What Is Naturalism, that We Should Be Mindful of It?

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"Naturalism" is all the rage in the philosophical world and elsewhere in the culture. The woods are teeming with those who would provide "naturalistic" construals of intentional psychological states, moral and other evaluative facts, epistemic statuses, and much else. Whatever we talk about must be given naturalistic credentials or be consigned to the flames, if, indeed, flames themselves are naturalistically respectable. It requires some bravado, in contemporary American philosophy, to argue that it is perfectly acceptable to acknowledge various facts that cannot be "naturalized".

But before we can usefully address the question as to the truth or acceptability of naturalism, we have to get clear as to just what all the fuss is about. What does it take for a construal of something to be "naturalistic"? What is it for a state, a fact, a condition, a process to be a "naturalist" one? Most of those who march under the naturalist banner in philosophy of mind, in ethics, in epistemology, in metaphysics simply use the term unselfconsciously, apparently supposing that it wears its meaning on its face. Nor do opponents do any better in this respect. Let me illustrate the fact that it is often puzzling and obscure just what force the term is supposed to have.

In philosophy of mind and philosophy of language - disciplines that have been increasingly pursued together recently - various thinkers aspire to give "naturalistic" accounts of various "intentional" states - among psychological states such items as beliefs, desires, intentions, and with respect to language and speech - meaning and reference.{1} The intuitive idea of "intentionality" here is that these are all ways in which something mental or linguistic is about something, carries a reference beyond itself. To put in other terms, these are all items that have content. A belief is a belief that so-and-so, e.g., it will rain tomorrow. An intention is an intention to do something, e.g., to return home tomorrow. A word in a language means

something, e.g., 'academic' means having to do with teaching and learning. To concentrate on the mental side, these "intentional states" are often termed "propositional attitudes", since their "content" is of a propositional form. Consider, e.g., the proposition that it will rain tomorrow. One can believe, doubt, hope, or fear that it will rain tomorrow; and one can desire that it rain tomorrow. Self-proclaimed naturalists typically feel that there is something deeply puzzling about this reference of a psychological state or an item in a language "beyond itself". And they feel that if our ordinary thought about such matters is to be made respectable we must find some way of explicating these notions in "naturalistic" terms. Usually they set out to do just that; though the more sceptical among them, like Stephen Schiffer argue that this cannot be done, and that therefore this entire conceptual framework must be abandoned.

This procedure raises two questions. The first, and less serious, concerns the idea that the unreduced intentional concepts are "non-natural". What could be more natural than beliefs, desires, intentions, and the use and understanding of speech? By this I mean not only that these are everyday, familiar, run-of-the-mill phenomena - not something weird, spooky, paranormal, or occult. More to the point, beliefs, desires, and meaningful use of language belong, in their own right, to what, on any reasonable construal, is to be termed the world of "nature". It is part of our nature, as human beings, to form beliefs, desires, and intentions and to act on them, and to learn and use languages with semantic structures to communicate with our fellows. The idea that such familiar phenomena as these need to be explicated in some specially favored patois in order that their credentials as "natural" be vindicated, is one that must strike any fluent speaker of the language who is not corrupted by contemporary philosophical jargon, as bizarre in the extreme.

I call this question the less serious one, because it may be that there is some technical use of 'naturalistic' that is being employed in these discussions. If so, the question is as to just what that is; and this is the more serious of the two questions. Lacking some avowed "naturalist" who would break down and tell us what s/he means by 'naturalist', the obvious approach is to look at the terms or concepts that are taken to be authentically naturalist, the terms that are such that once we have explained, in these terms, what a belief or a meaning is, we have achieved our naturalist goal.

In some cases it is relatively unproblematic what the naturalist is up to. Consider naturalism in meta-ethics, as classically conceived. This is the view that ethical terms can be analyzed in "purely factual" terms. (The position might better be termed "factualism", since, as G. E. Moore, the father figure of twentieth century meta-ethics, noted, one kind of supernaturalism, at least the view that the morally right is *defined* as being in accordance with the will or commands of God is a form of naturalism!) Thus it presupposes the fact-value distinction. To be sure, various problems can be raised about the (purely) factual-evaluative distinction, just as with any other alleged central conceptual distinction. But at least it would seem that we have a intuitive grasp of this distinction, and we are not at a total loss as to the criteria for membership in the naturalist's reduction base.

With other naturalist projects the situation is not nearly so rosy, and that includes the domains with which I began - mind and language. Look at the concepts that naturalists use in their "naturalistic" construals of mental states and semantic properties. Causation figures prominently. Here is a simple example, taken from the position known as functionalism, according to which a particular psychological state consists of a certain "role" or "function" performed by the psyche in mediating between incoming snesory stimulation and outgoing

behavior. One functionalist, ned Block, takes a psychological state, like a belief or a desire to be "definable in terms of its causal relations to inputs outputs, and other mental states". The idea is that by construing states like beliefs and desires in this way, we have de-mystified them, set aside anything "dualistic", "immaterial", or otherwise non-natural. By construing them as whatever plays a certain causal role, vis-a-vis naturalistically respectable items like sensory stimulation and overt behavior, we have shown how to view them as ordinary denizens of the physical world.

But, of course, it is not as if casual relations between relata of any sort are admitted into the account. Divine causation would, presumably not be considered kosher. What causal relata are deemed to be naturalistically admissible. Note that Block's formulation includes "other mental states" into the definition. These are presumably to be construed naturalistically in the same sort of way, which raises the same question about them. Though there seems to be dissension in the ranks of the faithful on this point. Thus Fodor in his "A Theory of Content" works with nomic relations between properties , whereas any such "Platonistic" commitment is anathema to some of his fellow-believers. Sticking with this work of Fodor's, counterfactuals also figure heavily in his analysis, and it is difficult to see how counterfactual conditionals can be avoided in any naturalistic reduction of the mental or the semantic. They are also heavily featured by Dretske and by many functionalists who aspire to naturalistically reductive accounts of the mental.Moreover, other self-styled naturalists, like Robert Stalnaker and David Lewis make heavy use of possible worlds in their analyses of intentional mental states and semantic properties of language. [Note that the currently standard (naturalistic?) semantics of counterfactual conditionals uses the notion of "close possible worlds"]. And, unless our notion of possible worlds has them, à la David Lewis, existing in the same way as this world, we would seem again to be involved in "Platonistic" commitments. And Lewis' version of possible worlds is hardly palatable to most naturalists, for he is committed to recognize an actually existing, concrete world corresponding to each of the infintiely many complete logically possible states of affairs! on any natural construal of that term, for Lewis is committed to the existence of many (infinite) worlds containing God. At least he is so committed if the existence of God is logically possible.)

What else is allowed in the naturalistic reduction base? How about propositions, which would be very useful in analyzing concepts of "propositional attitudes". Again there is dissension in the ranks, but the typical thrust of the self-proclaimed naturalist is to avoid commitment to propositions by various maneuvers, such as identifying them with classes of sentences or classes of possible worlds (here they come again). In general, it seems to be generally considered kosher to let linguistic entities of various sorts into the reduction base. Evolutionary considerations are also favored by some naturalists in their attempts to explicate mental content, on the supposition, presumably, that we can use a theory of evolution that deals exclusively in purely physical mechanisms and processes.

Putnam in his many phillipics against attempts to "naturalize" this and that, has argued, persuasively that the notion of causation, as well as counterfactual conditionals, reflect human interests, and are not simon pure denizens of some world that is objective vis-a-vis such matters. That seems, once again, to presuppose that such things as human interests are not "naturalistic", unless it is the relativity, rather than the intentionality, introduced by this that Putnam means to be stressing. In any event, Putnam's critiques illustrate the way in which there is considerable disagreement in what can be taken as truly natural.

I could go on at much greater length, but this is not supposed to be a lecture on naturalism in

philosophy of mind. I think I have said enough to at least rouse suspicion that it is not exactly crystal clear just what it would take to have a distinctively "naturalistic" analysis of intentional state or semantic concepts. If we turn to epistemology, the situation is even murkier, if possible. Sometimes one gets the impression that those who seek to "naturalize" epistemology are merely seeking to rid it of any unreduced evaluative or normative terms, thus assimilating it to the classical form of naturalism in meta-ethics. But sometimes there seems to be a higher level of aspiration. To see this look at Alvin Plantinga's account of epistemic "warrant", set forth in detail in his recent book, *Warrant and Proper Function*. The basic idea (subject to many qualifications into which I will not have time to go here) is that what converts true belief into knowledge (subject possibly to some Gettier-proofing condition) is that the belief results from the "proper functioning" of some of one's cognitive faculties. Now there is a question as to whether the notion of proper functioning is, at least in part, evaluative. But to clear that doubt out of the way let's give that notion a theistic reading, in which it means "functioning in accordance with the design plan" for those faculties, the plan the designer, viz., God, had in mind when creating them. This sounds factual rather than evaluative, but is it naturalistic? Has epistemology been naturalized here? If so, we are back to Moore's point that supernaturalism is a form of naturalism.

Perhaps the naturalized epistemologist's commitment is to science. Epistemology is to become a part of science, or at least to be pursued by "scientific method", if we can figure out what the boundaries of that are. This is Quine's line in his famous essay, "Epistemology Naturalized". Well, on any halfway plausible way of drawing boundaries around "scientific method", the proposal to do epistemology only by scientific method would put virtually all actual epistemologists out of business - Quine included. At this point we might go back to trying to figure out what is allowable in a naturalistic reduction base for epistemological concepts, thus bringing us back to the kind of bafflement we encountered in thinking about naturalistic philosophy of mind.

