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# **BARRING INTELLIGENT DESIGN FROM PUBLIC SCHOOLS: A PHILOSOPHICAL AND LEGAL INQUIRY**

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## **INTRODUCTION**

Should educators be allowed to teach intelligent design in public schools? Some say, “Obviously not!” Intelligent design is the idea that a supernatural intelligence is responsible for the apparent design in nature; it is not genuine science. Intelligent design is religion, and religion should be kept out of public schools. Common sense and the Constitution of the United States require this.

Others say, “Obviously yes!” A single theory should not be jammed down students’ throats. It is an affront to common sense that a viable theory, supported by secular reasoning, should be concealed from students. Furthermore, the Constitution is silent concerning which arguments can and cannot be brought up in public schools. Tendentious constitutional interpretation is all that precludes teaching intelligent design in public schools at this time.

There is merit to both responses. In this essay, we will offer our own, but before we do, it is important to remember the observation of the great twentieth- century philosopher G.E. Moore. Moore noted that people often do not succeed in philosophical inquiry because they fail to clarify the meaning of the question to be answered.<sup>1</sup> Therefore, we will select an

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1. G.E. MOORE, *PRINCIPIA ETHICA* 1(1903).

affirmative claim and consider what propositions it might express.

To avoid repetition, we will designate this affirmative claim as “thesis T”. Thesis T reads, “Educators may teach intelligent design in public school classes.” This claim can represent many distinct propositions. To clarify the issue, this essay will separate the propositions about thesis T that have been fused together in the literature.

A major problem with discussions of intelligent design is that it is difficult to address the issue without generating an emotional response. Many arguments on this issue are burdened by accounts of fundamentalist Christian opposition to evolution (e.g., *Genesis* is literally true), false dichotomies (e.g., creationism is not science; it is religion), and angry denunciations (e.g., “Fraud!”). As a result, we will do our best to offer a fair examination of the main philosophical and legal issues and explore neglected lines of reasoning. We hope that our efforts will provide a better understanding of the available logical space behind thesis T.

What is at stake in the intelligent design debate? Many argue that if intelligent design theory is allowed into science classes, the quality of public school education in the United States will be jeopardized. Others say that solid science education requires setting opposing hypotheses before students so that they can make up their own minds. In truth, though, something deeper worries those who consider this matter. The subtitle of evolutionary biologist Kenneth R. Miller’s *Only a Theory: Evolution and the Battle for America’s Soul* puts the worries in dramatic terms that resonate with religion.<sup>2</sup>

If evolutionary theory is taught in such a way as to assert or imply that human beings are thoroughly physical entities whose bodies and faculties can be explained in purely naturalistic terms, the consequences will be enormous. Recipients of a thoroughgoing naturalistic instruction will see that certain forms of naturalistic thought require a complete revising of our conception of God. There would be no place for a teleological argument for God’s existence like the watch-maker argument made so famous by the Rev. Paley.<sup>3</sup> And should students fail to grasp this, denigrators of revelation like Daniel Dennett stand at their side eager to correct each wayward thought. Dennett proclaims:

The kindly God who lovingly fashioned each and every one of us (all creatures great and small) and sprinkled the sky with shining stars for our delight—that God is, like Santa Claus, the myth of childhood not anything a sane, undeluded adult could literally

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2. KENNETH R. MILLER, *ONLY A THEORY: EVOLUTION AND THE BATTLE FOR AMERICA’S SOUL* (2008).

3. See WILLIAM PALEY, *NATURAL THEOLOGY* (2006).

believe in. *That* God must either be turned into a symbol for something less concrete or abandoned altogether.<sup>4</sup>

Nor is it only conceptions about God, the supernatural providential agent, which need revising. The consequences of evolutionary naturalism worry even some evolutionary naturalists. Kim Sterelny puts it this way:

One major movement of the twentieth-century philosophy has been naturalism: seeing humans as wholly part of the natural world. In turn, naturalism generates a difficult philosophical problem: to what extent is our ordinary common commonsensical picture of ourselves and of our world compatible with the fact that we are nothing more than complex evolved biochemical machines? Commonsense views humans as agents: we are self-aware; deliberative makers of real choices; reflective; often rational; and aware of moral considerations and sometimes responsive to them. Perhaps this picture is undermined by an evolutionary perspective that sees us as gene replicating machines : as vehicles built by and for genes. What could choice, rationality, a morality be but illusions if that is the truth about us?<sup>5</sup>

What indeed? Naturalists such as Dennett seek to reassure us that we still make real choices; however, Dennett's assurances are badly undercut by his frequent eliminativist declarations that we have no psychological states at all. Other Neo-Darwinians bite the bullet with respect to freedom and morality. For Michael Ruse and Richard Joyce, for example, ethical truth is an illusion.<sup>6</sup> Who could expect even half-alert students to walk away from a course in evolutionary biology with anything but deep doubts about who and what they are and whether there could be any god who cares?

Naturalistic instruction threatens to diminish respect for certain world-views coloring ideas of what should be taught in public schools. This is because defenders of intelligent design in the classroom are often motivated by theistic world-views. But, it cannot be denied that some opponents of teaching intelligent design are motivated by a strong attachment to a world-view of the sort offered by geneticist Richard Lewontin:

We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfill many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism . . . . Moreover, that materialism is absolute, for we cannot allow a

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4. DANIEL C. DENNETT, *DARWIN'S DANGEROUS IDEA* 18 (1995).

5. Kim Sterelny, *Philosophy of Evolutionary Thought*, in *EVOLUTION: THE FIRST FOUR BILLION YEARS* 313, 321 (Michael Ruse & Joseph Travis eds., 2009).

6. *Id.*

Divine Foot in the door.<sup>7</sup>

Despite the fact that world-views are threatened, emotional engagement should not prevent an honest investigation of thesis T.

This entire debate would be moot if a warranted consensus existed in the scientific community that the world, including all the organisms within it, is a physically closed system comprehensively explained by Neo-Darwinism. Such a consensus does not exist, though a high percentage of the scientific academy's most prestigious theorists may believe that Neo-Darwinism leaves no mystery that requires an appeal to supernatural forces. A major reason no such consensus has been formed—let alone been announced—is that the data that perplexed both Darwin and Wallace continues to dumbfound theorists today, particularly in the philosophical community.

It may be protested that despite our professed aim to be fair and precise, we have already muddied the waters and then stirred them up. One might object that we have merged Neo-Darwinian thought with a materialist view of the world; they are distinguishable. Logic requires that one should not confuse, as we just did, methodological atheism with metaphysical atheism. Methodological atheism is merely the scientific commitment to natural explanations of all natural processes. Metaphysical atheism is the doctrine, which individual scientists may or may not hold, that there is nothing beyond the natural to invoke.<sup>8</sup>

We answer that there certainly is a difference between a methodology that does not appeal to supernatural causality and a methodology that presupposes an atheistic metaphysics. It is not at all clear that this distinction can be applied to Neo-Darwinism. This is one of the issues we will investigate. At the moment, we are positing that it certainly *looks* to many people that Neo-Darwinism, as typically expounded, either presupposes or entails a physicalistic outlook. This raises important questions about what kind of god we can accept<sup>9</sup> and about what kind of being raises such important questions.<sup>10</sup> Whether or not Neo-Darwinism carries the imagined implications, the fear that it does is enough to make the issues raised in this essay of great concern.

At this point, one might be tempted to dismiss anxieties about world-

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7. Richard Lewontin, *Billions and Billions of Demons*, THE NEW YORK REVIEW OF BOOKS, Jan. 9, 1997 (reviewing CARL SAGAN, *THE DEMON-HAUNTED WORLD: SCIENCE AS A CANDLE IN THE DARK* (1995)).

8. Nancy Murphy, *Philip Johnson on Trial: A Critique of His Critique on Darwinism*, in *INTELLIGENT DESIGN: SCIENCE OR RELIGION* 181, 194 (Robert M. Baird & Stuart Rosenbaum eds., 2006).

9. See PALEY, *supra* note 3.

10. See DENNETT, *supra* note 4.

views as sheer confusion about the relationship between religion and science. Such a person might argue that it is only when people—irreligious as well as religious—treat *Genesis* like a science textbook that we wind up with conflict. If only these literalists could understand that there are “two magisteria”—one a scientific structure of the world and the other a religion of values—they would see that there cannot be conflict.<sup>11</sup>

We answer that while we are not among those who read *Genesis* literally or doubt species have evolved, we nonetheless believe that there are very considerable grounds for worrying about conflict. The two magisteria conception of the relation between science and religion is impossible to sustain without arbitrarily shrinking the set of propositions held by believers. One may smile indulgently at the naiveté of biblical literalists with their preposterous estimates of the age of the earth and explanations of the geological record, but what gives anyone the right to declare that their beliefs are not religious? Biblical literalists sincerely believe that God has revealed propositions at variance with that what modern science teaches. Why exactly does this soulful adhesion to some putatively revealed propositions not count as religious?

Since this is a Catholic legal journal, it is fitting to turn to Roman Catholic geneticist Francisco Ayala’s treatment of the two magisteria. Ayala cites popes and other religious figures to the effect that evolution is an acceptable doctrine.<sup>12</sup> He points out that Pope John Paul II refers to evolution as “a fact” in his 1996 address to the Pontifical Academy of Sciences.<sup>13</sup> Unfortunately, Ayala’s analysis is unhelpful because he overlooks much in the address that runs contrary to the notion that religion and science treat different subjects. Religion and science do treat the same subject: the metaphysics of the human person. The very subtitle of the address suggests such an overlap: “Magisterium is Concerned with [the] Question of Evolution for it Involves [a] Conception of Man.”<sup>14</sup>

In the body of the address, John Paul II endorses the pronouncements of Pope Pius XII concerning the immortality of human souls.<sup>15</sup> John Paul II’s teachings are so rich on the subject and so definite in their insistence that the magisterium of the Church can definitively teach things about human

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11. Stephen Jay Gould, *Nonoverlapping Magisteria*, in *INTELLIGENT DESIGN AND ITS CRITICS* 737 (Robert Pennock ed., 2001).

12. FRANCISCO J. AYALA, *DARWIN AND INTELLIGENT DESIGN* 90-96 (2006).

13. *Id.*

14. Pope John Paul II, Message to the Pontifical Academy of Science: On Evolution (Oct. 22, 1996), available at <http://www.ewtn.com/library/papaldoc/jp961022.htm>.

15. Pope Pius XI I, *Humanae Genes*: Encyclical Concerning Some False Opinions Threatening to Undermine the Foundations of Catholic Doctrine ¶ 36 (Aug. 12, 1950), available at [http://www.made-inbet.net/holy\\_father/pius\\_xii/encyclicals/documents/hf\\_p-xii\\_enc\\_12081950\\_humani-generis\\_en.html](http://www.made-inbet.net/holy_father/pius_xii/encyclicals/documents/hf_p-xii_enc_12081950_humani-generis_en.html).

nature that the entire text is worth reading:

5. The magisterium of the Church takes a direct interest in the question of evolution because it touches on the conception of man, whom Revelation tells us is created in the image and likeness of God. The conciliar constitution "*Gaudium et Spes*" has given us a magnificent exposition of this doctrine, which is one of the essential elements of Christian thought. The Council recalled that "man is the only creature on earth that God wanted for its own sake." In other words, the human person cannot be subordinated as a means to an end, or as an instrument of either the species or the society; he has a value of his own. He is a person. By this intelligence and his will, he is capable of entering into relationship, of communion, of solidarity, of the gift of himself to others like himself. St. Thomas observed that man's resemblance to God resides especially in his speculative intellect, because his relationship with the object of his knowledge is like God's relationship with his creation. (*Summa Theologica* I-II, q 3, a 5, ad 1). But even beyond that, man is called to enter into a loving relationship with God himself, a relationship which will find its full expression at the end of time, in eternity. Within the mystery of the risen Christ, the full grandeur of this vocation is revealed to us. (*Gaudium et Spes*, 22). It is by virtue of his eternal soul that the whole person, including his body, possesses such great dignity. Pius XII underlined the essential point: if the origin of the human body comes through living matter which existed previously, the spiritual soul is created directly by God ("*animas enim a Deo immediate creari catholica fides non retimere iubet*"). (*Humanae Generis*). As a result, the theories of evolution which, because of the philosophies which inspire them, regard the spirit either as emerging from the forces of living matter, or as a simple epiphenomenon of that matter, are incompatible with the truth about man. They are therefore unable to serve as the basis for the dignity of the human person.

6. With man, we find ourselves facing a different ontological order—an ontological leap, we could say.<sup>16</sup>

Thus, we see how mistaken Catholics and others are in thinking that what we are about to discuss is a tempest in a teapot. Not only pitifully misguided biblical literalism runs the risk of colliding with evolutionary theory but so does the magisterium of the Catholic Church.

This is a mere introduction to the complex issues surrounding thesis T.

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16. Pope John Paul II, *supra* note 14.

The essay is broken into two parts. Part I investigates the philosophical issues surrounding thesis T. Part II investigates the constitutional issues raised by thesis T. Though each part has a distinct focus, the essay forms a unit because the philosophical conclusions of Part I are assumed in Part II.

## PART I

### PHILOSOPHICAL ISSUES

The philosophical issues surrounding thesis T are ambiguously dealt with in books, articles, and court judgments. Therefore, the first step is to clarify the propositions incorporated in thesis T, thereby determining the logical space behind it. The second step is to distinguish the plausible responses to thesis T and build arguments for each response. Having addressed the philosophical issues, we will be in a position to move on to Part II and address the legal issues raised by thesis T.

#### *I. Clarifying the Propositions Incorporated in Thesis T.*

According to Moore, the first step in philosophical analysis is clarifying the propositions that can be affixed to a particular sentence.<sup>17</sup> To see what propositions thesis T could be used to represent, it is necessary to parse its constituent terms. In the case of thesis T, we will examine the terms “intelligent design,” “teach,” “public school classes,” and “may.” Such tasks are seldom exhilarating, but the effort will pay dividends.

##### *1. There is a difference between “intelligent design” and the case for “intelligent design.”*

It is important to distinguish between a proposition and the epistemic backing for it, what might be called a “case.” A “case” is the evidence offered for the proposition as grounds for believing it. Often the terms “intelligent design” or “intelligent design theory” are used in ways that obscure this distinction. So, where we are not quoting others, we will reserve the term “intelligent design” for ideas about the role of supernatural intelligence in the world. We will use “case” to refer to the evidence for the claims of intelligent design. Drawing this distinction between intelligent design and case immediately opens up alternatives – logical space. One might say, for example, “I certainly think it’s permissible to say a word or two about the meaning of the idea that the world is intelligently designed, but teachers should not take up arguments for and against this thesis.” Each time a distinction is drawn, more logical space is opened up.

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17. MOORE, *supra* note 1.



a. The phrase “intelligent design” can have a variety of meanings.

The phrase “intelligent design” has never represented a unified theory. The original distinctions are best displayed in the under-reported dispute between the two co-creators of the theory of evolution: Alfred Wallace and Charles Darwin. Wallace was the first person to present a paper to the learned world on the theory of evolution by natural selection. Wallace stunned Darwin by asking his opinion of a paper that Wallace had written on descent with modification by natural selection.<sup>18</sup> Dismayed by the realization that Wallace had independently worked out the theory of natural selection, Darwin thought he was in danger of losing credit for more than twenty years of work. Despite this setback, Darwin eventually published the world-changing *Origin of Species* followed by *The Descent of Man*.

In his books, particularly *The Descent of Man*, Darwin argues that blind physical processes are the sole efficient causes of the character and operational capacities of the human species. But Wallace was not convinced. He was having deep doubts about what the theory of natural selection could explain.<sup>19</sup> These doubts were not inspired by Christian revelation; rather, Wallace’s doubts were caused by a class of phenomena—certain physical and mental features of human beings—manifested in different places and epochs. Wallace confessed,

[T]his theory has the advantage of requiring the intervention of some distinct individual intelligence, to aid in the production of what we can hardly avoid considering as the ultimate aim and outcome of all organized existence – intellectual, ever-advancing spiritual man. It therefore implies, that the great laws which govern the material universe were insufficient for his production, unless we consider (as we may fairly do) that the controlling action of such higher intelligence is a necessary part of those laws.<sup>20</sup>

Dumbfounded by this confession, Darwin wrote to Wallace, “I hope you have not murdered too completely your own and my child.”<sup>21</sup> Despite their apparent disagreement, Darwin’s own writings suggest a willingness to accept intelligent design:

I am aware that the conclusions arrived at in this work will be denounced by some as highly irreligious; but he who thus denounces them is bound to show why it is more irreligious to

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18. ALFRED RUSSEL WALLACE, ON THE TENDENCY OF VARIETIES TO DEPART INDEFINITELY FROM THE ORIGINAL TYPE (1858).

19. ALFRED RUSSEL WALLACE, *Contributions to the Theory of Natural Selection, in INFINITE TROPICS: AN ALFRED RUSSEL WALLACE ANTHOLOGY* 175 (Andrew Berry ed., 2002).

20. *Id.*, at 208–09.

21. RICHARD MILNER, THE ENCYCLOPEDIA OF EVOLUTION 457 (1993).

explain the origin of man as a distinct species by descent from some lower form through laws of variation and natural selection, than to explain the birth of an individual through laws of ordinary reproduction. The birth both of the species and of the individual are equally parts of that grand sequence of events, which our minds refuse to accept the result of blind chance. The understanding revolts at such a conclusion . . .<sup>22</sup>

What, then, is to be made of all this? Wallace and Darwin clearly had different reasons for rejecting the supremacy of chance in creation. Wallace recognized a need for the interventions of a supernatural intelligence guiding the unfolding of nature. Unlike Wallace, Darwin recoiled at the idea of a supernatural intelligence supplementing natural processes. Darwin wrote to Wallace, “I can see no necessity for calling in an additional and proximate cause in regard to man.”<sup>23</sup> To Darwin, Wallace’s ideas about the limits of natural selection were heresy. The conflict between Wallace and Darwin highlights the need for clarity about the issue of teaching intelligent design in public schools. It also raises the hope that once thesis T is disambiguated, agreement can be reached based on the logical space uncovered.

Let us take a cue from how Wallace and Darwin frame their ideas and set out the two basic arguments. First, there is the notion—let us call it “Darwinian intelligent design”—that a supernatural intelligence operating outside the universe set things up so that human beings and other organisms came to be in much the form we find them now. This intelligence neither did nor does disturb the unfolding of nature.<sup>24</sup> The second idea—let us call it “Wallacian intelligent design”—is that a supernatural being created the universe to follow set rules, but it also took steps along the way to guide the processes to given ends. The intelligent designer is more than a mere designer or creator of the world. It brings about effects that nature would not or could not produce alone.

The proposition that the intelligent being *acts* is consistent with Darwinian intelligent design. The god-like Darwinian designer acted by building a physical world in accordance with the plan. The only difference is that it does not interfere with the workings of nature. This consistency opens up logical space upon which rational discussion and agreement can be based.

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22. CHARLES DARWIN, *The Descent of Man*, in FROM SO SIMPLE BEGINNING: THE FOUR GREAT BOOKS OF CHARLES DARWIN 1242 (E.O. Wilson ed., 2006).

23. See MILNER, *supra* note 21, at 457.

24. Darwin rejects the idea that God’s action is necessary as a proximate cause for the generation of human beings. It is unclear whether he also rejects the traditional Christian idea that God’s action is required to sustain things in this world.

*b. The Case for Intelligent Design.*

The case for intelligent design refers to the evidence offered in support of intelligent design. As one might expect, the evidence varies, as does the reasoning in which it is used. Beliefs about intelligent design held by religious people are often assumed to be ungrounded; they have no case. This is almost never true. Anyone who says, “I believe we were intelligently designed because . . . (fill in the blank)” gives grounds for his belief. The grounds for such religious belief are typically authoritative, based on revelation. That by itself means *some* grounds are offered; a case has been presented.<sup>25</sup> A case based on divine sources cannot be summarily dismissed.

The contrast between faith and science is all too crude if the only distinction it is supposed to draw is between rationally ungrounded and grounded positions. A better contrast arises from the distinction between grounds that include a reference to a divine source of hidden information and grounds that do not. A person who previously opposed intelligent design on religious grounds may now wish to support intelligent design based on scientific grounds. This distinction opens up more logical space.

This raises the question, “What are scientific grounds?” Given a sharp definition of “scientific,” the contrast between scientific and non-scientific would be exhaustive. Unfortunately, a sharp definition is not to be had. Decades of philosophical work on the problem of demarcation—the problem of cleanly separating science from non-science—have shown the distinction cannot be sustained.<sup>26</sup> Science textbooks, statements by learned societies, even declarations from the bench appear oblivious to this fact. There simply is no sharp line dividing the scientific from the non scientific.

One reason it seems impossible to draw a line of demarcation between science and non-science is that scientific arguments are often philosophical. Two brief illustrations should suffice. The first is an important argument by Wallace. The second is an observation about our knowledge of biology.

Wallace’s argument rests on the following conditional major premise:

[I]f, further, we should see that these very modifications, though hurtful or useless at the time when they first appeared, became in

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25. Under the influence of Alvin Plantinga, the Reformed Epistemologist, quite a few Christian philosophers have argued that religious belief is rational and warranted even without evidence. Be this as it may, many Christians supply reasons along these lines.

26. See RICHARD DAWKINS, *THE EXTENDED PHENOTYPE I* (1989)(stating that his vision of life is not provably more correct than the orthodox view); PHILLIP KITCHER, *LIVING WITH DARWIN* 4-14 (2007)(describing the uselessness of using testability as criterion of science); J. Blachowicz, *How Science Textbooks Treat Scientific Method: A Philosopher’s Perspective*, 60 *THE BRITISH JOURNAL FOR THE PHILOSOPHY OF SCIENCE* 303, 339 (2009)(explaining how scientists are falling behind the philosophy of science).

the highest degree useful at a much later period, and are now essential to the full moral and intellectual development of human nature, we should then infer the action of [a?]mind, foreseeing the future and preparing for it, just as surely as we do, when we see the breeder set himself to work with the determination to produce a definite improvement in the cultivated plant or domestic animal.<sup>27</sup>

To this conditional premise, Wallace added several premises supporting the antecedent. Some of these premises dealt with physical traits, others with mental and moral traits. Of particular importance to Wallace was the minor premise, “early humans had a much larger brain and a surplusage needed in their circumstances.”<sup>28</sup>

In *The Descent of Man*, Darwin left the conditional major premise in place, directing his fire entirely at the minor premise. Darwin protested that Wallace badly underestimated the challenges faced by early humans. Darwin could have replied that Wallace’s argument was unscientific because the major conditional premise is a philosophical assertion. Instead, Darwin attacked only one premise supporting the antecedent.<sup>29</sup>

The second illustration can be drawn from any biological text: the use of microscopes to infer that the body is made up of cells. Researchers see certain forms and colors and automatically infer that there is something, some x, such that these are forms and colors of x. Such an approach commits the researcher to a particular metaphysical outlook, something like substance ontology. This means there is something of which the forms are dependent attributes, an x, which is independent.<sup>30</sup> If somebody doubted this, as do philosophical opponents of substance ontologies, then one could scarcely prove it by taking another look in the microscope. There is no way to falsify this claim by experiment. Therefore, if an argument is scientific only if it can be tested by experiment, there is nothing scientific about the basis of cellular biology.

