Hume's chief objection to natural theology

M. C. BRADLEY

1 Scarborough Street, Somerton Park, South Australia 5044

Abstract: In the *Dialogues* Hume attaches great importance to an objection to the design argument which states, negatively, that from phenomena which embody evil as well as good there can be no analogical inference to the morally perfect deity of traditional theism and, positively, that the proper conclusion as regards moral character is an indifferent designer. The first section of this paper sets out Hume's points, and the next three offer an updating of Hume's objection which will apply to Swinburne's Bayesian form of the design argument. The final section concludes that Hume's objection, suitably developed, holds against most of the main theistic arguments, even in their Bayesian form.

Hume's argument

In the last quarter of his *Dialogues Concerning Natural Religion* Hume advances an argument against natural theology whose importance in his eyes has not, I think, been fully recognized by commentators on the *Dialogues*, and whose philosophical force has also not been adequately recognized by philosophers of religion. In this paper I first set out Hume's account of the matter, though without a detailed exposition, and then consider ways in which his argument might be extended, generalized, and defended.

First, an explanation of what I will mean by 'natural theology'. It might be claimed by the purist that the term 'natural theology' is properly understood as referring to that branch of philosophy which enquires whether natural reason, unaided by revelation, can establish the existence of some supernatural being or beings. Perhaps so; but even a casual reader in the literature of the subject can see that the natural theologian is normally – in fact just about always – a philosopher who claims to be able to demonstrate, or at least render probable, the existence specifically of a being of the sort posited in traditional Christian theology – personal, morally perfect, omnipotent, omniscient, disembodied, rational, and free. It is in this narrower sense of 'natural theology' that I will use the term, and it is against this that Hume's argument is directed. His argument does not apply against natural theology in the purist's, or broader sense, but that fact hardly

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detracts from its value, since, as just noted, practically all the philosophical interest lies in the question whether natural theology in the *narrow* sense is a tenable business.[1]

Hume's argument is developed with reference to the design argument. There are two versions of this to be distinguished in his discussion, one starting from the order in the world at large, the other from the appearances of teleology in living things, but the argument to be discussed here applies equally to both, and we do not at this point need to maintain a distinction between them. In the design argument, as Hume expounds it, we are dealing with an analogical argument.[2] We detect an analogy between artefacts (e.g. and especially, machines) and the orderly workings of the solar system or the cardiovascular system. The analogy is so striking, runs the argument, that we are bound to conclude that, just as purpose, intelligence, and control over materials are known to lie behind the production of artefacts, so purpose, and a vastly enlarged intelligence and control over materials must lie behind solar systems and cardiovascular systems. Such an intelligence can be further argued to be morally good, and it can seem, and historically has been, a very short step to holding that this agent is what all men call 'God'.[3]

In the *Dialogues* Hume subjects this argument to a destructive analysis of great power. The objections he brings in *Dialogues* I–VIII are now very familiar, and need no rehearsing. But a further, quite different argument emerges rather later in the piece, in *Dialogues* X–XII. It runs as follows: if we seek to go beyond intelligence and power to attribute a *moral character* to a designer (or designers) on the strength of the analogy, then we must look to the relevant features of the world to see what attribution the analogy will sustain. Now, Hume argues, what we find upon such a survey is *mixed phenomena* (199, 201, 211, 212). We find much that is good; but we also find much that is not. What is not good is that part of the world which figures in the problem of evil. (By 'the problem of evil', I will mean both the thesis that omnipotence, moral perfection, and evil are logically inconsistent, and the thesis that they are probabilistically so, the latter now generally called 'the evidential problem of evil'.)

However, we are not at all concerned here with that problem, but with the quite different question of what can or should be attributed to the putative designer or designers *on the strength of the analogy*. Hume's claim is that, *if we suppose ourselves confined to the analogy*, we are bound to assign whatever moral character is indicated by the relevant phenomena. Now, he argues, the mixed phenomena will not go beyond sustaining an inference to opposed beings, benevolent and malevolent, or better, to one being, indifferent to morality. Certainly, whatever precisely *should* be inferred, it is not traditional theism with its morally perfect deity. This latter thesis is what I will call 'the negative phase' of Hume's argument; from the mixed phenomena of the world there is no analogical inference to the morally perfect or benevolent deity of natural theology (201–202, 205, 207, 211).

There is also a positive phase to his position, already anticipated above. Mixed phenomena, Hume says, might suggest Manicheism, but Philo, speaking for Hume,[4] rejects this. Rather, he holds:

> If we consider … the perfect uniformity and agreement of the parts of the universe, we shall not discover in it any marks of the combat of a malevolent with a benevolent being. There is indeed an opposition of pains and pleasures in the feelings of sensible creatures; but are not all the operations of nature carried on by an opposition of principles, of hot and cold, moist and dry, light and heavy? *The true conclusion is that the original Source of all things is entirely indifferent to all these principles, and has no more regard to good above ill than to heat above cold, or to drought above moisture, or to light above heavy.* (211–212, my italics)

In referring to Hume's argument I will use the abbreviation 'HA'. Where there is no special need to distinguish the two phases of the argument HA can refer to both or either. Where there is a need to distinguish I will use 'HA-N' to refer to the negative phase of the argument, 'HA-P' to refer to the positive phase. I will assume that one can hold HA-N without holding HA-P, but that holding HA-P commits one to HA-N.

How, on a preliminary view, does HA fare? HA-N, I suggest, is very hard to dispute. *If* we do what Hume assumes that the natural theologian *is* doing, namely argue in a purely analogical way to the existence of a designer whose attributes are likewise to be based solely on the analogy, then indeed the moral component of traditional theism will *not* result from the design argument. Mixed phenomena cannot yield a morally perfect or benevolent designer, no matter what the design argument might yield in the way of natural (non-moral) attributes. Finessing which involves such things as rounding out the analogical conclusion (in Quine's phrase) so as to produce the neatest or simplest or most elegant conclusion from the phenomena may change the picture, but we are then already in the domain of hypothesis, or HD method, or Bayes' Theorem, and so have left behind the purely analogical argument to which Hume was addressing himself. I will assume, then, that HA-N has a strong claim on us.

HA-P is a less straightforward matter. For a start, many different assessments might be made of the proportions of good and ill in the (undoubtedly) mixed phenomena, leading to a variety of different estimates of the moral character of the designer. But there is a consideration which does rather favour HA-P. A human being who produced, or allowed, a range of mixed phenomena would probably be regarded as morally indifferent, rather than as actively aiming now at weal, now at woe for sentient creatures, and that would be so whatever the exact proportions of good and ill one seemed to detect. Thus, the analogy with human activity on which the design argument squarely rests suggests indifference in the designer rather than anything else. I return to this in the next section, where, in the domain now of hypotheses and Bayes' Theorem, HA-P takes on a much sharper edge.