So seeing what naturalists work with when giving "naturalistic" accounts of various entities fails to give us unambiguous guidance to what is supposed to be "natural". But we are not totally without attempts to say in general what naturalism amounts to. Consider Arthur Danto's article on Naturalism in the *Encyclopedia of Philosophy*, where he writes:

> The entire knowable universe is composed of natural objects - that is, objects which come into and pass out of existence in consequence of the operation of "natural causes".
>
> A natural cause is a natural object or an episode in the history of a natural object which brings about a change in some other natural object.
>
> A natural process is any change in a natural object or system of natural objects which is due to a natural cause or system of natural causes. (Vol. 5, p. 448)

'Natural object' is explained in terms of 'natural causes'. 'Natural causes' is explained in terms 'natural object'. 'Natural process' is explained in terms of 'natural object' and 'natural cause'. This is a very small circle, or system thereof. It can hardly be supposed to throw any radical light on what it is for an object, cause, or process to be *natural*. The closest Danto comes to breaking into the circle comes when he introduces science and scientific method as our only source of knowledge of the world. (p. 449) This suggestion will be followed up in the next section.

One may certainly be pardoned for feeling a bit frustrated at this point in the discussion. Our subject matter seems to vanish, like Macbeth's dagger, when we try to grasp it. We are left only with a vague sense of a position, a gut feel for the sorts of things that would or would not count as "naturalistic". But when we try to make this more explicit, the behavior of those who wear the label is not of sufficient help. But perhaps we have been too cautious, too circumspect. I have been proceeding on the working assumption that those who set out to forge a "naturalistic" account of some subject matter, are working with some distinctive concept, one that is distinct from those expressed by other familiar labels in the neighborhood, such as "materialism" and "physicalism". But that may be a mistake. It may be that (allowing for the usual spread of peripheral and deviant cases) what is mostly going on is that 'naturalism' has caught on as a popular buzz-word for what is more informatively designated as 'physicalism' or 'materialism'. It sounds more inclusive, more ecumenical, less dogmatic to say 'naturalism" than to use the other terms. But, insofar as 'naturalism' designates anything definite it is indistinguishable from (some of) what is designated by the other terms.

Let's pursue that tack. I will not distinguish between 'physicalism' and 'materialism'. However I must distinguish between more and less extreme forms. The more extreme form holds that nothing exists except what is entitled to be termed 'material' or 'physical'. Whereas the less extreme form holds only that nothing exists except the physical and what *supervenes* on that. (Use your favorite definition of supervenience at this point.) It may be that 'naturalism' has historically (in twentieth century history) been used for the less extreme form. In any event, the crucial problem in getting clear as to what physicalism or materialism is, is to clarify what it is for something to be physical or material. Let's look at that for a moment.

I take it to be reasonably clear what it is for a substance to be a material substance. Being spatially extended (plus, perhaps, having certain fundamental physical properties like mass) would seem to be necessary and sufficient. But what it is to be a material (physical) *state*, *property*, *process*, or *event* presents considerably more difficulty. States and properties (and perhaps events and processes as well) are not susceptible to spatial extension in the clear, unproblematic way substances are. We might try to reduce all these notions to a central one. Thus we might say that a state, event, or process is physical if it is definable as the exemplification (by a physical substance?) of one or more physical properties . Alternatively w might seek to reduce the physicality of properties to the physicality of states. But then we will still be left puzzled as to what makes items of the basic sort physical. To allay suspicion that this is merely an idle worry, let's think about positions on the mind-body problem, in particular the distinction between pure materialism and "property (state) dualism". The former holds that all of a human being's properties (states) are physical, while the latter holds that conscious mental states are not themselves physical, even though they are states of a physical substance (there is no mental substance in this picture), and, usually, that these non-physical mental states are supervenient on physical states. But just what is the issue here? What is our concept of 'physical state' such that it is a sensible question as to whether my believing that p or my being visually presented with a maple tree is or is not a physical state, given that I do not recognize the possibility of a non-physical substance of which it is a state? Spatial location cannot be the issue. States of me are not spatially located in the way in which I am. Again, it may be said that the question is as to whether the *property* of believing that p is a physical property. But what is that issue? What does it take to make a property physical? Presumably being a property of a physical substance is not sufficient, or there would be no controversy here.{2} So what are the pure materialist and the property

dualist arguing about?

If we look at attempts to define 'physical property' and the like, we find various approaches. Keith Campbell in his article, "Materialism", in the Encyclopedia of Philosophy has recourse to a list.

> The physical properties are position in space and time, size, shape, duration, mass velocity, solidity, inertia, electric charge, spin, rigidity, temperature, hardness, and the like. The list is open-ended."{3}

So far all this does for us is to remind us of some of the properties we are inclined to count as physical. It does nothing toward spelling out what there is about them that elicits that inclination.

Jaegwon Kim suggests that "Property P is a physical property if and only if that an object has P presupposes that it has extension".{4} This makes progress because it does not allow that every property of a physical object is a physical property. It requires in addition that the property can only be a property of a physical object. How much this helps depends on some complex issues. If it is to exclude the property of believing that p from being a physical property it has to be the case that this is not a property that can only belong to a physical object; that is, it has to be possible for a non-physical subject to believe that p, and this is controversial. Moreover, in view of the apparent blurring of the line between body and force in contemporary physics, it is dubious that every physical property belongs to something that has extension (in what sense?), much less that it can belong only to something extended.

J. W. Cornman defined 'physical property' as follows.

> P is a physical property of individuals = (1) P is an a posteriori property that, under certain conditions, would be a nonrelational property of or a relation among spatiotermporal individuals which are neither living individuals or attached parts of living individuals, and (2) P is not a property or relation that a spatiotemporal individual, which is living or is a part of a living individual,would have only if it or what it is part of were living.{5}

The thrust of this is to narrow the class of "extended" objects to those that are analytically tied to physical propertyhood. A physical property is one that can qualify non-living spatiotemporal individuals. This cuts out mental properties (which can only qualify living individuals) as physical properties. It also gives pride of place to sciences of the inorganic (physics and chemistry) as the home base of physical properties.{6}

These last definitions verge onto defining 'physical property' as one dealt with by the physical sciences. This approach, or something like it, is made explicit in the following.

> By "physical[1] terms" I mean all (empirical) terms whose specifications of meaning essentially involves logical (necessary or, more usually, probabilistic) connections with the intersubjective observation language, as well as the terms of this observation language itself…By "physical[2]" I mean the kind of theoretical concepts (and statements) which are sufficient for the explanation, i.e., the deductive or probabilistic derivation, or the observation statements

> regarding the inorganic (lifeless) domain of nature.{7}

What this amounts to is that physical terms are those that occur in observational reports (or what can be defined in terms of this), or in theories devised to account for observations of the inorganic. That is, physicalistic terms are those that occur in physical science (including the observational portion thereof). This approach is stated more forthrightly by Brandt and Kim.

> …we so use the term 'physical property' that the nonlogical terms of these sciences [contemporary physical and biological sciences] stand for physical properties.{8}

And Keith Campbell, after reciting the list of physical properties quoted above, adds that the list "is composed of properties that are the objects of the science of physics."

The reader may notice more than a passing resemblance of Campbell's procedure to the practice of determining what counts as divine revelation by reference to the canonical list of scriptural books. And in both cases, one seeks to avoid the charge of arbitrariness in this procedure by deriving the canon from a recognized authority - physical science or the church. So a physical property (state) is one that is recognized (dealt with) by science, one in terms of which science provides its descriptions and theories and explanations.

There are at least three difficulties with this suggestion. First, what are we going to include in "physical science". Physics and chemistry, obviously. But how about biology, now that it has become more scientifically respectable? (Brandt and Kim are more inclusive in this regard than other authors we have quoted.) What about geology, meteorology, and paleontology? If we were to include psychology, sociology, economics, and the other social and behavioral sciences, the whole thing would blow up; since the properties the property dualist wants to deem non-physical would turn out to be physical after all, and he would find himself a pure materialist malgré lui. Well, suppose we draw the line at some intuitively appealing point. There is then the second difficulty - that science develops. The physical sciences have been in a radical state of flux all during this century. What would have been thought of as visionary speculation in one decade becomes scientific orthodoxy in the next. When we define the physical by reference to what physical scientists think and work with, what period of the history of science are we to pick for this purpose? It seems arbitrary to canonize the present moment at defining a central metaphysical category. But if if we make the definition relative to the stage of scientific development we are considering, then the metaphysical issues change with each fundamental shift in science. Furthermore, what if physics should begin taking into account psychic forces or the élan vital, or other factors we now consider to be clearly non-physical. Would we be prepared to recognize them as physical properties in that case?

The third difficulty may be the most serious. What about commonsense concepts of what would naturally be regarded as concepts of physical properties, kinds, or conditions? What about being a table, a house, or a bed? What about being sour or sweet or rough or lumpy? What about being a rhinosceros or a robin? Let's say that none of these concepts, and thousands of their kindred, have any place in developed physical science. Are we therefore to count them as non-physical properties or kinds or conditions? If so, have we lost touch with the basic intuitions that originally led to the metaphysical distinction between the material (physical) and the non-material?

Section II

The above discussion, though certainly sketchy is, I believe, sufficient to make it clear that we encounter serious difficulties in trying to explain what naturalism, physicalism, or materialism is supposed to be. But, it may be said, our difficulties have all concerned the attempt to distinguish these positions from their contraries with respect to the denizens of the physical universe. We run into these difficulties when we try to distinguish between physical (natural) and non-physical (natural) aspects of what we accept as being, uncontroversially, material substances. But that is not our special concern here is with the bearing of naturalism on religious issues. And surely it is at least clear that naturalism is opposed to *supernaturalism* and, more specifically, to theism. Naturalism at least denies that there is anything other than the physical universe - whatever that contains and however these constituents are to be understood. Whereas traditional theistic religion is unequivocally supernaturalistic in this sense: it holds that the physical universe owes its existence to the creative activity of a supreme personal being that is independent of that universe for its existence, that is,indeed, independent of anything other than itself. Don't we have a clear opposition there?