Today, it is customary to recognize several branches and sub-branches of science, but it is difficult, if not impossible, to draw sharp lines between them. Taking advantage of this custom, however, some have argued that only biology should be taught in biology classes. There is a practical basis to this view, but it does not warrant bending the canons of reason out of shape.

Massimo Pigliucci introduces *Scientists Confront Intelligent Design and Creationism* with this criticism of creationists who propose a high school course on the science of origins:

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27. WALLACE, *supra* note 19, at 193.

28. *Id.* at 195.

29. DARWIN, *supra* note 22, at 855.

30. See ARISTOTLE, CATEGORIES (J. L. Ackrill trans., Oxford University Press 2002).

Even a superficial acquaintance with science reveals that these three subjects [evolutionary biology, biophysics, and cosmology] actually belong to three very distinct disciplines, and that only the first one has anything to do with the theory of evolution proper. Darwinian mechanisms cannot get going until after life originates on a planet, and, last time I checked, planets and galaxies were not making babies that could be subjected to natural selection. In other words, to put it in terms of “origins” is misleading at best, which once again clearly reveals the thin veneer of science throw over the creationist Trojan horse.<sup>31</sup>

Whatever one might think of the wisdom of offering a single high school course on origins, Pigliucci makes a very fundamental mistake about scientific argumentation and argumentation *simpliciter*.

The principle of total evidence, everywhere acknowledged, requires that to evaluate the probability of a proposition all the relevant evidence must be taken into account. It is entirely possible that evidence provided by cosmology is immediately relevant to evaluating a hypothesis about evolutionary biology. In its early days, Darwin’s theory faced the objection that cosmology indicated that the earth could not be old enough to support the evolutionary process. Darwin realized that the only way to rebut this objection was to show—or claim it would someday be possible to show—that the earth was much older than thought at the time. We can be sure he never dreamed of replying that because cosmology is not biology there is nothing to worry about.

Today, cosmology furnishes another kind of evidence that is relevant to considerations about evolution and intelligent design. This involves the apparent springing into existence of the universe and of its being fine-tuned from the beginning for intelligent life. If, as informed scientists and philosophers have argued, the probability of an intelligent designer of the universe is quite appreciable,<sup>32</sup> then that fact can function as background prior probability in a Bayesian argument encompassing biological data.

Again, we find ourselves with more logical space behind thesis T than we might have initially imagined. Prospective buyers of conceptual space can survey plots that allow for Darwinian or Wallacian design, and they can consider plots that permit cases for intelligent design made up of much more than just biological evidence.

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31. Massimo Pigliucci, *Introduction: The Problems with Creationism*, in SCIENTISTS CONFRONT INTELLIGENT DESIGN AND CREATIONISM 18 (Andrew J. Petto and Laurie R. Godfrey eds., 2007).

32. See GOD AND DESIGN: THE TELEOLOGICAL ARGUMENT AND MODERN SCIENCE (Neil Manson ed., 2003).

2. *There are many ways to teach a proposition.*

The general meaning of the verb “to teach”—to convey information or knowledge—can be gleaned from any dictionary. In order to investigate the logical space associated with thesis T, we need to attend to instantiations of the verb. Any proposition associated with thesis T can be taught in a number of ways. Teaching in some of these ways will be quite minimal, while in others quite maximal. Indeed, teaching can happen accidentally or in passing. Accordingly, it might be said that teaching admits of degrees. Once again, it becomes ever more obvious that the logical space behind thesis T is enormous.<sup>33</sup>

3. *“Public school classes” encompasses a range of subjects.*

Public school classes encompass a range of subjects and disciplines. These classes include science and non-science classes. It could be argued that intelligent design has a place in some classes but not others. Once more, logical space opens up.

4. *The term “may” has both an ethical and legal sense.*

The term “may” can be understood philosophically or legally. That is, “may” can function as a synonym for “morally permissible” or “right”, understood without reference to law or administrative fiat; but it also can mean “permitted by law or other form of legislation.” Given the ambiguity, the two interpretation of the term “may” opens up yet more logical space.

Many propositions are associated with thesis T. These propositions open up logical space that can be the basis for discussion and agreement. We turn now to possible ways of occupying the available logical space.

## *II. Examining Three Plausible Responses to Thesis T.*

Obviously, we cannot cover all possible responses to thesis T. For our present purposes, however, it will suffice to consider three plausible responses to thesis T, leaving the further interpretation for another time. The three plausible responses set up a spectrum, with absolute rejection and acceptance at the respective ends of the spectrum and selective prohibition occupying the middle ground.

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33. See *Epperson v. Arkansas*, 393 U.S. 97, 114 (1968). Justice Black, in his concurrence, argues that the Arkansas statute under consideration was unconstitutionally vague. The statute failed to make it clear whether the statute prohibited mentioning Darwin’s theory or declaring it to be true. A corresponding obscurity attends a good deal of the discussion of intelligent design today. Such obscurity may be due to the fact that there are many pertinent ways of teaching.

1. *Plausible Response 1: Absolute Rejection of Thesis T.*

One plausible response is to bar intelligent design from the public schools altogether. One might say, “On every interpretation of thesis T, I oppose it.” In Lewontin’s language, “we cannot allow a Divine Foot in the door.” This is the absolute rejection of thesis T.

There seem to be two reasons for adopting the absolute response to thesis T. The first reason is that intelligent design is a religious teaching. The last thing public education needs is a number of teachers pushing a religious agenda in public school classrooms. For those who want religion taught in schools, there are always religious schools. The second reason is that intelligent design is like astrology; there is no sound science to back it up. While proponents of intelligent design have made a lot of noise, all their arguments have been decisively refuted.

We will return to these objections, but first let us try to understand why it is so difficult to maintain the absolute response to thesis T. An easy way to see fatal problems with absolute prohibition is to consider three examples. The first is a story about an unhappy effort to bring new life into a program for high school honor students. The second is the text of the Declaration of Independence. The third is taken from the foundation of mathematics. After looking at these examples we will return to the two objections above.

a. *The Teacher’s Tale.*

This brief story is about a teacher named Phaenarete.<sup>34</sup> The story is told by Phaenarete to her local Board of Education. While it is fictional, the story illustrates the heavy-handedness of the absolute response.

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The trouble began when I accepted, with considerable eagerness, an assignment to teach a new, elective high school course with philosophical dimensions to well-tutored, college-bound students. I welcomed the opportunity to work with students capable of seeing how particular disciplines are interconnected and how certain pervasive philosophic questions transcend the bounds of standard, discipline-based courses.

Happily, I was left quite free to select the materials I thought would serve these purposes. I chose several short books, some old, some new. In addition to what is often thought of as straight philosophy—works like Plato’s *Phaedo*—students encountered material from literature, art, music, dance, and contemporary science—works like Jane Austin, Frida Kahlo, Chinua Achebe and Stephen Gould. The last author got me into this fix. I

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34. Phaenarete was the name of the mother of Socrates.

chose Gould's popular *Panda's Thumb* because his writing is accessible and beautiful. Several passages in his book lend themselves to discussing overarching philosophical questions about human beings and our place in the universe. I was particularly interested in the students' reaction to two essays, the first entitled "The Panda's Thumb" and the second entitled "Our Greatest Evolutionary Step." Students rose to the occasion.

"The Panda's Thumb" informs the reader that a panda's "thumb" is no thumb at all but an enlarged component of what is normally a wrist bone. The bone works well enough for the purposes of stripping bamboo, but to our eyes the "thumb" appears to have been designed by a drunken engineer. Gould claims this shows that no intelligent designer could have causally contributed to the emergence of the thumb. In response to "The Panda's Thumb," one of the brighter students asked, "If God wanted to make a panda, how does Gould know that it would have been provided with a 'standard' thumb? How can Gould know with confidence what a divine mind, with infinitely superior intelligence and obscure ends, would be willing to produce?" This is exactly the question Elliott Sober raises in his *Evidence and Evolution*.

Sober agrees with Gould that intelligent design arguments are exercises in futility. Nonetheless, Sober, along with my precocious student, had doubts about one of Gould's arguments.<sup>35</sup> Gould argues that "[o]dd arrangements and funny solutions are proof of evolution, for it mimics the postulated action of an omnipotent creator – paths a sensible God would never tread, but that a natural process, constrained by history, follows performe."<sup>36</sup> Without having read Sober, my student had echoed Sober's criticism of Gould.

The aim of my class was not to answer such profound questions, but to encourage students to think analytically. I wanted students to see that arguments purporting to be entirely scientific are often based on philosophical assumptions, which are often obscure.

Another student was taken by the last paragraph of "Our Greatest Evolutionary Step." In that essay Gould wrestles with big brains and upright posture: which came first and which is more important? My student was struck by Gould's final musing:

It is now two in the morning and I'm finished. I think I'll walk over to the refrigerator and get a beer; then I'll go to sleep. Culture-bound creature that I am, the dream I will have in an hour or so when I'm supine astounds me ever so much more than the stroll I

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35. ELLIOTT SOBER, *EVIDENCE AND EVOLUTION* 127–28 (2008).

36. STEPHEN JAY GOULD, *THE PANDA'S THUMB: ESSAYS IN NATURAL HISTORY* 20–21 (1980).



will now perform perpendicular.<sup>37</sup>

“Why,” the student asked, “would Gould be more astonished by his dream than his stroll?” I invited the class to think this through. The students could not let it go, perhaps because they had previously encountered the poem “Dreams.” The poem reads, “[h]ere we are all, by day; by night we’re hurl’d/ By dreams, each one into a several world.”<sup>38</sup> How can we move out of this world into others, each separate? And more astoundingly yet, each world is private! No one can dream your dreams, or for that matter, think your thoughts, though it is of course possible to have similar dreams and represent, privately again, the same propositions.

The size of the brain, the upright posture, and everything else about our bodies appears explicable entirely in terms of physics and chemistry. But how can these basic disciplines say anything about the weird, mental, and utterly private interior life that gives all the meaning there is to the world? And if the scientific disciplines cannot unfold the causes of our interior life, need we look beyond physical causes to something literally out of this world? These are the kind of philosophical questions commonly dealt with at great length in the philosophical literature, and exactly the kind of questions I had hoped the students would think up on their own.

Just as I was congratulating myself about the course, it blew up in my face. Parents descended on me with questions about the purpose of the class. Some asked, “Are you teaching intelligent design, creationism in sheep’s clothing?” Other parents asked, “Isn’t any talk about ‘God’s intentions’ and ‘supernatural causality’ religious through and through? Doesn’t the Constitution forbid this?”

The parents complained first to me, then to the administration, next to the local school board, and finally to the courts. I had hoped to guide another young Socrates or Diotima. Instead I have made a mess of things. Or have I? After all, what exactly did I do wrong? What should be abandoned – all philosophy in public high schools or all philosophy edging towards thought about the possibility of the divine? I can’t think of a reasonable answer. Can you?

\* \* \*

This story demonstrates a secular way of presenting intelligent design. It also shows that there are sound philosophical reasons for thinking about intelligent design. Is it reasonable, as a matter of public policy, to bar Phaenarete and everyone else from teaching a course like the one depicted? Hardly.

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37. *Id.*, at 133.

38. Robert Herrick, *Dreams*, in *WORKS OF ROBERT HERRICK* 23 (Alfred Pollard ed. 1891).

*b. The Declaration of Independence.*

The Declaration of Independence is another example of the futility of the absolutist response. “We hold these truths to be self evident, that all men are created equal and are endowed by their creator with certain inalienable rights.”<sup>39</sup> What is to be done in classes in which these words are studied? Should these words be banned from public schools? Mention of a creator violates the absolute response. An explanation of this idea, so fundamental to our society, will bring the teacher into conflict with the absolutist prohibition.

*c. The Foundations of Mathematics.*

A third example of the futility of the absolutist response is found in mathematics. Imagine a high-school course in the foundations of mathematics, a course designed exclusively for mathematically-gifted students. Suppose that one of the philosophical accounts of the foundations of mathematics is the traditional theory—shared to various extents by the monotheistic traditions—that all mathematical entities and relations are ultimately grounded in the Mind of God. Teaching this philosophical account will bring the teacher into conflict with the absolutist position. Should this basic mathematical knowledge be banned from public schools?

The lesson of these examples is that absolutely barring teachers from teaching intelligent design on the grounds that intelligent design is religious or frivolous is unsustainable. Let us return to the original two objections.

*d. Answering the Objections.*

The first objection argued that intelligent design had to be kept out of classrooms because it is not a scientific theory but only a religious teaching. We answer that intelligent design *is* a religious teaching, in *some* sense. However, from the fact that a proposition is religious it does not follow that it is unwise or illegal to present either a statement of intelligent design or a case for it in public schools. The concept may be religious only in the sense that it bears on the existence and character of a god-like being. Yet, it is possible that the case for the proposition about the god-like being appeals to no authoritative sacred text, person, or institution. The case can be entirely secular. The Teacher’s Tale provides one starting point for just such a case. The various modalities of consciousness, dreams, and other private internal states may be seen as inexplicable on a strictly physicalist hypothesis. Surely not *every* form of teaching can be reasonably excluded *a priori* from public school classes.

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39. The Declaration of Independence, ¶ 2 (U.S. 1776).

What about cases that do rely on sacred texts, persons, and institutions? Even these cannot be entirely excluded. What would be wrong with a course on religions of the world? Even Dennett thinks such a course could be a wonderful addition to a high school curriculum as an antidote to religious nonsense.

The second objection argued that there is no sound science to support intelligent design. We answer that this is an overbroad claim that relies upon a simplistic view of science. The Teacher's Tale and the foundations of mathematics show that science, even pure science such as mathematics, rests on philosophical propositions that do not exclude intelligent design. Therefore, it seems that the absolute rejection of thesis T is overwhelmingly difficult to sustain.

### *2. Plausible Response 2: Absolute Acceptance of Thesis T.*

The difficulty of absolutely rejecting thesis T on every construal of its terms might be thought to imply that the proper response to the proposition is absolute acceptance. However, it is also very difficult to defend thesis T on every construal of its terms. We do not think that the absolute acceptance of thesis T is an appropriate response to thesis T, and we have no interest in supporting the idea that intelligent design be given equal weight in the curriculum of each class. What has intelligent design to do with band class? Therefore, some qualification of the range of acceptable interpretations of thesis T is necessary.

### *3. Plausible Response 3: Selective Prohibition of Thesis T.*

This section considers prohibiting intelligent design from certain public school classes, particularly science classes. First, we will examine the arguments for selective prohibition. Then we will examine the objections to selective prohibition. Finally, we will offer a response to an argument for selective prohibition.

#### *a. Arguments for selective prohibition.*

Which interpretations of thesis T are acceptable for science classes? Proponents of selective prohibition might offer the following argument: while it is all very well for intelligent design theory to be covered in some courses outside of science, it is an altogether different matter to drag the theory into classes dedicated to what modern science can tell us about the origin, constitution, and powers of human beings.<sup>40</sup>

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40. See ROBERT T. PENNOCK, *Why Intelligent Design Should Not Be Taught In Public Schools*, in *INTELLIGENT DESIGN CREATIONISM AND ITS CRITICS* 761-63 (Robert T. Pennock ed., 2001).

We answer that this argument concedes that intelligent design may be part of public school curricula. This concession removes the absolutist objection to teaching intelligent design in public schools. If it is permissible to teach intelligent design in non-science classes, compelling arguments must be found to keep it out of science classes. What could those arguments be? Three readily present themselves.

First, intelligent design theory has no place within the science curriculum because it simply is not science at all. It is religion or, at best, philosophy. Neither religion nor philosophy has a place in a science program.

Second, our civilization cannot survive without an education system to pass on the knowledge necessary for our communal life. The task of science class is to communicate the scientific consensus regarding what is and can be known about the physical world. It is impossible to effectively teach this consensus while undercutting the very consensus to be taught. How can the students be expected to master the complexity of biological systems while pondering their philosophical validity? Questions of philosophical validity are best left to colleges and universities, not high school science classes.

Third, intelligent design theory has not been validated through the scientific method. The latest efforts to provide a scientific foundation for intelligent design have been unmitigated disasters. On the rare occasions that proponents use intelligent design to make scientific predictions, they are proven wrong. Intelligent design has no validity as a scientific theory.

We will answer these arguments and set out our own position.

*b. Arguments against selective prohibition.*

This section presents the two strongest arguments for the proposition that intelligent design should not be barred from sciences classes. The first argument is that intelligent design can be taught in science classes because a solid case for it can be made using the Wallacian version. The second argument is that it is appropriate to teach the history of a given subject.

*i. There is a solid case for the Wallacian version of intelligent design.*

The first argument is based on three premises: (1) the Wallacian version of intelligent design at least appears to undercut the modern Neo-Darwinian synthesis, as it is typically expounded; (2) there is a plausible case for the Wallacian version of intelligent design; (3) if the Wallacian version of intelligent design at least appears to undercut the modern Neo-Darwinian

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synthesis, as it is typically expounded, and a plausible case can be made for that version of intelligent design, then it is permissible to teach intelligent design in science classes. These three premises lead to the conclusion that it is permissible to teach intelligent design in science classes. This is a *modus ponens* argument. Premises (1) and (2) are the conjuncts of the antecedent of conditional premise (3). If (1) and (2) are true, the consequent of premise (3) can be detached. Since the argument is formally valid, the objection can only be made to the premises.

(a) *Considering Premise (1).*

What is meant by “the Neo-Darwinian synthesis as it is typically expounded?” It is not self-evident, and consulting authoritative texts often leaves one thoroughly confused.<sup>41</sup> Despite the lack of clarity, one is not left with the impression that Neo-Darwinism needs recourse to the divine to explain the biological and cognitive capacities of every organism, including human beings. This is in conflict with the Wallacian version of intelligent design.

The conflict between Neo-Darwinism and Wallacian intelligent design cannot be underestimated. Dennett pulls no punches about it:

Almost no one is indifferent to Darwin, and no one should be. The Darwinian theory is a scientific theory, and a great one, but that is not all it is. The creationists who oppose it so bitterly are right about one thing: Darwin’s dangerous idea cuts much deeper into the fabric of our most fundamental beliefs [then] many of its sophisticated apologists have yet admitted, even to themselves.<sup>42</sup>

Darwin recognized this conflict and rejected Wallace’s theory. If these two brilliant creators of evolutionary theory clashed on such an important matter, which of us is so bold as to declare they were mistaken?

Two additional reasons support the existence of a conflict between Neo-Darwinism and Wallacian intelligent design. First, even those who claim there is no genuine conflict, such as Christian philosopher Nancy Murphy, admit that “atheistic philosophical naturalism . . . [is] presupposed in most of the cases of *popular* books written in defense of evolution.”<sup>43</sup> Second, those who claim there is no conflict are generally muddled about their contentions. Consider, for example, how the notion that Neo-Darwinism and ideas about God are not in conflict has been picked up by the courts. For example, in *McLean v. Arkansas Board of Education*, the

41. See AYALA, *supra* note 13, *passim* (arguing that Darwin’s theory explains adaptation not evolution).

42. See DENNETT, *supra* note 4, at 18.

43. Nancy Murphy, *Phillip Johnson on Trial: A Critique of His Critique of Darwin*, in INTELLIGENT DESIGN: SCIENCE OR RELIGION 181, 194–95 (Stuart & Rosenbaum eds., 2007).

court observes that:

The approach to teaching “creation science” and “evolution science” found in Act 590 is identical to the two-model approach espoused by the Institute for Creation Research and is taken almost verbatim from ICR writings. It is an extension of Fundamentalists’ view that one must either accept the literal interpretation of *Genesis* or else believe in the godless system of evolution.<sup>44</sup>

But then the court goes on to say:

The two model approach of the creationists is simply a contrived dualism which has no scientific factual basis or legitimate educational purpose. It assumes only two explanations for the origins of life and existence of man, plants and animals: It was either the work of a creator or it was not. Application of these two models, according to creationists, and the defendants, dictates that all scientific evidence which fails to support the theory of evolution is necessarily scientific evidence in support of creationism and is, therefore, creation science “evidence” in support of Section 4(a).<sup>45</sup>

It will not escape the notice of the logically attuned that the court shifts between the first and second paragraph in a manner that utterly darkens the issue.<sup>46</sup>

The first paragraph rightly points out that the Fundamentalists who have found themselves in court as defendants cannot sensibly maintain that one must either accept the literal interpretation of *Genesis* or else believe in the godless system of evolution, since there are many other alternatives. In other words, there is not even the appearance of an inconsistency between the Court’s view and the view we advance.

But, in the second paragraph, the court rephrases its contention. Here, the “contrived dualism” of the creationists assumes “only two explanations for the origins of life and existence of man, plants, and animals: it was either the work of a creator or it was not.” *This* is a very different contention. Between the contradictory statements “is the work of a creator” and “is not the work of a creator” no third possibility remains.<sup>47</sup>

We answer that this is no contrived dualism. Whether or not the defendants put their point in a way that allowed for a middle ground, we close off the possibility of a middle ground. Either there is something spiritual about human beings that cannot be explained by Neo-Darwinian natural science or there is not. Intelligent design takes the affirmative: there

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44. 529 F. Supp. 1255, 1266 (E.D. Ark. 1982).

45. *Id.*

46. This issue is further discussed in Part II of this essay.

47. This is proven by the logical principal *tertium non datur*.

is something spiritual about human beings that cannot be explained by natural science.

This real and natural dualism is between belief in the controlling action of a higher intelligence and the rejection of this belief. Either there is something about our nature and operational capacities that demands an efficient cause from outside of the natural world, or there is not. Some Christian evolutionists and courts point out that it is entirely possible to believe in a god, even the Christian God who creates the world and saves its rational inhabitants.<sup>48</sup> Such people miss the point. The existence of a god and the truth of evolution are compatible only if the god does not control events in the world. There is no “contrived dualism” here. Dennett and many atheists see this clearly.

This real and natural dualism is a point of great significance, so let us be as clear as possible. Consider the following statement made by Ayala concerning logical conclusions based on the scientific method. “If one explanation fails, it does not necessarily follow that some other explanation is correct . . . The discovery of oxygen did not simply happen because it was shown that phlogiston did not exist.”<sup>49</sup> This is true as far as it goes, but it is not whole story.

Consider the following. If hypothesis H-1 is false, then the catch-all hypothesis not-H-1 is true. And in some cases, that catch-all hypothesis not-H-1 can be divided in such a way that a particular sub-hypothesis immediately emerges as the winner.<sup>50</sup> For example, H-1 says that the universe is a permanent entity. If H-1 is proved false, then the catch-all not-H-1 is true. Not-H-1 presents three possibilities. First, not-H-1(a) contends that the universe had no cause. Second, not-H-1(b) contends that the universe was self-caused. Finally, not-H-1(c) contends that the universe was caused by a distinct being. If you cannot swallow highly implausible not-H-1(a) or not-H-1(b), then your best bet is not-H-1(c). Not-H-1(c) does not reveal what this distinct being is, nor does it explain how the distinct being caused the universe. What not-H-1(c) *does* do is establish the probability that the distinct-being hypothesis is true.

At this point, one might object that we have not sufficiently answered the contention raised in the introduction that science is committed only to methodological naturalism. This contention is spoiled by an underlying ambiguity. Methodological naturalism invokes only natural causes when explaining empirical data. What does this mean? It could mean that methodological naturalism only invokes natural causes as a means to

48. Murphy, Miller, Ayala cited earlier all hold this view.

49. AYALA, *supra* note 13, at 76.

50. Not necessarily in the sense that it is certain, but that it is more probable than the competitor and more probable than not.

identify the necessary physical conditions of their occurrence. It could also mean that it invokes only natural causes based on the assumption that all possible sufficient causes are physical. If the claim is the former, then methodological naturalism leaves room for divine beings that exercise divine causality. If the claim is the latter, there is no room for divine beings exercising divine causality.

