



Theism and Inference to the Best Explanation

Abstract

In this paper the author critically examines the explanatory role of theistic belief. Although talk of religious beliefs as explanations is commonly employed in the context of religious epistemology, it may also serve to simply characterise one of the functions of religious views of life. It is proposed that with some qualifications, the methodology known as 'inference to the best explanation' may serve to clarify this explanatory aspect of belief in God.

1 Introduction

There is a great divide among philosophers of religion between those who interpret religious belief and language in a realist and factual way, allowing for religion to have cognitive content, to make explanatory claims, and to be hypothetical in nature, and others who stress that the function of religion is not to explain, or state matters of fact, but rather to address questions of value and meaning, to express an attitude towards life, and so on. The truth, as on many occasions, is probably to be found somewhere in between these opposites, for example by distinguishing between primary and subsidiary functions of religious belief, or by pointing to the fact that any religious commitment presupposes certain factual claims. I, for one, have come to believe that religious belief involves both affective and factual or, as one may say, 'theoretical' elements and that it is false to play off these elements against one another. I believe, furthermore, that the factual aspect of faith is not peripheral to religion, but is an essential part of it in so far as religious commitment would become incoherent without it. Most religious traditions entail some kind of theoretical framework in terms of which believers understand their lives and the world as a whole.¹

It is in virtue of this theoretical aspect that religious schemes are liable to be interpreted as 23&-) *) (%/*#.² Various authors have stressed this aspect of faith. Basil Mitchell, for instance, writes that 'in its intellectual aspect, traditional Christian theism may be regarded as a worldview or metaphysical system which is in competition with other such systems and must be judged by its capacity to make sense of all the available evidence.'³ One other philosopher, while emphasising the personal nature of faith, states explicitly that 'religious belief-systems, whatever else they might be, are explanatory metaphysical theories. They are intended, and

1. See K. Ward, 'Religion and the Question of Meaning,' in: J. Runzo & N.M. Martin (eds.), 452-62) *%* 7 / 8 9%82 %* (52, /"-+ : 2-%7%/*# (Oxford 2000), 11-30.

2. That is not to say that religious belief is primarily concerned with explanation (it isn't), merely to point to one of its undeniable functions. Cf. P. Clayton, ; 3&-) *) (%/* 8"/ < =5>#%?# (/ 452/-/7> (New Haven 1989), 113-45 who stresses the priority of the 'meaning dimension' in religion.

3. Mitchell, 452 @' #(%A?) (%/* /8 : 2-%7%' # B2-%28 (London 1973), 99.

at least partly function as explanatory systems.⁴ Wentzel van Huyssteen agrees: ‘of central importance among the various functions of religious beliefs is that of explanation.’⁵ Arthur Peacocke, to quote one more author, argues that ‘considered in the light of the natural sciences, we do infer the existence of a creator God as the best explanation of all-that-is.’⁶ Clearly, in the light of such claims, the proper question is not whether religious belief explains anything,⁷ but whether it (it explains and what the explanation is of this kind of explanation. In the present paper I try to answer this latter question.

Usually talk of religious beliefs as explanations has its place in discussions about the nature and function of religious belief. In such discussions it is argued that belief in God or adherence to a particular religious system is rationally justified in virtue of the fact that it provides a good (possibly the best) explanation of some phenomenon or piece of evidence or, more generally, for the nature and existence of the world at large. I believe that to argue for religious belief in this way is problematic, not only because people do not ordinarily come to hold their religious beliefs on the basis of their explanatory power, but also because religious explanations are difficult to argue for on objective grounds and hence are not likely to convince those who do not already share one’s religious frame of reference. One might, however, also speak of religious beliefs as explanations, or of entire belief-systems as explanatory hypotheses, quite apart from the question of their rational justification. If one takes the religious perspective as one’s starting-point, it is perfectly natural to say that religious believers explain, by drawing on the resources of their faith and by taking the realist assumptions of their faith seriously, a lot of phenomena and events, indeed the world as a whole in terms of their faith. ‘Explanation’ in this sense is not primarily seen as an epistemic concept, but as a way to characterise one of the functions of religious convictions; the term is now employed not in the context of religious epistemology, but in the context of an analysis of the nature and function of religious views of life.

Although these two uses of the term ‘explanation’ are distinct, they may not be completely separable. For if it is a function of religious belief-systems to explain a variety of things in the world, it is not to be excluded (indeed: to be expected) that religious beliefs gain epistemic credit or intellectual respect if they happen to be very good explanations, that is, if they are being recognised as intellectually satisfying answers to certain why-questions. Clearly, the proposal to interpret religious belief-systems as explanatory schemes or to tease out the explanatory power (if any) of religious claims never arises from the conviction that only bad explanations can be had in this context! For this reason the enterprises of justification and explanation cannot be kept radically apart; at most they can be conceptually distinguished. When I tread – because of this close connection – on epistemological issues none the less in the ensuing discussion, my purpose

4. S.C. Thakur, *Religion and Science* (London 1981), 47.

5. J.W. van Huyssteen, *After Darwin* (Grand Rapids 1997), 231.

6. Peacocke, *After Darwin* (London 1993), 134.

7. On this question see my ‘Does Religion Explain Anything? D.Z. Phillips and the “Wittgensteinian Objection” to Religious Explanation,’ *Journal of Religious Philosophy* 29 (2002), 199–217.

will be to point to the difficulties involved in arguing for a belief on the basis of its purported explanatory power.

It is one thing to state that religious beliefs fulfil an explanatory function in the lives of believers, but quite another to spell out the nature of such explanations. The purpose of the present paper is to clarify the way in which religious belief-systems, Christian theism in particular, fulfil this explanatory role. I will propose that one way in which this may be done, is to interpret theism as an ‘inference to the best explanation’ (IBE). This term is primarily developed in the philosophy of science, but has many applications in other areas of philosophy as well. Although I am acutely aware of the profound differences between science and religion, there are, I believe, sufficient parallels between the use of IBE in a scientific and a religious context for it to be able to clarify the explanatory role of theistic belief. Because of the peculiar character of this kind of belief, however, I propose some important qualifications concerning the application of IBE to theism. In order to understand the qualified way in which theism counts as such, I first provide an analysis of IBE in a scientific context. Preceding this discussion, I make, in the next section, some general introductory comments on the nature of theistic explanation. For these comments Mitchell’s remark, as quoted above, will serve as a starting-point.

2 The Nature of Theistic Explanation

The first thing to note in Mitchell’s remark is the characterisation of theism as a 2-hypothesis or system. Now the term ‘metaphysics’ has meant many different things in the history of philosophy, so what does it mean in this context? Two well-worn uses of the term seem to apply here. First of all, to call the theistic hypothesis ‘metaphysical’ means, broadly speaking, that it is a hypothesis about all there is and seeks to explain the nature and existence of the world in the most general possible way. In this sense, metaphysics may be defined as ‘the systematic presentation of a vision of the world as a whole.’⁸ Or, as Ian Barbour puts it in the context of the dialogue between science and religion, ‘Metaphysics is the search for a set of general categories in terms of which diverse types of experience can be interpreted. An inclusive conceptual scheme is sought that can represent the fundamental characteristics of all events.’⁹ In so far as metaphysical theories describe, or purport to describe, what is ultimately real, they are by definition meta-scientific: they range quite literally ‘beyond the physical’ in that they include both what is and what is not investigated by the physical sciences.¹⁰ Such hypotheses may be philosophical in nature (e.g. idealism, materialism) or they may be derived from some religious tradition (e.g.