Perhaps. It sounds like it. But that bold modification of the "nothing but the physical universe" position, viz., "whatever that contains and however those constituents are to be understood" may make trouble. Whether they do depends once more on how naturalism is to be understood. If it is prepared to give a blank check to the physical universe) - *whatever that turns out to be*, then the position is clearly delineated in this way. But if there are secret reservations, if some ways the physical universe might conceivably turn out to be run contrary to naturalistic commitments, then we are back to wondering just what naturalism comes to. What if the universe were, as Hegel thought, a stage in the process of the Absolute Spirit's becoming fully self-conscious? Most contemporary "naturalists", I think, would not settle for this. And if we try to specify how the physical universe has to be constituted to be purely "naturalistic" or "physicalistic", we are back in the problems that were plaguing us before.

But we might try a quite different tack, defining the thrust of naturalism not by the *content* of science, thereby holding ourselves hostage to whatever future developments there may be in that, but by the *method* of science. We will take "nature", by definition, to include all and only what is discoverable by the "scientific method", including the incipient beginnings of this in ordinary sensory observation, and reasoning from the results of observation. And let's pretend that we know what is and is not included in the "scientific method". Perhaps this will give us a real criterion for what is properly included in a reduction base for a naturalistic analysis of intentional and semantic concepts, and what is allowable in "naturalized epistemology". If a concept is such that its application can be determined by scientific method, then it is acceptable; if not, not. Perhaps this is what causal relations, (recognized) physical properties, neuro-physiological processes, and spatio-temporal location have in common. To be sure, there is still the possibility that "scientific method" can tell us about beliefs, desires, intentions, and linguistic meanings - without their having been defined in a way that contemporary naturalists would find acceptable. That depends on the details of how we think of scientific method. In any event, my principal concern now is not to clean up the act of the naturalist in philosophy of mind, etc., but to find some kind of naturalism that is interestingly related to religion. And it does look as if, on the present approach, we have a naturalism that is squarely opposed to the supernaturalism that we get in theistic religion. This naturalism turns out to be a form of "scientism". There is nothing

other than what can be discovered by the scientific method. Or in other terms, science is our only access to what there is. If it can't be ascertained by science (or its humbler commonsense cousins), is isn't real. Thus we avoid the problem of what stage of science to take as our landmark, for we have brought science in by its method. To be sure, if scientific method itself changes and develops, often in unpredictable ways, we have an analogous problem here. And there is no doubt but that there have been many methodological developments in the history of science. Lacking the time to go into this properly, I shall have to be brutal and just rule that at a high level of abstractness there is a commonality of method that is characteristic of science, and that if this were to change significantly we would no longer have what is properly called "scientific method".

Note too that the present approach avoids the problem of determining what "physical" or "material" properties or states are, and consequently that it avoids drawing boundaries around "physical science". Again, by putting method into the center of the picture (and interpreting this in a very generic, and generous, fashion) we are able to draw on anything that employs a method that fits this characterization, whatever its subject matter and whatever recognized discipline it involves.

The final step in the current argument is to point out that the God of theistic religion - His nature, purposes, requirements, and doings - is inaccessible to scientific method. By that method we can discover nothing about any such being. As far as science can tell us, the physical universe is all there is. Thus, on naturalistic principles, it is all there is. This step is, needless to say, controversial. Many thinkers have held that scientific method does uncover clear indications of the hand of God in creation. And others think that science establishes atheism. Again, I will simply rule against this. I will assume in this discussion that by the use of scientific method we can discover nothing one way or the other as to whether the claims of theistic religion about God are true. This is not meant to rule out the possibility that scientific results might be used in philosophical arguments for or against the existence of God.

I have been concentrating on the conflict that this kind of scientistic naturalism{9} comes into with theistic religion over the existence, nature, and activities of God. It has often been held that theistic religion comes into important conflict with naturalism over its understanding of the natural world itself, for example over human nature and whether we are endowed with free will. I do not deny that there are, or well can be, incompatibilities of this sort, but I will ignore them for purposes of this discussion.

Section III

Let's say, then, that naturalism is ineluctably incompatible with the deepest convictions of theistic religion, including any of its convictions concerning the existence, nature, purposes, and doings of God. How seriously should we take this? How much of a threat is this to theistic religion? That all depends on what there is to be said for this kind of naturalism. Why should we suppose that there is nothing except what we can learn about from science? What grounds are there for this kind of scientism?

I fear that one will find little real argument for this position in the writings of its proponents. One gets the impression that it is felt to be sufficient to bask in the glow of the prestige of science. We live in a scientific age. Everyone agrees that science has made enormous strides in the last few centuries in widening and deepening our understanding of the internal

economy of the cosmos and has thereby made possible technological advances that would have been undreamed of two hundred years ago. With this kind of track record who needs a philosophical argument? Science has proved itself by its achievements. So what's the problem?

The problem is that one can unreservedly acknowledge the stupendous achievements of the scientific method - theoretical and practical - and still wonder whether this is our only cognitive access to the world. One can still wonder whether reality is limited to what science can reveal. So one can unreservedly acknowledge the stupendous achievements of J. S. Bach and still wonder whether he completely exhausted the resources of musical expression. Isn't there still room for a Mozart, a Beethoven, a Wagner? So one can unreservedly acknowledge the supreme subtlety and finesse of French cuisine and still find a place in ones culinary world for Chinese and Italian cuisine.

To take an analogy closer to home, suppose that one, dazzled by the dizzying heights to which modern mathematics has ascended, should forthwith conclude that nothing exists except what is disclosed to us by pure mathematics. Pythagoras would have been revived, but to what purpose? Isn't it arbitrary to conclude from the stupendous achievements of one mode of inquiry that no other putative mode of inquiry can tell us anything about the world? And isn't the scientistic naturalist guilty of just this kind of arbitrariness in moving from the spectacular success of science to the conclusion that there is no other way of finding out anything about the world?

At this point the naturalist may turn to her opponent and ask for some reason to think that there is some other procedure that yields real knowledge of the world. Obviously, claims have been made for other modes of access - rational intuition, religious experience, innate ideas, systematic coherence, and so on. But, she will say, what reason is there for supposing that any of them really gives us knowledge of reality? Until solid reasons are produced for taking any of them as serious candidates, she will not worry her head about the possibility that any of them are genuine sources of knowledge.

There are two answers to this. First, we must think carefully about what is possible, in general, by way of validating the claims of a putative source of knowledge. I have argued that none of our basic (putative) sources of knowledge (including "scientific method" and its commonsense roots) can be shown to be a reliable source of belief, or a source of knowledge, without making use of what we take ourselves to have learned from that very source. Any otherwise effective argument for the reliability of such a source is infected with what I call "epistemic circularity" - using outputs of that source to show it to be reliable. (See my *The Reliability of Sense Perception* and "Epistemic Circularity" in *Epistemic Justification*.) If that is right, then the naturalist is using epistemically circular arguments to establish the claims of scientific method to be a source of knowledge. And perhaps the advocate of, say, religious experience can mount an effective argument for the reliability of that source if he is allowed to use its outputs in the argument.

Second, in criticizing the pretensions of scientistic naturalism I am not concerned to defend the pretensions of other sources of knowledge. I believe that there are other genuine modes of cognitive access to the world, but that is not the point here. The naturalist I am discussing makes a claim: that scientific method is the only genuine cognitive access to reality. The question is as to whether this claim can be successfully defended. If it cannot, the naturalist position is in big trouble, even if other claimants to knowledge are unsuccessful in

defending their claims as well.

Let me reemphasize the point that it is all too easy to be blinded to the weakness (or even the absence) of the case for the thesis that only science can tell us what there is in the world, by the fact that we are all daily reminded of the resounding successes of science in penetrating he mysteries of the world of nature. It is easy to be so dazzled by these achievements as to forget that conspicuous task at task T has no tendency to show that nothing else is successful at that task. In other words, we are seduced into forgetting the elementary distinction between sufficient and necessary conditions. That the use of scientific method is *sufficient* , roughly speaking, for getting truth about the world by no means shows that it is *necessary* for achieving that.

In fact the case for scientistic naturalism is so weak that the most appropriate reaction to it is one of caricature or ridicule. Fortunately I can draw on a distinguished predecessor in this enterprise, and one that it is especially appropriate to invoke in this place - O.K. Bouwsma, who for many, many years was the sage of the Nebraska prairies. In his wonderful essay, "Naturalism",{10} Bouwsma has some fun at the expense of some of the contributors to a 1944 volume entitled *Naturalism and the Human Spirit*, many of whom characterized naturalism in the methodologically scientistic way I have been utilizing. For example, he quotes William Dennes as saying: "There is for naturalism no knowledge except of the type ordinarily called scientific", and responds as follows.

> Notice first the form of Dennes's sentence. Mr. Ringling might say: "There is for Ringling Brothers no elephant except of the type ordinarily called big." Does Mr. Ringling intend to deny that there are any little elephants? Does he mean that besides Jumbo and Mumbo there is no little Nimblo? I think he means no more than that there is a difference between big elephants and little elephants, and that Mr. Ringling has no use for little elephants. If you tried to sell him one, he wouldn't buy. He can't use any. Or try this sentence: "For all the boys in our alley, there's no girl but pretty Sally." What, have the boys in our alley seen no girl but pretty Sally? Don't be silly. Of course, they know Helen and Ruth and Betty. It's just a way of saying that above all the girls they know, they prefer Sally.
>
> And this is now the way in which we are to understand Mr. Dennes?…In this case…Mr. Dennes might have admitted other types of knowledge too, but would in this instance merely have intended to say: "Well, so long as I have my choice, let mine be scientific"…If Mr. Dennes prefers blondes or gas-heat or lemonade or a hard mattress or scientific knowledge, well, that's all there is to it.

Bouwsma then goes on to scrutinize a formulation of Krikorian.

