Philosophical Foundations for a Christian Worldview

Edited by: J. P. Moreland and William Lane Craig
نبذة مختصرة عن الكتاب:

هذا كتاب ضخم، جامعًّا لموضوعات كثيرة جدًا فلسفيَّة في مجالات الإبستيمولوجي، والمتافيزيقا، وفلسفة العلم، والأخلاق، وفلسفة الذِّين، بالإضافة لمناقشة قواعد المنطق الأساسية.

الكتب من تحرير الفيلسوف الأمريكي الشَّهير «ويليام كريج» ومعه الفيلسوف الأمريكي ج. ب. مورلاند، والكتب يهدف إلى وضع الأسس والقواعد الفلسفيَّة التي ينبغي أن تكون عند المُحاول قبِل الدَّخُول في أيّ نقاش عقائدي، والكتب يُناقش القضايا بعمق.

الكتاب ليس للمبتدئين، بمعنى أن يجب عليك أن تكون على دراية ولو بسيطة بطبيعة المواضيع التي يتم مناقشتها في الكتاب، لذا يُنصح بالاطلاع على كُتُب «كريج» الأبسط، مثل: «مُستعد للدفاع» (On Guard) و«الإيمان المنطقي» (Reasonable Faith) (متوفرما عصرًا على مُدوَّنتي: التَّاعم).

الكتاب تعليمي وتأسيسي، حيث أنَّه يحتوي على مُلخص رائع لكلّ فصل في نهايةه، مع قائمة بأهم المُصطلحات التي تم شرحها في الفصل، بالإضافة إلى مُلحق ضخم يتميّز في قراءات إثريَّة في كافة المواضيع التي يتم مناقشتها في الكتاب!

شيء أشبه بالكنز، ويحتاج وحده إلى دراسة واطلاع وبحث، ولكن الكتاب في النهاية عميق، وأحياناً صعب!

الكتاب «مُنَجِّح» بمعنى الكلمة! يهدف إلى إلمام الطالب بكل وجهات النَّظر العالميّة المعاصرة الخاصة بكل المجالات الفلسفيَّة التي يتعريّض لها المدافعون عن الإيمان أثناء حواراته مع المخالفين، لذا قد لا يدرك القارئ أهمية الموضوع المطروح في فصل من قُصُور الكتاب إلا عند مواجهة مخالف يتبنى هذا الرأي! فنذكر أن هذا الرأي الفلسفي مذكور في الفصل الفلسفي في الكتاب! لذلك تذكر أن الموضوع الذي قد لا يُهمك اليوم، قد يُهمك غداً، فنذكر المراجع التي تتكلم عن هذه المواضيع حتى تستطيع الرجوع إليها عند الحاجة!

الكتاب يحتاج إلى مُذاكرة، وحجم عصير الكتاب دليل مُباشر على أهمية الكتاب وكتلة الأفكار المُستفادة منها، لذا أنسح الدارسين الجادين المُهتمين بدعوة الغرب بشكل عام، والملف الإلحادي بشكل خاص، أن يُولوا هذا الكتاب أهمية خاصة، وأن يتم دراسة هذا الكتاب بشكل عميق، بالورقة والقلم مع التَّلخيص، لأنه - كما قلتٌ - [2]
An Invitation to Christian Philosophy

- Philosophical Foundations is obviously a large book, covering a wide range of issues in epistemology, metaphysics, philosophy of science, ethics and philosophy of religion, as well as basic rules of reasoning. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p7.]

**Part I Introduction**

1 What is Philosophy?

- First one could focus on the etymology of the word philosophy. The word comes from two Greek words philein, “to love,” and sophia, “wisdom.” Thus a philosopher is a lover of wisdom. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p13.]

- Accordingly, philosophy may be defined as the attempt to think rationally and critically about life’s most important questions in order to obtain knowledge and wisdom about them. Philosophy can help someone form a rationally justified, true worldview, that is, an ordered set of propositions that one believes, especially propositions about life’s most important questions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p13.]

- Second, our understanding of philosophy will be enhanced if we observe that philosophy often functions as a second-order discipline. For example, biology is a first-order discipline that studies living organisms, but philosophy is a second-order discipline that studies biology. In general, it is possible have a philosophy of x, where x can be any discipline whatever; for example, law, mathematics, education, science, government, medicine, history or literature. When philosophers examine another discipline to formulate a philosophy of that field, they ask normative questions about that discipline (e.g., questions about what one ought and ought not believe in that
discipline and why), analyze and criticize the assumptions underlying it, clarify the concepts within it and integrate that discipline with other fields. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p13.]

- Philosophy is critical because it examines assumptions, asks questions of justification, seeks to clarify and analyze concepts, and so on. Philosophy is constructive because it attempts to provide synoptic vision; that is, it seeks to organize all relevant facts into a rational system and speculate about the formation and justification of general worldviews. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p14.]

- Second, philosophy aids the church in its task of polemics. Whereas apologetics involves the defense of Christian theism, polemics is the task of criticizing and refuting alternative views of the world. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p15.]

- C. S. Lewis once remarked that “to be ignorant and simple now—not to be able to meet the enemies on their own ground—would be to throw down our weapons, and to betray our uneducated brethren who have, under God, no defence but us against the intellectual attacks of the heathen. Good philosophy must exist, if for no other reason, because bad philosophy needs to be answered.” [C. S. Lewis, *The Weight of Glory* (Grand Rapids, Mich.: Eerdmans, 1949), p. 50.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p17.]

- The biblical notion of faith includes three components: notitia (understanding the content of the Christian faith), fiducia (trust) and assensus (the assent of the intellect to the truth of some proposition). Trust is based on understanding, knowledge and the intellect’s assent to truth. Belief in rests on belief that. One is called to trust in what he or she has reason to give intellectual assent (assensus) to. In Scripture, faith involves placing trust in what you have reason to believe is true. Faith is not a blind, irrational leap into the dark. So faith and reason cooperate on a biblical view of faith. They are not intrinsically hostile. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p18.]
Consider the following six propositions that describe conditions under which science places a limit on theology or vice versa: S1. Theological beliefs are reasonable only if science renders them so. S2. Theological beliefs are unreasonable if science renders them so. S3. Theological beliefs are reasonable only if arrived at by something closely akin to scientific methodology. T1. Scientific beliefs are reasonable only if theology renders them so. T2. Scientific beliefs are unreasonable if theology renders them so. T3. Scientific beliefs are reasonable only if arrived at by theologically appropriate methods. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p22.]

Contrary to initial appearances, these propositions are not examples of science or theology directly placing limits on the other, for none is a statement of science or theology. Rather, all are philosophical statements about science and theology. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p22.]

Again, science assumes there is an external world that is orderly and knowable, that inductive inferences are legitimate, that the senses and mind are reliable, that truth exists and can be known, and so on. Orthodox theology assumes that religious language is cognitive, that knowledge is possible, that an intelligible sense can be given to the claim that something exists that is not located in space and time, that the correspondence theory of truth is the essential part of an overall theory of truth and that linguistic meaning is objective and knowable. These presuppositions, and a host of others besides, have all been challenged. The task of clarifying, defending or criticizing them is essentially a philosophical task. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p23.]

Another example concerns some conceptions of the mechanisms involved in evolutionary theory. Some scientists have held that evolution promotes the survival of the fittest. But when asked what the “fittest” were, the answer is that the “fittest” were those that survived. This was a problem of circularity within evolutionary theory, and attempts have been made to redefine the notion of fitness and the goal of evolution (e.g., the selection of those organisms that are reproductively favorable) to avoid circularity. [J. P.
2 Argumentation and Logic

- Philosophy, Alvin Plantinga has remarked, is just thinking hard about something. If that is the case, then doing good philosophy will be a matter of learning to think well. That serves to differentiate philosophy from mere emotional expressions of what we feel to be true or hopeful expressions of what we wish to be true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p24.]

- Every one of us already employs the rules of argumentation whether we realize it or not. For these rules apply to all reasoning everywhere, no matter what the subject. We use these rules unconsciously every day in normal life. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p28.]

- For example: Suppose a friend says to you, “I’ve got to go to the library today to check out a book.” And you reply, “You can’t do that today.” “Why not?” he asks. “Because today is Sunday,” you explain, “and the library isn’t open on Sunday.” In effect, you have just presented an argument to your friend. You have reasoned: 1. If today is Sunday, the library is closed. 2. Today is Sunday. 3. Therefore, the library is closed. Sentences (1) and (2) are the premises of the argument, and sentence (3) is the conclusion. You are saying that if premises (1) and (2) are true, then the conclusion (3) is also true. It is not just your opinion that the library is closed; you have given an argument for that conclusion. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p28.]

- In a good deductive argument the premises guarantee the truth of their conclusions. In a good inductive argument the premises render the conclusion more probable than its competitors. What makes for a good argument depends on whether that argument is deductive or inductive. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p28.]

- A good deductive argument will be one which is formally and informally valid, which has true premises, and whose premises are more plausible than their contradictories. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p28.]

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First, a good argument must be formally valid. That is to say, the conclusion must follow from the premises in accord with the rules of logic. Logic is the study of the rules of reasoning. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p29.]

An argument that is both logically valid and has true premises is called a sound argument. An unsound argument is either invalid or else has a false premise. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p29.]

But so long as a statement is more plausible than its contradictory (that is, its negation), then one should believe it rather than its negation, and so it may serve as a premise in a good argument. Thus a good argument for God’s existence need not make it certain that God exists. Certainty is what most people are thinking of when they say, “You can’t prove that God exists!” If we equate “proof” with 100% certainty, then we may agree with them and yet insist that there are still good arguments to think that God exists. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p30.]

Someone may object to premise (1) of our argument by saying, “But it’s possible that moral values exist as abstract objects without God.” We may happily agree. That is epistemically possible, that is to say, the premise is not known to be true with certainty. But possibilities come cheap. The question is not whether the contradictory of a particular premise in an argument is epistemically possible (or even plausible); the question is whether the contradictory is as plausible or more plausible than the premise. If it is not, then one should believe the premise rather than its contradictory. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p30.]

Sentential or propositional logic is the most basic level of logic, dealing with inferences based on sentential connectives like “if . . ., then,” “or” and “and.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p30.]

**Rule #1: modus ponens:** 1. P \(\to\) Q. 2. P. 3. Q. In symbolic logic one uses
letters and symbols to stand for sentences and the words that connect them. In (1) the P and the Q stand for any two different sentences, and the arrow stands for the connecting words, “if . . . , then . . . .” To read premise (1) we say, “If P, then Q.” Another way of reading P → Q is to say: “P implies Q.” To read premise (2) we just say, “P.” The reason letters and symbols are used is because sentences that are very different grammatically may still have the same logical form. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p30.]

- **Rule #2: modus tollens:** 1. P → Q. 2. ¬Q. 3. ¬P. Once again the P and the Q stand for any two sentences, and the arrow stands for “if . . . , then . . . .” The sign ¬ stands for “not.” It is the sign of negation. So premise (1) reads, “If P, then Q.” Premise (2) reads, “Not-Q.” The rule modus tollens tells us that from these two premises, we may validly conclude, “Not-P.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p31, 32.]

- Modus ponens and modus tollens help to bring out an important feature of conditional sentences: The antecedent “if” clause states a sufficient condition of the consequent “then” clause. The consequent “then” clause states a necessary condition of the antecedent “if” clause. For if P is true, then Q is also true. The truth of P is sufficient for the truth of Q. At the same time P is never true without Q: if Q is not true, then P is not true either. So in any sentence of the form P → Q, P is a sufficient condition of Q, and Q is a necessary condition of P. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p32.]

- **Rule #3: Hypothetical Syllogism:** 1. P → Q. 2. Q → R. 3. P → R. The third rule, hypothetical syllogism, states that if P implies Q, and Q implies R, then P implies R. Since we do not know in this case if P is true, we cannot conclude that R is true. But at least we can know on the basis of premises (1) and (2) that if P is true, then R is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p34.]

- **Rule #4: Conjunction:** 1. P. 2. Q. 3. P & Q. Here we introduce the symbol &, which is the symbol for conjunction. It is read as “and.” This rule is perspicuous: If P is true, and Q is true, then the conjunction “P and Q” is also

- The symbol & symbolizes many more words than just and. It symbolizes any conjunction. Thus the logical form of sentences having the connective words but, while, although, whereas and many other words is the same. We symbolize them all using &. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p35.]

**Rule #5: Simplification:** 1. P & Q. 2. P. 1. P & Q. 2. Q. Again, one does not need to be a rocket scientist to understand this rule! In order for a conjunction like P & Q to be true, both P and Q must be true. So simplification allows you to conclude from P & Q that P is true and that Q is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p35, 36.]

**Rule #6: Absorption:** 1. P → Q. 2. P → (P & Q). This is a rule which one hardly ever uses but which nonetheless states a valid way of reasoning. The basic idea is that since P implies itself, it implies itself along with anything else it implies. (…) The main use for absorption will be in cases where you need to have P & Q in order to take a further step in the argument. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p36.]

**Rule #7: Addition:** 1. P. 2. P ∨ Q. For this rule we introduce a new symbol: ∨, which is read “or.” We can use it to symbolize sentences connected by the word or. A sentence which is composed of two sentences connected by or is called a disjunction. Addition seems at first to be a strange rule of inference: It states that if P is true, then “P or Q” is also true. What needs to be kept in mind is this: in order for a disjunction to be true only one part of the disjunction has to be true. So if one knows that P is already true, it follows that “P or Q” is also true, no matter what Q is! [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p37.]

**Rule #8: Disjunctive Syllogism:** 1. P ∨ Q. 2. ¬P. 3. Q. 1. P ∨ Q. 2. ¬Q. 3. P. This rule tells us that if a disjunction of two sentences is true, and one of the sentences is false, then the other sentence is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p37.]

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• **Rule #9: Constructive Dilemma:** 1. \((P \rightarrow Q) \& (R \rightarrow S)\). 2. \(P \lor R\). 3. \(Q \lor S\). According to constructive dilemma, if \(P\) implies \(Q\) and \(R\) implies \(S\), then if \(P\) or \(R\) is true, it follows that either \(Q\) or \(S\) is true. (…) This rule is useful for deducing the consequences of either-or situations, when we know the implications of each of the alternatives. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p37.]

• A special kind of conditional proof is called reductio ad absurdum (reduction to absurdity). Here we show that if some premise is supposed to be true, then it implies a contradiction, which is absurd. Therefore we can conclude that the premise is not true after all. This is an especially powerful way of arguing against a view, for if we can show that a view implies a contradiction, then it cannot be true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p43.]

• Statements about all or none of a group are called universally quantified statements, since the statement covers every member in a group. When we analyze the logical form of such statements, we discover that they turn out to be disguised “if . . . , then . . .” statements. For example, when we say, “All bears are mammals,” logically we are saying, “If anything is a bear, then it is a mammal.” Or if we say, “No goose is hairy,” logically we are saying, “If anything is a goose, then it is not hairy.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p44.]

• So we can symbolize universally quantified statements as “if . . . , then . . .” statements. In order to do so, we introduce the letter \(x\) as a variable that can be replaced by any individual thing. We symbolize the antecedent clause using some capital letter (usually the first letter of the main word in the antecedent to make it easy to remember). For example, we can symbolize “Anything is a bear” by \(Bx\). We do the same thing with the consequent. For example, “it is a mammal” can be symbolized \(Mx\). The whole sentence is then symbolized as follows: \((x) (Bx \rightarrow Mx)\). You can read this as “For any \(x\), if \(x\) is a bear, then \(x\) is a mammal.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p44.]

[\(\vdash\)]
Statements which are about only some members of a group are called existentially quantified statements. They tell us that there really exists at least one thing that has the property in question. For example, the statement “Some bears are white” tells us that there is at least one thing in the world that is both a bear and white. The statement “Some bears are not white” says that there is at least one thing that is a bear and is not white. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p46.]

We symbolize existentially quantified statements by using the symbol $\exists$. It may be read as “There is at least one ___ such that . . . .” We fill in the blank with the variable $x$, which can be replaced by any individual thing. So if we let $Bx = “x$ is a bear” and $Wx = “x$ is white,” we can symbolize “Some bears are white” as: $(\exists x) (Bx \& Wx)$. This is read as “There is at least one $x$ such that $x$ is a bear and $x$ is white.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p46, 47.]

One of the subdisciplines of advanced logic is modal logic, which deals with notions of necessary and possible truth—the modes of truth, as it were. It is evident that there are such modes of truth, since some statements just happen to be true but obviously could have been false—for example, “Garrett DeWeese teaches at Talbot School of Theology.” But other statements do not just happen to be true; they must be true and could not have been false—for example, “If $P$ implies $Q$, and $P$ is true, then $Q$ is true.” Still other statements are false and could not have been true—for example, “God both exists and does not exist.” Statements which could not have had a different truth value than the one they have are said to be either necessarily true or necessarily false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p48.]

We can use the symbol $\Box$ to stand for the mode of necessity: $\Box P$ is to be read as “Necessarily, $P$” and indicates that $P$ is necessarily true. $\neg \Box P$ is to be read as “Necessarily, not-$P$” and indicates that $P$ is necessarily false. Now if $P$ is necessarily false, then it could not possibly be true. Letting $\Diamond$ stand for the mode of possibility, we can see that $\Box \neg P$ is logically equivalent to $\neg \Diamond P$. [!]
which may be read as “Not-possibly, P.” This is to say that it is impossible for P to be true. The contradictory of ¬◇P is ◇¬P, or “Possibly, ¬P.” Now if P is necessarily true, it is obviously also possibly true; otherwise its truth would be impossible. So □P implies ◇P; but it precludes the truth of ◇¬P. Indeed, □P is equivalent to ¬◇¬P. That is to say, if P is necessarily true, then it is impossible that P be false. If, on the other hand, it is possible for P to be true and possible for P to be false, then P is a contingent statement, being either contingently true or contingently false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p48, 49.]

*A possible world is a way the world might be. One can think of a possible world as a maximal description of reality; nothing is left out. It may be thought of as a maximal state of affairs, which includes every other state of affairs or its complement, or as an enormous conjunction composed every of statement or its contradictory. These states of affairs or statements must be compossible, that is, able to obtain together or to be true together, otherwise they would not constitute a possible world. Moreover, such a maximal state of affairs must be actualizable or capable of being actual. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p50.]*
A good deductive argument, it will be recalled, must be not only formally valid but also informally valid. In practice, the primary informal fallacy to be on the alert for is the fallacy called petitio principii (begging the question). Sometimes this fallacy is also called circular reasoning. If one reasons in a circle, the conclusion of one’s argument is taken as one of the premises somewhere in the argument. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p57.]

- **Genetic Fallacy.** This is the fallacy of arguing that a belief is mistaken or false because of the way that belief originated. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p57.]

- **Argument from Ignorance.** This is the fallacy of arguing that a claim is false because there is not sufficient evidence that the claim is true. Our ignorance of evidence for a claim’s truth does not imply the falsity of the claim. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p57.]

- **Equivocation.** This is the fallacy of using a word in such a way as to have two meanings. This fallacy is committed in the following argument: “Socrates is a Greek; Greek is a language; therefore, Socrates is a language.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p57.]

- **Amphiboly.** This is the fallacy of formulating our premises in such a way that their meaning is ambiguous. For example, the statement “If God wills x, then necessarily x will happen” is amphibolous. Do we mean “(God wills x → x will happen)” or “God wills x → (x will happen)”? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p58.]

- **Composition.** This is the fallacy of inferring that a whole has a certain property because all its parts have that property. Of course, sometimes wholes do have the properties of their parts, but it is fallacious to infer that a whole has a property just because its every part does. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p58.]

- **Certainty is an unrealistic and unattainable ideal.** Were we to require certainty
of the truth of an argument’s premises, the result for us would be skepticism. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p58.]

- Obviously, the most persuasive arguments will be those that are based on premises which enjoy the support of widely accepted evidence or seem intuitively to be true. But in cases of disagreement we simply have to dig deeper and ask what reasons we each have for thinking a premise to be true or false. When we do so, we may discover that it is we who have made the mistake. After all, one can present bad arguments for a true conclusion! But we might find instead that our interlocutor has no good reason for rejecting our premise or that his rejection is based on misinformation, or ignorance of the evidence, or a fallacious objection. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p59.]

- In a sound deductive argument the conclusion follows necessarily from the premises: if the premises are true and the inference form valid, then it is impossible that the conclusion be false. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p59.]

- An inductive argument is one for which it is possible that the premises be true and no invalid inferences be made, and yet the conclusion still be false. A good inductive argument must, like a good deductive argument, have true premises which are more plausible than their contradictories and be informally valid. But because the truth of their premises does not guarantee the truth of their conclusions, one cannot properly speak of their being formally either valid or invalid. In such reasoning the evidence and rules of inference are said to “underdetermine” the conclusion; that is to say, they render the conclusion plausible or likely, but do not guarantee its truth. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p59.]

- A different approach to inductive reasoning that is apt to be more useful in philosophical discussions is provided by inference to the best explanation. In inference to the best explanation, we are confronted with certain data to be explained. We then assemble a pool of live options consisting of various
explanations for the data in question. From the pool of live options we then select the explanation that, if true, best explains the data. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p61, 62.]