8. R.W. Hepburn, ‘Metaphysics,’ in: A. Richardson (ed.), *Metaphysics* (London 1969), 212.

9. I. Barbour, *Metaphysics and Science* (London 1998), 103. For this use of the term see also Van Huyssteen, *Metaphysics and Science*, 233; D.A. Pailin, *Metaphysics and Science* (London 1986), 21–2.

10. Cf. Thakur, *Metaphysics and Science*, 25: ‘[T]heories purporting to explain the nature and significance of the world (as against scientific ones which only describe specific aspects of it) are typically regarded as philosophical or, more specifically, metaphysical.’

the Buddhist idea that the phenomenal world is ultimately illusory or the theistic idea of a creator God). Although religion is distinct from metaphysics, religion implies metaphysical claims¹¹ and Christian theism, as an ‘explanation of all-that-is,’ is naturally seen to provide a framework that attempts to render intelligible all aspects of reality and experience at the most general level. When I speak of religious or other systems as ‘metaphysical theories’ in this paper, I refer to their purported all-encompassing nature.

But the hypothesis of Christian theism is also metaphysical in a further sense, in that its central postulate, God, is a suprasensible entity, i.e an entity beyond sense perception. God, according to traditional Christian belief, is a Spirit who is ‘other than’ the created world and so cannot be localised within the physical world.¹² For this reason the existence of God cannot be verified or falsified by empirical means. Still, as I will argue in due course, this does not imply that evidence is irrelevant to the theistic framework.

A final note here concerns the possibility of metaphysics; the possibility, that is, of this enterprise of constructing an all-encompassing view of reality. Some philosophers have expressed doubts as to whether this is at all possible—positivists, for example, on the grounds that we can never get ‘behind appearances,’ postmodernists and feminists on the grounds that such total views are alienating and oppressive, and yet others on other grounds.¹³ I cannot argue extensively for the possibility of metaphysics here. Suffice it to say that although many people may not be explicitly aware of the metaphysical ideas they adopt, or do not feel the need to articulate them, it would be fair to say that the way people live their lives presupposes some such ideas, presupposes, that is, some sort of worldview one way or another. Metaphysics, in other words, is simply inescapable. As Hegel once said, ‘The real question is not whether we should apply metaphysics; but whether our metaphysics is of the right kind.’¹⁴

The second thing Mitchell notes is that the hypothesis of Christian theism is in ?/<&2(%(%/* with other metaphysical systems. In our scientific era perhaps the most prominent of these metaphysical theories with which theism competes are

11. See J. Richmond, *452/-/7>) *+ 62() &5>#%?#* (London 1970), xi: ‘any satisfactory and healthy Christian theology simply cannot dispense with, or be constructed in isolation from some overall metaphysical scheme or vision which somehow articulates into a rational unity man’s experience and knowledge of the world, taken in the widest possible sense’; also Hepburn, ‘Metaphysics,’ 213.

12. This is only one meaning of the term ‘transcendence’ applied to God. On other senses of the term see Marcel Sarot, ‘Rational Theology and the Transcendence of God,’ in: Henri A. Krop, Arie L. Molendijk & Hent de Vries (eds.), *=(1452%#<J : 28") <%*7 (52 @' +2/1D5""%#(%) * 4") +%(/** (Leuven 2000), 257–8.

13. See P. van Inwagen, ‘The Nature of Metaphysics,’ in: S. Lauwrence & C. MacDonald (eds.), *D/*(2<&/") "> : 2)+%*7# %* (52 M/' *+) (%/*# /8 62() &5>#%?#* (Oxford 1998), 14–16; Van Inwagen & D.W. Zimmerman (eds.), *62() &5>#%?#J 452 B%7 N' 2#(%/*#* (Oxford 1998), 455–91.

14. Quoted in K. Ward, *)(%/*)- 452/-/7>) *+ (52 D"2) (%0%(> /8 L/+* (Oxford 1982). Cf. Michael Scriven’s characterisation of metaphysical questions as questions ‘to which everyone has an answer, whether he knows it or not,’ quoted in W. Hasker, *62() &5>#%?#J D/*#("' ?(%*7) , /"-+ 0%2C* (Downers Grove, Illinois 1983), 11; and Hasker’s own claim that metaphysical questions ‘are among the enduring questions of philosophy because they are among the central – and ultimately inescapable – issues of human life’ (16).

those that can be subsumed under the general rubric of 'scientism,' e.g. naturalism, materialism, physicalism and reductionism.¹⁵ Those theories also go beyond science in that they affirm, broadly speaking, that science can tell us what there is and that that is there is. But scientism is not forced upon us by the scientific enterprise; it makes an assertion about the ultimate nature of the universe of which science is at most a part. In a recent encounter with Richard Dawkins Keith Ward points out that materialism is itself a metaphysical belief that is not implied by scientific practice, nor based on scientific evidence. To say that it is, is to confuse science with metaphysics.¹⁶ Hence, it is not the case that all scientists are really materialists. On the contrary, Christian theism may be perfectly compatible with scientific practice and a scientifically informed view of the world. There is an incompatibility, however, between theism and rival metaphysical schemes, but these schemes must first be recognised for what they are. Fact of the matter is that there are always more candidates available when it comes to adopting a view on what in the world is real, on what one thinks the ultimate constituents are of the world we inhabit.

Such views may be functionally equivalent in so far as they play an essentially similar role in the lives of those who adopt them, but that does not imply that one cannot rationally argue for or against them. This brings us to the third element in Mitchell's remark, viz. the issue of *20%+2*?2*. It is sometimes said that metaphysical hypotheses are vacuous because it is impossible to argue for or against them on the basis of evidence; they are true or false, it is said, irrespective of the facts and so cannot be really about the facts after all. I think this accusation goes only so far as to say that metaphysical hypotheses are not empirical and hence cannot be checked by experiment. But then the objection assumes a very narrow view of what counts as 'good evidence.' Metaphysical hypotheses differ from scientific ones not only in their scope, but also in the methods used to assess the data within their relevance range. As Robert Prevost points out, 'one difference between the two [science and religion, WvH] is the place of experimentation. Religion, as well as a number of other disciplines . . . is not experimental in the way that the hard sciences are. But it is simply untrue to say that there is therefore no evidence for or against theism.'¹⁷

Furthermore, it should be noted that even in science, the wider in scope a theory, the more difficult it becomes to provide a straightforward proof or disproof of them. Since metaphysical schemes range literally about everything, that is, about the widest possible set of data, it is not surprising that it is difficult to argue for them in a precise manner. Moreover, unlike the ideal scientist who dispassionately tests a fairly clear hypothesis against a clear and observer-neutral amount of evidence, religious metaphysical theories deal with questions involving people's deepest attitudes and interests, and for this reason believers are much more personally involved in the subject-matter.¹⁸ As a corollary of this, disputes

15. For this classification see J. Hobbs, : 2-%7%' # ; 3&-) *) (%/*) * + E?%2* (%A? K+2/-/7> (New York 1993), xiv.

16. Ward, L/+P D5) *?2 Q F2?2##%(> (Oxford 1996), 98–104.

17. R.W. Prevost, = "/R)R%-(>) * + 452%#(%? ; 3&-) *) (%/* (Oxford 1990), 91.

18. See K. Ward, 1/-+%*7 M)#((/ L/+ (London 1982), 84; Thakur, : 2-%7%') * + :) (%/*)-

over evidence for and against are only to be expected.

