

# *Engaging Naturalism: William Rottschaefer and Willem Drees in Conversation*

HOW TO MAKE NATURALISM SAFE FOR SUPER-NATURALISM: AN EVALUATION OF WILLEM DREES'S SUPERNATURALISTIC NATURALISM

by *William A. Rottschaefer*

*Abstract.* Naturalism is often considered to be antithetical to theology and genuine religion. However, in a series of recent books and articles, Willem Drees has proposed a *scientifically informed* naturalistic account of religion, which, he contends, is not only compatible with supernaturalistic religion and theology but provides a better account of both than either purely naturalistic or purely supernaturalistic accounts. While rejecting both epistemological and methodological naturalism, Drees maintains that ontological naturalism offers the best philosophical account of the natural world and that, in addition, it provides the opening for a supernaturalistic understanding of religion and theology, one that best fits the condition of epistemic and moral distance from the transcendent characteristic of religious wonderers and wanderers. In this paper I examine Drees's claim and argue that it is seriously flawed. I show that Drees's naturalism is, in fact, both methodologically and epistemologically naturalistic. I also show that his attempts to limit naturalism to the sphere of the natural world by means of the phenomena of limit questions and underdetermination fail. Arguing for a more optimistic, but also, I contend, more empirically accurate account of human epistemic and moral capacities, I propose a full-fledged *scientifically based* naturalistic account of theology.

*Keywords:* Willem Drees; epistemological naturalism; limit questions; methodological naturalism; naturalism; ontological naturalism; Wilfrid Sellars; strong underdetermination; supernaturalism; underdetermination; weak underdetermination.

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[*Zygon*, vol. 36, no. 3 (September 2001).]

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Can naturalism offer an adequate description and explanation of religion that is superior to competing supernaturalistic accounts? This is a large question that has been and is answered in radically different ways. In the context of the discipline of Religious Studies, naturalists are often thought to explain away religion (Preus 1987; 2000; Segal 2000; Griffin 1997; 2000). They seek to provide biological, psychological, social, and cultural explanations of the various noncognitive dimensions of religion but seem to ignore, deny, or find lacking its cognitive dimension. In philosophy of religion and philosophical theology, naturalists frequently are classified as atheists. Moreover, these naturalists often are scientific naturalists, making their case against religion using their assessment of the sciences. Other proponents of a fruitful interaction between the sciences and theology often use the findings of the sciences substantively to develop natural theologies or theologies of nature. Still others, with the same sort of positive view of the sciences, find parallels between scientific and theological methodologies or attempt to develop theologies modeled on accounts of scientific method.

In this paper I explore the prospects for a scientifically based religious naturalism. To do so, I examine the proposals of Willem B. Drees (1996; 1997; 1998a; 1998b) for a supernaturalistic religious naturalism.<sup>1</sup> Drees has argued for a scientifically informed religious naturalism, one compatible with a form of supernaturalism, a Platonic theism, and one that he contends is superior to its chief competitors, both naturalistic and supernaturalistic. In Drees's view naturalism supports supernaturalism by revealing both an epistemic and a moral distance between the transcendent and the human. These discontinuities function negatively to put proper epistemic limits on claims about knowledge of the transcendent and to prevent moral self-satisfaction. They also function positively to inspire religious wonderers seeking religious knowledge and to motivate religious wanderers seeking moral wisdom. Drees supports his epistemic position by developing what he calls a "low-level metaphysics," constituted in part by both a scientifically informed ontological naturalism and a rejection of epistemic and methodological naturalism. Drees's naturalism leads him to conclude that theological questions are limit questions, unanswerable by either the sciences or metaphysics. The basis for this claim is to be found in the phenomenon of the underdetermination of scientific theories by scientific findings and the underdetermination of metaphysical claims by established scientific theories. Drees supports his position about moral distance by emphasizing the normative distance between a descriptive and explanatory scientifically informed low-level metaphysics and a divinely originated normative realm. In the end both the epistemic and moral distance encountered by religious wonderers and wanderers is best accounted for by a supernatural sort of divine transcendence.

In response to Drees, I argue negatively that he has failed to make a case for his supernaturalistic religious naturalism. Positively, I argue for a naturalistic religious naturalism. I begin by presenting the distinctively important central features of Drees's scientifically informed religious naturalism, his supernaturalistic religious naturalism. Second, I examine Drees's naturalism focusing on an analysis of the central elements of what he calls the "low-level metaphysics" that is constitutive of his religious naturalism. Here I maintain that, despite his claims to the contrary, Drees's low-level metaphysics, including his ontological naturalism, is dependent upon methodological and epistemic naturalistic positions. These implicit positions on methodological and epistemic naturalism are crucial for the limits that he places on his scientifically informed ontological naturalism and consequently for the opening that the latter provides for his supernaturalism. Next, I examine the central sources for the limits that he places on epistemic and methodological naturalism. Drees argues that religious wonderers are faced with limit questions that are unanswerable, given the resources of both the sciences and a scientifically influenced low-level metaphysics. The existence of these limit questions, in particular those about the existence and order of things, render both purely naturalistic and purely supernaturalistic answers to these questions less probable than his own naturalistic supernaturalistic account. I examine Drees's account of limit questions and find that it depends on claims about the underdetermination of theological metaphysical claims based on the findings of the sciences. I contend that Drees has not established the existence of the strong form of underdetermination required for his thesis about limit questions. I also argue that, even if one grants to Drees a weak form of underdetermination, Drees cannot establish the kind of limit on human epistemic capacities that he needs in order to maintain the existence of limit questions in the required sense—one that implies a *de facto*, but permanent, restriction on human epistemic capacities.

Positively, I argue that weak underdetermination is compatible with a piecemeal approach to the assessment of human epistemic capacities with respect to theological metaphysical issues. I then show how these considerations apply in the case of the limit question of why something rather than nothing exists. Besides an epistemic distance between human beings and the transcendent, Drees maintains that there is a moral distance that is indicative of and appropriate for religious wanderers. I examine this source of Drees's supernaturalistic religious naturalism and find that it does not support his position in relation to its competitors. In the penultimate section of the paper, I address what Drees deems to be a major consequence of his position, namely, that supernaturalistic religious naturalism is best developed within the context of a plurality of religious traditions rather than a naturalistic religion. Here I distinguish between practical

and theoretical solutions to the problem of religious diversity. With respect to epistemic religious diversity, I argue for the theoretical superiority of a scientifically based religious naturalism while retaining for practical purposes religious pluralism. Finally, I sketch the outlines of my alternative scientifically based nonsupernaturalistic religious naturalism, which reflects more accurately than does Drees's account both the limitations and the possibilities that the sciences provide for answering theological metaphysical questions.

#### SUPERNATURALISTIC RELIGIOUS NATURALISM

Drees attempts to walk a fine line between the limits and positive potential of the sciences for developing a religious naturalism. While he proposes to take the sciences seriously, as naturalists require, he nevertheless argues for a much more diminished role for the sciences, in both theology of nature and natural theology, than is often currently urged. Thus, his is a limited religious naturalism, based, it seems, on an implicit use of the limit principle "ought implies can." Drees can be interpreted as arguing that a scientifically inspired religious naturalism ought not to be extended into some areas of theology because it cannot be. It cannot be because of the limits of the sciences themselves when it comes to the fashioning of a metaphysics, especially a religious metaphysics. This makes naturalism compatible with supernaturalism. On the other hand, he also makes use of a normative positive potential principle. He proposes that to provide an adequate account of religion, especially in its cognitive aspects, theology should make full use of the sciences. On the basis of both principles, he suggests that a Platonic theism is preferable to other competing religious naturalistic and supernaturalistic accounts of the transcendent.<sup>2</sup>

Drees's position contrasts with three other current major positions on the role of the sciences in theology. These are the positions of a theology of nature, natural theology, and a scientifically based atheism. With respect to theologies of nature, Drees does not deny that there is a role for the sciences in understanding theological doctrines. Thus, he does not oppose theologies of nature. In fact, he makes impressive use of current speculations in the field of quantum cosmology to interpret the classical Christian understanding of God's eternity, proposing that God's existence is non-temporal rather than everlasting in character. However, Drees differs from proponents of theologies of nature insofar as he does not appeal to nonscientific sources of religious knowledge such as religious experience, faith, religious traditions, or ecclesiastical authority to support his theological claims. Drees also finds natural theology problematic, arguing that current attempts to establish the existence of God on the basis of scientific findings are fundamentally inconclusive. For similar reasons he also rejects uses of the sciences to establish atheistic conclusions. In their place

Drees develops a scientifically informed supernaturalistic religious naturalism. He contends that this sort of religious naturalism best accounts for our human religious condition as religious wonderers and wanderers.

#### TAKING SCIENCE AND RELIGION SERIOUSLY

Drees argues that we should take both the sciences and religion seriously. As far as the sciences go, that means in particular that we should be scientific realists. Thus, he contends that scientific theories are intended to deal with realities independent of the scientific theorist and that the referents of successful scientific theories exist. However, he distinguishes this question about the referential power of successful scientific theories from the question about their degree of justification—their “quality,” as he puts it. Sufficiently justified scientific theories should be taken to reveal the structure of reality. Although I have some problems with the way Drees conceives of scientific realism, I believe that he is correct in accepting a realist account of the sciences and distinguishing issues of justification and truth from those of scientific realism.<sup>3</sup> Thus, for purposes of this paper, I shall assume the correctness of the scientific realist position as described by Drees. Indeed, I think that it is an important element in the development of any satisfactory account of either science or religion.<sup>4</sup> My disagreement with Drees concerns the limited capacity that he seems to assign scientific findings and theories in the resolution of metaphysical issues, that is, with his philosophical naturalism. Thus, I shall argue that Drees’s scientifically *informed* religious naturalism must be strengthened by becoming a scientifically *based* religious naturalism.

As far as religion goes, Drees correctly contends that religion is a multifaceted reality, including both cognitive and noncognitive features, all of which need adequate accounting. Although he focuses on the cognitive side of religion, it is to Drees’s credit that he recognizes that an adequate account of religion requires explaining its noncognitive, especially ethical, features.<sup>5</sup> I doubt that other theorists and students of religion are in disagreement with Drees on the necessity for such a multifaceted account of religion, even though much of the focus of supernaturalists has been on the cognitive features of religion. What is significant in Drees’s understanding of religion is the connection he finds between its epistemic and moral dimensions. In contrast with such theologians as Philip Hefner, Nancey Murphy, and George Ellis, he finds a tension between these dimensions that prompts him to argue that one must diminish cognitive potential in order to ensure proper and effective moral motivation. I shall evaluate this limitation on religious naturalism in detail later and argue that it needs modification. (I shall argue for a scientific religious naturalism that finds a positive connection between moral motivation and religious cognition rather than a distancing tension.)

Moreover, Drees aims to provide a scientifically informed account of the noncognitive aspects of religion, making use especially of the biological sciences in doing so.<sup>6</sup> Although as a scientific naturalist theorist of religion I think it is necessary to broaden the sciences used to account for religion to include cognitive science, psychology, and the social sciences, I believe that I would find no disagreement from Drees on this point.<sup>7</sup>

Drees also recognizes that an adequate account of religion must address the issue of religious pluralism. However, he does not address the issue head-on by, for instance, examining the relative epistemic merits of the claims of the major religious traditions, although he does suggest a theoretical framework for handling that issue. In doing so, he argues that religious pluralism is preferable to a naturalistic religion. I find his proposal ambiguous in certain key respects, but I think that Drees has done a service to discussions of the relationships between science and religion by focusing on the issue of religious pluralism. Most discussions of the relationships between the sciences and religion are, in fact, examinations of the relationships between the sciences and Christian theology to the neglect of other major religious traditions. No account of the relationships between the sciences and religion will be adequate that confines itself to one set of relations.

In addition, Drees has emphasized the dynamic character of the relationships between the cognitive domains of science and religion. He recognizes that both scientific and religious claims have changed and developed over the years. Any adequate account of religion needs to describe, explain, and show the significance of these changes. In this connection he brings to the foreground of consideration the differences between theoretical claims of the sciences and the claims of religions often formulated in nonscientific terms. When these claims conflict, a question arises about the relative merits of ordinary and scientific conceptions of the religious. That question leads to a further one concerning the extent to which the former should be replaced by the latter. By addressing this issue Drees opens up a new dimension of discussion between the sciences and religions, a dimension that has important parallels to the way scientific and ordinary understandings of things have related to each other in other areas of human cognitive endeavor. I shall argue that a scientific religious naturalism supports both a religious pluralism and a progressive epistemic religious commonality.

What is most significant about Drees's attempt to take both science and religion seriously is the kind of supernaturalistic religious naturalism to which he contends it leads. As I have indicated, Drees proposes a scientifically informed account of religion, especially the cognitive aspects of religion. Thus, like many recent scholars of the interaction of the sciences and theology, he argues for a positive account of this interaction. As a consequence, he opposes separatism and negative interaction. However,

he places more restrictions on the prospects for positive interaction than do other proponents. Drees maintains that his supernaturalistic naturalism provides a metaphysical account of religion that is superior to theologically and philosophically inspired alternative accounts of religion that are also naturalistic in the sense that they take the sciences seriously. Specifically, he contends that his religious naturalism better accounts for the phenomenon of religion, especially its epistemic status and theological content, than these other accounts do.<sup>8</sup> He numbers among these competing positions (1) the theologies of John Polkinghorne and Arthur Peacocke, both of whom have proposed theologies of nature and natural theologies of a supernaturalistic Christian God, (2) the process theologies of Donald R. Griffin and Nancy Frankenberry, (3) the empirical theology of Karl Peters, and (4) purely naturalistic accounts of religion that deny the existence of any sort of divine reality.<sup>9</sup> Drees rests his case against his competitors on the fact that his is a more adequate assessment and use of the sciences than theirs. Such assessments are not a part of science itself but are in Drees's view metaphysical.<sup>10</sup> To put it simply, he rejects his competitors' positions as taking the sciences either too seriously in their metaphysics or not seriously enough. They violate either limit or positive potential principles or both. They are, that is, inadequate religious naturalisms. Purely supernaturalistic accounts rely on theological foundations that either do not take the sciences seriously enough or make more of natural theology than they ought. Alternative naturalistic supernaturalisms also fail to take the sciences seriously enough or take them too seriously. Purely naturalistic accounts of religion fail by taking the sciences too seriously. Drees proposes to rectify these problems by advocating a scientifically inspired "low-level" metaphysics that is ontologically naturalistic but compatible with a supernatural theism. Thus, we might view him as proposing to use religious naturalism to save religious supernaturalism. To do this, a religious naturalism must take the sciences seriously but not more seriously than they can be taken. To find out how Drees attempts to do this, we need to consider his scientifically informed naturalism, what he calls his low-level metaphysics.