Hume is at great pains to separate the point he is making here from the problem of evil. He returns to the theme time and again. Here is one notable statement of it:

> I will allow that pain or misery in man is *compatible* with infinite power and goodness in the Deity … : what are you advanced by all these concessions? A mere possible compatibility is not sufficient. You must *prove* these pure, unmixt, and uncontrollable attributes from the present mixed and confused phenomena, and from these alone. A hopeful undertaking! Were the phenomena ever so pure and unmixed, yet, being finite, they would be insufficient for that purpose. How much more, where they are also jarring and discordant! (201)

This is a point that can hardly be too strongly emphasized, whether in its historical or its philosophical aspect. HA, that is, is not concerned at all with the question whether the mixed phenomena can be *squared with* theism, but only with the question whether theism can or should be *inferred from* the mixed phenomena. Though the discussion of the problem of evil occupies considerably more space than that of HA, still, the problem of evil is not ultimately pressed, and it is rather HA that emerges as the principal conclusion of *Dialogues* X and XI. It is hard to read the last paragraph of *Dialogue* X, with its notably triumphal tone, as anything less than Hume's recognition that what has emerged here is the fundamental problem for natural theology. *Dialogue* XI fills out its predecessor with a more detailed discussion, but it is still HA which emerges as the main point (211–212), the rest of the *Dialogue* being concerned with finalizing Demea's part in the discussion. And in the long, summarizing peroration (227–228) which constitutes the penultimate paragraph of *Dialogue* XII, and thus of the whole work, it is HA which, I suggest, is to be seen as the main point.

It seems to me that even those recent commentators who have provided good accounts of the *Dialogues* have faltered a little when characterizing HA. Thus, Gaskin begins by referring to HA (which he calls 'the inference problem') as the main argument of *Dialogues* X and XI, but goes on almost at once to speak as though HA is after all only the minor theme, saying that it 'lightly conceals [Hume's] real discussion of a crucial religious issue', i.e. the 'much more vexing' problem of evil. A few later statements come closer to what I have claimed about Hume's intentions, but Gaskin, it seems to me, still does not fully register those intentions. He also fails to distinguish clearly between HA-N and HA-P, switching back and forth between these as though they were the same point.[5]

O'Connor adopts Gaskin's phrase 'the inference problem', and clearly delineates HA-N. Yet he does not go on to treat HA-P as a phase of the same problem, as Gaskin and I do, but as a separate point which he refers to as 'the hypothesis of indifference'. This would not amount to much were it not for the fact that he credits Draper with the phrase, evidently intending thereby to associate himself with Draper's reading of Hume. In a notable discussion Draper had cited the passage from *Dialogues* 211–212, quoted above as evidence of HA-P, as a statement

of a probabilistic form of the problem of evil, and proceeded to elaborate the idea to fine effect. But I can see no evidence that the passage bears the meaning Draper supposes; it is, rather, the main statement of HA-P. (That detracts nothing from Draper's argument, but the question here is about Hume's intentions.) Thus, in using Draper's phrase, O'Connor is finding the problem of evil where there is, rather, the positive phase of HA.[6]

Other writers have not properly recognized HA at all. Thus, Yandell in his study of Hume's philosophy of religion devotes two detailed chapters to *Dialogues* X and XI, yet hardly mentions HA, and, when he does, appears to treat HA-N as correct but banal, and HA-P as baseless.[7] This seems to me to be a misjudgement, both historically and philosophically. A good many other cases of misjudgement about HA might be cited, in relation both to the *Dialogues* and also to the earlier version in Section XI of the *Enquiry Concerning Human Understanding*, though no survey of these is possible here.

This necessarily brief exposition of Hume may, I hope, go some little way towards justifying the title of the paper. But there is no denying that a case has only been sketched. If space were available I would argue that a detailed analysis of the last three *Dialogues* can provide solid evidence for the view that HA figured in Hume's thought as the fundamental defect in the design argument, and thus, for him, in natural theology itself (see (3) of the last section below for the 'thus').

HA and Swinburne's design argument

I now consider an extension of HA. The design argument as it relates to the appearances of teleology in living things ran upon the hard rock of Darwinism, but the other form of the argument, relating to the regularities in nature, is immune from the Darwinist objection. In this form it has been defended with great sophistication by Richard Swinburne. I will now argue that HA can be brought to bear against Swinburne's version of the argument as it appears in the recent second edition of his main work on natural theology, *The Existence of God*.[8]

In an earlier and widely discussed version of the argument,[9] Swinburne treated it as analogical, as Hume had done, though with more precise conditions on the analogy than Hume had provided, and sought to counter the objections which Hume had brought against it. He explicitly refrained, however, from claiming that the design argument could establish the goodness or moral perfection of a designer. In *The Existence of God* Swinburne renews his defence of the design argument, but in a very different framework. The argument turns on what Swinburne calls 'temporal order', or 'regularities of succession'. Ordinary experience, and subsequently science, reveal regularities in the behaviour of the objects that constitute the world. These regularities are:

> … codified in laws of nature. In books of physics, chemistry, and biology we can learn how almost everything in the world behaves. The laws of their behaviour can be set

> out by relatively simple formulae that humans can understand and by means of which they can successfully predict the future. The orderliness of the universe to which I draw attention here is its conformity to formulae, to simple, formulable, scientific laws. The orderliness of the universe in this respect is a very striking fact about it. The universe might so naturally have been chaotic, but it is not – it is very orderly. (153–154).

So, Swinburne asks, how probable is it 'that in a Godless universe there will be laws of nature at some level guaranteeing that things behave in very largely predictable ways?' (160).

That raises the question what laws of nature are (whether Humean regularities, connections between universals, and so on), but after an extended discussion of the various cases Swinburne concludes that on any of the theories 'it is very improbable that there would be in a Godless universe laws of nature sufficiently simple for rational beings to extrapolate from past to future with normal success' (164). On the other hand, 'Theism leads us to expect a world at some phenomenal level, simple and reliable .... [So it is] improbable that a Godless universe would be governed by simple laws, but there is quite a significant probability that a God-created universe would be governed by simple laws' (165–166). Now it is a consequence of Bayes' Theorem that:

A $\mathrm{P}(h/e \ \& \ k) > \mathrm{P}(h/k)$ iff $\mathrm{P}(e/h \ \& \ k) > \mathrm{P}(e/-h \ \& \ k)$.