But this does not imply that evidence, construed in a broad sense as any intellectual consideration that bears on the truth or falsity of metaphysical views, and so can be legitimately offered as a reason for or against them,¹⁹ is irrelevant to them. Comprehensive schemes of reality are confirmed to the extent that the facts are as one might expect if these schemes were true. Conversely, a metaphysical hypothesis is disconfirmed if the facts are really at odds with what one would expect given the hypothesis. A large number of thinkers from ancient times onwards have thought that the latter is the case with respect to the hypothesis of theism in view of the evil in our world. On the other hand, given the theistic hypothesis we might expect the world, among other things, to be rationally ordered, to display many instances of goodness and beauty, and people to occasionally experience the divine presence, and theism is confirmed to the extent that this is the case.

Even so it must be granted that the world can be interpreted more or less coherently in terms of more than one metaphysical theory. In contemporary philosophy of religion this insight has been forcefully argued by John Hick: ‘From our present standpoint, the universe is religiously ambiguous. Alternative total views confront one another, one interpreting . . . data naturalistically and the other religiously. Each may in principle be complete, leaving no data unaccounted for; and the acceptance of either arises from a basic cognitive choice, or act of faith.’²⁰ Still, the defender of the theistic hypothesis need not worry too much about this ambiguity of the world as far as metaphysics and religion are concerned. For one thing, as I will explore in more detail in due course, it is to be seen whether metaphysical theories fare much worse in this respect than some scientific theories. But more importantly, the theist’s adherence to belief in God is, in the last resort, not *R*)#2+ ’ &/ * this belief’s having great explanatory power; belief in God is not an %*82""2+ belief. Theistic belief is ultimately rooted in a response to a personal, transcendent reality resulting in a commitment to a life of prayer, worship and self-transformation.²¹ It is only from this basic commitment that the reflective theist extrapolates (if that is the right word), and tries to show that her belief makes good sense of all the evidence available. In this sense, Thakur calls religion ‘metaphysics enlivened by experience and personal commitment.’²² The point is that even if we grant the ambiguity of the evidence, evidence there is nonetheless.

3 Inference to the Best Explanation

As said, a comprehensive hypothesis about reality is confirmed or disconfirmed to the extent that the world is or is not as we would expect it to be in

D5/%?2, 102.

19. For this definition see W.J. Wainwright, =5%/#/&5> /8 : 2-%7%/ * (Belmont, California 1988), 200 and C. Franks Davis, 452 ; 0#+2*(%) - M/"?2 /8 : 2-%7%/ ' # ; 3&2""2*?2 (Oxford 1989), 3.

20. Hick, ‘The Rationality of Religious Belief,’ in: R.D. Geivett & B. Sweetman (eds.), D/*(2<&/") "> =2"#&2?(%02# / * : 2-%7%/ ' # ; &#(2</- /7> (Oxford 1992), 315. On the religious ambiguity of the world see also Hick, ! * K*(2"&"2)(%/ * /8 : 2-%7%/ * (London 1989), 73–125.

21. Cf. Ward, L/+P D5) *?2) * + F2?2##%(>, 96–8.

22. Thakur, : 2-%7%/ *) * + :)(%/*)- D5/%?2, 29.

case the hypothesis were true. Confirmation and disconfirmation is a process that goes with induction or inductive inference; deduction, by contrast, goes with certainty and proof. For our purposes two types of inference may be distinguished. Sometimes a hypothesis is arrived at by way of what is called ‘induction by enumeration.’ This method is inspired by the writings of the seventeenth century philosopher and writer Francis Bacon, and consists basically in listing a number of direct observations from which generalisations are drawn.²³ Another way in which to arrive at an explanation goes by a variety of names like ‘abduction,’ ‘hypothetical reasoning,’ ‘eliminative induction,’ and the like, and has more recently been discussed under the name of ‘inference to the best explanation.’²⁴ Scientists not merely gather data, they sometimes also launch hypotheses in order to see how much of the evidence gets satisfactorily explained on the assumption that the hypothesis is true. Here the process of arriving at an explanatory hypothesis has something of ‘throwing a net’ over the facts in the hope that it will ‘catch’ most of what is observed or otherwise known. Philosophers of science sometimes refer to these different types of reasoning as the ‘bucket’ and ‘searchlight’ method, meaning by this that scientists are not simply going around with a bucket in which to collect whatever facts they happen to stumble upon; they more often propose a specific hypothesis in order to see how well – like the beam of a flashlight – it illuminates one’s surroundings.²⁵

According to IBE, then, we infer from certain facts to a hypothesis that would, if correct, provide an explanation for them. This kind of inference is in fact a very familiar feature of our thinking, both in science, philosophy, and everyday life. For example, when the electric appliances in the house stop working all at once, I infer that a fuse must have blown, because that provides a perfect explanation for the event; a doctor infers that his patient has measles because that is the best explanation for the symptoms; scientists postulate unobservable entities to explain observable processes; philosophers infer to scientific realism as the best explanation for the success of science, etc. In a similar fashion defenders of theism can be said to employ a version of IBE to argue that the theistic hypothesis or the postulate of God provides the best explanation for the existence and nature of the universe, makes most sense of all the evidence available, accounts best for things, or claims similar to that. As these examples show, there is a wide variety of contexts in which some form of IBE applies—not the least in metaphysical contexts.²⁶

Although the examples given above are natural and straightforward, the

23. Bacon’s methodology is in fact more subtle than this short characterisation, but it captures the main idea. On Bacon see E. J. Dijksterhuis, *452 6275* (Oxford 1969), 396–403; O’Hear, *! * K * (" / + ' ? (% / * (/ (52 =5% / # / & 5 > / 8 E ? % 2 * ? 2* (Oxford 1989), 12–21.

24. See Gilbert H. Harman, ‘Inference to the Best Explanation,’ *452 =5% / # / & 5 % ?* - : 20% 2 C 74 (1965), 88–95; Peter Lipton, *K * 82 " 2 * ? 2 (/ (52 B 2 # (; 3 & -) *) (% / * (Oxford 1991); Philip Clayton, ‘Inference to the Best Explanation,’ *G > 7 / * 3 2* (1997), 377–91.*

25. I borrow this imagery from Robert T. Pennock, *4 / C 2 " / 8 B) R 2 -* (Cambridge, Massachusetts 1999), 53–4.

26. See Paul Thagard, ‘The Best Explanation: Criteria for Theory Choice,’ *452 @ / ' " *) - / 8 =5% / # / & 5 > 7 5* (1978), 92; Lipton, *K * 82 " 2 * ? 2*, 70–2.

method of IBE is not without its problems. The main problem arises from specifying the relation between evidence and hypothesis, and consequently with how one knows that an inferred hypothesis is true. Because for any body of data it is possible to dream up a number of hypotheses that would, if true, explain the evidence at hand. IBE, therefore, is always inference to the best of R -2 or (2^*) - explanations.²⁷ Gilbert Harman expresses the point in the following words:

In making this inference, one infers from the fact that a certain hypothesis would explain the evidence, to the truth of that hypothesis. In general, there will be several hypotheses which might explain the evidence, so one must be able to reject all such alternative hypotheses before one is warranted in making the inference. Thus one infers, from the premise that a given hypothesis would provide a “better” explanation for the evidence than would any other hypothesis, to the conclusion that the given hypothesis is true.²⁸

The question now is how to discriminate between possible explanations. How can one determine which of the explanations compatible with the evidence is in fact the correct one? Harman recognises that there is a problem about how one is to judge that one hypothesis is sufficiently better than another, and mentions such general criteria as simplicity, plausibility, comprehensiveness, lack of $5/?$ -ness, and so forth.