> Before we settle these matters, let us inspect Krikorian's sentence. It is: "For naturalism as a philosophy, the universal applicability of the experimental method is a basic belief." Consider the parallel sentence of the vacuum cleaner salesman: "For vacuumism as a philosophy, the universal applicability of the suction nozzle is a basic belief." He may argue to himself: "If I ever give this up, I'll never sell another vacuum cleaner. It is basic." To the house-wife who asks: "And can you use it to dust books?" he replies: "Of course". And when he

> shows her and finds that it does not do so well, does he deny the universal applicability of the nozzle? No such thing. He may complain that he himself is not skillful, or that what seems like dust to the house-wife is not dust. The universal applicability of the nozzle is now the touchstone of dust. If the nozzle is applicable, it's dust. If it is not applicable, it is not dust.

There is much more of this in the essay, but that is sufficient to give the general line. Bouwsma is suggesting (but only suggesting) that the scientistic naturalist is only expressing an attitude. He really doesn't have what he would need, in the way of solid backing, to require us to take his claim seriously as a claim as to what there is.

Section IV

As you may have gathered, I am very sympathetic to the line Bouwsma takes in these passages. Nevertheless, candor compels me to admit that I have not yet fully set out the case for methodological naturalism. I do believe that the "sufficient, therefore necessary" argument, if we can call it an argument, that I have been discussing, is the only thing in the way of a general argument for the position that the methodological naturalist has in her arsenal. But that is not the whole story.

For one thing, the naturalist can take up other alleged ways of getting at the truth and criticize them one by one. There is a great deal of this in the literature. Such bases of belief-knowledge as self-evidence, rational reflection, authority, moral intuition, and religious experience have been repeatedly criticized by the empirically-scientistically minded. But, of course, no amount of polemics against particular non-scientific ways to truth, however cogent each of them may be, suffices to establish the naturalist position. For however many rivals have been discredited, there are more waiting in the wings. To give a conclusive argument for methodological naturalism along these lines one would have to be able to show that all possible candidates have been invalidated; and that is presumably beyond human powers.

Still, there is a somewhat more general argument that can be, and has been, given. One could argue that a certain feature of scientific method is a necessary feature of any procedure that gives us knowledge of the world (or, perhaps, to make it a bit more modest, any substantive knowledge of the world, or any contingent knowledge, any knowledge of non-necessary facts). Then, although it might be very difficult to show that there is *no* other possible cognitive access that has this feature, one might take what appear to be the most promising candidates for possessing the feature in question and show that they do not. To conclude this lecture I will give a brief exposition and discussion of an argument of this sort.

To simplify matters I will concentrate on the observational component of scientific method - the reliance on careful sense perception as the way of amassing data for empirical testing of hypotheses and theories, and as providing explananda for scientific explanation. Thus, remembering that I am using 'scientific method' in a disgracefully broad sense to embrace its commonsense roots, what I will be discussing, in the way of naturalist methodology, is really any use of sense perception to acquire knowledge about the perceivable environment. Let's call this procedure 'SP'. Now a salient fact about SP is that any particular perceptual report can be checked, in principle conclusively, by whether other observers, suitably placed and suitably qualified, perceive what the first reporter claimed to perceive. Suppose I report seeing a morel (a particularly delicious wild mushroom) at a certain spot in the forest. There

are various ways in which it can be determined whether I really did see a morel at that spot. A number of other observers can take a good look at that spot at (approximately) that time and report whether they saw a morel. If it is clear that there is something there that looks like a morel, further tests, including microscopic examination, can be made to determine whether the object really is a morel, rather than some other wild fungus. Tests like these are capable of providing conclusive confirmation as well as conclusive disconfirmation for a perceptual report in SP.

Now I want to consider the claim that the availability of such intersubjective tests is a necessary condition of the evidential value of a mode of experience, and the further claim that religious experience, for example, does not satisfy this condition. In support of the first claim it could be said that our conviction that sense perception puts us in effective cognitive contact with a surrounding world is intimately tied up with the fact that when we compare our perceptual beliefs with those of relevant others, they exhibit a massive commonality. And if we can have no such interpersonal confirmation how can we distinguish veridical perception from dreams and fancies? Though this claim hs considerable initial plausbility, I want to oppose it. But first, let me agree with the second claim, that religious experience (RE) does not satisfy the condition in question.

With reports about God based on religious experience this kind of intersubjective testing is not available. The crucial point here is not that not all persons report experiences of God. Not all persons report having seen morels either. The point, rather, is that for SP, but not for RE, we can specify conditions under which the experience of one subject is *relevant* to the testing of the report of another subject. If S does (doesn't) see a morel in some other place, or at the same place in some other year, that has no bearing (at least no crucial bearing) on whether my report was accurate. It is only visual perception of that spot at (approximately) that time that can provide a maximally decisive test. For SP we are able to determine what perceptions have what bearing on the credibility of the report in question. We can't always do this in as simple a fashion as the "same time, same place" formula. If the alleged object is, unlike a morel, something that moves around a lot, like a human being or other animal, or like an airplane, then the recipes will be more complicated. With respect to an airplane report, what perceptions of others are relevant will depend on the direction in which the plane was moving and at what speed. Where we have to take into account the modifications undergone by an object over a considerable period of time, as we do with a seventeenth century traveller's report of a Cambodian temple, the recipes are still more complicated. But whatever the complexity, we have a considerable capacity to discriminate between relevant and irrelevant experiences of others in the critical examination of a particular sense perceptual report.

There is nothing comparable to this for RE. God is always present everywhere, if present anywhere, and so the whereabouts of a subject has no bearing. If an RE report were to be assessed on the SP model, we would have to say that S really perceived God at t only if every normal subject perceives God all the time. But no religious believer would take this to be an appropriate test. "Why should we expect God to be perceivable by everyone all the time even if He is present everywhere all the time?", he might ask. From within the "doxastic practice" of forming beliefs about God on the basis of religious experience there is no sub-practice of holding such experiential reports subject to decisive confirmation or disconfirmation by the reports of other qualified observers. Within the practice no conditions are identified that are such that if a qualified (normal) observer satisfies those conditions, s/he will experience the same thing if it is there to be experienced.

Thus RE does not satisfy the condition that is claimed to be necessary for being an experiential source of knowledge. That throws us back on the question as to whether this is a necessary condition, and, in particular whether the failure of RE to satisfy it is to its epistemic discredit. I want to suggest that the answer to both questions is NO. I shall approach this via the second question.

To determine whether the lack of this kind of test by other perceivers prevents RE from being a source of knowledge, let's consider what makes this kind of test possible for SP. Clearly, it is that we have discovered fairly firm regularities in the behavior of physical things, including human sense perception. Since there are stable regularities in the ways in which physical objects disclose themselves to our perception, we can be assured that if X exists at a cerain time and place and if S satisfies appropriate conditions, then S is sure to perceive X. But no such tight regularities are disocverable in God's appearances to our experience. We can say *something* about the way in which such matters as the distribution of attention and the moral and spiritual state of the subject are conducive to such appearances; but these most emphatically do not add up to the sort of lawlike connections we get with SP. Is it to the epistemic discredit of RE that it does not enable us to discover such regularities? Well, that all depends on what it would be reasonable to expect if RE does put us into effective cognitive contact with God. Given what we have learned about God and our relations to Him from RE, supplemented by whatever other sources there be, should we expect to be able discover such regularities if God really exists and is something like what He is typically supposed to be? Clearly not. There are several important points here, but the most important is that it is contrary to God's plans to give us that much control - cognitive and practical. Hence it is quite understandable, if God exists and is as RE leads us to suppose He is, that we should not be able to ascertain the kinds of regularities that would make possible the kinds of intersubjective tests exhibited by SP. Hence, the epistemic status of RE is in no way diminshed by its lack of such tests. On the contrary. Given what we have learned about God and His relations to us, if a source did deliver beliefs in such regularities, that would be an indication that it is not putting us into effective cognitive contact with the divine. Hence it is quite unwarranted to hold reports of RE subject to the kinds of tests appropriate to reports of SP. What is appropriate in each case is dictated by the nature of the reality in question and our relations thereto. To judge RE by whether it lives up to the standards of SP is to engage in a kind of "epistemic imperialism" or "epistemic chauvinism": arbitrarily judging one practice by the standards appropriate to another.

The naturalist may complain that I have been drawing my picture of the reality with which RE allegedly puts us in touch from RE itself, and this is circular. But there is no escape from that kind of circularity. We are in the same situation with respect to SP. How do we know what conditions are such that if someone who satisfies those conditions sees (doesn't see) a morel at the appropriate place, that confirms (disconfirms) my morel report? For that matter, how do we know whether the other observer in question reports seeing (not seeing) a morel there and then? Obviously we have to make use of what we have learned from

SP. We don't know these things by rational intuition, nor does an angel tell us about them. When we are dealing with basic belief forming practices - those that constitute our basic access to a certain realm of reality - there is no alternative to using what we have learned by the exercise of that practice in setting up standards for evaluating particular beliefs so formed. The practice sets its own examinations. It is both examiner and examinee.

This brief discussion is just an example of the problems we encounter when a

methodological naturalist tries to show that some other putative source of knowledge does not measure up to what s/he takes to be a necessary condition of epistemic efficacy. For a more extended presentation of these points see Ch. 5, sec. iii E., of my *Perceiving God*.

"Naturalism" is all the rage in the philosophical world and elsewhere in the culture. The woods are teeming with those who would provide "naturalistic" construals of intentional psychological states, moral and other evaluative facts, epistemic statuses, and much else. Whatever we talk about must be given naturalistic credentials or be consigned to the flames, if, indeed, flames themselves are naturalistically respectable. It requires some bravado, in contemporary American philosophy, to argue that it is perfectly acceptable to acknowledge various facts that cannot be "naturalized".