- 1. Explanatory scope. The best hypothesis will explain a wider range of data than will rival hypotheses. 2. Explanatory power. The best hypothesis will make the observable data more epistemically probable than rival hypotheses. 3. Plausibility. The best hypothesis will be implied by a greater variety of accepted truths and its negation implied by fewer accepted truths than rival hypotheses. 4. Less ad hoc. The best hypothesis will involve fewer new suppositions not already implied by existing knowledge than rival hypotheses. 5. Accord with accepted beliefs. The best hypothesis, when conjoined with accepted truths, will imply fewer falsehoods than rival hypotheses. 6. Comparative superiority: The best hypothesis will so exceed its rivals in meeting conditions (1) through (5) that there is little chance of a rival hypothesis’s exceeding it in fulfilling those conditions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p62.]

- The neo-Darwinian theory of biological evolution is a good example of inference to the best explanation. Darwinists recognize that the theory represents a huge extrapolation from the data, which support micro-evolutionary change but do not provide evidence of macro-evolutionary development. They further freely admit that none of the evidence, taken in isolation, whether it be from microbiology, paleogeography, paleontology and so forth provides proof of the theory. But their point is that the theory is nonetheless the best explanation, in virtue of its explanatory power, scope and so on. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p62.]

- By contrast, the charge leveled by critics of the neo-Darwinian synthesis like Phillip Johnson that the theory presupposes naturalism is best understood as the claim that the explanatory superiority of the neo-Darwinian theory is a function of the pool of live options’ being restricted by an unjustified methodological constraint, namely, the philosophical presupposition of naturalism. Johnson is quite happy to agree that the neo-Darwinian synthesis
is the best naturalistic explanation available (in contrast to Lamarckianism, self-organization theories and so on). But he insists that the interesting and important question is not whether the neo-Darwinian theory is the best naturalistic explanation, but whether it is the best explanation, that is to say, whether it is correct. Johnson argues that once hypotheses positing Intelligent Design are allowed into the pool of live options, then the explanatory superiority of the neo-Darwinian theory is no longer apparent. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p62.]

- On the contrary, its deficiencies, particularly in the explanatory power of its mechanisms of random mutation and natural selection, stand in stark relief. What is intriguing is that several of Johnson’s detractors have openly admitted that Darwinism’s explanatory superiority depends on limiting the pool of live options to naturalistic hypotheses, but they claim that such a constraint is a necessary condition of doing science—a claim which is not, as such, scientific, but is a philosophical claim about the nature of science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p62, 63.]

**Part II Epistemology**

3 Knowledge and Rationality

- All men by nature desire to know. [Aristotle Metaphysics 1.1] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p71.]

- Epistemology is the branch of philosophy that tries to make sense out of knowledge, rationality and justified or unjustified beliefs. The term epistemology comes from the Greek word epistēmē, which means knowledge. Accordingly, epistemology is the study of knowledge and justified or warranted belief. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p71.]

- Actually, there are four major areas of focus within the field of epistemology. First, there is the conceptual analysis of key concepts in epistemology: What is knowledge? What is rationality, justification or warrant? This first area of epistemology works hand in hand with the philosophy of language in that the
focus of study is the clarification of important epistemological notions in order to be clear about what these concepts really are. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p71.]

- Second, there is the problem of skepticism. Do people really have knowledge or justified belief? If people do have knowledge or justified beliefs in one area, say in mathematics, do they have it in other areas; for example, is there moral or religious knowledge? Can one know something if he is not one hundred percent certain that he is not wrong about it? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p71.]

- Third, there is the question of the sources and scope of knowledge and justified belief. If people do in fact have knowledge and justified beliefs, how is it that they have these things? What are the different kinds of knowledge? Surely one’s five senses in some way are a source of perceptual knowledge about the external world. But are there other kinds of knowledge and sources for them beyond sensory perception? Is there also knowledge and justified beliefs about the past (memory), about one’s own inner mental states (introspection), about the thoughts, feelings and minds of other persons, about logic, mathematics, metaphysics, morality, God? What are the sources of these different types of knowledge? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p71, 72.]

- Sentence (1) expresses what is known as knowledge by acquaintance. Here one knows something in that the object of knowledge is directly present to one’s consciousness. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p72.]

- the answer seems to be that people can simply “see” that 2 + 2 = 4 or that (C) must follow if (A) and (B) are accepted. What kind of seeing is this? Many believe that it involves an intuitional form of awareness or perception of abstract, immaterial objects and the relationships among them—numbers and mathematical relations or propositions and the laws of logic. Arguably, all of these examples of knowledge are cases of knowledge by acquaintance. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p72.]
Know-how is the ability or skill to behave in a certain way and perform some task or set of behaviors. One can know how to speak Greek, play golf, ride a bicycle or perform a number of other skills. Know-how does not always involve conscious awareness of what one is doing. Someone can learn how to do something by repeated practice without being consciously aware that one is doing the activity in question or without having any idea of the theory behind the practice. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p73.]

Sentence (3) expresses what Bertrand Russell called knowledge by description or what is more typically called by philosophers propositional knowledge. Here someone knows that P where P is a proposition. For present purposes, a proposition may be defined as the content of a sentence or statement. Epistemology involves all three kinds of knowledge. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p73.]

But for now, it may simply be noted that justification (or warrant) for a belief amounts to something like this: one has sufficient evidence for the belief, one formed and maintained the belief in a reliable way (e.g., on the basis of his senses or expert testimony and not by palm reading), or one’s intellectual and sensory faculties were functioning properly in a good intellectual environment when he formed the belief in question. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p74.]

the main idea is that there is a big difference between a mere true belief and a true belief that has warrant or justification. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p74.]

If we say a belief is justified, we usually mean that we either have a right to believe it, that we ought to believe it, or that accepting the belief is an intrinsically good, rational thing to do. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p76.]

Justification is often closely related to a second issue: the internalist-
externalist debate. Roughly, an internalist is one who holds that the sole factors that justify a belief are “internal” or “cognitively accessible” to the believing agent or subject. These factors are various mental states (experiences, sensations, thoughts, beliefs) to which the agent himself has direct access by simply reflecting on or being aware of his own states of consciousness. Justification is grounded in what is internal to the mind of and directly accessible to the believing subject. They are factors the subject can be aware of by simply reflecting upon himself. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p76.]

- An externalist is one who denies internalism, that is, who affirms that among the factors that justify a belief are those to which the believing subject does not have or does not need to have cognitive access. For example, an externalist could hold that among the things that justify a belief is the causal process that caused the belief to be formed—light waves reflecting off of objects and interacting with the eyes and optic nerve in the right way—even though this causal process is entirely outside of the subject’s awareness. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p76.]

- Several objections have been raised against this view. First, how does one determine which processes are, in fact, reliable and just how reliable they have to be to give knowledge? Consider vision. How does one know the visual processes that contribute to the formation of perceptual beliefs are, in fact, reliable and know just how reliable they are? Their reliability varies greatly as circumstances inside and outside the knower change. If one is sick or drunk or if the lighting is poor or the object far away, the processes forming one’s visual beliefs are less reliable. Some argue that the only noncircular way to answer this is to fall back on an internalist view of justification. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p82.]

- First, there is what can be called Aristotelian rationality. In this sense, Aristotle called man a rational animal. Here, rational refers to a being with ratio—a Latin word referring to the ultimate capacity or power to form concepts, think, deliberate, reflect, have intentionality (mental states like
thoughts, beliefs, sensations that are of or about things). Humans are rational animals in that, by nature, they have this power of reason. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p85.]

- Roughly, a priori refers to the idea that justification for them does not appeal to sensory experiences, as would justification for an a posteriori claim (e.g., there is a tree in the yard). According to rationalism, some a priori truths are self-evident: upon simply understanding the proposition in question, one can see or feel a strong inclination to accept that the proposition is a necessary truth—it does not just happen to be true, but rather it could not possibly be false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p85.]

- It is only if people think that rationality or epistemic justification constitutes a means to truth that they have any reason for thinking that rationality is cognitively important. Of course, one could still value rationality and not believe in truth in that one could hold rational behavior to be a means to cultural power, happiness or something else. But if rationality is to be valuable precisely as something related to cognitive and intellectual excellence, then the existence of truth is a necessary condition for such value. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p86.]

- Doxastic voluntarism is a controversial thesis, but it is important to keep in mind that it does not mean one has direct, immediate control over one’s beliefs. If someone offered you a million dollars to believe right now that a pink elephant was in your room, you could not do it if you wanted to. People’s beliefs usually just come to them. Upon looking at a red object, one simply finds himself believing it is red. Nevertheless, one could still have indirect control over a belief. Perhaps people cannot directly change their beliefs, but they may be free to do certain things (e.g., study certain evidence and avoid other evidence) to move themselves to a position to change their beliefs. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p87.]

- For any belief P, say the belief that God exists, there are three important cognitive postures we can take regarding P: we can believe P (as theists do),
we can believe not-P (as atheists do), or we can withhold P (as agnostics do) and neither believe P nor believe not-P. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p87, 88.]

- Epistemologically speaking, a person should withhold a belief about P if P is counterbalanced for that person: P and not-P are equally justified for the person; neither position is more justified than the other. If one moves from withholding to believing P or believing not-P, his degree of justification can grow and change over time. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p88.]

- One factor that affects whether and to what degree a belief is justified is the presence of defeaters for that belief. (...) A defeater removes or weakens justification for a belief. There are at least two kinds of defeaters. First, there are rebutting defeaters, which directly attack the conclusion or thing being believed. In the case above, a rebutting defeater would be a reason to believe not-Q, i.e., a reason to believe that the statue is not blue. (...) Second, there are undercutting defeaters. These defeaters do not directly attack the thing believed (by trying to show that it is false), but rather they attack the notion that R is a good reason for Q. Undercutting defeaters do not attack Q directly; they attack R and in some way undercut R as a good reason for Q. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p88.]

4 The Problem of Skepticism

- Common sense assures us that we all know and have justified beliefs about many things: the external world, God, morality, the past, mathematics, our own mental life and the existence of other minds. And while Scripture places an important emphasis on faith, it places an equally important emphasis on things we can, should and do know. Thus Scripture unites with common sense to affirm that there are many examples of knowledge and justified belief for human beings. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p91.]

- During the Hellenistic period of ancient Greek philosophy, two schools of skepticism arose. The first, known as Academic skepticism, flourished in the third and second centuries B.C. It was founded by Arcesilaus (315-240 B.C.),
a philosopher in Plato’s Academy, and was propagated by Carneades in the second century B.C. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p91, 92.]

- There is some controversy over what the Academic skeptics actually affirmed, but the traditional view is that they asserted two things: (1) The skeptical thesis: All things are inapprehensible, no one has any knowledge. (2) Regarding the skeptical thesis itself, we can dogmatically affirm that we know that no one has any knowledge. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p92.]

- It should be clear that, as stated above, Academic skepticism was a difficult position to maintain. For one thing, statement two is self-refuting because it asserts that people know that there is nothing they can know. However, it may be that in asserting the skeptical thesis itself (statement one), the Academic skeptics did not really say that there is no knowledge at all, but rather that there is only one thing that people know: namely, that they cannot know anything else. But this affirmation, while not self-refuting, is still hard to maintain. Is it really possible to know only one thing? Would not a person claiming to know this statement also be implicitly claiming to know that he himself existed, that he knew what the statement meant, that he knew that the statement was true, and thus that there was such a thing as truth? Further, if someone can simply assert that there is one exception to the skeptical thesis (namely, the thesis itself), what would keep others from simply asserting other exceptions to the thesis, say, that they know red is a color? For these and other reasons, a second school of ancient skepticism was more prominent. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p92.]

- The second school was called Pyrrhonian skepticism after its founder Pyrrho of Ellis (360-270 B.C.). It flourished in Alexandria, Egypt, and reached its zenith in the last great Pyrrhonian, Sextus Empiricus, who lived during the last half of the second and the first quarter of the third century A.D. This form of skepticism is rooted in the view that philosophy seeks wisdom and wisdom includes knowledge of truths relevant for living a good, skilled life. The main human problem is unhappiness and this comes, primarily, from a
disparity between one’s desires and what he believes to be true in the world. So the key to dealing with unhappiness is to give up on the search for wisdom, suspend judgment about all of one’s beliefs and be free. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p92.]

- The Pyrrhonian skeptics rejected dogmatism and proceeded in three stages: (1) antithesis (both sides of an issue are placed in opposition to each other and skeptical arguments called “tropes” or “modes” are used for each side); (2) epoche (the suspension of judgment); (3) ataraxia (the ultimate, desired state of tranquility). In contrast to the Academic skeptics, the Pyrrhonians suspended judgment about all things, including the skeptical thesis itself. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p92.]

- With the spread of Christianity and writings critical of skepticism such as Augustine’s Against the Skeptics, skepticism did not flourish until the time of René Descartes (A.D. 1596-1650) when it began to flower again. Descartes set out to refute skepticism and set knowledge on a sure foundation. Especially important in this regard is Descartes’s Meditations on First Philosophy first published in 1641. Descartes began his quest for knowledge by adopting methodological doubt. This amounted to the idea that knowledge requires absolute certainty (sometimes called Cartesian certainty) and that if it were logically possible to be mistaken about something, then one could not know the thing in question. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p92.]

- Finally, Descartes opined that a malevolent demon could be tricking people with sensory experiences of an external world when no such world is really “out there.” The logical possibility of such a malevolent demon meant for Descartes that people cannot know the laws of logic or mathematics, since the demon may be tricking people into accepting these laws even though they are false. But there is one thing about which the demon could not trick someone—one’s own existence, for before one can doubt one’s existence he must exist. This insight was expressed in Descartes’s famous maxim (which had been stated in a different form by Augustine) Cogito ergo sum (“I think,
therefore, I am”). This was one secure item of knowledge that could not possibly be doubted. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p93.]

- Iterative skepticism occurs when the skeptic refuses to offer an argument for his view but, instead, simply responds to every assertion with the question, how do you know? When this question is answered, the iterative skeptic merely repeats the question, and so on, indefinitely. This form of skepticism is not a genuine philosophical position, since its advocates are not willing to advance arguments against knowledge or accept arguments for knowledge. Iterative skepticism is merely a verbal game and should be treated as such. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p93.]

- A third form of skepticism is heuristic or methodological skepticism. Here, knowledge and justified belief are acknowledged, and skepticism—especially the question “How does one know that X?” and the use of doubt—is taken as a guiding principle to aid people in their search for a better understanding of epistemological issues. In this sense, skepticism is not a position to be refuted or rebutted, but a guiding method to help people understand knowledge. This form of skepticism is, indeed, very helpful, since doubting and questioning knowledge claims can lead one to deeper understanding. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p94.]

- Knowledge skepticism is a thesis to the effect that the conditions for knowledge do not obtain and people do not have knowledge. Justificational skepticism is the same thesis directed, not at knowledge, but at justification and justified beliefs. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p94.]

- Going from stronger to weaker forms of unmitigated skepticism, these grades are as follows: (1) No proposition is knowable, that is, it is not possible for any proposition to be known. (2) While it may be possible for a proposition to be known, as a matter of fact, no proposition is known. (3) While there may be some propositions that are known in some weak sense of that word, nevertheless, no propositions are known with complete certainty. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p94.]

[74]
Global skepticism is the view that there is no knowledge (or justified belief) in any area of human thought. By contrast, local skepticism allows for knowledge in some areas (e.g., in science or in our sensory knowledge of the external world), but local skeptics deny knowledge in this or that specific area (e.g., in theology, ethics, mathematics). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p95.]

First-order skepticism is the more typical version and it involves skepticism directed at people’s everyday beliefs, that is, beliefs about the external world (there is a tree in the yard) or about an ethical proposition (Mercy as such is a virtue). Second-order skepticism is directed at people’s beliefs about these other beliefs. Here the skeptic does not directly question whether people have knowledge of this or that particular item. Rather, he challenges the idea that people know that they have this knowledge. It is normally the case that a first-order skeptic will also be a second-order skeptic because if people do not have knowledge of this or that, then they cannot have knowledge that they do have knowledge of this or that. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p96.]

The skeptic cites this problem, labeled the argument from error, and generalizes it in this way. In each case of past error we confused appearance with reality and mistakenly thought we had knowledge. How do we know that this is not happening right now? How do we know that this is not universally the case in our sensory awareness of the world? Since we have been mistaken in the past, for all we know we could always be mistaken in our beliefs. If this is so, how can we claim to have knowledge? How do I know I am not mistaken right now? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p97.]

Perhaps skeptics do not need to argue from the fact that we have been mistaken on occasions. Instead, skeptics may offer various brain-in-the-vat arguments; they simply need to point out that it is merely possible, logically speaking, that we are mistaken in our knowledge claims. And from the mere
logical possibility of error (the fact that a skeptical thesis about any putative knowledge claim is not a logical contradiction), it follows that we cannot have knowledge. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p97.]

- We can distinguish two different questions in epistemology. First, we can ask, what is it that we know? This is a question about the specific items of knowledge we possess and about the extent of our knowledge. Second, we can ask, how do we decide in any given case whether or not we have knowledge in that case? What are the criteria for knowledge? This is a question about our criteria for knowledge. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p98.]

- Methodism is the name of the second solution and it has been advocated by philosophers such as John Locke, René Descartes, logical positivists and others. According to methodism, one starts the enterprise of knowing with a criterion for what does and does not count as knowledge, in other words, one starts with an answer to question two and not question one. Methodists claim that before one can know some specific proposition P (e.g., There is a tree in the yard), one must first know some general criterion Q and, further, one must know that P is a good example of or measures up to Q. For example, Q might be “If you can test some item of belief with the five senses, then it can be an item of knowledge,” or perhaps, “If something appears to your senses in a certain way, then in the absence of defeaters, you know that the thing is as it appears to you.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p99.]

- The argument from error. From the fact that one has been mistaken in the past, it does not follow that there are good reasons for thinking that one’s senses are currently deceiving him right now. Until such reasons are given as defeaters, one has a right to be sure that one’s current sensory beliefs are examples of knowledge. One’s current sensory beliefs are prima facie justified, that is, innocent until “proven” guilty. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p102.]

- Evil demons and the mere possibility of error. Just because it is logically
possible that one’s current beliefs are mistaken, it does not follow that it is epistemically possible that one is mistaken, i.e., that one has any grounds for doubting one’s current beliefs. Someone does not need to refute the skeptic before he can know things, and the burden of proof is on the skeptic. The mere suggestion that it is logically possible that one might be mistaken does not meet that burden of proof. Knowledge does not require total certainty. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p102.]


- This idea is not new. In fact, the same problem troubled Darwin himself: “With me the horrid doubt always arises whether the convictions of man’s mind, which has been developed from the mind of lower animals, are of any value or at all trustworthy. Would any one trust in the convictions of a monkey’s mind, if there are any convictions in such a mind?” [This is from Darwin’s letter to William Graham Down, dated July 3, 1881, in The Life and Letters of Charles Darwin Including an Autobiographical Chapter, ed. Francis Darwin, 2 vols. (London: John Murray, Albermarle Street, 1887), 1:315-16.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p103.]

- Plantinga’s case is more detailed than we can present here. But if his argument is correct, then metaphysical naturalism, including evolutionary naturalism, is false. The issue is this: if knowledge exists and if properly functioning faculties are necessary conditions for knowledge, then if the notion of proper function requires the existence of a designer of those faculties and cannot be adequately understood in strictly naturalistic terms, we can conclude that metaphysical naturalism is false. [J. P. Moreland & William Craig: [P7V]
5 The Structure of Justification

- The term noetic structure stands for the entire set of propositions that some person, S, believes, together with the various epistemological relations that obtain among those beliefs themselves (e.g., some beliefs—that apples are red—entail other beliefs—that apples are colored), plus the relations among S himself and those beliefs (e.g., S accepts some beliefs on the basis of other beliefs). Foundationalism and coherentism are normative theories about how a noetic structure ought to be structured such that the beliefs in that structure are justified for the person possessing that structure. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p110, 111.]

- Foundationalist theories are distinguished by the notion that all knowledge rests on foundations. More specifically, the foundationalist notes a fundamental division between those beliefs we justifiably accept on the evidential basis of other beliefs (e.g., the belief that the wind is blowing is evidentially based on the belief that the leaves are rustling) versus those we justifiably accept in a basic way, that is, not entirely on the basis of the support that they receive from other beliefs. For the foundationalist, all beliefs are either basic or nonbasic. Basic beliefs are, somehow, immediately justified. All nonbasic beliefs are mediately justified in some way by the relationship they sustain to the basic beliefs. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p112.]

- To begin with, according to foundationalism, there are beliefs that are called properly basic beliefs. Such beliefs are basic in the sense that they are not justified by or based on other beliefs. If we use the term evidence to mean “propositional evidence,” then evidence refers to cases in which a person S believes a proposition and this serves as the basis for believing another proposition. A properly basic belief is basic in the sense that it is not believed on the basis of evidence, that is, it is not based on belief in another proposition. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p112.]
According to classical foundationalism, only sensory beliefs or beliefs about the truths of reason should be allowed in the foundations. Other foundationalists claim that additional beliefs should be in the foundations as well; for example, certain moral beliefs (e.g., Mercy is a virtue) and theological beliefs (e.g., God exists). Roughly, a truth of reason is one that can be known independent of sense experience, that is, without requiring a sense experience or sensory belief for its justification. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p112, 113.]

Strong foundationalism is the view that foundational beliefs are infallible, certain, indubitable or incorrigible. These terms are all attempts to get at the same thing, but they differ somewhat in their meaning. A belief is infallible if it is impossible in some sense for a person to hold to the belief and be mistaken about it. Sometimes the term incorrigible is used in the same way. On other occasions, a belief is incorrigible just in case the person holding the belief could never be in a position to correct it. The notion of certainty has two different senses. Sometimes it refers to a certain depth of psychological conviction with which a belief is held. On the other hand, a belief is sometimes called certain in the sense that at least this must be true of it: accepting that belief is at least as justified as accepting any other belief whatever. Finally, indubitability refers to a feature a belief has when no one could have grounds for doubting the belief in question. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p113.]