Taking h as theism, e as the above evidence of order, and k as the existence of a complex physical universe, since the right-hand side is thought to be secured by the preceding argument, the left-hand side follows, so the evidence of order renders theism more probable than it was without consideration of that order and so confirms it (166).[10]

In his 1968 paper Swinburne had presented the argument from design as an argument in the usual understanding of the term, that is, as a ponderable piece of reasoning which provides good grounds for accepting its conclusion. But evidently the above design argument in *The Existence of God* is not presented as that at all; that is, it is not presented as a ponderable argument for the acceptance of its conclusion. Rather, it is held to be what Swinburne calls 'a good C-inductive argument', that is, an argument from premises known to be true which raises the probability of its conclusion above its previous probability. The official strategy of the book as a whole is to show in turn that nearly all the main traditional theistic arguments are good C-inductive arguments by the use of Bayes' theorem and then, finally, to show by means of a special synoptic argument that the cumulative effect of the various good C-inductive arguments is to produce *a good P-inductive argument* for the existence of God, that is, an argument from premises known to be true which renders its conclusion more probable than not.[11]

There is a very great difference between good C-inductive and good P-inductive status. We see above in A a necessary and sufficient condition for an argument to be good C-inductive, that is, for the posterior probability P(h/e & k) to be greater than the prior probability P(h/k). Now that inequality holds if P(h/e & k) is, say, ¾, and P(h/k) is ¼; but it holds no less where $P(h/e$ & $k)$ and $P(h/k)$ are both nugatory, and the former is greater, even vastly greater, than the latter. Thus a million-fold increase from P(h/k)$=10^{-50}$ to P(h/e & k)$=10^{-44}$ makes the argument from e & k to h a good C-inductive one, no less than an increase from ¼ to ¾. A good P-inductive argument, on the other hand, is a good argument in what I called above 'the usual understanding' of the term, raising the probability of its conclusion h above ½, thus conferring belief-worthiness on that conclusion. (This is slightly qualified in the final section below.)

Now though the *official* aim of Swinburne's chapter on the design argument is merely to show that it is a good C-inductive argument, he also puts the matter in ways which present it as *much* more than that. Thus in a preliminary discussion of the argument from order, he says:

> A teleological argument … is, I believe, a codification by philosophers of a reaction to the world deeply embedded in the human consciousness. Humans see the comprehensibility of the world as evidence of a comprehending creator. The prophet Jeremiah lived in an age in which the existence of a creator-god or gods of some sort was taken for granted. What was at stake was whether there was only one god, and the extent of his goodness, knowledge, and power. Jeremiah argued from the order of the world that there was one powerful and reliable god, and that god was God. He argued to the power of the creator from the extent of the creation: … he argued that its regular behaviour showed the reliability of the creator, and he spoke of the 'covenant of day and night' whereby they followed each other regularly, and 'the ordinances of heaven and earth', and he used their existence as an argument for the trustworthiness of the Jewish God. (154)

But Jeremiah, like Cicero's Stoic in book II of *The Nature of the Gods*, who develops the argument at length,[12] is not presented as merely proposing to elevate the posterior over the prior probability, but *as offering a compelling reason to think that God exists*, that is, a good P-inductive argument. Such phrasing, moreover, is common throughout Swinburne's discussions. In his popular exposition he explicitly describes the design argument as providing 'strong grounds' for believing theism to be true, without bothering at all about the route through good C-inductive status. Examples of this can readily be multiplied, not just in relation to the argument from order but also in relation to the other theistic arguments which he endorses.[13] I should add that – unsurprisingly – Swinburne's readers have commonly taken him in this way, that is, as refurbishing and endorsing the traditional theistic arguments – arguments, that is, in the usual sense. A large number of cases of this might be cited, but I restrict myself to citing, in a footnote, a textbook and a reference book where Swinburne's design argument

(and his presentations of the other traditional arguments) are treated, without hesitation, as arguments in the usual sense.[14]

One further point of clarification about Swinburne's book is worth making before we proceed. This point is connected with the cumulative argument which, as noted above, it is the official aim of the book to produce. Other natural theologians have worked with the idea of a cumulative argument, but not quite in Swinburne's way. Thus, in his well known textbook Davies contemplates a cosmological argument showing a creator and sustainer, a design argument showing an intelligent and purposeful agent at work in the world, and so on, then argues on grounds of plausibility that these variously characterized entities are in fact the same entity under various aspects.[15] This is an entirely reasonable procedure, at least in principle, but the point to recognize is that it is *not* Swinburne's. Swinburne treats *each* of his theistic arguments as arguments for exactly the *same* hypothesis, viz. theism. ('For' in the preceding sentence naturally shares the ambiguity noted above; sometimes the arguments are being regarded as good P-inductive, at other times – and officially – only as good C-inductive.) Thus, the cosmological argument is not presented merely as an argument for a creating and sustaining agent, but as an argument for *theism*; the design argument is not presented merely as an argument for a designer, but as an argument for *theism*, and so on. (This proves to matter below.)

I proceed now to an extension of HA-P. Here we cannot just continue to follow the details of Swinburne's design argument, because in his exposition he is concerned to oppose theism to all those other hypotheses on which order would be either uncaused or due to lesser beings (112), i.e. those lacking the attributes of theism. Thus, his argument does not consider what concerns us here, viz. a form of supernaturalism which differs from theism only in replacing moral perfection by indifference. (Call this 'Epicureanism'. Swinburne has his own reasons for ignoring Epicureanism; for him, there is no such theory – see (2) of the next section.) To pursue HA-P, then, let us oppose theism (h) to Epicureanism (h_1). HA-P, extended to the Bayesian design argument, will claim that even if order e, with background knowledge k, made some agent with theism's natural attributes the most probable conclusion, still, the mixed phenomena should make us regard Epicureanism as the most probable form of such a theory (Hume's 'true conclusion'), and, in particular, as more probable than theism, i.e. $P(h_1/e \ \& \ k) > P(h/e \ \& \ k)$. In view of Bayes' theorem the latter holds iff

B $P(e/h_1 \ \& \ k) \times P(h_1/k)/P(e/k) > P(e/h \ \& \ k) \times P(h/k)/P(e/k)$

Now suppose for the moment that there were reasons for claiming that $P(h_1/k) > P(h/k)$; then B would hold unless

C $P(e/h \ \& \ k) > P(e/h_1 \ \& \ k)$.

Let us first consider C. In chapter 6, 'The explanatory power of theism', Swinburne considers in detail what the deity of theism is likely to create. He concludes that in view of the moral perfection of such a deity

> … there is a modest probability … to which I will give the artificially precise value of ½ that a God will create humanly free agents [defined 118] located in a beautiful physical universe, containing perhaps also animals …. Subsequently I will discuss … particular features of the universe [order, in the case of the design argument] that are necessary for the existence of humanly free agents, and show that it is most improbable that they would occur unless God brings them about (131).

It is against this background that Swinburne is able to assert in his account of the design argument that theism leads us to expect order while other theories do not. The Swinburnean would now no doubt wish to compare $P(e/h \& k)$ with $P(e/h_1 \& k)$. With the latter, she might say, we are given no reason whatever to think that the Epicurean deity would produce order or anything else in particular or at all. Thus the moral perfection which is a component of theism imparts a significant value (166) to $P(e/h \& k)$, whereas the value of $P(e/h_1 \& k)$ appears entirely nugatory. Thus C holds, and B is called into question. (B might still be true, but the onus is now upon the Epicurean hypothesis.)