The former interpretation does not fit standard scientific practice. For example, a teacher will not explain how a flashlight works by saying, "On top of the flow of electricity, it takes the special action of a god to turn on the light." Standard scientific practice supposes that once the electrical action and the character of the metals are understood, the flashlight is understood. It appears that the latter interpretation of methodological naturalism is the better fit here: no room for a divine cause. This creates a conflict between standard scientific practice and Wallacian intelligent design.

Those who believe that proponents of intelligent design are mistaken about methodological naturalism have a sophisticated answer, similar to the one offered by Kenneth R. Miller in *Finding Darwin's God*.<sup>51</sup> Miller points out that the entire controversy about the place of God in evolution is mired in nineteenth-century science. Before the advent of quantum mechanics, everyone, including Darwin, saw the unfolding of organic life as a deterministic process. For them, a physical explanation of an event follows necessarily from some antecedent physical condition possibly subject to a final determination by scientists. Miller further observes that contemporary biology has not yet caught on to the idea that quantum mechanics massively influences the development of life; contemporary biologists tend to think about physical laws as they did in the nineteenth century.

In Miller's opinion, once it is understood that quantum mechanics rules out predictability, science must give up on the idea of offering a statement of the conditions that are not only necessary but jointly sufficient for the emergence of an event. Therefore, our declaration that the first interpretation of methodological naturalism does not fit science is true only of the science practiced by those who have yet to catch up with the implications of quantum mechanics. So, our distinction actually works against our argument.

This is a subtle response, but ambiguity in Miller's argument renders it ineffective. Miller is right about how sophisticated theorists view contemporary biology, but he confuses two understandings of the term "sufficient." On one hand, an explanation is sufficient if it provides the means for making exact predictions. In this sense, Miller denies that

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51. KENNETH R. MILLER, *FINDING DARWIN'S GOD* 204-218 (1999).



physical explanations are ever complete. On the other hand, an explanation might be “sufficient” in the sense that it posits all the causes that bring about a given state of affairs. Quantum mechanics, its laws, and other physical laws are sufficient in the sense that they provide all the explanation that is possible. Although these laws give us no tools to predict the future based on prior events, there is no need to introduce a creator because the physical laws provide as entire an explanation as can be had, even in principle.

What does Miller think about this second sense of the term “sufficient”? Miller is unclear about his view, but from time to time he *seems* to indicate that methodological naturalism does indeed offer sufficient explanations in this second sense of “sufficient.” For it is difficult to see what else he could be thinking when he remarks, “Any idea that life requires an inexplicable vital essence, a spirit, an *elan vital* has long since vanished from our lives and laboratories, a casualty of genetics and biochemistry.”<sup>52</sup>

Has the need for a “vital essence” completely vanished? Hardly. Many philosophers seriously consider the possibility of non-physical human traits, siding with Wallace against Darwin. Darwin believed that “man’s whole nature – physical, mental, intellectual and moral – was developed from the lower animals by means of the same laws of variations and survival; and, as a consequence of this belief, that there was no difference in kind between man’s nature and animal nature, but only one of degree.”<sup>53</sup> Wallace disagreed. In his view, the difference is in kind, not just degree. “While [the human] body was undoubtedly developed by the continuous modification of some ancestral animal form, some different agency, analogous to that which first produced organic life, and then originated consciousness, came into play in order to develop a higher intellectual and spiritual nature of man.”<sup>54</sup>

Darwin was irked by Wallace’s appeal to “some different agency.” Darwin would not have been pacified by the idea that science is only methodologically naturalistic. He sought, and thought he had found, the sufficient causes of man’s completely physical nature. There is no need to introduce anything spiritual or supernatural about man. Nor is there any need for a supernatural cause to explain man’s unique mental and moral powers. The same would surely be said by the majority of biologists practicing today. That is why they celebrate the power of science to explain so many illnesses and bizarre behavior previously attributed to spirits. The exclusion of the supernatural as an intervening cause in the physical world is not a mere adventitious belief of modern practicing scientists. It is central

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52. *Id.*, at 214.

53. ALFRED RUSSELL WALLACE, MY LIFE: A RECORD OF EVENTS AND OPINIONS 16 (1905).

54. *Id.*, at 16–17.

to their methodology, which accounts for all natural behavior by appealing to causes that are entirely physical.

Therefore, it can be said that the Wallacian version of intelligent design undercuts the modern Neo-Darwinian synthesis, as typically expounded.

*(b) Considering premise (2).*

Recall that premise (2) reads, "There is a plausible case for the Wallacian version of intelligent design." This premise is hotly contested. Some opponents declare, "Not a chance!" For example, Dennett calls intelligent design "a pathetic hodgepodge of pious pseudo-science."<sup>55</sup> Others have said the same with the same delicate reserve. Yet, one should thoughtfully consider the premise before taking them at their word.

Given the consensus established by the Neo-Darwinian synthesis, how are we to know whether Wallace's arguments are plausible? The anticipated answer is underwhelming: evidence from a dozen scientific disciplines supports the proposition that all organisms, including homo-sapiens, arose from some pre-biotic source. This answer is underwhelming because there is at least something to be said about the evolutionary problems connected with the origin of life. For the sake of discussion, however, let us suppose with Darwin, Wallace, and all who have worked in the field of evolutionary biology that modern evolutionary theory gives an adequate explanation for unconscious organisms. Let us also assume, for the sake of discussion, that Wallace's arguments are wrong with regard to physical features.<sup>56</sup> Further, let us assume that all these features could be explained better than with the sort of "just-so" stories Lewontin scorns. And finally, let us assume that there is nothing to the worry voiced by Darwin and elaborated in our time by Alvin Plantinga, that unguided evolution has little chance of producing reliable cognitive capacities.<sup>57</sup>

Let us assume all this. Still, even after all these injurious concessions are made, it remains possible to outline a case that ought to give pause to the opponents of teaching intelligent design in public school science classes. The case has two parts. The first part focuses on consciousness *qua* consciousness; consciousness abstracted from its modalities. The second concentrates on one particular form of consciousness: consciousness of

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55. See DENNETT, *supra* note 4, at 18.

56. WALLACE, *supra* note 19, at 172–212. Wallace pointed to a number of physical features, including the early emergence of a big brains as best explained by the action of a conscious mind operating outside of nature and seeking to provide humans with what they would need long after this supernatural agent conferred the properties on them.

57. See JAMES BEILBY, NATURALISM DEFEATED (2002)(providing an expression of Plantinga's position in itself and in response to criticism).

abstract entities.<sup>58</sup>

What exactly do we mean by consciousness *qua* consciousness? It must be admitted that there is no agreed upon definition of consciousness, and it may well be the case that no exact definition is possible. We have the same problem with other familiar realities such as motion. One might take a shot at defining motion by saying it's passing from here to there, but a moment's reflection reveals that "passing" is just another term for "moving." But it does not follow that we have no idea of what motion is or that we should doubt that it exists. Similarly, it does not follow that we have no idea of what consciousness is or should doubt there is such a thing. For example, we know what Gould was talking about when he said he was stunned by his ability to dream. Dreaming represents one of the lowest levels of consciousness, so low that some would say we are entirely unconscious when we dream. To say this is to acknowledge that one understands the difference between conscious and unconscious states. It is helpful to think of dreaming as a minimal state of consciousness because then we can use it as a foundation for considering heightened forms of consciousness, the times when we are acutely aware of what is going on around us.

Following the lead of Steven Pinker, Ray Jackendoff, and Ned Block, some cognitive neuroscientists have found it useful to distinguish between "sentience," "access to information," and "self-knowledge."<sup>59</sup> Access to information is the ability to report on the content of mental experience without the capacity to report on how the content was constructed by the nervous system. Self-knowledge is the capacity to report on one's own states. Of particular importance to our argument is sentience. In the words of the authors of *Cognitive Neuroscience*, sentience "refers to the subjective experience, phenomenal awareness, raw feelings, first-person tense, what it is like to be here to do something. If you have to ask, you will never know."<sup>60</sup>

As noted in the previous quotation, cognitive neuroscientists confess to finding consciousness elusive. Gazzaniga, Ivry, and Mangun recognize the same problem. "Right from the start we could say that science has little to say about sentience. We are clueless on how the brain creates sentience."<sup>61</sup> Many philosophers have echoed the perplexity of these neuroscientists.

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58. See WALLACE, *supra* note 19, at 197. The argument does *not* depend on Wallace's idea about the capacities early humans, the conditional premise of his argument earlier cited, but on the separable notion that there is something spiritual about the process of grasping universals, often called "abstraction." Our argument is nonetheless in line with Wallace's to the degree that he also looks to this power as indicative of this spiritual something.

59. MICHAEL S. GAZZANIGA ET AL., *COGNITIVE NEUROSCIENCE: THE BIOLOGY OF THE MIND* 657-59 (2nd ed. 2002).

60. *Id.*

61. *Id.*, at 659-60.

Jerry Fodor, for example, says, “Nobody has the slightest idea how anything material could be conscious. Nobody even knows what it would be like to have the slightest idea about how anything material could be conscious.”<sup>62</sup>

Underlying all these doubts is the realization that no matter how detailed the account of what is going on in the brain, it is always possible to ask, “Why do I have any sensation at all?” Put a bit more formally, the question becomes the following. If a putative explanation E is a genuine and complete explanation of a phenomenon P, then it should not be possible to grasp E, in relationship to P, and still logically ask, “But why does P occur?” This seems to be why Nicholas Humphrey is sufficiently taken with the problem of consciousness to hearken back to Wallace and to ask aloud whether, as the title of his essay has it, consciousness is the Achilles’ heel of Neo-Darwinism. Without a doubt the strange phenomenon of consciousness is a problem for physicalists.<sup>63</sup>

Consciousness is a problem for Neo-Darwinism, but it might be problematic for non-physicalists like Wallace. The “why” asked in the previous argument means, “How exactly does the connection between the causal factors invoked by explanation E and the phenomenon P work?” No one can understand how a supernatural being can imbue material with the capacity for consciousness. But even if we could, it seems that it would nonetheless be possible to conceive of a world in which God did not create finite consciousness. That is, it seems that it would be possible to grasp the explanatory factor, God, and still ask sensibly, “But how exactly did God do it?”

In contrast to physicalistic explanations of consciousness, theistic explanations have the virtue of invoking a causal agent. If this causal agent were to exist, it would have the metaphysical power to bring about consciousness, even though we do not have any direct insight into exactly how that divine power would or could do it. Physicalistic explanations do not even do that much. They do not invoke any causal factor which could metaphysically accomplish the feat. This will become clearer when we consider a special modality of consciousness.

The problem of consciousness *qua* consciousness for Neo-Darwinism is actually more than one problem. We have just considered the first problem: how can matter produce this odd, subjective, and private state? A second

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62. See Nicholas Humphrey, *Consciousness: The Achilles’ Heel of Darwinism? Thank God, Not Yet*, in *INTELLIGENT THOUGHT: SCIENCE VERSUS THE INTELLIGENT DESIGN MOVEMENT* 50, 53–54 (John Brokman ed., 2006).

63. See MILLER, *supra* note 51, at 148 (explaining that, if science has no understanding at all at this time of how consciousness has been produced by the physical system, it is probably premature for evolutionary theory even to suggest how it developed).

and perhaps more pressing problem for Neo-Darwinism is how consciousness influences the world.

By a physicalist account, consciousness is either identical with neural activity or produced by its neural correlate. Thus, many of our actions are, in the parlance of some neuroscientists and philosophers, “zombie” actions. For example, as you read the morning paper, you unconsciously pick up your coffee cup and start drinking the coffee. Does this not suggest that a physicalist understanding of consciousness adequately accounts for our experience? Does not the neural activity, the neural correlate of consciousness, suffice for the effect? And if it does, what purpose could consciousness possibly play in the world? If it has no function, how could evolution select for it? Much has been written on this difficult problem, with no satisfactory answer.

In his lauded work, *Quest for Consciousness*, Christof Koch explains how both healthy and brain-damaged persons execute learned, stereotypical behavior in a rapid and flawless manner.<sup>64</sup> The possibility of all activity carried out in this zombie-like fashion prompts him to raise a troubling question. “If so much processing can go on in the dark, without any feelings, why is a conscious mental life needed at all? What evolutionary advantage favored conscious brains over brains that are nothing but large bundles of zombie agents?”<sup>65</sup> Koch gives an answer that stretches over two chapters, but has conceded that the answer is unsuccessful.<sup>66</sup> To date, zombie-based explanations have not proved satisfactory.

Volumes have been written on the problems mere consciousness poses for physicalism. Some of the most articulate accounts resist at all cost the notion that consciousness is divinely connected to neurological activity.<sup>67</sup> Others emphatically declare the need for divine action.<sup>68</sup> This by itself tells us enough to secure our second premise: there is a plausible case for Wallacian intelligent design.

The second argument for the validity of our second premise has to do with a special form of consciousness: the consciousness of abstract entities.<sup>69</sup> The basic idea of this argument is that we are capable of consciously grasping properties that can be instantiated apart from their manifestations. For example, you not only can recognize the family cat, but

64. CHRISTOF KOCH, *THE QUEST FOR CONSCIOUSNESS: A NEUROBIOLOGICAL APPROACH* (2004).

65. *Id.*, at 231.

66. This concession was made by Professor Christof Koch to the author in a private email on Sunday, January 22, 2006 at 8:19 CST (on file with author).

67. See COLIN MCGINN, *THE MYSTERIOUS FLAME* (1999).

68. See J.P. MORELAND, *CONSCIOUSNESS AND THE EXISTENCE OF GOD* (2008).

69. This topic could be treated in its own book. We will do our best to provide a short account capturing the main ideas of this topic.

you can also cognitively grasp the property of being a cat.<sup>70</sup> This is an even greater cognitive achievement. Recognition of an instantiable attribute C is not the same as being able to recognize every particular that happens to instantiate C. It is rather to grasp, however vaguely, what it is to be a C, C-ness itself.

Now, here is a strange thing about this capacity; it elicits an activity that is not entirely physical. This is because an action that is entirely physical, such as a machine stamping a coin, takes place within the space-time continuum. On one end of the action, we have a physical object in the space-time continuum, the stamping machine. On the other end of the action, we have another physical object in the space-time continuum, the coin being stamped. The action of the machine stamping the coin takes place in space and time; it moves in a certain direction at a certain velocity. Notice that for this action to be physical it is necessary for both relata of the action to be in the space-time continuum.

In contrast, the psychological act of grasping an instantiable concept does not meet the conditions of an entirely physical act. The instantiable C itself is nowhere and is at no-when. It makes sense to ask, "Where is the cat?" It makes no sense to ask, "Where is cat?" This question is nonsensical because the property itself is never found in space and time; it is only present in localized manifestations. Wallace earned a living by bringing back *specimens* of unusual animals from Malaysia. He never dreamed of trying to bring home an exotic *species*, an abstract beetle or monkey.

Should one protest that the instantiable character C certainly is in the space-time continuum, being in the localized manifestations, one need only imagine an instantiable character C that cannot make such an appearance. Take as C the logical property of being valid. Because arguments themselves are not in space-time, though their representation in words are, and no part of the brain or brain activity has the property of being valid, this C, validity, is not *per se* in the space-time continuum. It follows that human beings, and possibly other organisms, are capable of activities that are not entirely physical. To be sure, there are ways of answering this argument, but such answers have a difficult time explaining why the premises of this argument are false.

If the premises of this argument are true, what does that tell us about intelligent design? The conclusion by itself does not assert anything about a god-like being. Additional premises are necessary to make the case that our cognitive capacities are, in some measure, dependent on a supernatural

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70. We here skirt complications about the boundaries of properties. These complications have led Darwinians to deny that there are species or kinds of things. The complications can be avoided by keeping to properties like "moving" "two" and "valid." But for simplicity, we'll allow ourselves to talk about cats and humans.

cause. Such premises are not hard to imagine. They consist of the contention that no physical process can give rise to non-physical activities, not even partially non-physical activities. Furthermore, if an organism finds itself capable of not entirely physical activities, there must be some cause of the capacity; it would not have just popped into existence without a cause. If there is a cause and the cause is not physical, then it must be non-physical, which is to say, supernatural. This is exactly what Wallace thought.

This argument is not a demonstration. Much more must be said about it to secure the validity of the premises advanced. It should be noted, however, that this argument is unlike all the popular arguments for intelligent design, which are based on what can and cannot be produced by chance. This argument is deductively valid and logically sound. To that extent it is insulated from objections based on use of statistics and probability. Therefore, not only is this an argument worth contemplating, it is as accessible as the Darwinian account of evolution. The argument has something going for it both with respect to the truth and with respect to pedagogical issues. Phaenarete could easily teach its elements.

*(c) Considering premise (3).*

We come now to the last premise, the conditional that combines in its antecedent premises (1) and (2). There are three arguments for the content of premise (3). The first deals with censorship. The second deals with academic integrity. The third deals with the permissibility of teaching intelligent design in public school classes.

The first argument turns on the idea of censoring books. Should science students be barred from reading Wallace, Darwin, Gould, Dennett and a vast number of other authors dealing with this conflict? That hardly makes sense. If these authors are read in science classes, students will encounter arguments for and against intelligent design. We should not censor the intellectual development of our children.

The second argument for premise (3) turns on the idea of academic integrity. Intellectual and academic standards of integrity not only permit but require that any hypothesis be presented in a way which incorporates its major strengths and weaknesses. One of the major weaknesses of the Neo-Darwinian hypothesis is its inability to adequately explain the origin of consciousness *qua* consciousness or the special mode of consciousness targeting abstract properties. This means that the Neo-Darwinian hypothesis cannot be presented as a complete theory. Therefore, intellectual and academic standards of integrity require that public schools present the Neo-Darwinian hypothesis in a way that clearly explains the limits of the theory. The fact that Neo-Darwinism contains a major weakness permits the

presentation of an alternative hypothesis which, if accepted, would remedy that particular weakness. Intelligent design is one such hypothesis. Hence, intellectual and academic standards of integrity permit the presentation of intelligent design as a reasonable alternative to Neo-Darwinism.

The third argument for premise (3) has been established by the Teacher's Tale. It is permissible to teach intelligent design in at least *some* classes. It seems odd to permit the teaching of intelligent design in a philosophy class, but not a biology class. What sense would it make to permit a hypothesis to be presented in one class, a counter-hypothesis in another, but never the two together? Or should the competing hypotheses be set side by side only in a philosophy class, the philosophy teacher explaining evolution, not the science teacher?

It might be replied that this is not as odd as it sounds because the entire issue is philosophical, not scientific. We answer again that this distinction does not hold. Consider an example from chemistry. Chemists might think it possible to produce a certain molecule. This hope could be dashed by purely mathematical demonstrations that the geometry of the molecule is impossible. Just as the scientific disciplines are subject to the constraints of pure mathematics, why cannot philosophy also serve such a corrective role?

*ii. It is permissible to teach the history of a given subject.*

We turn now to the second argument for permitting the teaching of intelligent design in science classes. It can be stated much more briefly than the first, as it depends on arguments already made in the previous section. It runs as follows. (1) If teaching a subject to high school students is appropriate, then so is teaching the history of the subject. (2) If it is permissible to teach high school students modern physics, it is permissible to teach them about Galileo and Newton. (3) Teaching evolutionary biology is appropriate. (4) The key teachings of Wallace, co-creator with Darwin of the theory of evolution, belong to the history of evolutionary biology. (5) Wallace teaches that natural selection has its limits and human beings are a result of the action of a supernatural being. (6) It follows from these premises that it is appropriate to teach Wallace's ideas in public school science classes. These premises need little elaboration.

*3. A response to an argument for selective prohibition.*

In the course of arguing our case, most of the arguments on the other side have already been considered. We have addressed the contention that intelligent design is not a science. We have addressed the contention that intelligent design is not validated through the scientific method. We have not addressed perhaps the most thoughtful argument for selective prohibition. This argument contends that our civilization cannot survive



without an education system to pass on the knowledge necessary for our communal life. The task of public schools is to convey to the next generation the knowledge established by previous generations. What is “established” is never beyond challenge, but there are appropriate venues for launching these challenges. Public school science classes are not among them.

For example, a philosophically attuned high school mathematics teacher might believe that there is no such thing as mathematical truth. Such a teacher should not undercut student confidence by declaring that the only truth in mathematics is its internal consistency. Nor should the teacher spend valuable time discussing truth, truth-makers, and Platonic and Formalist theories at the expense of actually teaching the course material to students. In the same way, biology teachers charged with explaining the structure of reproductive cells, DNA, selection and genetic drift, and other matters of high importance should not distract the class with philosophical arguments about the limits of evolutionary theory.

Our contention has never been that teachers *must* teach intelligent design, but only that they *may*. Students who struggle to grasp the basics of biology may not be ready to delve into the complex problems associated with the genesis of our private internal states. Even when students are capable of understanding these problems, circumstances may not permit them or their teachers to address them. Not every teacher is capable of, or comfortable with, exploring such deep questions.

Many teachers are so accustomed to seeing correlations as explanations that these questions will strike them as entirely incomprehensible. By itself, this is not a problem. But there is a problem when teachers are forbidden from addressing these questions. We see such a ban in public schools today. Schools and teachers are encouraged to remain silent about the challenges to the Neo-Darwinian account. Such encouragement comes from experts whose narrow vision of the issues predictably leads them to advocate for an over-simplified curriculum. These experts make life difficult for the Phaenaretes of this world.

It is hard to see any sense in an interdiction of every mode of teaching of intelligent design in public school classes. It is hard to imagine why we should censor the way we engage the arguments of distinguished scholars. Further, it is hard to understand why we coddle these theories, protecting them from the rigors of philosophical investigation. Finally, it is hard to see why students should be kept oblivious to the impact of Neo-Darwinism on their fundamental beliefs.

### *III. Conclusion.*

Our response to thesis T is that no teacher should be barred from

teaching intelligent design in appropriate circumstances. If intelligent design is not part of the curriculum, a decent respect for students' intellectual development demands they at least be informed that only one side of an old argument has been set before them.

## PART II

### LEGAL ISSUES

In the second part of our essay we shall discuss the *legal* context in which the question of teaching evolutionary theory arises in public schools. We shall argue for five major propositions. (1) It is a political and sociological fact that the Supreme Court's method of interpreting and applying the Constitution necessarily relies upon philosophical argumentation. (2) That fact renders philosophical argumentation entirely appropriate and necessary on the part of those who are engaged in analyzing and evaluating the Court's constitutional interpretations and applications. (3) The standard of review the Court frequently applies to the interpretation and application of the Establishment Clause is irretrievably flawed and should be replaced with a different standard of review which we shall formulate and defend. (4) The Court's evolution cases are fundamentally misguided. (5) The philosophical recommendation regarding the teaching of evolutionary theory in public schools we articulated in Part I of this essay—that it should be permissible for public school districts to permit, but not require, the introduction, discussion, and evaluation of non-physicalist<sup>71</sup> explanations of life—should be held constitutional under our proposed standard of review.

#### *I. Basic Legal Background*

Given the philosophical nature of this article, it may be that some of the readers of this essay will be neither lawyers nor law students. Accordingly, it may be useful to begin by sketching some of the legal background of the conference's theme.