Weak foundationalists deny that foundational beliefs must have such a strong epistemic status. For them, foundational beliefs must be merely prima facie justified. Very roughly, a belief is prima facie justified for some person just in case that person holds the belief in question and has no good reason to think that he is not justified in doing so, in other words, he has no reason to think that there are defeaters of the belief sufficient on balance to remove his justification for the belief. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p113, 114.]

Foundationalists also argue that certain types of a priori knowledge,
specifically, our knowledge of self-evident truths of reason, fit well into foundationalism and not coherentism. Examples include our knowledge that necessarily $2 + 2 = 4$ or that necessarily if A is taller than B and B is taller than C, then A is taller than C. In cases like these, people are justified in believing them without that justification coming from some other things they believe. These truths are “self-evident” and the justification for them is immediate. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p117.]

- the essence of coherentism lies in the fact that there are no asymmetries between basic and nonbasic beliefs. All beliefs are on a par with each other and the main, or more likely, sole source of the justification of a belief is the fact that the belief appropriately “coheres” with the other beliefs in one’s noetic structure. Important coherentists have been F. H. Bradley, Brand Blanshard and, more recently, Keith Lehrer and Nicholas Rescher. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p121.]

- First, there are coherence theories of belief or meaning. These are theories that claim, in one way or another, that the content of a belief, the thing that makes a belief what it is, is the role the belief plays in an entire system of beliefs. This position is sometimes called the holist theory of meaning. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p121.]

- Second, there are coherence theories of truth, roughly, the notion that a proposition is true if and only if it is part of a coherent set of propositions. This theory of truth contrasts with the correspondence theory of truth, roughly, the notion that the truth of a proposition is a function of its correspondence with the “external” world. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p121, 122.]

- Sensory experiences (e.g., being appeared to redly) themselves serve no role in grounding beliefs, even perceptual beliefs, and, in general, a belief acquires no justification whatever from its relationship to experience. Nor do externalist factors like the proper functioning of one’s sensory faculties play a role in justification. Only a belief or set of beliefs can confer justification
on another belief. This means, among other things, that all versions of coherentism are internalist theories, whereas foundationalist theories can be either internalist or externalist in orientation. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p122.]

- For the coherentist, there is no basic, privileged class of beliefs (e.g., those expressing perceptual beliefs such as I am being appeared to redly now) that serve as a foundation for justifying other beliefs but which need no justification from other beliefs. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p122.]

### 6 Theories of Truth and Postmodernism

- As C. S. Lewis put it, “We are now getting to the point at which different beliefs about the universe lead to different behavior. Religion involves a series of statements about facts, which must be either true or false. If they are true, one set of conclusions will follow about the right sailing of the human fleet; if they are false, quite a different set.” [C. S. Lewis, *Mere Christianity* (New York: Macmillan, 1960), p. 58.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p130.]

- The notion of truth employed in Lewis’s statement is called the correspondence theory of truth, roughly, the idea that truth is a matter of a proposition (belief, thought, statement, representation) corresponding to reality; truth obtains when reality is the way a proposition represents it to be. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p130.]

- Is there a biblical view of truth? The answer seems to be no and yes, depending on what one means. No, there is no peculiarly Christian theory of truth, one that is used only in the Bible and not elsewhere. If there were a peculiarly Christian view of truth, two disastrous implications would follow: claims that certain Christian doctrines are true would be equivocal compared to ordinary, everyday assertions of truth, and Christianity’s claim to be true would be circular or system-dependent and, therefore, trivial. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p130.]

[31]
• The Old and New Testament terms for truth are, respectively, ἐμετ and ἀλήθεια. The meaning of these terms and, more generally, a biblical conception of truth are broad and multifaceted: fidelity, moral rectitude, being real, being genuine, faithfulness, having veracity, being complete. Two aspects of the biblical conception of truth appear to be primary: faithfulness and conformity to fact. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p131.]

• Thus God says, “I the LORD speak the truth, I declare what is right” (Is 45:19). Proverbs 8:7 says, “For my mouth will utter truth,” and Proverbs 14:25 proclaims, “A truthful witness saves lives, but one who utters lies is a betrayer.” According to Jeremiah 9:5, “They all deceive their neighbors, and no one speaks the truth.” In John 8:44-45, Jesus says that the devil is a liar and deceiver who cannot stand the truth but that he, Jesus, speaks the truth. In John 17:17, Jesus affirms that the word of God is truth, and in John 10:35 he assures us that it cannot be broken (i.e., assert a falsehood). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p131, 132.]

• According to relativism, a claim is true relative to the beliefs or valuations of an individual or group that accepts it. According to relativism, a claim is made true for those who accept it by that very act. A moral analogy may help to make this clear. There is no absolute moral obligation to drive on the right side of the road. That obligation is genuine relative to America but not to England. Similarly, The earth is flat was true for the ancients but is false for moderns. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p132.]

• Those who claim that truth does not vary from person to person, group to group, accept absolute truth, also called objective truth. On this view, people discover truth, they do not create it, and a claim is made true or false in some way or another by reality itself, totally independent of whether the claim is accepted by anyone. Moreover, an absolute truth conforms to the three fundamental laws of logic, which are themselves absolute truths. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p132.]
Consider some declarative proposition, P, say, Two is an even number. The law of identity says that P is identical to itself and different from other things, say, Q, Grass is green. The law of noncontradiction says that P cannot be both true and false in the same sense at the same time. The law of excluded middle says that P is either true or false or, put somewhat differently, either P is true or its negation, not-P, is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p132.]

Who is correct, the absolutists or relativists? For at least two reasons, the absolutists are right about the nature of truth. (...) First, relativism itself is either true or false in the absolutist sense. If the former, relativism is self-refuting, since it amounts to the objective truth that there are no objective truths. If the latter, it amounts to a mere expression of preference or custom by a group or individual without objective, universal validity. Thus it cannot be recommended to others as something they should believe because it is the objective truth of the matter and this is a serious difficulty for those who “advocate” relativism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p133.]

When most people claim that P is true (or false) to them and false (or true) to others, they are speaking epistemologically, not ontologically, and relativists are wrong if they think otherwise. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p133.]

The second confusion among those who argue for relativism is the confusion of truth conditions and criteria for truth. A truth condition is a description of what constitutes the truth of a claim. So understood, a truth condition is ontological and it is associated with what the truth itself is. (...) Criteria for truth consist in epistemological tests for deciding or justifying which claims are true and false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p133.]

In its simplest form, the correspondence theory of truth says that a proposition (sentence, belief) is true just in case it corresponds to reality, when what it asserts to be the case is the case. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p133.]
First, what is the truth-bearer? Three main types of candidates have been offered. To begin with, two linguistic candidates are sentences and statements. Second, two mental states, thoughts and beliefs, have been proffered. Finally, propositions have been named as the basic truth-bearer.

A sentence is a linguistic type or token consisting in a sense-perceptible string of markings formed according to a culturally arbitrary set of syntactical rules. A statement is a sequence of sounds or body movements employed by a speaker to assert a sentence on a specific occasion. So understood, neither sentences nor statements are good candidates for the basic truth-bearer.

What are propositions? Philosophers who accept their existence are not in agreement on the answer to this question. However, here are some things relevant to answering it: A proposition (1) is not located in space or time; (2) is not identical to the linguistic entities that may be used to express it; (3) is not sense-perceptible; (4) is such that the same proposition may be in more than one mind at once; (5) need not be grasped by any (at least finite) person to exist and be what it is; (6) may itself be an object of thought when, for example, one is thinking about the content of one’s own thought processes; (7) is in no sense a physical entity. Though assessing the debate about the precise nature of propositions is beyond the scope of the present study, we shall return to propositions shortly.

Edmund Husserl (1859-1938) stated the phenomenological argument most powerfully. The phenomenological argument focuses on a careful description and presentation of specific cases to see what can be learned from them about truth.

In one form or another, the pragmatic theory of truth has been advanced by William James (1842-1910), John Dewey (1859-1952) and contemporary
philosophers Hilary Putnam and Richard Rorty. In general terms, the pragmatic theory implies that a belief P is true if and only if P works or is useful to have. P is true just in case P exhibits certain values for those who accept it. Pragmatism is widely taken to be an expression of antirealism regarding external reality. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p144.]

• Further, part of the nature of postmodernism is a rejection of certain things—for example, truth, objective rationality, authorial meaning in texts along with the existence of stable verbal meanings and universally valid linguistic definitions—that make accurate definitions possible. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p145.]

• Postmodernism is both a historical, chronological notion and a philosophical ideology. Understood historically, postmodernism refers to a period of thought that follows, and is a reaction to the period called modernity. Modernity is the period of European thought that developed out of the Renaissance (14th-17th centuries) and flourished in the Enlightenment (17th-19th centuries) in the ideas of people like Descartes, Locke, Berkeley, Hume, Leibniz and Kant. In the chronological sense, postmodernism is sometimes called “post modernism.” [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p145.]

• As a philosophical standpoint, postmodernism is primarily a reinterpretation of what knowledge is and what counts as knowledge. More broadly, it represents a form of cultural relativism about such things as reality, truth, reason, value, linguistic meaning, the self and other notions. Important postmodern thinkers are Friedrich Nietzsche, Ludwig Wittgenstein, Jacques Derrida, Thomas Kuhn, Michel Foucault, Martin Heidegger and Jean-François Lyotard. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p145.]

• Philosophically, metaphysical realism includes a commitment to (1) the existence of a theory-independent or language-independent reality, (2) the notion that there is one way the world really is and (3) the notion that the basic laws of logic (identity, noncontradiction, excluded middle) apply to reality. Postmodernism involves an antirealist rejection of these realist

- Postmodernists reject the idea that there are universal, transcultural standards, such as the laws of logic or principles of inductive inference, for determining whether a belief is true or false, rational or irrational, good or bad. There is no predefined rationality. Postmodernists also reject the notion that rationality is objective on the grounds that no one approaches life in a totally objective way without bias. Thus objectivity is impossible, and observations, beliefs and entire narratives are theory laden. There is no neutral standpoint from which to approach the world, and thus observations, beliefs and so forth are perspectival constructions that reflect the viewpoint implicit in one’s own web of beliefs. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p146.]

- Postmodernists deny the existence of universals (see chap. 10). A universal is an entity that can be in more than one place at the same time or in the same place at different, interrupted time intervals. Redness, justice, being even, humanness are examples of universals. If redness is a universal, then if one sees (the same shade of) redness on Monday and again on Tuesday, the redness seen on Tuesday is identical to, is the very same thing as the redness seen on Monday. Postmodernists deny such identities and claim that nothing is repeatable, nothing is literally the same from one moment to the next, nothing can be present at one time or place and literally be present at another time or place. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p147.]

- According to postmodernism, an item of language, such as a literary text, does not have an authorial meaning, at least one that is accessible to interpreters. Thus the author is in no privileged position to interpret his own work. In fact, the meaning of a text is created by and resides in the community of readers who share an interpretation of the text. Thus there is not such thing as a book of Romans. Rather, there is a Lutheran, Catholic and Marxist book of Romans. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p147.]

- The first has to do with the postmodern rejection of objective rationality on
the grounds that no one achieves it because everyone is biased in some way or another. As a first step towards a response to this claim, we need to draw a distinction between psychological and rational objectivity. Psychological objectivity is the absence of bias, a lack of commitment either way on a topic. Do people ever have psychological objectivity? Yes, they do, typically, in areas in which they have no interest or about which they have not thought deeply. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p150.]

- Put simply, postmodernism is self-refuting. Postmodernists appear to claim that their own assertions about the modern era, about how language and consciousness work and so forth are true and rational, they write literary texts and protest when people misinterpret the authorial intent in their own writings, they purport to give us the real essence of what language is and how it works, and they employ the dichotomy between modernism and postmodernism while claiming superiority for the latter. In these and other ways postmodernism seems to be self-refuting. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p150, 151.]

7 Religious Epistemology

- Positivists championed a verification principle of meaning, according to which an informative sentence, in order to be meaningful, must be capable in principle of being empirically verified. Since religious statements like “God exists” or “God loves the world” were, in their opinion, incapable of being empirically verified, positivistic philosophers held them to be literally meaningless. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p154.]

- Under criticism, the verification principle underwent a number of changes, including its permutation into the falsification principle, which held that a meaningful sentence must be capable in principle of being empirically falsified. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p154.]

- In general, verificationist analyses of meaning ran into two insuperable problems: (1) The verification/falsification principle was too restrictive. It was quickly realized that on such theories of meaning vast tracts of obviously
meaningful discourse would have to be declared meaningless, including even scientific statements, which the principle had aimed to preserve. (2) The principle was self-refuting. The statement “In order to be meaningful, an informative sentence must be capable in principle of being empirically verified/falsified” is itself incapable of being verified or falsified. Therefore, it is by its own lights a meaningless statement—or, at best, an arbitrary definition, which we are free to reject. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p155.]

- The assertion “God does not exist” is just as much a claim to knowledge as the assertion “God exists,” and therefore the former requires justification just as the latter does. It is the agnostic who makes no knowledge claim at all with respect to God’s existence, confessing that he does not know whether God exists or does not exist, and so who requires no justification. (We speak here only of a “soft” agnosticism, which is really just a confession of ignorance, rather than of a “hard” agnosticism, which claims that it cannot be known whether or not God exists; such a positive assertion would, indeed, require justification.) If anything, then, one should speak at most of a presumption of agnosticism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p156.]

- As Flew confesses, the word “atheist” has in the present context to be construed in an unusual way. Nowadays it is normally taken to mean someone who explicitly denies the existence . . . of God . . . But here it has to be understood not positively but negatively, with the originally Greek prefix “a-” being read in this same way in “atheist” as it customarily is in . . . words as “amoral.” . . . In this interpretation an atheist becomes not someone who positively asserts the non-existence of God, but someone who is simply not a theist. [Antony Flew, “The Presumption of Atheism,” in Companion to Philosophy of Religion, ed. Philip Quinn and Charles Taliaferro (Oxford: Blackwell, 1997).] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p156.]

- Other advocates of the presumption of atheism continued to use the word in the standard way and so recognized their need of justification for their claim that atheism is true, but they insisted that it was precisely the absence of
evidence for theism that justified their claim that God does not exist. Thus, in the absence of evidence for God, one is justified in the presumption of atheism. The problem with such a position is captured neatly by the aphorism “Absence of evidence is not evidence of absence.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p156.]

- To give an illustration, it has become commonplace in astrophysical cosmology to postulate an early inflationary era in the expansion of the universe in order to explain such features of the universe as its flat space-time curvature and large scale isotropy. Unfortunately, by the very nature of the case, any evidence of such an era will have been pushed by the inflationary expansion out beyond our event horizon, so that it is unobservable. But woe be to the cosmologist who asserts that this absence of evidence is proof that inflation did not take place! At the most we are left with agnosticism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p156.]

- The most celebrated and oft-discussed, truth-dependent, pragmatic argument is Pascal’s wager, the brainchild of the French mathematical genius Blaise Pascal. Pascal argued, in effect, that belief in God is pragmatically justified because we have nothing to lose and everything to gain from holding that belief. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p159.]

- Pascal reasons that if I believe God exists and it turns out that he does, then I have gained heaven at the small sacrifice of foregoing the pleasures of sin for a season. If I believe and it turns out that God does not exist, then I gain nothing and have suffered the finite loss of the pleasures of sin I have foregone. On the other hand, if I do not believe and it turns out that God does, in fact, exist, then I have gained the pleasures of sin for a season at the expense of losing eternal life. If I do not believe and it turns out that there is no God, then I have the finite gain of the pleasures afforded by my libertine lifestyle. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p159.]

- However, the truly serious objection to Pascal’s wager is the so-called many gods objection. A Muslim could set up a similar payoff matrix for belief in
Allah. A Mormon could do the same thing for his god. In other words, state (II) God does not exist is actually an indefinitely complex disjunction of various deities who might exist if the Christian God does not. Thus the choice is not so simple, for if I believe that the Christian God exists and it turns out that Allah exists instead, then I shall suffer infinite loss in hell for my sin of associating something (Christ) with God. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p160.]

**Part III Metaphysics**

**8 What is Metaphysics?**

- Metaphysics has a long, distinguished history boasting of some of the greatest thinkers of all time: Plato, Aristotle, Augustine, Boethius, Aquinas, Descartes, Leibniz, Locke and many others. Along with logic and epistemology, metaphysics is the most basic part of philosophy. And metaphysics has been the longstanding friend of theology. The early creeds of Christendom are filled with metaphysical terms—person, essence, substance, subsistence—and they give testimony to the help that metaphysics can give to the development of systematic theology. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p173.]

- The term metaphysics was first used as a title for a group of works by Aristotle (384-322 B.C.). One set of his writings was about “the things of nature” and came to be called the Physics. Another set of works (which Aristotle himself never named) was called “the books after the Physics” (ta meta ta physica) by some ancient editors that collected and edited his writings in the first century B.C. Thus metaphysics originally meant “after the Physics” and, while metaphysical reflection existed before Aristotle, the title was first used in the way just mentioned, and it has continued to refer to a certain branch of philosophy ever since. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p173.]

- It is difficult, if not impossible to come up with an adequate definition of metaphysics. Usually, it is characterized as the philosophical study of the nature of being or reality and the ultimate categories or kinds of things that
are real. This definition is adequate to capture much of what is done in metaphysics. Typical metaphysical questions are these: What is the difference between existing and not-existing? Is reality one or many? Are there abstract objects that exist but are not spatial and temporal? Are there substances and, if so, what are they? Are we free or determined? Is matter real and, if so, what is it? Do humans have minds as well as bodies? Is the property of being red real and, if so, what is it? Where is it? [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p173, 174.]

- Metaphysical study should begin with and take into account the things we already know or have reason to believe are true before we begin doing metaphysics. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p179.]

- Use thought experiments as sources for counterexamples to metaphysical arguments. In metaphysics, we are primarily interested in what something must be, not in what it merely happens to be by accident. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p181.]

- The naturalist has three tasks before he or she can defend naturalism as a broad metaphysical view: 1. The naturalist must show that mental entities are not real (a) by denying their existence outright (e.g., since beliefs, if they exist, must be mental, then we should treat beliefs like a flat earth and deny that there are such things) or (b) by reducing them to physical entities in space and time (e.g., beliefs exist, but they are really nothing but states of the brain) or (c) by trying to show that in some way or another they depend on the physical world for their existence. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p184.]

- The naturalist must deny that properties and relations are abstract entities by either (a) denying that they exist (extreme nominalism) or (b) accepting the existence of properties and relations but treating them as material realities that are wholly inside of space and time (nominalism and impure realism). [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p184.]
The naturalist must show that abstract entities are not real by either (a) denying their existence outright (e.g., propositions, like witches, do not exist at all) or (b) reducing them to physical entities in space and time (e.g., propositions exist but they are really nothing but physical scratchings called sentences). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p185.]

11 The Mind-Body Problem: Dualism

- It is virtually self-evident to most people that they are different from their bodies. Almost all societies throughout history (unless they are taught to think otherwise) have believed in some form of life after death, and this belief arises naturally when a human being reflects on his or her own constitution. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p228.]

- In some contexts, it is possible and important to make a distinction among the mind, the soul, the spirit, the ego or the self. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p229.]

- Our main concern here is to focus on the mind-body problem, which, in turn, involves two main issues. First, is a human made of only one component, say matter, or is a human made of two components, matter and mind? Second, if the answer is two components, do mind and matter interact, and if so, how does that interaction take place? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p229.]

- The two main views are physicalism and dualism. Physicalism claims that a human being is completely physical, and dualism claims that a human being is both physical and mental. Dualism, in turn, comes is two major varieties: substance dualism and property-event dualism. Physicalism comes in different varieties as well. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p299.]

- Today, physicalism often means something more restrictive than materialism so defined: Physicalism can be understood as the view that all entities whatsoever are merely physical entities. There are no abstract objects, and all substances, properties and events are merely physical entities. Some
physicalists hold that while there are only physical substances, there are genuinely mental properties that emerge from and are dependent on their physical bases. This view seems to be a version of property dualism, and we will treat it as such. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]

- What is meant by a physical entity? Three different things can be meant here. First, physical can mean whatever can be described using the language of physics and chemistry. Second, physical can include the sense just given and be extended to include whatever can be described in any physical science, especially including biology. Third, physical can be extended beyond the first two senses to include any commonsense notion of physical. This is often, though not always, taken to include the primary qualities (shape, mass, size, motion) and to exclude the secondary qualities (those experienced through only one sense organ such as color, smell, texture, sound, taste). The restricted sense of physicalism, therefore, implies that all entities whatever are merely physical in one of these three senses. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]

- This sense of physical is widely used by physicalists in stating and defending their views, and it captures what is, for many, the driving force behind physicalism: the unity of science. The unity of science means, among other things, that a completely developed physics and chemistry could give a complete, unified description and explanation of all phenomena because the world is one physical system. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]

- According to physicalism, a human being is merely a physical entity. The only things that exist are physical substances, properties and events. When it comes to humans, the physical substance is the body or brain and central nervous system. The physical substance called the brain has physical properties, such as a certain weight, volume, size, electrical activity, chemical composition and so forth. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]
• According to physicalism, when someone has an occasion of pain or an occurrence of a thought, these are merely physical events, namely, events where such and such C-fibers are firing or certain electrical and chemical events are happening in the brain and central nervous system. Thus physicalists believe that we are merely a physical substance (a brain and central nervous system plus a body) that has physical properties and in which occur physical events. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]

• What is matter? There is no clear definition of matter, and the fact of the matter is that we know precious little about what matter actually is. But examples of matter are not hard to come by. Material objects are things like computers, carbon atoms and billiard balls. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p230.]