My reply to this is as follows. Swinburne puts most of his extensive effort in chapter 6 into determining what kind of world the deity of theism could be expected to create, *assuming that such a deity would create something*. What is the basis for the latter assumption? Here Swinburne appeals to the venerable Neoplatonic thesis that goodness is diffusive of itself: *Omne bonum est diffusivum sui.* The brevity of his discussion here is rather surprising, considering how much depends on it; in a short paragraph (116–117) he merely states the point and refers to a discussion by Kretzmann to justify the thesis. But Kretzmann in turn seems to do no more than *explain* the thesis; unexpressed knowledge is possible, he says, but unmanifested goodness is not, not, that is, when allied with omnipotence. But why? Human moral excellence is no doubt diffusive because there is so much woe that it is called on to diffuse itself over. But if there were no such motive for the deity of theism by reason of there being nothing else but itself, why must one suppose that its postulated goodness would lead it to create? The principle of diffusiveness seems quite out of place in a rigorous modern natural theology such as Swinburne's, and I can only regard it with scepticism.[16]

The truth, I would suggest, is that an independent addition to theism is needed to provide the required value for $P(e/h \& k)$, viz. the diffusivity principle or some equivalent. But if the natural theologian is free to add to the content of her hypothesis, the Epicurean is free to do likewise, and to stipulate that an Epicurean deity would have a motive to create, and to create humanly free agents and thus an ordered world. (Let the motive be an inclination.) The Epicurean's envisaged stipulation may seem arbitrary, but I would suggest that the theist's stipulation is no less so, and only appears less so because of familiarity and venerable antiquity.

Thus we have not been provided with a reason to accept C, hence no reason to call in question B.

I should note in relation to the above that the existence of humanly free agents is not itself part of the e of the design argument, so the question of theism's predicting it does not arise directly in relation to that argument. But the prediction in chapter 6 of humanly free agents is essential to Swinburne's procedure in the design argument in that the probability of order given theism, $P(e/h \& k)$, is judged by treating such order as one of several necessary conditions for humanly free agents, thus making $P(e/h \& k)$ even greater than the probability of humanly free agents given theism referred to in the quotation from chapter 6 above. (See 164–166 on the design argument, and 218 on the strategy generally.) Swinburne's design argument also of course requires that humanly free agents do actually exist, and this means showing that there is libertarian free will. This he seeks to do later, combining quantum indeterminacy with an appeal, reminiscent of C. A. Campbell, to the experience of choice. This seems to me to be a particularly dubious aspect of his procedure, but is not pursued here, since it does not bear directly on HA.[17]

The remaining question in relation to B, shelved above, is whether it is true that $P(h_1/k) > P(h/k)$. The argument on this is as follows. Consider that part of our background knowledge that relates to the moral character of the putative designer. The phenomena to be explained, Hume rightly insisted, are mixed. Now suppose, as before, that some hypothesis embodying the natural attributes involved in theism is the most probable explanation of order. We can now argue that the Epicurean hypothesis is the simplest of those available here. It is the simplest because it avoids the intractable questions created by the two other available hypotheses, viz. supreme benevolence and supreme malignancy. (There are in reality many other hypotheses. The point is allowed for below.) The former of these is called on to account for the evil in the world, the latter to account for the good in the world. The awful complexities of the former are well known since this is the problem of evil. The latter – supreme malignancy – would involve corresponding complexities if anyone ever thought to defend it. But the hypothesis of indifference, the hypothesis that the putative designer 'has no more regard to good above ill than to heat above cold', is freed from all such complexities. Thus, of the three alternatives considered, it is by far the simplest. Now for Swinburne prior probability is determined by simplicity, scope and fit with background knowledge. Since h and h_1 are of equal scope, and h_1 is simpler than h (and fits better with background knowledge, if that is a separable matter here), it follows that $P(h_1/k) > P(h/k)$ by Swinburne's criterion, and thus that B is true.[18]

Is the foregoing really a simplicity argument? I conjecture that many philosophers would regard it as such, but I am content here, for brevity's sake, to make the point *ad hominem*, since Swinburne himself regularly uses just this type of

argument, and uses it under the rubric of 'simplicity'. Consider the following passages (all italics are mine):

> [That there is an omnipotent God] is a simpler hypothesis than the hypothesis that there is a God who has such-and-such limited power … . It is simpler in just the same way that the hypothesis that some particle has zero mass, or infinite velocity is simpler than the hypothesis that it has a mass of 0.34127 of some unit, or a velocity of 301,000km/sec. *A finite limitation cries out for an explanation of why there is just that particular limit, in a way that limitlessness does not* (97, 334).

> To postulate a [person] of very great but finite power, much but not all knowledge, etc., *would raise the inevitable questions of why he has just that amount of power and knowledge, and what stops him from having more, questions that do not arise with the postulation of God* (145).

> It is simpler to suppose that these properties of eternal omnipotence, omniscience and perfect freedom belong essentially together – *for that removes the need to explain why God exists now in terms of his having existed a long time ago and subsequently choosing to retain his omnipotence or whatever* (335).

The italicized passages all make the point that a theory T is simpler than a theory T_1 if T_1 raises further questions not raised by T, or requires some further piece of explanation not required by T. It would seem, then, that on Swinburne's own principles, the hypothesis of indifference is the simplest of the three considered. In reality, of course, there are many other alternatives, postulating various proportions of goodwill and ill will in the putative designer (while keeping the other attributes fixed). Yet all of these too are swept away by Swinburne's simplicity criterion, since they all raise the question of why there are just those proportions, a question which disappears on the Epicurean hypothesis.

There is another point which can conveniently be registered here as well. It will be recalled that the design argument, as it was understood by Hume, was purely analogical. Now there is a very considerable difference between this analogical form of the argument and the Bayesian form of the argument given by Swinburne; and this difference is so great that it might be thought by itself to put HA out of consideration. The analogical form of the design argument, as envisaged by Hume, is exposed to HA essentially because in it we suppose ourselves confined to arguing *from* the relevant features of the world *to* the moral character of the putative designer. But when we come to the method of *hypothesis*, of which the Bayesian argument is a specialized form, the picture changes altogether. You do not need to argue *for* the hypothesis *from* the phenomena in any direct way; you can advance whatever hypothesis you please. The only question is how well the evidence supports the hypothesis.

Specifically, according to Bayes' theorem, $P(h/e \ \& \ k)$ depends on the quantities $P(h/k)$, $P(e/k)$ and $P(e/h \ \& \ k)$. Accordingly, a Swinburnean might reply to HA as follows. Perhaps in the domain of traditional analogy HA has some force, since the conclusion of the argument must be closely proportioned to the evidence,

just as Hume held, and the evidence is mixed in relation to moral character or benevolence, so that both HA-N and HA-P may hold. But in the domain of hypothesis there are no such constraints. We now do not ask whether the theory advanced is closely proportioned to the evidence in the manner of analogy; we ask whether the theory is supported by the evidence, and that depends only on the quantities mentioned above, *and none of these is influenced by the fact of the mixed phenomena*.[19]

From our present vantage point, we can now deal with this reply. HA-P, as redirected against Swinburne, *would* no doubt be undercut if the mixed phenomena had no effect on any of the probabilities of which P(h/e & k) is a function. But when we recognize that the mixed phenomena make the indifference of the designer the simplest hypothesis in relation to the moral attributes, we see that they do have such an effect. They deny traditional theism its claim to maximal simplicity, and thus (according to Swinburne's own criterion) deny its claim to a greater prior probability than its competitors. Thus HA-P bears on Swinburne's design argument no less than on the traditional analogical argument. And so, as a consequence, does HA-N.