But before we can usefully address the question as to the truth or acceptability of naturalism, we have to get clear as to just what all the fuss is about. What does it take for a construal of something to be "naturalistic"? What is it for a state, a fact, a condition, a process to be a "naturalist" one? Most of those who march under the naturalist banner in philosophy of mind, in ethics, in epistemology, in metaphysics simply use the term unselfconsciously, apparently supposing that it wears its meaning on its face. Nor do opponents do any better in this respect. Let me illustrate the fact that it is often puzzling and obscure just what force the term is supposed to have.

In philosophy of mind and philosophy of language - disciplines that have been increasingly pursued together recently - various thinkers aspire to give "naturalistic" accounts of various "intentional" states - among psychological states such items as beliefs, desires, intentions, and with respect to language and speech - meaning and reference.{1} The intuitive idea of "intentionality" here is that these are all ways in which something mental or linguistic is about something, carries a reference beyond itself. To put in other terms, these are all items that have content. A belief is a belief that so-and-so, e.g., it will rain tomorrow. An intention is an intention to do something, e.g., to return home tomorrow. A word in a language means something, e.g., 'academic' means having to do with teaching and learning. To concentrate on the mental side, these "intentional states" are often termed "propositional attitudes", since their "content" is of a propositional form. Consider, e.g., the proposition that it will rain tomorrow. One can believe, doubt, hope, or fear that it will rain tomorrow; and one can desire that it rain tomorrow. Self-proclaimed naturalists typically feel that there is something deeply puzzling about this reference of a psychological state or an item in a language "beyond itself". And they feel that if our ordinary thought about such matters is to be made respectable we must find some way of explicating these notions in "naturalistic" terms. Usually they set out to do just that; though the more sceptical among them, like Stephen Schiffer argue that this cannot be done, and that therefore this entire conceptual framework must be abandoned.

This procedure raises two questions. The first, and less serious, concerns the idea that the unreduced intentional concepts are "non-natural". What could be more natural than beliefs, desires, intentions, and the use and understanding of speech? By this I mean not only that these are everyday, familiar, run-of-the-mill phenomena - not something weird, spooky, paranormal, or occult. More to the point, beliefs, desires, and meaningful use of language belong, in their own right, to what, on any reasonable construal, is to be termed the world of "nature". It is part of our nature, as human beings, to form beliefs, desires, and intentions and to act on them, and to learn and use languages with semantic structures to communicate with our fellows. The idea that such familiar phenomena as these need to be explicated in

some specially favored patois in order that their credentials as "natural" be vindicated, is one that must strike any fluent speaker of the language who is not corrupted by contemporary philosophical jargon, as bizarre in the extreme.

I call this question the less serious one, because it may be that there is some technical use of 'naturalistic' that is being employed in these discussions. If so, the question is as to just what that is; and this is the more serious of the two questions. Lacking some avowed "naturalist" who would break down and tell us what s/he means by 'naturalist', the obvious approach is to look at the terms or concepts that are taken to be authentically naturalist, the terms that are such that once we have explained, in these terms, what a belief or a meaning is, we have achieved our naturalist goal.

In some cases it is relatively unproblematic what the naturalist is up to. Consider naturalism in meta-ethics, as classically conceived. This is the view that ethical terms can be analyzed in "purely factual" terms. (The position might better be termed "factualism", since, as G. E. Moore, the father figure of twentieth century meta-ethics, noted, one kind of supernaturalism, at least the view that the morally right is *defined* as being in accordance with the will or commands of God is a form of naturalism!) Thus it presupposes the fact-value distinction. To be sure, various problems can be raised about the (purely) factual-evaluative distinction, just as with any other alleged central conceptual distinction. But at least it would seem that we have a intuitive grasp of this distinction, and we are not at a total loss as to the criteria for membership in the naturalist's reduction base.

With other naturalist projects the situation is not nearly so rosy, and that includes the domains with which I began - mind and language. Look at the concepts that naturalists use in their "naturalistic" construals of mental states and semantic properties. Causation figures prominently. Here is a simple example, taken from the position known as functionalism, according to which a particular psychological state consists of a certain "role" or "function" performed by the psyche in mediating between incoming snesory stimulation and outgoing behavior. One functionalist, ned Block, takes a psychological state, like a belief or a desire to be "definable in terms of its causal relations to inputs outputs, and other mental states". The idea is that by construing states like beliefs and desires in this way, we have de-mystified them, set aside anything "dualistic", "immaterial", or otherwise non-natural. By construing them as whatever plays a certain causal role, vis-a-vis naturalistically respectable items like sensory stimulation and overt behavior, we have shown how to view them as ordinary denizens of the physical world.

But, of course, it is not as if casual relations between relata of any sort are admitted into the account. Divine causation would, presumably not be considered kosher. What causal relata are deemed to be naturalistically admissible. Note that Block's formulation includes "other mental states" into the definition. These are presumably to be construed naturalistically in the same sort of way, which raises the same question about them. Though there seems to be dissension in the ranks of the faithful on this point. Thus Fodor in his "A Theory of Content" works with nomic relations between properties , whereas any such "Platonistic" commitment is anathema to some of his fellow-believers. Sticking with this work of Fodor's, counterfactuals also figure heavily in his analysis, and it is difficult to see how counterfactual conditionals can be avoided in any naturalistic reduction of the mental or the semantic. They are also heavily featured by Dretske and by many functionalists who aspire to naturalistically reductive accounts of the mental.Moreover, other self-styled naturalists, like Robert Stalnaker and David Lewis make heavy use of possible worlds in their analyses

of intentional mental states and semantic properties of language. [Note that the currently standard (naturalistic?) semantics of counterfactual conditionals uses the notion of "close possible worlds"]. And, unless our notion of possible worlds has them, à la David Lewis, existing in the same way as this world, we would seem again to be involved in "Platonistic" commitments. And Lewis' version of possible worlds is hardly palatable to most naturalists, for he is committed to recognize an actually existing, concrete world corresponding to each of the infintiely many complete logically possible states of affairs! on any natural construal of that term, for Lewis is committed to the existence of many (infinite) worlds containing God. At least he is so committed if the existence of God is logically possible.)

What else is allowed in the naturalistic reduction base? How about propositions, which would be very useful in analyzing concepts of "propositional attitudes". Again there is dissension in the ranks, but the typical thrust of the self-proclaimed naturalist is to avoid commitment to propositions by various maneuvers, such as identifying them with classes of sentences or classes of possible worlds (here they come again). In general, it seems to be generally considered kosher to let linguistic entities of various sorts into the reduction base. Evolutionary considerations are also favored by some naturalists in their attempts to explicate mental content, on the supposition, presumably, that we can use a theory of evolution that deals exclusively in purely physical mechanisms and processes.

Putnam in his many phillipics against attempts to "naturalize" this and that, has argued, persuasively that the notion of causation, as well as counterfactual conditionals, reflect human interests, and are not simon pure denizens of some world that is objective vis-a-vis such matters. That seems, once again, to presuppose that such things as human interests are not "naturalistic", unless it is the relativity, rather than the intentionality, introduced by this that Putnam means to be stressing. In any event, Putnam's critiques illustrate the way in which there is considerable disagreement in what can be taken as truly natural.

I could go on at much greater length, but this is not supposed to be a lecture on naturalism in philosophy of mind. I think I have said enough to at least rouse suspicion that it is not exactly crystal clear just what it would take to have a distinctively "naturalistic" analysis of intentional state or semantic concepts. If we turn to epistemology, the situation is even murkier, if possible. Sometimes one gets the impression that those who seek to "naturalize" epistemology are merely seeking to rid it of any unreduced evaluative or normative terms, thus assimilating it to the classical form of naturalism in meta-ethics. But sometimes there seems to be a higher level of aspiration. To see this look at Alvin Plantinga's account of epistemic "warrant", set forth in detail in his recent book, *Warrant and Proper Function*. The basic idea (subject to many qualifications into which I will not have time to go here) is that what converts true belief into knowledge (subject possibly to some Gettier-proofing condition) is that the belief results from the "proper functioning" of some of one's cognitive faculties. Now there is a question as to whether the notion of proper functioning is, at least in part, evaluative. But to clear that doubt out of the way let's give that notion a theistic reading, in which it means "functioning in accordance with the design plan" for those faculties, the plan the designer, viz., God, had in mind when creating them. This sounds factual rather than evaluative, but is it naturalistic? Has epistemology been naturalized here? If so, we are back to Moore's point that supernaturalism is a form of naturalism.

Perhaps the naturalized epistemologist's commitment is to science. Epistemology is to become a part of science, or at least to be pursued by "scientific method", if we can figure out what the boundaries of that are. This is Quine's line in his famous essay, "Epistemology

Naturalized". Well, on any halfway plausible way of drawing boundaries around "scientific method", the proposal to do epistemology only by scientific method would put virtually all actual epistemologists out of business - Quine included. At this point we might go back to trying to figure out what is allowable in a naturalistic reduction base for epistemological concepts, thus bringing us back to the kind of bafflement we encountered in thinking about naturalistic philosophy of mind.

So seeing what naturalists work with when giving "naturalistic" accounts of various entities fails to give us unambiguous guidance to what is supposed to be "natural". But we are not totally without attempts to say in general what naturalism amounts to. Consider Arthur Danto's article on Naturalism in the *Encyclopedia of Philosophy*, where he writes:

> The entire knowable universe is composed of natural objects - that is, objects which come into and pass out of existence in consequence of the operation of "natural causes".
>
> A natural cause is a natural object or an episode in the history of a natural object which brings about a change in some other natural object.
>
> A natural process is any change in a natural object or system of natural objects which is due to a natural cause or system of natural causes. (Vol. 5, p. 448)

'Natural object' is explained in terms of 'natural causes'. 'Natural causes' is explained in terms 'natural object'. 'Natural process' is explained in terms of 'natural object' and 'natural cause'. This is a very small circle, or system thereof. It can hardly be supposed to throw any radical light on what it is for an object, cause, or process to be *natural*. The closest Danto comes to breaking into the circle comes when he introduces science and scientific method as our only source of knowledge of the world. (p. 449) This suggestion will be followed up in the next section.