• There is one very crucial observation to make about material substances, properties and events. No material thing presupposes or requires reference to consciousness for it to exist or be characterized. You will search in vain through a physics or chemistry textbook to find consciousness included in any description of matter. A completely physical description of the world would not include any terms that make reference to or characterize consciousness. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p231.]

• Dualists disagree with physicalists. According to them, mental entities are real and the mind and its contents are radically nonphysical. As with matter, it is hard to give a definition of mental entities. Some have defined a mental entity as something such that it would not exist if there were no sentient creatures. Others define a mental entity as something about which the subject is in a better position to know than is anyone else, or something to which a subject has private, firstperson access. Mental entities belong to the private world of inner experience. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p231.]

• According to property dualism (also called property-event dualism), there are some physical substances that have only physical properties. A billiard ball is hard and round. Further, there are no mental substances. But there is one
material substance that has both physical and mental properties—the brain. When one experiences a pain, there is a certain physical property possessed by the brain (a C-fiber stimulation with chemical and electrical properties) and there is a certain mental property possessed by the brain (the pain itself with its felt quality). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p232.]

- The brain is the possessor of all mental properties. A human is not a mental self that has thoughts and experiences. Rather, a human is a brain and a series or bundle of successive experiences themselves. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p232.]

- Substance dualism, on the other hand, holds that the brain is a physical object that has physical properties and the mind or soul is a mental substance that has mental properties. When one is in pain, the brain has certain physical (e.g., electrical, chemical) properties, and the soul or self has certain mental properties (the conscious awareness of the pain). The soul is the possessor of its experiences. It stands behind, over and above them and remains the same throughout one’s life. The soul and the brain can interact with each other, but they are different things with different properties. Since the soul is not to be identified with any part of the brain or with any particular mental experience, then the soul may be able to survive the destruction of the body. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p232.]

- Physicalists are committed to the claim that alleged mental entities either do not exist at all or if they do, they are really identical to physical entities, e.g., brain states, properties of the brain, overt bodily behavior or dispositions to behave (e.g., pain is just the tendency to shout “ouch!” when stuck by a pin instead of pain being a certain mental feel). If physicalism is true and if mental entities exist but are really nothing but physical entities, then everything true of the brain (and its properties, states and dispositions) is true of the mind (and its properties, states and dispositions) and vice versa. If we can find one thing true, or even possibly true of the mind (or its states) and not the brain (or its states), or vice versa, then some form of dualism is established. The mind is not the brain. [J. P. Moreland & William Craig:
To establish physicalism, it is not enough that mental states and brain states are causally related or constantly conjoined with each other in an embodied person. Physicalism needs identity to make its case, and if something is true, or possibly true of a mental substance, property or event that is not true, or possibly true of a physical substance, property or event, physicalism is false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p233.]

If a doctor touches part of one’s brain with an electrode, it may cause a certain mental experience, say a memory, to occur. But all that proves is that the mind is causally connected to the brain, not that they are identical. A sound is not stored in the grooves of a record, but rather is causally connected with those grooves (one can cause a sound by doing something to the grooves). Likewise, memories are neither parts of nor stored in the brain, but are stored in the mind, yet causally connected with the brain (one can cause a memory by doing something to the brain). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p233, 234.]

A simple thought experiment may further illustrate the point. Try to picture a pink elephant in your mind, or if you do not have a vivid imagination, look at a colored object, close your eyes, and you will continue to have an awareness of that object called an after-image. Now, if you imagine a pink elephant or have, say, a blue after-image, there will be an awareness of pink or blue (a sense datum or a sensory way of experiencing) in your mind of which you are aware. There will be no pink elephant outside of you, but there will be a pink mental image or an awareness of pink in your mind. Now at that time there will be no pink or blue entity in your brain nor any awareness of pink or blue; no neurophysiologist could open your brain and see a pink or blue entity or an awareness of such an entity while you are having the sensory experience. But, then, the sensory event has a property—being pink or blue or being an awareness of pink or blue—that no brain event has. Therefore, they cannot be identical. The sense image is a mental entity. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p233, 234.]

[46]
• Consider the following argument: 1. No physical properties are self-presenting. 2. At least some mental properties are self-presenting. 3. Therefore, at least some mental properties are not physical properties. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p234.]

• Mental properties, like feeling sad, experiencing red, having a thought that three is an odd number, are self-presenting properties, that is, they present themselves directly to the subject, they are psychological attributes, they are directly present to a subject because that subject simply has them immediately in his field of consciousness. There are two pieces of evidence for the claim that mental properties are self-presenting, while physical properties are not: One can have private access to one’s mental properties and not one’s physical properties, and one can know at least some of one’s mental properties incorrigibly, but this is not true of one’s knowledge of his physical properties. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p234.]

• First, let us look at the issue of private access. A person has private access to his own mental life. A woman is in a privileged position to know about what she is thinking and sensing compared to anyone else. Whatever ways one has for finding out if someone else is presently sensing a red after-image (by analyzing the other’s brain states or by looking at her behavior, say, her shouting “red” after looking at the flag), those ways are available to the other person in her attempt to know about her own sensation. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p234.]

• Physical objects, including one’s brain, are public objects, and no one is in a privileged position regarding them. A neurophysiologist can know more about one’s brain than the person himself does, but the scientist cannot know more about one’s mental life than the person himself. In fact, a scientist’s knowledge of one’s mental states will, ultimately, depend on the first-person reports of the persons having them, but a scientist’s knowledge of any physical state whatsoever will not depend on a first-person report. People have private, privileged access to their mental life because it contains self-

- Some physicalists respond to this by claiming that we may reach the time when a scientist will know more about a patient’s current mental states than the patient does, and such scientific knowledge will not depend essentially on first-person reports. However, it is hard to see how such progress in scientific knowledge would be possible without the subject having to report verbally or by behavior his own mental states to the outside observer because he alone has private access to them. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p235.]

- Not only do people have private access to their own mental states, but also, people can know them incorrigibly. If something is incorrigible to a knowing subject, then that subject is incapable of being mistaken about that thing. (...) Again, one can be wrong if one thinks that a chair is in the next room. But one cannot be wrong about the fact that one at least thinks that the chair is there, i.e., that a certain, specific thought is occurring to one. The former claim is about a physical object (the chair); the latter is about a mental state within a person—a thought that one is currently having. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p235.]

- Physicalists deny that people know their own mental states incorrigibly. For example, one may be experiencing an itch and mistakenly classify or report it to others as a pain. Dualists respond that in cases like these, people are still incorrigibly aware of the felt texture of the experience itself, even though they may not have the correct word to report it to others or even if they don’t remember past experiences of different kinds of itches well enough to know how to classify the present itch in light of their past, poorly remembered experiences. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p236.]

- As Howard Robinson puts it: The notion of having something as an object of experience is not, prima facie, a physical notion; it does not figure in any physical science. Having something as an object of experience is the same as

- Subjective states of experience are real—people experience sounds, tastes, colors, thoughts, pains—and they are essentially characterized by their subjective nature. But this does not appear to be true of anything physical. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p236.]

- Secondary qualities are qualities such as colors, tastes, sounds, smells and textures. Primary qualities are qualities thought to be among the properties that characterize matter—weight, shape, size, solidity, motion. According to some, physicalism seems to imply that secondary qualities do not exist in the external world. For example, some claim that color is really nothing but a wavelength of light. So in general, physicalism reduces the properties of matter to being nothing but primary qualities. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p236.]

- Frank Jackson has put the point this way: It is a commonplace that there is an apparent clash between the picture Science gives of the world around us and the picture our senses give us. We sense the world as made up of coloured, materially continuous, macroscopic, stable objects; Science and, in particular, Physics, tells us that the material world is constituted of clouds of minute, colourless, highly-mobile particles. . . . Science forces us to acknowledge that physical or material things are not coloured. . . . This will enable us to conclude that sense-data are all mental, for they are coloured. [Frank Jackson, Perception (Cambridge: Cambridge University Press, 1977), p. 121.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p236, 237.]

- Now there is a clear tendency in physics to claim that color is just a wavelength of light, and thus, when we say that an apple is red, this just means that the apple has certain physical dispositions to absorb certain wavelengths of light and reflect others and so forth. We do not need to postulate that the apple actually has a shade of red on its surface to explain
all the scientific cause-and-effect relationships that occur between the apple, light waves and the bodies of observers. Now this same strategy is what many physicalists want to use in reducing mental states to physical states. For those physicalists who do not apply this strategy to secondary qualities, it would seem to be more consistent for them not to apply that strategy to mental states. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p237.]

- When we pay attention to our own consciousness, we can become aware of a very basic fact presented to us: We are aware of our own self as being distinct from our bodies and from any particular mental experience we have. We simply have a basic, direct awareness of the fact that we are not identical to our bodies or our mental events; rather, we are the selves that have a body and a conscious mental life. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p238.]

- This point can be expanded by noting that through introspection a person is directly aware of the fact that (1) he is an immaterial center of consciousness and volition that uses his body as an instrument to interact with the material world; (2) he is the owner of his experiences and he is not identical to a bundle of mental experiences; and (3) he is an enduring self who exists as the same possessor of all his experiences through time. This direct awareness shows that a person is not identical to his or her body in whole or in part or to one’s experiences, but rather is the thing that has them. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p238.]

- The first-person perspective is the vantage point that one uses to describe the world from one’s own point of view. Expressions of a first-person point of view utilize what are called indexicals—words like I, here, now, there and then. Here and now are where and when I am; there and then are where and when I am not. Indexicals refer to one’s own self. I (and, most likely, now) is the most basic indexical, and it refers to one’s self, which one knows by acquaintance with one’s own ego in acts of self-awareness. That is, one is immediately aware of one’s own self, and one knows who I refers to when one uses it—it refers to that very person as the owner of his or her body and mental states. [J. P. Moreland & William Craig: *Philosophical Foundations*]
According to physicalism, there are no irreducible, privileged, first-person perspectives. Everything can be exhaustively described in an object language from a third-person perspective. A physicalist description of Tom would say that there exists a body at a certain location that is five feet, eight inches tall, weighs 160 pounds, etc. (...) But no amount of third-person descriptions capture Tom’s own subjective, first-person acquaintance of his own self in acts of self-awareness. In fact, for any third-person description of Tom, it would always be an open question as to whether the person described in third-person terms was the same person as Tom is. The reason Tom knows his self is not because he knows some third-person description of a set of mental and physical properties and also knows that a certain person satisfies that description. Rather, Tom knows himself as a self immediately through being acquainted with his own self in an act of self-awareness. He can express that self-awareness by using the term I. Arguably, I refers to one’s own substantial soul. It does not refer to any mental property or bundle of mental properties one is having, nor does it refer to any body described from a third-person perspective. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p239.]

It would seem that a person can maintain absolute sameness through change, that is, personal identity. More specifically, even though one’s body constantly gains new parts and loses old ones, and even though one’s mental states come and go in rapid succession, nevertheless, the person himself remains the same because he is a mental self that is other than his body parts and mental states. If one were merely a body or a body with mental properties, then when one’s body parts or mental life changed, one would not literally be the same. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p239.]

For our purposes, when we use the term “free will” we mean what is called libertarian freedom: Given choices A and B, one can literally choose to do either one, no circumstances exist that are sufficient to determine one’s choice; a person’s choice is up to him, and if he does one of them, he could have done otherwise, or at least he could have refrained from acting at all. One acts as an agent who is the ultimate originator of one’s own actions and,
in this sense, is in control of one’s action. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p240.]

- If physicalism is true, then, arguably, determinism is true as well, at least for normal-sized objects like brains or bodies. If one is just a physical system, there is nothing in him that has the capacity to choose freely to do something. Material systems, at least large-scale ones, change over time in deterministic fashion according to the initial conditions of the system and the laws of chemistry and physics. A pot of water will reach a certain temperature at a given time in a way fixed by the amount of water, the input of heat and the laws of heat transfer. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p240.]

- Now, when it comes to morality, if determinism is true, some argue that it is hard to make sense of moral obligation and responsibility. They seem to presuppose libertarian freedom of the will. If one “ought” to do something, it seems to be necessary to suppose that one can do it in the libertarian sense. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p240.]

- If physicalism is true, one does not have any genuine ability to choose one’s actions. It is safe to say that physicalism requires a radical revision of many people’s commonsense notions of freedom, moral obligation, responsibility and punishment. On the other hand, if these commonsense notions are true, physicalism is false. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p240.]

- According to epiphenomenalism, when matter reaches a certain organizational complexity and structure, as is the case with the human brain, then matter “produces” mental states like fire produces smoke, or the structure of hydrogen and oxygen in water “produces” wetness. The mind is to the body as smoke is to fire. Smoke is different from fire (to keep the analogy going, some physicalists would identify the smoke with the fire or the functioning of the fire), but fire causes smoke, not vice versa. Mental states are byproducts of the brain, but they are causally impotent. Mental states merely “ride” on top of the events in the brain. It should be obvious that epiphenomenalism denies free will, since it denies that mental states

- In agent causation, substances are the cause; in event-event causation, a state within a substance is the cause. According to event-event causation, when one raises one’s arm, there is some state within one that causally necessitates or determines that the arm goes up; for example, a state of desiring that one’s arm go up or a state of willing that one’s arm go up. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p241.]

- H. P. Owen states that: determinism is self-stultifying. If my mental processes are totally determined, I am totally determined either to accept or to reject determinism. But if the sole reason for my believing or not believing X is that I am causally determined to believe it I have no ground for holding that my judgment is true or false. [H. P. Owen, *Christian Theism* (Edinburgh: T & T Clark, 1984), p. 118.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p241.]

- Why are physicalism and property dualism thought by many philosophers to be self-refuting? The simple answer is that they undercut the necessary reconditions for rationality itself to be possible. In other words, they make rationality itself impossible. If someone claims to know that physicalism or property dualism are true, or to embrace them for good reasons, if one claims that they choose to believe in them because of good reasons, then these claims are self-refuting. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p242.]

- First, humans must have certain mental features true of them. They must have genuine intentionality, they must be capable of having thoughts and propositions in their minds, they must be capable of having awarenesses of the things they claim to know as well as of the contents of their own minds. But intentionality, thoughts and propositions, and awarenesses are mental notions, not physical ones. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p242.]

- Second, in order to rationally think through a chain of reasoning such that one sees the inferential connections in the chain, one would have to be the same self present at the beginning of the thought process as the one present at the
end. As Immanuel Kant argued long ago, the process of thought requires a genuine enduring “I.” If there is one self who reflects on premise (1), namely, “If P, then Q,” a second self who reflects on premise (2), namely, P, and a third self who reflects on the concluding statement (3), namely, Q, then there is literally no enduring self who thinks through the argument and draws the conclusion. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p242.]

- As H. D. Lewis noted, “one things seems certain, namely that there must be someone or something at the centre of such experience to hold the terms and relations together in one stream of consciousness.” [H. D. Lewis, The Self and Immortality (New York: Seabury, 1973), p. 34.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p242.]

- Finally, rationality seems to presuppose an agent view of the self and genuine libertarian freedom of the will. There are rational “oughts.” That is, given certain evidence, one “ought” to believe certain things. One is intellectually responsible for drawing certain conclusions, given certain pieces of evidence. If one does not draw that conclusion, one is irrational. But ought implies can. If one ought to believe something, then one must have the ability to choose to believe it or not to believe it. If one is to be rational, one must be free to choose his beliefs for the sake of certain reasons. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p242.]

- How could a soul, totally lacking in any physical properties, cause things to happen to the body or vice versa? How can the soul move the arm? How can a pin-stick in the finger cause pain in the soul? Response: This objection assumes that if we do not know how A causes B, then it is not reasonable to believe that A causes B, especially if A and B are different. But this assumption is not a good one. We often know that one thing causes another without having any idea of how causation takes place, even when the two items are different. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p243.]

- A magnetic field can move a tack, gravity can act on a planet millions of miles away, protons exert a repulsive force on each other and so forth. In these
examples, we know that one thing can causally interact with another thing, even though we may have no idea how such interaction takes place. Further, in each case the cause would seem to have a different nature from the effect—forces and fields versus solid, spatially located, particle-like entities. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p243.]

- Evolutionist Paul Churchland makes this claim: The important point about the standard evolutionary story is that the human species and all of its features are the wholly physical outcome of a purely physical process. . . . If this is the correct account of our origins, then there seems neither need, nor room, to fit any nonphysical substances or properties into our theoretical account of ourselves. We are creatures of matter. And we should learn to live with that fact. [Paul Churchland, *Matter and Consciousness* (Cambridge, Mass.: MIT Press, 1984), p. 21.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p244.]

- Since humans are merely the result of an entirely physical process (the processes of evolutionary theory) working on wholly physical materials, then humans are wholly physical beings. Response: Dualists could point out that this objection is clearly question begging. To see this, note that the objection can be put into the logical form known as modus ponens: If humans are merely the result of naturalistic, evolutionary processes, then physicalism is true. Humans are merely the result of naturalistic, evolutionary processes. Therefore, physicalism is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p244.]

**12 The Mind-Body Problem: Alternatives to Dualism**

- John Searle, one of the leading philosophers of mind in the twentieth century,
- has made the following observation: Acceptance of the current [physicalist] views is motivated not so much by an independent conviction of their truth as by a terror of what are apparently the only alternatives. That is, the choice we are tacitly presented with is between a “scientific” approach, as represented by one or another of the current versions of “materialism,” and an “unscientific” approach, as represented by Cartesianism or some other traditional religious conception of the mind. [John Searle, *Rediscovering the*
In other words, the main intellectual drive that underlies physicalism is not primarily philosophical arguments against dualism and in favor of physicalism, but what are taken to be the implications of a scientific, naturalistic worldview. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p249.]

The problem of many minds is this: If dualism is true and the mind and body are different, then why would we expect that there would be just one mind attached to one body? When we meet a person, how could we ever know that the body before us had only one mind in it instead of seventeen minds? Since dualism cannot rule out the possibility of many minds, dualism leads to skepticism about our knowledge of how many minds others have, and thus it is to be rejected. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p249.]

As Howard Gruber explains: The idea of either a Planful or an Intervening Providence taking part in the day-to-day operations of the universe was in effect a competing theory [to Darwin’s version of evolution]. If one believed that there was a God who had originally designed the world exactly as it has come to be, the theory of evolution through natural selection could be seen as superfluous. Likewise, if one believed in a God who intervened from time to time to create some of the organisms, organs, or functions found in the living world, Darwin’s theory could be seen as superfluous. Any introduction of intelligent planning or decision-making reduces natural selection from the position of a necessary and universal principle to a mere possibility. [Howard E. Gruber, *Darwin on Man: A Psychological Study of Scientific Creativity* (Chicago: University of Chicago Press, 1974), p. 211.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p263.]

Daniel Dennett notes that “Darwin saw from the outset that his theory had to include an entirely naturalistic account of the origins of ‘mind,’ . . . for if Man were to be the golden exception to Darwin’s rule, the whole theory would be dismissible.” [Daniel Dennett, review of Darwin and the Emergence of

- Paul Churchland makes this claim: The important point about the standard evolutionary story is that the human species and all of its features are the wholly physical outcome of a purely physical process. . . . If this is the correct account of our origins, then there seems neither need, nor room, to fit any nonphysical substances or properties into our theoretical account of ourselves. We are creatures of matter. And we should learn to live with that fact. [Paul Churchland, Matter and Consciousness (Cambridge, Mass.: MIT Press, 1984), p. 21.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p263.]

- D. M. Armstrong asserts the following: It is not a particularly difficult notion that, when the nervous system reaches a certain level of complexity, it should develop new properties. Nor would there be anything particularly difficult in the notion that when the nervous system reaches a certain level of complexity it should affect something that was already in existence in a new way. But it is a quite different matter to hold that the nervous system should have the power to create something else, of a quite different nature from itself, and create it out of no materials. [D. M. Armstrong, A Materialist Theory of Mind (London: Routledge & Kegan Paul, 1968), p. 30.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p264.]

- Arthur Peacocke agrees: I find it very hard to see why that functional property [consciousness] coded in a certain complex physical structure requires a new entity to be invoked, of an entirely different kind, to appear on the scene to ensure its emergence. How could something substantial, some substance or some other entity different in kind from that which has been evolved so far, suddenly come in to the evolutionary, temporal sequence? [Arthur Peacocke and Grant Gillett, eds., Persons & Personality (Oxford: Basil Blackwell, 1987), p. 55.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p264.]

- Howard Robinson: [William] James called materialism a tough-minded
theory. We began this essay by wondering why, if this is so, materialists are so often on the defensive in philosophy. The explanation seems to be that though the materialist makes a show of being tough-minded he is in fact a dogmatist, obedient not to the authority of reason, but to a certain picture of the world. That picture is hypnotising but terrifying: the world as a machine of which we are all insignificant parts. Many people share Nagel’s fear of this world view, but, like Nagel, are cowed into believing that it must be true. . . . But reason joins with every other constructive human instinct in telling us that it is false and that only a parochial and servile attitude towards physical science can mislead anyone into believing it. To opt for materialism is to choose to believe something obnoxious, against the guidance of reason. This is not tough-mindedness, but a willful preference for a certain form of soulless, false and destructive modernism. [Howard Robinson, Matter and Sense (Cambridge: Cambridge University Press, 1982), p. 125.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p265.]