Further defence of the preceding

There are two matters which must be immediately considered if the preceding objection to Swinburne is to be sustained.

(1) The first relates to the content of k, the background knowledge in the design argument. If we consider the application of HA-P made above to Swinburne, it is clear that a great deal of information about the world is being assumed *as part of the background*. We assume, in particular, knowledge of Hume's mixed phenomena. But, a defender of Swinburne will protest, there is no entitlement to this assumption, since the background knowledge k of Swinburne's design argument is merely what figured as e in his (preceding) cosmological argument, that is, the existence of a physical universe (166). Hence, whatever it is that *other* versions of the design argument may choose to assume as background knowledge, and however they may in consequence be exposed to HA, none of this affects *Swinburne's* argument, since nothing but the existence of the physical world figures as the content of his k. Hence, in particular, the mixed phenomena do not figure there, and our application of HA, at any rate against Swinburne, is stymied.

My reply to this is as follows. Swinburne is of course free to construct whatever argument he chooses. The *official* structure is that of a cumulative argument, each constituent argument (the cosmological, the design, and so on) taking as its k the e of the argument preceding it in the sequence presented.[20] I do not dispute this. What *is* disputable, however, is Swinburne's title to restrict k in the way he does *so far as he treats the design argument as a ponderable argument for theism*,

that is, as a good P-inductive argument, and I have already shown how that *is* something he does, and how he is commonly understood that way. When the design argument is treated in *that* way, there *is* a compelling reason why *k* cannot any longer be regarded merely as the proposition that there exists a physical universe. That compelling reason is the Total Evidence Condition (TEC) of confirmation theory. TEC requires (with very good reason indeed) that all of the information relevant (logically or statistically) to the conclusion of the argument should be taken into account.[21] If we confine the *e* of the design argument to the appearances of order, then *k* will be bound, by TEC, to contain a mass of information, and in particular information about the mixed phenomena. Thus the traditional or common understanding of the design argument brings the mixed phenomena into play, and so exposes it to HA as argued in the previous section.

I may perhaps add that Swinburne's own *k* in the design argument *anyway* goes far beyond the mere assumption of a physical world. Thus, in the course of minimizing the probability of temporal order in a Godless universe, he writes:

> … any theory that at a beginning or always there were many substances, which fall into kinds with identical powers and liabilities, is again a theory of a very improbable coincidence. Such a coincidence cries out for explanation in terms of some single common source with the power to produce it. Just as we would seek to explain all the coins of the realm having an identical pattern in terms of their origin from a common mould, or all of many pictures having a common style in terms of their being painted by the same painter, so we should seek to explain all physical objects having the same powers in terms of their deriving them from a common source (164).

The appeal here is to one's background knowledge of the coinage (and thus of money, economic activity, and so on and so on), and of the likely explanation of several cases of a distinctive style of painting (the latter arcane background indeed). This is only one example of Swinburne's *k* far exceeding its official bounds; others can readily be cited, both here and in the case of other theistic arguments he advances.[22]

(2) According to HA-N, even if the non-moral attributes postulated by theism could be established, moral perfection could not be inferred. And according to HA-P, moral indifference *should* be inferred. But Swinburne has an argument to say that if we assume omnipotence, omniscience, freedom (in a contra-causal sense), rationality and objective morality, then moral perfection *follows*. If this were correct, both HA-N and HA-P would be stymied (as applied to his form of the design argument). Objective morality, it is true, is a very substantial assumption, but not one to be dismissed without argument. However I shall entirely bypass that question, and argue that even on the assumption of objective morality Swinburne's argument does not establish moral perfection from the other attributes.

The argument he advances is a sophisticated version of that given by Samuel Clarke in his 1704 Boyle lecture 'A demonstration of the being and attributes of God'.[23] In the last section of that remarkable piece of natural theology Clarke infers from the natural attributes which he believes he has already established, via his own theory of objective morality, to moral perfection, the link being that if the agent supposed already established is omniscient it will recognize the truths of morality, and hence will subscribe to them. Swinburne's deduction goes as follows:

(1)   Any agent, human or divine, must have a reason for any action, and this involves the agent's seeing the action as a good thing (intrinsically or instrumentally). (100–101)

(2)   For many actions there are reasons why it is good for the agent to perform them, and also reasons why it is good for the agent to refrain from performing them. (101)

(3)   Frequently, perhaps normally, there is no objective scale in which such competing reasons can be weighed; one cannot say that doing A is on balance better than refraining from A. (101)

(4)   But sometimes competing reasons can be compared objectively so that one can say that doing A is overall better than refraining from A. (101)

(5)   For one action to be morally better than another is for it to be overall better than the other. For an action to be morally good is for it to be the case that it is better to do it than to refrain, i.e. that there are overriding reasons for doing it. (101)

(6)   To say of someone that he recognizes as overriding certain reasons for doing or refraining from some action, is to say that, so far as no factors other than reasons influence him, he will do or refrain from the action. (104)

(7)   If moral obligations are objective facts, an omniscient agent will recognize them, and thus recognize the overriding reasons which they provide to act or refrain. (105)

(8)   Hence an omnipotent, omniscient, free and rational agent can never perform actions that are morally bad, and will always perform the best action (if there is one, otherwise the next best thing – these considerable complications are irrelevant here), and so is morally perfect. QED. (105)

The argument begins at (1) by treating *any* desire, wish, design, or purpose whatever as a reason for performing an action, and as correlative to the good which the agent sees in the action. Swinburne's argument for (1) makes this quite clear. A bodily movement is not an action at all, he holds, *unless* the agent has a reason for it and sees a good in it; and the (desire for) the good he sees in it

constitutes his reason. Thus, the least whim, no less than the most carefully calculated design, if it motivates an action, is to count as A, or the reason for the action. Proceeding, (3) seems dubious; why should the absence of an objective scale in some domain mean that one cannot have a system of preferences in that domain? But I set that aside, and go on at once to (6), which is the crux of the matter.

It is (6) that is to carry us across the gap that Swinburne needs to bridge between the knowledge and motivation of a rational agent and the actions of that agent. First consider (6) in relation to the rules and prescriptions of etiquette. In some circumstances these can present themselves as overriding, where, for example (and especially), no moral question is involved. The question is what 'recognize as overriding' ('recognize' for short) means in relation to these rules and their prescriptions. There are two senses to be distinguished. First, you can recognize reasons of etiquette for doing something simply by grasping what the rules prescribe in application to a given case (and grasping their claim to override other reasons). In this sense, it remains a question what you will *do* once you have recognized the reasons. You may conform your actions to the prescription, if you feel moved to go along with the rules of etiquette. On the other hand, you may choose for some reason to ignore etiquette and act otherwise. There is, secondly, the much stronger sense of 'recognize' in which it refers, not only to one's *acknowledgement that* such and such are the claims of etiquette, but also to the *acceptance* of these prescriptions as determinants of one's actions. Where a prescription of etiquette presents itself as overriding, (6) is false in the first of the two senses of 'recognize', true in the second.