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71. In Part II we shall use the term "non-physicalist" instead of "intelligent design." We do this because "non-physicalist" is a more inclusive term, which avoids suggesting that our arguments are tied to one particular non-physicalist explanation of life. We will use the term "creation science" to refer to a theory maintaining that "the earth was created within the specific time stated in Genesis and that the species were created at once and did not evolve from lower to higher orders." Carol Weisbrod, *Evolution and Creation Science, in THE OXFORD COMPANION TO THE SUPREME COURT OF THE UNITED STATES* 263 (Kermit L. Hall ed., 1992).

### 1. *Introductory*

The First Amendment to the United States Constitution provides, in part, “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . . .”<sup>72</sup> The sentence, “Congress shall make no law respecting an establishment of religion” is traditionally referred to as the Establishment Clause. The interrupted sentence, “Congress shall make no law . . . prohibiting the free exercise thereof,” is customarily referred to as the Free Exercise Clause.<sup>73</sup>

Readers of the Constitution who know little or nothing about the history of judicial interpretation of that document, and who focus exclusively upon these two constitutional provisions, might reasonably assume that they restrict only the powers of Congress. After all, Congress is the only branch of the Federal government mentioned in the Clauses. Such a reader might understandably argue that, if the Framers had intended to extend the restraints of the Establishment and Free Exercise Clauses to the President and the Federal Judiciary, they would have done so explicitly. Nevertheless, the Court has long held that the Religion Clauses limit the powers of both the President and the Courts.<sup>74</sup>

The Court has held that the Religion Clauses also apply to all levels of Federal and State government<sup>75</sup> by virtue of the *implied* content of the Due Process Clause of the 14<sup>th</sup> Amendment. The Due Process Clause reads, “. . . nor shall any State deprive any person of life, liberty, or property, without due process of law . . . .”<sup>76</sup> The use of the adjective “implied” is appropriate because nothing in the language of the Due Process Clause explicitly refers to either of the Religion Clauses.

The long-established Federal judicial interpretation of the Establishment Clause raises the following question: under what circumstances is it constitutionally permissible for Federal or State government to assist religious activities? Analogously, the Free Exercise Clause raises this question: under what circumstances is it constitutionally permissible for Federal or State government to burden religious activities? If the answers to both questions are overbroad, then a conflict between the Clauses is inevitable. For example, suppose that the Establishment Clause is interpreted as prohibiting government from assisting religious activities in

72. U.S. CONST. amend. I.

73. *Id.*

74. *See, e.g.,* Herbert v. Lando, 441 U.S. 153, 168 n.16 (1979); DANIEL A. FARBER, THE FIRST AMENDMENT I (1998).

75. The phrase “all levels” includes State, *qua* State, County, and Local government. In particular, public school districts are included.

76. *See* Everson v. Board of Education, 330 U.S. 1 (1947)(incorporating the Establishment Clause against state governmental power); Cantwell v. Connecticut, 310 U.S. 296 (1940) (incorporating the Free Exercise Clause against state governmental power).

any way and that the Free Exercise Clause is interpreted as prohibiting government from burdening religious activities in any way.

There are many situations in which government is forced to choose between assisting and burdening religious activities. For example, consider the provision of police and fire protection to religious activities. The provision of such services assists religious activities, whereas the denial of such protection burdens religious activities. The government must choose between the two. Choosing the former would violate the Establishment Clause; choosing the latter would violate the Free Exercise Clause. This situation arises in many other situations, such as providing tax exemptions to religious activities. Thus, one of the challenges presented in interpreting the Religion Clauses is to sufficiently restrict the scope of one or both in a way which avoids such conflicts.<sup>77</sup>

## 2. *Constitutional standards of review*

How does the Supreme Court resolve these questions in the context of judicial appeals? Fundamentally, the Court does not typically resolve any constitutional issue by appealing exclusively to the language of the various constitutional clauses. Instead, the Court invokes and applies what are traditionally referred to as standards of review. A standard of review is a judicially created and formulated test or criterion that the Court applies to determine whether a particular action of the Federal or a State government conforms to the requirements of some provision of the Constitution.<sup>78</sup> Thus, a standard of review functions as a linguistically expressed judicial interpretation of a constitutional provision.

Standards of review are determinative factors in constitutional litigation, but it is important to understand that there are no standards of review, in this sense, explicitly articulated in the Constitution itself. The political fact of the matter is that the entire law of constitutional standards of review is *judicially created* by the Supreme Court. A consequence of this political fact, is that there is an important sense in which the present Constitution can be ascertained *only* by focusing upon the published opinions of the Supreme Court itself—as contrasted with focusing solely upon the language of the Constitution. This explains the traditional lawyers' maxim that the Constitution is not the document ratified in 1789, together with its later Amendments, but is rather the view of the sitting members of the Supreme Court.

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77. See, e.g., *Zorach v. Clauson*, 343 U.S. 306, 313-314 (1952) (interpreting the Religion Clauses).

78. Of course, all other courts in the United States, both Federal and State, are required to apply whatever constitutional standards of review the Supreme Court has, for the time being, decided to use, when those other courts apply the federal constitution.

This understanding of the political reality of the temporary and fluctuating content of Constitutional law was explicitly expressed by former Justice William Brennan:

We current Justices read the Constitution in the only way that we can: as Twentieth-Century Americans. We look to the history of the time of framing and to the intervening history of interpretation. But the ultimate question must be, what do the words of the text mean in our time? For the genius of the Constitution rests not in any static meaning it might have had in a world that is dead and gone, but in the adaptability of its great principles to cope with current problems and current needs. What the constitutional fundamentals meant to the wisdom of other times cannot be their measure to the vision of our time.<sup>79</sup>

The point is that this "vision of our time," at any given time, is ultimately in the hands of one or another coalition of at least five of the nine current justices of the Supreme Court.

### *3. Why standards of review?*

Why has the Court interposed its own judicially-formulated standards of review? An explanation is that long ago the Court concluded that many of the provisions of the Constitution are so vague that they cannot be applied in any non-arbitrary way. For example, consider the Equal Protection Clause of the Fourteenth Amendment: "... Nor shall any State . . . deny to any person within its jurisdiction the equal protection of the laws." What precisely is it to deny to a person the equal protection of the laws? An indefinitely large number of alternative interpretations are possible and the words of the provision itself offer little or no prospect of adjudicating between such alternative interpretations. As a consequence, it is understandable that the Court has chosen to tie its own standards of review to vague constitutional provisions.

Another possible explanation is that some of the constitutional provisions are too clear. For example, some provisions are linguistically phrased in absolute terms, which apparently permit no exceptions or qualifications. A standard example is the Free Speech Clause of the First Amendment: "Congress shall make no law . . . abridging the freedom of speech. . . ." Literally interpreted, it might seem that this provision prohibits Congress from enacting any law which restricts speech in any way.

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79. William J. Brennan, Jr., *The Constitution of the United States: Contemporary Ratification*, in INTERPRETING THE CONSTITUTION: THE DEBATE OVER ORIGINAL INTENT 27 (Jack N. Rakove ed., 1990).

Nevertheless, despite Justice Black's protestations,<sup>80</sup> the Court has never construed the clause in this literal way, presumably because the Court has never believed that an absolute protection of speech would be good public policy.

#### *4. Some examples of Constitutional standards of review*

Given the relatively abstract nature of our exposition, a few specific examples of constitutional standards of review used in the First Amendment context might help comprehension.

Strict scrutiny requires the Government to prove that the content-restrictive action promotes some compelling government interest. Consider the Free Speech Clause: "Congress shall make no law . . . abridging the freedom of speech. . . ." First, suppose that government has acted in a way which restricts the semantical content of a speech act. Next, suppose that there is no exception to the First Amendment which applies. In such a case, the Court presently applies strict scrutiny where it is virtually impossible for the government to prevail.

The next standard, intermediate scrutiny, is used when the government restricts only the time, place, or manner of speech. In such cases the applicable First Amendment standard of review provides that the Government has the burden of proving that its action was content-neutral, is narrowly tailored to serve some significant governmental interest, and leaves open ample alternative channels of communication."<sup>81</sup> Although it is not as severe a standard as a strict scrutiny standard, intermediate scrutiny is nevertheless strict enough to make it quite difficult for the government to win.

An example of rational basis standard of review would be when the government regulates the semantical content of speech in a governmentally-controlled forum which is not a traditional public forum, not voluntarily opened up to speech activities, and not used by the government for its own expressive purposes. According to the Court the government is permitted to do so in any fashion, as long as the regulation of speech is reasonable in the light of the intended purpose of the government's forum.<sup>82</sup> A rational basis standard of review makes it extremely difficult for the government to lose.

This list of Free Speech Clause standards of review could be extended indefinitely, but it would be sufficient to say that the Court has enormous discretion when it comes to applying constitutional provisions to litigated

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80. *See, e.g.,* *Konigsberg v. State Bar of Cal.*, 366 U.S. 36, 61 (1961) (Black, J., dissenting) (describing Justice Black's absolutist theory of the Free Speech Clause).

81. *See, e.g.,* *Perry Educ. Ass'n v. Perry Local Educators' Ass'n*, 460 U.S. 37 (1983).

82. *Id.*

situations by means of its own judicially-formulated standards of review.<sup>83</sup>

When it comes to understanding constitutional law, reading the constitutional text itself is only a bare beginning. The Court's standards of review function as translations of the Constitutional text itself, which readily suggests that those standards of review *instrumentally substitute* for the words of that text. Constitutional law is not the Constitution unadorned, but rather the Constitution as translated by the Court's standards of review. This is the primary way in which the law of the Constitution is brought to bear upon persons in the United States.

*5. The Court's willingness to use its own standards of review enormously increases its discretion and flexibility in interpreting the Constitution.*

All standards of review can be conceived of as arranged on a *spectrum*. At one end lies strict scrutiny where the government has little or no chance of prevailing. At the other end of the spectrum lies rational basis, where the government is virtually certain to succeed.

Between the two ends of this imaginary spectrum are situated a large variety of standards of review, although there is often controversy and uncertainty as to which of such two "in-between" standards ranks above the other in terms of degree of severity. For example, the Contract Clause of Article I provides, "No State shall . . . pass any . . . Law impairing the Obligation of Contracts."<sup>84</sup> The Court has translated this provision by means of a standard of review providing that a State impairment of an existing contract interest is constitutional if and only if the impairment is reasonable and necessary to serve some important governmental objective.<sup>85</sup> In contrast, the Privileges and Immunities Clause of Article IV provides, "The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States."<sup>86</sup> The Court has translated this provision by means of a standard of review providing that if the regulated activity in question is sufficiently integral to the welfare of the Nation as a whole, then the regulatory burden is constitutional if and only if it is closely related to the promotion of a substantial governmental objective.<sup>87</sup> It is uncertain which of these two standards of review is stricter.

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83. See, e.g., *Miller v. California*, 413 U.S. 15 (1973)(setting out the standard of review for prohibiting sexually-oriented materials); *Cohen v. California*, 403 U.S. 15 (1971)(setting out the standard of review for "fighting words"); *Brandenburg v. Ohio*, 395 U.S. 444 (1969)(setting out the standard of review for speech acts urging people to violate the law).

84. U.S. CONST. art. I, § 10.

85. See, e.g., *United States Trust Co. of New York v. New Jersey*, 431 U.S. 1 (1977).

86. U.S. CONST. art. IV § 2.

87. See, e.g., *Supreme Court of Virginia v. Friedman*, 487 U.S. 59 (1988).

Why is all this significant? One who is unaware of the Court's practices of constitutional interpretation might easily suppose that any particular provision in the Constitution carries the same legal force as any other. After all, the Constitution is the supreme law of the land, so how could it be that some constitutional provisions are "more supreme" than others?

The answer is that some constitutional provisions are "more supreme" than others in virtue of their varying semantical translations into the Court's set of standards of review. As we've seen, the Court has at its disposal an indefinitely large number of standards of review, ranging all the way from extremely tolerant to extremely strict standards. By choosing to semantically translate any given constitutional provision by means of a stricter or weaker standard of review, the Court can unilaterally direct the legal force of that provision in any direction it chooses. The following three instances are examples of the Court using this power to effectively eliminate a constitutional provision altogether.

Section 1 of the Fourteenth Amendment provides, "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States. . . ."<sup>88</sup> This Clause is traditionally referred to as the "Privileges or Immunities of United States Citizens Clause."<sup>89</sup> In the *Slaughter-House Cases* the Court effectively eliminated that Clause from the Constitution by holding that it was redundant because it failed to add any liberty protections to those already existing in the Constitution.<sup>90</sup>

The Takings Clause of the Fifth Amendment provides, ". . . nor shall private property be taken for public use, without just compensation."<sup>91</sup> The phrase 'for public use' is generally referred to as the "public use requirement." Paradigm instances of public uses include highways, streets, sidewalks, public parks, railroad lines, and airports. The use of the adjective "public" seems to suggest that Government may not condemn private property for "private" uses, even if it is willing to pay adequate compensation. Despite this common-sense interpretation, in *Kelo v. City of New London*<sup>92</sup> the Court essentially drained the "public use requirement" of all legally significant semantical content by holding that Government may transfer the title to private property from certain private citizens to other private citizens, such as real-estate developers, for the latter's own private

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88. U.S. CONST. amend. XIV, §1.

89. This Clause must be distinguished from the earlier-mentioned Privileges and Immunities Clause of Article IV.

90. There is, however, some very obscure language in *Saenz v. Roe*, hinting that the Court might be prepared to reconsider the matter; although, the language in question does not seem to commit itself to the thesis that the Privileges and Immunities Clause of the Fourteenth Amendment actually adds liberty guarantees in its own right. 526 U.S. 489 (1999).

91. U.S. CONST. amend. V.

92. 545 U.S. 469 (2005).



uses and profit, so long as it is minimally rational for Government to have believed that such a property transfer will create at least some indirect economic benefit to the community at large, such as increased property tax valuations and greater numbers of available jobs.

The third example concerns the Eleventh Amendment's provision, "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by citizens of another State, or by Citizens or Subjects of any Foreign State."<sup>93</sup> Read literally, the Clause prohibits Federal court lawsuits against States, when those suits are brought by citizens of a State other than the defendant State or by citizens of a foreign State. In *Hans v. Louisiana*<sup>94</sup> the Court chose to ignore the exclusionary semantical force of the phrase "citizens of another State." The Court held that the Eleventh Amendment bars even federal court lawsuits brought by citizens of the defendant State itself. Thus, after *Hans*, the Eleventh Amendment effectively reads, "... shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by *Citizens of any State, including the defendant State itself* . . . ."

The Court then ruled in *Ex parte Young*<sup>95</sup> that the Eleventh Amendment does not bar federal court lawsuits against states, so long as the relief requested is *equitable*. *Young* effectively eliminates the phrase "in law or equity" from the Eleventh Amendment, which must now be read as, "The Judicial power of the United States shall not be construed to extend to *any suit whatever* . . . ."<sup>96</sup> These examples show the Court has the unlimited legal power to effectively eliminate words and phrases from the constitutional text.

Eliminating words and phrases from the constitutional text is not the only tool the Court employs. The Court can also retain the original words and phrases but adjust their legal force by selectively attaching its own constitutional standards of review to the language. Examples of this kind of "intra-Clause" flexibility include the Equal Protection Clause of the Fourteenth Amendment, which provides, ". . . nor shall any State. . . deny any person within its jurisdiction the equal protection of the laws."<sup>97</sup> In cases of racial or ethnic classifications, the Court translates this language into a strict scrutiny standard of review: The State bears the legal burden of proving that its racial or ethnic classification promotes a compelling

93. U.S. CONST. amend. XI.

94. 134 U.S. 1 (1890).

95. 209 U.S. 123 (1908).

96. There are a number of later complex interpretive moves the Court has made with respect to the Eleventh Amendment in the decades following *Young*, none of which we shall take up here.

97. U.S. CONST. amend. XIV.

governmental objective in a necessary way.<sup>98</sup> In sharp contrast, in cases of sex classifications, the Court translates this same Fourteenth Amendment language into an intermediate standard of review: The State bears the legal burden of proving that its sex classification promotes an important governmental interest in a substantial way, where the term “important” is weaker than “compelling” and the term “substantial” is weaker than “necessary.”<sup>99</sup> In further contrast, in cases of classifications of economic interests, the Court translates this same Fourteenth Amendment language into a rational basis standard of review: the classification is constitutional so long as it promotes a constitutionally permissible objective in a minimally rational way.<sup>100</sup> This is an example of the Court selecting a single constitutional provision and splitting its legal force into three distinct degrees, depending upon the type of legal context in which the Clause is judicially applied. This type of judicial dexterity could be described infinitely.<sup>101</sup>

In summary, we provided a long but nonexclusive list of examples to support our thesis that the Supreme Court has a legally unlimited power to *restate and restructure* the Constitutional text in any way it sees fit. Considerations such as these have motivated legal scholars to characterize American constitutional law as being expressed common law with an ever-evolving set of judicial decisions as opposed to being expressed in any single document.<sup>102</sup> Thus the Constitution can be characterized as nine sitting judges rather than a document.

*6. The unlimited legal power of the Court to translate provisions of the Constitution into its own self-selected standards of review makes room for philosophical argumentation in arguing for and against particular constitutional interpretations.*

The very text of the Constitution inevitably requires philosophical reflection and analysis when it comes to the interpretation and application of it. There are many ambiguities in the Constitution. The term “religion” is found in the religion clauses but there is not a definition of the term. Do secular physicalist worldviews qualify as a religion? The term “speech” in the free speech clause and the term “person” in the due process clause are also undefined which leaves open questions about whether burning a flag

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98. *See, e.g.,* *Palmore v. Sidoti*, 466 U.S. 429 (1984).

99. *Craig v. Boren*, 429 U.S. 190, 197–98 (1976).

100. *See, e.g.,* *Fed. Comm’n Comm’n v. Beach Comm’ns, Inc.*, 508 U.S. 307 (1993).

101. *Compare, e.g.,* *Roe v. Wade*, 410 U.S. 113 (1973) (applying strict scrutiny to burdens upon the abortion interest), *with* *Ferguson v. Skrupa*, 372 U.S. 726 (1963) (applying rational basis scrutiny to economic interests).

102. *See, e.g.,* LEONARD LEVY, *ORIGINAL INTENT AND THE FRAMERS’ CONSTITUTION* 330 (1988).

constitutes speech or whether a fetus qualifies as a person. The equal protection clause uses the phrase “equal protection.” What precisely does that mean? Does a progressive income tax qualify as equal protection of the law?

Any serious effort to answer such questions will quickly struggle with what are essentially philosophical issues. Thus, even in the absence of the complex structure and hierarchy of standards of review fashioned by the Court, interpreters of the Constitution would have to engage in philosophical analysis and reflection. It seems that, even apart from the question of interpreting the constitutional text, the suggestion that there could be *any* litigation which completely excludes any philosophical considerations is an illusion.

In any case, the presence of the complex structure and hierarchy of standards of review dramatically increases the frequency and necessity to invoke philosophical arguments and considerations when it comes to constitutional interpretation. There are at least two aspects of this frequency and necessity.

First, the Court’s standards of review are *philosophical tools*. Anyone who supposes that the Court’s interpretation and application of the Constitution by means of its self-selected standards of review involve only purely legal considerations need only read one or two of the Court’s opinions. Thus, any adequate attempt to defend or challenge a Court decision would necessarily require using philosophy.

An example of this philosophical phenomenon is the Court’s choice to give speech a high degree of protection under the Free Speech Clause, especially with respect to content-based regulations. One of the Court’s traditional rationales for this choice was expressed by Justice Holmes, and has been reiterated many times since:

But when men have realized that time has upset many fighting faiths, they may come to believe . . . that the ultimate good desired is better reached by free trade in ideas - that the best test of truth is the power of the thought to get itself accepted in the competition of the market, and that truth is the only ground upon which their wishes safely can be carried out. That at any rate is the theory of our Constitution. It is an experiment, as all life is an experiment. Every year if not every day we have to wager our salvation upon some prophecy based upon imperfect knowledge. While that experiment is part of our system I think that we should be eternally vigilant against attempts to check the expression of opinions that we loathe and believe to be fraught with death, unless they so imminently threaten immediate interference with the lawful and pressing purposes of the law that an immediate check is required to

save the country.<sup>103</sup>

This rationale is clearly philosophical in nature. Indeed, it essentially the justification for protecting speech proposed by John Stuart Mill in his book, *On Liberty*.<sup>104</sup> Other examples include the use philosophy in interpreting the dormant commerce clause<sup>105</sup> and liberty interests in abortion.<sup>106</sup>

Of course, we are dealing with two different types of philosophy. *Applied philosophy* differs from the *abstract philosophy* which occurs in the typical academic context. The kind of philosophizing that occurs in the context of constitutional litigation is inevitably *constrained and limited* by the specific nature of the particular situations and issues involved in any given lawsuit. Indeed, judicial philosophizing at the constitutional level necessarily begins with specific legal situations.<sup>107</sup> From such specific legal situations, courts ascend to a level of abstract philosophical reflection. After resolving the philosophical issues at the abstract level, courts return to the specific legal situations and apply the principles they formulated in the abstract. Nevertheless, despite being constrained and limited by specific factual contexts, the use of philosophy that takes place in constitutional litigation is just as philosophical in nature as the detached and abstract philosophizing done in purely academic contexts.<sup>108</sup>

Applications of standards of review inevitably make more room for such philosophical argumentation. Because of the ways in which these standards are typically formulated they generate philosophical issues in their own right. Applications of standards of review in litigation are necessarily contested. Hence, to the extent to which these standards are themselves expressed in philosophical terminology, the application of those standards to specific legal situations also triggers conflicting philosophical analysis and argument.

In summary, the Supreme Court essentially functions as the supreme Philosophical Administrator and Overseer of the American legal system. This role allows the Court to modify the framework and content of the legal

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103. *Abrams v. United States*, 250 U.S. 616, 630 (1919).

104. See especially Chapter II of that work.

105. *H.P. Hood and Sons Inc., v. DuMond*, 336 U.S. 525, 539 (1949)(explaining the philosophy of the Dormant Commerce Clause); see also *Baldwin v. G.A.F. Seelig*, 294 U.S. 511, 523 (1935)(supporting the philosophy behind the standard of review for the Dormant Commerce Clause).

106. See also *Planned Parenthood of Se. Pennsylvania v. Casey*, 505 U.S. 833, 851 (1992)(philosophizing that at the heart of liberty is the right to define one's own concept of existence).

107. This is a result of the Supreme Court's interpretation of the "case or controversy" provision of Article III of the Constitution.

108. It may help to compare the distinction between abstract and applied philosophy to the distinction between the Socratic philosophy—arguing from particulars to universals—and the way in which academic philosophers typically philosophize—arguing from universals to particulars.

system whenever it unilaterally decides to promote the Common Good, as perceived by a majority of the Court. One of the inevitable consequences of the Court playing this role in our legal system is that the need for formally amending the Constitution in the democratic way provided in Article V has been largely eliminated.

## II. *The Court's Interpretation of the Establishment Clause*

### 1. *The Lemon Test*

One of the Court's most frequently applied standards of review under the Establishment Clause is the three-part Lemon Test.<sup>109</sup> *Lemon* held that in order for a governmental action to be constitutional under the Establishment Clause the following criteria must be satisfied: "First, the statute must have a secular legislative purpose; second, its principal or primary effect must be one that neither advances nor inhibits religion. . . , finally, the statute must not foster 'an excessive entanglement with religion.'"<sup>110</sup> *Lemon* is a disjunctive test, which means that a failure to satisfy any of the three criteria results in a violation of the Establishment Clause. It has generated much debate.