13 Free Will and Determinism

- First, there is the freedom of permission—the social/political notion of freedom involved in discussions of rights, the authority of the state, and law. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p268.]

- Second, there is freedom of personal integrity—the ability of fully developed, ideally functioning persons to act as unified selves in a responsible, mature way. This sense of freedom contrasts with the slavery and bondage that comes from being an immature, divided, undeveloped self. So understood, the freedom of personal integrity is in large measure a developmental concept largely employed in studies of psychological and spiritual formation, though it does have philosophical aspects to it. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p268.]

- Finally, there is freedom of moral and rational responsibility—that freedom, whatever it turns out to be, that is part of human action and agency, in which the human being acts as an agent who is in some sense the originator of one’s own actions and, in this sense, is in control of one’s action. This type of

- We can define determinism as the view that for every event that happens, there are conditions such that, given them, nothing else could have happened. For every event that happens, its happening was caused or necessitated by prior factors such that given these prior factors, the event in question had to occur. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p268.]

- Hard determinism denies the existence of free will (as understood by libertarians) and libertarianism accepts free will and denies determinism with respect to human freedom. Soft determinism, also called compatibilism, holds that freedom and determinism are compatible with each other, and thus the truth of determinism does not eliminate freedom. As we will see, compatibilists have a different understanding of free will from the one embraced by libertarians and hard determinists. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p268.]

- Compatibilism. The central idea behind compatibilism is this: If determinism is true, then every human action (e.g., raising one’s hand to vote) is causally necessitated by events that obtained prior to the action, including events that existed before the person acting was born. That is, human actions are mere happenings—they are parts of causal chains of events that lead up to them in a deterministic fashion. Moreover, determinism is true. But freedom properly understood is compatible with determinism; both determinism and freedom are true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p269.]


- Libertarianism claims that the freedom necessary for responsible action is not compatible with determinism. Real freedom requires a type of control over one’s action—and, more importantly, over one’s will—such that, given a
choice to do A (raise one’s hand and vote) or B (leave the room), nothing determines that either choice is made. Rather, the agent himself must simply exercise his own causal powers and will to do one alternative, say A (or have the power to refrain from willing to do something). When this happens, the agent either could have refrained from willing to do A or he could have willed to do B without anything else being different inside or outside of his being. He is the absolute originator of his own actions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p270.]

- Historically, well-known libertarians have been Thomas Aquinas and Thomas Reid. Currently, Timothy O’Connor, Peter van Inwagen and William Rowe are among the advocates of libertarian freedom. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p271.]

- Most philosophers agree about the ability condition: that in order to have the freedom necessary for responsible agency, one must have the ability to choose or act differently from the way the agent actually does. A free choice, then, is one where a person can act, or at least will to do otherwise. Most compatibilists and libertarians agree about this. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p271.]

- In *Summa contra Gentiles* 1.8, Thomas Aquinas states a principle about causal chains that is relevant to this example and, more generally, the type of control necessary for freedom according to libertarians: In an ordered series of movers and things moved [to move is to change in some way], it is necessarily the fact that, when the first mover is removed or ceases to move, no other mover will move [another] or be [itself] moved. For the first mover is the cause of motion for all the others. But, if there are movers and things moved following an order to infinity, there will be no first mover, but all would be as intermediate movers. . . . [Now] that which moves [another] as an instrumental cause cannot [so] move unless there be a principal moving cause [a first cause, an unmoved mover]. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p275.]
14 Personal Identity and Life After Death

- Traditional Christian theology, common sense and various philosophical arguments unite to affirm that persons sustain absolute, real sameness through various kinds of change. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p286.]

- Such questions have been part of philosophy since its inception, and they have often focused on the ship of Theseus, an ancient Greek sailor and warrior who was a king of Athens. Here is Plutarch’s reference to the ship of Theseus: The ship wherein Theseus and the youth of Athens returned had thirty oars, and was preserved by the Athenians down even to the time of Demetrius Phalereus, for they took away the old planks as they decayed, putting in new and stronger timber in their place, insomuch that this ship became a standing example among the philosophers, for the logical question of things that grow; one side holding that the ship remained the same, and the other contending that it was not the same. [Plutarch, “The Life of Theseus,” in *The Lives of the Noble Grecians and Romans*, trans. John Dryden, rev. Arthur H. Clough (New York: Random House, n.d.), p. 14.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p288.]

Part IV Philosophy of Science

15 Scientific Methodology

- If Christians are going to speak to the modern world and interact with it responsibly, they must interact with science. And if believers are going to explore God’s world by means of science and integrate their theological beliefs with the results of that exploration, they need a deeper understanding of science itself. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p307.]

- There are two very different and competing approaches to the philosophy of science. The first is called an external philosophy of science (EPS). In this view, science itself is the object of study, and one applies a general philosophical understanding of reality (metaphysics), knowing (epistemology) and logical structure to episodes of science, evaluating the
episodes as good or bad science. Philosophy is seen as a normative discipline that justifies the presuppositions of science and evaluates certain scientific claims in light of what we already have reason to believe from metaphysics and epistemology. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p308.]

- By contrast, a recent view in the philosophy of science, developed by thinkers like W. V. O. Quine and Wilfred Sellars, is called an internal philosophy of science (IPS). In this view, philosophy is a branch of science. There is no difference in kind between philosophical and scientific questions but only one of degree—usually, philosophical questions (e.g., What is reality in general?) are broader than scientific ones (e.g., What is matter?). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p309.]

- The inadequacies of IPS have kept most philosophers from accepting it. IPS assumes that we can already recognize the difference between good and bad science in our attempt to describe science, but such a recognition will involve distinctively philosophical assessment. Moreover, IPS begs the question against skeptics that ask why are we justified in accepting the cognitive authority of science in the first place. IPS merely asserts the epistemological authority of science and this is question begging. Finally, IPS breaks down the distinction between normative and descriptive issues. Descriptive scientific questions about how we do, in fact, form our beliefs are very different from and presuppose answers to normative philosophical questions about how we are justified in trusting beliefs in general. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p309.]

- First, there is the epistemology of science, which investigates the process of discovering scientific laws and theories, how we use those laws and theories to explain things, and how laws and theories receive confirmation from various sources like successful predictions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p309.]

- Second, there is the ontology of science, which focuses on the realism-antirealism debate. Should good scientific theories be interpreted as true or
approximately true descriptions of the theory-independent world and/or should we believe in the existence of the theoretical entities postulated in those theories? Or should we interpret the success of good scientific theories in ways that do not require commitment to the existence of the theoretical entities in those theories? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p309.]

- Finally, there is the philosophy of nature: Given that we accept scientific realism, how should our scientific beliefs about what is real factor into our broad worldview about reality in general? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p309.]

- For example, the following statement, taken from a widely used high school biology text, is typical: “Scientists use the scientific method in attempting to explain nature. The scientific method is a means of gathering information and testing ideas. . . . The scientific method separates science from other fields of study.” [Peter Alexander et al., Biology: Teacher’s Edition (Morristown, N.J.: Silver Burdett, 1986), p. 4.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p310.]

- In this section, our exploration of scientific methodology will lead us to two discoveries: First, there is no such thing as the scientific method, but rather there is a cluster of practices and issues that are used in a variety of contexts and can be loosely called scientific methodologies. Second, various aspects of scientific methodologies are used in disciplines outside science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p310.]

- Inductivism is a view of the scientific method made popular in the nineteenth century and usually associated with the ideas of Francis Bacon (1561-1591), J. F. W. Herschel (1792-1866) and John Stuart Mill (1806-1873), though the actual description of scientific methodology by these three figures is much more complicated than the sort of inductivism to be described in this section. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p310.]

- Inductivism is an entire view about scientific methodology and should not be
confused with induction itself, which is a form of inference wherein the truth of the premises does not guarantee but only supports the truth of the conclusion to one degree or another. As it came to be understood by the middle of the twentieth century, inductivism is a view of scientific method wherein scientists are seen as starting with unbiased observations of facts, progressively piling up more and more facts by means of those observations, generalizing them by enumerative induction into laws, combining these generalizations into broader and broader generalizations by piling up more facts and, finally, arriving at various levels of scientific laws whose contents are nothing but the facts in general form. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p310.]

- The epistemology of justification refers to the normative, logical structure by which a scientist or community of scientists justifies scientific laws and theories. Inductivism implies that a scientific law or theory is justified only if the evidence in favor of that law or theory fits the inductive scheme already mentioned. Scientists form and test laws and theories by (1) starting with observations without any bias or prior guesswork as to what is important or unimportant to be observed, (2) observing and analyzing the facts gathered in step 1 so as to classify them in different ways, (3) inductively deriving generalizations from this classification of facts, (4) testing these generalizations by further observations and experiments and forming higher-order generalizations. Scientific knowledge is a conjunction of well-attested facts that grows by the addition of new facts that usually leaves previous facts unaltered. One’s belief in the plausibility of a law grows in proportion to the number of observed positive instances of the phenomenon described in it. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p311.]

- First, one cannot merely start with observations without some guiding hypothesis or background assumptions, however tentatively they are held, to guide in deciding what is and is not relevant to observe. Pure, presuppositionless observations are a fable in science, and scientists almost never start with observations. Usually, they start with a problem to be solved and a set of assumptions and hypotheses about what is and is not relevant to observe. [J. P. Moreland & William Craig: *Philosophical Foundations for
In fact, sometimes a shift in theory can turn seeming facts into falsehoods, as Rom Harré has pointed out: For instance, consider the history of the determination of the atomic weights. What were the facts? Under the influence of Prout’s hypothesis some chemists considered that the discrepancies between integral values for the atomic weights of the elements [e.g., chlorine is approximately 35.5] were errors, since Prout had maintained that all elemental atoms were combinations of whole numbers of complete hydrogen atoms, and hence their atomic weights had to be integral numbers by comparison with hydrogen. Those who did not accept or had abandoned Prout’s hypothesis were inclined rather to suppose that the non-integral weights were the facts, that is a genuine measure of a natural phenomenon. What the facts were depended in part on whether one held or did not hold to a particular theory. [Rom Harré, The Philosophies of Science (Oxford: Oxford University Press, 1972), p. 43.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p312.]

Several other problems have been raised against inductivism: the problem of induction (what justifies the inference from “All observed A’s are B” to “All A’s whatsoever are B”); the difficulty of deciding between accidental generalizations about a phenomenon that merely happen to be true (e.g., plants grow from the sun’s warmth) and lawlike generalizations that express real necessities in nature based on a background theory of the true nature of the phenomenon in question (e.g., plants grow from the sun’s light by photosynthesis); and the fact that scientists do not try merely to describe phenomena by generalizations, but also to explain them with theories about underlying mechanisms, often unobserved or even unobservable, that account for observational generalizations. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p313.]

A better way of picturing scientific reasoning is called the hypothetico-deductive method, advocated by Carl Hempel, among others. Roughly, this view sees scientists as, in one way or another, forming and putting forth a hypothesis, deriving test implications from it (along with what are called
boundary conditions), then seeing if observations corroborate with the hypothesis. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p313.]

- There are seven aspects of the proposed eclectic model to explore: (1) the formation of scientific ideas, (2) the nature of scientific questions and problems, (3) the use of scientific ideas and scientific explanation, (4) the nature of scientific experiments, (5) the testing of scientific ideas (scientific confirmation), (6) the nature of scientific ideas (laws and theories) and (7) the aims and goals of scientific ideas. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p313.]

- While some views we will look at are not as plausible as others, nevertheless, each is logically consistent with the practice of science, and this supports an eclectic model of scientific methodology; it shows that scientific methodology is a cluster of different methodologies and not one single method worthy of the title “the scientific method.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p314.]

- The formation of scientific ideas. Area one is sometimes called the psychology of discovery and refers to the process by which individual scientists or communities of scientists discover and form their ideas. It is generally agreed that there is no formalized method, no step-by-step procedure that characterizes the process of scientific discovery. Sometimes scientists discover things by accident. On other occasions they generate their ideas in more bizarre ways. It is well known, for example, that F. A. Kekule (1829-1896) came up with the hexagon formula for the benzene ring by having a trancelike vision of a snake attempting to chase its own tail and thus curving into such a ring! [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p314.]

- First, scientists generate ideas by a creative process of educated guesswork known as adduction or abduction. Adduction refers to the process of inventing a theory to explain observed facts. Science is a craft, and after a scientist has worked in an area for a while, this personal involvement allows the scientist to develop savvy about that area, a sense of tacit know-how. Part
of this knowhow is the ability to see things in a certain way, to intuit patterns of phenomena and, by the use of creative imagination, to adduce a conceptual web to explain those patterns. Often a scientist cannot say how it was that he or she came up with a theory. This same sort of tacit knowledge is used by auto mechanics, judges, biblical exegetes and others who use their knowledge of a field to weigh things and adduce a solution to a problem. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p314.]

- The nature of scientific questions and problems. Often, scientists try to solve problems by answering at least three types of questions. First there are “what” questions: What does the fossil record look like? What is the half-life of uranium? Here scientists try to establish facts even if they cannot, even in principle, explain those facts. For example, scientists could try to establish what the rest mass is of some alleged ultimate particle, even if they do not believe there is a further explanation for why the rest mass is some specific value because the particle is taken as ultimate. Second, scientists answer “why” questions: Why do metals expand when heated? Here the focus is on stating the cause for some phenomenon (e.g., the efficient or final cause). Third, scientists answer “how” questions: How does light dislodge an electron from the surface of a metal? “How” questions are requests for a description of how it is that some cause accomplishes an effect. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p315, 316.]

- Two things should be noted about these questions. First, disciplines outside of science ask and answer very similar types of questions. Second, scientific methodology is not exhausted by a search for answers to “how” questions. They also answer “what” and “why” questions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p316.]

- It is worth noting that the epistemological impact of anomalies for scientific theories is parallel to the impact of anomalies in areas outside science. For example, just exactly when is it no longer reasonable to believe in biblical inerrancy in light of anomalous data outside Scripture or problem passages? Answering this question is no easier in theology than in science. [J. P.
First, there are internal conceptual problems. These arise when the concepts within a theory appear to be vague, ambiguous, circularly defined or contradictory. For example, some have argued that the wave-particle nature of electromagnetic radiation is contradictory, that the evolutionary pathway from reptile scales to bird feathers through a series of slightly changed intermediaries is unclear and vague, that the use of imaginary time by cosmologists such as Stephen Hawking is unintelligible and that “survival of the fittest” is circularly defined. The point is not that these objections have been decisive, but rather that they are examples of internal conceptual problems. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p316.]

First, there is the covering-law or inferential model of explanation made popular by Carl G. Hempel and Ernest Nagel. According to this view, two factors make an explanation a scientific one: the logical form of the explanation and the nature of the explanation’s premises. The terms explanans and explanandum mean, respectively, “that which does the explaining” and “that which is to be explained.” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p317.]

There are compositional or structural explanations: the properties of an object are explained in terms of the properties or structural relations of its parts. There are historical explanations, which explain the properties and existence of an object in terms of the temporal development and history of the object and its ancestors. With functional explanations the capacities of an object are explained in terms of the function they play in some system— the function of x (the heart) is to do y (pump blood). Transitional explanations explain a change of state in some object in terms of some disturbance in the object and the state of the object at the time of the disturbance. Finally, there are intentional explanations, which explain the behavior of an organism or the existence of some state of affairs in terms of the beliefs, desires, fears and intentions of that organism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p319,
• There is no reason that can be derived from the nature of scientific explanation for why the same type of argument could not be used to explain some sort of phenomenon in biology or a related field, say in explaining the origin of life. Whether or not the explanation would be a good one would, of course, largely be a scientific question. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p320.]

• In sum, falsificationism is the view that positive test results only show that the theory has so far not been falsified and that it is possibly true. Justificationism is the view that in one way or another, positive test results increase the probability that the theory is true and give it positive support. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p321, 322.]

• For one thing, there are three basic ways to distinguish a law from a theory. One way is to hold that a theory is roughly a hypothesis and, if it becomes well confirmed, can graduate to the status of a law. On this view, the only difference between the two is that a theory should be held tentatively and a law should be held firmly; that is, the differences lie in their relative degree of epistemological strength. While this way of speaking is fairly popular, it is the least helpful for understanding the nature of scientific methodology and thus is not widely used among philosophers of science. A second way to distinguish a law from a theory focuses on their relative degrees of generality—a theory is broader in scope than is a law. (...) A third way to distinguish theories from laws is embraced especially by those who hold to some form of scientific realism (see chap. 16) and who hold to the realist, causal model of scientific explanation discussed earlier in this chapter. On this view, laws merely describe the lawlike regularities that are observed in nature, and theories explain those regularities by offering a model for the theoretical entities, structures and processes thought to be causally responsible for those regularities. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p323.]

• Two different types exist: extrinsic and intrinsic goals of science. Extrinsic goals are the motives or reasons that scientists do science—for example,
glorify God, to exert power over nature, to protect the environment, etc. More important for assessing the truthfulness or epistemic strength of a scientific theory are intrinsic goals. These goals are the epistemic virtues that scientists seek: simple theories, empirically accurate theories and so forth. Further, part of understanding intrinsic scientific goals is how we should interpret a scientific law or theory that embodies various epistemic virtues and is, therefore, a “good” theory. Do scientists seek virtuous theories because they seek true theories that accurately describe the real world or do they seek virtuous theories because such theories work and are useful fictions? Scientific realists adopt the former view of intrinsic scientific goals, and scientific antirealists adopt the latter. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p324.]

16 The Realism-Antirealism Debate

- If scientific realism is accepted as the correct view of a scientific theory—for example, the idea that by employing the notion of imaginary time as something real, one can avoid postulating that the universe had a beginning—then if that theory seems to run counter to some theological affirmation, say, that the universe had a beginning, then Christians will either have to refute that scientific theory, adjust their understanding of the theological affirmation or adopt a different strategy. Thus much depends on what it means for a theory to be well established or successful. This, in turn, is related to the debate about realism and antirealism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p327.]

- However, if antirealism is adopted for and limited to scientific theories, then one would not take a well-established scientific theory to be true or approximately true—perhaps the theory is just a useful fiction—and there will be no pressure to adjust the truth of the theological affirmation. For example, if a theologian believes that all physical events have causes, and if quantum physics seems to deny this, then if quantum theory is taken in an antirealist way, there would be no need to adjust one’s view of causation. On the other hand, there may be dangers in adopting antirealism for scientific theories because, once this move is made, it may be difficult to limit

- Scientific realism was a minority view in the first half of the twentieth century, at least among the more vocal philosophers, but is now the majority position among current philosophers of science. Prominent scientific realists are Ernan McMullin, Richard Boyd, W. H. Newton-Smith, Karl Popper and Rom Harré. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p329.]

- According to this argument, scientific realism is the best explanation for the fact that (1) our theories actually work (i.e., embody various epistemic virtues); (2) science makes progress in solving its problems; (3) often, a scientific theory will have a host of independent, empirical confirmations for it that converge together to support the theory, even if some of those empirical confirmations were not originally conceived as part of the domain for which the theory was thought to be responsible. Scientific realists claim that the best explanation for these three facts is that our theories succeed in laying hold of reality and giving at least approximately true descriptions of what really exists. For the scientific realist, it is because our theories capture the way the world is that those theories embody epistemic virtues, allow us to solve problems, obtain empirical confirmation and can be extended into new, previously unthought-of domains of investigation. If we abandon scientific realism, say its advocates, these facts about science can only be regarded as fortuitous miracles. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p332.]

- Among other things, phenomenalism is an epistemological doctrine that includes a view about the nature of perception. It was discussed in chapter eight, and thus it will only be briefly treated here with special focus on the way phenomenalism relates to the nature of science. Phenomenalism is a view that was more popular earlier in this century. Major proponents of one form or another of phenomenalism have been Benjamin Brodie, Ernst Mach and A. S. Eddington. Essentially, phenomenalism is a radical empiricist theory of epistemology to the effect that all our knowledge is derived from
and is about immediate sensory experiences. Applied to science, the view implies that scientific knowledge is about what can be directly observed. Any thing or process that cannot be perceived cannot be supposed to exist for science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p336.]

- Operationalism, occasionally called operationism, is an approach to science very similar to phenomenalism. Its major proponent has been P. W. Bridgman (1882-1962). Whereas phenomenalism links scientific terms, laws and theories to actual or possible sensory experiences, operationalism links them to actual or possible laboratory operations. For the phenomenalist, scientific laws and theoretical terms really refer not to mind-independent entities and events but to mind-dependent sensations. For the operationalist, scientific laws and theoretical terms really refer to experimental activities and operations. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p337.]

17 Philosophy and The Integration of Science and Theology

- The theorist who maintains that science is the be-all and end-all—that what is not in science textbooks is not worth knowing—is an ideologist with a peculiar and distorted doctrine of his own. For him, science is no longer a sector of the cognitive enterprise but an all-inclusive world-view. This is the doctrine not of science but of scientism. To take this stance is not to celebrate science but to distort it. [NICHOLAS RESCHER, THE LIMITS OF SCIENCE] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p346.]

- Scientism, expressed in the quotation by Rescher at the beginning of the chapter, is the view that science is the very paradigm of truth and rationality. If something does not square with currently well-established scientific beliefs, if it is not within the domain of entities appropriate for scientific investigation, or if it is not amenable to scientific methodology, then it is not true or rational. Everything outside of science is a matter of mere belief and subjective opinion, of which rational assessment is impossible. Science, exclusively and ideally, is our model of intellectual excellence. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p346, 347.]