Now take the case of morality. There is, as J. L. Mackie astutely argued,[24] considerable prior difficulty in seeing just what objective morality could anyway *be*; truths, objective facts, yes, but also *prescriptive* truths, *prescriptive* objective facts, and how are these to be understood? However, I make no appeal to that line of thought here, cogent though it is, but merely fix on the point that morality *is* prescriptive – like etiquette it *requires* one to think and act in certain ways. Suppose then that you recognize the claims of (putatively) objective morality in the first sense. You accept that there are values in the nature of things, that in the nature of things you ought to do this and not that, that this is good, that is best. To secure (6), it must be claimed that if you recognize the claims of morality in the first sense, then you must also do so in the second sense. But the case seems no different from that of etiquette. You can acknowledge as an objective fact that this is a morally good, or that a morally obligatory action; but you may choose for some reason to act otherwise. Thus (6) is false in relation to morality.

Swinburne's position here is that someone who recognizes, in the first sense, the existence and content of an objective moral code, but then fails

to conform his action to the dictates of the code, merely perhaps preferring to do otherwise, not caring for the prescriptions of the code, *is to that extent non-rational, not influenced solely by reasons*, and so not a counter-example to (6). It is quite clear, I think, that this is Swinburne's line of thought. He regards mere preferences, likes or dislikes, as non-rational. Thus he says the following:

> If you said that you recognised that overall it would be better for you to go home rather than to go to the cinema, and then you went to the cinema, we should have to suppose either that you were lying or had changed your mind, or that factors other than reasons influenced what you did. An explanation of your behaviour is needed, not only in terms of what you believed about the relative merits of the actions, in terms, that is, of reasons, but also in terms of desires, passive inclinations to act that led you to do what you did not recognise adequate reason for doing. If someone has strong desires, it makes sense to suppose that he recognises refraining from A as overall better than doing A, but nevertheless intentionally does A. Such non-rational factors over which the agent does not have control explain 'weakness of will', a person acting 'against his better judgement'. But the suggestion that someone might see refraining from A as overall better than doing A, be subject to no non-rational influences inclining him in the direction of doing A, and nevertheless do A is incoherent (104).

But in saying this Swinburne has retreated from what he has said under (1). According to (1), as we saw, desires and inclinations are no less *reasons* than are the weightiest excogitations. (1) allows no contrast between a reason, on the one hand, and a desire, mere preference or whim, on the other. According to (1), you must have a reason if you perform an action, and the reason is (the desire for) the good you see in the action. But that good may consist merely in this being the state that you prefer, as far as (1) is concerned, and then your mere preference is a reason – *the* reason – for the action. I conclude that Swinburne's argument founders on the fact that an agent, human or divine, contemplating (putatively) objective facts of goodness and obligation, and recognizing them for what they are, can *still* consider whether he will conform. 'Yes, morality prescribes it, that is true, but *will* I?' is a fully coherent position, even for a divine person.

A doubt may remain. Can a rational agent really agree that the action prescribed by morality is overall better, yet choose to act otherwise? What is the agent agreeing to, *qua* rational, if not that she will so act? But there is an ambiguity in 'overall better' which corresponds to the ambiguity in 'recognize' noted above. The agent, surveying the putative moral facts, can agree that this action is overall better as these things are reckoned in the universe's system of values; but it may not be so by the agent's system of preferences. For it to become *that*, the agent must choose to side with the universe. If the agent does not so choose, she will still have her reasons, according to (1). Perhaps she just objects to being told what to do.

Thus moral perfection does not follow from the other attributes, even if we assume objective morality. Rather, the moral attributes are open to the best bid, and HA-P tells us that the Epicurean hypothesis is the best bid.

Other attempts to block HA

The above argument is one of various ways in which natural theologians have sought to establish moral perfection or benevolence. In this section I identify five further possible lines of thought on the point. These, so far as I can tell, along with the Swinburne type of argument, constitute the main approaches (and probably, I think, all of the approaches of philosophical consequence). Such lines of argument need to be at least recognized, since if there were any way of arguing from the existence of a deity with the traditional non-moral attributes to the moral attributes then HA, in both negative and positive phases, would be blocked.

The obvious place to start, though I will argue that it proves illusory for our purposes, is with the traditional arguments (1) from morality or the moral consciousness and (2) from religious experience.[25] These two, as commonly presented, are self-contained arguments for the existence of a deity with the moral attributes. Regarded in that way they do not, in my view, have much weight, and I would consider discussions of them by Mackie to make the important critical points. But our present standpoint is rather different; we are still thinking of the argument from design as the sole theistic argument under notice, and are asking what supplement there is that can be added to yield the moral attributes.

The decisive point to register here, I would suggest, is that the usual arguments from morality and religious experience *do not have a detachable component* which can be used for the purpose of supplementing another argument. If (1) and (2) could be regarded as having some substance as self-contained theistic proofs they could *also* reasonably be regarded as warranting a favourable conclusion about the moral character of the deity whose existence they would indicate. The source or validator of morality or the moral consciousness could reasonably (though not indeed inevitably) be regarded as itself supremely moral; and special experience as of a benign presence could likewise reasonably (though not inevitably) be regarded as produced by a benign presence.

But these are, as it were, package deals. If you think of the arguments from morality and religious experience as good arguments, then you also have arguments for the existence of a deity of good character. But if you do not think of them as good arguments in the first place, then you are not able to separate out and salvage a reason for good character which can be conjoined with some other, different argument – the design argument, in the case that interests us. That is, to reject the arguments from morality and religious experience on the kind of grounds adduced by Mackie and other naturalistic critics is *already* to take a view of morality and moral consciousness, and of religious experience, on which they

are natural phenomena containing no particular pointer to the moral character of a designer, supposed to exist to explain order.[26]

(3) In the natural theology of Aquinas, however, we do find what we are looking for, a derivation of the moral attributes from the other attributes supposed already established. Briefly stated, the argument given in the *Summa Theologiae* is as follows.[27] Goodness is consequent upon desirability. Any thing desires its perfection, and the latter consists in the thing's resembling its cause. So the cause is desirable, and therefore good. The dependence upon a naïve teleology under which everything in nature aims at its self-realization is evident. However, a neo-Thomist might seek to restrict 'desire' (Aquinas's *appetere*) to genuine human desire, since this would still give the conclusion that the cause is desirable, and therefore good, even if not everything in nature is in the business of desiring. But in doing this we would run into a different problem, namely the referential opacity of 'desire'. Suppose you desire that piece of cake, and suppose that that piece of cake is (identical with) the piece which Jane laced with arsenic; it is not true and hence cannot be inferred that you desire the piece which Jane laced with arsenic. In the same way, the inference from the premises that one desires one's perfection, and that one's perfection is (identical with) resemblance to one's cause to the conclusion that one desires resemblance to one's cause, is invalid, and desirability is not transmitted to the cause, as is required.