### 2. *What exactly is a religion, anyway?*

According to the Court's standard of review, any application of the Establishment Clause must involve governmental regulation of a religion. But what precisely counts as a religion? The Court has never purported to definitively answer the question; it has merely offered hints not subsumable under any comprehensive definition. We shall briefly describe two such efforts to illustrate the range of possible judicial interpretations of the term "religion."

#### a. *An apparently very broad formulation.*

*United States v. Seeger*<sup>111</sup> illustrates one end of a spectrum of interpretations. The case involved a federal statute exempting from the draft any persons "who by reason of their religious training and belief are conscientiously opposed to participation in war in any form."<sup>112</sup> The statute defined the term "religious training and belief" as "an individual's belief in

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109. *Lemon v. Kurtzman*, 403 U.S. 602 (1971). The Court has not applied the *Lemon* test in all of its Establishment Clause cases decided since 1971; however, it has been frequently applied and has not been overruled. See, e.g., ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 1202 (3d ed. 2006).

110. *Lemon*, 403 U.S. at 612-13.

111. *United States v. Seeger*, 380 U.S. 163 (1965).

112. *Id.* at 164-65.

a relation to a Supreme Being involving duties superior to those arising from any human relation, but (not including) essentially political, sociological, or philosophical views or a merely personal moral code.”<sup>113</sup>

Seeger was one of three litigants whose cases were consolidated on appeal. He was convicted in Federal District Court for refusing to submit to induction into the armed services, instead claiming an exemption as a conscientious objector. Seeger asserted that:

He was conscientiously opposed to participation in war in any form by reason of his ‘religious’ belief; that he preferred to leave the question as to his belief in a Supreme Being open, ‘rather than answer ‘yes’ or ‘no’; that his ‘skepticism or disbelief in the existence of God’ did ‘not necessarily mean lack of faith in anything whatsoever’; that his was a ‘belief in and devotion to goodness and virtue for their own sakes, and a religious faith in a purely ethical creed.’ He cited such personages as Plato, Aristotle and Spinoza for support of his ethical belief in intellectual and moral integrity ‘without belief in God, except in the remotest sense.’<sup>114</sup>

The District Court rejected his claim “solely because it was not based upon a ‘belief in a relation to a Supreme Being’ as required by section 6(j) of the Act.”<sup>115</sup>

The Supreme Court held that the statute’s use of the term “religion” included world views such as Seeger’s: “We believe that . . . the test of belief ‘in a relation to a Supreme Being’ is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption.”<sup>116</sup> Thus, the Court held that the statutory exemption applied to anyone who asserts a “belief in and devotion to goodness and virtue for their own sakes, and a religious faith in a purely ethical creed,”<sup>117</sup> regardless of whether or not they believe in a Supreme Being.

As support for its interpretation of the statutory exemption, the Court cited the views of the Protestant theologian, Paul Tillich: “The eminent Protestant theologian, Dr. Paul Tillich, whose views the Government concedes would come within the statute, identifies God not as a projection ‘out there’ or beyond the skies but as the ground of our very being.”<sup>118</sup> The Court further quoted Tillich:

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113. *Id.* at 165.

114. *Id.* at 166.

115. *Id.* at 167.

116. *Id.* at 165–66.

117. *Seeger*, 380 U.S. at 166.

118. *Id.* at 180.

I have written of the God above the God of theism . . . . In such a state (of self-affirmation) the God of both religious and theological language disappears. But something remains, namely, the seriousness of that doubt in which meaning within meaningless is affirmed. The source of this affirmation of meaning within meaninglessness, of certitude within doubt, is not the God of traditional theism but the 'God above God,' the power of being, which works through those who have no name for it, not even the name God.<sup>119</sup>

In further support for its interpretation of "religion," the Court proceeded to cite The Second Vatican Council,<sup>120</sup> Bishop John A.T. Robinson, author of *Honest to God*,<sup>121</sup> and David Saville Muzzey, author of *Ethics as a Religion*.<sup>122</sup>

In commenting specifically upon Seeger's case, the Court said:

[T]here was no question of the applicant's sincerity. He was a product of a devout Roman Catholic home; he was a close student of Quaker beliefs from which he said 'much of (his) thought is derived'; he approved of their opposition to war in any form; he

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119. *Id.* (citing PAUL TILlich, SYSTEMATIC THEOLOGY: EXISTENCE AND THE CHRIST 12 (1957)). The Court's quotation compresses and slightly modifies the actual passage, which reads in full:

In the last chapter of my book *The Courage To Be* . . . I have written of the God above the God of theism. This has been misunderstood as a dogmatic statement of a pantheistic or mystical character. First of all, it is not a dogmatic, but an apologetic, statement. It takes seriously the radical doubt experienced by any people. It gives one the courage of self-affirmation even in the extreme state of radical doubt. In such a state the God of both religious and theological language disappears. But something remains, namely, the seriousness of that doubt in which meaning within meaninglessness is affirmed. The source of this affirmation of meaning within meaninglessness, of certitude within doubt, is not the God of traditional theism but the 'God above God,' the power of being, which works through those who have no name for it, not even the name God. This is the answer to those who ask for a message in the nothingness of their situation and at the end of their courage to be. But such an extreme point is not a space within which one can live. The dialectics of an extreme situation are a criterion of truth but not the basis on which a whole structure of truth can be built.

120. *Id.* at 181-82 (citing *Draft Declaration on the Catholic Church's Relations with Non-Christians*, in COUNCIL DAYBOOK 282 (Vatican II, 3d Sess., 1965)).

121. *Id.* at 181 (citing JOHN A. T. ROBINSON, HONEST TO GOD 15-16 (1963)). The Court quotes this sentence: "But the signs are that we are reaching the point at which the whole conception of a God 'out there,' which has served us so well since the collapse of the three-decker universe, is itself becoming more of a hindrance than a help."

122. *Id.* at 182-83 (citing DAVID SAVILLE MUZZEY, ETHICS AS RELIGION 98 (1951)). The Court quotes these sentences:

Religion, for all the various definitions that have been given of it, must surely mean the devotion of man to the highest ideal that he can conceive. And that ideal is a community of spirits in which the latent moral potentialities of men shall have been elicited by their reciprocal endeavors to cultivate the best in their fellow men. . . . Thus the 'God' that we love is not the figure on the great white throne, but the perfect pattern, envisioned by faith, of humanity as it should be, purged of the evil elements which retard its progress toward 'the knowledge, love and practice of the right.

devoted his spare hours to the American Friends Service Committee and was assigned to hospital duty.<sup>123</sup>

In summing up its ruling on Seeger's case, the Court said:

Seeger professed 'religious belief' and 'religious faith.' He did not disavow any belief 'in a relation to a Supreme Being'; indeed he stated that 'the cosmic order does, perhaps, suggest a creative intelligence.' He decried the tremendous 'spiritual' price man must pay for his willingness to destroy human life. In light of his beliefs and the unquestioned sincerity with which he held them, we think the Board, had it applied the test we propose today, would have granted him the exemption. We think it clear that the beliefs which prompted his objection occupy the same place in his life as the belief in a traditional deity holds in the lives of his friends, the Quakers. We are reminded once more of Dr. Tillich's thoughts: 'And if that word (God) has not much meaning for you, translate it, and speak of the depths of your life, of the source of your being, or your ultimate concern, of what you take seriously without any reservation. Perhaps, in order to do so, you must forget everything traditional that you have learned about God . . .' Tillich, *The Shaking of the Foundations*. 57 (1948).<sup>124</sup>

Although all three litigants challenged the constitutionality of the statutory exemption, the Court avoided reaching constitutional issues by holding that the statutory exemption applied to the three cases at hand. The Court's holding is one of statutory interpretation rather than constitutional meaning. However, despite *Seeger's* narrow holding, commentators have construed the case as strong evidence of what the Court would have said had it chosen to reach the constitutional issue.<sup>125</sup> One explanation for this general consensus is that the Court purposely construed the statute beyond the legislative intent. As Justice Douglas pointed out in his concurring opinion:

The legislative history of this Act leaves much in the dark. But it is, in my opinion, not a tour de force if we construe the words 'Supreme Being' to include the cosmos, as well as an anthropomorphic entity. If it is a tour de force so to hold, it is no more so than other instances where we have gone to extremes to construe an Act of Congress to save it from demise on constitutional grounds. In a more extreme case than the present one we said that the words of a statute may be strained 'in the candid

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123. *Seeger*, 380 U.S. at 185–86.

124. *Id.* at 187 (citation in original).

125. See, e.g., ERWIN CHEMERINSKY, *CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES* 1189 (3d ed. 2006).



service of avoiding a serious constitutional doubt.<sup>126</sup>

If *Seeger* is to be construed as an implied Constitutional interpretation, what is the corresponding definition of religion? We begin with the Court's own formulation: "[T]he test of belief 'in a relation to a Supreme Being' is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption."<sup>127</sup>

Some readers might immediately protest our implicit assumption that, in purporting to define the phrase, "belief in a relation to a Supreme Being," the Court is, at least implicitly, purporting to define the phrase, "religious belief." Why didn't the Court explicitly say that it was defining the latter phrase? We would suggest that, in effect, the Court just that: "The crux of the problem lies in the phrase 'religious training and belief' which Congress has defined as 'belief in a relation to a Supreme Being involving duties superior to those arising from any human relation.'"<sup>128</sup> Thus, the Court apparently assumed that in defining the phrase, "belief in a relation to a Supreme Being involving duties superior to those arising from any human relation," it was simultaneously defining the phrase, "religious training and belief," that is, in short, simply 'religious belief.'<sup>129</sup>

Some readers might grant this inference, but still object that the conventional semantical meaning of "religious belief" is not identical to the meaning of "religion." Because, it might be argued, the semantical extension of the latter term seems to include, not only sets of beliefs, but also communal symbols, rituals, patterns of worship, patterns of conduct, etc. We concede the point. Any historical religion consists of indefinitely more than a set of beliefs. An historical religion is, at the very least, a community, persisting through time, of persons who share a set of beliefs, a set of symbols, a set of rituals, a set of normative patterns of worship, and a set of normative patterns of conduct.<sup>130</sup>

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126. *Seeger*, 380 U.S. at 188 (Douglas, J., concurring)(quoting *United States v. Rumely*, 345 U.S. 41, 47 (1953)). It seems difficult to accept the second sentence of this passage as a sincere expression of Douglas's actual belief. Given the explicit language of the statutory exemption, it is perhaps best to regard Douglas's sentence as a tongue-in-cheek joke. Whatever Congress meant by the term "Supreme Being," it surely did not mean "the material universe," or, for that matter, "the object of a belief that is sincere and meaningful [which] occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption" (paraphrasing the Court's interpretation of the statute). It seems more accurate to interpret Douglas's comment as, e.g., "Of course, we know what you (Congress) meant. But we're just not going to let you mean that and we have the last word."

127. *Id.* at 165-66.

128. *Id.* at 173.

129. Note that the Court's formulation of the equivalence has the effect of discarding the word "training." "Religious training and belief" is transformed into simply "religious belief."

130. See, e.g., JOHN COTTINGHAM, *THE SPIRITUAL DIMENSION: RELIGION, PHILOSOPHY AND*

However, conceding this point does not further commit us to the proposition that the *Seeger* Court made a similar concession. On the contrary, so far as one can tell from the majority opinion, one can have a religion without participating in a community which shares symbols, rituals, worship, and patterns of conduct. The only condition, both necessary and sufficient, for having a religion is simply possessing a set of religious beliefs. The Court assumed, without argument, that *Seeger*, as an isolated individual, possessed religious beliefs, despite the fact that he did not participate in any ongoing religious community. According to the Court, a religion is something which one can have all by oneself. This is a significant claim. It implies that anyone qualifies as having a religion for First Amendment purposes, so long as she or he has a set of religious beliefs. Having a religion just is having a set of religious beliefs.<sup>131</sup>

We have argued that the *Seeger* Court maintained that having a religion just is having a set of religious beliefs. Or, putting it more precisely, and numbering it for later reference:

[1]X has a religion if and only if X has a set of religious beliefs, where 'X' ranges over the class of humans.

What is the Court's analysis of the property of having a set of religious beliefs? For an answer, it may be useful to return to the Court's own language, ". . . [T]he test of belief 'in a relation to a Supreme Being' is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God of one who clearly qualifies for the exemption."<sup>132</sup> What can be inferred from this remark?

First, the statement presupposes the existence of a class of paradigmatic religious beliefs. For example, presumably the religious beliefs of orthodox Christians, Jews, and Muslims would all qualify as paradigmatic religious beliefs, at least in the Court's mind. All such religious participants believe

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HUMAN VALUE (2005).

131. A brief digression: One might ask why we assert that this claim is "significant." One reason is this. Identifying an historical community as a religious community, and thereby identifying that community's participants as possessing a religion in virtue of being active participants in that community, is much easier epistemically than identifying some particular individual as having a religion in her own right, considered independently of religious community to which she may belong. But it seems likely that this very epistemic difficulty induces a more lenient and lazy approach to the question, "Is there a religion in this case?" Given the inherent epistemic difficulty of answering that question in any particular case, the natural human, and therefore judicial, tendency is to conclude, "Well, so what? X's case is close enough, and I'm getting tired of being asked to formulate criteria for determining, in any particular case, precisely how close is "close enough."

132. *Seeger*, 380 U.S. at 165–66.

in the existence of a Ground of Being<sup>133</sup> which is ontologically distinct from the physical universe. Second, the statement presupposes the existence of a relation between this class of paradigmatic religious beliefs and another class of beliefs that, although sincerely held by their possessors, are not paradigmatic religious beliefs. Third, the statement presupposes the existence of a two-place relation between these two classes of beliefs that can be expressed as follows: the members of class x play the same role in the lives of their possessors as the members of class y play in the lives of their possessors, where the variables 'x' and 'y' range over classes of beliefs.

Putting these three observations together, we can now more fully characterize the second class of beliefs we temporarily designated as "the class of beliefs" which, although sincerely held by their possessors, are not paradigmatic religious beliefs. Now that we have specified the two-place relation between the two classes (x plays the same role in the lives of its possessors as y) we can re-characterize the second class by means of the relational predicate (x plays the same role in the lives of its possessors as paradigmatic religious beliefs play in the lives of their possessors). Given this, we can re-characterize the second class of beliefs as "the class of beliefs which play the same role in the lives of their possessors as the role paradigmatic religious beliefs play in the lives of their possessors."

However, we have not clarified the meaning of the phrase, "play the same role in the lives of their possessors as." We can better make sense of this phrase by first understanding the Court's conception of the role paradigmatic religious beliefs play in the lives of their possessors. In light of the Court's extensive references to the writings of Paul Tillich, it seems reasonable to assume that it was heavily influenced by Tillich's analysis of the role of religious belief in religious believers' lives. According to one of the quotations the Court takes from his writings, Tillich maintains that the essential characteristic of genuine religious beliefs are their focusing upon matters of ultimate concern to the believer, i.e. what is taken seriously without any reservation.<sup>134</sup>

According to Tillich, it follows that paradigmatic religious beliefs necessarily focus upon matters of ultimate concern to the paradigmatic

133. PAUL TILlich, *SYSTEMATIC THEOLOGY: VOLUME I* 235-36 (1951).

The being of God is being-itself. The being of God cannot be understood as the existence of a being alongside others or above others. If God is a being, he is subject to the categories of finitude, especially to space and substance. . . . Whenever infinite or unconditional power and meaning are attributed to the highest being, it has ceased to be a being and has become being-itself. Many confusions in the doctrine of God and many apologetic weaknesses could be avoided if God were understood first of all as being-itself or as the ground of being. The power of being is another way of expressing the same thing in a circumscribing phrase.

134. *Seeger*, 380 U.S. at 187.

religious believers holding such beliefs. It presumably also follows that, non-paradigmatic religious beliefs necessarily focus upon matters of ultimate concern to non-paradigmatic religious believers. Thus, the element common to both paradigmatic religious beliefs and non-paradigmatic religious beliefs is the property of being a belief bearing upon a matter of ultimate concern to its possessor.

We can summarize the preceding analysis in terms of the following numbered propositions, beginning with our previously-stated Proposition [1]:

[1] X has a religion if and only if X has a set of religious beliefs.

[2] X has a set of religious beliefs if and only if either X has a set of paradigmatic religious beliefs or X has a set of beliefs which play the same role in the lives of their possessors as paradigmatic religious beliefs play in the lives of their possessors.

[3] Label the class of beliefs in [2] as non-paradigmatic religious beliefs.

[4] Hence, [2] can be restated as: X has a set of religious beliefs if and only if either X has a set of paradigmatic religious beliefs or X has a set of non-paradigmatic religious beliefs.

[5] Both paradigmatic religious beliefs and non-paradigmatic religious beliefs bear upon matters of ultimate concern to their possessors.

[6] Hence, [4] can be restated as: X has a set of religious beliefs if and only if X has a set of beliefs which bear upon a matter of ultimate concern to X.

[7] So, substituting in [1] yields: X has a religion if and only if X has a set of beliefs bearing upon a matter of ultimate concern to X, where 'X' ranges over the class of humans.

Proposition [7] motivates another question. What exactly is an ultimate concern? We begin with Tillich's own formulation, the formulation the Court relied upon: "An individual's ultimate concern is whatever that

person takes seriously without any reservation.”<sup>135</sup> How should that be understood?

In raising this question we are not asking what Tillich means by “ultimate concern.” Answering that question would require a difficult analysis of the various senses in which Tillich uses the phrase “ultimate concern.” However, we can assert one thing with relative certainty: Tillich does not believe that every particular ultimate concern striven for by an arbitrarily-selected individual is necessarily identical to what Tillich regards as the only legitimate ultimate concern, namely God, conceived of as the ground of all being.<sup>136</sup> Thus, even though Tillich apparently holds that everyone necessarily has one or another ultimate concern, he also maintains that any particular individual’s personal pursuit of his ultimate concern can be radically misdirected (in the sense of being directed toward goals that, even if attained, will not satisfy the passions and desires motivating that individual’s pursuit of his ultimate concern).

Understanding this point may be helped by grasping an elementary distinction. The term ‘ultimate concern’ is potentially ambiguous. Imagine an arbitrarily-selected person, X, who is pursuing an “ultimate concern.” It is important to distinguish between the objective of X’s “ultimate concern,” where that object will presumably be some state-of-affairs, on the one hand, and X’s subjective state of desiring and striving for that state-of-affairs. Thus, the term ‘ultimate concern’ may be used to refer to either the objective of X’s subjective state of desiring and striving, on the one hand, or to X’s subjective state of desiring and striving itself, on the other. This distinction can be baptized with a semantical stipulation. Given an arbitrarily-selected person, X, we shall characterize X’s state of desiring and striving for her ultimate concern as X’s ultimate-concern desiring and striving and shall characterize the state-of-affairs itself which is the objective of X’s ultimate-concern desiring and striving as X’s ultimate concern.

Using this stipulated terminology, we can say that Tillich believes that every human agent is fundamentally motivated by an ultimate-concern desiring and striving for some particular ultimate concern. That is to say, every human agent is motivated by a fundamental passion and desire to bring about some state-of-affairs whose attainment that agent believes would constitute the complete fulfillment of her deepest desires. However, although Tillich does not make the point as clearly as one might like, he also believes that any particular human agent’s state of ultimate-concern

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135. *Id.*

136. See, e.g., TILLICH, *supra* note 64, at 10–15, 21, 24–25, 28, 36, 42, 50, 110–11, 118, 156, 211, 214–16, 218, 220–23, 230, 273.

desiring and striving can be misdirected, in the sense that her aimed-at ultimate concern may, even if attained, fail to fully satisfy that agent's deepest desires.

This possibility of an individual's particular state of ultimate-concern desiring and striving being aimed at an inappropriate ultimate concern was explicitly recognized by many earlier philosophers and theologians. For example, Thomas Aquinas, Plato, and Aristotle explicitly argue that there is no guarantee that any particular individual's state of ultimate-concern desiring and striving is necessarily directed to an ultimate concern that proves to be authentic, i.e. a concern that even if attained, would completely satisfy that individual's deepest desires.

In contrast, the *Seeger* Court makes no attempt to draw this distinction between authentic and inauthentic ultimate concerns. Why did the Court ignore Tillich's distinction? One plausible explanation is that the Court recognized that any attempt to draw a distinction between authentic and inauthentic ultimate concerns could have the effect of privileging certain ultimate-concern perspectives over others in the application of the Religion Clauses. In particular, when it comes to applying the Free Exercise Clause, authentic ultimate concerns would be entitled to special protection, in contrast to inauthentic ultimate concerns. In contrast, when applying the Establishment Clause, inauthentic ultimate concerns would not be constrained, while authentic ultimate concerns would be.

Whatever the motivation underlying the Court's refusal to adopt Tillich's distinction, the consequence of the Court's approach is that any "ultimate concern" qualifies as "religious" under the Court's analysis. Imagine someone whose entire waking life is organized around the overriding desire to engage in any one of the following activities: golfing, gambling, drinking, eating, using drugs, having sex, pursuing a career, making money, being famous, etc. It seems that any of these commonplace ultimate concerns qualify as religious under the *Seeger* Court's analysis. Each is an objective that at least some people take seriously without any reservation—meaning at the very least—regarding an objective as potentially overriding the attainment of any other possible objective whatever. This interpretation of the Court's analysis is supported by ordinary linguistic usage, e.g., "Golf is X's religion," "Eating is Y's religion," "Making money is Z's religion," etc.

However such cases might be classified in terms of the Court's analysis, it seems clear that the ultimate concern of an individual who is fundamentally motivated by a physicalist conception of reality qualifies as "religious" under this analysis. Imagine a paradigmatic physicalist, X. X believes that there are no non-physical causes whatsoever; there is no non-physical ground of being. Every fact in the universe is wholly explicable in

terms of other wholly physical facts. Reality is physical through and through. Moreover, this fundamental conception of reality guides X's entire life, including X's conception of morality, society, the ultimate meaning of human existence, and the point of living at all. One need think only of Richard Dawkins or Daniel Dennett, an evangelizing secular pair driven by a missionary zeal to convert the masses to secular physicalism.<sup>137</sup> Even better, think of Richard Lewontin, whom we quoted in Part I as warning fellow secularists, ". . . for we cannot allow a Divine Foot in the door." This observation is significant because, if secular physicalism qualifies as a religion under the Establishment Clause, then the Supreme Court's exclusion of non-physicalist accounts of evolution from public-school classrooms would violate that Clause. The effect of that exclusion would be leaving the public-school forum to just a single religious point of view, that of secular physicalism, to the detriment of non-physicalist points of view.

*b. An apparently very narrow formulation.*

In *Wisconsin v. Yoder*, the Court held that the Free Exercise Clause protects Amish children from the application of a Wisconsin law requiring children to attend school until the age of sixteen.<sup>138</sup> In holding that the Amish qualify as having a religion within the semantical scope of the Free Exercise Clause, the Court analyzed the issues very differently than it did in *Seeger*.