One may certainly be pardoned for feeling a bit frustrated at this point in the discussion. Our subject matter seems to vanish, like Macbeth's dagger, when we try to grasp it. We are left only with a vague sense of a position, a gut feel for the sorts of things that would or would not count as "naturalistic". But when we try to make this more explicit, the behavior of those who wear the label is not of sufficient help. But perhaps we have been too cautious, too circumspect. I have been proceeding on the working assumption that those who set out to forge a "naturalistic" account of some subject matter, are working with some distinctive concept, one that is distinct from those expressed by other familiar labels in the neighborhood, such as "materialism" and "physicalism". But that may be a mistake. It may be that (allowing for the usual spread of peripheral and deviant cases) what is mostly going on is that 'naturalism' has caught on as a popular buzz-word for what is more informatively designated as 'physicalism' or 'materialism'. It sounds more inclusive, more ecumenical, less dogmatic to say 'naturalism" than to use the other terms. But, insofar as 'naturalism' designates anything definite it is indistinguishable from (some of) what is designated by the other terms.

Let's pursue that tack. I will not distinguish between 'physicalism' and 'materialism'. However I must distinguish between more and less extreme forms. The more extreme form holds that nothing exists except what is entitled to be termed 'material' or 'physical'. Whereas the less extreme form holds only that nothing exists except the physical and what

supervenes on that. (Use your favorite definition of supervenience at this point.) It may be that 'naturalism' has historically (in twentieth century history) been used for the less extreme form. In any event, the crucial problem in getting clear as to what physicalism or materialism is, is to clarify what it is for something to be physical or material. Let's look at that for a moment.

I take it to be reasonably clear what it is for a substance to be a material substance. Being spatially extended (plus, perhaps, having certain fundamental physical properties like mass) would seem to be necessary and sufficient. But what it is to be a material (physical) *state*, *property*, *process*, or *event* presents considerably more difficulty. States and properties (and perhaps events and processes as well) are not susceptible to spatial extension in the clear, unproblematic way substances are. We might try to reduce all these notions to a central one. Thus we might say that a state, event, or process is physical if it is definable as the exemplification (by a physical substance?) of one or more physical properties . Alternatively w might seek to reduce the physicality of properties to the physicality of states. But then we will still be left puzzled as to what makes items of the basic sort physical. To allay suspicion that this is merely an idle worry, let's think about positions on the mind-body problem, in particular the distinction between pure materialism and "property (state) dualism". The former holds that all of a human being's properties (states) are physical, while the latter holds that conscious mental states are not themselves physical, even though they are states of a physical substance (there is no mental substance in this picture), and, usually, that these non-physical mental states are supervenient on physical states. But just what is the issue here? What is our concept of 'physical state' such that it is a sensible question as to whether my believing that p or my being visually presented with a maple tree is or is not a physical state, given that I do not recognize the possibility of a non-physical substance of which it is a state? Spatial location cannot be the issue. States of me are not spatially located in the way in which I am. Again, it may be said that the question is as to whether the *property* of believing that p is a physical property. But what is that issue? What does it take to make a property physical? Presumably being a property of a physical substance is not sufficient, or there would be no controversy here.{2} So what are the pure materialist and the property dualist arguing about?

If we look at attempts to define 'physical property' and the like, we find various approaches. Keith Campbell in his article, "Materialism", in the Encyclopedia of Philosophy has recourse to a list.

> The physical properties are position in space and time, size, shape, duration, mass velocity, solidity, inertia, electric charge, spin, rigidity, temperature, hardness, and the like. The list is open-ended."{3}

So far all this does for us is to remind us of some of the properties we are inclined to count as physical. It does nothing toward spelling out what there is about them that elicits that inclination.

Jaegwon Kim suggests that "Property P is a physical property if and only if that an object has P presupposes that it has extension".{4} This makes progress because it does not allow that every property of a physical object is a physical property. It requires in addition that the property can only be a property of a physical object. How much this helps depends on some complex issues. If it is to exclude the property of believing that p from being a physical property it has to be the case that this is not a property that can only belong to a physical

object; that is, it has to be possible for a non-physical subject to believe that p, and this is controversial. Moreover, in view of the apparent blurring of the line between body and force in contemporary physics, it is dubious that every physical property belongs to something that has extension (in what sense?), much less that it can belong only to something extended.

J. W. Cornman defined 'physical property' as follows.

> P is a physical property of individuals = (1) P is an a posteriori property that, under certain conditions, would be a nonrelational property of or a relation among spatiotermporal individuals which are neither living individuals or attached parts of living individuals, and (2) P is not a property or relation that a spatiotemporal individual, which is living or is a part of a living individual,would have only if it or what it is part of were living.{5}

The thrust of this is to narrow the class of "extended" objects to those that are analytically tied to physical propertyhood. A physical property is one that can qualify non-living spatiotemporal individuals. This cuts out mental properties (which can only qualify living individuals) as physical properties. It also gives pride of place to sciences of the inorganic (physics and chemistry) as the home base of physical properties.{6}

These last definitions verge onto defining 'physical property' as one dealt with by the physical sciences. This approach, or something like it, is made explicit in the following.

> By "physical[1] terms" I mean all (empirical) terms whose specifications of meaning essentially involves logical (necessary or, more usually, probabilistic) connections with the intersubjective observation language, as well as the terms of this observation language itself…By "physical[2]" I mean the kind of theoretical concepts (and statements) which are sufficient for the explanation, i.e., the deductive or probabilistic derivation, or the observation statements regarding the inorganic (lifeless) domain of nature.{7}

What this amounts to is that physical terms are those that occur in observational reports (or what can be defined in terms of this), or in theories devised to account for observations of the inorganic. That is, physicalistic terms are those that occur in physical science (including the observational portion thereof). This approach is stated more forthrightly by Brandt and Kim.

> …we so use the term 'physical property' that the nonlogical terms of these sciences [contemporary physical and biological sciences] stand for physical properties.{8}

And Keith Campbell, after reciting the list of physical properties quoted above, adds that the list "is composed of properties that are the objects of the science of physics."

The reader may notice more than a passing resemblance of Campbell's procedure to the practice of determining what counts as divine revelation by reference to the canonical list of scriptural books. And in both cases, one seeks to avoid the charge of arbitrariness in this procedure by deriving the canon from a recognized authority - physical science or the church. So a physical property (state) is one that is recognized (dealt with) by science, one

in terms of which science provides its descriptions and theories and explanations.

There are at least three difficulties with this suggestion. First, what are we going to include in "physical science". Physics and chemistry, obviously. But how about biology, now that it has become more scientifically respectable? (Brandt and Kim are more inclusive in this regard than other authors we have quoted.) What about geology, meteorology, and paleontology? If we were to include psychology, sociology, economics, and the other social and behavioral sciences, the whole thing would blow up; since the properties the property dualist wants to deem non-physical would turn out to be physical after all, and he would find himself a pure materialist malgré lui. Well, suppose we draw the line at some intuitively appealing point. There is then the second difficulty - that science develops. The physical sciences have been in a radical state of flux all during this century. What would have been thought of as visionary speculation in one decade becomes scientific orthodoxy in the next. When we define the physical by reference to what physical scientists think and work with, what period of the history of science are we to pick for this purpose? It seems arbitrary to canonize the present moment at defining a central metaphysical category. But if if we make the definition relative to the stage of scientific development we are considering, then the metaphysical issues change with each fundamental shift in science. Furthermore, what if physics should begin taking into account psychic forces or the élan vital, or other factors we now consider to be clearly non-physical. Would we be prepared to recognize them as physical properties in that case?

The third difficulty may be the most serious. What about commonsense concepts of what would naturally be regarded as concepts of physical properties, kinds, or conditions? What about being a table, a house, or a bed? What about being sour or sweet or rough or lumpy? What about being a rhinosceros or a robin? Let's say that none of these concepts, and thousands of their kindred, have any place in developed physical science. Are we therefore to count them as non-physical properties or kinds or conditions? If so, have we lost touch with the basic intuitions that originally led to the metaphysical distinction between the material (physical) and the non-material?

Section V

The above discussion, though certainly sketchy is, I believe, sufficient to make it clear that we encounter serious difficulties in trying to explain what naturalism, physicalism, or materialism is supposed to be. But, it may be said, our difficulties have all concerned the attempt to distinguish these positions from their contraries with respect to the denizens of the physical universe. We run into these difficulties when we try to distinguish between physical (natural) and non-physical (natural) aspects of what we accept as being, uncontroversially, material substances. But that is not our special concern here is with the bearing of naturalism on religious issues. And surely it is at least clear that naturalism is opposed to *supernaturalism* and, more specifically, to theism. Naturalism at least denies that there is anything other than the physical universe - whatever that contains and however these constituents are to be understood. Whereas traditional theistic religion is unequivocally supernaturalistic in this sense: it holds that the physical universe owes its existence to the creative activity of a supreme personal being that is independent of that universe for its existence, that is,indeed, independent of anything other than itself. Don't we have a clear opposition there?

Perhaps. It sounds like it. But that bold modification of the "nothing but the physical

universe" position, viz., "whatever that contains and however those constituents are to be understood" may make trouble. Whether they do depends once more on how naturalism is to be understood. If it is prepared to give a blank check to the physical universe) - *whatever that turns out to be*, then the position is clearly delineated in this way. But if there are secret reservations, if some ways the physical universe might conceivably turn out to be run contrary to naturalistic commitments, then we are back to wondering just what naturalism comes to. What if the universe were, as Hegel thought, a stage in the process of the Absolute Spirit's becoming fully self-conscious? Most contemporary "naturalists", I think, would not settle for this. And if we try to specify how the physical universe has to be constituted to be purely "naturalistic" or "physicalistic", we are back in the problems that were plaguing us before.

