Evolution, Science, and Ideology: Why the Establishment Clause Requires Neutrality in Science Classes

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INTRODUCTION

Public education is often considered to be one of the most benign aspects of state power. Many people question how such a benevolent institution could be labeled as coercive when it rarely even engages in corporal punishment. It is the dominance of this assumption in society that allows compulsory public education to conceal its considerable coercive power. The source of this power is the inherent capacity of public education to shape how students view the world. Both the public education system and the elites who influence it use this power to serve their own ideological ends. One of the best examples of this ideological coercion is the choice of public schools to teach evolutionary theory as the exclusive explanation for the origin of life. Both public schools and federal courts justify the failure to teach alternatives with the claim that evolutionism is the only scientific explanation for the origin of life. In reality, alternatives to evolutionary theory are only unscientific to the extent that one relies on a secular definition of the scientific method. Relying on a slanted definition of science will inevitably produce a rigged game when one determines whether a theory is scientific.

Although some school districts and legislatures have attempted to solve this problem, the federal courts have used the Establishment Clause to obstruct all attempts at reform. The underlying cause of this situation is both philosophical and legal. Flawed epistemological assumptions have produced flawed legal reasoning. Because the problem has two sources, the solution must also have two aspects. First, people should recognize that the definition of science, which is legitimizing the exclusion of alternatives to evolutionary theory, is ideological. Second, the U.S. Supreme Court should hold that the failure to teach alternatives

* J.D. 2006, William Mitchell College of Law; B.S. 2003, Liberty University. I would like to thank Professor Russell Pannier, Jeremy Samek, and Josiah Neeley for assisting with this article.
to evolutionary theory in public school science classes is an establishment of religion under the First Amendment. Section I of this paper will analyze the false epistemological assumptions that are legitimizing the indoctrination of students into evolutionary theory. Section II will examine Establishment Clause cases that have dealt with evolutionism. Section III will discuss why the exclusive teaching of evolutionism in public schools violates the Establishment Clause.

I. UNMASKING SECULAR HUMANISM

Nearly all public schools teach evolutionism without incorporating alternatives to evolutionism into the curriculum. In order to address the legal errors that have produced this situation, it is first necessary to address the epistemological errors that are justifying the exclusion of alternatives to evolutionary theory from public school science classes. Some late twentieth-century philosophers examined the role that knowledge can play in justifying the exclusion of non-conforming belief systems. An exploration of the thought of these philosophers will offer some insight into the logic that has legitimized the exclusion of alternatives to evolutionism.

The search for truth is not always an objective inquiry. Michel Foucault has argued:

If we truly wish to know knowledge . . . we must look not to philosophers but to politicians—we need to understand what the relations of struggle and power are. One can understand what knowledge consists of only by examining these relations of struggle and power, the manner in which things and men hate one another, fight one another, and try to dominate one another, to exercise power relations over one another.

The search for truth is not always an innocent pursuit; it can also be a power struggle. The ability to determine what truth is can place a person or group of people in a position of social dominance. According to Foucault, every society has a politics of truth, which determines what forms of discourse will be accepted

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1 See McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1259 (E.D. Ark. 1982). The Biological Sciences Curriculum Study (BSCS) . . . developed a series of biology texts which, although emphasizing different aspects of biology, incorporated the theory of evolution as a major theme. The success of the BSCS effort is shown by the fact that fifty percent of American school children currently use BSCS books directly and the curriculum is incorporated indirectly in virtually all biology texts.

Id.

as truth. This politics of truth includes the methods that people will use to define truth and what people will be responsible for making determinations concerning the nature of truth. This politics of truth that exists in a society at any given time is not something that the state must enforce, since embedded power relations in culture “permeate the whole fabric of our existence.”

Power is not always bad, but it is always dangerous, and it is important to understand the world through cautious investigation that takes into account the dangers of truth and power.

Logical Positivism, an early twentieth-century philosophical movement, strongly influenced the epistemological methods that exist in the scientific community today. A.J. Ayer was probably the best-known proponent of Logical Positivism. He argued that in order for a statement to be meaningful, it must be verifiable. The necessary condition of whether a statement is factually significant is whether some observation could affirm or deny the truth of the statement.

We enquire in every case what observations would lead us to answer the question, one way or the other; and, if none can be discovered, we must conclude that the sentence under consideration does not, as far as we are concerned, express a genuine question, however strongly its grammatical appearance may suggest that it does.

Therefore, under Ayer’s definition of science, a statement that refers to the “purposeful complexity of the universe as evidence for the existence of God” would be an incoherent statement since no possible observation could directly affirm or deny the existence of God.

Jean-François Lyotard has written about the role that the

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Each society has its regime of truth, its “general politics” of truth—that is, the types of discourse it accepts and makes function as true; the mechanisms and instances that enable one to distinguish true and false statements; the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true.

Id.

4 Id.

5 Foucault, supra note 2, at 17.


7 See infra notes 63–64, 137–144 and accompanying text.


9 Id.

10 Id.

11 Id. at 115 (“For to say that ‘God exists’ is to make a metaphysical utterance which cannot be either true or false. And by the same criterion, no sentence which purports to describe the nature of a transcendent god can possess any literal significance.”).
scientific epistemology can play in legitimizing exclusion. He argues that scientific epistemologies are language games since there are rules or constraints that establish what forms of discourse a person can use in the process of fulfilling the requirements of the game. The dominant definition of science in the scientific community is such a language game because it establishes the rules or constraints that one must follow to arrive at truth. Science is simply descriptive statements that are limited by two constraints: the descriptive statements must be open to explicit observation, and they must be subject to review by scientific experts.