[72]
Strong scientism is the view that some proposition or theory is true and/or rational to believe if and only if it is a scientific proposition or theory; that is, if and only if it is a well-established scientific proposition or theory that, in turn, depends on its having been successfully formed, tested and used according to appropriate scientific methodology. There are no truths apart from scientific truths, and even if there were, there would be no reason whatever to believe them. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p347.]

Advocates of weak scientism allow for the existence of truths apart from science and are even willing to grant that they can have some minimal, positive rationality status without the support of science. But advocates of weak scientism still hold that science is the most valuable, most serious and most authoritative sector of human learning. Every other intellectual activity is inferior to science. Further, there are virtually no limits to science. There is no field into which scientific research cannot shed light. To the degree that some issue or belief outside science can be given scientific support or can be reduced to science, to that degree the issue or belief becomes rationally acceptable. Thus we have an intellectual and perhaps even a moral obligation to try to use science to solve problems in other fields that, heretofore, have been untouched by scientific methodology. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p347.]

Advocates of weak scientism are claiming that fields outside science gain if they are given scientific support and not vice versa. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p347.]

If either strong or weak scientism is true, this would have drastic implications for the integration of science and theology. If strong scientism is true, then theology is not a cognitive enterprise at all and there is no such thing as theological knowledge. If weak scientism is true, then the conversation between theology and science will be a monologue with theology listening to science and waiting for science to give it support. For thinking Christians, either of these alternatives is unacceptable. What, then, should we say about scientism? [J. P. Moreland & William Craig: *Philosophical Foundations for*]
Note first that strong scientism is self-refuting (see chap. 2 for a treatment of self-refutation). Strong scientism is not itself a proposition of science, but a second-order proposition of philosophy about science to the effect that only scientific propositions are true and/or rational to believe. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p347.]

First, scientism (in both forms) does not adequately allow for the task of stating and defending the necessary presuppositions for science itself to be practiced (assuming scientific realism). Thus scientism shows itself to be a foe and not a friend of science. Science cannot be practiced in thin air. In fact, science itself presupposes a number of substantive philosophical theses which must be assumed if science is even going to get off the runway. Now each of these assumptions has been challenged, and the task of stating and defending these assumptions is one of the tasks of philosophy. The conclusions of science cannot be more certain than the presuppositions it rests on and uses to reach those conclusions. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p348.]

Strong scientism rules out these presuppositions altogether because neither the presuppositions themselves nor their defense are scientific matters. Weak scientism misconstrues their strength in its view that scientific propositions have greater epistemic authority than those of other fields like philosophy. This would mean that the conclusions of science are more certain than the philosophical presuppositions used to justify and reach those conclusions, and that is absurd. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p348.]

John Kekes strikes at the heart of weak scientism: A successful argument for science being the paradigm of rationality must be based on the demonstration that the presuppositions of science are preferable to other presuppositions. That demonstration requires showing that science, relying on these presuppositions, is better at solving some problems and achieving some ideals than its competitors. But showing that cannot be the task of science. It is, in fact, one task of philosophy. Thus the enterprise of justifying the
presuppositions of science by showing that with their help science is the best way of solving certain problems and achieving some ideals is a necessary precondition of the justification of science. Hence philosophy, and not science, is a stronger candidate for being the very paradigm of rationality. [John Kekes, The Nature of Philosophy (Totowa, N.J.: Rowman & Littlefield, 1980), p. 158.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p348.]

- Here is a list of some of the philosophical presuppositions of science: (1) the existence of a theory-independent, external world; (2) the orderly nature of the external world; (3) the knowability of the external world; (4) the existence of truth; (5) the laws of logic; (6) the reliability of our cognitive and sensory faculties to serve as truth gatherers and as a source of justified beliefs in our intellectual environment; (7) the adequacy of language to describe the world; (8) the existence of values used in science (e.g., “test theories fairly and report test results honestly”); (9) the uniformity of nature and induction; (10) the existence of numbers. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p348.]

- The problem of induction is the problem of justifying such inferences. It is usually associated with David Hume. Here is his statement of it: It is impossible, therefore, that any arguments from experience can prove this resemblance of the past to the future, since all these arguments are founded on the supposition of that resemblance. Let the course of things be allowed hitherto ever so regular, that alone, without some new argument or inference, proves not that for the future it will continue so. In vain do you pretend to have learned the nature of bodies from your past experience. Their secret nature, and consequently, all their effects and influence, may change without any change in their sensible qualities. This happens sometimes, and with regard to some objects. Why may it not happen always, and with regard to all objects? What logic, what process of argument secures you against this supposition? My practice, you say, refutes my doubts. But you mistake the purport of my question. As an agent, I am quite satisfied in the point; but as a philosopher who has some share of curiosity, I will not say skepticism, I want to learn the foundation of this inference. [2David Hume, An Inquiry Concerning Human Understanding (1748; Indianapolis: Bobbs-Merrill,
Now the debate about the existence and nature of numbers is a philosophical one, and thus stating the debate and defending the existence of numbers is another philosophical task presuppositional to science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p349.]

In sum, scientism in both forms is inadequate. There are domains of knowledge outside and independent of science, and while we have not shown this here, theology is one of those domains. How, then, should the domains of science and theology be integrated? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p350.]

According to these models: A. Science and theology focus on two distinct, nonoverlapping areas of investigation, viz. the natural and the supernatural. B. Science and theology involve two different, complementary approaches to and descriptions of the same reality from different perspectives. Each involves a different level of description, tells us different kinds of things, and uses a different vocabulary. Each level of description is complete at its own level without having gaps in its perspective. Nevertheless, each is only a partial description of the whole reality described. Science and theology do not directly interact with each other in epistemically positive or negative ways, but are complementary views of the total reality described. Science and theology only conflict if one field illicitly encroaches into the territory of the other field. C. Science can fill out details in theology or help to apply theological principles and vice versa. D. Theology provides the metaphysical and epistemological foundation for science by justifying or, at least, helping to justify the necessary presuppositions of science. E. Science provides the boundaries within which theology must work. Theology can do its work only after consulting science. Thus science can inform theology but not vice versa. F. Science and theology involve descriptions that can directly interact with each other in mutually reinforcing or competing ways. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*,...
This leaves us with position (F), labeled theistic science. This view, more than any of the others, allows for the possibility that science and theology may directly interact with each other in epistemically positive or negative ways. That is, (F) implies that some propositions of theology may support or gain support from science or they may conflict with and count against a scientific belief or vice versa. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p352.]

The term evolution has several meanings. It may simply mean “change over time.” This sense of evolution is uncontroversial if taken to mean that microevolution has occurred, that is, that organisms can and have changed in various ways within certain limits. The second meaning of the term is the thesis of common descent: all organisms are related by common ancestry. This is sometimes called macroevolution, especially when coupled with the third meaning of evolution: the blind watchmaker thesis. This is a thesis about the mechanism of evolution, an explanation of how evolution in the first two senses has occurred. This thesis states that the processes of evolution are nonintelligent, purposeless and completely naturalistic (e.g., through mutation, natural selection, genetic drift). [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p353.]

There are three main camps (with different subgroups within each camp) among Christians regarding the creation-evolution controversy. First, there is young earth creationism. Advocates of this view, like Duane Gish, Henry Morris and John Morris, hold that God’s work of creation took place in six literal, consecutive days of twenty-four hours and that the original creation of the universe took place recently, say ten to twenty thousand years ago. Moreover, most young earth creationists hold that the flood of Noah, understood as a universal deluge, is a major key for understanding the earth’s geological column. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p353.]

Second, there is progressive creationism (sometimes called “old earth creationists”), held by people such as Bernard Ramm, Walter Bradley and Hugh Ross, who hold that theistic evolution is scientifically and biblically
inadequate. More positively, they hold that there is strong scientific and biblical evidence for the claim that God has acted through primary causation to create at various times. Progressive creationists differ over just how often God has done this, but many progressive creationists say that God directly created each “kind” of organism (which is in need of more clarification), and most of them agree that God directly created “the heavens and earth,” first life (especially animal life) and Adam and Eve. Progressive creationists do not take the days of Genesis to be consecutive, literal twenty-four-hour periods, preferring instead to take them as long, unspecified periods of time or as six twenty-four-hour periods separated from each other by long periods of time. Either way, they view the age of the universe and earth in terms of billions of years, though most progressive creationists hold that Adam and Eve are recent creations. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p353.]

- Finally, theistic evolutionism, represented by Howard J. Van Till and Richard Bube, generally holds that theology is complementary to science, that Scripture is not a science textbook, and that methodological naturalism (according to which answers to questions are sought only within nature, within the contingent created order) is the correct posture to take while doing science. Thus theistic evolution is the proper view to take regarding origins. Accordingly, the general theory of evolution is to be taken as approximately true. Most theistic evolutionists accept all three senses of evolution listed above, except they would modify sense three. They would hold that naturalistic processes were, indeed, operative in the creation of all life and these are complementary to God’s creative and providential activity. Some theistic evolutionists hold that when God created the world in the beginning, he caused it to have functional integrity— the created world had no gaps, no functional deficiencies that would require God to act through primary causation. Rather, God implanted potentialities in his original creation such that all the various kinds of creatures would arise through normal processes as these potentialities unfold. Others hold that God simply guides and sustains the widely accepted processes of evolution and creates through secondary causation solely by means of those processes. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p353, 354.]
• The main debate between young earth and progressive creationists is over the use of the Hebrew word yom (day) in Genesis, and thus over the age of the universe and earth and over the usefulness of the flood for doing geology. They are agreed, however, that the general theory of evolution is false and that some sort of theistic science is appropriate. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p354.]

• Theistic evolutionists, on the other hand, usually hold that science presupposes methodological naturalism, that science and theology are complementary to each other, and that evolution is only a problem for Christians when it is coupled with philosophical naturalism as a broad worldview, that is, the doctrine that the natural world is all there is. Thus the dialogue among these groups is not merely one about scientific fact. It never has been, because beginning with Darwin himself, the creation-evolution controversy has significantly been a debate about philosophy of science: Should theology directly interact and enter into the very fabric of science or should science adopt methodological naturalism? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p354.]

• Thus theistic science can be understood as a research program that, among other things, utilizes the insights of theology, where appropriate, for doing science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p354.]

• Theology can provide propositions “from above” for guiding research and, in keeping with the hypothetico-deductive method, which can generate positive and negative test implications (e.g., that evidence of human origins should be found in the Mideast, that models of the universe entailing an infinite past like certain big bang models will be falsified). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p355.]

• Theology can provide and help solve external and internal conceptual problems (e.g., problems of overcoming the improbabilities of life originating by chance without a guiding intelligence). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p355.]
Theology can provide explanations for certain scientific problems and data. Some of these explanations involve the use of a primary causal act of God, and thus the use of personal agency (e.g., in solving the problem of gaps in the fossil record by noting that they are to be expected due to God’s primary causal activity in creating discrete “kinds” of organisms). Other explanations involve theological propositions that do not directly include personal agency (e.g., the notion of original sin to help explain different types of psychological defense mechanisms). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p355.]

Theology can shed light on various issues in the confirmation of scientific hypotheses in at least four ways: (a) by providing rationally justified background beliefs against which rational assessment of a specific scientific theory can be made (e.g., given the belief that man was created by a primary causal act of God, then various evidences for prehuman ancestral forms will carry less weight than they would without this background belief); (b) by yielding positive and negative results that can be tested (see [1] above); (c) by recommending certain methodological rules over others (e.g., prefer explanations of living organisms on a substance model over those that treat them as machines and property-things when the two come into conflict—see chap. 10); (d) by specifying a certain ranking of epistemic virtues in certain cases (e.g., in origin of life research, prefer theories that solve external and internal conceptual problems theologically to theories that claim to offer avenues fruitful in guiding research for naturalistic mechanisms as to how life arose). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p355.]

Theology can provide extrinsic goals for science (e.g., to glorify God, to show that our Scriptures are not in conflict with what it is reasonable to believe from sources outside them) and can help justify certain intrinsic goals for science (e.g., as we saw in chap. 16 with those Christian theists who use their theism to justify scientific realism and thus the goal of truth for scientific theories). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p355.]
• In recent years, a new movement has arisen called the intelligent design (ID) movement. Major participants in the ID movement are Phillip E. Johnson, Michael Behe, William Dembski, Jonathan Wells, Paul Nelson and Stephen Meyer. The ID movement rejects methodological naturalism and is committed to the in-principle legitimacy of theistic science. The ID movement is an entire approach to science, and as such it goes far beyond the topic of evolution. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p356.]

• Regarding evolution, ID proponents are committed to two central claims: (1) The central issue is between an intelligent design hypothesis and the blind watchmaker thesis. According to the blind watchmaker thesis, there is no scientific evidence or intellectual justification for appealing to an intelligent designer in order to explain the history of life and the existence and nature of living things and their parts. Rather, nonintelligent, purposeless naturalistic processes are fully adequate to explain all the relevant scientific facts. Advocates of ID demur and believe an intelligent design model is superior to the blind watchmaker thesis. (2) The facts that justify an inference to an intelligent designer and the inference itself are properly construed as being within the domain of science. ID proponents reject methodological naturalism and accept theistic science. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p356.]

• If theistic evolution is construed such that it includes a commitment to (1) the thesis of common descent (all life is related by a common ancestry), (2) the functional integrity of creation (subsequent to the initial creation of the universe, there are not gaps and God does not act in natural history by way of primary causal miracle) and (3) methodological naturalism, then theistic evolution is not compatible with ID theory. However, if theistic evolution is taken to include the first two commitments and not the third, then theistic evolution and ID theory are compatible. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p356.]

• Dembski analyzes cases in which insurance employees, police and forensic scientists must determine whether a death was an accident (no intelligent
cause) or brought about intentionally (done on purpose by an intelligent agent). According to Dembski, whenever three factors are present, scientific investigators are rationally obligated to draw the conclusion that the event was brought about intentionally: (1) The event was contingent, that is, even though it took place, it did not have to happen. (2) The event had a small probability of happening. (3) The event is capable of independent specifiability. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p357.]

- Dembski and other ID theorists argue that the fine-tuning of the universe, the biological information in living organisms, and other phenomena justify the scientific inference of an intelligent designer. Thus ID theorists accept theistic science and reject methodological naturalism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p358.]


- The goal of natural science: The goal of natural science is to explain contingent natural phenomena strictly in terms of other contingent natural phenomena. Explanations should refer only to natural objects and events and not to the personal choices and actions of human and divine agents. Natural science seeks knowledge of the physical properties, behavior and formative history of the physical world. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p358.]
• Methodological versus philosophical naturalism. Within science, we should adopt methodological naturalism, according to which answers to questions are sought within nature, within the contingent created order. For example, in describing how two charged electrodes separate hydrogen and oxygen gas when placed in water, the “God hypothesis” is both unnecessary and out of place. The physical universe—the world of atoms, subatomic particles and things made of atoms—is the proper object of scientific study, and methodological naturalism is the proper method for pursuing that study. Philosophical naturalism, on the other hand, is the philosophical doctrine that the natural world is all there is and that God, angels and the like do not exist. Science presupposes methodological naturalism but not philosophical naturalism, and the two should not be confused. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p358.]

• Philip Kitcher, no friend of creationism, admits this: Moreover, variants of Creationism were supported by a number of eminent nineteenth-century scientists. . . . These Creationists trusted that their theories would accord with the Bible, interpreted in what they saw as a correct way. However, that fact does not affect the scientific status of those theories. Even postulating an unobserved Creator need be no more unscientific than postulating unobservable particles. What matters is the character of the proposals and the ways in which they are articulated and defended. The great scientific Creationists of the eighteenth and nineteenth centuries offered problem-solving strategies for many of the questions addressed by evolutionary theory. [Philip Kitcher, *Abusing Science: The Case Against Creationism* (Cambridge, Mass.: MIT Press, 1982), p. 125.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p360.]

• Now some branches of science—for example, SETI (the search for extraterrestrial intelligence), archeology, forensic science, psychology and sociology—use personal agency and various internal states of agents (desires, willings, intentions, beliefs) as part of their description of the causal entities cited in their explanations of the things they try to explain. This is especially true in the historical sciences as opposed to the empirical sciences.
Thus there is nothing nonscientific about appealing to divine agency in creationist explanations of certain phenomena such as the origin of the universe, first life and human beings. At the very least, such an appeal cannot be faulted as nonscientific on the grounds that it involves an agent causal explanation and not an explanation in terms of subsumption under natural law. Moreover, such an appeal to divine agency may be especially (but not solely) appropriate where there are theological reasons to believe God acted through primary and not secondary causes. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p361.]

- For example, one often finds Darwin and other evolutionists making claims to the effect that if God were an optimal, efficient designer who was also free to use variety in his designing activities, then certain biological structures (e.g., homologous structures like the forelimbs of birds, porpoises and humans that have a similar structure but serve different purposes) would not be present because they are not very efficient nor do they show much creativity. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p361.]

- Finally, as we noted above, advocates of ID theory practice theistic science without being committed one way or another to gaps in the history of the cosmos. According to ID advocates, one can use science to discover the products of intelligent design without having any idea how those products came about. Critics who raise a “god-of-the-gaps” objection against theistic science fail take into account ID theory. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p364.]


- Nicholas Rescher has pointed out: One way in which a body of knowledge S
can deal with a question is, of course, by answering it. Yet another, importantly different, way in which S can deal with a question is by disallowing it. S disallows [Q] when there is some presupposition of Q that S does not countenance: given S, we are simply not in a position to raise Q. [Nicholas Rescher, The Limits of Science (Berkeley: University of California Press, 1984), p. 22.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p365.]

18 Philosophy of Time and Space

- In fact, Newton makes quite clear in the General Scholium to the Principia, which he added in 1713, that absolute time and space are constituted by the divine attributes of eternity and omnipresence. He writes: He [God] is eternal and infinite; . . . that is, his duration reaches from eternity to eternity; his presence from infinity to infinity. . . . He is not eternity and infinity, but eternal and infinite; he is not duration or space, but he endures and is present. He endures forever, and is everywhere present; and, by existing always and everywhere, he constitutes duration and space. Since every particle of space is always, and every indivisible moment of duration is everywhere, certainly the Maker and Lord of all things cannot be never and nowhere. [Newton, Mathematical Principles, 2:545.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p375.]

Part V Ethics

19 Ethics, Morality and Metaethics

- Ethics can be understood as the philosophical study of morality, which is concerned with our beliefs and judgments regarding right and wrong motives, attitudes, character and conduct. When an ethicist studies morality, certain value concepts are the center of focus: “right,” “wrong,” “good,” “bad,” “ought,” “duty,” “virtuous,” “blameworthy” and so on. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p393.]

- The following have been offered by a number of philosophers as a set of necessary (and/or sufficient) conditions for defining morality: 1. A judgment
is moral only if it is accepted as a supremely authoritative, overriding guide to conduct, attitudes and motives. (...)

2. A judgment is moral only if it is a prescriptive imperative that recommends actions, attitudes and motives and not merely a factual description about actions, attitudes and motives. (...)

3. A judgment is moral only if it is universalizable, that is, if it applies equally to all relevantly similar situations. (...)

4. A judgment is moral only if it makes reference to proper human flourishing, human dignity, the welfare of others, the prevention of harm and the provision of benefit. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p394, 395.]

- Metaethics involves two main areas of investigation. First, metaethics focuses on the meaning and reference of crucial ethical terms, such as right and wrong, good and bad, ought and ought not, duty, and so on. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p396.]

- Noncognitivism denies that moral statements (e.g., “X is right”) are indicative statements that can be either true or false. Consider the statement “The apple is red.” This is an indicative statement. It asserts an alleged fact which has ontological implications. It asserts that there is an apple that exists and has an existent property, redness, in it. So indicative statements have ontological implications. Further, they can be either true or false. In this case, if the apple really is red, the statement is true. If the apple were green, it would be false. So indicative statements are cognitive in the sense that they can be either true or false, and they have ontological implications because they assert that some state of affairs obtains in the world. Noncognitivist theories or moral statements, however, deny that moral statements are either true or false and that moral statements have ontological implications. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p398.]

- Imperativalism/prescriptivism agrees with emotivists that moral statements are not indicative statements of fact. But they do not think that moral statements are expressions of feeling. Rather, they hold that moral statements are merely moral commands whose sole function is to guide action. “X is right” is merely the command “Do x!” [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p398.]

[87]

- Cognitivism holds that moral statements make truth claims because they are indicative statements that convey descriptive factual information: the statement “x is right” can be either true or false. Nevertheless, cognitivist theories of the meaning of moral statements differ in what they identify as the object that ethical statements describe. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p400.]

- Subjectivism holds that moral statements convey information about the speaker of the moral statement. According to private subjectivism, “x is right” states the psychological fact that “I like x.” This differs from emotivism. Emotivism holds that moral statements merely express feelings. Private subjectivism, however, holds that moral statements do not express feelings but describe the psychological state of the speaker. An expression of feeling cannot be false. But if person A says “I dislike x,” then this can be false if A really likes x but does not want to admit it. Cultural relativism is the view that statements like “x is right” state the sociological fact that “We in our culture like x.” [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p400.]

- Ethical naturalism is a reductionist view that holds that ethical terms (goodness, worth and right) can be defined by or reduced to natural, scientific properties that are biological, psychological, sociological or physical in nature. For example, according to ethical naturalism the term right in “X is right” means one of the following: “What is approved by most people”; “What most people desire”; “What is approved by an impartial, ideal observer”; “What maximizes desire or interest”; “What furthers human survival.” The important point here is that these moral terms and moral properties are not irreducibly moral in nature. Moral properties (e.g., worth, goodness or rightness) turn out to be properties that are biological or psychological. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p401.]