Since IBE is really inference to the hypothesis that best satisfies certain explanatory criteria, we are led to another chapter in the philosophy of science, namely to the possibility of theory-choice. This is a controversial issue, however, since philosophers of science are profoundly divided over the question of whether there are objective grounds on which to decide between (large-scale) scientific theories.²⁹ According to relativist readings of science, it is not possible to make such a choice, since the preference of one theory over another depends on a given ‘paradigm’ or ‘research tradition’ within which a scientific community at a certain time happens to deal with things. According to this interpretation, an assessment of the relative merits of rival theories against a given background of evidence is impossible: theories, it is said, are ‘incommensurable.’ Realist interpreters of science, on the other hand, maintain that scientific theories are true or false in virtue of how the world is, and that we sometimes have good reasons for believing one theory to be more approximately true than another. According to these philosophers, a rational choice between rival theories is possible, and hence it is possible to infer to a hypothesis that explains the evidence better than does any other.

As this brief survey illustrates, the possibility of theory choice is a problem in its own right and depends, not merely on the explanatory criteria one accepts, but on one’s reading of the scientific enterprise as a whole. Fortunately, for our

27. Lipton, *K*82"2*?2*, 59–60.

28. Harman, ‘Inference to the Best Explanation,’ 89. For this reason E. McMullin, ‘Explanatory Success and the Truth of Theory,’ in: N. Rescher (ed.), *E?%2*(%A? K*T' %"> %* =5%/#/&5%?) - =2"#&2?(%02* (New York 1986), 65 correctly observes that it would be better to speak of inference $8"/<$, not $(/$ the best explanation.

29. See on the following W.H. Newton-Smith, *452 :)(%/*)-%(> /8 E?%2*?2* (London ⁸1999).

present purposes we do not have to have an entire philosophy of science. It is more helpful, I suggest, to reverse the matter, and raise the question of whether, among the explanatory virtues applicable to scientific theories there are some that make it especially difficult for metaphysical hypotheses, like theism, to count as an explanation or best explanation to which one might infer.

Among the criteria mentioned, the rule against *ad hoc*-ness is likely to raise a special obstacle for metaphysical theories.³⁰ Sometimes it is said that a necessary requirement for good explanatory theories is that they are not merely designed to account for previously known observations (*ad hoc* explanations);³¹ they must also lead to new and corroborated predictions. For if they do not, so the argument goes, we are stuck with the problem at issue, for then, given enough imagination, almost any hypothesis will do for almost any body of data. Hence, mere fit with data is not enough for a theory to have explanatory power; it must, if it is to be acceptable, also have *ad hoc*-ness. Thus, to use a classic example from the history of science, Einstein's gravitational theory was a good explanatory theory precisely because it not merely explained the previously observed phenomena covered by Newton's laws; in addition it also predicted further observations, and these predictions were confirmed by Eddington's eclipse experiments in 1919.³²

It should be clear that this requirement raises a problem for the theistic hypothesis, because, on the face of it, theism merely provides an explanation of facts already known and does not lead to new and testable predictions. It could be argued, of course, in the manner of John Hick, that theism will be vindicated in the eschaton,³³ but this 'prediction' possibly lies in a very distant future, and does, in any case, not suggest an agreed means of confirmation. So it would be fair to say that theism is manifestly *ad hoc*: it merely explains retrospectively, not predictively. How, then, can it count as a good explanation?

In response to this objection three points may be made concerning the rule against *ad hoc*-ness that significantly relativise the applicability of this requirement to scientific theories, and so considerably weaken the force of the objection to theism based on it. First of all, the celebrated cases often referred to in connection with the *ad hoc*-ness requirement – like the theories of Newton and Einstein – are not entirely accurate historically. As some have pointed out, these theories were initially accepted on the basis of their ability to account for known observations, that is, for their ability to solve 'old problems,' and acquired universal reception long before the required confirmation of the relevant predictions was given.³⁴ Thus Clark Glymour argues that, 'Scientists commonly argue for their theories from evidence known long before the theories were introduced. Copernicus ar-

30. For the following discussion I am indebted to M. Banner, 452 *et passim* (*Journal of Philosophy* 87 (1990), 131–42).

31. J. Kim, 'Explanation in Science,' in: Paul Edwards (ed.), *Philosophy of Science*, Vol. II (London 1967), 161.

32. See on this K. Popper, *Objective Knowledge* (London 1972), 35–6.

33. Hick, 'Theology and Verification,' in: Mitchell, 452–55 (*Journal of Philosophy* 68 (1971), 53–71).

34. See Banner, *et passim* (*Journal of Philosophy* 87 (1990), 136–7).

gued for his theory using observations made over the course of millennia, not on the basis of any startling new predictions derived from the theory.³⁵ Further, the) + 5/?-ness requirement is too restrictive to be applied rigorously to all theories for there are some well established scientific theories that do (as yet) without confirmed predictions. Darwin’s theory of evolution by natural selection is a case in point: this theory is also manifestly) + 5/?, for it was probably designed with the facts in mind, as a response to them.³⁶ Finally, the rule against) + 5/?/ness does not provide the hoped for means of demarcating scientific from non-scientific theories (Popper). As Banner argues, the criterion ‘fails to solve the very problem it was designed to solve, for just as any number of theories may fit with known observations, so any number of theories may yield confirmed predictions.’³⁷

In the light of this, we may conclude that success in suggesting new and corroborated predictions is not a necessary requirement for the acceptance of an explanatory theory. Hence there is no reason to think that theism, though being) + 5/?, cannot count as a good explanation. If a theory’s explanatory power is foremost a measure of its observational success, i.e. of how well it accounts for known observations,³⁸ and not necessarily of its predictive success, the argument in favour of theism will largely depend on its power to do justice to our experience of the world—in the widest possible sense of that term.