But we might try a quite different tack, defining the thrust of naturalism not by the *content* of science, thereby holding ourselves hostage to whatever future developments there may be in that, but by the *method* of science. We will take "nature", by definition, to include all and only what is discoverable by the "scientific method", including the incipient beginnings of this in ordinary sensory observation, and reasoning from the results of observation. And let's pretend that we know what is and is not included in the "scientific method". Perhaps this will give us a real criterion for what is properly included in a reduction base for a naturalistic analysis of intentional and semantic concepts, and what is allowable in "naturalized epistemology". If a concept is such that its application can be determined by scientific method, then it is acceptable; if not, not. Perhaps this is what causal relations, (recognized) physical properties, neuro-physiological processes, and spatio-temporal location have in common. To be sure, there is still the possibility that "scientific method" can tell us about beliefs, desires, intentions, and linguistic meanings - without their having been defined in a way that contemporary naturalists would find acceptable. That depends on the details of how we think of scientific method. In any event, my principal concern now is not to clean up the act of the naturalist in philosophy of mind, etc., but to find some kind of naturalism that is interestingly related to religion. And it does look as if, on the present approach, we have a naturalism that is squarely opposed to the supernaturalism that we get in theistic religion. This naturalism turns out to be a form of "scientism". There is nothing other than what can be discovered by the scientific method. Or in other terms, science is our only access to what there is. If it can't be ascertained by science (or its humbler commonsense cousins), is isn't real. Thus we avoid the problem of what stage of science to take as our landmark, for we have brought science in by its method. To be sure, if scientific method itself changes and develops, often in unpredictable ways, we have an analogous problem here. And there is no doubt but that there have been many methodological developments in the history of science. Lacking the time to go into this properly, I shall have to be brutal and just rule that at a high level of abstractness there is a commonality of method that is characteristic of science, and that if this were to change significantly we would no longer have what is properly called "scientific method".

Note too that the present approach avoids the problem of determining what "physical" or "material" properties or states are, and consequently that it avoids drawing boundaries around "physical science". Again, by putting method into the center of the picture (and interpreting this in a very generic, and generous, fashion) we are able to draw on anything that employs a method that fits this characterization, whatever its subject matter and whatever recognized discipline it involves.

The final step in the current argument is to point out that the God of theistic religion - His

nature, purposes, requirements, and doings - is inaccessible to scientific method. By that method we can discover nothing about any such being. As far as science can tell us, the physical universe is all there is. Thus, on naturalistic principles, it is all there is. This step is, needless to say, controversial. Many thinkers have held that scientific method does uncover clear indications of the hand of God in creation. And others think that science establishes atheism. Again, I will simply rule against this. I will assume in this discussion that by the use of scientific method we can discover nothing one way or the other as to whether the claims of theistic religion about God are true. This is not meant to rule out the possibility that scientific results might be used in philosophical arguments for or against the existence of God.

I have been concentrating on the conflict that this kind of scientistic naturalism{9} comes into with theistic religion over the existence, nature, and activities of God. It has often been held that theistic religion comes into important conflict with naturalism over its understanding of the natural world itself, for example over human nature and whether we are endowed with free will. I do not deny that there are, or well can be, incompatibilities of this sort, but I will ignore them for purposes of this discussion.

Section VI

Let's say, then, that naturalism is ineluctably incompatible with the deepest convictions of theistic religion, including any of its convictions concerning the existence, nature, purposes, and doings of God. How seriously should we take this? How much of a threat is this to theistic religion? That all depends on what there is to be said for this kind of naturalism. Why should we suppose that there is nothing except what we can learn about from science? What grounds are there for this kind of scientism?

I fear that one will find little real argument for this position in the writings of its proponents. One gets the impression that it is felt to be sufficient to bask in the glow of the prestige of science. We live in a scientific age. Everyone agrees that science has made enormous strides in the last few centuries in widening and deepening our understanding of the internal economy of the cosmos and has thereby made possible technological advances that would have been undreamed of two hundred years ago. With this kind of track record who needs a philosophical argument? Science has proved itself by its achievements. So what's the problem?

The problem is that one can unreservedly acknowledge the stupendous achievements of the scientific method - theoretical and practical - and still wonder whether this is our only cognitive access to the world. One can still wonder whether reality is limited to what science can reveal. So one can unreservedly acknowledge the stupendous achievements of J. S. Bach and still wonder whether he completely exhausted the resources of musical expression. Isn't there still room for a Mozart, a Beethoven, a Wagner? So one can unreservedly acknowledge the supreme subtlety and finesse of French cuisine and still find a place in ones culinary world for Chinese and Italian cuisine.

To take an analogy closer to home, suppose that one, dazzled by the dizzying heights to which modern mathematics has ascended, should forthwith conclude that nothing exists except what is disclosed to us by pure mathematics. Pythagoras would have been revived, but to what purpose? Isn't it arbitrary to conclude from the stupendous achievements of one mode of inquiry that no other putative mode of inquiry can tell us anything about the world?

And isn't the scientistic naturalist guilty of just this kind of arbitrariness in moving from the spectacular success of science to the conclusion that there is no other way of finding out anything about the world?

At this point the naturalist may turn to her opponent and ask for some reason to think that there is some other procedure that yields real knowledge of the world. Obviously, claims have been made for other modes of access - rational intuition, religious experience, innate ideas, systematic coherence, and so on. But, she will say, what reason is there for supposing that any of them really gives us knowledge of reality? Until solid reasons are produced for taking any of them as serious candidates, she will not worry her head about the possibility that any of them are genuine sources of knowledge.

There are two answers to this. First, we must think carefully about what is possible, in general, by way of validating the claims of a putative source of knowledge. I have argued that none of our basic (putative) sources of knowledge (including "scientific method" and its commonsense roots) can be shown to be a reliable source of belief, or a source of knowledge, without making use of what we take ourselves to have learned from that very source. Any otherwise effective argument for the reliability of such a source is infected with what I call "epistemic circularity" - using outputs of that source to show it to be reliable. (See my *The Reliability of Sense Perception* and "Epistemic Circularity" in *Epistemic Justification*.) If that is right, then the naturalist is using epistemically circular arguments to establish the claims of scientific method to be a source of knowledge. And perhaps the advocate of, say, religious experience can mount an effective argument for the reliability of that source if he is allowed to use its outputs in the argument.

Second, in criticizing the pretensions of scientistic naturalism I am not concerned to defend the pretensions of other sources of knowledge. I believe that there are other genuine modes of cognitive access to the world, but that is not the point here. The naturalist I am discussing makes a claim: that scientific method is the only genuine cognitive access to reality. The question is as to whether this claim can be successfully defended. If it cannot, the naturalist position is in big trouble, even if other claimants to knowledge are unsuccessful in defending their claims as well.

Let me reemphasize the point that it is all too easy to be blinded to the weakness (or even the absence) of the case for the thesis that only science can tell us what there is in the world, by the fact that we are all daily reminded of the resounding successes of science in penetrating he mysteries of the world of nature. It is easy to be so dazzled by these achievements as to forget that conspicuous task at task T has no tendency to show that nothing else is successful at that task. In other words, we are seduced into forgetting the elementary distinction between sufficient and necessary conditions. That the use of scientific method is *sufficient* , roughly speaking, for getting truth about the world by no means shows that it is *necessary* for achieving that.

In fact the case for scientistic naturalism is so weak that the most appropriate reaction to it is one of caricature or ridicule. Fortunately I can draw on a distinguished predecessor in this enterprise, and one that it is especially appropriate to invoke in this place - O.K. Bouwsma, who for many, many years was the sage of the Nebraska prairies. In his wonderful essay, "Naturalism",{10} Bouwsma has some fun at the expense of some of the contributors to a 1944 volume entitled *Naturalism and the Human Spirit*, many of whom characterized naturalism in the methodologically scientistic way I have been utilizing. For example, he

quotes William Dennes as saying: "There is for naturalism no knowledge except of the type ordinarily called scientific", and responds as follows.

> Notice first the form of Dennes's sentence. Mr. Ringling might say: "There is for Ringling Brothers no elephant except of the type ordinarily called big." Does Mr. Ringling intend to deny that there are any little elephants? Does he mean that besides Jumbo and Mumbo there is no little Nimblo? I think he means no more than that there is a difference between big elephants and little elephants, and that Mr. Ringling has no use for little elephants. If you tried to sell him one, he wouldn't buy. He can't use any. Or try this sentence: "For all the boys in our alley, there's no girl but pretty Sally." What, have the boys in our alley seen no girl but pretty Sally? Don't be silly. Of course, they know Helen and Ruth and Betty. It's just a way of saying that above all the girls they know, they prefer Sally.
>
> And this is now the way in which we are to understand Mr. Dennes?…In this case…Mr. Dennes might have admitted other types of knowledge too, but would in this instance merely have intended to say: "Well, so long as I have my choice, let mine be scientific"…If Mr. Dennes prefers blondes or gas-heat or lemonade or a hard mattress or scientific knowledge, well, that's all there is to it.

Bouwsma then goes on to scrutinize a formulation of Krikorian.

> Before we settle these matters, let us inspect Krikorian's sentence. It is: "For naturalism as a philosophy, the universal applicability of the experimental method is a basic belief." Consider the parallel sentence of the vacuum cleaner salesman: "For vacuumism as a philosophy, the universal applicability of the suction nozzle is a basic belief." He may argue to himself: "If I ever give this up, I'll never sell another vacuum cleaner. It is basic." To the house-wife who asks: "And can you use it to dust books?" he replies: "Of course". And when he shows her and finds that it does not do so well, does he deny the universal applicability of the nozzle? No such thing. He may complain that he himself is not skillful, or that what seems like dust to the house-wife is not dust. The universal applicability of the nozzle is now the touchstone of dust. If the nozzle is applicable, it's dust. If it is not applicable, it is not dust.