- Ethical nonnaturalism is the only view we have considered that holds that irreducible moral facts and properties really exist as part of the furniture of
the universe. In addition to natural properties (redness and so forth), there are moral properties (rightness, goodness, worth), which persons and acts have and which moral statements ascribe to persons and acts. “X is right” ascribes an unanalyzable, irreducible moral property to X, just as “The apple is red” ascribes the natural property redness to the apple. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p401.]

- Mackie argues: If there were objective values, then they would be entities or qualities or relations of a very strange sort, utterly different from anything else in the universe. Correspondingly, if we were aware of them, it would have to be by some special faculty of moral perception or intuition, utterly different from our ordinary ways of knowing everything else. [J. L. Mackie, *Ethics: Inventing Right and Wrong* (New York: Penguin, 1977), p. 38.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p402.]

- Mackie’s objection is a mere assertion of bias in favor of naturalism. It seems reasonable to say that if a physicalist version of philosophical naturalism is true, then objective moral values do not exist. But it is often the case in philosophy that one person’s modus ponens is another’s modus tollens. Mackie would affirm the antecedent and deny the objectivity of moral values. However, an opponent would deny the consequence and thus deny that a physicalist version of philosophical naturalism is true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p402.]

### 20 Ethical Relativism and Absolutism

- Louis Pojman observes: Eskimos allow their elderly to die by starvation, whereas we believe that this practice is morally wrong. The Spartans of ancient Greece believed, and Dobu of New Guinea believe today, that stealing is morally right, but we believe that it is wrong. The Nuer of East Africa throw deformed infants to the hippopotamus, but we abhor infanticide. Ruth Benedict describes a tribe in Melanesia that views cooperation and kindness as vices, and Colin Turnbull had documented that the Ik in Northern Uganda have no sense of duty toward their children or parents. Some societies make it a duty for children to kill (sometimes...
strangle) their aging parents. Eskimos sometimes abandon their elderly as they move on to new locations. Sexual practices vary over time and clime. Some cultures permit homosexual behavior, whereas others condemn it. Some cultures practice cannibalism, whereas we detest it. Cultural relativism is well documented, and custom seems “king o’er all.” [Louis P. Pojman, Ethics: Discovering Right and Wrong (Belmont, Calif.: Wadsworth, 1990), p. 19.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p406, 407.]

- In general, a fact or factual belief involves a description about the way the world is: empirically, metaphysically, religiously. Some descriptions have nothing to do with morality, such as, “The lamp is on the desk.” If a descriptive statement does involve morality, then it is a statement about morality; for example, “Most people in America think racism is wrong.” In contrast, a value or value belief involves the adherence to some moral proposition that prescribes what morally ought to be. An “ought” statement makes a prescription. Moral, prescriptive statements are statements of morality, e.g., “Racism is wrong” or “Racism is morally permissible.” [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p407.]

- Differences in factual beliefs can play a decisive role in ethical disagreements. For example, when a Jehovah’s Witness refuses a blood transfusion and dies, does this imply that he or she accepts the moral appropriateness of suicide? Not at all. Jehovah’s Witnesses may agree with others that suicide is morally forbidden. But because they believe that God disapproves of eating blood and transfusions are examples of eating blood, these religious factual beliefs lead them to the following position: An act of refusing a blood transfusion is not an act of suicide but rather an act of sacrificing one’s life for God. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p408.]

- First, a moral dispute can be about a factual difference. For example, debates about abortion sometimes involve debates about whether the fetus is a person or a human being. Such a debate is a factual debate, not primarily a moral one, though of course it has serious moral implications. Both sides in the debate can agree that murder or manslaughter is wrong, but they differ about
whether abortion is murder or manslaughter because they have different factual beliefs about the status of the fetus. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p408.]

- To begin with, a value difference can occur when one side affirms and the other side denies a moral proposition, such as the proposition that it is wrong to intentionally kill an innocent human being. On the other hand, a value difference can occur when both sides accept two or more moral principles, but weigh their relative strengths differently. For example, the right to life and the right to choice could both be embraced by each side of the abortion debate, but the two sides weigh them differently. Pro-life advocates could hold that the right to life takes precedence over the right to choose, and pro-choice advocates could reverse this order. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p408, 409.]

- Someone could respond that sometimes the fact that people cannot agree about something shows that there is no real fact of the matter at stake, that is, that no one is right and no one is wrong. On the other hand, from the simple existence of unresolved disagreements about something it still does not follow that no one is right. This further conclusion needs to be argued for, not merely asserted. Moreover, if a case can be made for true moral values (see below), then the presence of disagreements in moral views shows something other than the relative truth value of moral statements—for example, that people often form their moral views for self-serving, sinful reasons. Finally, ethical differences may not be as widespread as many people think. This leads to a second observation. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p409.]

- A second ethical thesis is called normative relativism or ethical relativism. This substantive moral thesis holds that everyone ought to act in accordance with the agent’s own society’s code. What is right for one society is not necessarily right for another society. (…) Put differently, normative relativism implies that moral propositions are not simply true or false. Rather, the truth values of moral principles themselves are relative to the beliefs of a

- The majority of moral philosophers and theologians do not embrace normative relativism because of the seriousness of the criticisms raised against it. First, it is difficult to define what a society is or to specify in a given case what the relevant society is. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p410.]

- Second, a related objection is the fact that we are often simultaneously a member of several different societies that may hold different moral values: our nuclear or extended family; our neighborhood, school, church or social clubs; our place of employment; our town, state, country and the international community. Which society is the relevant one? What if I am simultaneously members of two societies and one allows but the other forbids a certain moral action? What do I do in this case? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p410.]

- Third, normative relativism suffers from a problem known as the reformer’s dilemma. If normative relativism is true, then it is logically impossible for a society to have a virtuous, moral reformer like Jesus Christ, Gandhi or Martin Luther King Jr. Why? Moral reformers are members of a society who stand outside that society’s code and pronounce a need for reform and change in that code. However, if an act is right if and only if it is in keeping with a given society’s code, then the moral reformer is by definition an immoral person, for his views are at odds with those of his society. Moral reformers must always be wrong because they go against the code of their society. But any view that implies moral reformers are impossible is defective. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p411.]

- A fourth thesis often associated with ethical relativism is ethical skepticism. This is the view that no one’s ethical beliefs are true, or even if they are, no one is ever in a position to know that they are true. There are two main versions of ethical skepticism: an epistemological version and an ontological one. The epistemological version does not state that there are no objective
moral values that are true; it merely holds that even if such values exist, we can never know what they are. The ontological version of ethical skepticism claims that there is no moral knowledge because there are simply no objective moral truths to be known. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p413.]

- First, one could adopt the standpoint of particularism and claim that it is self-evidently true that some things are simply right or wrong—mercy as such is a virtue; rape as such is wrong. The skeptic could respond that this claim is question-begging. He could ask us how we know these things are wrong. The particularist could reply that one does not need a criterion that tells us how we know the above claims before we are rationally entitled to make them. Further, we have more grounds for believing that mercy as such is a virtue than we have for believing that ethical skepticism is true. Thus the burden of proof seems to be on the skeptic in this case. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p413.]

- A statement is self-refuting if it falsifies itself and thus cannot be true. The statements “I do not exist,” “There are no truths whatever,” “I cannot utter a sentence in English” (uttered in English) are all selfrefuting. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p414.]

- Finally, if ethical skepticism is true, one cannot recommend any moral behavior whatever, including toleration of different moral opinions or even the alleged moral obligation to be skeptical. One cannot deny the existence or knowability of moral “oughts” in one breath and affirm a moral “ought” in the next breath; at least one cannot do this and remain consistent. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p414.]

- To understand this position, we need to make a distinction between a formal and a material moral principle. A formal principle states necessary conditions for the thing in question and gives the structure of that thing. It can be likened to the mold used to form a statue. It provides the necessary structure for what that statue will be like, but by itself it is not a statue. A material principle
states a sufficient condition for the thing in question and gives its content. The material principle is like the content you pour into the mold to get the statue. The whole statue is a combination of its formal and material principle. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p414.]

- Combinatorial relativism is a view that combines a formal principle, taken as a moral absolute, with a material principle that is taken to be relative. For example, some versions of combinatorial relativism state that we ought to respect creatures with biographical lives, or that we have a duty to pursue the good life and to allow others to do the same, or we have a duty not to harm others. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p414.]

- According to the classical sense of the principle of tolerance, a person holds that his own moral views are true and those of his opponent are false. But he still respects his opponent as a person and his right to make a case for his views. Thus someone has a duty to tolerate a different moral view, not in the sense of thinking it is morally correct, but quite the opposite, in the sense that a person will continue to value and respect one’s opponent, to treat him with dignity, to recognize his right to argue for and propagate his ideas and so forth. Strictly speaking, on the classic view, one tolerates persons, not their ideas. In this sense, even though someone disapproves of another’s moral beliefs and practices, he or she will not inappropriately interfere with them. However, it is consistent with this view that a person judges his opponent’s views to be wrong and dedicates himself to doing everything morally appropriate to counteract those views, such as using argument and persuasion. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p415, 416.]

- The modern version of tolerance, popular in the general culture, goes beyond the classical version in claiming that one should not even judge that other people’s viewpoints are wrong. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p416.]

- What does it mean to claim that some moral principle P is an absolute? There are at least three answers to this question. First, one can mean that P is

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objectively and unchangingly true irrespective of the beliefs of individuals or cultures. Someone who holds this form of absolutism would embrace one or more of the following: (1) Moral statements have truth values which make no reference to the beliefs of individuals or cultures. (2) There are objectively good/bad arguments for the truth of moral positions people take. (3) Nonmoral facts (e.g., persons exist) and moral facts (irreducibly moral properties like goodness) are relevant to the assessment of the truth value of moral statements. (4) When two moral statements conflict, only one can be true. (5) There is a single true morality. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p416.]

- A second understanding of an absolute is as follows. A moral absolute is true and completely exceptionless. This is sometimes put by saying that a moral absolute is universalizable: it is equally binding on all people at all times in relevantly similar circumstances. An exception to a moral principle is a case in which that principle normally applies, but for some reason it does not apply in this particular instance. On this understanding of a moral absolute, moral principles have no exceptions. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p417.]

- First, since one must either be a relativist or an absolutist, then arguments against relativism count as arguments for absolutism. An absolutist can try to show that the various forms of relativism are inadequate and use this as evidence for absolutism. For example, one can point out that if absolutes are denied, then morally unacceptable and irrational consequences follow. For example, if there are no absolutes, one could argue, then what Hitler and the Nazis did to the Jews was not plain and simply wrong, but only wrong in some lesser, relative sense. If this conclusion is unacceptable, then the premise that led to it (there are no absolutes) must be false. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p421.]

- Second, one can try to show that absolutes are to be expected, given that a certain worldview is judged reasonable. For example, theists or Platonists (those who hold that objective properties and propositions, including moral
ones, exist whether or not they come from some divine being) could cite the fact that their worldview has this result: Absolute morality is at home in their conceptions of the world and is to be expected. On the other hand, physicalistic or naturalistic worldviews labor to justify moral absolutes in a way not necessary for theism or Platonism, because objective moral properties and propositions that refer to human beings are odd and surprising within their worldview. This type of argument moves the debate to the level of general worldview and the relationship between a worldview and objective morality. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p421.]

- Finally, one can seek to justify belief in the existence of moral absolutes by appealing to fundamental, basic, moral intuitions. We have already had occasion to see examples of this strategy. The moral relativist can respond that such appeals are question-begging. The issue boils down to different views of the burden of proof regarding moral relativism (cf. chap. 4). The absolutist believes that there are more grounds for believing these basic intuitions than there are for believing that relativism is true. The mere fact that it is logically possible that he or she is wrong is not sufficient to grant victory to the relativist. The relativist holds the opposite view and claims that the possibility of error is sufficient to justify abandonment of the claim to know that certain moral propositions are objectively true. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p421.]

- Princeton philosopher Saul Kripke once remarked that it was difficult to see what could be said more strongly for a view than that it squared with one’s basic, reflective intuitions. Kripke’s remark reminds us that in philosophy, ethical theory included, intuitions play an important role. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p422.]

- What is an intuition? The philosophical use of intuition does not mean a mere hunch or a prereflective expression of, say, a moral attitude. Nor is it a way of playing it safe, as when one says, “My intuition tells me that P is true but I really don’t know, and if you chose to accept P, you do so at your own risk.” While philosophers differ over a precise definition of intuitions, a common
usage defines an intuition as an immediate, direct awareness or acquaintance with something. An intuition is a mode of awareness—sensory, intellectual or otherwise—in which something seems or appears to be directly present to one’s consciousness. For example, one can have a sensory intuition of a table or an intellectual intuition of a conceptual truth, for instance, that $2 + 2 = 4$. Intuitions are not infallible, but they are prima facie justified. That is, if one carefully reflects on something, and a certain viewpoint intuitively seems to be true, then one is justified in believing that viewpoint in the absence of overriding counterarguments (which will ultimately rely on alternative intuitions). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p422.]

21 Normative Ethical Theories: Egoism and Utilitarianism

- Roughly, deontological ethics focuses on right and wrong moral actions and moral laws and holds that some moral acts and rules are intrinsically right or wrong irrespective of the consequences produced by doing those acts or following those rules. According to deontological ethics, morality is its own point, at least in part, and moral duty should be done for its own sake. By contrast, virtue ethics focuses on the nature and formation of a good person, and the sort of dispositions and character traits that constitute the good person. According to virtue ethics, the good person is the one who is functioning properly, that is, as a human ought to function and thus is one who is skilled at life. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p446.]
- The term deontology comes from the Greek word deon, which means “binding duty.” Accordingly, the essence of deontological approaches to ethics lies in the notion that duty should be done for duty’s sake. Moral rightness or duty is, in part, independent of the nonmoral good realized in the consequences of moral acts. On this view, a moral act is right when it conforms to the relevant, correct principle of moral duty. A correct principle of moral duty is one that is intrinsically right or derived from a principle that is intrinsically right. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p447.]
- Something has intrinsic value just in case it is valuable as an end in itself—for example, friendship. Something has instrumental value just in case it is
valuable as a means to an end—for example, money. Some things can exemplify both kinds of value. Thus friendship is intrinsically good and also a means to pleasure. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p447.]

- Moral value, sometimes called rightness, is the value possessed by moral acts and rules. Nonmoral value, sometimes called goodness, is the value possessed by things besides moral acts and rules—for example, pleasure, beauty, health, friendship. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p447.]
- Now according to utilitarianism, rightness is merely an instrumental value, that is, rightness is simply a means for obtaining goodness, namely, the maximization of utility, which, as we saw in chapter twenty-one, has been defined differently by various advocates of utilitarianism. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p447.]
- On a deontological theory, persons have intrinsic value simply as such and ought not be treated solely as a means to an end. According to utilitarianism, persons do not have intrinsic value; rather, they have value as units that contain utility. On this view, persons do not have intrinsic value simply as persons. Rather, they are in some sense “bundles of nonmoral good,” and as such they have value insofar as they exemplify pleasure, health and so forth. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p448.]
- Regarding social relationships, utilitarianism implies that there is one fundamental moral relationship between people, namely, the relationship of benefactor to beneficiary. On this view, people relate to each other morally as recipients or creators of utility. On a deontological view, there is a wide range of special social relationships that create their own special, intrinsic moral duties: parent-child, promisor-promisee, employer-employee and so forth. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p448.]
- In these moral actions, we may distinguish four things: a motive, an intent, a means, and a consequence. A motive is why one acts. Jack’s motive was a feeling of love; Jill’s was greed. An intent is what act one actually performs.
The intent answers the question “What sort of act was it?” Jack’s intent was to show kindness toward his grandmother and he performed an act of kindness. Jill’s intent was to secure a place in the will, and her act was one of attempting to secure that place. The means is the way an agent purposely carries out his or her intention. Jack and Jill each perform the same means, namely, each spends the afternoon visiting with the grandmother. Finally, the consequence is the state of affairs produced by the act. In each case, the grandmother was cheered up. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p448.]

- For the utilitarian, the consequences of the act are the sole intrinsic factor that determines its moral worth. Means are evaluated according to their effectiveness in securing the maximization of utility. Intentions and motives are assessed morally in the same way. Intentions and motives receive moral praise and blame not because some are intrinsically right or wrong, but on the basis of whether or not those acts of moral praise or blame will themselves maximize utility. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p449.]

- Virtue theory, also called aretaic ethics (from the Greek word arete3, “virtue”), has a long and distinguished pedigree, going back to Aristotle and Plato, running through Thomas Aquinas, and including many contemporary advocates. Virtue ethicists sometimes claim that deontological ethics fails because it abstracts from the moral agent himself, it focuses entirely on doing the right things instead of on being a good person, and it provides little guidance for understanding how to develop ethical character and moral motivation. By contrast, central to virtue ethics is the question of what a good person is and how a good person is developed. Further, the claim is made that deontological ethics places too much emphasis on moral autonomy, whereas virtue theory includes an emphasis on community and relationships. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p454.]
Part VI Philosophy of Religion and Philosophical Theology

23 The Existence of God I

- Within the discipline of philosophy of religion certain standard topics have emerged, such as the nature of religious language (Do sentences having religious content make factual assertions which are either true or false?); religious epistemology (How can one be justified or warranted in believing religious truth claims?); the existence of God (Is there such a being as God?); the coherence of theism (Does the concept of God make sense?); the problem of evil (Does the suffering in the world preclude God’s existence?); comparative religions (How are the religious truth claims of other religious faiths to be evaluated?); the problem of miracles (How should divine action in the natural world be understood?); the soul and immortality (What is the nature of man and life after death?); religious experience (Can we experience God and how?); and revealed religious doctrines (How are we to understand doctrines such as the Trinity, the Incarnation, heaven and hell, providence, predestination, biblical inspiration and a host of other doctrines?). [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p464.]

- The cosmological argument is a family of arguments that seek to demonstrate the existence of a Sufficient Reason or First Cause of the existence of the cosmos. The roll of the defenders of this argument reads like a Who’s Who of western philosophy: Plato, Aristotle, ibn Sina, al-Ghazali, Maimonides, Anselm, Aquinas, Scotus, Descartes, Spinoza, Leibniz and Locke, to name but some. The arguments can be grouped into three basic types: the kalam cosmological argument for a First Cause of the beginning of the universe, the Thomist cosmological argument for a sustaining Ground of Being of the world, and the Leibnizian cosmological argument for a Sufficient Reason why something exists rather than nothing. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p465.]

- A simple statement of a Leibnizian cosmological argument runs as follows: 1. Every existing thing has an explanation of its existence, either in the necessity of its own nature or in an external cause. 2. If the universe has an explanation of its existence, that explanation is God. 3. The universe is an
existing thing. 4. Therefore the explanation of the existence of the universe is God. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p]

- The kalam cosmological argument may be formulated as follows: 1. Whatever begins to exist has a cause. 2. The universe began to exist. 3. Therefore, the universe has a cause. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p468.]

- This objection, however, is based on misunderstandings. In the first place, not all scientists agree that subatomic events are uncaused. A great many physicists today are quite dissatisfied with the Copenhagen interpretation of subatomic physics and are exploring deterministic theories like that of David Bohm. Thus subatomic physics is not a proven exception to premise (1). Second, even on the traditional, indeterministic interpretation, particles do not come into being out of nothing. They arise as spontaneous fluctuations of the energy contained in the subatomic vacuum, which constitutes an indeterministic cause of their origination. Third, the same point can be made about theories of the origin of the universe out of a primordial vacuum. Popular magazine articles touting such theories as getting “something from nothing” simply do not understand that the vacuum is not nothing but rather a sea of fluctuating energy endowed with a rich structure and subject to physical laws. Thus there is no basis for the claim that quantum physics proves that things can begin to exist without a cause, much less that universe could have sprung into being uncaused from literally nothing. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p469.]

- Other critics have said that premise (1) is true only for things in the universe, but it is not true of the universe itself. But the argument’s defender may reply that this objection misconstrues the nature of the premise. Premise (1) does not state merely a physical law like the law of gravity or the laws of thermodynamics, which are valid for things within the universe. Premise (1) is not a physical principle. Rather, premise (1) is a metaphysical principle: being cannot come from nonbeing; something cannot come into existence uncaused from nothing. The principle therefore applies to all of reality, and it is thus metaphysically absurd that the universe should pop into being

- Premise (2), The universe began to exist, has been supported by both deductive philosophical arguments and inductive scientific arguments. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p470.]

- The first of four arguments for this premise that we will consider is the argument based on the impossibility of the existence of an actual infinite. It may be formulated as follows: 1. An actual infinite cannot exist. 2. An infinite temporal regress of physical events is an actual infinite. 3. Therefore an infinite temporal regress of physical events cannot exist. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p470.]

- In order to assess this argument, it will be helpful to define some terms. By an actual infinite, the argument’s defender means any collection having at a time \( t \) a number of definite and discrete members that is greater than any natural number \( \{0, 1, 2, 3, \ldots\} \). This notion is to be contrasted with a potential infinite, which is any collection having at any time \( t \) a number of definite and discrete members that is equal to some natural number but which over time increases endlessly toward infinity as a limit. By exist proponents of the argument mean “have extra-mental existence,” or “be instantiated in the real world.” By a “physical event,” they mean any change occurring within the space-time universe. Since any change takes time, there are no instantaneous events. Neither could there be an infinitely slow event, since such an “event” would in reality be a changeless state. Therefore, any event will have a finite, nonzero duration. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p470.]