4 Formal Versus Informal Reasoning in Science and Religion

It would still be interesting to know whether via a careful evaluation of rival hypotheses in the light of certain explanatory criteria, we may be confident to arrive at truth. It seems that the answer to this question must be in the negative in so far as non-deductive reasoning very rarely provides us with absolute certainty or proof. It is in the nature of this type of inference that the most we can aim at is a high degree of confirmation. Explanatory power is never a 7') ") * (22 for truth; it is at most #' 772#(%02 /8 the truth of a theory.³⁹

Apart from this formal point, there are basically two traditions within the philosophy of science pertaining to the issue of theory choice: a formal tradition and an informal one.⁴⁰ Both traditions admit that the process of theory choice is guided by certain explanatory virtues or criteria like coherence, simplicity, observational success, and so on; but in addition to that formalists claim that this process can be represented in formal terms to the effect that, in the case of two (or more) rival hypotheses and a given body of evidence, it is possible to show which of these hypotheses is objectively more probable on the evidence and hence more likely to be true. Usually proponents of this view invoke a version of the probability calculus known as Bayes’s theorem by means of which they attempt

35. Glymour, 452/">) * + ; 0%+2*?2 (Princeton 1980), 85–6.

36. Banner, @' #(%A?) (%/* /8 E?%2*?2, 125–30, 137–8.

37. @' #(%A?) (%/* /8 E?%2*?2, 135; Newton-Smith, :) (%/*) -%(> /8 E?%2*?2, 88.

38. Cf. Newton-Smith, :) (%/*) -%(> /8 E?%2*?2, 224: ‘In the long run, then, the ultimate test of the superiority of one theory over another, is observational success.’

39. McMullin, ‘Explanatory Success,’ 57.

40. For a helpful survey of both traditions, see e.g. M. Stenmark, :) (%/*) -%(> %* E?%2*?2P : 2-%7%/ *) * + ; 02">+) > 9%2 (Notre Dame 1995), Chs. 3 and 5.

to assign values to the degree of support the evidence lends to each of alternative hypotheses. Obviously, the hypothesis with the highest probability is to be selected as the 'best explanation' for the evidence at hand.

However, this formal approach inherits two notorious difficulties. There is, first of all, the practical problem that Bayes's theorem is highly idealised in character, and therefore cannot be applied very well to concrete physical theories.⁴¹ But more importantly, there is reason to believe that the theorem cannot work, even in principle. Because for Bayes's theorem to work, it is essential to assign a value to the 'prior probability' of both the hypothesis and the evidence at hand, that is, to their initial probabilities relative to background knowledge alone. Yet it has been objected to this that the assignment of such 'priors' is a highly subjective matter because of its dependence on the background knowledge of working scientists, and that for this reason the calculated probability of a hypothesis on given evidence will vary with the varying personal estimates of the relevant probabilities by individual scientists.⁴² In response to this it is sometimes argued that the application of certain explanatory criteria will enable scientists to assign a value to the relevant prior probabilities. Yet the problem with this suggestion is that scientists are profoundly divided, not merely over the proper analysis and application of such criteria, but also over the question of which criteria to accept in the first place.⁴³ It seems, therefore, that an appeal to evaluative criteria will not suffice to overcome the subjectivity involved in the use of Bayes's theorem, and that the theorem, despite its portrayal as an objective mode of inference, for its 'input' necessarily relies on informal, intersubjective knowledge, estimations and intuitions.

In view of these difficulties, many contemporary philosophers (the 'informalists') tend to be sceptical about the usefulness of formal theories of probability and confirmation in the context of scientific theory choice. They deny that there is a formal, rule-governed decision-procedure for determining whether a given theory is superior to its rivals. They reject Bayes's theorem, arguing instead that scientists have to rely on their best judgement as to which of rival hypotheses to accept for the evidence on a given occasion. On this view, what scientists have to go on when adjudicating between different candidate theories are certain explanatory virtues; but even if they would agree on the proper set of criteria, this would not guarantee a unanimous outcome since they may still differ in the application of these criteria.⁴⁴ Furthermore, scientific values may easily conflict with one another: one hypothesis may be very comprehensive, another may fit best with background knowledge, a third one may be simpler, and so on and so forth. On the informalist's view, it ultimately depends on the judgement of the individual scientist

41. O'Hear, *Bayesian Epistemology*, 49; R.N. Giere, *Science and Cognitive Psychology* (Chicago 1988), 149–56.

42. See A. Chalmers, *The Conscious Mind* (Oxford 1996), 174–92, esp. 178, 188; O'Hear, *Bayesian Epistemology*, 48; H. Putnam, *Reason, Truth and Probability* (Cambridge 1981), 190–2; Newton-Smith, *Science and Rationality* (Oxford 1981), 118–21; Banner, *Bayesian Epistemology*, 380; Clayton, 'Inference', 380.

43. Prevost, *Bayesian Epistemology*, 37.

44. E. McMullin, 'The Shaping of Scientific Rationality: Construction and Constraint,' in: McMullen (ed.), *Bayesian Epistemology* (Notre Dame, Indiana 1988), 3ff.

to $+2\%+2$ which of these values is to be given preference over another on given occasions.⁴⁵ In sum, when inferring to the best explanation several explanatory criteria together with the skills to apply them work together in the appraisal of theory.

These points also have their application in the philosophy of religion. When it comes to arguing for metaphysical theories or worldviews, like Christian theism, defenders usually rely on ‘cumulative case’ arguments. That is, in attempting to establish a conclusion in favour of a metaphysical hypothesis, they adduce a variety of diverse types of considerations that have a bearing on the hypothesis in question.⁴⁶ Taken singly, it is realised that none of these considerations suffices to establish the conclusion, but taken together it is believed, or in any case hoped, that they make an impressive case for it.

In addition to this, some philosophers of religion believe that this cumulative case argumentation can be represented in a $\frac{P}{L} < \frac{R}{R-2}$ - manner. In his 1982; 3rd (2nd/8 L/+), for example, Richard Swinburne represents the evidence for theism in terms of Bayes’s theorem, arguing that, taken jointly, the evidence available renders the theistic hypothesis $\frac{P}{L} < \frac{R}{R-2}$ (5) * */(. Put more precisely, Swinburne believes that all the evidence considered provides, in his terminology, a good P-inductive argument for theism, i.e. an argument that raises the overall probability of the theistic hypothesis above 0.5.⁴⁷

Because of his reliance on Bayes’s theorem, however, Swinburne’s argument becomes necessarily infected by the problems concomitant to this theorem. Because in order to determine the explanatory power of theism, we need to know both the prior probability of there being a God, and the prior probability of the evidence considered. In addition, we need to know the probability of the evidence on the hypothesis of God, i.e. the predictive power of theism relative to the evidence considered. The trouble with this, however, is how to determine these probabilities. How likely is it that there be a God anyway? It is doubtful whether this question can even be meaningfully answered apart from anything to go on, that is, in the absence of any considerations whatsoever that might be interpreted as pointing in the direction of God. Likewise it is difficult to assign a value to the initial probability of some pieces of evidence traditionally cited in theistic arguments.

It is well known that Swinburne appeals to the criterion of $\frac{P}{L} < \frac{R}{R-2}$ to determine the comparative values of the relevant prior probabilities.⁴⁸ However, this suggestion runs up against three much discussed difficulties.⁴⁹ First of all, simplicity is itself a notoriously difficult notion: philosophers do not agree on the proper analysis, let alone the application, of the concept. Second, it is by no

45. Cf. Newton-Smith, :) (%/*) -%(> /8 E?%2*?2, 232–5. On the role of judgement in science see also Harold I. Brown, :) (%/*) -%(> (London 1988), 137–77; McMullin, ‘Values in Science,’ = "/?22+*% 7# /8 (52 =5%/#/&5> /8 E?%2*?2 ! ##/?%) (%/* 2 (1982), 3–28, esp. 14–8.