#### SCIENCE, NATURALISM, AND LOW-LEVEL METAPHYSICS

Drees distinguishes science from metaphysics. Theology, the reflectively cognitive side of religion, belongs in metaphysics. Roughly, science deals with the natural world, and theology deals with at least some parts of the metaphysical world, the supernatural parts. Drees's naturalism concerns what he calls a low-level metaphysics. He argues that the sciences provide us with the best knowledge we have of the natural world. That knowledge is wide in scope, is coherent, enlarges our view of the world, and requires changes in our ordinary conceptions. Although it is only provisional, it is also stable.

Thus, he argues that the three major problems confronting scientific realism—those of the theory-laden character of observation, the underdetermination of theories, and the discontinuities in scientific knowledge—do not preclude one's understanding scientific theories to be about a mind-independent world. We can use the sciences to build a metaphysics.<sup>11</sup>

Among the metaphysical views that take science seriously, Drees contends that ontological naturalism is the closest to adequate in its view of the natural world. This may sound like a tautology, but we shall see that it is not. Following current philosophical practice (for example, in Giere 1999), Drees distinguishes three types of naturalism: ontological, methodological, and epistemological. Roughly, they deal with the entities that compose one's ontology, the methods by which claims about such entities are made and justified, and the epistemic quality of the cognitive processes available to human beings, processes that are parts of or the bases for methods. Drees argues for ontological naturalism and against methodological and epistemological naturalism. Ontological naturalism is one of the six constituents of the low-level metaphysics that provides the basis for his naturalistic supernaturalism (Drees 1996, 12–21; 1997, 531–32; 1998a, 308–10).

Let us turn to an examination of Drees's naturalism, beginning with his ontological naturalism, in order to gain an understanding of the low-level metaphysics that leads him to his supernaturalistic naturalism.

#### ONTOLOGICAL NATURALISM

Ontological naturalism is the first element of Drees's low-level metaphysics. To understand his low-level metaphysics and its resulting supernaturalistic naturalism, we need to understand its components. They are as follows:

1. *Ontological Naturalism.* “The natural world is the whole of reality that we know of and interact with; no supernatural or spiritual realm distinct from the natural world shows up *within* our natural world, not even in the mental life of humans” (1996, 12; emphasis added). Drees continues, “Let us call the domain of the natural sciences—a domain which includes stars and planets, living beings and non living objects, stable entities and ephemeral events, physical objects and embodies mental and cultural entities—the natural world” (1996, 12). He also states that “non material aspects of reality such as music, science and social meanings, are not studied as such by any of the natural sciences, but they seem to be always embodied, and therefore causally efficacious, in forms which are in the domain of the natural sciences, whether as ink on paper, sound waves in the air, or neural patterns in the brain” (1996, 12).

2. *Constitutive Reductionism.* “Our actual world is a world in which all the entities are made up of the same constituents.”<sup>12</sup>



3. *Physics Postulate.* “Physics offers us the best available description of these constituents, and thus of our natural world at its finest level of analysis” (1996, 14).<sup>13</sup>

4. *Conceptual and Explanatory Nonreductionism.* “The description and explanation of phenomena may require concepts which do not belong to the vocabulary of fundamental physics, especially if such phenomena involve complex arrangement of constituent particles or extensive interactions with a specific environment” (1996, 16).

5. *Limit Questions.* “Fundamental physics and cosmology form a boundary of the natural sciences, where speculative questions with respect to a naturalistic view of our world come most explicitly to the forefront. The questions which arise at the speculative boundary I will call limit questions” (1996, 18–19).

6. *Evolutionary-Explanations Postulate.* “Evolutionary biology offers the best available explanations for the emergence of various traits in organisms and ecosystems; such explanations focus on the contribution these traits have made to the inclusive fitness of organisms in which they were present. Thus the major pattern of evolutionary explanations is functional” (1996, 19–20).

We need to consider these constituents in more detail—in particular, ontological naturalism and limit questions. Thesis 1 is distinctive of Drees’s naturalism and by implication his religious naturalism. Even so, it not as clear as one would like. The first clause seems to say that the natural world is the totality of what we know and interact with. But that contention is problematic. Surely there is much in the natural world that we do not know about and, perhaps, much more that we do not interact with. Indeed, there may be natural things that are not knowable in principle and that in principle cannot be the object of our interaction. The natural world is more than what we know and interact with, perhaps more than we *can* know and interact with. By the natural world, Drees tells us, he means the domain studied by the natural sciences. Using that meaning, the first clause reads: the domain of the natural sciences is the totality of what we know and interact with. That claim too seems highly problematic because many natural and artificial things are not directly the concern of the natural sciences—for instance, the pebble in my shoe and my ball-point pen. In addition, it seems clear that Drees does not intend to exclude the social sciences from his naturalism.

A fundamental problem with both of these readings is that they define reality in terms of what we know and interact with. But Drees is a realist, so this formulation puts the cart before the horse. Moreover, we need to distinguish claims about what we *do* know and interact with and what we

can know and interact with. I interpret Drees's ontological naturalism to be concerned with the latter rather than the former. Thus I reformulate the first clause of Drees's ontological naturalism as follows: All that we can know and can interact with is the natural world. We find out from the natural and social sciences—although not only from both of them—what is part of the natural world. Nevertheless, from the viewpoint of Drees's explicitly stated positions, this formulation is problematic because it makes ontological naturalism dependent implicitly on methodological and epistemological naturalism. But Drees rejects both methodological and epistemological naturalism.

We might try to eliminate this implicit dependence upon methodological and epistemological naturalism in his formulation of ontological naturalism by using theses 2, 3, 4, and 6 to specify the kinds of entities and processes that make up the natural world. It seems clear, however, that this will not do either, because these theses refer to various scientific disciplines in order to specify the kinds of realities to which they refer. Thus, it seems to me that Drees is implicitly accepting a modified version of methodological naturalism: the sciences are the best way to find out about *natural* reality. This sort of methodological naturalism involves a positive epistemological assessment of the methods of the sciences with respect to knowledge of the realities of the natural world. Thus, I find that Drees is also implicitly supporting a modified version of epistemological naturalism: the methods of the sciences and the epistemic capacities upon which they are built are reliable means for achieving true claims about the *natural* world. If this interpretation is correct, Drees's implicit methodological and epistemological naturalism stops at the boundary of the natural world. Full-fledged naturalism does not restrict its methodological and epistemological naturalism to the ontology of the natural world.

What, in Drees's view, can we say about the supernatural world? The second clause of the thesis of ontological naturalism is also not interpretable in a straightforward fashion. It states that "no supernatural or spiritual realm distinct from the natural world shows up *within* our natural world, not even in the mental life of humans" (emphasis added). This clause might be interpreted to imply that there are supernatural or spiritual realities, that some are distinct from the natural world and others are not, and that the former do not show up within our natural world. I doubt that Drees intends this reading. It seems closer to his intention to read him as saying that no supernatural or spiritual reality "shows up" in the natural world.<sup>14</sup> But what does Drees mean by "show up"? We can understand the expression ontologically to mean, for instance, "exist within" or "act within." On the other hand, we can interpret it epistemically, as meaning, for instance, "are discernible within."

The first of the ontological meanings seems to make the clause in question tautologous. It is a matter of definition that supernatural or spiritual

realities do not exist as parts of the natural world. Thus, there is no need to deny their existence as part of the natural world. Consequently, Drees is better understood as using “show up” to mean “act within.” This reading fits better with his views about the various ways in which God could be present in the natural world. Drees rejects views of God as acting within the world either miraculously (by suspending the laws of nature) or nonmiraculously (by acting within the interstices of nature). For these reasons, we might be inclined to read Drees’s denial that supernatural realities show up within the natural world as meaning that supernatural realities do not act within the natural world. However, there may be a sense in which Drees might be read as holding that God does “act within” the world. In his preferred view of the divine, God is the eternal creative source of the entire universe, past, present, and future. One might conclude that this sort of creative instantiation and preservation of the natural world entails that God is acting “within” the natural world.<sup>15</sup> Thus it is not clear to me whether Drees is denying the activity of God within the natural world or not.

That leaves us with the epistemic rendition of the expression “act within.” It does seem that Drees wants to deny that supernatural beings are “discernible within” in the natural world. That claim leaves open the possibility that they are active within the natural world although not discernible. However, this interpretation has the consequence that Drees’s ontological naturalism does not exclude the other forms of supernaturalism in which God is active in the world. On this reading, Drees needs a further argument to exclude other forms of supernaturalism. Thus, one way to understand the basis of Drees’s rejection of supernaturalistic supernaturalisms is that the lack of evidence for the presence of the divine within the natural world is sufficient cause for rejecting them. Such rejection would, it seems, involve an empirically based argument against them. Drees’s negative evaluations of theistic arguments seem to constitute this sort of move. They exemplify a low-level methodological and epistemological naturalism insofar as they seem to rely on a minimalist assessment of what can be inferred religiously from the findings of the sciences—for instance, from the order, intelligibility, and apparent design of the world. They also exemplify a “high-level” methodological and epistemological naturalism insofar as they seem to depend on an optimistic assessment of the epistemic power of the sciences to provide natural explanations of natural phenomena. This is exemplified in Drees’s rejection of arguments for the existence of God from ontological contingencies and gaps. Both moves represent implicit assessments of the methodological potentials of the sciences and consequently of the epistemic capacities and skills with which they are constituted. On the other hand, Drees could appeal to nonempirical reasons, religiously inspired reasons, for denying that God can be discerned acting within the world. That sort of appeal would move him toward some sort

of methodological and epistemic nonnaturalism. I do not find him making that sort of move.

But, then, if Drees does not embrace nonnaturalism, and if he is implicitly a methodological and epistemic naturalist, what are we to make of his official rejection of methodological naturalism? It is to that question that we now turn.

#### METHODOLOGICAL NATURALISM

Following Arthur Danto (1967), Drees tells us that methodological naturalism is the view that the methods of the sciences are the best means of determining both what things exist and what their natures are. Thus, according to methodological naturalism, questions about what things exist and their natures are not predetermined by a naturalistic stance. Reality may contain both natural and supernatural entities. However, according to the methodological naturalist, the methods of the sciences properly provide the answers to these questions. According to this view, methodological naturalism provides the basis for determinations about ontology. Drees rejects methodological naturalism. Although he agrees with methodological naturalists that the sciences are the best means of finding out about the entities of the natural world, he denies that the sciences are competent to provide knowledge of the existence and nature of the supernatural world, if there is such a world.

Drees (1996, 21–22; 1997, 529–30; 1998a, 307) has two arguments for rejecting methodological naturalism. Neither of them, I contend, is satisfactory. First, he argues that methodological naturalism excludes disciplines such as the humanities and those that focus on religious narrative. He claims that such disciplines make use of metaphorical and narrative language that is not allowed by the sciences. Methodological naturalism need make no such exclusions, however. It is clear that both the natural and the social sciences use narrative forms—for instance, in cosmology, geology, evolutionary theory, paleontology, social theory, and social history. Moreover, all of the sciences make use of metaphorical and analogical language. They do so not merely for heuristic or communicative purposes but also in the statement of scientific theories that are claimed to have some justification. Insofar as these justified claims are incorporated into the body of a science's findings and accepted theory they are an intrinsic part of that science.

Perhaps Drees's contention is that methodological naturalism does not give adequate epistemic status to the claims of the humanities and religious studies. But there is no reason why this must be so. It seems *prima facie* false when attributed to such subdisciplines of religious studies as comparative religion, history of religions, sociology of religion, anthropology of religion, and psychology of religion. These disciplines make use of

many of the methods of the social sciences, which Drees seems to take, at least implicitly, to be part of the sciences. Moreover, philosophy, perhaps the central discipline for the discussion of the nature and quality of scientific and religious knowledge, is usually considered a part of the humanities. It is clear, though, that Drees takes the epistemic status of philosophy seriously. The study of literature is also a major component of the humanities, but literary scholars use many of the techniques and methods of the social sciences.

Moreover, there is a question about whether all approaches in the humanities and religious studies are or ought to be aimed at making cognitive claims. Literary appreciation seeks an understanding and an evaluation of its subject matter that does not require that the object of its study be composed of true claims. Nevertheless, to the extent that the humanities and the disciplines constitutive of religious studies do seek to produce justified claims, I agree with Drees that their methods should not be ruled out a priori as incapable of doing so. Methodological naturalism, however, makes no such dogmatic claims. Indeed, methodological naturalists are committed to assessing the relative merits of epistemic claims on the basis of an a posteriori assessment of their results. Such assessments of methodological merit move one into issues of epistemology and thus epistemological naturalism.<sup>16</sup> Of course, methodological naturalists often do come to the conclusion that in cases of conflict scientific findings and theories are to be preferred to humanistic or religious claims that are based on non-scientific sources, because of the superiority of the methodologies employed by the natural and social sciences. But Drees himself makes that sort of claim implicitly in the first thesis of his ontological naturalism. Thus, I contend that Drees's first argument against methodological naturalism fails.