(4) Paley offers two further lines of reasoning for moral perfection given the existence and natural attributes of a designer. One, which he attaches great importance to, involves the claim that, in the great majority of cases, living creatures are *happy*. 'Myriads of happy beings crowd upon my view'. The reader is beguiled with descriptions of the joy of flies, shrimps and young fish, the latter being 'so happy that they know not what to do with themselves'. Paley's argument, previously very forceful, is evidently here in rapid decline, and his other argument is also, I would hold, a broken reed, though I cannot examine either of them here.[28]

(5) Finally, the reader may well expect to find something said about the historically important linking of goodness with existence, manifested for example in the Neoplatonic thesis that existence *qua* existence is good, and the Thomist thesis that being and goodness are identical. Somewhere here, it would seem, is a serious argument for divine goodness. Perhaps there is, though I have not been able to identify it, and indeed remain sceptical about the whole idea. But further discussion of this knotty topic will not be attempted here.[29]

Proofs of the traditional moral attributes, I conclude, are a lot harder to come by than has been commonly supposed in natural theology.

Concluding points

(1) Some readers may query whether a good argument, in the usual sense, for theism, is necessarily good P-inductive. If we consider the star turns in natural

theology I believe we would have to say that that has always been the intention, at any rate. Plato in the *Laws*, Aristotle in the *Physics* and *Metaphysics*, Aquinas in the two *Summas*, Leibniz in 'On the ultimate origination of things', Clarke in the *Demonstration*, Berkeley in the *Alciphron*, and Paley in the *Natural Theology* did not suppose that they were doing less than providing compelling grounds which *fully justified* theism (or, in the case of Plato and Aristotle, some fairly near relative).

I do not, however, press this point. It may be that Swinburne and his interpreters and followers mean something less than 'good P-inductive'; they may mean, for example, an argument which, while it does not make the theistic hypothesis more probable than not, does nevertheless render theism very much more probable than any alternative hypothesis, so that defeasibly, and other things being equal, one would be justified in adopting it. But this would not make HA inapplicable. If HA-P as deployed in the second section above is effective against the design argument regarded as good P-inductive, it is equally effective against the design argument regarded as a good argument in the above weakened sense. I think that this point is clear enough, and will not further elaborate it.

(2) Some readers may continue to feel that Swinburne receives less than justice in the preceding. After all, it might be repeated, the official, explicitly stated intention is to show of each of a sequence of theistic arguments that it is good C-inductive, and to assemble them into a cumulative argument which, for further reasons, is then held to be good P-inductive. And nothing has been so far said to counter this. But, I have argued, Swinburne *also* both says and implies in many places that he is advancing the design argument as a *good* argument, and many of his readers have taken him that way. It is against *this* that the preceding sections have been directed. But what then of Swinburne's official cumulative argument? Is HA-P effective against *that*? It is not claimed in this paper that HA-P is effective against the cumulative argument as given. (But, I believe, there are other lines of criticism that are.)[30]

(3) What is the scope of HA? First, we can say something to further justify the title of this paper. Hume's *Dialogues* are directed against the design argument, apart from a discussion in *Dialogue IX* of the cosmological argument, evidently based on Clarke's version. But Hume regarded the latter as worthless, and he saw no other argument as warranting attention. Hence for him natural theology just *is* the design argument. Thus, if my interpretation of him is correct, and HA figured in his mind as the chief or ultimate point against the design argument, then it figured in his mind also as the chief argument against natural theology in general.

But for us latter-day folk it is not so simple. Few would now claim that the design argument was the only thing worth attention. Thus the question is how far HA can be generalized. How far could *we* go in claiming that it is the chief argument against natural theology in general? First, I think it is reasonably clear that

the argument can be generalized so as to apply not only to the design argument, as above, but also to the cosmological argument, to the fine-tuning argument, and to the argument from consciousness (chapters 7, 8 and 9 of *The Existence of God*). The reason is quite straightforward, and depends on a point made in the second section above. All of these four arguments are treated as arguments for *the same thing* – theism. (They are not, respectively, an argument for a designer, an argument for a creator and sustainer, an argument for a fine-tuner, and an argument for an ordainer of psycho-physical correlations.) Further, they proceed along the same Bayesian lines, and all depend crucially on holding theism to be the simplest of all the available explanatory hypotheses. In all these cases then HA-P works in the same way as it has been argued to do in the case of the design argument. That is, even if the simplicity criterion *did* call for omnipotence and omniscience in the cause, still, the mixed phenomena would, by that same simplicity criterion, require the cause to be indifferent to good and evil.

If this is correct, then we have a very substantial generalization of HA, since the four arguments referred to in the previous paragraph include the main pillars of modern natural theology. Now Swinburne endorses, in addition to these, four others. These are the argument from moral awareness (215–218), the argument from providence (chapter 10), the argument from history and miracles (chapter 12) and the argument from religious experience (chapter 13). Here the applicability of HA is less clear. In the case of the argument from moral awareness, it *may* be that the evidence *e* points to a morally concerned agent, as noted in the previous section. If so, it may be that HA does not apply, or does not apply without some qualification. It may also be that something similar is true of the other three arguments of this latter group. These are complications which I cannot try to follow up here. Still, if HA generalizes, as suggested, to the main pillars of natural theology, then it is an important line of thought, and worthy of the astonishing work in which Hume elaborated it so carefully.[31]

Notes

1. Various different senses that have attached to 'natural theology' and 'natural religion' are well discussed by Peter Byrne *Natural Religion and the Nature of Religion* (London: Routledge, 1989), ch. 1. Hume himself uses the term 'natural theology' five or six times in the *Dialogues*, rather more often than he uses 'natural religion'.
2. Hume is quite clear that the design argument is analogical, e.g. *Hume's Dialogues Concerning Natural Religion*, Norman Kemp Smith (ed.), 2nd edn (London: Nelson, 1947), 143, 144, 180. (Overall there are well over a dozen places where the analogical character of the argument is referred to. This matters because of points that arise below.) Subsequent quotations from and references to Hume are referenced in the text by Kemp Smith page number.
3. This summary conforms fairly closely to Paley's famous exposition. See William Paley *Natural Theology, or Evidences of the Existence and Attributes of the Deity Collected from the Appearances of Nature* (London, 1802, with various subsequent editions). Personality is argued for in ch. 23, omnipotence and omniscience in ch. 24, and divine goodness in ch. 26.

4. I am assuming here without argument the correctness of Kemp Smith's view of Philo as the main spokesman for Hume (Kemp Smith, 57–75).

5. J. C. A. Gaskin *Hume's Philosophy of Religion*, 2nd edn (London: Macmillan, 1988), 52–58. The quoted words are from 52.

6. David O'Connor *Hume on Religion* (London: Routledge, 2001), 163–164, 173–178, 186. O'Connor discusses the hypothesis of indifference at 188–190. For Draper see Paul Draper 'Probabilistic arguments from evil', *Religious Studies*, **28** (1992), 303–317. Draper also draws on Hume to construct an argument against theism in two papers anthologized in Daniel Howard-Snyder (ed.) *The Evidential Argument from Evil* (Bloomington IN: Indiana University Press, 1996), chs 2 and 9.