46. W.J. Abraham, ‘Cumulative Case Arguments for Christian Theism,’ in: W.J. Abraham & S.W. Holtzer (eds.), 452 :) (%/*) -%(> /8 : 2-%7%/’ # B2-%28 (Oxford 1987), 17–37.

47. R. Swinburne, 452 ; 3rd (2nd/8 L/+, rev. edn. (Oxford 1991), 7ff., 14–19, 291.

48. KR%+, 56ff., 93–7, 102–6.

49. On the first two points see W. Derkse, W* E%< &-%?%(>) *+ ; -27) *?2 (Delft 1992).

means clear that simplicity is an indicator of truth, or even a sign of the long term success of a theory: many philosophers of science tend to see simplicity therefore as a pragmatic rather than an epistemic criterion. From the theological side, finally, Swinburne's claim that 'God is simple' has been disputed as being either inaccurate or subjective.⁵⁰

Because of these and other difficulties, the majority of philosophers of religion doubt whether numerical or even comparative values can be assigned to the alleged probabilities involved in a cumulative case for theism. Many claim that the value one assigns to the relevant terms ultimately and inescapably depends on one's intersubjective beliefs about the world. In the debate between theist and atheist, therefore, or more generally between adherents to different metaphysical schemes, the theorem 'can only be used to express our judgements, not to help us reach them.'⁵¹ Like their 'soft rationalist' colleagues in the philosophy of science, proponents of 'informal reasoning' in religion believe that, although there are general guidelines and criteria to be applied, no numerical or even comparative values can be assigned to the various pieces of evidence and intellectual considerations that can be brought to bear on the truth or falsity of theism or some other metaphysical scheme. A corollary of this seems to be that it is difficult to state with any degree of confidence or precision that a certain metaphysical view is objectively more probable on the evidence than another—a point that will emerge more clearly in the next section.

5 Criteria for Assessing Worldviews

Above we have looked at the question of whether after the application of criteria guiding the process of IBE one can be sure to infer to a hypothesis that is probably true. It was pointed out that formalists both in the philosophy of science and in the philosophy of religion would want to go quite far in answering this question in the affirmative: they believe that in the light of certain evaluative criteria a more or less unambiguous case for the 'best explanation' can be made. This formal approach was shown to be fraught with difficulties, however, and was seen in the end to rely on informal reasoning procedures instead.

That it not to say that general criteria may not be legitimately appealed to when inferring to a certain explanation. Criteria and guidelines do apply, and this is so in science as much as it is in religion. Science, however, is not religion, and this implies that the criteria for assessing religious (or secular) worldviews are not necessarily the same as those applicable to the assessment of large-scale scientific theories. On the other hand, the criteria for assessing both kinds of theories are not wholly dissimilar. According to William Hasker, metaphysical theories 'function for us in ways that are similar, though not identical, to the functioning of scientific theories; they serve to unify areas of our experience and make them understandable to us. If this is so, then it ought to be possible to

50. See e.g. K. Ward, *The Simplicity of God* (London 1982), 99: 'It does not seem very plausible to say that the necessary and incomprehensibly great creator of all is a very simple being'; A. O'Hear, *The Simplicity of God* (London 1982), 113–4.

51. Banner, *The Simplicity of God*, 144.

evaluate metaphysical theories using criteria which are similar to those used for scientific theories.⁵² In this section I will discuss some criteria applicable to all-encompassing views of reality. It seems to me that with some exceptions and qualifications, many criteria for the assessment of entire worldviews can be borrowed from those current in philosophical theology.⁵³ These criteria have a recognisable continuity with those applicable to any explanatory hypothesis, be it scientific, philosophical or religious in character. They are to be taken as functional, ‘good-making features’ or ‘success conditions’ in that they must be met by comprehensive conceptual schemes to adequately fulfil their explanatory role.

To begin with, comprehensive views of reality should be internally consistent and display as great a measure of coherence as possible. Obviously, a self-contradictory worldview cannot provide an adequate explanation, solution or illumination of anything whatever, since a contradictory explanation at the same time nullifies what it attempts to propose and thus fails to propose or explain anything in the first place. It follows from this that though no metaphysical scheme can be confirmed solely on logical grounds, it can in principle be refuted on such grounds alone. But the tenets of a metaphysical scheme should not only be free from contradiction, they should also hang together in some ways. It might be difficult, on closer inspection, to say what exactly it is for different propositions, beliefs and concepts to cohere with each other, but most of us, I believe, share an intuitive understanding of this notion. Relevant to the coherence of a theory is also its lack of *ad hoc*-ness, in the sense of containing auxiliary hypotheses designed merely to explain away counter evidence; for the more *ad hoc* hypotheses a theory needs, the less coherent it will be.⁵⁴ The importance for worldviews to display a measure of coherence and interconnectedness is that this enables adherents to understand the whole of their experience much better than when their convictions and actions are just a bunch of unrelated ideas and practices without any systematic order.

Second, the facts⁵⁵ that a worldview purports to explain must actually exist.

52. Hasker, *62*(*5*)#?, 25–6.

53. See e.g. V. Brümmer, ‘The Intersubjectivity of Criteria in Theology,’ in: M. Olivetti (ed.), *K*(2) R U 2 ? (% 0 % X 2 ((5 X / - / 7 % 2 & 5 % / # / & 5 % T ' 2 (Rome 2001), 165–90; I. Barbour, 6 > (5 # P 6 / + 2 - #) * + =)) + % 7 < # (London 1974), 142–6; G. van den Brink & M. Sarot, ‘Contemporary Philosophical Theology,’ in: id. (eds.), *Y * + 2 " # () * + % * 7 (5 2 ! ((" % R ' (2 # / 8 L / + (Frankfurt a / M 1999), esp. 18–28; Hasker, 62*(*5*)#?, 25–8; Wainwright, ‘Worldviews, Criteria and Epistemic Circularity,’ in: J. Kellenberger (ed.), *K*(2) " " 2 - % 7 % / ' # 6 / + 2 - #) * + D " % (2 " %) (London 1993), 87–105; id., = 5 % / # / & 5 > / 8 : 2 - % 7 % / * , 171ff.; M. Prozesky, ‘Proposals for a Criteriology of Religion,’ @ / ' " *) - 8 / " (5 2 E (' * + > / 8 : 2 - % 7 % / * 5 (1992), 67–75; K.E. Yandell, *D 5 " % # (%) * % (>) * + = 5 % / # / & 5 > (Leicester 1984), 272–85. Some criteria prevalent in philosophical theology that would not seem to be directly related to the 23 & -) *) (/ " > function of religious belief-systems are e.g. faithfulness to authoritative texts or existential adequacy.***

54. Note that I use the notion of ‘*ad hoc*ness’ in a slightly different, though related, sense here than I did §3 above; here it refers to single hypotheses that are added to a theory to save it from falsification, whereas earlier it referred to entire theories (large-scale hypotheses) that are merely designed to account for already known observations and that lack predictive success. While the former always discredits an explanatory theory, the latter does not do so necessarily. The relation between the two uses of the term is its qualifying hypotheses that are being designed % * " 2 # & / * # 2 (/ (counter)evidence.