Drees's second argument against methodological naturalism is that it improperly takes as meaningless the limit questions addressed in theology. He argues that methodological naturalists dismiss questions that cannot be answered by the sciences as meaningless. He claims that methodological naturalists will dismiss as meaningless such theological limit questions as the one about why there is something rather than nothing. Naturalists do so, Drees claims, because the methods of the sciences are unable to answer these questions. Here Drees seems to confuse the verification theory of cognitive meaning with methodological naturalism. The verification theory of cognitive meaning maintains that expressions that cannot be verified are cognitively meaningless.<sup>17</sup> Methodological naturalists need not hold such a theory of meaning. Issues of meaning are separate from those of truth and justification. Methodological naturalists can admit that limit questions, if there be such, are meaningful, even though the sciences are in principle unable to answer them. Of course, whether there are such questions is another matter.

Thus I find that Drees provides no persuasive reasons for rejecting methodological naturalism as a basis for religious naturalism. Indeed, methodological naturalism has the advantage, as Danto notes, of not discriminating a priori against any sort of metaphysics or ontology. If some supernaturalistic entity is excluded from the ontology of a religious naturalism built on methodological naturalism, it is excluded because adequate justification for claims about that entity or for its nonexistence has not been provided. The use of scientific criteria for these purposes seems to fit Drees's own intention to take science seriously. Indeed, as we have seen, Drees has himself adopted an implicit methodological naturalism. The reasons that he provides for rejecting supernatural entities in his naturalistic ontology and for allowing their possibility in what we might call his supernatural ontology seem to be based in part on findings of the sciences. He thereby seems to be implicitly accepting the reliability of the methods of the sciences in these matters. His ontological naturalism is only ontological in name; in fact, it is methodological. In addition, as we have seen, Drees seems to exclude all supernatural entities from his naturalistic ontology—but he does so on the basis what appears to be a *generalized* assessment of the adequacy of scientific methods for justifying claims about religious realities that transcend the natural world. I suggest that a *piecemeal* approach to this assessment is preferable. Moreover, such exclusions, whether general or piecemeal, depend upon epistemological considerations. So let us turn to Drees's views on epistemological naturalism.

#### EPISTEMOLOGICAL NATURALISM

Drees (1996, 21–22) rejects epistemological naturalism, as it is understood in the context of Alvin Plantinga's claims about it.<sup>18</sup> According to Plantinga, epistemic well functioning, especially of the evolutionary sort, requires completely well-functioning cognitive capacities. Plantinga claims that only a divine designer, the Christian God, can assure us of such capacities (1993). I am in complete agreement with Drees's rejection of Plantinga's attempt to found epistemological naturalism on theistic supernaturalism. But epistemological naturalism-cum-theistic supernaturalism is not the only form of epistemological naturalism. In general, epistemological naturalism is the position that human cognitive capacities and achievements are best understood and accounted for by using the methods of the natural and social sciences. This connection with methodological naturalism may be an additional reason that Drees does not accept epistemological naturalism. However, as his own critique of methodological naturalism reveals, it is necessary to take some epistemological stances in order to assess methodologies. Further, his own "low-level" metaphysics is presented and argued for as an empirically based metaphysics. Moreover, the determination of the epistemic quality of scientific and metaphysical claims and methodologies all depend upon epistemological issues. Therefore, I do not believe

that Drees avoids epistemological considerations or that he can. He could, indeed, distinguish epistemology from epistemological naturalism and opt for some sort of nonnaturalistic epistemology, but I do not find him doing that.

Epistemological naturalism in religious knowledge entails that the methods of the natural and social sciences ought to be used to understand and assess human religious cognitive capacities, according to whether they be distinctively religious or general capacities used in seeking religious knowledge. Although it does not deny *a priori* the existence or epistemic worth of these capacities, it does subject them to the same sort of assessment as our other cognitive capacities. Inasmuch as Drees finds arguments for and against the existence of God problematic, as he does appeals to religious experience, we can infer that he questions the epistemic potential of our religious cognitive capacities. Moreover, according to Drees's ontological naturalism, our religious cognitive capacities belong to us, and we are part of the natural world. But, as we have seen, the contents of Drees's ontological naturalism belong to the natural sciences. It seems that Drees is implicitly relying on both methodological and epistemological naturalism in his account of human religious cognitive capacities.

Yet, as we have seen, Drees's ontological naturalism asserts that no supernatural entities "show up" in the natural world. If we read this claim epistemically, it seems to assert implicitly that if there are religious cognitive capacities they are epistemically impotent, because of the findings of the sciences. This is an implicit advertence to epistemological naturalism. However, Drees (1998a) also contends that the sciences are not the only mode of acquiring knowledge, since he claims that the humanities and religious studies, at least in their metaphorical and narrative aspects, are distinct from the natural and social sciences. If Drees were correct in this contention, the use of these disciplines would seem to be a form of epistemic nonnaturalism; but, according to Drees, the capacities and methodologies that generate these disciplines are a part of the natural world. Is the exercise of these capacities successful in some instances? It seems not, given Drees's claim that no such entities "show up" within the natural world. We may have religious cognitive capacities, but they are ineffective. I suggest that these ambiguities in Drees's account indicate that he needs to pay explicit attention to religious epistemology and to the question of epistemological naturalism.

I conclude that Drees's naturalism has ontological, methodological, and epistemological components, the latter two only implicitly present. This result is not surprising, nor is it disastrous for his position. While scientific naturalists make methodological and epistemological naturalism central to their position, Drees attempts to avoid both. Thus, scientific naturalists are clear about the determinants of their ontological commitments with respect to both natural and supernatural realities. Drees's view

is not so clear. He implicitly uses methodological and epistemic naturalism to define ontological naturalism, but the latter concerns potentially only a part of the entirety of reality, the natural part. On the other hand, he does seem to make assessments about the ontology of the supernatural. He implicitly uses methodological and epistemic considerations to assess human ability to discern supernatural realities in the natural world. Such realities may exist, but they are not detectable in the natural world. Thus Drees, like the scientific naturalist, seems to have a naturalism whose ontology is open to the existence of supernatural realities but whose existence and activity are more opaque to the methods and epistemic capacities of the sciences than the scientific naturalist contends. What leads Drees to this less ambitious sort of naturalism, a naturalism that in some ways seems designed to make it safe for supernaturalism? The answer to this question seems to reside in the existence and nature of limit questions.

#### LIMIT QUESTIONS

Thesis 5 tells us that certain speculative questions arise, especially in physics and cosmology, that are unanswerable within these disciplines or science in general. There are two questions upon which Drees focuses: (1) Why is there something rather than nothing at all? and (2) Why does the universe have the sort of structure that it does rather than some other? These are questions, he says, about existence and order. Although he does not formulate them, Drees suggests that there are other topics about which limit questions could be formulated (1996, 34). These concern creativity, purposiveness, coherence, beauty, and mystery.

Drees characterizes limit questions in several ways to bring out their nature. First, limit questions are those that exceed the potential of scientific disciplines to answer. He illustrates this idea by imagining a set of questions that are sent to various academic departments to be answered. Some are solved in the various departments. Others are sent on. Invoking a hierarchy of the disciplines, some end up in the departments of physics and cosmology. Some of these questions are answerable; others are not. The latter are the limit questions.

Second, these questions are unanswerable not because they are unintelligible or meaningless but because they are framework questions, questions about the whole or about the framework itself and not about the parts of either the whole or the framework the study of which is the province of the different scientific disciplines. Limit questions are such because of methodological and substantive limitations. In this case, the limitations in question are those of the scientific disciplines.

But, in fact, answers have been proposed for these limit questions. Philosophers and theologians, those who use metaphysics, have attempted to answer them. The question of existence, for example, has been answered



by supernaturalists in terms of a theistic God and by atheists in terms of chance or sheer givenness. Drees examines current arguments for and against a theistic God that are based on cosmological theories about the origin of the universe and on the anthropic principle, and he finds them all wanting. His general conclusion is that the metaphysical claims involved in answering limit questions are underdetermined by the scientific findings upon which they are based. It is this underdetermination that, at least in part, prompts Drees to propose his supernaturalistic naturalism as preferable to other forms of supernaturalism as well as to atheistic naturalism. Thus, though limit questions belong in metaphysics, specifically theological metaphysics, they remain unanswered—indeed, “unanswerable”—in a sense of the term still to be determined.

We have, then, several kinds of limit questions. Questions are sorted by disciplines. Some questions lie outside the boundaries of a discipline. Some questions are answerable by one scientific discipline but not by another. The theological issues raised by limit questions are not questions that are part of the official subject matter of the sciences, even cosmology and physics. Call this sense of limit questions, disciplinary limit questions. Given the historic development of the sciences, philosophy, and theology, limit questions do not belong in the sciences.<sup>19</sup> Naturalistic naturalists, naturalistic supernaturalists, and supernaturalistic supernaturalists can all agree that limit questions of the sort Drees has in mind do not belong to the subject matter of the sciences as currently understood. But this fact about disciplinary location tells us nothing about the in-principle answerability of a question. A question may be unanswerable in one discipline but answerable in another.

Moreover, even if we grant that the scientific disciplines cannot answer limit questions, that says nothing about the degree to which the sciences might contribute to attempts to answer these questions. Depending upon the philosophical methodology employed, the philosopher will or will not make use of the findings of the sciences in answering these questions. To the extent that he or she does, the philosopher is a methodological naturalist in metaphysics. Methodologically exclusive scientific naturalists will make use only of scientific methodologies or those methodologies that are sanctioned by scientific methodologies. Therefore, some questions can be unanswerable by the sciences, not because the sciences can contribute nothing to their determination but because there are other disciplines (and, perhaps, methodologies) that play a role in answering them. They are, therefore, limit questions in the sense that they pass beyond a given discipline’s methodological ability to answer them entirely on its own resources. Drees rejects methodologically exclusive scientific naturalism and so rejects methodological naturalism as such, seemingly because he believes that it excludes the supernatural entirely.<sup>20</sup> Nevertheless, Drees allows the sciences to play a role in assessing the merits of metaphysical,

including theological, claims. The issue as posed by Drees seems to concern the extent of the role that the sciences can play in answering limit questions, given that their findings underdetermine metaphysical claims. Limit questions are such because they reveal certain limitations on the ability of scientifically informed naturalisms to address theological issues.

Suppose we find the proper discipline(s) for a question and make use of whatever methodological resources, whether scientific or metaphysical, we determine necessary to answer it. It may, nevertheless, turn out to be unanswerable. Paul Edwards (1967) has distinguished between several sorts of questions: (1) why questions, for instance, Why do bodies fall? (2) ultimate why questions, for example, Why does anything at all exist? and (3) superultimate why questions, for instance, Why, given everything, does anything exist? Let us understand why questions as requests for an explanation.<sup>21</sup> We can take “explanation,” in its ordinary sense, as the provision of an account of something,  $x$ , in terms of something else,  $y$ , or another state of  $x$ .

Using these meanings, ultimate why questions are meaningful, as are the proposed answers to them: “Something rather than nothing exists because God created it,” or “Something rather than nothing exists because some things exist eternally of their own nature.” However, superultimate why questions are meaningless, not because they fail some empiricist theory of meaning, but because they involve a contradiction. The superultimate question asks one to assume everything. It then asks for an answer that involves something more—but, of course, there cannot be something more if one has assumed everything! All parties can agree that limit questions are not superultimate questions. They do not exceed comprehension in the sense of intelligibility. Moreover, it seems that limit questions, as ultimate questions, concern ultimate explanations. All parties, it seems, can agree on this point also.

Thus, we can understand Drees to be claiming that there are certain metaphysical questions concerning ultimate explanations, questions that do not belong to the sciences although the sciences might contribute to answering them. These questions are meaningful in the sense of being intelligible. Intelligible answers can and have been proposed for them. Nevertheless, they remain unanswered. Indeed, in a sense still to be determined, they are unanswerable. Drees’s claim that they are undetermined by the sciences implies that a satisfactory answer must have sufficient justification and that the sciences have not and, it seems, *cannot* provide that justification. But, Drees is also claiming that metaphysics itself has not and, it seems, *cannot* provide that justification.

Drees is advocating neither metaphysical skepticism nor metaphysical agnosticism. He is not claiming that there are no justified metaphysical claims nor that we do not know that there are any justified metaphysical claims. Rather, he is implicitly claiming that the metaphysical claims con-

cerning ultimate explanatory factors are such that they do not and cannot achieve the sort of justification achieved in the sciences and, perhaps, in other parts of metaphysics. There is a relative limit—in comparison with the sciences—to the justificatory status of theological answers to questions about ultimate explanations. It is that epistemic limit that makes limit questions limit questions.

The reader will have noticed that I have characterized Drees's claim about the epistemic restraints on limit questions in both empirical and modal terms. Empirically, the answers to limit questions *are not* adequately justified. Modally, the answers to limit questions *cannot be* adequately justified. We can distinguish several sorts of modalities in descending order of strength: logical, metaphysical, and physical. Thus, one might claim that limit questions cannot as a matter of logical necessity be adequately justified. That is to say, it would be either an explicit or implicit contradiction in terms to claim that answers to limit questions could be adequately justified. Or one might claim that limit questions cannot as a matter of metaphysical necessity be adequately justified. That is to say, it would be a violation of metaphysical principles to claim that answers to limit questions could be adequately justified. These principles might have a purely a priori or some empirical bases. Or, finally, one might maintain that limit questions cannot as a matter of physical necessity be adequately justified. That is to say, there are limitations on the capacities of the cognitive agents, human beings in this case, that prevent them from providing adequate justification for their answers to limit questions.