First, the Court said,

A way of life, however virtuous and admirable, may not be interposed as a barrier to reasonable state regulation of education if it is based on purely secular considerations; to have the protection of the Religion Clauses, the claims must be rooted in religious belief. Although a determination of what is a 'religious' belief or practice entitled to constitutional protection may present a most delicate question, the very concept of ordered liberty precludes allowing every person to make his own standards on matters of conduct in which society as a whole has important interests. Thus, if the Amish asserted their claims because of their subjective evaluation and rejection of the contemporary secular values accepted by the majority, much as Thoreau rejected the social

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137. Incidentally, this seemingly obvious consequence of the *Seeger* Court's analysis of 'religion' has an important consequence for the Court's qualification, "We also pause to take note of what is not involved in this litigation. No party claims to be an atheist or attacks the statute on this ground. The question is not, therefore, one between theistic and atheistic beliefs. We do not deal with or intimate any decision of that situation in these cases." *Seeger*, 380 U.S. at 173-74. How the Court could assert this proposition in the face of its own interpretation of 'religion' in the very case-at-hand is puzzling, to say the least.

138. *Wisconsin v. Yoder*, 406 U.S. 205 (1972).

values of his time and isolated himself at Walden Pond, their claims would not rest on a religious basis. Thoreau's choice was philosophical and personal rather than religious, and such belief does not rise to the demands of the Religion Clauses.<sup>139</sup>

This appears to be a dramatically different analysis from that applied in *Seeger*: Thoreau, or philosophers such as Plato, Aristotle, and Spinoza, for that matter, would qualify as having a religion under the *Seeger* analysis. If anyone ever had an all-encompassing ultimate concern that focused, guided, and motivated his entire waking life, Henry David Thoreau did. Granted, Thoreau did not belong to an organized group of like-minded persons, but neither did Daniel Seeger. If Seeger, an independent and religiously-unaffiliated freethinker, had a religion, then, *a fortiori*, Thoreau did, and so did Plato, Aristotle, and Spinoza. However, the Court in *Yoder* rejected the proposition that Thoreau had a religion because his "choice was philosophical and personal rather than religious."<sup>140</sup> The apparent implication is that an individual cannot have a religion by himself. One must be a participating member of a group, whose values and objectives transcend the merely "subjective" and "personal" values and objectives.

Justice Douglas' dissenting opinion in *Yoder* evidences the case's radical departure from *Seeger*'s explication of 'religion':

In another way, however, the Court retreats when in reference to Henry Thoreau it says his 'choice was philosophical and personal rather than religious, and such belief does not rise to the demands of the Religion Clauses.' That is contrary to what we held in *United States v. Seeger* . . . where we were concerned with the meaning of the words 'religious training and belief' in the Selective Service Act.<sup>141</sup>

After quoting extensively from *Seeger*, Justice Douglas went on to say, "I adhere to these exalted views of 'religion' and see no acceptable alternative to them now that we have become a Nation of many religions and sects, representing all of the diversities of the human race."<sup>142</sup>

Let us return to the majority opinion, which states:

Giving no weight to such secular considerations, however, we see that the record in this case abundantly supports the claim that the traditional way of life of the Amish is not merely a matter of personal preference, but one of deep religious conviction, shared by an organized group, and intimately related to daily living. That the

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139. *Id.* at 215–16.

140. *Id.*

141. *Id.* at 247–248 (Douglas, J., dissenting in part).

142. *Id.* at 249.



Old Order Amish daily life and religious practice stem from their faith is shown by the fact that it is in response to their literal interpretation of the Biblical injunction from the Epistle of Paul to the Romans, 'be not conformed to this world. . .' This command is fundamental to the Amish faith. Moreover, for the Old Order Amish, religion is not simply a matter of theocratic belief. As the expert witnesses explained, the Old Order Amish religion pervades and determines virtually their entire way of life, regulating it with the detail of the Talmudic diet through the strictly enforced rules of the church community.

The record shows that the respondents' religious beliefs and attitude toward life, family, and home have remained constant - perhaps some would say static - in a period of unparalleled progress in human knowledge generally and great changes in education. The respondents freely concede, and indeed assert as an article of faith, that their religious beliefs and what we would call today 'life style' have not altered in fundamentals for centuries. Their way of life in a church-oriented community, separated from the outside world and 'worldly' influences, their attachment to nature and the soil, is a way inherently simple and uncomplicated, albeit difficult to preserve against the pressure to conform. Their rejection of telephones, automobiles, radios, and television, their mode of dress, their habits of manual work do indeed set them apart from much of contemporary society; these customs are both symbolic and practical.<sup>143</sup>

Precisely what is the majority's semantical analysis of the First Amendment's use of "religion"? We begin by listing the factors the majority deemed to be necessary conditions for a belief or practice to qualify as "religious" under the First Amendment. The belief or practice:

- [1] Must not be based upon purely secular considerations;<sup>144</sup>
- [2] Must not be based upon purely philosophical considerations, such as Thoreau's;
- [3] Must not be based upon purely personal preferences, such as Thoreau's;

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143. *Id.* at 216-217.

144. *See* *Frazee v. Ill. Dep't of Employment*, 489 U.S. 829, 833 (1989) (quoting *Thomas v. Review Bd. Of Ind. Employment Sec. Div.*, 450 U.S. 707, 713 (1981)). "There is no doubt that '[o]nly beliefs rooted in religion are protected by the Free Exercise Clause. . . . Purely secular views do not suffice.'" Of course, this statement is not of much help without a prior systematic clarification of the distinction between "religious" and "secular" views. Note that the Court apparently acknowledged the difficulty of drawing a line in saying, "Nor do we underestimate the difficulty of distinguishing between religious and secular considerations." *Id.*

- [4] But rather must be based upon:
  - [a] deeply held preferences;
  - [b] which are intimately related to daily living; and
  - [c] shared by an organized group.<sup>145</sup>

There is another set of conditions that the Court thought relevant to the issue whether Amish beliefs and practices qualified as “religious,” but did not make clear whether these additional factors are merely sufficient, rather than necessary. Those factors are:

- [1] The organized group is bound together by a reliance upon a sacred scripture;
- [2] The organized group’s beliefs have remained constant over significant span of time;
- [3] The organized group’s beliefs and practices are inherently simple and uncomplicated;
- [4] The organized group’s beliefs and practices are markedly distinct from the beliefs and practices of the surrounding society.

In light of these factors, does the secular physicalism of Richard Dawkins, Daniel Dennett, or Richard Lewontin, qualify as a “religion” under the First Amendment? At least one proposition can be asserted with confidence: since Dawkins and Dennett assert their comprehensive physicalist worldviews as individuals, rather than asserting them as members of an organized group, presumably their worldviews would not qualify as religious under the *Yoder* analysis.

However, there may be an alternative state of affairs that does qualify. Imagine a large, organized group established for the explicit purpose of “maintaining, expanding, and promulgating the worldview of physicalism and materialism, as articulated by Richard Dawkins.” Imagine further that these members regard themselves as bound by strict normative standards for daily living, which they deem required by their worldview (e.g. being obligated to preach the gospel of physicalism whenever opportunities present themselves). Imagine even further that the members are emotionally and intellectually related by a mutual reliance upon a certain sacred scripture, such as the writings of Lucretius, Marx, Feuerbach,

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145. Note, however, that in *Franzee* at footnote 76, the Court held that the Free Exercise Clause protected a professed Christian, even though he did not claim to be a member of any established religious community, church, or sect. This holding appears to negate *Yoder*’s apparent holding that belonging to an established religious community is a necessary condition for having a religion within the meaning of the Religion Clauses.

Nietzsche, Carnap, Quine, or Richard Dawkins. Would members of this hypothetical group qualify as having a “religion”?

The answer is uncertain. The hypothetical group seems to satisfy many of the *Yoder* criteria, but do they satisfy the apparently necessary condition of not being based upon purely secular beliefs? Can a worldview shared by a community of like-minded believers with a sacred scripture qualify as “religious” if it is based upon a purely physicalistic metaphysics? Would *Yoder* exclude it because it is grounded on purely secular presuppositions?

Perhaps not. Suppose that the members of this hypothetical group posit an ungrounded ground of being: the universe of matter itself. Suppose further that the members regularly participate in rituals in which they rededicate themselves to pure materialism and sing ecologically-oriented hymns to “Nature, Our Earthly Mother.” It is now less clear that this hypothetical group is purely “secular” under *Yoder*. The answer depends upon what the *Yoder* Court meant by “secular.” Since the Court made no attempt to explicate the meaning “secular,” any answer is uncertain. Thus, *Yoder* did not definitively settle the meaning of “religion” under the First Amendment.

*c. Tentative summary on the Court’s analyses of the meaning of First Amendment’s use of the term “religion.”*

At this point, the Court’s interpretation of the First Amendment’s use of the term “religion” is unclear. This is especially most apparent in the question of whether an all-encompassing worldview based upon secular physicalism qualifies as a religion. Secular physicalism may qualify under the *Seeger* analysis, but may not under the *Yoder* analysis (although we have raised questions about the latter). The question of whether the Supreme Court would definitively hold that an all-encompassing, secular physicalist worldview qualifies as a “religion” under the First Amendment is distinct from the question whether the Court should so rule. The first question raises an issue of mere prediction, whereas the second question raises a normative issue of desirability or necessity. We shall return to this question in the context of the issue of teaching evolution in public schools.

*d. How should “religion” be defined for purposes of the Establishment Clause?<sup>146</sup>*

There is a tendency in the Western philosophical and theological traditions to answer the question of whether a given person has a religion or is a religious person, by first determining whether that person believes at least one religious proposition. This approach assumes that having a religion comes to nothing more than accepting a religious proposition. Presumably, the underlying strategy is based upon the assumption that the problem of sorting abstract propositions into two subclasses—religious propositions and non-religious propositions—is simpler than the problem of sorting human beings into two subclasses - religious persons and non-religious persons—together with the assumption that by solving the easier problem the harder problem will also be solved.

This approach seems inadequate. One difficulty is that it is not easy to sort all abstract propositions into the two subclasses—religious propositions and non-religious propositions. There are apparently easy cases, such as the proposition, God the Father of our Lord Jesus Christ exists. Even in cases of that kind one should always first ask, “but how exactly is that proposition being used by a particular person in some particular context?” Putting aside that difficulty about such “easy” cases, there are many difficult cases, cases in which the question whether a particular proposition is a religious proposition turns upon much more than the abstract content of that proposition, where “much more” includes such things as: the particular context of the speech, the speaker’s intention, and the role the abstract proposition plays in the speaker’s life. Asking whether that abstract proposition “everything is alright” is a religious or a non-religious proposition is hopeless. The answer will vary according to the particular context and speaker involved. The proposition, uttered at the end of a successful 18-hole golf play, is probably not being used religiously. On the other hand, that same proposition, uttered as the last words of a person on his death-bed, could easily be used religiously.

However, setting aside problems of that sort, we move on to another kind of difficulty. Imagine someone who can recite the Nicene Creed at a moment’s notice. Suppose further that this person asserts that she believes every proposition of the Creed. However, suppose that her beliefs in the truth of the Creed’s propositions have absolutely no effect whatever on any

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146. Some have proposed that the term ‘religion’ should be analyzed as having one sense, as used in the Establishment Clause, and a different sense, as used in the Free Exercise Clause. We reject this proposal on the ground that there is absolutely no textual basis in the First Amendment for drawing such a distinction, to say nothing about the absence of any historical basis. In any case, as Erwin Chemerinsky notes, the Supreme Court has not adopted the proposal. CHEMERINSKY, *supra* note 59, at 1187.

other dimensions of her life, whether considered internally from a first-person perspective or externally from a third-person perspective. She rarely participates in Christian practices or worship, and when she does, she does so solely to please relatives or friends. She does not deliberately conduct her life in the light of any of the norms that are entailed or presupposed by the assertions of the Creed. The propositions of the Creed play no role in her intellectual, imaginative, emotional, or spiritual life, and so on. Although this person may have some religion, she does not have a Christian religion.

Thus, something more than simply believing at least one religious proposition is necessary for having a religion. Believing at least one religious proposition is a necessary condition for having a religion but is not a sufficient condition. What more is needed?

We will use passages from Alfred North Whitehead and Huston Smith to construct a definition of religion. Whitehead states:

But as between religion and arithmetic, other things are not equal. You *use* arithmetic, but you *are* religious. Arithmetic of course enters into your nature, so far as that nature involves a multiplicity of things. But it is there as a necessary condition, and not as a transforming agency. No one is invariably 'justified' by his faith in the multiplication table. But in some sense or other, justification is the basis of all religion. Your character is developed according to your faith. This is the primary religious truth from which no one can escape. Religion is force of belief cleansing the inward parts. For this reason the primary religious virtue is sincerity, a penetrating sincerity.

A religion, on its doctrinal side, can thus be defined as a system of general truths which have the effect of transforming character when they are sincerely held and vividly apprehended.<sup>147</sup>

Similarly, Smith defines "religion" as "a way of life woven around a people's ultimate concerns"<sup>148</sup> and situates the religious issue in people's lives in this way:

Wherever people live, whenever they live, they find themselves faced with three inescapable problems: how to win food and shelter from their natural environment (the problem nature poses), how to get along with one another (the social problem) and how to relate themselves to the total scheme of things (the religious problem).<sup>149</sup>

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147. ALFRED NORTH WHITEHEAD, *RELIGION IN THE MAKING* 14-15 (New American Library 1974) (1926).

148. HUSTON SMITH, *THE WORLD'S RELIGIONS* 183 (1958).

149. HUSTON SMITH, *WHY RELIGION MATTERS* 11 (2001).

According to these passages, we shall say that having a religion involves at least: [1] having at least one belief about the essential nature of the World; [2] having at least one belief about one's essential mode of relationship to that World; [3] having at least one belief about the modes of thinking, attitudes, purposes, and conduct which are necessary, or at least appropriate, given the beliefs of the first two categories; and [4] systematically conforming one's modes of thinking, attitudes, purposes, and conduct to the beliefs of the third category. We shall say that anyone who satisfies conditions [1], [2], and [3] has a worldview and that anyone who satisfies all four conditions has an integrated worldview. Thus, an integrated worldview is generated by adding conforming practices to a set of worldview beliefs. Integrated worldviews are worldviews plus conforming practices. On the one hand, one might think an integrated worldview is what one gets by adding a metaphysical account of reality to a particular way of living. On the other hand, one might think of integrated worldviews as what one would get by first enrolling in some philosophy courses that evaluate different metaphysical accounts of reality, and then, moving outside of the various course requirements, choosing one of those metaphysical accounts as a guide for living.

It is important to avoid construing condition [1] (having at least one belief about the essential nature of the World) in an overly narrow sense. For example, it would be a mistake to restrict the class of beliefs about the essential nature of the World to so-called "theistic" beliefs, where the adjective "theistic" is used to describe worldviews which ascribe personal characteristics to the Ground of Being. According to some accounts, Hinduism and Buddhism do not ascribe personal characteristics to the Ground of Being, although this seems to be an oversimplification.<sup>150</sup> Even if such accounts were accurate, they would not suffice to exclude practitioners of Hinduism and Buddhism from having religions in our sense. Hindu and Buddhist beliefs about the nature of Reality are beliefs about the essential nature of the World.

Another important point about our conditions is that they make no attempt to distinguish between true religions and untrue religions, or between coherent and incoherent religions. It is sometimes appropriate for

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150. The general point is that both the Hindu and Buddhist traditions include emphases upon both the impersonal and personal characteristics of the Ground of Being. See, e.g., EDWARD CONZE, *BUDDHIST SCRIPTURES* 190–97 (1959); SMITH, *supra* note 82, at 61–63; A SOURCEBOOK IN INDIAN PHILOSOPHY 272–73 (Sarvepalli Radhakrishnan & Charles A. Moore eds., Princeton University Press 3d ed. 1970) (1957). The same holds for, say, the Christian tradition. See, e.g., *THE CLOUD OF UNKNOWING* (James Walsh trans., HarperCollins 2004); *THEOLOGICA GERMANICA* (Susanna Winkworth trans., MacMillan and Co. 1937); THOMAS AQUINAS, *SUMMA THEOLOGIAE* (Fathers of the English Dominican Province trans., Christian Classics 1981); and the writings of Nicholas of Cusa, and many others.

those participating in various particular religions to make such evaluative judgments for themselves. However, for purposes of defining the term "religion," as it is used in the Establishment Clause, it would be a mistake to draw such distinctions. Attempts to do so would presumably themselves violate the Establishment Clause. It is not the business of courts to evaluate the truth-value or efficacy of particular religions. The only appropriate issue for the courts is determining whether a given individual has a religion, and that issue can be resolved without getting into matters such as truth, coherence, or efficacy.

Of course, there are typically many other characteristics of persons who participate in a religion, such as engaging in communal rituals and liturgies, revering certain traditional writings, engaging in organizational structures, and many other things. However, we think that our four conditions suffice to identify the minimal core of what it is to have a religion, which is to say, have an integrated worldview.

Is secular physicalism a religion in the sense we have defined? It seems so. It satisfies condition [1]: secular physicalists have at least one belief about the essential nature of the World, namely, that it is purely physical, which entails that there are no non-physical entities or causes. This belief extends far beyond the scope of any possible physical experiment, as do the succeeding beliefs of [2] and [3]. Such beliefs are not testable in any narrow, positivistic sense.

With respect to condition [2], secular physicalists presumably must believe that their essential mode of relationship to the World is that of one physical entity to another. That belief entails the proposition that there are no non-physical relations between themselves and any other entity in the World, including the World itself. In particular, they must presumably believe that there is no ultimate consciousness in the metaphysical foundation of the World, no ultimate consciousness which grounds any universal or transcendent meaning for human lives. Humans are ultimately metaphysically alone in the World. There is no metaphysically foundational element or entity in the World which can appropriately be addressed as "You" or "Thou."<sup>151</sup>

With respect to condition [3], it seems that secular physicalists must believe that the only attitudes, modes of thinking, purposes, and conduct that are required by their beliefs regarding conditions [1] and [2] are modes that reflect their beliefs that they themselves are nothing more than purely physical entities in a purely physical World and that they are ultimately metaphysically alone. These modes typically include such fundamental life-

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151. See, e.g., MARTIN BUBER, *I AND THOU* (Ronald Gregor Smith trans., 1958) (1923).

patterns as creating one's own individual meaning for life,<sup>152</sup> fully acknowledging and confronting the ultimate absurdity of existence,<sup>153</sup> and so on.<sup>154</sup>

Finally, regarding condition [4], secular physicalists who pursue an integrated worldview must strive to conform their conduct to their condition [3]-beliefs, such as striving to invent their own life-meanings, consciously living in the face of ultimate metaphysical absurdity, and so on.

There is yet another way to argue that secular physicalism qualifies as a religion. This argument focuses upon the cognitive operation of rejecting propositions. First we must choose an integrated worldview which everyone would concede to be a paradigmatic religion such as orthodox Christianity, orthodox Islam, orthodox Judaism, etc. Call that integrated worldview "IWV-1." Consider the proposition that IWV-1 is the most appropriate response to the ultimate question: "what is the ultimate nature of reality and how should we live in the light of that ultimate nature?" Call that proposition "P-1." Now consider a rejection of the proposition P-1, a rejection which can be expressed as the negation of P-1. We maintain that anyone asserting the negation of P-1 should be regarded as asserting an integrated worldview of his own, one he prefers. In short, rejections of integrated worldviews are themselves integrated worldviews.

An alternative way of expressing this point is to say that the class of integrated worldviews is closed—in the mathematical sense—under the cognitive operation of rejection. The explanation for this closure is that the ultimate question, "What is the ultimate nature of reality and how should we live in the light of that ultimate nature?" cannot be avoided. It must be answered in one way or another. In the famous terminology of William James, it poses a forced option.<sup>155</sup> Even responses consisting of a rejection of the ultimate question are themselves, although perhaps unwittingly, responses to that same question. Think about the possible ways of rejecting the question. On the one hand, one might maintain that reality has no ultimate nature and that therefore the second question cannot intelligibly arise, which, in turn, presumably entails the proposition that it does not matter how we live. On the other hand, one might concede that reality has

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152. See, e.g., JEAN-PAUL SARTRE, *BEING AND NOTHINGNESS* (Hazel E. Barnes trans., 1956) (1943); see also FRIEDRICH NIETZSCHE, *THUS SPAKE ZARATHUSTRA* (Walter Kaufmann trans., The Viking Press 1966) (1885); and FRIEDRICH NIETZSCHE, *THE WILL TO POWER* (Walter Kaufmann trans., 1967) (1901).

153. See, e.g., ALBERT CAMUS, *THE MYTH OF SISYPHUS* (Justin O'Brien trans., 1955) (1942). Again, Nietzsche is one of the most important proponents of views of this kind.

154. See generally *THE MEANING OF LIFE* 65–295 (E.D. Klemke ed., 2d ed., 1999) (discussing examples of all three of the foregoing alternative approaches).

155. WILLIAM JAMES, *THE WILL TO BELIEVE AND OTHER ESSAYS IN POPULAR PHILOSOPHY* 3 (1956).



an ultimate nature, but nevertheless still maintain that it does not matter how we live, perhaps because reality “just does not care how we live.” But the assertion common to both responses—that it does not matter how we live—is itself a normative prescription about how to live, namely, that one ought not to concern oneself about the question. In addition, the first response’s denial that reality has an ultimate nature is itself an assertion about that very nature, namely, that it is indecipherable. Necessarily, there is such a thing as reality, even if reality should turn out to be entirely the causal product of a single solipsistic consciousness, but if so, then reality necessarily has an essence, even if that essence is being ultimately indecipherable.

There is a third way of arguing that secular physicalism is a religion. We begin again with the ultimate question. We then argue that any pattern of thinking and living whatever necessarily constitutes a voluntary response to that question, and that any such voluntary response to the question is itself an integrated worldview, which is to say, a religion. That is, any pattern of thinking and living can be understood, both from a third-person and from a first-person perspective, as a response to the ultimate question, and any such response itself constitutes an integrated worldview. But secular physicalism constitutes a pattern of thinking and living. Hence, secular physicalism is a response to the ultimate question and is therefore an integrated worldview—a religion.

### *3. The challenged governmental action must have a secular objective.*

We return to the analysis of the three-part *Lemon* test, whose application in any given instance presupposes that a religion is involved. The first *Lemon* element requires that the challenged governmental action have a secular objective.<sup>156</sup> We shall refer to it as the “secular-objective criterion.” Obviously, the use of the term “secular” is intended to distinguish “secular” from “religious” purposes. As mentioned above, the Court has refused to draw a clear distinction between the meanings of these two terms.

One of the major issues is the lack of clarity in the secular-objective criterion itself. We assume that, in at least the vast majority of cases, any particular human action is directed at a plurality of objectives. Given this background fact, how should the criterion be understood? Suppose that a particular act of a governmental agent is aimed at, say, six objectives. Is the Establishment Clause violated if just one of those six objectives is religious

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156. We broaden the language of *Lemon* to include any governmental action, whether it be legislative in nature or not. This expansion is in accord with the Court’s general approach to the interpretation of its language in *Lemon*. See, e.g., *County of Allegheny v. Am. Civil Liberties Union*, 492 U.S. 573 (1989).

in nature? Or, is it violated if and only if all of the objectives are religious in nature? Or, is it violated if and only if the objective which is most important to the agent himself religious in nature?

Assuming for the sake of discussion that the intended meaning of the secular-objective criterion can be clarified in those respects, there would then arise a plethora of epistemological issues of correctly identifying each objective pursued by any particular governmental agent in any particular context.<sup>157</sup> These epistemological issues are just special cases of a more general set—that of correctly identifying every one of the objectives pursued by any human agent in any particular context. Given any particular action of any particular human agent in any particular context, how can courts accurately identify each of the objectives that agent was pursuing in that context by means of that action? Notice that no matter how the secular-objective criterion is construed in terms of the alternative interpretations just specified, it must be at least possible to accurately identify all of the objectives pursued by means of any particular human action.