55. For an analysis of ‘fact’ see V. Brümmer, *452*(*- / 7 >) * + = 5 % / # / & 5 % ?) - K * T ' % " > (London*

For example, various forms of theism explain the order found in the universe by relating it to the intelligent design of a personal creator. But they obviously succeed in doing so only if this order (e.g. fine tuning) is an objective feature of our world. Similarly, the origin (in the sense of a beginning) of the universe can only be successfully explained theistically if the universe has in fact a beginning, i.e. if it is not eternal. William Wainwright points out that some metaphysical systems offer an explanation of the objectivity of moral and aesthetic values, and that these systems are defective if these values are not objective after all.⁵⁶

It should be noted that it might not always be possible to demonstrate the objectivity or factuality of the features liable to religious explanation apart from the view in question for the way the evidence is seen and represented often partly depends on the conceptual scheme which it is supposed to support.⁵⁷ This is so because metaphysical views typically "2#?"%R2 what one should be prepared to count as evidence in the first place: they define the parameters within which experience and evidence is to be understood.⁵⁸ Del Ratzsch illustrates this point with the following example:

[T]he Christian might, for instance, hold that the existence of a world, or the existence of life, or her own existence, or perhaps some sort of experiences she has had, can best be explained by reference to certain religious principles or to a Creator. She believes that those things constitute evidence for her beliefs. When the religious critic says that there is no evidence, he certainly does not mean to be denying the existence of the world, or of life, or of himself, but is serving notice that he does not accept the background principles (5) (7%02 20%+2*(%) - #() (' # (/ those things.⁵⁹

It is evident, then, that the facts by themselves do not generate the categories into which they ought to be placed or the theory in the light of which they ought to be understood (the Baconian error); rather, we bring our interpretations to the evidence in the form of conjectures, hypotheses and organising, explanatory principles.⁶⁰ In so far as the evidence gets inevitably coloured by the metaphysical scheme within which it is interpreted, any arguing for a particular worldview necessarily has an element of circularity about it.

If this is right, Wainwright is overly restrictive when he says in the context of a comparison between theism and naturalism that 'theists must be careful not to beg the question by appealing to values that couldn't be acknowledged by non-theists. For similar reasons, those who are sympathetic to naturalism shouldn't base their decisions on claims that are plausible only if naturalism is true.'⁶¹ If it is true, as Wainwright also acknowledges, that people's assessments are necessarily influenced by their 'metaphysical commitments and predilections,'

1981), 276ff.

56. Wainwright, =5%/#/&5> /8 : 2-%7%/*, 171.

57. A. Plantinga, 452 4C%* =%-) "# /8 D5"%#(%) * E?5/-) "#5%& (Grand Rapids 1990), 24-7 makes this point in relation to the evidence for biological evolution.

58. Hasker, 62() &5>#%?# , 26; Ward, L/+P D5) *?2 Q F2?2##%(>, 100.

59. Ratzsch, E?%2*?2) * + K(# 9%<%# (Downers Grove, Illinois ²2000), 102, italics added.

60. KR%+, 19-20.

61. Wainwright, =5%/#/&5> /8 : 2-%7%/*, 175.

it seems rather inevitable to argue from premises peculiar to one's own specific perspective.⁶² Obviously, this does not preclude there being massive cases where adherents to different metaphysical schemes agree on the facts—on the findings of the empirical sciences, for example. But the possibility and desirability or even expediency of seeking common ground does not guarantee that it can always be found.

What proponents of a metaphysical scheme need to do, in any event, is to show that the universe can reasonably be interpreted as possessive of such objective features.⁶³ Consider, for example, a limited metaphysical theory like belief in other minds: though I will never be able to show that it is an objective feature of our world that other people really have other minds rather than being intelligently designed robots, all the argument in favour of belief in other minds needs, it seems, is that the actions of other people can reasonably be seen as springing from their having other minds.

A third and related criterion for good metaphysical theories is that they are compatible with well-established facts and theories. They should not contradict the findings of the sciences, for example. If they do entail premises that go against current scientific knowledge they seem to start with a strike against them. Christian theism, for example, is sometimes construed in ways incompatible with the theory of evolution by natural selection or current estimations concerning the age of the earth. It would be natural to suppose that the burden of proof is on creationists to show the inadequacy of such widely accepted scientific theories. There will, of course, always be the possibility of dispute as to whether something is as 'well-established' or 'beyond reasonable doubt' as it is supposed to be, but generally speaking it would seem a rational procedure for metaphysicians and religious thinkers to accept current scientific knowledge. If our doctor tells us to take a certain drug against a disease or discomfort, most of us comply without argument; so why object to cosmologists telling us that the universe to the best of their knowledge is fifteen billion years old, or to biologists telling us that the evidence in favour of evolution is overwhelming? For forms of reductive scientism, on the other hand, it will be difficult to explain other features of the universe, such as the apparent independence and singularity of phenomena of value and beauty, consciousness and purpose, love and religious experience. On such views, such phenomena are likely not to get explained but reduced to something other than what they appear to be.

It follows from this that a theistic explanation of the universe is never completed, but always remains subject to revision. In the words of John Macquarrie: 'The theological task needs to be done over and over again, as new problems, new situations, and new knowledge come along.'⁶⁴ Thus the facts which theism seeks to explain are not settled once and for all. Rather, there is a constant interaction

62. See on this A. Plantinga, 'Advice to Christian Philosophers,' (1984), esp. 265.

63. Ward, :)(%/*)- 452/-/7>, 99.

64. Macquarrie, = "%*?%&-2# /8 D5""#(%)* 452/-/7>, rev. edn. (London 1977), v; see also 30–33.

between what at one point in time counts as ‘established facts’ and the religious explanation of those facts. Thus, before the mechanisms behind biological evolution were discovered, it was not possible for Christian theists to show how the capacity of cosmic evolution to produce rational, personal beings like humans can be seen to fit into a Christian perspective on reality. On the other hand, the relatively recent discovery of the ‘fine-tuning’ of the initial conditions of our space-time universe is something theists are likely to see as evidence supporting the existence of a cosmic intelligence.⁶⁵ The acceptance of an evolutionary picture of the cosmos, in other words, enables new versions of the teleological argument to arise from the ashes of the old. In the words of Garth Hallett: ‘In response to recent scientific findings, the teleological argument has undergone dialectical development. What in Hume’s day looked like products of intelligent design now look like results of natural evolution, but natural evolution itself – from big bang to life, sentient beings and *Homo sapiens* – now looks like the products of supremely intelligent design.’⁶⁶ It would be rather simplistic to regard this ongoing process of reinterpretation and reformulation of the tenets of a certain worldview in the light of new knowledge as a definite falsification of such views, or worse even as an indication of the impossibility of such enterprise. As argued earlier, having some idea concerning the ultimate nature of things is just inescapable.