What sort of characterization does Drees intend? Clearly, we can rule out logical impossibility. We can, I think, also infer that his low-level metaphysical stance rules out metaphysical impossibility of the a priori sort. Drees implicitly appeals to two factors in the characterization of his low-level metaphysics. First, his metaphysics is empirically based; the empirical components include both the empirical and theoretical findings and results of the sciences. We also recall that Drees takes the position that the sciences should be taken seriously by the metaphysician and theologian. Second, it is low level in that it refrains from a priori imposition of metaphysical categories on relevant scientific findings (Drees 1998a, 312). Thus, the impossibility that Drees has in mind seems to be located in his low-level metaphysics interpreted as a scientifically informed philosophical position. The exact nature of the physical impossibility that this limit imposes is not clear, however. A strong version would be based on scientific findings about human knowers that indicate that there is an intrinsic limit on the abilities of human cognitive agents to answer ultimate theological questions. As far as I can discern, Drees does not appeal to that kind of limitation. Let us call it an *in-principle* physical limitation of our epistemic capacities. A much weaker version could also be based on both scientific findings about human cognitive abilities and the historical track

record of their use. On this weaker version, human beings have been, currently are, and in all likelihood in the future will be unable to answer ultimate theological questions. Let us call this a *permanent, but de facto* limitation on our epistemic capacities. This seems closer to the kind of limitation Drees has in mind. Does Drees give us any reason for thinking that we are so limited?

Drees argues that one characteristic of limit questions is that they concern the entire framework or the entire world. As such they seem to go beyond the competence of the individual scientific disciplines. Thus, even though individual scientific disciplines deal with the structures of parts of the physical world and even, in some instances, with the origin of structured parts of the world, they do not, it seems, concern themselves with the structures of the whole nor with its existence. They do not address the limit questions: (1) Why does the world rather than nothing exist? and (2) Why does this sort of structured world exist rather than another sort of structured world? Of course, scientific naturalists can grant this claim since scientific naturalists, Drees, and supernaturalists all agree that limit questions are metaphysical questions. That concession, however, says nothing about the degree to which the metaphysician might seek the aid of scientists in answering these limit questions. Drees, as one who takes the sciences seriously in his theological and metaphysical theorizing, surely agrees with this. Thus, although we might concede that limit questions are questions for metaphysicians, proposed answers to these questions may rely more or less on the findings of the sciences. Providing help in answering limit questions is not beyond the competence of the sciences. Nor does it seem that the sciences are unable to make an important contribution toward understanding how we come to, understand, pursue, propose answers to, and solve—if in fact we do—limit questions. Epistemology is the philosophical discipline that explores such questions, but there is no reason to confine the contribution of the sciences to metaphysics. Indeed, scientific naturalists are making significant use of the sciences in the development of a naturalized epistemology. From the scientific naturalists' view, understanding and evaluating our cognitive capacities is a central task of epistemology, and it applies equally to the capacities used in doing science, metaphysics, and theology.<sup>22</sup> But none of this puts an intrinsic limitation on the answering of limit questions. It does not support the in-principle limitation mentioned earlier. Indeed, it does not seem sufficient for a de facto limitation that predicts continued inability to resolve limit questions.

The scientific naturalist ought to follow Drees's announced intention of pursuing a low-level metaphysics rather than Drees's actual practice. She should postulate neither an in-principle nor a de facto, though permanent, limitation on our epistemic capacities for answering limit questions. Keeping her metaphysics low-level and so her philosophical commitments close to the sciences, she ought to assess individual empirical hypotheses about

the nature of our epistemic limits on the basis of our epistemic historical track record. The track record does not seem to warrant postulating an intrinsic or de facto limitation on our ability to provide justified answers to limit questions. What emerges from the examination of that record is a piecemeal type of empirical limitation that changes as scientific and philosophical/theological investigations change over the course of history.<sup>23</sup> The latter, I contend, is the sort of position that a scientific naturalist should adopt. But Drees seems to have adopted a stronger sort of epistemological and methodological limitation based on a kind of pessimistic inductive generalization concerning human cognitive capacities in the theological realm.<sup>24</sup> This pessimistic induction is fueled by the phenomenon of underdetermination.

In the end, therefore, the underdetermination of theological metaphysical claims by the sciences provides the basis for Drees's claims about the in-principle unanswerability of these questions, and it is the in-principle unanswerability of these questions that makes them limit questions. Moreover, because it is, as we have seen, the existence and nature of limit questions that is the basis for his supernaturalistic religious naturalism, we need to turn now to an examination of the phenomenon of underdetermination.

#### UNDERDETERMINATION

No matter what kind of metaphysics is proposed, Drees argues that scientific findings underdetermine metaphysical claims. The claim is that limit questions are not answerable, that is, the answers proposed for them are not adequately justified. The failure to achieve adequate justification is the result of the underdetermination of metaphysical claims by the scientific data and theories used to support them.

Philosophers of science have examined the issue of underdetermination in depth. They have distinguished several sorts of underdetermination of scientific theories by scientific findings and have attempted to determine which, if any, occurs. Underdetermination must be distinguished from a more general feature of the epistemic limitations of abductive reasoning in the sciences. By *abductive reasoning* I mean reasoning that proposes hypotheses that are substantively theoretical.<sup>25</sup> Abductive reasoning should therefore be distinguished not only from deductive reasoning but also from inductive reasoning, which is understood in the sense of empirical generalization. The conclusions of empirical generalizations are posed in the same terms as the observations or data that are used to support them. Philosophers of science have come to general agreement that abductively based hypotheses can be neither verified nor falsified. None can be shown to be conclusively true or false. That is, it is logically possible that any claim said to have sufficient justification to hold it to be true is, in fact, false; and it is logically possible that any claim for which there is sufficient evidence against it to hold it to be false is, in fact, true.

These results derive from the structure of abductive reasoning generally and the complexity of abductive reasoning in the sciences. The latter has to do with the fact that abductive theories are testable; that is, they can make contact with potentially confirming or disconfirming observations only by means of auxiliary theoretical and empirical hypotheses and through the use of empirically based claims about experimental conditions and/or initial conditions. Any confirmation or disconfirmation is, in the first instance, attributable only to this complex of hypotheses, not just to the hypothesis under test. We can call this limitation on the epistemic power of abductive reasoning *justificatory fallibilism*. The limitation of justificatory fallibilism also applies to the sort of low-level—empirically based—metaphysics that Drees has in mind. It is uncontroversial. But it is distinct from the phenomenon of underdetermination that appears to be central to Drees's notion of a limit question.<sup>26</sup>

While the phenomenon of justificatory fallibilism is widely accepted, the issue of scientific underdetermination is a controversial one. We can distinguish two versions of underdetermination, weak and strong (Newton-Smith 2000; Laudan 1990; Laudan and Leplin 1991). The weak underdetermination thesis (WUT) asserts that as a matter of empirical fact it has happened in the history of science that the available empirical evidence does not decide between rival hypotheses or theories. For instance, at the time of Copernicus, the available observational evidence did not decide between heliocentric and geocentric theories. This sort of underdetermination, however, does not reveal any sort of intrinsic limit on our ability to make epistemic decisions between competing hypotheses. In the presence of such weakly underdetermined hypotheses, further empirical evidence can be sought and perhaps attained, as happened in the case of our example. Moreover, even if further differentiating empirical evidence is not currently available, other epistemic criteria can be employed to determine which theory is better justified. That is to say, *empirical* underdetermination does not imply *evidential* underdetermination. For instance, in the case of heliocentrism, fit with the accepted physics of the day served as an evidential criterion that initially broke the epistemic stalemate in favor of geocentrism.<sup>27</sup> The existence of situations in the history of science and philosophy that exemplify WUT is not uncommon. But the sorts of questions that remain temporarily unanswered are not the kind of limit questions that Drees seems to require. They pose no in-principle barrier to arriving at an epistemically based preference for one of the rival hypotheses. Nor do they suggest an inductive generalization about some permanent de facto human inability to answer them. Rather, situations in which WUT is instantiated are entirely compatible with the piecemeal account of the unanswerability of limit questions that I have suggested a scientific naturalist should favor.

The strong underdetermination thesis (SUT) is a much deeper and more problematic type of underdetermination. It maintains that any scientific theory has an incompatible rival theory to which it is empirically equivalent—that is, both rival theories have exactly the same empirical implications. Applying this to theological metaphysical claims, SUT asserts that any theological metaphysical claim has an incompatible rival with exactly the same scientific implications. Consequently, they are scientifically equivalent.

Let me focus on the major difficulties with SUT, first as it applies to the underdetermination of scientific theories. To begin with, it is not clear that every theory has a rival that is empirically equivalent. Proposed rivals may merely be differently formulated versions of the same theory. Given that it has often been difficult to find even one plausible scientific account of phenomena, it seems unlikely that a rival can be found for every scientific theory that is proposed. Moreover, no general method has been found for generating such rivals. In addition, inasmuch as no theory is tested in isolation, a further problem arises in finding empirically equivalent theories. As we have seen, a theory becomes empirically relevant only through a large group of auxiliary hypotheses, and it is not at all clear that the right kind of auxiliaries (that is, non-ad hoc theories and non-ad hoc combinations of them) can be found for the rival of any theory so that the rival in conjunction with the auxiliaries will produce an empirically equivalent theory. Thus, the scientific version of SUT seems to be merely a speculative hypothesis.<sup>28</sup>

What about a metaphysical version of SUT? There are two general reasons why we might expect that metaphysical theories are strongly underdetermined even if scientific ones are not. These reasons have to do with differences in subject matter or methodology. But neither is persuasive. Underdetermination is a postulated feature of abductive reasoning. Thus, any metaphysics that stays close to the sciences methodologically, that is, remains methodologically low-level, would be expected to be as free of or as burdened with the problem of underdetermination as are abductively based scientific theories. All four problems with the scientific version of SUT seem to apply as well to the metaphysical version. None of the difficulties concerning the application of SUT to the sciences seems to be peculiar to the sciences. They seem equally applicable to theological versions of SUT. Since Drees, implicitly at least, adopts for theology a methodology similar to that of the sciences and explicitly espouses a low-level metaphysics, strong underdetermination should not be much more of a problem in his metaphysics than it is in the sciences. If this is correct, then the sort of limit posed by theological limit questions is probably not of the in-principle type that comes from the presence of SUT.

There is a further reason to not be overly concerned about the phenomenon of underdetermination. One could grant *empirical* underdetermination but argue that it does not imply *evidential* underdetermination either

in the scientific or the theological metaphysical case. The key distinction here is between several kinds of justifiers for a claim. Besides empirical justification, scientists invoke other justifications for a theory such as coherence with other scientific theories, explanatory power, and heuristic fertility.<sup>29</sup> These sources of evidence for a theory are independent of the empirical support that a theory has. Consequently, one may be able to use them to decide between empirically equivalent scientific or metaphysical hypotheses. I see no reason why a similar sort of thing might happen at the theological level. I conclude that SUT is a speculative hypothesis as it applies to both the sciences and metaphysics.

WUT is a much more plausible hypothesis. It does seem to be the case that, with respect to some competing scientific hypotheses, they have been empirically underdetermined. I grant too that there may be times when they are even evidentially underdetermined. A similar conclusion seems to be reasonable with respect to metaphysical hypotheses. The historical interaction between the sciences and metaphysics seems to bear this out (Seager 2000).<sup>30</sup> Drees's own empirical metaphysics appears to be consistent with this view of interaction. I conclude that underdetermination is a phenomenon that may on occasion affect either scientific or metaphysical hypotheses. But there are no persuasive reasons for thinking that it poses in-principle or permanent *de facto* limitations on the evaluation of competing metaphysical hypotheses. Limitations may occur from time to time. Some questions may appear more enduring than others. Limit questions must be temporally indexed. The issue of limits must be decided empirically and in a piecemeal fashion rather than once and for all.

Moreover, the rejection of the underdetermination of metaphysics by scientific findings does not require the abandonment of a differential assessment of the epistemic fallibility of the sciences and theology. The scientific naturalist can therefore accept Drees's reasons for being cautious about theological realism. Drees argues that the reasons proposed for scientific realism are not available for theological realism. Scientific realism is supported by the successes of the sciences as measured by the consensus about scientific claims and practices, their fertility, and the ability that they provide to manipulate reality. None of these sources of success seems to be present in the case of theology. Thus there is reason to be more cautious about claims for theological realism. Drees attributes the differences to both subject matter and methodology. Following Ernan McMullin (1994), he accepts the claim that scientific and theological theories are similar in that their subject matters move beyond the realm of literal descriptions, but according to Drees there are further subject matter differences once this similarity is granted.<sup>31</sup>

Thus, Drees grants that both theology and the sciences use the method of abductive reasoning and other methodological parallels, but he argues that theology has been manifestly less successful than the sciences. I think



that this point can be conceded. However, the differences that Drees notes between theological and scientific success are not clearly differences in kind. They appear to be differences in degree. In addition, it should be noted that there has been a historical winnowing of theological positions. From a multitude of religious positions, there are now five or six major religious traditions (Rolston 1999). There are two generally recognized groups of theological positions about the transcendent, the Semitic and Indian. Indeed, Drees himself (1998b) argues that the sciences enable us to know *for sure* that certain supernatural phenomena have no basis in reality. Drees states his case too strongly here, because epistemic fallibilism does not allow certainty. Nevertheless, Drees seems to admit that, with respect to the justification of certain kinds of religious claims, metaphysical claims are on a par with those of the sciences.

It might be objected that the argument against theological limit questions has thus far been made on a general basis. Drees, however, has been specific about two particular limit questions. Thus, Drees might argue that these general arguments against theological limit questions might hold generally but fail in the case of ultimate questions about existence and the structure of existence. It will be helpful at this point to turn to Drees's explicit arguments that these questions are limit questions in the sense of being unanswerable either in principle or with a *de facto* permanence.

#### WHY IS THERE SOMETHING RATHER THAN NOTHING?

Let us consider in some detail how Drees handles one of the limit questions that he explicitly formulates, the limit question concerning existence.<sup>32</sup> Drees claims that the question, Why does something exist rather than nothing? is a limit question. The sciences, including cosmology and physics, cannot answer this question. It is a metaphysical question of the theological sort that has received various sorts of answers, theistic and atheistic, but it remains unanswered and unanswerable.

