges the epistemic probability of q as against that of its alternatives (and so apply Rule 12). His experimental faith can then be expressed as the difference between these two hypothetical degrees of believing that q.

If we label the hypothetical believing (simpliciter) of q as $\beta^q$ and the hypothetical believing required for the actual action (supposing this again to be $a_1$) as $\beta^{a_1}$, then the rationality (for $\beta^q$) of q, divided by the rationality of $\beta^{a_1}$, will give us an index of the amount of experimental
faith present. The rationality (for $\beta^q$) of $q$ is calculated according to Rule 12. The rationality of $\beta^{q_1}$ is calculated using Schematic Rule 13 with the person's weightings for determinants and his Inclusive value policy plugged in. (Rule 13 can apply here because it says that the rationality of the believing upon which $\alpha_1$ is based is directly proportional to the rationality of $\alpha_1$, which that Rule shows how to calculate.) In this way we apply our earlier rules to calculate the amount of experimental faith present behind an action.

7.725 The potential rationality of experimental faith.

All our notions of rationality rest upon the concept of 'proper proportion'. Practical rationality rests upon the idea of a 'fit' between means and end. The rationality of believing (simpliciter) of a proposition depends on an equivalence between degree of believing and degree of probability (as compared with that of alternatives). The rationality of an action depends on whether or not the doxastic rationality of the underlying believed has a proper degree of influence as a guide to that action. I suggest that the rationality of experimental faith is likewise a matter of proper proportion; for we regard this propositional attitude as irrational when we judge it to be, in some set of circumstances, excessive. So we can express this idea of rationality of experimental faith as a threshold value of our index of experimental faith. This threshold's exact location will reflect our informal ideas of what proportion of motivating influence for doxastic rationality is a proper one.

What determines where the threshold lies for any particular action based on experimental faith? The kinds of relevant consideration seem very much like those which enter into our calculation of the rationality of an action based on believing: e.g., a man's preparedness to give a theory, which he believes to some extent, the 'benefit of the doubt' by acting quite
confidently upon an experimental faith in it would be considered irrational if it were out of line with the potential goods he can achieve by so acting, set against the potential damages which he may incur by so acting if his belief is wrong, set against the intrinsic moral value of so acting, etc. The proper balance is again, I suggest, the reflection of an Inclusive value policy. But whether this would need to be a special policy for judgements on experimental faith, or could be the same one we employ for judgements on believing, I do not yet know.

We may note parenthetically exactly how differing Inclusive value policies may be expressed in terms of the index of experimental faith. An Inclusive value policy enters the calculation of the denominator in the index, namely the rationality of \( \beta^{q_1} \). The greater the weight which the person's Inclusive value policy assigns to his epistemic probability judgements (and hence to his doxastic rationality judgements) as opposed to the weight given to his non-epistemic evaluations, then the closer will the rationality of \( \beta^{q_1} \) approach \( r \) (for \( \beta^q \)) of \( q \). But the numerator in our index just is \( r \) (for \( \beta^q \)) of \( q \). Thus it will be a fact that the greater weight a person gives on principle to considerations of epistemic probability, the closer will the value of the denominator in the index approach the value of the numerator. Since I am dealing with experimental faith as an explanation of apparent over-believing, the numerator is always going to be less than the denominator, i.e., the index will always be a fraction, e.g., \( \frac{8}{9} \). Thus the more important in an Inclusive value policy is epistemic probability, the closer to 1.0 will be the index of experimental faith of the person who acts on it. (1.0 would represent the absence of experimental faith.) Thus the level of such faith which that policy tolerates as rational can be expressed as how far from the value 1.0 it will allow the index to move.