However, even supposing that this task can be successfully carried out, how can courts identify an agent's priority ranking of those objectives, in the event that the secular-objective criterion is interpreted as requiring such a value ranking? Which, among an agent's plurality of objectives, does she deem most important?

Assuming that these epistemological issues can be satisfactorily resolved, another issue is whether an application of the secular-objective criterion is too strong, in the sense of expressing hostility toward religiously-motivated governmental agents. It seems that the most efficient way to prevent governmental agents from taking into consideration their religious convictions in performing public roles would be to prevent religiously-minded people from participating in government at all. If such persons are allowed to serve in governmental roles, they will inevitably take their religious motivations into account in performing those roles. For example, religiously-minded legislators will at least sometimes pray for divine guidance before voting on a measure. Or, like Thomas Jefferson, they might even be inclined to utter metaphysically intemperate sentences incorporating phrases such as, "endowed by their Creator with certain inalienable rights."<sup>158</sup> Simply enacting rules prohibiting them from relying upon their religious motivations would be ineffective. Religiously-motivated persons would have to be excluded from public roles. But that

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157. For illuminating discussions of some of the difficulties inherent in judicially ascertaining legislative intent, see, e.g., Justice Scalia's dissenting opinion in *Edwards v. Aguillard*, 482 U.S. 578 (1987), and then Justice Rehnquist's dissenting opinion in *Kassel v. Consol. Freighways Corp.*, 450 U.S. 662 (1981).

158. The Declaration of Independence, ¶ 2 (U.S. 1776).

consequence seems outrageous, at least to some.<sup>159</sup>

However, an even more fundamental issue is whether the secular-objective criterion has any conceptually appropriate role to play in the interpretation of the Establishment Clause. One might think not, possibly because of the arbitrary way in which the criterion would apply across the board. Imagine that the President of the United States performs a particular governmental act with the ultimate objective to do God's will. In order to put aside difficult *Seeger* questions about distinguishing between religious and secular beliefs, suppose that the President is an orthodox Christian of a paradigmatic kind. Presumably, the President's governmental action would constitute a violation of the Establishment Clause because it is intentionally aimed at an ultimate religious objective. Now contrast that hypothetical situation with one in which another President performs the very same governmental action as the earlier President did but without the religious motivation. In contrast to the earlier President's action, the later President's action would not violate the Establishment Clause. Such an outcome is unreasonable and arbitrary.

This hypothetical raises the question of why a governmental actor's motivations should matter at all, when it comes to deciding whether that action violates the Establishment Clause. It seems that the only appropriate way to determine whether the Establishment Clause has been violated is to ask whether the challenged governmental action establishes a religion. If it does, the Clause has been violated, regardless of the motivations of the governmental actor responsible. For example, the Clause should be deemed violated even if the governmental actor is not motivated by a religious consideration but rather by a politically-authoritarian passion to keep the ignorant masses in line to promote the efficacy of rule by autocratic government.

4. *The challenged governmental action must not have a principal or primary effect which either advances or inhibits religion.*

The second *Lemon* criterion asks whether the challenged governmental action has a principal or primary effect that either advances or inhibits religion. If it does, the action violates the Establishment Clause. This is the *Lemon* criterion the Court has most frequently used to strike down governmental actions under the Establishment Clause. Like the first *Lemon* criterion, this one is also a puzzle. We shall take up only a few of many possible issues.

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159. But perhaps not to all. For example, consider the logical implications of the popular thesis that "religious" discourse must be excluded from the "public square." What better way to accomplish that objective than to simply exclude the makers of religious discourse from the public square themselves?

We shall focus upon the criterion's use of the verb "advances," rather than upon its use of the verb "inhibits." Using the latter term to interpret the Establishment Clause creates an overlap between the scope of the Establishment Clause and the Free Exercise Clause. The Free Exercise Clause has the function of prohibiting governmental efforts to "inhibit" religious activities. Inserting the same prohibition in the Establishment Clause causes a redundancy.

Of course, the criterion's use of the term "religion" brings along with it all of the issues about that term we have already discussed. To the extent that the meaning of "religion" is unclear, so is the second *Lemon* criterion.

What does "effect" mean? It seems that the Court must be referring to causal consequences. But causal consequences of what? Presumably, causal consequences of a governmental action. But what does principal or primary effect mean? The Court couldn't intelligibly mean intended effects, because that meaning-intention would reduce the second *Lemon* criterion to the first criterion, rendering the second redundant. The Principle of Charity requires that one avoid assigning to an obscure passage an interpretation that makes the passage silly, unless such a meaning assignment is the only possible interpretation. So, we should look further.

Perhaps what the Court means by "principal or primary effects" of a governmental action is the largest class of consequences of that action. But what would that mean? The answer isn't clear. Imagine a governmentally-operated nuclear power plant which explodes because of governmental negligence. Suppose that the causal consequences of the explosion include 3,000 people killed, 15,000 people wounded, 10-billion dollars of property damage, and 100-billion dollars of damage to the environment. Which of these classes of consequences is the largest class? The answer isn't clear because we don't know the answer to the question, "largest with respect to what criterion or measure?" The largest monetary amount of consequences? The largest number of human beings affected? The most important consequences?

But there seems to be no answer to such questions because the Court has not attempted to answer it. It has simply tossed into the river of constitutional interpretation the phrase "principal or primary effect" with the apparent, but mistaken, assumption that its intended meaning will be clear to competent readers.

Suppose there is an intelligible answer to the question, "what does the Court mean by the "primary or principal" set of causal consequences of a governmental action?" Other difficult questions would then arise. For example, suppose that a particular governmental action causes at least two classes of consequences, each of which is equal in weight (however that term is construed) to the other. Are both of these classes primary or

principal effects of the action? If so, what are we to make of the Court's apparent assumption that, given any particular governmental action, there is necessarily just one principal or primary effect? Dialectical reflections of this kind could be extended indefinitely.

We move on to other issues. The second *Lemon* criterion presupposes that courts are capable of accurately identifying all of the causal consequences of any particular governmental action. But the Court offers no argument to persuade us of the truth of that presupposition. Indeed, one might well be skeptical about any such argument, given the apparent fact that no one, judges or otherwise, seem well-equipped to make such identifications.

Assuming, hypothetically, that the Court is able to determine the meaning of "principal or primary effect," there remain problems with the second *Lemon* criterion. The second criterion presupposes not only that courts are capable of accurately identifying all of the causal consequences of any particular governmental action, but also of extracting from the class of the total causal consequences that subclass whose membership makes up the primary or principal causal consequences. However, even assuming the formulation of some intelligible and empirically-confirmable criterion for applying the term "primary or principal effect," why should we assume that judges are well-equipped to make the measurements and calculations required to apply such a criterion?

The apparent implications of the second criterion present even more difficulties. They are potentially incoherent and at least arbitrary. As to potential incoherence, imagine a governmental program that severely restricts orthodox Christians from participating in political process, whether by running for office or voting. Suppose that, instead accomplishing the program's intended objective, the "primary or principal causal effect" is, in fact, a massive public rejection of the government's attempt to throttle the political power of orthodox Christians. In fact, suppose that the primary causal consequence of the government's program is an unprecedented and overwhelming conversion of large numbers of Americans to orthodox Christianity. Presumably, the Court would have to rule that the government's anti-Christian program violates the second *Lemon* criterion because its "primary or principle" effect is that of assisting the cause of religion. This consequence seemingly illustrates the potential incoherence of the second *Lemon* criterion itself. As to potential arbitrariness, consider the chaotic sequence of the aid-to-religious-school cases. It is difficult to imagine a more arbitrary and unpredictable set of judicial rulings.<sup>160</sup>

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160. See, e.g., John E. NOWAK, RONALD D. ROTUNDA, CONSTITUTIONAL LAW 1429-58 (7th ed. 2004) (providing an overview of these cases).

Finally, the potential implications of the second criterion could exhibit a deep hostility to religiously-motivated conduct. Given the ambiguity of the noun “religion,” as used in the phrase “advancing or inhibiting religion,” and the ambiguity inherent in the linguistic formulation of the second criterion, that criterion could easily, and perhaps already does, serve as a disguise for anti-theistic judicial rulings. For example, the second criterion could be used to prohibit governmental officials from publicly displaying religious beliefs, such as the common presidential practice of holding prayer breakfasts with people like Billy Graham. Similarly, the criterion could be used to prohibit governmental officials from publicly attending religious services or from publicly acknowledging personal religious convictions. Such actions would presumably run afoul of the second *Lemon* criterion, and the Establishment Clause insofar as they would have a primary effect that advances religious causes.

*5. The challenged governmental action must not create an excessive entanglement on the part of government with religious activities.*

Additionally, the third creates the risk of a Catch-22 dilemma with respect to the primary-effect criterion of *Lemon*. On the one hand, if there is insufficient protection against the diversion of governmental assistance to religion, then there is a substantial chance that the Court would hold that the primary-effect criterion has been violated. On the other hand, if there is sufficient protection against such diversion, in the form of oversight functions and processes, then there is a substantial chance that the Court would hold that the entanglement test has been violated.

*6. Conclusion and Recommendation*

Based on our criticisms of the *Lemon* standard of review, we recommend that the Court discard the *Lemon* standard altogether. In its place, we propose the substitution of a standard of review we shall refer to as the “No-Discrimination Standard of Review.” According to that standard, the Establishment Clause should be interpreted as prohibiting government, at any level, from discriminating among the members of the class of integrated worldviews, as we have defined that class and where secular physicalism qualifies as an integrated worldview.

Recall that we earlier defined the class of integrated worldviews in terms of four conditions: [1] having at least one belief about the essential nature of the world, [2] having at least one belief about one’s essential mode of relationship to the world, [3] having at least one belief about the modes of thinking, attitudes, purposes, and conduct which are necessary, or at least appropriate, given the beliefs associated with the first two

conditions, and [4] systematically conforming one's actual modes of thinking, attitudes, purposes, and conduct to the beliefs associated with the third condition. Thus, we propose that the standard of review under the Establishment Clause prohibit government, at any level, from discriminating among the members of the class of integrated worldviews. For example, government would violate the Establishment Clause under our proposed standard of review if it prohibited at least one integrated worldview (e.g., theism) from expressing itself in a particular forum while permitting at least one other integrated worldview (e.g., secular physicalism) to express itself in that same forum.

Recall also that we defined the class of worldviews as views that satisfy just the first three of the abovementioned four conditions. Assuming, at least in many situations, that condition [4] would be satisfied if the first three conditions were also satisfied. We also propose that government should not be permitted to discriminate even among worldviews. If this were not the case, and the government was permitted to discriminate among worldviews, it would inevitably discriminate among integrated worldviews. For example, if government at some level discriminated against, say, theistic worldviews, in favor of secular physicalist worldviews, then—assuming that most persons who have theistic worldviews also have integrated theistic worldviews—the discrimination would effectively also discriminate against integrated theistic worldviews.

### *III. The Court's Evolution Cases*

We shall now analyze the Court's two major cases dealing with teaching evolutionary theory in public schools as well as our own proposal.

#### *a. Our own proposal*

The proposal for which we shall later present a more in depth argument is that a state statute, school-district regulation, or school-district practice that permits, but does not require, public-school teachers to incorporate non-physicalist accounts of life in their science classes does not violate the Establishment clause. Our proposal is notably different from the legislation struck down in the two cases discussed below in that it would neither prohibit teaching the Darwinian physicalist theory of evolution (as in the first case), nor require teaching non-physicalist theories of life whenever the Darwinian theory is presented (as in the second case).

b. *Epperson v. Arkansas*

In *Epperson v. Arkansas*<sup>161</sup> the Supreme Court struck down an Arkansas statute prohibiting teachers in any State-supported school or university from teaching “the theory or doctrine that mankind ascended or descended from a lower order of animals,” or using “in any such institution a textbook that teaches” that theory.<sup>162</sup> A violation of the statute was a misdemeanor and subjected violators to dismissal.

*Epperson v. Arkansas* involved teaching biology in a Little Rock high school. Prior to the events giving rise to the litigation, the official high school biology textbook did not contain any material dealing with the Darwinian theory of evolution. However, for the academic year 1965-1966—conforming to a recommendation from biology teachers in the district—the Little Rock School administration adopted a biology textbook containing a chapter discussing “the theory about the origin. . . of man from a lower form of animal.”<sup>163</sup> Epperson, a 10<sup>th</sup>-grade biology teacher, brought an action, seeking a declaration that the statute was unconstitutional and an order enjoining the State and the School District from dismissing her.

The Court expressed its general interpretation of the Establishment Clause in these words:

Government in our democracy, state and national, must be neutral in matters of religious theory, doctrine, and practice. It may not be hostile to any religion or to the advocacy of nonreligion; and it may not aid, foster, or promote one religion or religious theory against another or even against the militant opposite. The First Amendment mandates governmental neutrality between religion and religion, and between religion and nonreligion.<sup>164</sup>

The Court held that the statute violated the Establishment Clause on the ground that it had been enacted for a religious purpose, thereby invoking a criterion that would be formulated, three-years later, as the first element of the *Lemon* test:

The overriding fact is that Arkansas’ law selects from the body of knowledge a particular segment which it proscribes for the sole reason that it is deemed to conflict with a particular religious doctrine; that is, with a particular interpretation of the Book of Genesis by particular religious group.<sup>165</sup>

Arkansas’ law cannot be defended as an act of religious neutrality.

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161. *Epperson v. Arkansas*, 393 U.S. 97 (1968).

162. *Id.* at 98–99.

163. *Id.* at 99.

164. *Id.* at 103–04.

165. *Id.* at 103.



Arkansas did not seek to excise from the curricula of its schools and universities all discussion of the origin of man. The law's effort was confined to an attempt to blot out a particular theory because of its supposed conflict with the Biblical account, literally read.<sup>166</sup>

[T]here can be no doubt that Arkansas has sought to prevent its teachers from discussing the theory of evolution because it is contrary to the belief of some that the Book of Genesis must be the exclusive source of doctrine as to the origin of man. No suggestion has been made that Arkansas' law may be justified by considerations of state policy other than the religious views of some of its citizens. It is clear that fundamentalist sectarian conviction was and is the law's reason for existence."<sup>167</sup>

The statute was the result of a 1928 popular initiative. As evidence for its conclusion that the statute had been enacted for a religious objective, the Court quoted from a religiously-oriented newspaper advertisement and religiously-oriented published letters written in support of the initiative.<sup>168</sup>

### c. *Edwards v. Aguillard*

In *Edwards v. Aguillard*<sup>169</sup> the Court struck down as a violation of the Establishment Clause a Louisiana statute mandating the teaching of both Creation science and evolution. The statute prohibited teaching the theory of evolution in public schools unless accompanied by the teaching of "creation science." Although the statute did not require teaching either evolution or creation science, it did require that, if either was taught, so must the other. The State officials charged with enforcing the statute argued that the statute's objective was promoting the Constitutionally-permissible, secular interest of academic freedom.

The Court began its analysis of the Act by invoking the three-part *Lemon* test<sup>170</sup> and noting that it was especially motivated to find Establishment Clause violations in public-school contexts:

The Court has been particularly vigilant in monitoring compliance with the Establishment Clause in elementary and secondary schools. Families entrust public schools with the education of their children, but condition their trust on the understanding that the classroom will not purposely be used to advance religious views that may conflict with the private beliefs of the student and his or her family. Students in such institutions are impressionable and

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166. *Id.* at 109.

167. *Epperson*, 393 U.S. at 107-08.

168. *Id.* at 109 n. 16.

169. 482 U.S. 578 (1987).

170. *Id.* at 582-83.

their attendance is involuntary . . . . The State exerts great authority and coercive power through mandatory attendance requirements, and because of the students' emulation of teachers as role models and the children's susceptibility to peer pressure . . . . Furthermore, "[t]he public school is at once the symbol of our democracy and the most pervasive means for promoting our common destiny. In no activity of the State is it more vital to keep out divisive forces than in its schools."<sup>171</sup>

The Court contrasted the application of the Establishment Clause to primary and secondary public schools with its application to post-secondary public education:

The potential for undue influence is far less significant with regard to college students who voluntarily enroll in courses. 'This distinction warrants a difference in constitutional results.' . . . Thus, for instance, the Court has not questioned the authority of state colleges and universities to offer courses on religion or theology.<sup>172</sup>

The Court maintained that applying the first *Lemon* criterion requires asking whether the "actual purpose" of the Government's challenged action is either the endorsement or the disapproval of religion.<sup>173</sup> Of course, the Court's assumption in this regard is that the Establishment Clause prohibits both governmental endorsement and governmental disapproval of religion, where secular physicalism is not deemed to be a religion. This formulation presupposes the existence of a third alternative to the dichotomy of endorsement, on the one hand, and disapproval, on the other. For, if there is no third alternative, then the First Amendment would be violated no matter what a State or School District did about the matter, an absurd consequence. But is the Court's belief in a third alternative correct?

One might easily suppose that there is a third alternative: neither endorsing nor disapproving religion. However, the matter is less clear, at least in the context of teaching in public schools. It seems that however a state or school district addresses this particular issue, its action will inevitably violate the Court's maxim. Consider the available alternatives and the inherent problems with each.

Alternative [1] - Prohibit all teaching of evolution, whether from a secular Darwinian physicalist viewpoint, or from a non-physicalist viewpoint, which the Court would classify as a "religious" viewpoint. This alternative would violate the Court's maxim because it would involve "disapproving" religion.

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171. *Id.* at 583-584 (quoting *Ill. ex rel. McCollum v. Bd. Of Educ.*, 333 U.S. 203, 231 (1948)).

172. *Id.* at 584 n.5 (quoting *School District of Abington Twp. v. Schempp*, 374 U.S. 203, 253 (1963)).

173. *Id.* at 585.

Alternative [2] - Permit the teaching of evolution from both a secular physicalist viewpoint and a non-physicalist viewpoint. This alternative would violate the Court's maxim because it would involve "endorsing" religion.

Alternative [3] - Permit the teaching of evolution from a secular physicalist viewpoint, but prohibit teaching it from a non-physicalist viewpoint. That alternative would violate the Court's maxim because it would involve "disapproving" religion.

Alternative [4] - Permit the teaching of evolution from a non-physicalist viewpoint, but prohibit teaching it from a secular physicalist viewpoint. This alternative would violate the Court's maxim because it would involve "endorsing" religion.

These logical consequences show the source of the difficulties is the Court's maxim. When interpreted literally, the maxim exhibits internal incoherence.

The Court went on to say that a governmental intention to promote a religious objective may be evidenced in either of two ways - either by promoting "religion in general" or by promoting a "particular religious belief." Consequently, if a governmental action aims at promoting a religious objective in either of these two ways, it violates the Establishment Clause regardless of whether the challenged legislation meets the second and third *Lemon* criteria.<sup>174</sup> Of course, this maxim is as clear as the Court's definition of "religion," which is to say, not at all.

It is instructive to compare this analysis of the Court's maxim with the maxim cited in *Epperson*: that the Establishment Clause prohibits both governmental discrimination between religions and between religions and non-religions, where secular physicalism is deemed to be non-religion. Are these two maxims equivalent, at least with respect to the issue of teaching evolution in public schools? It seems that they are not. If we apply the analysis we just used on the first maxim to the second maxim, we get the following results:

Alternative (1): Prohibit all teaching of evolution, whether from a secular physicalist perspective or from a non-physicalist viewpoint. It seems that this prohibition would not violate the second maxim, although it would probably violate the Free Speech Clause of the First Amendment.

Alternative (2): Permit the teaching of evolution from both a secular physicalist perspective and from a non-secular non-physicalist perspective. Presumably, this would not violate the second maxim because there would be no governmental discrimination between religions or between religions and non-religions.

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174. *Id.*

Alternative (3): Permit the teaching of evolution from a secular physicalist viewpoint, but prohibit teaching it from a non-secular non-physicalist viewpoint. It seems that this alternative would violate the second maxim because it would involve governmental discrimination between religions and non-religions, in favor of the latter.

Alternative (4): Permit the teaching of evolution from a non-physicalist viewpoint, but prohibit teaching it from a secular physicalist viewpoint. Presumably, this would also violate the standard because it would involve governmental discrimination between religions and non-religions, in favor of the former.

Thus, it seems that the two maxims are not equivalent. We set aside the difference in outcomes under Alternative (1), because both outcomes would result in unconstitutionality, albeit for different reasons. However, the difference in outcomes under Alternative (2) is decisive. In Alternative (2), the outcome of the first maxim is unconstitutionality and that of the second is constitutionality.

It seems that this non-equivalence is due to the fact that the second maxim is formulated in broader terms than the first, in that the second includes non-religious, as well as religious, points of view. Nevertheless, both maxims can be faulted for failing to recognize secular physicalism as an integrated worldview in its own right, a failure which is remedied by our proposed No-Discrimination standard-of-review under the Establishment Clause, a standard which presupposes that secular physicalism is an integrated worldview.

The Court went on to address the argument raised by the defense: that the statute's stated purpose was that of protecting academic freedom. The Court distinguished two possible senses of "academic freedom." On the one hand, the term might be construed as meaning the promotion and protection of the liberty of public-school teachers to teach as they wish. With respect to that interpretation, the Court maintained that the statute was not designed to promote that objective,<sup>175</sup> offering four reasons for so concluding:

(1) The concept of academic freedom has no application in this particular context because under state law public-school teachers have no academic freedom in this regard. The Court argued that the contents of public-school courses are defined and required by the Louisiana Board of Education and therefore public-school teachers are not legally free to teach courses differing from the State's requirements.<sup>176</sup>

(2) The legal coercion inherent in the statute's sanctions is incompatible

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175. *Aguillard*, 482 U.S. at 586.

176. *Id.* at 586 n.6.

with the objective of promoting academic freedom by requiring the teaching of creation science whenever the Darwinian theory is taught. This means that, instead of promoting academic freedom, the statute actually diminishes that freedom by restricting teachers' liberty to teach Darwinian evolution without also teaching creation science.<sup>177</sup>

(3) The legislative history shows that the statute's legislative sponsor intended to narrow the scope of the public-school science curriculum. Senator Keith said, "My preference would be that neither [creationism nor evolution] be taught." A prohibition of that kind would actually frustrate the accomplishment of the goal of ensuring a comprehensive education.<sup>178</sup>

(4) The statute does not give public-school teachers any liberty that did not already have under state law. The Court approved the Court of Appeals' finding that Louisiana law already permitted teachers to present any scientific theory, other than Darwinian evolution, about the origins of life on earth. There was testimony at trial that "[a]ny scientific concept that's based on established fact can be included in our curriculum already, and no legislation allowing this is necessary."<sup>179</sup> Thus, because the statute fails to give teachers any new powers, the statute does not achieve its stated purpose of promoting academic freedom.

This last argument is somewhat startling. The Court seemed to maintain that, under state law, public-school teachers already had the legal power to teach creation science. If so, then presumably a statute which permitted, rather than required, the teaching of creation science would be constitutional. Whether the Court intended to imply this might be questioned, however, given the qualification that such alternative theories must be "based on established fact." However, even given this qualification, the Court seemed to leave the door open for non-physicalist accounts of life which are "based on established fact" in some significant sense. On the other hand, given the Court's strong tendency to strike down statutes which are motivated by religious, especially Christian, concerns, one wonders whether it would strike down even such a "permission" statute, if Christians were among its supporters. We shall return to this issue later.