There is much more of this in the essay, but that is sufficient to give the general line. Bouwsma is suggesting (but only suggesting) that the scientistic naturalist is only expressing an attitude. He really doesn't have what he would need, in the way of solid backing, to require us to take his claim seriously as a claim as to what there is.

Section VII

As you may have gathered, I am very sympathetic to the line Bouwsma takes in these passages. Nevertheless, candor compels me to admit that I have not yet fully set out the case for methodological naturalism. I do believe that the "sufficient, therefore necessary" argument, if we can call it an argument, that I have been discussing, is the only thing in the way of a general argument for the position that the methodological naturalist has in her arsenal. But that is not the whole story.

For one thing, the naturalist can take up other alleged ways of getting at the truth and criticize them one by one. There is a great deal of this in the literature. Such bases of belief-knowledge as self-evidence, rational reflection, authority, moral intuition, and religious experience have been repeatedly criticized by the empirically-scientistically minded. But, of course, no amount of polemics against particular non-scientific ways to truth, however cogent each of them may be, suffices to establish the naturalist position. For however many rivals have been discredited, there are more waiting in the wings. To give a conclusive argument for methodological naturalism along these lines one would have to be able to show that all possible candidates have been invalidated; and that is presumably beyond human powers.

Still, there is a somewhat more general argument that can be, and has been, given. One could argue that a certain feature of scientific method is a necessary feature of any procedure that gives us knowledge of the world (or, perhaps, to make it a bit more modest, any substantive knowledge of the world, or any contingent knowledge, any knowledge of non-necessary facts). Then, although it might be very difficult to show that there is *no* other possible cognitive access that has this feature, one might take what appear to be the most promising candidates for possessing the feature in question and show that they do not. To conclude this lecture I will give a brief exposition and discussion of an argument of this sort.

To simplify matters I will concentrate on the observational component of scientific method - the reliance on careful sense perception as the way of amassing data for empirical testing of hypotheses and theories, and as providing explananda for scientific explanation. Thus, remembering that I am using 'scientific method' in a disgracefully broad sense to embrace its commonsense roots, what I will be discussing, in the way of naturalist methodology, is really any use of sense perception to acquire knowledge about the perceivable environment. Let's call this procedure 'SP'. Now a salient fact about SP is that any particular perceptual report can be checked, in principle conclusively, by whether other observers, suitably placed and suitably qualified, perceive what the first reporter claimed to perceive. Suppose I report seeing a morel (a particularly delicious wild mushroom) at a certain spot in the forest. There are various ways in which it can be determined whether I really did see a morel at that spot. A number of other observers can take a good look at that spot at (approximately) that time and report whether they saw a morel. If it is clear that there is something there that looks like a morel, further tests, including microscopic examination, can be made to determine whether the object really is a morel, rather than some other wild fungus. Tests like these are capable of providing conclusive confirmation as well as conclusive disconfirmation for a perceptual report in SP.

Now I want to consider the claim that the availability of such intersubjective tests is a necessary condition of the evidential value of a mode of experience, and the further claim that religious experience, for example, does not satisfy this condition. In support of the first claim it could be said that our conviction that sense perception puts us in effective cognitive contact with a surrounding world is intimately tied up with the fact that when we compare our perceptual beliefs with those of relevant others, they exhibit a massive commonality. And if we can have no such interpersonal confirmation how can we distinguish veridical perception from dreams and fancies? Though this claim hs considerable initial plausbility, I want to oppose it. But first, let me agree with the second claim, that religious experience (RE) does not satisfy the condition in question.

With reports about God based on religious experience this kind of intersubjective testing is

not available. The crucial point here is not that not all persons report experiences of God. Not all persons report having seen morels either. The point, rather, is that for SP, but not for RE, we can specify conditions under which the experience of one subject is *relevant* to the testing of the report of another subject. If S does (doesn't) see a morel in some other place, or at the same place in some other year, that has no bearing (at least no crucial bearing) on whether my report was accurate. It is only visual perception of that spot at (approximately) that time that can provide a maximally decisive test. For SP we are able to determine what perceptions have what bearing on the credibility of the report in question. We can't always do this in as simple a fashion as the "same time, same place" formula. If the alleged object is, unlike a morel, something that moves around a lot, like a human being or other animal, or like an airplane, then the recipes will be more complicated. With respect to an airplane report, what perceptions of others are relevant will depend on the direction in which the plane was moving and at what speed. Where we have to take into account the modifications undergone by an object over a considerable period of time, as we do with a seventeenth century traveller's report of a Cambodian temple, the recipes are still more complicated. But whatever the complexity, we have a considerable capacity to discriminate between relevant and irrelevant experiences of others in the critical examination of a particular sense perceptual report.

There is nothing comparable to this for RE. God is always present everywhere, if present anywhere, and so the whereabouts of a subject has no bearing. If an RE report were to be assessed on the SP model, we would have to say that S really perceived God at t only if every normal subject perceives God all the time. But no religious believer would take this to be an appropriate test. "Why should we expect God to be perceivable by everyone all the time even if He is present everywhere all the time?", he might ask. From within the "doxastic practice" of forming beliefs about God on the basis of religious experience there is no sub-practice of holding such experiential reports subject to decisive confirmation or disconfirmation by the reports of other qualified observers. Within the practice no conditions are identified that are such that if a qualified (normal) observer satisfies those conditions, s/he will experience the same thing if it is there to be experienced.

Thus RE does not satisfy the condition that is claimed to be necessary for being an experiential source of knowledge. That throws us back on the question as to whether this is a necessary condition, and, in particular whether the failure of RE to satisfy it is to its epistemic discredit. I want to suggest that the answer to both questions is NO. I shall approach this via the second question.

To determine whether the lack of this kind of test by other perceivers prevents RE from being a source of knowledge, let's consider what makes this kind of test possible for SP. Clearly, it is that we have discovered fairly firm regularities in the behavior of physical things, including human sense perception. Since there are stable regularities in the ways in which physical objects disclose themselves to our perception, we can be assured that if X exists at a cerain time and place and if S satisfies appropriate conditions, then S is sure to perceive X. But no such tight regularities are disocverable in God's appearances to our experience. We can say *something* about the way in which such matters as the distribution of attention and the moral and spiritual state of the subject are conducive to such appearances; but these most emphatically do not add up to the sort of lawlike connections we get with SP. Is it to the epistemic discredit of RE that it does not enable us to discover such regularities? Well, that all depends on what it would be reasonable to expect if RE does put us into effective cognitive contact with God. Given what we have learned about God and

our relations to Him from RE, supplemented by whatever other sources there be, should we expect to be able discover such regularities if God really exists and is something like what He is typically supposed to be? Clearly not. There are several important points here, but the most important is that it is contrary to God's plans to give us that much control - cognitive and practical. Hence it is quite understandable, if God exists and is as RE leads us to suppose He is, that we should not be able to ascertain the kinds of regularities that would make possible the kinds of intersubjective tests exhibited by SP. Hence, the epistemic status of RE is in no way diminshed by its lack of such tests. On the contrary. Given what we have learned about God and His relations to us, if a source did deliver beliefs in such regularities, that would be an indication that it is not putting us into effective cognitive contact with the divine. Hence it is quite unwarranted to hold reports of RE subject to the kinds of tests appropriate to reports of SP. What is appropriate in each case is dictated by the nature of the reality in question and our relations thereto. To judge RE by whether it lives up to the standards of SP is to engage in a kind of "epistemic imperialism" or "epistemic chauvinism": arbitrarily judging one practice by the standards appropriate to another.

The naturalist may complain that I have been drawing my picture of the reality with which RE allegedly puts us in touch from RE itself, and this is circular. But there is no escape from that kind of circularity. We are in the same situation with respect to SP. How do we know what conditions are such that if someone who satisfies those conditions sees (doesn't see) a morel at the appropriate place, that confirms (disconfirms) my morel report? For that matter, how do we know whether the other observer in question reports seeing (not seeing) a morel there and then? Obviously we have to make use of what we have learned from

SP. We don't know these things by rational intuition, nor does an angel tell us about them. When we are dealing with basic belief forming practices - those that constitute our basic access to a certain realm of reality - there is no alternative to using what we have learned by the exercise of that practice in setting up standards for evaluating particular beliefs so formed. The practice sets its own examinations. It is both examiner and examinee.

This brief discussion is just an example of the problems we encounter when a methodological naturalist tries to show that some other putative source of knowledge does not measure up to what s/he takes to be a necessary condition of epistemic efficacy. For a more extended presentation of these points see Ch. 5, sec. iii E., of my *Perceiving God*.

Notes

{1}For a few examples out of an immense crowd, see Jerry Fodor, *A Theory of Content and Other Essays*, Brian Loar, *Mind and Meaning*, Robert Stalnaker, *Inquiry*, and Stephen Stich, *From Folk Psychology to Cognitive Science*.

{2} Despite the fact that Richard Taylor defines a physical property thus. "For something to count as a physical property of something it is sufficient and necessary that the thing in question is a physical object." (APQ, Vol. 6) This makes every property of a physical object a physical property, and forecloses the possibility of "property dualism".

{3} This is not the only string in Campbell's bow, as we shall see shortly.

{4} "Materialism and the Criteria of the Mental", in *Monist*.

{5} *Materialism and Sensations*, p. 12.

{6} Cf. Wilfrid Sellars. "P is a physical property =df. P is a property that is expressed by one of a set of predicates adequate to a theoretical description of non-living matter.". *Review of Metaphysics*, Vol. 18.

{7} "The 'Mental' and the 'Physical'", in *Minn. Stud. in Philos. of Science*, Vol. II.

{8} "The Logic of the Identity Theory", *Journ. Philos*., Sept., 1967.

{9} A physicalism that uses physical science to define what is physical is also a scientistic kind of naturalism. We are currently working with a methodologically oriented scientistic naturalism.

{10} Reprinted in his *Philosophical Essays*.