That natural reality is assumed rather than explained [by the sciences], is not proof for the existence of a creator. Introducing a god as an explanatory notion only shifts the locus of the question: why would such a god exist? And it is possible that the universe just happens to exist without explanation. Perhaps the craving for an explanation is not appropriate here. The limit question is there and it does not point to a specific answer. (Drees 1996, 268)

Adolph Grunbaum (2000) has argued that the assumption of existence may not be problematic in the sense that Drees seems to suppose. That is, it may not be a phenomenon presupposed by the sciences that then needs some explanation elsewhere. Grunbaum points to the widely recognized fact that scientists take certain states of a phenomenon to be states that do not require explanation. They are, as it were, the ground state or the natural state of the phenomenon. What need explanation are changes from

that ground state. Perhaps the most famous example of this is in the transition from Aristotelian to Newtonian physics. Aristotelians required that all motion, whether constant or accelerated (as it came to be classified) needed explanation. But Newton asserted that only accelerated motion required explanation. According to Newton's first law of motion, unaccelerated motion needs no force to account for it. Generalizing on this assertion, it may be that existence does not require an explanation. That is, the best account of the existence of the universe is one that turns out to presuppose existence, but not in the sense that leaves open a further explanatory task. Whether the phenomenon of existence is a case of this kind is another question. However, Drees does not seem to recognize the sort of possibility suggested by Grunbaum.<sup>33</sup>

Nevertheless, Drees might object that the assumption of existence is always one about which a request for explanation can legitimately be raised. I grant that this must be conceded if one means by *can* "logically possible," but the invocation of logical possibility is the weakest of all constraints on metaphysics, and it seems to be an insufficient criterion for metaphysical acceptance. Pursuing this objection further, Drees might propose that it is a priori clear that existence is a phenomenon for which any metaphysics must give an explanation. This option is not open to Drees, however, because he claims that his is a low-level metaphysics, which takes the findings of the sciences seriously and does not impose categories on metaphysics or scientifically based metaphysics a priori. What Drees needs to meet Grunbaum's claim that existence is not a phenomenon that requires explanation is a scientifically inspired metaphysical argument to that effect. I find no such argument in Drees.

Actually, there are low-level metaphysical arguments that support Grunbaum's possibility. Consider the classical theistic and atheistic answers to the existence question. Classical theists assert that the existence and creative causality of the theistic God provides an adequate explanation of the existence of the world. No further questions about the existence of the theistic God are legitimate because it is the nature of the theistic God to exist. It turns out that from the classical theistic perspective the only satisfactory account of the existence of the world is the postulation of a being whose very nature it is to exist. To the question *Why* does such a being exist? the only proper answer is nothing. God is the sort of being whose nature it is to exist. The situation is similar to one in which the question asked is *Why* are human beings rational animals? The proper answer (granting that humans are, indeed, rational) is, *That is their nature.* An alternative atheistic account of the existence of the world is that its existence is the result of its fundamental constituents: classically, material particles. To the question *What brought these constituents into being?* the proper answer is nothing. They were not brought into being, because it is their nature to exist. Thus, Drees's claim that the question can always be

asked of either God or the fundamental constituents of the universe, What caused their existence? is, at best, misleading. It is, of course, logically possible to raise the existence question about each, but, given both the context of the metaphysical arguments and the concession that the evidence for one side or the other is persuasive, the question is not a legitimate one.

Drees may object that it is precisely because the evidence is not persuasive for one side or the other that the existence question is still open and has become a limit question. All the evidence that we have about existence, ordinary or scientific, underdetermines the metaphysical question about the ultimate source of existence. So let us accept Drees's position that the question about existence is a genuine metaphysical question for which various answers have been proposed but for which a definite answer has not yet been settled on. Does this situation present a case of underdetermination, and, if so, is it of the WUT or the SUT variety? Drees does not address this question, but we may find some implicit answers from his reflections on the existence question.

Drees does suggest that no theological answer to the existence question may be better justified than that proposed by a rival hypothesis. To be an instance of SUT, Drees would need to show that *no* theoretical explanation of the phenomenon of existence is without a rival. I find no such argument in Drees, however. Indeed, it is not clear to me that any such argument could be generated in an empirically based low-level metaphysics of the sort that Drees claims to hold, because SUT is a metaphysical hypothesis that must take into account all possible worlds. WUT applies locally with respect to this world, but WUT does not seem to be sufficient for the kind of limitation that Drees requires to qualify the question about existence as a limit question. WUT merely asserts that two hypotheses are equally supported by the available data and equally explain those data. Even if this is conceded with respect to the existence question, however, Drees must still show that WUT implies a *de facto* and permanent unanswerability of the existence question. This argument could be based on a pessimistic induction to the effect that the historical track record indicates that past failures will in all likelihood lead to continued failures. Such a bare induction is risky, based, as it seems to be, on mere past performance. Another, stronger argument for the same sort of conclusion could be based on premises concerning the epistemic limitations of human knowers, the nature of the realities (probably or currently) involved in answering existence limit questions, and the overwhelming difficulties in establishing an epistemic relationship between the two. I find no such arguments in Drees's account.

But let us grant Drees the bare induction or that some argument has been constructed to show why the *de facto*, permanent unanswerability is probable. That is, let us grant that current, and projected, theological

theories with respect to the existence question are, and will be, *empirically* underdetermined by scientific findings and theories. Even with this concession, Drees does not have enough to make his case. As we have seen, empirical underdetermination does not imply *evidential* underdetermination. Drees needs a further argument to show that other epistemic criteria for deciding on the relative justification of theories also underdetermine the theories. I find no argument in Drees to this effect.

It might be objected that Drees's low-level metaphysics does not allow the use of any but empirical justificatory criteria. But that clearly is not the case. Drees employs nonempirical criteria when he argues against process theological positions on the basis of the claim that they violate the hierarchical ordering of the sciences. Since process theologians ascribe protomental features to elementary particles, they make what seems to be an evolutionarily derived superstructure feature of some organisms, a fundamental feature. This violates the explanatory patterns implicit in Drees's naturalism. Thus, even though it seems that there is empirical equivalence between process and Platonic theistic hypotheses about existence, Drees argues—although he does not put it this way—that the theories are not underdetermined on evidential grounds. Drees also rejects classical theistic hypotheses that involve either the miraculous or nonmiraculous activity of God in the world. These hypotheses also seem to be empirically equivalent to Drees's Platonic hypothesis with respect to existence. Nevertheless, he argues for the preferability of the Platonic hypothesis because classical theistic hypotheses violate the causal integrity of the natural world. In the terms of our analysis, he is using an evidential criterion to show that empirically equivalent hypotheses are not evidentially equivalent. Thus, not only does Drees's naturalism allow for evidential overcoming of empirical underdetermination, Drees himself seems to use it implicitly, apparently not recognizing that he is doing so, in making his case for Platonic theism and against both classical and process theism.<sup>34</sup>

These results have important consequences for the assessment of Drees's Platonic theism. Given Drees's own naturalism, it seems that there is good reason to reject Platonic theism in favor of a purely naturalistic account of transcendence, for instance, of the sort recently suggested by Karl Peters.<sup>35</sup> Even if we concede the empirical equivalence of Platonic theism and a naturalistic account of transcendence with respect to the existence question, we are still able to use the criteria implicit in Drees's own naturalism to argue for the evidential preferability of a "naturalistic religious naturalism" over Drees's supernaturalistic religious naturalism. One of the central features of the Platonic God proposed by Drees is that it is the creative locus of values. But, if we take seriously the Evolutionary Explanation Postulate of his naturalism, the presence of a timeless locus of values becomes problematic. An emergentist hypothesis concerning value, including ultimate or transcendent value, fits better with Drees's naturalism than

does his own Platonic theism. Evidential considerations stemming from coherence seem to undermine any empirical equivalence.

Drees might object that to use features of his naturalism, as I have done in appealing to his Physics Postulate and his Evolutionary Explanation Hypothesis, is to make a category mistake. The reason is that it applies features of the ontology of the natural world to the supernatural world. These features might be used to undermine empirical equivalence and also evidential underdetermination with respect to competing hypotheses about natural phenomena, but they are not applicable to the supernatural world. Applying them there, so the objection goes, is a mistake. I have two problems with this objection. First, Drees seems to make the same mistake! If I have interpreted him correctly, he uses the Physics Postulate and considerations about the integrity of the natural world (including considerations with respect to time and causality) to argue against both classical and process theistic views. In arguing that Platonic theism is problematic, I have merely followed Drees's own example.

Moreover, Drees argues that the results of the sciences can be divided into three classes: (1) those that tell us for sure what is not the case, (2) those that are generally accepted, and (3) those that are speculative, about which we are unsure what to claim. But Drees (1998b) tells us that the findings of (1) tell us that certain alleged religious phenomena do not exist. This move implies that low-level metaphysics, a naturalism that is based on taking the sciences seriously, not only can help resolve underdetermination but can actually settle matters in the realm of supernatural ontology.<sup>36</sup> Perhaps more tellingly, Drees maintains, in opposition to theistic and other forms of supernaturalism, that no immaterial or supernatural entities "show up" in the natural world. If Drees's metaphysics is, as he claims, empirically based, a metaphysics that takes the sciences seriously, it seems plausible to assume that the basis for that claim is scientific. Thus Drees's own practice seems to refute the objection that the scientific naturalist has committed a category mistake in critiquing his Platonic theism.

Second, let us suppose that appeals to features of naturalism ought not to be made in determining stances with respect to supernatural ontology. How, then, do we make such determinations? As far as I can see, Drees proposes no direct answer to that question. I have argued that Drees's ontological naturalism is implicitly—perhaps willy-nilly—also a methodological and epistemological naturalism. If I am correct, given the uses to which he puts his naturalism in critiquing other supernaturalistic positions, Drees either implicitly or willy-nilly provides us with an answer to our question. The sciences and an epistemology based on the sciences ought to be the basis for claims about supernatural ontology. On the other hand, as we shall see, Drees also appeals to the wisdom of religious traditions. That wisdom seems to include cognitive as well as moral elements. If so, he may be implicitly endorsing the epistemic resources of those traditions. The

problem with this understanding is that I know of no place where he endorses the usual sorts of nonnaturalistic epistemic sources that are appealed to in these traditions, such as religious experience, divine revelation, faith, tradition, and teaching authority. Nor does he implicitly use these sources as epistemic justifiers.

I have examined in some detail possible epistemic constraints that might be the source of limit questions. Drees has argued that questions about the existence of this world rather than nothing, or some other differently structured world rather than this one, constitute limit questions that are unanswerable in the sense that they are underdetermined. I have argued that Drees has not established that these questions cannot be answered in either of two senses of the term *unanswerable*. He has not shown that they are unanswerable in principle, corresponding to the thesis of SUT, nor has he shown that they are in all likelihood unanswerable *de facto*, although not in-principle unanswerable. Indeed, I have argued that it would be inconsistent with his claim to be presenting a low-level metaphysics to argue for either form of unanswerability. The historical track record shows at best that competing theistic and atheistic accounts of existence are weakly underdetermined by the empirical phenomenon of existence. But, as I have noted above, empirical underdetermination does not imply evidential underdetermination.

Thus, as we have seen, even if we grant to Drees some form of empirical underdetermination, it does not follow that we are unable to make a reasoned choice between competing theories. Evidential considerations concerning such factors as relative coherence, explanatory and heuristic power may enable one to decide in favor of one sort of hypothesis over another. I have, indeed, argued that such considerations do play a role in Drees's own assessment of the relative merits of the process and Platonic hypotheses and his argument in favor of the latter. Consistency demands that they also be applied in the instance of the relative merits of classical theism, Platonic theism, and either atheistic or empirical theological hypotheses. If that is done, not only is it clear that there is no evidential underdetermination, but it also seems that empirical theological hypotheses are preferable to Drees's Platonic theism. Weak underdetermination does occur and, more than likely, will occur in the future, but the limit questions constituted by WUT seem to be temporary. Human epistemic prospects even in theological issues seem brighter than those portrayed by Drees.

Thus far I have addressed Drees's claims about the epistemic limitations on theological claims. But Drees offers another argument for limitations on knowledge of the divine. Besides an epistemic distance, there is a moral distance. Human beings are not only, as Drees puts it, religious wonderers but also religious wanderers. Just as wondering is enhanced by mystery, recognition of distance from a goal prevents settling into places when one is not yet home and, one hopes, promotes wandering in the right direction.

## MORAL TRANSCENDENCE AND EPISTEMIC LIMITS

Drees emphasizes two features of religion: its cognitive and moral aspects, or what he calls its mystical and prophetic sides. The absence of God and the consequent apophatic character of religion lead Drees to emphasize limitations on both cognitive and moral aspects of religion. As we have seen, the limitations on the cognitive side suggest that theological inquiry is engaged in the posing of limit questions that have a distinctive quality of unanswerability. The distance between God's existence and nature and our epistemic grasp of them distinguishes theological inquiry from scientific inquiry. The epistemic quality is decidedly less. In terms of the classical account of the understanding of the divine, Drees is emphasizing negative theology. Although human beings may make analogically affirmative claims about God, they must also assert that the divine being is not what their models affirm of it. When we move from the epistemic realm to the moral, the gap between model and reality not only remains but is amplified.