On the other hand, the Court said that the phrase "academic freedom" could be interpreted in terms of a principle of fundamental fairness, requiring that all the available evidence be taught. However, the Court said that, even if the term "academic freedom" is understood as meaning that all of the available evidence regarding the origin of human beings ought to be taught, the statute does not promote that objective either: "[t]he goal of

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177. *Id.*

178. *Id.* at 587.

179. *Id.*

providing a more comprehensive science curriculum is not furthered either by outlawing the teaching of evolution or by requiring the teaching of creation science.”<sup>180</sup> The statute required the development of curriculum guides for teaching creation science but not for teaching Darwinian evolution. The statute required that resource services be supplied for teaching creation science but not for teaching evolution. Only creation scientists were permitted to serve on the committee supplying such resource services. The statute prohibited discrimination against any teacher choosing to teach creation science but did not protect teachers choosing to teach Darwinian evolution or any other non-creation science theory, or teachers who simply refused to teach creation science.<sup>181</sup>

The Court went on to say:

If the Louisiana Legislature’s purpose was solely to maximize the comprehensive-ness and effectiveness of science instruction, it would have encouraged the teaching of all scientific theories about the origins of humankind. But under the Act’s requirements, teachers who were once free to teach any and all facets of this subject are now unable to do so. Moreover, the Act fails even to ensure that creation science will be taught, but instead requires the teaching of this theory only when the theory of evolution is taught.<sup>182</sup>

Thus, the Court argued that the statute’s purpose is not to protect academic freedom, in the sense of teaching all of the available evidence, but rather to discredit the Darwinian theory by countering it with the creation science account.<sup>183</sup>

Again, we note the Court’s implied commitment to the proposition that a statute which simply permits, rather than requires, the teaching of non-Darwinian accounts of would be constitutional. We shall return to this implied commitment later.

Turning from its focus upon the statute’s officially-stated purpose of promoting “academic freedom,” the Court maintained that the legislature’s primary purpose in enacting the statute was religious, given the “historic and contemporaneous link between the teachings of certain religious denominations and the teaching of evolution.”<sup>184</sup> Given such a sociological link, it is not necessary for such a statute to state a primary religious purpose.<sup>185</sup> The primary legislative purpose was to promote the “religious”

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180. *Id.* at 586.

181. *Aguillard*, 482 U.S. at 588.

182. *Id.* at 588–89.

183. *Id.* at 589.

184. *Id.* at 590.

185. *Id.*

doctrine that a “supernatural being created humankind.”<sup>186</sup> In fact, the very term “creation science” was defined as promoting that doctrine by supporters of the legislation who testified in the legislative hearings.<sup>187</sup> Hence, the legislative history of the statute clearly shows that “the term ‘creation science,’ as contemplated by the legislature which enacted the statute, embodies the religious belief that a supernatural creator was responsible for the creation of humankind.”<sup>188</sup>

In addition, the Court argued that it was no coincidence that the legislature required the teaching of a theory that “coincides” with the religious view that a supernatural being created humankind. The legislative history shows that the legislature’s primary purpose was to “change the science curriculum of public schools in order to provide persuasive advantage to a particular religious doctrine that rejects the factual basis of evolution in its entirety.”<sup>189</sup>

The Court summed up its arguments against the Act in these words:

[T]he purpose of the Creationism Act was to restructure the science curriculum to conform with a particular religious viewpoint. Out of many possible science subjects taught in the public schools, the legislature chose to affect the teaching of the one scientific theory that historically has been opposed by certain religious sects. As in *Epperson*, the legislature passed the Act to give preference to those religious groups which have as one of their tenets the creation of humankind by a divine creator. The ‘overriding fact’ that confronted the Court in *Epperson* was ‘that Arkansas law selects from the body of knowledge a particular segment which it proscribes for the sole reason that it is deemed to conflict with . . . a particular interpretation of the Book of Genesis by a particular religious group.’ . . . Similarly, the Creationism Act is designed *either* to promote the theory of creation science which embodies a particular religious tenet by requiring that creation science be taught whenever evolution is taught *or* to prohibit the teaching of a scientific theory disfavored by certain religious sects by forbidding the teaching of evolution when creation science is not also taught. The Establishment Clause, however, ‘forbids *alike* the preference of a religious doctrine *or* the prohibition of theory which is deemed antagonistic to a particular dogma.’ . . . Because the primary purpose of the Creationism Act is to advance a particular religious belief, the Act endorses religion in violation of the First

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186. *Id.* at 591.

187. *Aguillard*, 482 U.S. at 591-92.

188. *Id.*

189. *Id.* at 592.

Amendment.<sup>190</sup>

However, the Court went on to state a significant qualification, much like the two earlier qualifications we have already noted:

We do not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught. Indeed, the Court acknowledged in *Stone* that its decision forbidding the posting of the Ten Commandments did not mean that no use could ever be made of the Ten Commandments, or that the Ten Commandments played an exclusively religious role in the history of Western Civilization. . . . *In a similar way, teaching a variety of scientific theories about the origins of humankind might be validly done with the clear secular intent of enhancing the effectiveness of science instruction.* But because the primary purpose of the Creationism Act is to endorse a particular religious doctrine, the Act furthers religion in violation of the Establishment Clause.<sup>191</sup> [Emphasis added.]

Thus, we see again that the Court apparently concedes the constitutionality of a statute, or even a practice, for that matter, which permits, without requiring, the teaching of alternative theories of life, including non-physicalist theories.

*d. Evaluation of the Court's evolution cases*

From our perspective, the Court's evolution cases can be faulted on at least the following grounds:

First, the Court's reliance upon the first *Lemon* criterion—no religious purpose—is a serious deficiency. As we have argued, regardless of what ought to be done about the second and third *Lemon* criteria, the first element is particularly objectionable. And, eliminating the reliance upon the first *Lemon* element would undercut both opinions, at least as written.

Second, the Court's implicit assumption that the theory of Darwinian evolution, if presented with the presupposition that a secular physicalist metaphysics is not itself an integrated worldview, is mistaken. As we have argued, it is—at least in its typical academic incarnations. Thus, the Court's holdings in these cases constitute a violation of the No-Discrimination standard of review we have proposed for interpreting and applying the Establishment Clause.

Third, the second failure is itself a function of the Court's refusal to give a systematic general definition of the term “religion” for purposes of the First Amendment.

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190. *Id.* at 593 (quoting *Epperson v. State of Ark.*, 393 U.S. 97, 103, 106-07 (1968)).

191. *Id.* at 593-594.



Fourth, in *Aguillard* the Court failed to formulate the essential content of the Establishment Clause in a way which avoids incoherence.

On the other hand, in neither *Epperson* nor *Aguillard* was the Court presented with the issues raised by our proposal: the Establishment Clause would not be violated by a rule or practice that merely permitted, without requiring, the presentation of non-physicalist accounts of the origin of life. Indeed, not only was the Court not confronted with a proposal like ours, but, as we have pointed out, there are three passages in *Aguillard* which implicitly show that, even assuming the application of the *Lemon* criteria, the Court would be willing to uphold a proposal like ours under the Establishment Clause. From our point of view that particular implication is a welcome one.

#### *IV. Significant Lower Federal-Court Cases*

We shall briefly take up two lower federal court cases that have figured prominently in discussions of the evolution issue: *McLean v. Arkansas Board of Education*,<sup>192</sup> and *Pelozo v. Capistrano Unified School District*.<sup>193</sup>

##### *1. McLean v. Arkansas Board of Education*

In *McLean* the district court struck down under the Establishment Clause an Arkansas statute requiring public schools to give “balanced treatment” both to “creation science” and to “evolution science.”<sup>194</sup> We shall focus upon just a few especially significant aspects.

##### *a. Unfortunate reliance upon the Lemon test*

First, the district court relied exclusively upon the *Lemon* test, holding that the challenged statute violated all three of the *Lemon* criteria. Of course, the fact that the court applied *Lemon* is perfectly reasonable, given that, as a lower federal court, it was obliged to follow applicable Supreme Court precedents. However, given our previously-stated opposition to the *Lemon* standard of review, we do not regard the *McLean* decision as philosophically right.

##### *b. An inadequate characterization of the two-model approach*

Second, the district court criticized what it called the “two-model approach” to the question of explaining life. Because we have already analyzed the court’s criticism in greater detail in Part I, we will take it up briefly here. One of the major problems with the court’s analysis of this

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192. 529 F.Supp. 1255 (D. Ark. 1982).

193. 37 F.3d 517 (9th Cir. 1994), *cert.denied*, 515 U.S. 1173 (1995).

194. *McLean*, 529 F. Supp. at 1256.

two-model approach is that it described approach in two notably different ways. On the one hand, it characterized the approach as maintaining that “there are only two positions with respect to the origins of the earth and life: belief in the inerrancy of the Genesis story of creation and of a worldwide flood as fact, or belief in what they call evolution”;<sup>195</sup> and the court later stated that the two-model approach is “an extension of Fundamentalists’ view that one must either accept the literal interpretation of Genesis or else believe in the godless system of evolution.”<sup>196</sup> On the other hand, the court characterized the two-model approach as assuming “only two explanations for the origins of life and existence of men, plants and animals: It was either the work of a creator or it was not.”<sup>197</sup>

These two characterizations of the two-model account of life are importantly different. According to the first characterization—which holds that either the Genesis account of life is true, or the secular Darwinian account is true—the two-model approach fails to specify an exhaustive dichotomy of alternative hypotheses as to the explanation of life. Obviously, the Genesis account is not the only available non-physicalist account of life. In contrast, according to the second characterization—which holds that either life was the work of a non-physical Creator, or it was not—the two-model approach does specify an exhaustive dichotomy of alternative hypotheses of life. The second characterization essentially distinguishes between those accounts of life that posit at least one non-physical cause and explanation, and those accounts that do not. Thus, the two characterizations of the two-model approach are not equivalent.

However, one might ask, “even if you’re right about the court’s mistake, why does the mistake matter? What harm does it do?” The court’s mistake completely vitiates the conclusion it drew from its equivocating characterization of the two-model approach. The court maintained that “[a]pplication of these two-models, according to creationists, and the defendants, dictates that all scientific evidence which fails to support the theory of evolution is necessarily scientific evidence in support of creationism and is, therefore, creation science ‘evidence’ in support of Section 4(a).”<sup>198</sup> In dismissing this argument as fallacious, the court clearly relied upon its first characterization of the two-model approach. If the alternatives are simply the truth of the Genesis account or the truth of Darwinian physicalism, then it is not the case that any evidence tending to cast doubt upon the truth of Darwinian physicalism is evidence that necessarily strengthens the case for the truth of the Genesis account. The

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195. *Id.* at 1260.

196. *Id.* at 1266.

197. *Id.*

198. *Id.*

reason is obvious. The Genesis account of the origins of life is but one of many possible non-physicalist accounts.

In contrast, if the alternatives are stated as the court did in its second formulation—either the truth of at least one non-physicalist account of life, or the truth of at least one physicalist account of life—then the outcome is dramatically different. Given the mutually exclusive and exhaustive statement of the alternatives, then any evidence tending to cast doubt upon the truth of any purely physicalist account would necessarily strengthen the case for the truth of at least one non-physicalist account. That is precisely the kind of evidence we have marshaled in the first part of this essay.

*c. An overly narrow definition of 'evolutionary theory'*

The district court maintained that there is no conflict between evolutionary theory and non-physicalist accounts of life. The court's argument for that proposition relied upon a narrow definition of "evolutionary theory." In that regard, the court said:

The emphasis on origins as an aspect of the theory of evolution is peculiar to creationist literature. Although the subject of origins of life is within the province of biology, the scientific community does not consider origins of life a part of evolutionary theory. The theory of evolution assumes the existence of life and is directed to an explanation of how life evolved. Evolution does not presuppose the absence of a creator or God and the plain inference conveyed by Section 4 is erroneous.<sup>199</sup>

But this is an overly narrow definition of "evolutionary theory." As we have argued in Part I, typical presentations of Darwinian evolutionary theory go far beyond the scope of the court's definition. Indeed, typical presentations incorporate not only strictly biological assertions, but also metaphysical assertions, such as the metaphysical claim that there simply are no non-physical causes in the universe. When Darwinian evolutionary theory is understood to include such a philosophical underpinning of secular metaphysical physicalism, the conflict between that theory and non-physicalist accounts of the origin life should be obvious.

*d. An overly narrow definition of "science"*

In the course of arguing that "creation science" is not science, the Court proposed a definition of the term "science." One of the elements of the definition was that the assertions and theories of science are "falsifiable,"<sup>200</sup>

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199. *McLean*, 529 F. Supp. at 1266. See the Court's remark that "evolution is not a religion and . . . teaching evolution does not violate the Establishment Clause." *Id.* at 1274.

200. *Id.* at 1267.

meaning that it makes at least one definite prediction that is capable of being empirically tested and shown to be mistaken. If such a prediction turns out to be false, the assertion or theory has been falsified but a scientific assertion or theory is falsifiable merely if it could be falsified.<sup>201</sup> This definition is too narrow to capture even what everyone uncontroversially regards as science.

The general philosophical consensus is that, if the criterion of falsifiability were taken seriously, much of what is considered paradigmatic science would have to be discarded.<sup>202</sup> Thus, the Court's attempt to distinguish between "creation science" and "genuine science" misfires. There may be ways of coherently distinguishing the two, but invoking the criterion of falsifiability is not one of them.

A similar mistake runs through part of the unpublished opinion in *Kitzmiller v. Dover Area School District* (2005).<sup>203</sup> The District Court's discussion in Section 4 ("Whether ID is Science") relies upon an overly-narrow characterization of science in terms of what the Court calls "methodological naturalism," a term it defines as a principle limiting scientific explanations to only those propositions which can be physically tested and verified. As we have argued, this is not an accurate description of the way in which science actually proceeds. Science often posits hypotheses which cannot be tested in any such narrow sense. However, even if it were an accurate characterization of science, it would not suffice to preclude at least the invocation of non-physicalist explanations of life in classrooms. Any responsible science teacher who conforms to such an overly-narrow view of science would be intellectually obligated to make students aware that science limits itself to physical testability in an extremely narrow sense and therefore is constitutionally incapable of evaluating hypotheses about the nature of reality that invoke non-physical causes, hypotheses which might in fact be true. At that point, it would presumably be ad hoc and artificial to refuse to respond to students' inevitable questions about the nature of such non-physicalist explanations and even if some science teachers did resort to such ad hoc boundary stipulations, they would at least have put students on notice that science, as they understand it, is surely not the last word about the ultimate nature of reality. Such concessions would themselves constitute a significant educational advance.<sup>204</sup>

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201. See, e.g., SAMIR OKASHA, *PHILOSOPHY OF SCIENCE: A VERY SHORT INTRODUCTION* 13 (2002).

202. *Id.* at 13 - 17. See also ALEXANDER BIRD, *PHILOSOPHY OF SCIENCE* 239-47 (1998); ROBERT KLEE, *INTRODUCTION TO THE PHILOSOPHY OF SCIENCE: CUTTING NATURE AT ITS SEAMS* 67-73 (1997).

203. *Kitzmiller v. Dover Area School District*, 400 F.Supp.2d 707 (M. D. Pa. 2005).

204. The topic of "methodological naturalism" involves difficult questions of interpretation and analysis. We remind readers of our more detailed discussion in Part I. As we argue there, the

To understand why such characterizations about the nature of science are inadequate, we will look now at an observation made by Willard Van Orman Quine, a twentieth-century logician. Let  $H$  be a hypothesis and  $P$  be one of  $H$ 's predictions. A typical way of formulating the logical relationship between  $H$  and  $P$  is using the entailment relation. Let " $\rightarrow$ " symbolize that relation. Then we have  $H \rightarrow P$ . Suppose further that  $P$  turns out to be false. Then by *modus tollens* we can derive the falsity of  $H$ . This seems simple but is not. Representing the logical relationship between  $H$  and  $P$  as " $H \rightarrow P$ " is a vast oversimplification. No (interesting) hypothesis ( $H$ ) ever entails a predication ( $P$ ) all by itself. Rather, any such  $H$  entails a  $P$  only together with a large indeterminate class of other propositions, say  $A-1 \dots A-n$ , for some very large finite  $n$ . Thus, one should not represent the relationship of  $H$  to  $P$  as ' $H \rightarrow P$ .' Rather, one should represent it as ' $(H \& A-1 \& A-2, \dots \& A-n) \rightarrow P$ .' If  $P$  is false, no simple *modus tollens* move to  $H$ 's negation is logically permissible. The only inference is that one of the conjuncts in the antecedent of the conditional is false. Which one should be selected as false is a matter of complex and controversial scientific and philosophical discretion. Thus, the naïve idea that scientific hypotheses can be used to make predictions which, if false, conclusively falsify those hypotheses cannot be sustained. As Quine puts it, "[a]ny statement can be held true, come what may, if we make drastic enough adjustments elsewhere in the system."<sup>205</sup>

## 2. *Peloza v. Capistrano Unified School District*

In *Peloza* a high-school biology teacher sued his school district alleging a violation of the Establishment Clause by requiring him to teach

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claim that science is guided by the principle of "methodological naturalism" can be understood in at least two ways. On the one hand, it can be understood as the claim that "science limits itself to the invocation of purely physical causes and explanations, although there may, in fact, be non-physical causes and explanations for physical things and events." On the other hand, it might be understood as the claim that "science limits itself to the invocation of purely physical causes and explanations, and there simply are no non-physical causes or explanations of physical things and events." On the first interpretation, the principle of methodological naturalism would not conflict with non-physicalist explanations of life, although, as we have just argued, public-school teachers should be normatively expected to make clear to their students that science, as these teachers understand it, cannot exclude the possibility of there being a non-physical explanation of life. On the second interpretation, the principle of methodological naturalism obviously conflicts with non-physicalist explanations of life. However, as we have argued, the existence of such a conflict is, by itself, sufficient to show that the principle of methodological naturalism, thus understood, is itself a philosophical thesis which goes far beyond any "physically testable" boundaries that might be defensively stipulated, thereby penetrating far into "metaphysical space." As we have also argued, paradigmatic secular physicalists such as Dennett and Dawkins, have explicitly adopted the second interpretation of the principle of methodological naturalism and are at this very moment jousting around in metaphysical space jousting with theists to the death.

205. WILLARD VAN ORMAN QUINE, FROM A LOGICAL POINT OF VIEW 43 (1961).

“evolutionism,” a religious belief system.<sup>206</sup> The Court ruled against him, arguing that evolutionism is not a religious belief system and that therefore there was no violation of the Establishment Clause.<sup>207</sup>

In the course of arguing for the proposition that “evolutionary theory” is not a “religion,” the Court said, “only if we define ‘evolution’ and ‘evolutionism’ as does *Peloza* as a concept that embraces the belief that the universe came into existence without a Creator might he make out a claim. This we need not do.”<sup>208</sup>

But this argument fails for the same reason that a similar argument failed in *McLean*. The Court overlooked the fact that, as typically presented in academic contexts, Darwinian evolutionary theory does incorporate the claim that the universe came into existence without the assistance of a non-physical cause. Once that basic point is grasped, it is obvious that Darwinian evolutionary theory is an integrated worldview.

*V. Teaching evolutionary theory in public schools does not violate the Establishment Clause.*

Our legal proposal is that the Establishment Clause should not be deemed violated by a state statute, school-district regulation, or even just a school-district practice, which merely permits, without requiring, public-school science teachers to incorporate non-physicalist accounts of life in their science classes. As we have also previously noted, this proposal is significantly different from the types of legislation struck down in the Court’s two evolution precedents. In particular, it would neither prohibit teaching the Darwinian theory of evolution, as in *Epperson v. Arkansas*, nor would it require teaching non-physicalist theories of life whenever the Darwinian theory is taught, as in *Edwards v. Aguillard*.

We shall make two arguments: first, that our proposal does not violate the Establishment Clause, even under the Supreme Court’s own evolution cases, and second, that our proposal does not violate the Establishment Clause under the standard of review we have proposed to resolve Establishment Clause issues.

*1. Resolution of our proposal under the Supreme Court’s own evolution precedents.*

There are three crucial passages in *Edwards v. Aguillard* which strongly suggest that the Court would have upheld a proposal such as ours. Selecting just one of the passages we discussed, the Court said:

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206. *Peloza v. Capistrano Unified Sch. Dist.*, 37 F.3d. 517 (1994).

207. *Id.*

208. *Id.* at 521.

We do not imply that a legislature could never require that scientific critiques of prevailing scientific theories be taught. Indeed, the Court acknowledged in *Stone* that its decision forbidding the posting of the Ten Commandments did not mean that no use could ever be made of the Ten Commandments, or that the Ten Commandments played an exclusively religious role in the history of Western Civilization. . . In a similar way, teaching a variety of scientific theories about the origins of humankind might be validly done with the clear secular intent of enhancing the effectiveness of science instruction. But because the Creationism Act is to endorse a particular religious doctrine, the Act furthers religion in violation of the Establishment Clause.<sup>209</sup>

A plausible reading of such a passage yields the interpretation that the Court has implicitly conceded the constitutionality of a statute or practice which merely permits, without requiring, the teaching of alternative theories of life, including non-physicalist theories.

Our argument might be contested by some who would argue that our proposal would flounder upon the first *Lemon* criterion—no religious motivations or objectives. What if it turned out that at least one of the parties in an Establishment Clause lawsuit was a Christian and that her motivation for participating in the litigation was based upon religious beliefs?

We concede that this is a serious objection. Indeed, the Court seems committed to the proposition that the mere existence of a religious motivation for any governmental action is, by itself, sufficient to render that action a violation of the Establishment Clause. However, there are at least two countervailing points.

First, in none of the three *Aguillard* passages we singled out did the Court hint that a proposal like ours would fail if it turned out that at least one of the proposal's proponents had religious views, in the overly-narrow sense of the Court's semantical interpretation of the term "religious." Why not take the Court at its word?

Second, perhaps when directly confronted with the unreasonableness of holding on for dear life to the first *Lemon* criterion, regardless of the consequences, the Court would relax its cognitive grip just enough to uphold the proposal.

## 2. *Resolution of our proposal under our proposed standard of review for applying the Establishment Clause.*

Since the groundwork for this conclusion has already been worked out

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209. *Aguillard*, 482 U.S. at 594.

previously, the argument can be stated very briefly. Recall that we have proposed and argued for replacing the *Lemon* standard of review with what we have called a “No-Discrimination standard,” according to which the Establishment Clause prohibits Government from discriminating between integrated worldviews. Secular physicalist accounts of life are integrated worldviews, as are non-physicalist accounts. Permitting class-room presentation of accounts of the secularist physicalist variety, while prohibiting class-room presentation of accounts of the non-physicalist variety, would constitute discrimination against integrated worldviews of the non-physicalist variety. Hence, government must permit the presentation and exposition of integrated worldviews of the non-physicalist variety, assuming that it permits presentation of integrated worldviews of the secularist physicalist variety. However, if government must permit the presentation and exposition of accounts of the non-physicalist variety, then, *a fortiori*, it is constitutionally permissible for science teachers in public schools to present accounts of the non-physicalist variety.

As we argued in Part I, there are different possible degrees of the scope of such a governmental permission. For purposes of the statement of this conclusion to Part II, we assume that the scope of any such governmental permission must satisfy our No-Discrimination standard, although, as we have also pointed out in Part I, that would not necessarily require literally equal periods of class time. The question of what the No-Discrimination standard requires in any specific context would be a highly contextual matter.