- Take, for example, Hilbert’s Hotel, a product of the mind of the great German mathematician David Hilbert. As a warm-up, let us first imagine a hotel with a finite number of rooms. Suppose, furthermore, that all the rooms are full. When a new guest arrives asking for a room, the proprietor apologizes, “Sorry, all the rooms are full,” and that is the end of the story. But now let us imagine a hotel with an infinite number of rooms and suppose once more that all the rooms are full. There is not a single vacant room throughout the entire
infinite hotel. Now suppose a new guest shows up, asking for a room. “But of course!” says the proprietor, and he immediately shifts the person in room #1 into room #2, the person in room #2 into room #3, the person in room #3 into room #4 and so on, out to infinity. As a result of these room changes, room #1 now becomes vacant, and the new guest gratefully checks in. But remember, before he arrived, all the rooms were full! Equally curious, according to the mathematicians, there are now no more persons in the hotel than there were before: the number is just infinite. But how can this be? The proprietor just added the new guest’s name to the register and gave him his keys—how can there not be one more person in the hotel than before? [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p471.]

- For instance, is not every finite distance capable of being divided into 1/2, 1/4, 1/8, . . . , on to infinity? Does that not prove that there are in any finite distance an actually infinite number of parts? The defender of the argument may reply that this objection confuses a potential infinite with an actual infinite. He will point out that while you can continue to divide any distance for as long as you want, such a series is merely potentially infinite, in that infinity serves as a limit that you endlessly approach but never reach. If you assume that any distance is already composed out of an actually infinite number of parts, then you are begging the question. You are assuming what the objector is supposed to prove, namely that there is a clear counterexample to the claim that an actually infinite number of things cannot exist. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p472.]

- The second argument against the possibility of an infinite past that we will consider is the argument based on the impossibility of forming an actual infinite by successive addition. It may be formulated as follows: 1. The temporal series of physical events is a collection formed by successive addition. 2. A collection formed by successive addition cannot be an actual infinite. 3. Therefore, the temporal series of physical events cannot be an actual infinite. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p473.]

- Here one does not assume that an actual infinite cannot exist. Even if an actual
infinite can exist, it is argued that the temporal series of events cannot be such, since an actual infinite cannot be formed by successive addition, as the temporal series of events is. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p473.]

- But such an objection fails to reckon with two crucial disanalogies of an infinite past to Zeno’s paradoxes: whereas in Zeno’s thought experiments the intervals traversed are potential and unequal, in the case of an infinite past the intervals are actual and equal. The claim that Achilles must pass through an infinite number of halfway points in order to cross the stadium is questionbegging, for it already assumes that the whole interval is a composition of an infinite number of points, whereas Zeno’s opponents, like Aristotle, take the line as a whole to be conceptually prior to any divisions which we might make in it. Moreover, Zeno’s intervals, being unequal, sum to a merely finite distance, whereas the intervals in an infinite past sum to an infinite distance. Thus his thought experiments are crucially disanalogous to the task of traversing an infinite number of equal, actual intervals to arrive at our present location. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p475.]

- In 1917, Albert Einstein made a cosmological application of his newly discovered gravitational theory, the general theory of relativity (GTR). In so doing he assumed that the universe exists in a steady state, with a constant mean mass density and a constant curvature of space. To his chagrin, however, he found that GTR would not permit such a model of the universe unless he introduced into his gravitational field equations a certain “fudge factor” in order to counterbalance the gravitational effect of matter and so ensure a static universe. Unfortunately, Einstein’s static universe was balanced on a razor’s edge, and the least perturbation would cause the universe either to implode or to expand. By taking this feature of Einstein’s model seriously, the Russian mathematician Alexander Friedman and the Belgian astronomer Georges Lemaître were able to formulate independently in the 1920s solutions to the field equations which predicted an expanding universe. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p476.]

- In 1929 the astronomer Edwin Hubble showed that the red-shift in the optical...
spectra of light from distant galaxies was a common feature of all measured galaxies and was proportional to their distance from us. This red-shift was taken to be a Doppler effect indicative of the recessional motion of the light source in the line of sight. Incredibly, what Hubble had discovered was the isotropic expansion of the universe predicted by Friedman and Lemaître on the basis of Einstein’s GTR. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p476.]

- According to the Friedman-Lemaître model, as time proceeds, the distances separating galactic masses become greater. It is important to understand that as a GTR-based theory, the model does not describe the expansion of the material content of the universe into a preexisting, empty space, but rather the expansion of space itself. The ideal particles of the cosmological fluid constituted by the galactic masses are conceived to be at rest with respect to space but to recede progressively from one another as space itself expands or stretches, just as buttons glued to the surface of a balloon would recede from one another as the balloon inflates. As the universe expands, it becomes less and less dense. This has the astonishing implication that as one reverses the expansion and extrapolates back in time, the universe becomes progressively denser until one arrives at a state of “infinite density” (This should not be taken to mean that the density of the universe takes on a value of )0 but rather that the density of the universe is expressed by a ratio of mass to volume in which the volume is zero; since division by zero is impermissible, the density is said to be infinite in this sense.) at some point in the finite past. This state represents a singularity at which space-time curvature, along with temperature, pressure and density, becomes infinite. It therefore constitutes an edge or boundary to space-time itself. The term “big bang” is thus potentially misleading, since the expansion cannot be visualized from the outside (there being no “outside,” just as there is no “before” with respect to the big bang). [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p476, 477.]

- The standard big bang model, as the Friedman-Lemaître model came to be called, thus describes a universe that is not eternal in the past but that came into being a finite time ago. Moreover—and this deserves underscoring—the origin it posits is an absolute origin ex nihilo. For not only all matter and energy, but space and time themselves come into being at the initial

- There can be no natural, physical cause of the big bang event, since, in Quentin Smith’s words, “it belongs analytically to the concept of the cosmological singularity that it is not the effect of prior physical events. The definition of a singularity ... entails that it is impossible to extend the spacetime manifold beyond the singularity. ... This rules out the idea that the singularity is an effect of some prior natural process.” [Quentin Smith, “The Uncaused Beginning of the Universe,” in Theism, Atheism and Big Bang Cosmology, by William Lane Craig and Quentin Smith (Oxford: Clarendon, 1993), p. 120.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p477.]

- Sir Arthur Eddington, contemplating the beginning of the universe, opined that the expansion of the universe was so preposterous and incredible that “I feel almost an indignation that anyone should believe in it—except myself.” He finally felt forced to conclude, “The beginning seems to present insuperable difficulties unless we agree to look on it as frankly supernatural.” [Arthur Eddington, The Expanding Universe (New York: Macmillan, 1933), p. 124.] [Ibid., p. 178.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p477.]

- The devil is in the details, and once you get down to specifics you find that there is no mathematically consistent model that has been so successful in its predictions or as corroborated by the evidence as the traditional big bang theory. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p477.]


- The fourth argument for the finitude of the past is also an inductive argument, this time on the basis of the thermodynamic properties of the universe. According to the second law of thermodynamics, processes taking place in a
closed system always tend toward a state of equilibrium. Now our interest in the law concerns what happens when it is applied to the universe as a whole. The universe is, on a naturalistic view, a gigantic closed system, since it is everything there is and there is nothing outside it. This seems to imply that, given enough time, the universe and all its processes will run down, and the entire universe will come to equilibrium. This is known as the heat death of the universe. Once the universe reaches this state, no further change is possible. The universe is dead. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p478.]

- There are two possible types of heat death for the universe. If the universe will eventually recontract, it will die a “hot” death. As it contracts, the stars gain energy, causing them to burn more rapidly so that they finally explode or evaporate. As everything in the universe grows closer together, the black holes begin to gobble up everything around them, and eventually begin themselves to coalesce. In time, all the black holes finally coalesce into one large black hole that is coextensive with the universe, from which the universe will never reemerge. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p478.]

- On the other hand if, as is more likely, the universe will expand forever, then its death will be cold, as the galaxies turn their gas into stars, and the stars burn out. At 1030 years the universe will consist of 90% dead stars, 9% supermassive black holes formed by the collapse of galaxies, and 1% atomic matter, mainly hydrogen. Elementary particle physics suggests that thereafter protons will decay into electrons and positrons so that space will be filled with a rarefied gas so thin that the distance between an electron and a positron will be about the size of the present galaxy. Eventually all black holes will completely evaporate and all the matter in the ever-expanding universe will be reduced to a thin gas of elementary particles and radiation. Equilibrium will prevail throughout, and the entire universe will be in its final state, from which no change will occur. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p478.]

- Now the question that needs to be asked is this: if given enough time the
universe will reach heat death, then why is it not in a state of heat death now, if it has existed forever, from eternity? If the universe did not begin to exist, then it should now be in a state of equilibrium. Like a ticking clock, it should by now have run down. Since it has not yet run down, this implies, in the words of one baffled scientist, “In some way the universe must have been wound up.” [Richard Schlegel, “Time and Thermodynamics,” in The Voices of Time, ed. J. T. Fraser (London: Penguin, 1948), p. 511.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p478, 479.]

**24 The Existence of God II**

- There are five ways in which one can prove that there is a God. [THOMAS AQUINAS SUMMA THEOLOGIAE 1A.2.3] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p482.]

- I believe also that nearly all the means which have been employed to prove the existence of God are good and might be of service, if we perfect them. [G. W. LEIBNIZ, NEW ESSAYS ON HUMAN UNDERSTANDING] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p482.]

- What is meant by fine-tuning? The physical laws of nature, when given mathematical expression, contain various constants or quantities, such as the gravitational constant or the density of the universe, whose values are not mandated by the laws themselves; a universe governed by such laws might be characterized by any of a wide range of values for such variables. By “fine-tuning” one typically means that the actual values assumed by the constants and quantities in question are such that small deviations from those values would render the universe life-prohibiting. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p482, 483.]

- Various examples of cosmic fine-tuning can be cited. The world is conditioned principally by the values of the fundamental constants—α (the fine structure constant, or electromagnetic interaction), α_G (gravitation), α_w
(the weak force), $\alpha_s$ (the strong force) and $m_p/m_e$ (proton to electron mass ratio). When one assigns different values to these constants or forces, one discovers that the number of observable universes, that is to say, universes capable of supporting intelligent life, is very small. Just a slight variation in some of these values would render life impossible. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p483.]

- In investigating the initial conditions of the big bang, one also confronts two arbitrary parameters governing the expansion of the universe: $\Omega_0$, related to the density of the universe, and $H_0$, related to the speed of the expansion. Observations indicate that at $10^{-43}$ seconds after the big bang the universe was expanding at a fantastically special rate of speed with a total density close to the critical value on the borderline between recollapse and everlasting expansion. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p483.]

- Classical cosmology serves to highlight another parameter, $S$, the entropy per baryon in the universe. The structure of the big bang must have been severely constrained in order that thermodynamics as we know it should have arisen. Not only so, but $S$ is itself a consequence of the baryon asymmetry in the universe, which arises from the inexplicable, built-in asymmetry of quarks over anti-quarks prior to $10^{-6}$ seconds after the big bang. Oxford physicist Roger Penrose calculates that the odds of the special low-entropy condition having arisen sheerly by chance in the absence any constraining principles is at least as small as about one part in $10^{10(123)}$ in order for our universe to exist. Penrose comments, “I cannot even recall seeing anything else in physics whose accuracy is known to approach, even remotely, a figure like one part in $10^{10(123)}$.” [Roger Penrose, “Time-Asymmetry and Quantum Gravity,” in Quantum Gravity 2, ed. C. J. Isham, R. Penrose and D. W. Sciama (Oxford: Clarendon, 1981), p. 249.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p483.]

- Regardless of whether one adopts Dembski’s analysis of design inferences, the key to detecting design is to eliminate the two competing alternatives of physical necessity and chance. Accordingly, a teleological argument
appealing to cosmic fine-tuning might be formulated as follows: 1. The fine-tuning of the universe is due to either physical necessity, chance or design. 2. It is not due to physical necessity or chance. 3. Therefore, it is due to design. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p]

- A T.O.E. actually has the limited goal of providing a unified theory of the four fundamental forces of nature, to reduce gravity, electromagnetism, the strong force and the weak force to one fundamental force carried by one fundamental particle. Such a theory will, we hope, explain why these four forces take the values they do, but it will not even attempt to explain literally everything. For example, in the most promising candidates for a T.O.E. to date, super-string theory or M-theory, the physical universe must be 11-dimensional, but why the universe should possess just that number of dimensions is not addressed by the theory. Hence, one must not be misled by talk of a T.O.E. into thinking that the universe possesses all its fundamental constants and quantities by physical necessity. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p485.]

- As Davies states: Even if the laws of physics were unique, it doesn’t follow that the physical universe itself is unique. . . . The laws of physics must be augmented by cosmic initial conditions. . . . There is nothing in present ideas about “laws of initial conditions” remotely to suggest that their consistency with the laws of physics would imply uniqueness. Far from it. ... It seems, then, that the physical universe does not have to be the way it is: it could have been otherwise. [Paul Davies, *The Mind of God* (New York: Simon & Schuster, 1992), p. 169.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p485.]

• Lee Smolin made the ingenious suggestion that if we suppose that black holes spawn other universes beyond our own, then universes that produce large numbers of black holes would have a selective advantage in producing offspring, so that a sort of cosmic evolution would take place. If each new universe is not an exact reproduction of its parent universe but varies in its fundamental constants and quantities, then universes that are proficient in producing black holes would have a selective advantage over those less proficient. Thus in the course of cosmic evolution universes whose fundamental parameters are finetuned to the production of black holes would proliferate. Since black holes are the residue of collapsed stars, cosmic evolution has the unintended effect of producing more and more stars and hence, more and more planets where life might form. Eventually observers would appear who marvel at the fine-tuning of the universe for their existence. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p487, 488.]

• The fatal flaw in Smolin’s scenario, wholly apart from its ad hoc and even disconfirmed conjectures, was his assumption that universes fine-tuned for black hole production would also be fine-tuned for the production of stable stars. In fact, the opposite is true: the most proficient producers of black holes would be universes that generate them prior to star formation, so that life-permitting universes would actually be weeded out by Smolin’s cosmic evolutionary scenario. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p488.]

• Given the complexity of the human organism, it is overwhelmingly more probable that human beings will evolve late in the lifetime of the sun rather than early. In fact Barrow and Tipler list ten steps in the evolution of Homo sapiens, each of which is so improbable that before it would occur the sun would have ceased to be a main sequence star and incinerated the earth! [John Barrow and Frank Tipler, The Anthropic Cosmological Principle (Oxford: Clarendon, 1986), pp. 561-65.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p489.]

• Many philosophers have argued that if God exists, then the objectivity of moral values, moral duties and moral accountability is secured, but that in
the absence of God, that is, if God does not exist, then morality is just a human convention, that is to say, morality is wholly subjective and nonbinding. We might act in precisely the same ways that we do in fact act, but in the absence of God, such actions would no longer count as good (or evil), since if God does not exist, objective moral values do not exist. Thus we cannot truly be good without God. On the other hand, if we do believe that moral values and duties are objective, that provides moral grounds for believing in God. We should thus have an axiological argument for the existence of God. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p490, 491.]

- Philosopher of science Michael Ruse writes, The position of the modern evolutionist . . . is that humans have an awareness of morality . . . because such an awareness is of biological worth. Morality is a biological adaptation no less than are hands and feet and teeth. . . . Considered as a rationally justifiable set of claims about an objective something, ethics is illusory. I appreciate that when somebody says “Love thy neighbour as thyself,” they think they are referring above and beyond themselves. . . . Nevertheless, . . . such reference is truly without foundation. Morality is just an aid to survival and reproduction, . . . and any deeper meaning is illusory. [Michael Ruse, “Evolutionary Theory and Christian Ethics,” in The Darwinian Paradigm (London: Routledge, 1989), pp. 262, 268-69.] [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p491.]

- Now it is important that we remain clear in understanding the issue before us. The question is not: Must we believe in God in order to live moral lives? There is no reason to think that atheists and theists alike may not live what we normally characterize as good and decent lives. Similarly, the question is not: Can we formulate a system of ethics without reference to God? If the nontheist grants that human beings do have objective value, then there is no reason to think that he cannot work out a system of ethics with which the theist would also largely agree. Or again, the question is not: Can we recognize the existence of objective moral values without reference to God? The theist will typically maintain that a person need not believe in God in order to recognize, say, that we should love our children. Rather, as humanist
philosopher Paul Kurtz puts it, “The central question about moral and ethical principles concerns their ontological foundation. If they are neither derived from God nor anchored in some transcendent ground, are they purely ephemeral?” [Paul Kurtz, Forbidden Fruit (Buffalo, N.Y.: Prometheus, 1988), p. 65.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p492.]

- Atheistic moral realists affirm that objective moral values and duties do exist and are not dependent on evolution or human opinion, but they also insist that they are not grounded in God. Indeed, moral values have no further foundation. They just exist. [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p492.]

- As the ethicist Richard Taylor points out, “A duty is something that is owed. . . . But something can be owed only to some person or persons. There can be no such thing as duty in isolation.” [Richard Taylor, Ethics, Faith and Reason (Englewood Cliffs, N.J.: Prentice-Hall, 1985), p. 83.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press 2003, p493.]


- This presents a pretty grim picture for an atheistic ethicist like Kai Nielsen. He writes: We have not been able to show that reason requires the moral point of view, or that all really rational persons should not be individual egoists or classical amoralists. Reason doesn’t decide here. The picture I have painted for you is not a pleasant one. Reflection on it depresses me. . . . Pure practical reason, even with a good knowledge of the facts, will not take you to morality. [Kai Nielsen, “Why Should I Be Moral?” American Philosophical Quarterly 21 (1984): 90.] [J. P. Moreland & William Craig: Philosophical Foundations for a Christian Worldview, InterVarsity Press

• Furthermore, consider the nature of moral obligation. The international community recognizes the existence of universal human rights, and many persons are willing to speak of animal rights as well. But the best way to make sense of such rights is in terms of agreement or disagreement of certain acts with the will or commands of a holy, loving God. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p495.]

• Proponents of the argument [ontological argument] claim that once we understand what God is—the greatest conceivable being or the most perfect being or the most real being—then we shall see that such a being must in fact exist. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p496.]

25 The Coherence of Theism I

• The difficulty with theism, it was said, was not merely that there are no good arguments for the existence of God, but, more fundamentally, that the notion of God is incoherent. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p501.]

• Ever since Aristotle, God has been conceived in Western philosophical theology as a necessarily existent being (ens necessarium). Christian theologians interpreted the revelation of the divine name “I am that I am” (Ex 3:14 KJV) to express the same idea of God’s necessity. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p502.]

• Aseity (from the Latin a se, “by itself”) refers to God’s self-existence or independence. God does not merely exist in every possible world (as great as that is) but, even more greatly, he exists in every world wholly independent of anything else. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p502.]
“God is spirit” (Jn 4:24), that is to say, a living, immaterial substance. God’s immateriality entails the divine attribute of incorporeality, that God is neither a body nor embodied. As a personal being, God is therefore of the order of unembodied Mind. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p507.]

As an incorporeal being, God is clearly not to be thought of as localized in space, having a certain circumscribed size and shape. The Scriptures present God as having the attribute of omnipresence; he is everywhere present in his creation in virtue of his incorporeality. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p509.]

That God is eternal is the clear teaching of the Judeo-Christian Scriptures (Ps 90:2), and God’s eternity also follows from divine necessity. For if God exists necessarily, it is impossible that he not exist; therefore he can never go out of or come into being. God just exists, without beginning or end, which is a minimalist definition of what it means to say that God is eternal. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p511.]

26 The Coherence of Theism II

Divine simplicity is a doctrine inspired by the neo-Platonic vision of the ultimate metaphysical reality as the absolute One. It holds that God, as the metaphysical ultimate, is an undifferentiated unity, that there is no complexity in his nature or being. As such, this is a radical doctrine that enjoys no biblical support and even is at odds with the biblical conception of God in various ways. According to the doctrine of divine simplicity God has no distinct attributes, he stands in no real relations, his essence is not distinct from his existence, he just is the pure act of being subsisting. All such distinctions exist only in our minds, since we can form no conception of the absolutely simple divine being. While we can say what God is not like, we cannot say what he is like, except in an analogical sense. But these predications must in the end fail, since there is no univocal element in the predicates we assign to God, leaving us in a state of genuine agnosticism about the nature of God. Indeed, on this view God really has no nature; he is

- For Aristotle, God was the Unmoved Mover, the unchanging source of all change. God’s immutability is also attested in Scripture (Mal 3:6; Jas 1:17). But the biblical authors did not have in mind the radical changelessness contemplated by Aristotle nor the immutability required by the doctrines of essential divine timelessness or simplicity. They were speaking primarily of God’s unchanging character and fidelity. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p526.]

- Although one of the biblical names of God is El-Shaddai (God Almighty), the concept of omnipotence has remained poorly understood due to its recalcitrance to analysis. Few thinkers, aside from Descartes, have been willing to affirm that the doctrine means that God can do just anything—for example, make a square triangle. Such a view has been construed as affirming universal possibilism, the doctrine that there are no necessary truths. [J. P. Moreland & William Craig: *Philosophical Foundations for a Christian Worldview*, InterVarsity Press 2003, p527.]

الحمد لله الذي بنعمته تنعم الصالحين