In comparing the role of the "is not" in the two aspects of religion and theology, Drees tells us:

For a "mystical" theology, which reflects a desire for unity, for a divine presence in continuity with our lives and our knowledge, awareness of the limitations of our models may do sufficient justice to its understanding of the otherness of the divine. However, this "is not" is insufficient as an expression of the distinction between our models of the divine and the divine reality itself for a "prophetic" theology, which is characterized by a sense of difference and contrast, of divine absence rather than presence, of contrast between what is and what should have been. On a "prophetic" understanding of theology, there is a sense of "and it is not" for which there is no analogy in science. In a prophetic theology, people also seek to articulate a sense of contrast between God and the world, between how humans behave and how God intended them to behave (e.g. Isaiah 55:8), or, more naturalistically, between ideas about "what ought to be" and "what is," as such ideas have evolved within reality. An "is not" meant as a form of modesty about our language and knowledge is not enough to articulate such a sense of contrast. (Drees 1996, 149; see also 33–34)

Drees is claiming that theologians face two sorts of discontinuities in their conception of the divine, whereas scientists face only one in understanding natural reality. There is a further source of underdetermination in theology that is not present in the sciences. Let us call these discontinuities descriptive and normative.

The first discontinuity is at the epistemic level. In the sciences it is exemplified in the discontinuity between models and what they are intended to model. Scientific models are intended to apply to what they model in some ways but not others. The billiard-ball model of the atom was intended to represent its solidity and geometrical features but not its color or size. The planetary model of the atom represented it in the orbital features of its electrons but not its size or the magnitude of gravitational

effects. This kind of discontinuity is also present in theology. Classical theistic models of God as personal attribute cognitive and evaluative capacities to God but deny bodily characteristics. These positive characteristics are also said to be present in God in the highest degree. Thus God is claimed to be all knowing, all loving, and all powerful.

The second discontinuity occurs at the level of evaluation. It is reflected in the distinction between what is and what ought to be and in the distinction between fact and value. But Drees maintains that this sort of discontinuity is not one that is faced in the sciences. The sciences are restricted to factual matters.

Drees argues that both of these discontinuities serve to distance the sciences from theology and therefore support the contention that theological claims are underdetermined by the findings of the sciences. We have examined the descriptive discontinuity in some detail and argued that it does not seem to present the kind of in-principle underdetermination that Drees claims for the epistemic relationship between the sciences and theology. The evaluative discontinuity, at least at first glance, seems to be a different matter. The sciences are commonly thought to be restricted to matters of fact. That theology concerns itself with evaluative matters and with the source of values and moral goodness seems to set it off sharply from the sciences. This is true both for classical theism and for Drees's own preferred Platonic theism according to which God is a timeless creator of existence and source of goodness. But this normative distance serves a positive function that is, perhaps, less discernible in the descriptive distance. Descriptive distance and its consequent epistemic underdetermination work their positive effects by maintaining limit questions and cognitive wonder. They reflect in Drees's view the mystical side of religion. The consequence of descriptive distance is epistemic underdetermination. According to Drees, epistemic underdetermination allows Platonic theism to be compatible with naturalism.

However, Drees maintains that normative distance is essential for the prophetic side of religion. This is so because the distance between what is and what ought to be is a necessary vehicle for conveying the moral inadequacies of the world in which we live and morally motivating us to remove them. Drees seems to claim that the normative distance strengthens his underdetermination argument, but he also seems to claim that the normative distance gives an edge to Platonic theism over views that find a closer connection between what ought to be and what is.<sup>37</sup>

Secularists and religionists, whether scientific naturalist or not, can agree with Drees that the world in which we live is far from morally ideal and that the recognition of this distance is, or at least ought to be, a powerful source of motivation to change the world. But even if one grants a distinction between facts and values, nothing decisive follows from it about the



ontological foundation of moral values or about the epistemic sources for moral knowledge. Theistic, nonnaturalistic secularist, and naturalist accounts of values are all compatible with a fact-value distinction. Thus, on the face of it, all of these moral theories are able to maintain the normative distance that Drees requires for religious wanderers.

Drees's Platonic realism may account for normative distance, but at the cost, it seems, of providing an adequate account of moral agency. Drees does not address the well-known classical difficulties with a theistic ethics: arbitrariness and unknowability. Both of these difficulties apply as well to his Platonic theism. If Drees does not intend his God to be personal, as seems to be the case in some versions that he presents, he might avoid the charge of voluntary arbitrariness about a divine command theory of morality. But it is not clear to me how he avoids the problem of knowability, that is, the problem of determining what is the moral good, given that good is identified with an unknowable abstract source. Nor is it clear how that goodness comes to be in the world through the moral activity of human beings. According to standard accounts, moral agency requires knowledge and free choice, but in Drees's view the divine does not "show up" within the world. As we have seen, this seems to mean in its ontological version that God is not active in the world and in its epistemic version that God is not discernible in the world. Thus it would seem that human beings cannot know the good and that the source of the good cannot operate in this world.

Of course, Drees might object that he has provided a means for knowing the good and understanding how the good works in the world by appealing to religious traditions. They provide the wisdom for the required moral actions, and their source is ultimately divine. A scientific naturalist can grant the former claim and deny the latter. Indeed, Drees seems to accept both a biological and social/cultural evolutionary account of religious wisdom. A scientific naturalist might advocate that we retain the religious wisdom of religious traditions for practical moral purposes while urging, on the basis of scientifically derived reasons, the elimination of their theological foundations. A naturalistic account of the ontological foundations of moral values and the sources of knowledge about these values appears more promising than Drees's Platonic theism. If this is so, it is in a much better position than Drees's Platonic realism to establish and explain the normative distance that Drees requires for religious wanderers.

Thus I conclude that Drees's attempt to support his underdetermination thesis with the notion of normative distance fails.<sup>38</sup> But this conclusion leads us to one final important feature of Drees's supernaturalistic religious naturalism: his views on the relationship between the various religious traditions and a naturalistic religious substitute.

## RELIGIOUS TRADITIONS AND A NATURALISTIC RELIGION

Drees (1997; 1998b) argues against the view that religious naturalism ought to reject the pluralism of religious traditions and seek to construct a naturalistic religion. He does so because the rejection of religious traditions would involve the elimination of accumulated religious wisdom without replacing it with something equivalent. The loss would be especially significant in the ethical realm, where religious traditions provide a set of practices, a way of life, and a motivating narrative. The latter are necessary, in Drees's view, because human beings do not live by explicit, reflective knowledge alone. Much of the cognition that is built into religious traditions operates at the implicit, nonreflective level.<sup>39</sup> That sort of cognition is necessary for human living, and it is provided by religious wisdom.

However, Drees does not advocate an unthinking retention of the totality of any religious tradition in either its normative or descriptive aspects. He envisions changes that result from different circumstances, understandings of reality and moral ideals, but he denies that a search for and adoption of the commonalities of religious traditions would provide what is necessary for the religious life either cognitively or morally. Epistemic underdetermination provides the basis for religious cognitive pluralism. Differing personal, social, and cultural histories provide the basis for retaining pluralism in the other aspects of religious life.

I think that it is important to distinguish the role of religious traditions in living one's daily life from their epistemic status in the context of theology. Drees seems to run these two aspects of the issue of religious pluralism together. Epistemic religious pluralism poses a problem for the epistemic status of religious claims that practical pluralism does not, for it is quite conceivable that the latter pluralism represents merely the fact that there are multiple ways to live a satisfactory religious life. Indeed, the commonality of ethical ideals across differing religious traditions supports this idea. They are different ways of achieving these shared moral ideals.<sup>40</sup> However, epistemic pluralism is another matter. If one is a theological realist in the minimal sense, as Drees is, contending that theological claims can be true or false, it follows that not all of the major theological claims of the religious traditions can be true. It is clear, for instance, that the Semitic and Indian notions of the divine are contradictory. Of course, they may both be false, as the atheistic naturalist who is also a theological realist would claim, but the falsity of some or all of the ontological claims of religious traditions is not an in-principle problem for the moral effectiveness of these religious traditions. Indeed, Drees seems to agree with the consensus of students of religion that religions can be effective in achieving various functions, including moral functions, without making truth claims.<sup>41</sup>

Thus the issue of epistemic religious pluralism remains a pressing theological one, even if the solution of the issue of practical moral pluralism is pursued along the lines suggested by Drees. Since John Hick has adopted

the term religious pluralism as the name for his proposed solution to the problem we are discussing, let me for clarity's sake rephrase the problem as one of epistemic religious diversity. How are we to reconcile the different, often contradictory, claims of the various religious traditions concerning not only the transcendent but also human nature and the world? This is surely not the place or the time to enter into a detailed discussion of this issue. However, let me mention a helpful proposal that Drees has made for solving the problem of epistemic religious diversity, even though he has failed, in my view, to make adequate use of it because of his commitment to supernaturalistic religious naturalism.

Drees has suggested that the problem of religious diversity can be illuminated by using a model developed by the American philosopher Wilfrid Sellars for understanding the integration of the findings and established theories of the sciences with the conceptions and view of reality that we have acquired by using our ordinary cognitive capacities.<sup>42</sup> Sellars spoke of the problem of fitting our ordinary knowledge of the world, what he called the manifest image, within a scientific view of the world, the scientific image. Drees realizes—and his use of the distinction brings this out clearly—that any account of the epistemic character of religion that takes the sciences seriously, as his does, also faces this problem. For theology, as ordinarily practiced in the various religious traditions, seems to fit more closely within the manifest image than within the scientific image. So the question of integration arises. Indeed, his supernaturalistic naturalistic account of religion, including his attempt to handle the problem of religious diversity, can be understood as a solution to the integration-of-images problem first proposed by Sellars in another context.

In order to better understand and assess Drees's efforts, let me lay out the problem as Sellars posed it and his suggested solution. I will then be in a better position to explain why I think that, although Drees has moved the dialogue forward by posing the problem of the relationship between theology and the sciences in the context of the Sellarsian problematic, his supernaturalistic religious naturalism fails to take advantage of the potential that its Sellarsian casting affords.

Sellars proposed that we understand the relationships between our commonsense understanding of humans as thinking, feeling, and intentional beings and our emerging scientific understanding of them in the biological and psychological sciences as two images of human persons—what he called the manifest and scientific images. Both our evolutionary history and that part of our cultural learning that does not depend upon theoretical science constitute the manifest image. Its production involves the use of our perceptual capacities and our abilities to generalize on the basis of perceptually based concepts. The scientific image is structured by our emerging theoretical scientific knowledge. We produce the scientific image by the use of theoretical concepts and the postulation of unobservable

entities. Sellars argued that a central task of philosophy is to show how these images are to be unified.

The model of manifest and scientific images and their unification can be extended to other fields of inquiry. Using the terminology of folk psychology and scientific psychology, for example, philosophers have distinguished our commonsense ideas about ourselves, Sellars' manifest image, and our scientific ideas about ourselves, Sellars' scientific image. Similarly, we can distinguish folk physics, folk chemistry, folk biology, and the like from their scientific cousins. Following Drees's suggestion, we can apply this distinction to religion. We can distinguish our manifest image(s) of religion or folk religion from scientific image(s) of religion. I shall take both manifest and scientific images to constitute the cognitive components of a larger complex of affective and behavioral capacities and skills that are constitutive of the social and cultural practices identified with religion. As constitutive of cognitive components, both images contain means of imagining, perceiving, conceiving, describing, explaining, predicting, and understanding.

On this view, the manifest image(s) of religion are constituted in part by our evolutionary history and, thus, may have been selected for by environmental factors because of the relative evolutionary advantage provided to organisms with genetically based religious propensities. The other, larger part of our manifest image of religion is culturally fashioned. Although it may also have arisen through selection and provided biological survival and reproductive value, as cultural, the variants on which cultural selection acts are not genetically based but learned and culturally transmitted, and the benefits they produce are not necessarily evolutionary. On the other hand, the scientific image(s) of religion are cultural products of the various scientific disciplines that study religion and those disciplines that make use of the sciences in their study of religion. In particular, in the scientific image, the cognitive component of religion is constituted by the culturally evolving phenomena of the sciences related to the study of religion, such as psychology, sociology, and anthropology. In addition, the realities that are the object of the science(s) of religion are also dynamic realities, including those realities that are subject to evolutionary forces, both cultural and biological. The reasoned inquiry of the supernaturalistic religious traditions are in the first instance parts of the manifest image(s) of religion, although their theological developments may move beyond the manifest images of religion in various ways.<sup>43</sup> The emerging sciences of religion are in the first instance scientific subdisciplines in biology: the neurosciences, psychology, anthropology, sociology, and so forth. From the perspective of a scientific naturalistic religious naturalism the job of the theologian is to find the ways in which these two images are to be united and the manner in which the various sciences of religion form a whole.

In order to get some sense of how one might achieve unification, we can extrapolate from the proposed ways in which the unification of the manifest and scientific images of the human person might be achieved. With respect to manifest and scientific images of the human person, so-called folk psychology and scientific psychology, philosophers have suggested and pursued several models of unification. These involve (1) elimination, (2) retention, or (3) partial elimination and retention of folk psychology within a scientific psychology. Retention can be conceived of either in terms of retention without reduction or retention by means of reduction, where *reduction* is understood in its technical philosophy-of-science sense. For philosophers of science, reduction refers not to an explanatory relationship between two theories in which the nonreduced theory explains the reduced theory; rather, it involves both a deductive relationship between the reducing and reduced theory and the identification of key terms in the reduced theory with those in the reducing theory. Ontologically, the explanatory relationship instantiates a causal relation, whereas the reduction relation instantiates a relation of identification.

There are two other possibilities for unification frequently discussed by philosophers of mind. These are supervenience and emergence. In the former case the theories of one perspective (folk psychology, for instance) supervene on those of another (scientific psychology, for instance). Ontologically, the idea is that thoughts, say, are not to be identified with neuronal firings as in the case of reduction but rather that all thoughts are instantiated in neuronal firings. Nevertheless, identical thoughts can be instantiated in different neuronal firings. Such an occurrence is known as multiple instantiation. If two sets of neuronal firings are identical, however, the thoughts that they instantiate are the same. Whatever causal power thoughts have in this view is ultimately due to the neuronal firings that instantiate them. Thus, all higher-level causality rises from the lowest level. The view that thoughts (or their scientific equivalent, representations or neuronal complexes) are emergent psychological phenomena is that, although thoughts do indeed supervene on noncognitive processes and entities, these thoughts have causal properties. They are not epiphenomenal as they usually are in supervenience accounts.