A further good-making feature of worldviews is scope or comprehensiveness. A truly comprehensive worldview should be able to account for all aspects of reality and human experience, and not leave certain aspects out of the picture. Thus views that explain humanity’s scientific, moral, aesthetic, and religious experience are superior to those that only illuminate science.⁶⁷

Simplicity, as briefly noted, is a controversial criterion for assessing alternative explanatory theories. Philosophers of science tend to regard it as a pragmatic rather than an epistemic value. In a metaphysical context we may also opt for a pragmatic interpretation of this concept. Clearly, regarding religious worldviews that are ultimately based on revelation, it would seem odd to say that one such view is more likely to be true because on the face of it, it is more elegant than others. That is not to say that simplicity is irrelevant to the explanatory power of religious conceptual schemes. It is often said, and rightly so I believe, that belief in one God provides a deeply satisfying (elegant, economical) way of relating numerous diverse phenomena and experiences otherwise less readily intelligible.

This list of criteria is certainly not exhaustive and can easily be enlarged by adding more criteria. It seems to me, however, that further criteria can either without much loss be subsumed under any of those mentioned, or that they rest on purely intellectual distinctions. Prolonged lists of criteria, in any event, run the risk of losing content and of becoming trivial. One aspect of these criteria

65. See M.A. Corey, *Life and the Mind* (52 F2C D/#</-7>J ! * ! *(5"/&%? \$2#%7* ! "7' <2*((Lanham 1993); M. Stenmark, ‘Evolution, Purpose and God,’ *Journal of Philosophy* 452 W*-%*2 @/' "I *) - 8/" =5%/#/&5> /8 : 2-%7%/* [http://www.arsdisputandi.org/publish/articles/000016/index.html] 1 (2001), sect. 4.

66. G. Hallett, *Intelligent Design: A Philosophical Investigation* (Oxford 2000), 80; see also Hugh Montefiore, *Intelligent Design: A Philosophical Investigation* (London 1985).

67. Wainwright, *Intelligent Design: A Philosophical Investigation*, 172.

that should be noted, finally, is the fact that they are to a greater or lesser extent intersubjective and person-relative. This is evident, for example, for simplicity, but applies also to something as intersubjective as logical coherence.⁶⁸

As this emphasis on person-relativity already suggests, it is clearly impossible by applying these criteria to infer of many possible worldviews to the correct one. Yet we now know that this is not peculiar to religion or metaphysics: proof or certainly is just too much to ask for \rightarrow IBE; we have to settle for less, viz. confirmation. That is not to say, however, that one cannot \rightarrow for one's preferred views on the basis of these criteria. One might still try to show that one's own worldview satisfies the mentioned criteria very well—possibly better than any other. The details of this process of argumentation I leave aside, since that leads directly into a discussion of the rationality of religious belief, whereas at present I am primarily concerned with the explanatory function of comprehensive belief-systems per se. Suffice it to say that most writers on the subject believe that by and large all major belief-systems have the capacity to satisfy the criteria equally well.⁶⁹ It follows from this that of many competing metaphysical theories or worldviews not only one satisfies them 'best' in any objective sense. However, if this is so, some important qualifications are called for regarding the interpretation of theism as the R_2 explanation for the existence and nature of the universe.

6 Theism and IBE: Three Qualifications

First, and most importantly perhaps, this claim appears to be intelligible only from the standpoint of faith. Theism, that is, provides the best explanation R_2 (52 R_2 -202". This entails that when we speak of religious belief explaining anything, what we are dealing with is always and necessarily so 'explanation within the bounds of religion': only those who adopt a theistic framework and consequently view things from a theistic perspective, will concur with the statement that this perspective makes most sense of all the available evidence. It might seem that recognition of this fact must lead us to drop the claim that an argument for theism can be interpreted as an IBE, since the notion of 'best' here cannot be given hard content. But that, I think, does not immediately follow. We have seen that it is a common feature of IBE that there are always more theories compatible with the explanandum. Although it remains true that of competing and conflicting views only one can be best, it does not follow that one will be able to convince others that one's preferred view qualifies as such. Especially when the evidence is complex and ambiguous, as with all-encompassing views of reality, it is to be expected that various views will have something to be said for them. It seems that the problem can be circumvented by saying that theism counts as just a R_2 explanation in that it is able to meet all of the above-mentioned criteria. Of course, to this suggestion it may be retorted Good for whom?, but this question, it seems, can be raised pertaining to any explanation anyone accepts on any occasion. Some may want to say, more modestly even, that theism provides a R_2 explanation

68. See Brümmer, 'Intersubjectivity of Criteria,' 188; also 187–90.

69. Cf. Wainwright, \rightarrow 185; Yandell, \rightarrow 284.

for the nature and existence of the universe, and that the question of whether it does so better than any competing theory is a matter of debate. Yet if 'good' in this connection is understood as 'meeting the appropriate criteria,' such further weakening of the theist's claim seems quite redundant.

Second, though it is a general problem with inferences to the best explanation how one is to pick out one explanation of many potential explanations, and how one justifies this choice, this problem can in fact be turned into an issue of religious outlooks, since they are not ordinarily accepted for their explanatory power in the first place. As noted, religious believers do not ordinarily come to hold their beliefs for their ability to make sense of a wide variety of phenomena. This, in a way, helps to circumvent the problem of determining (and justifying) how one chooses the explanation in question.⁷⁰ At the same time, it implies that we must qualify the sense in which belief in God counts as an *inference to the best explanation* belief. Clearly, it does not do so in the usual and straightforward sense of being derived from a pre-existing body of data. It is a predominant feature of theistic explanation that faith comes first, and that it is only from the standpoint of faith that reflective believers attempt to show that their belief provides a good explanation for the world at large.

This observation leads to a third qualification, viz. concerning the notion of choice implicit in any IBE. It would seem misleading to say that religious believers, drawing on the resources of their faith, choose to accept the hypothesis of God as the best available explanation for the nature and existence of the world. Clearly, in so far as an element of choice is involved here, this is not akin to a situation whereby one possibility is picked from a gallery of alternatives. In the vast majority of cases people's religious stance in life results from things like upbringing, education and socialisation. It is something one grows into, and this process for a large part takes place beyond one's conscious choice. It would be fair to say, then, that the interpretation of theism as the best explanation does not imply or presuppose that this explanation is chosen in a process of comparing and evaluating various alternatives.

Even so, these three qualifications do not imply that the processes at work in theistic explanation are radically different from those in other areas. As I have tried to show, the process of launching a hypothesis 'over' the facts in order to see how well they get explained on the assumption that the hypothesis is true is very much similar. For this reason the methodology of IBE can, when properly applied to belief in God, serve to clarify one aspect of this kind of belief. Before concluding the paper, I should perhaps stress again that the interpretation of theism along these lines should not be taken as an attempt to model theistic explanation as closely as possible on patterns of scientific explanation—arguing that if the latter are judged acceptable, so must be the former. Efforts to do so often yield counter-intuitive results.⁷¹ Clarification has been my sole purpose.

70. D. W.B. Drees, *Philosophy of Religion* (Cambridge 1996), 147: 'If one wants to give priority to some metaphysical scheme, one has to face at least two problems, that of choice and that of justification: Which metaphysical scheme and why?'

71. See e.g. E. Schoen, *Philosophy of Religion* (Durham 1985); Thakur, *Philosophy of Religion* (Dordrecht, 1985), 54–5 who both transplant one type of scientific explanation

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Whether one thinks theistic explanations are worthy of belief, rationally justified or intellectually respectable is a quite different matter.⁷²

to the religious realm.

72. I thank Marcel Sarot for valuable comments and suggestions on an earlier version of this paper.

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