7. Keith Yandell *Hume's 'Inexplicable Mystery'* (Philadelphia PA: Temple University Press, 1990). References to HA-N are 254, 257, 271, and to HA-P 268–269. Later in the book (309–314) he discusses the *Enquiry*, sec. XI, and here gets closer to recognizing HA.

8. Richard Swinburne *The Existence of God* (Oxford: Clarendon Press, 1979, rev. edn, 1991, 2nd edn, 2004). References are given by page number in the text here and in subsequent sections. Reference is also made to Swinburne's more popular exposition of his natural theology, *Is There a God?* (Oxford: Oxford University Press, 1996).

9. Richard Swinburne 'The argument from design', *Philosophy*, **43** (1968), 199–212.

10. A is a consequence of the standard form of Bayes' theorem. For the relevant definition of 'confirm', see Swinburne *Existence of God*, 6. For Swinburne's own summary of the design argument see 166, and 110–112 for a succinct statement of the general method of argument.

11. The official aim in relation to the several traditional arguments, see *ibid.*, 13–14, 17, and see too the summaries of each of the several arguments; in relation in particular to the design argument, 166; good C-inductive, good P-inductive, 6–7; special synoptic argument, ch.14.

12. Cicero *De Natura Deorum*, many translations, e.g. by H. Rackham in the Loeb Classical Library edition. Book II sets out both forms of the design argument in great detail.

13. The quoted phrase is in Swinburne *Is There a God?*, 68. The reader who doubts what is said here should consult *Existence of God*, 153–155. More generally, the following is a selection of places in *Existence of God* where Swinburne views the traditional arguments as arguments in the usual sense: 6, 8, 9–10, 20, 23, 51, 108. Many other cases can be cited both from *Existence of God* and *Is There a God?*

14. Brian Davies *An Introduction to the Philosophy of Religion* (Oxford: Oxford University Press, 1987), ch. 6; Philip L. Quinn and Charles Taliaferro (eds) *A Companion to Philosophy of Religion* (Oxford: Basil Blackwell, 1999), ch. 43.

15. Davies *Introduction to the Philosophy of Religion*, 62–63, 90–91. Similar points hold (on a much larger scale) of the elaborate cumulative argument given by F. R. Tennant *Philosophical Theology*, 2 vols (Cambridge: Cambridge University Press, 1956).

16. See Norman Kretzmann *The Metaphysics of Theism* (Oxford: Clarendon Press, 1997), ch.7, especially 223–225. There is a useful concise statement of the matter in Quinn and Taliaferro *Companion to Philosophy of Religion*, 245. The *locus classicus* for the whole line of thought is Arthur O. Lovejoy, *The Great Chain of Being* (Cambridge MA: Harvard University Press, 1936).

17. Libertarian free will (a component of humanly free agency) predicted by theism; Swinburne *Existence of God*, 117–120, 123, 131, the argument for the reality of such free will, 169–170.

18. His account of prior probability, and especially its connection with simplicity, is an important aspect of Swinburne's procedure. It is stated and amplified in a number of places, but mainly in ch. 3 of *Existence of God*. I discuss Swinburne's conception of, and use of simplicity in 'The fine-tuning argument: the Bayesian version', *Religious Studies*, **38** (2002), 375–404; see 388–399 for this point.

19. The present line of thought has had wide currency. It can be seen in Quinn and Taliaferro *Companion to Philosophy of Religion*, 108 and 339–340, and at various points in Yandell *Hume's 'Inexplicable Mystery'*, 309–314. Hume himself uses the word 'hypothesis' at least a dozen times in the *Dialogues*. I will not try here to decide how many of these uses mean more than 'analogical conclusion', i.e. how far Hume himself may have gone in the direction of recognizing a difference between ordinary analogical arguments and hypotheses in the HD sense. If he did do that, some revision of the earlier exposition would be necessary.

20. Each argument in the sequence takes as its k the e of the preceding argument; Swinburne *Existence of God*, 17.

21. R. Carnap *Logical Foundations of Probability* (Chicago IL: University of Chicago Press, 2nd edn, 1962), 211–213; C. Hempel *Aspects of Scientific Explanation* (New York NY: The Free Press, 1965), 64–67. Swinburne's own textbook shows no sign of dissent from TEC; see his *An Introduction to Confirmation Theory* (London: Methuen, 1973), 26–28 and ch. 12, especially 188–189.

22. The topic of background knowledge is discussed in Quentin Smith's review of Swinburne's *Is There a God?*, *Religious Studies*, **34** (1998), 91–102. His discussion (93–96) has some points of contact with what is being said here in its emphasis on the unacknowledged *extent* of relevant background knowledge.

23. A recent edition, with a valuable introduction and other material, is that by Ezio Vailati (Cambridge: Cambridge University Press, 1998). Clarke's proof of the moral attributes is in sec. XII of the lecture, 83–85 of this edition.

24. J. L. Mackie *Ethics: Inventing Right and Wrong* (Harmondsworth: Penguin Books, 1977), 23–24, 38–42.

25. A recent survey of moral arguments is in Quinn and Taliaferro *Companion to Philosophy of Religion*, article 44, 'Moral arguments'. See too J. L. Mackie *The Miracle of Theism* (Oxford: Oxford University Press, 1982), ch. 6 (moral arguments) and ch. 10 (religious experience). I emphasize that I am treating religious experience as the source of a causal argument, i.e. as interpreted by Mackie at 177–187; Reformed Epistemology and its kin are not in question here. Swinburne's stance on these matters is as follows: (1) he rejects the traditional argument from morality (212–215); (2) he accepts an argument from moral awareness, near kin to what I call an 'argument from moral consciousness' (215–218); (3) he advances an argument from religious experience (ch. 13), which, however, differs from the traditional one in not appealing to the unusual or extraordinary character of the experience but rather to general epistemological considerations. But the point made in the text below about the absence of a detachable component applies equally to this version of the argument.

26. There are in fact attempts at using morality as a detachable component, e.g. by Tennant *Philosophical Theology*, vol. 2, 99–103. I cannot discuss these here, but doubt that much is thereby lost.

27. The *Summa Theologiae* argument discussed below is *ST*, Ia. 6. 1. Four further arguments to the same conclusion are given in the *Summa Contra Gentiles*, I. 37. These four arguments seem to me to be no better than the *ST* argument though I cannot discuss them here.

28. Paley *Natural Theology*, ch. 26. Both quotations are from the seventh paragraph of this chapter.

29. See the anthology Scott Macdonald (ed.) *Being and Goodness: The Concept of the Good in Metaphysics and Philosophical Theology*, (Ithaca NY: Cornell University Press, 1991). See too Quinn and Taliaferro *Companion to Philosophy of Religion*, article 30, 'Goodness'. Lovejoy's *Great Chain of Being* is (as always) a source of illumination.

30. My own objection to the cumulative argument is given in 'The fine-tuning argument', 399–400.

31. My thanks to my former student Christopher Walsh for useful comments and much further assistance.