We can apply this model to the relationships of the manifest image(s) of religion and the scientific image(s). To simplify things for purposes of illustration we can make the unrealistic assumption that there is a single manifest image of religion, some epistemic unification of the major religious traditions, and a single scientific image achieved at the ideal end of scientific investigation, a Piercean science of religion. Given these simplifications, we have the following set of possible relationships between the manifest and scientific images of religion: (1) retention of the manifest image of religion along with its scientific image, (2) its elimination, (3) its partial retention/elimination. Retention could occur through a dualistic

separatism or through reduction, supervenience, or emergence. Elimination would occur if the manifest and scientific images were to diverge significantly and if the scientific image were more successful in describing and explaining religious phenomena than the manifest. Partial retention and elimination would occur if there were some reason to distinguish various aspects of the content of the images and to handle them differently.

Drees's supernaturalistic religious naturalism represents a partial retention of the manifest image without reduction. Insofar as Drees's Platonic God is an impersonal principle, Drees is replacing a manifest image of a personal divine being present in classical theism.<sup>44</sup> However, since his notion of God makes God the source and locus of the good, including the moral good, Drees is retaining an important element of the manifest image of the transcendent in many major religious traditions.

Drees's partial retention model of unification is problematic. It seems inconsistent with his own naturalistic theses of Physical Constitution and Evolutionary Explanation Postulate. These two theses suggest that goodness, especially moral goodness, is an emergent property dependent on physical constituents. Moreover, since the good, especially moral good, is associated with persons—even though Drees seems either to reject or to remain agnostic about the personal qualities of the good—his Platonic God is difficult to conceive of as an abstract principle. Insofar as the moral good is conceptually connected with the qualities of personal being, Drees's Platonic God retains a central feature of the manifest image of theology, despite, perhaps, his own intentions to the contrary.

An alternative hypothesis representing a scientific naturalistic religious naturalism postulates that supernaturalistic theologies will gradually replace their use of supernaturalistic conceptions of the divine with naturalistic conceptions. According to this hypothesis a future theology will give an account of both the evolutionary and the cultural origins of the manifest image of religion and will, as the theology develops, show how the content of that image has changed and ought to change. I must emphasize, though, that I envisage these changes in content to be theoretical accomplishments, not necessarily practical ones. Indeed, given the evolutionary origins of religion and its deep basis in nonscientific cultural learning and practices, it may well be that the manifest image of religion, although completely or largely false from the cognitive perspective, will be retained. To this extent, then, the alternative hypothesis I have suggested would be in agreement with Drees's hypothesis about the retention of religious diversity. Compare this to a similar sort of situation with respect to colors. Because of our biological adaptations, we see things as in color, and unless we attempt some sort of genetic engineering or intensive cultural retraining we will continue to perceive things as in color and to describe them verbally that way, even though our best theories in physics tell us that there are no colors.

This alternative scientific naturalistic religious naturalism is also consistent with Drees's contention about a natural religion. At least two factors suggest that, at this point in the history of religions, the formation of a natural religion, though not impossible, will probably not be as productive for the development of religion as the interaction of religious naturalism and supernaturalism within the context of the current religious traditions. Scientific naturalistic religious naturalists can agree with Drees that religious traditions contain a wisdom worth retaining, while also agreeing with him about the appropriateness of change in these traditions in both their central epistemic and moral stances. In addition, the likelihood of replacing these traditions is low because of both the in-principle—or at least greatly impractical—ineliminability of some of the cognitive components of the manifest image of religion and a similar difficulty with eliminating other components of the social and cultural practices of religion. For this reason, the epistemic fate of the theologies of the various religious traditions may be significantly different from their practical fate. Elimination or reduction of the manifest image of religion is compatible with its practical retention.<sup>45</sup>

#### A NATURALISTIC RELIGIOUS NATURALISM

Let me conclude by pulling together some of the features of the scientifically based naturalistic religious naturalism that I have been suggesting as an alternative to Drees's supernaturalistic religious naturalism.

What would an adequate naturalistic religious naturalism require? In first approximation it would have to provide an accurate description of the phenomenon of religion, including both its commonalities and its diversity, and adequate explanations of all of its central components, both cognitive and noncognitive. In addition, it would have to account for the origin, extinction, maintenance, and development of religions. Focusing on its cognitive side, it would need to account for the cognitive meaningfulness of religious claims and the degree of the epistemic justifiedness of religious claims.

The scientifically based naturalistic religious naturalism that I am proposing as an approach to providing an account of religion is a naturalism that, like Drees's, takes both the sciences and religion seriously. Unlike Drees's official position, it is explicitly naturalistic not only ontologically but also methodologically and epistemologically. Moreover, it has a higher estimate of human cognitive capacities in theological matters than does Drees, if I have interpreted him correctly. It aims at being a scientifically based philosophical account of religion.<sup>46</sup>

Thus, as regards religious ontology, a naturalistic metaphysics is open to the possibility of the existence of any sort of transcendent entity or entities. Its ontology need not be confined to the entities and properties dealt

with by the sciences. None is ruled out a priori. However, questions about the existence and nature of transcendent reality are empirical questions in the same sense that theoretical scientific questions about in-principle unobservable physical entities are empirical. But metaphysical theories should not only be consistent with those of the sciences but should also be evidentially supported by them. The methodological religious naturalism that I am proposing is a scientific naturalistic one. On the explanatory level its methods are similar to those used in high-level scientific theorizing. Such scientific theorizing should be guided heuristically and evaluatively by (1) the best current scientific theories, (2) the best current empirical findings, and (3) generally accepted facts. A scientific naturalistic perspective makes the further assumption that the sciences provide the best theoretical and empirical knowledge available for understanding religion. While other current philosophical methods—for instance, conceptual analysis (whether ordinary language or possible-worlds analysis), phenomenology, cultural criticism, and pure speculation—may be helpful at times, they take second place to the evaluation of philosophical theories on the basis of their fit with the best current scientific theories and on the basis of the indirect empirical testing to which high-level scientific theories can be subjected.

However, scientific naturalists ought not to be scientific; that is, they ought not to exclude a priori any nonscientifically based claims about religion. Nevertheless, scientific naturalists ought not to accept any claims about religion without assessing the reasons on which the claims are based. The track record of various approaches to answering questions about religion should guide assessments. Of course, determining the criteria for such assessments is no easy matter. Without arguing the matter here at length, I maintain that, when one applies the epistemic criteria derivable from the ordinary perceptual and inferential capacities—criteria, I claim, that all parties make use of at least implicitly—the multiple methods of the sciences have demonstrated their superiority to those of humanistic, a priori, and religious approaches. Indeed, on the scientific naturalistic view that I am advocating, all of our disciplinary capacities are methodological extensions and refinements of our ordinary cognitive capacities. Thus, although it is not part of the scientific naturalistic perspective that purported nonscientific sources of justification be excluded a priori as justifiers for claims about religion, that perspective does require that such sources be as reliable as scientific sources. In my view they have thus far failed this test.

Questions about the existence and nature of transcendent reality are empirical questions in the same sense that theoretical scientific questions about in-principle unobservable physical entities are empirical. Thus, explanatory theories about ultimate reality are justified in the same manner as are high-level scientific theories. Similar criteria of adequacy are applied.



Among these are empirical adequacy, internal coherence and consistency, explanatory power, comprehensiveness, unifying power, simplicity, and coherence with the results of the sciences. There are no special nonnaturalistic sources for finding out about the transcendent.<sup>47</sup>

Focusing on the content of such explanatory theories, I contend that claims that make the divine a supernatural being are less supported than those that do not. That is to say, if we consider religion's cognitive enterprise to be ascertaining the existence and nature of the ultimately valuable—however that is to be defined—then it is more likely, given our current scientific knowledge, that such a reality is physical in the sense that its basic components are made of the fundamental particles postulated by our best physical theories. Of course, I do not claim that these theories may not themselves change. I do maintain, however, that such changes will more than likely still produce theories that include material entities as basic. A naturalistic divine reality does not, more than likely, possess the classical divine attributes ascribed to it in the Semitic tradition, such as personhood, omnipotence, omnibenevolence, and eternity. Nor does it, more than likely, possess the classical divine attributes ascribed to it in the Indian tradition—for instance, those of mind and absolute unity. Indeed, such a naturalistic divine reality, like other complex natural realities, may be in the process of becoming and may itself also suffer demise.

Nevertheless, my scientific naturalistic philosophical hypothesis is that religious reality is itself a natural evolutionary phenomenon and that that reality can be the object of an inquiry that makes use of the cognitive tools and criteria developed in the sciences. Thus, in contrast with Drees's scientifically informed supernaturalistic naturalism, I am proposing a scientifically based naturalistic religious naturalism that supports claims about both the evolution of religion and a worldview that includes a religious dimension that has cognitive status, is open to epistemic assessment, and has possible justification.

## NOTES

1. I do not use "supernatural" in its traditional sense of the Christian theistic God. Rather I use it in the more literal sense of a being beyond the natural world, characterized in Drees's view as the creator *ex nihilo* of the natural world and the source of actuality, possibility, and values.

2. Drees proposes a metaphysics that allows for a theological dualism or a theistic dualism. He describes the God of this theistic dualism in various fashions. He places himself explicitly within a liberal Christian theological context (1990). There he makes God the unified transcendent source of actuality, possibility, and values. In later formulations (1991a; 1991b; 1993; 1994; 1996; 1997; 1998a; 1998b) he emphasizes the conception of God as the timeless creator *ex nihilo* of the world or the world's ground, considered either as a primary cause in relation to secondary causes or as the timeless source upon which the world is always dependent. Drees (1993) suggests a platonizing of theology. He argues that there are both theological and scientific reasons for understanding the eternity of God as timelessness rather than everlastingness. Following John Leslie, he suggests that God could be understood as the noncausal, impersonal, but axiological source of the world. According to this sort of understanding, God could be conceived of as a single being with attributes, as being itself, or as an abstract entity (1993, 348). In a reply

to a criticism by Wesley Robbins (1997) that his view is supernaturalistic and theologically conservative, Drees (1998b) maintains that he prefers a more agnostic position and refers to passages in other of his writings, where he discusses the use of animistic and personalistic descriptions of the divine. There he notes the continuing use of these sorts of descriptions within various religious traditions. He maintains that, although some of these sorts of descriptions are still used, others have been eliminated, and some are not intended to have cognitive import. Here Drees makes a fruitful connection with philosophical discussions about the relative merits of nontheoretically scientific accounts of reality and scientific accounts in which the former retain explanations in terms of personal categories and the latter do not. These are the so-called manifest and scientific images of human beings. Drees applies this distinction to religion. He goes on to invoke his distinction between religious traditions that make use of such descriptions and a naturalistic religion that might seek to eliminate them. Drees maintains that a noneliminative stance is preferable, both for cognitive and ethical reasons. I shall return to this issue later.

3. Issues of scientific realism do depend upon assessments of human epistemic capacities, but the latter issue is fundamentally distinct from the former. The question of scientific realism concerns whether scientific theories can be true or false and, thus, whether the entities to which they refer exist or not. The epistemic quality of scientific claims has to do with their justification. Realists and antirealists can be in complete agreement about the quality of justification that a scientific theory possesses but in fundamental disagreement about its capacity for being true or false and its referential capacity. But I must set these issues aside.

4. I realize that Drees has been criticized for his scientific realist stance (Robbins 1997) and that the thesis of scientific realism can be interpreted in several ways, none of which is unproblematic (Leplin 1984).

5. Although Drees is not explicit about the matter, I interpret him to hold a noncognitive account of moral values. I disagree with Drees on this point but will not pursue the matter here.

6. Dale Cannon (1996) describes in illuminating fashion different collective and individual ways of being religious within several of the major religious traditions. He finds the following features: (1) *sacred ritual*, which provides an ultimate sense of propriety for living through momentous events; (2) *devotion*, which offers a way to respond to experiences that threaten to overwhelm one's emotional capacity to bear them; (3) *morality*, which provides guidelines for acting in ways that accord with a cosmic sense of order or justice; (4) *shamanism*, which provides solutions to the practical problems of life that seem to be beyond everyday solution; (5) *mysticism*, which offers access to a reality more substantial and enduring than the ordinary one; and (6) *reasoned inquiry*, which seeks ultimate explanations of reality as a whole. Karl Peters (1997, 467) has offered a helpful working definition of religion that, while implicitly capturing the above elements, also unifies them. "Religion," he suggests, "is a system of ideas, actions, and experiences that offers a path toward human fulfillment by relating individuals and societies to what is thought to be ultimate."