Before finishing this section, I shall suggest, again only in a sketch, what seem to me to be the intellectual pressures governing the shape of a
person's (or our culture's) Inclusive value policy as used for judgements of the rationality of actions based on experimental faith. It seems to me that three forces operate. There is, first of all, the idea that experimental faith should only operate on the positive side of the ledger, so to speak. That is to say, I would not call the propositional attitude of the miner's wife, waiting for news after an accident, that of experimental faith. She must estimate the probability of her husband's survival to be quite low, certainly less than that of the alternative proposition, but she certainly acts as if it were much higher. Let us call her propositional attitude here one of pure hoping-that. Experimental faith, by contrast, will be (in part) hoping-that where the degree of epistemic probability, and hence of believing-that, is greater to some degree than that of any alternative. In that case the rationality of someone's experimental faith will depend on how much this attitude exceeds the person's believing-that. It seems to me that there are two opposing pressures which operate in the policy that sets the level of rational experimental faith. One is the need, born of the 'tyranny of time' and perhaps also the refusal of the theories at issue to recognize neutral stances, to have a large amount of experimental faith. This Jamesian pressure pushes the rational index of experimental faith away from the value of 1.0. Pushing that index towards 1.0 is the opposing pressure created by the need to be very careful, that is to say, by our tendency to require a higher level of epistemic warrant for the underlying proposition if the actions to be based on it determine our whole way of life, are in large part irreversible, may have significant effects on our fellows, and so on. I do not pretend yet to understand exactly how these pressures operate, nor even if they are the only ones present; I

1. There is, for example, the traditional claim by Christianity that to fail to respond positively to Jesus Christ is equivalent to rejecting him.
make the above as a suggestion for further research only.

7.8 A brief summary.

In summary, then, let us briefly rehearse the main movements of the argument in this thesis. First we developed the concept of an ethic of belief as an illuminating approach to epistemology. There are sufficient similarities between the meaning of epistemic and moral evaluative terms (though only similarities) to warrant our treating as a 'quasi-morality of trying to believe' any epistemology (along with the Inclusive-value stance in which it fits).

Then we examined two particular ethics of belief. One was Strong Formalism, the deductivist approach taken almost universally by the traditional philosophical approaches to religious belief. We compared and contrasted it with the informalist epistemology proposed by Soft Rationalism. In considering the arguments for and against both ethics of belief, we discovered that their proponents share a Foundationalism which allows an impasse to develop regarding the relative epistemic worth of the two ethics.

We were able to break this impasse (in the Soft Rationalist's favour) only by eliminating Foundationalism. This required going back to discover the threefold, but unified, nature of the meaning of epistemic terms wherein they promise reasons if challenged. That meaning is therefore, broadly speaking, justificational. But the activity of justification as currently practiced generates several principles (see 4.7) forbidding certain kinds of moves, particularly certain kinds of challenge, to participants in that activity. A challenger must have reasons for his challenge, and these must not be specific to his present case (unless excusing reasons are available, such as that his present case is unique). This Injunction Against Ad Hoc Reasons, and the Injunction Against Unspecified Criticisms, are two criteria of epistemic worth that must be common to all epistemologies which respect
the justificational nature of epistemic evaluation, including those of the Strong Formalist and the Soft Rationalist. But on the basis of these injunctions, the Strong Formalist's apparent tu quoque argument against the Soft Rationalist fails, while the latter's tu quoque against the former succeeds.

Despite its preferability over its rival, Soft Rationalism still has drawbacks, particularly in its Foundationalism. In the remainder of the thesis I outlined an alternative ethic of belief, Modest Formalism. This grants to Soft Rationalism the priority of personal rationality as a basis of epistemic justification. But it also seeks to replace this source where possible with a formal canon of epistemic evaluation. After rendering innocuous the concept of a rule of rationality, we proceeded to construct a partly formal Dialectic suitable for assessing some aspects of the epistemic worth of interpretive theories. It took the form of a set of constitutive rules for two-role, zero-sum games of interpretive argument which we saw could apply to actual examples, such as our historians' debate.

This Dialectic was not very useful for epistemic assessment as long as it represented only the procedural proprieties of good argument. In order to extend it so that it made some inroads into our more substantive standards of epistemic worth, we looked at the concepts of epistemic probability and rationality. We saw that these can be worked into our formal Dialectic to the extent that the relationships within our judgements employing those concepts can be represented by the mathematical calculus of probability and by my Rule 13. We saw that these concepts also fulfill our requirements for the epistemic modal concepts which historians and other interpretive theorists need to employ (thus rendering unnecessary any more esoteric concepts such as Soft Rationalism seemed to entertain). Finally, I also tried to suggest, in an admittedly preliminary way, how the theologian might apply such an inductivist epistemology to his own
maximal scope explanatory system and its competitors.
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