7. As we shall see, Drees's understanding of the natural sciences is broadly inclusive.

8. I hope that I do not overstate Drees's contention. In his major work *Religion, Science and Naturalism*, he tells us, "The aim of this study is to develop a naturalistic view of reality, including the phenomenon of religion, and to argue that it is superior to other ways of considering religion in relation to the natural sciences. To the extent that the program is successful, it offers some support for naturalism" (1996, 23–24). I take the naturalism to which he is referring to be his own brand of naturalism, not the generic naturalism that merely takes the science seriously. This interpretation is supported by the fact that he presents arguments against the naturalistic views mentioned in the text and against other views relating theology and the sciences. In a recent paper Drees (1998b) has argued for a naturalistic religious view that allows for religious pluralism while rejecting a naturalistic religion. The naturalistic religion that he has in mind seems, in its cognitive dimension, to involve a synthesis of the views of major religious traditions to the degree that such a synthesis is possible. Drees contrasts his ontological dualism with pantheism and agnosticism. He claims that all of these positions are naturalistic insofar as they take the sciences seriously. As a metaphysics they underdetermine theological conclusions—that is, they do not provide sufficient epistemic support for any particular religious tradition to allow one to determine which tradition is preferable. Insofar as that is the case, he claims that these metaphysical positions support religious pluralism, when that means a retention of religious traditions because of their stored wisdom. Unfortunately, Drees is not very clear about whether that wisdom is connected with the often-differing ontological positions of traditions. One way to read his argument is to view Drees as having backed away from his earlier claim of the metaphysical superior-

ity of his position to the above-mentioned competitors, although here the competitors are somewhat different from those in his book. Under this interpretation, these metaphysical positions all equally underdetermine any particular theological tradition but, because of their retentive noneliminativist character, are to be preferred to naturalistic metaphysical views about religious positions that advocate a single naturalistic religion to replace the evolved particular and diverse current religious traditions. It is not clear to me that these thoughts about religious naturalism's consequences for religious pluralism affect, if they do at all, Drees's claims about the superiority of theistic dualism or his naturalistic supernaturalism. Nevertheless, if his views have changed on this score, my assessment bears on the latter set of issues. I shall return to Drees's discussion of religious pluralism later, because I do think that it has bearing on an adequate scientific naturalistic account of religion.

9. Drees seems to classify Peters with the process theologians. He seems to think that Peters's central use of selective processes is indicative of an option for the primacy of organic processes rather than physical ones (in the sense of processes studied in physics) in the universe. I do not read Peters in that way. I think his view is significantly different from that of the process theologians and is close to my own view of how to characterize an understanding of the divine as immanent in this world. Of course, Drees would also find that view incompatible with his theistic dualism.

10. I think that such assessments are epistemological—though, of course, they have implications for one's metaphysics.

11. Drees does not tell us much about what he thinks metaphysics is. We can gain some insight into his understanding by his use of the term, the examples he uses, and the claims that he makes about it.

12. I assume that Drees here uses the term *actual* to mean natural. I also assume that despite the use of the phrase "*our* [emphasis added] natural world" Drees means that the natural world would remain natural even if the human race no longer existed, and was so before its existence.

13. Drees's intention here is, I think, to convey that physics not only describes the constituents of the natural world but also, to some degree at least, *explains* them.

14. Drees also claims that there are *nonmaterial* aspects of the natural world. But these are all embodied. I take this to mean that, according to his thesis of constitutive reductionism, these aspects are all constituted physically and thus can be studied indirectly in their physical constitution by the natural sciences. However, given Drees's thesis of conceptual and explanatory nonreductionism, I conjecture that we have to understand Drees as claiming that these nonmaterial aspects of natural things, qua nonmaterial, are studied more properly by the social sciences. Does Drees include religious meanings in "social meaning"? If so, it seems that he includes the study of religious expressions, including those concerning supernatural and spiritual entities, within the natural world, though not their referents. Therefore, even though supernatural and spiritual entities are not detectable within the natural world, expressions referring to them are.

15. On this reading, Drees's account is close to classical theistic accounts of divine activity inasmuch as they too postulate that God is always active and present in the world. According to one classical view of causality, the causal power of the cause is present within its effect. But, according to the Humean view of causality, there is no such thing as causal power. I am unclear about Drees's views on causality and to what extent they apply to a divine being in his preferred understanding.

16. Drees does not make this connection of method with epistemology, perhaps because he associates discussions of epistemological naturalism with Alvin Plantinga's account of it (1993) or perhaps because he seems in several places to equate the two.

17. Other versions of the theory held that expressions that cannot be either verified or falsified are cognitively meaningless. Weaker versions required confirmation instead of verification. All versions are problematic.

18. Drees (1997; 1998a) equates epistemological and methodological naturalism.

19. This interpretation is not as clear as it appears to be, because there are categories that seem to cross multiple disciplines and it is not clear what discipline has property rights to it. I am thinking of such "typically" metaphysical categories as space, time, causality, process, and entity. Perhaps such categories are intrinsically interdisciplinary.

20. Consequently, it seems that Drees should allow other sorts of methodologies to play a role in answering metaphysical questions, including limit questions. Do these metaphysical methodologies, specifically theological ones, rely on special epistemic religious sources? I cannot determine Drees's stance on these questions.

21. Sometimes, why questions are not requests for an explanation but expressions of complaint, surprise, or frustration—for instance, “Why does this always happen to me?”

22. Thus, although Drees speaks of his position as a low-level metaphysics, it is perhaps more accurate to describe his view as a low-level philosophy, one that includes both a low-level metaphysics and a low-level epistemology where “low-level” is meant to describe its closeness to the sciences, a closeness that is the result of taking the science seriously.

23. I realize that this contention needs extensive support that cannot be given here.

24. The following passage, which adverts both to current underdetermination and continued underdetermination, suggests this interpretation: “These three different views, the theistic, the pantheistic, and the mysterianistic, only briefly and inadequately described here, are in my opinion all compatible with contemporary science and a naturalistic understanding of it. The ways they are articulated and defended may be influenced by current scientific theories (as they affect the notions of time, space, cause, etc.), but variants of these positions can be formulated again and again. In this way they illustrate the conclusion drawn above about the underdetermination of metaphysical views by current science. Different particular traditions are acceptable for the naturalists as long as these are taken in a liberal spirit—that is, as long as a tradition avoids assuming claims which with respect to science belong to the category of that which we know not to be the case, and as long as the tradition acknowledges its epistemic limitations. As a consequence, religious ambiguity with respect to ultimate questions counts in favor of a pluralistic view of religious traditions within a naturalistic framework rather than in favor of a naturalistic replacement for religious traditions” (1998b, 630–31).

25. Substantively theoretical hypotheses are those that make claims about nonobservable phenomena, which are understood either to be phenomena not directly discernible through unaided human perceptual capacities or not directly discernible by instrument-enhanced human capacities. As is well known, the question of whether there is a satisfactory in-principle distinction between theory and observation in science is a much-exercised one. My account of the distinction is meant to be broad enough to take in the major ways that the distinction is currently made. Moreover, whatever the answer is to the issue of a substantive distinction, scientists do make a functional distinction between observations and data, on one hand, and hypotheses and theories, on the other. In the context of justification, the former has both a relatively greater degree of justification than the theory or hypothesis under test and is justified independently of it.

26. It is not clear to me that Drees distinguishes between justificatory fallibilism and underdetermination. He routinely talks about the underdetermination of scientific theories by their evidence and a parallel sort of underdetermination of metaphysical claims by scientific findings. He could be read as intending merely justificatory fallibilism. However, it is not clear to me that Drees’s understanding of the unanswerability of theological limit questions is satisfied by the limitations imposed by justificatory fallibilism. For instance, Drees seems to find that both theistic and atheistic answers to the question of why there is anything rather than nothing are equally plausible. He is not merely claiming that both could be incorrect. Indeed, under one interpretation, they could not both be incorrect. He seems rather to be claiming that the evidence supports both equally and, thus, it is not possible epistemically to decide between them.

27. Nonepistemic criteria also can facilitate a decision between competitors without resolving the epistemic underdetermination.

28. This claim is compatible with the claim that SUT is a plausible hypothesis when applied to certain branches of the sciences, for instance, theories of space (Newton-Smith 2000).

29. Ernan McMullin (1993) calls these secondary virtues of theory that are indicative of its justification and thus of its truth.

30. Of course, it is well known that Kant and Hume attempted to separate the sciences and metaphysics and that the logical positivists sought to eliminate the latter by denying cognitive content to metaphysical claims. Although this is not the place to argue for it, I maintain that these efforts all failed. I interpret Drees as also rejecting Kant, Hume, and the logical positivists’ views on metaphysics.

31. As far as subject matter differences go, Drees tells us: “In terms of the two varieties of theological anti-realism distinguished above [atheistic and skeptical], the issue is that the justification of theological claims has to overcome both the ineffability of God (2) and the difference between ordinary and divine reality (1), whereas a similar justification in the sciences is restricted to the ineffability of reality ‘as such’ and thus only to the problems related to an assessment of the match between theories and reality, rather than between theories and two realms of reality” (1996, 144). Shortly thereafter, he adds a comment about epistemic and subject matter differences:

“Nor is theology challenged only in its epistemology; the content of its claim is problematic as well (and this includes eschatological expectations, claims about the human soul and life beyond death, divine action and divine existence). This is, in other terms, the wider import of the challenge to ‘existence’ claims, a challenge which is not in a comparable way present in disputes in philosophy of science where we deal only with arguments about our access to (and thus our claims about) particular existents” (1996, 144).

32. The other major limit question concerns the structure of the universe: Why this structure rather than some other? “Our observable universe has a certain structure. It could perhaps have been different. Even if we had laws which accounted for all observations and experiments, we could still ask why these laws (or whatever ingredients that are essential to our explanations) have been implemented in reality rather than any other laws” (Drees 1996, 269). I contend that the same problems arise with claiming the structure question to be a limit question in the strong sense demanded by Drees as arise with the existence question. Because of space limitations I will not argue for that contention here.

33. This may be a hasty conclusion, since we might use the last sentence in the preceding quotation from Drees to argue that he recognizes this possibility. Although I grant this possibility, the context persuades me to infer that Drees has in mind the notion that if the universe arises by chance, someone might argue that such an account is not one for which it is reasonable to ask a further account. I understand Drees to reject the latter argument and to claim that both a theistic and a chance account of the universe still raise questions about the existence of a creator God and of chance.

34. Drees also suggests reasons concerning the phenomenon of time to claim that his own Platonic theism with its conception of God as a timeless creator may better fit the theories of quantum cosmology than do its competitors, which by understanding God as everlasting make time an essential character of God’s being. These theological hypotheses do not seem to be empirically equivalent. They account for the existence of things differently and are supported differentially by various more or less well-accepted scientific theories. Roughly, cosmological, evolutionary, and individual organic history seem to make time a fundamental sort of reality requiring its attribution to the creator, while special relativity theory and some speculations concerning quantum cosmology do not do so.

35. Peters (1997) suggests that the transcendent, understood in terms of power and value, can be identified with a set of processes of variation and selection that produce value and meaning in the world.

36. Of course, Drees is overstating what science can do, because, as I have indicated, all findings of science, even the best justified, are fallible. Nevertheless, given that qualification, his point—and mine—stands.

37. Drees refers explicitly to the views of Philip Hefner (1993) and Gerhard Theissen (1985). It is not clear to me that Drees is claiming the same edge for his views when compared to classical theism and atheistic naturalism. In some ways his notion of normative distance is puzzling. He seems to think that theistic positions, for instance, do not provide sufficient normative distance because they identify the source of the good and affirm it as present in the world. But it is not clear why knowledge of the good and its source, indeed knowledge of what ought to be done, bridges the kind of normative gap that concerns Drees. He is concerned with the gap caused by a failure of moral motivation and action in the face of evil in the world. But both classical theistic theory and experience seem to show us that gaps of motivation and practice are often not diminished by the filling in of the cognitive gaps in moral knowledge. Drees seems to be running together two sorts of deficits.

38. Space limitations preclude my discussing Drees’s other claim that his Platonic theism can better account for the normative gap than theological views that more closely identify facts and values. This claim parallels the claim that Platonic theism is superior to theistic accounts of divine action in which God is said to act in contravention to natural laws or in the contingencies of nature.

39. I use the term *cognition* here in the sense that psychologists often use it. It can refer to a nonpropositional sort of representation whose adequacy is not measured entirely, if at all, in terms of its correspondence with what is the case.

40. I do not intend to say that there are no conflicts between religious traditions about moral issues. That is clearly false. I am referring rather to central moral principles and values. Here there seems to be greater agreement than is the case concerning ontological matters. See Hick 1989.

41. As a moral realist, I claim that there are, indeed, ontological foundations for morality, but these need not be transcendent foundations (Rottschaefer 1998).

42. I refer here to Sellars' (1963) notions of the manifest and scientific images of the human person which have played an important role, though under the aegis of a somewhat different set of terms and concepts, in contemporary philosophical discussions in philosophy of mind. Although I have long been a student of Sellars' work, doing my dissertation (Rottschaefer 1973) on the very topic of Sellars' views on the relationship of scientific realism to common sense claims and making strategic use of Sellars' distinction in my recent book (Rottschaefer 1998), it was Drees's use of the distinction that stimulated my thinking about its use in the context of the historical development of theology and the study of religion. Thus, even though I have disagreements with Drees's naturalism, I must thank him for the intellectual stimulus he has provided for my own position.

43. Theologies deriving from both Semitic and Indian theological traditions often characterize the divinely transcendent in terms of features of the manifest image, especially those relating to consciousness, cognition, and moral evaluation. But some of these theologies also make use of the sort of abductive reasoning that is characteristic of the sciences.

44. In response to criticism by Robbins (1997), Drees (1998b) claims that he is sympathetic toward an agnostic view about the nature of the divine being, which in the context refers to the classical theistic conception of the divine.

45. Another possibility suggests itself. Human cognitive capacities are dynamic and flexible. It is clear that, in other areas of cognitive endeavor in which advances have been made, we incorporate acquired scientific knowledge into our ordinary practices, including their cognitive components. Thus, we often use concepts of the scientific image such as stress, hormones, and neurotransmitters to describe and explain our behaviors where concepts of the manifest image were used before the development of physiology and neuroscience. A similar adoption of the concepts of the scientific image of religion may occur in the practice of religion.

46. Classically, philosophy has been concerned with the substantive understanding of being, unity, truth, goodness, and beauty, both in their distinction and unity. Sellars, one of the modern creators of philosophical naturalism, described philosophy's substantive pursuit as follows: "The aim of philosophy, abstractly formulated, is to understand how things in the broadest possible sense of the term hang together in the broadest possible sense of the term" (1963, 1).

47. These are, of course, large assertions that need to be defended. I present them merely to outline the differences between the naturalistic religious naturalism I am proposing and both Drees's supernaturalistic religious naturalism and supernaturalistic hypotheses.

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