Scientific epistemologies, like Logical Positivism, legitimize the exclusion of those who do not understand truth exclusively through empirical verification. “The scientist questions the validity of narrative statements and concludes that they are never subject to argumentation or proof. He classifies them as belonging to a different mentality: savage, primitive, underdeveloped, backward, alienated, composed of opinions, customs, authority, prejudice, ignorance, ideology.” The state excludes any theory that has a supernatural element under the assumption that such statements must inevitably rely on subjective faith instead of objective proof. Therefore, those who do not define truth exclu-

13 Id. at 10.
14 Id. at 18 (Science is “composed of denotative statements, but imposes two supplementary conditions on their acceptability: the objects to which they refer must be available . . . in explicit conditions of observation; and it must be possible to decide whether or not a given statement pertains to the language judged relevant by the experts.”). Id. at 24 (“These two rules underlie what nineteenth-century science calls verification and twentieth-century science, falsification.”).
15 Id. at 18.
16 Id.
17 Id. at 27.
18 Introduction to CHRISTIAN PERSPECTIVES ON LEGAL THOUGHT, at xx–xxi (Michael W. McConnell et al. eds., 2001) (“A second source of the resistance, we think, is a throwback to the modern or ‘scientific’ period of legal thought... Religion is subjective, and science is objective.”); Iain T. Benson, Notes Towards a (Re)Definition of the “Secular”, 33 U. BRIT. COLUM. L. REV. 519, 520 (2000).

The term ‘secular’ has come to mean a realm that is neutral or, more precisely, ‘religion-free.’ Implicit in this religion free neutrality is the notion that the
sively through the process of scientific verification often experience marginalization.

The hegemony of scientific knowledge production becomes even more problematic given that this form of knowledge requires as much faith as belief in the supernatural. Lyotard argues that science is facing a major crisis of legitimation because of epistemological problems that result from its inability to demonstrate the legitimacy of its method. Two problems would result if science attempted to legitimize itself. First, it would rely on circular reasoning, which would violate the very principles that govern rational inquiry in the scientific discipline. Second, science cannot prove through the senses alone that all true knowledge must be directly accessible to the senses since, if there were either forms of knowledge or elements of reality that were inaccessible to the senses, the senses, by definition, would be unable to detect those forms of knowledge or elements of reality. Therefore, since science cannot confer legitimacy upon itself, it is inevitable that science will seek legitimation using narrative knowledge. It will seek to tell the epic stories of scientific discoveries in order to confer legitimacy on its method. However, the problem with using narrative as a function of legitimation is that the foundation of science becomes a form of knowledge that science believes is inferior, backward, and worthless. The scientific epistemology is slowly collapsing under its own unconditional demands for proof. The positivistic view of the scientific

secular is a realm of facts distinct from the realm of faith... States cannot be neutral towards metaphysical claims. Their very inaction towards certain claims operates as an affirmation of others... The often anti-religious stance embodied in secularism excludes and banishes religion from any practical place in culture.

Id. The term “faith” refers to a belief that does not rely on proof.

19 LYOTARD, supra note 12, at 27–28. Before it came to this point (what some call positivism), scientific knowledge sought other solutions. It is remarkable that for a long time it could not help resorting for its solutions to procedures that, overtly or not, belong to narrative knowledge... It is not inconceivable that the recourse to narrative is inevitable, at least to the extent that the language game of science desires its statements to be true but does not have the resources to legitimate their truth on its own.

Id.

20 Id. at 29 (“Without such recourse it would be in the position of presupposing its own validity and would be stooping to what it condemns: begging the question, proceeding on prejudice.”).

21 See id. (“It is recognized that the conditions of truth, in other words, the rules of the game of science, are immanent in that game...”).

22 Id. The term “narrative knowledge” refers to a belief that does not rely on proof.

23 Id. at 28.

24 Id. at 29 (“Scientific knowledge cannot know and make known that it is the true knowledge without resorting to the other, narrative, kind of knowledge, which from its point of view is no knowledge at all.”).
method is a faith-based principle.

Some practical implications for science classes emanate from these philosophical principles. The object of study in science classes should be anything in the universe that a person can study through the five senses. Therefore, revealed texts in which some people find authority are not within the realm of scientific study. This is not because such religious texts are necessarily inferior to scientific study—they are just two different topical areas of study. This does not mean that science classes can exclude any idea relating to the supernatural. There are two possible approaches to the scientific method. One studies reality through the senses in both approaches. The point of tension between the two methods concerns what inferences one can draw from sensory experience. The materialistic approach (Logical Positivism) to the scientific method would not allow a person to infer supernatural explanations from the sensible world. The non-materialistic approach to the scientific method would allow a person to infer supernatural explanations from sensory experience. Science classes should teach students about both of these approaches to the scientific method because neither has a superior claim to proof and both entail faith.  

The current indoctrination in science classes is the result of a failure to teach both approaches. Public schools and the courts have argued that the materialistic scientific method is the only scientific method. When one operates under this assumption, the exclusion of alternatives to evolutionary theory from the curriculum becomes inevitable since only theories that are exclusively materialistic in their inferences are legitimate scientific theories. Other explanations relating to the origin of life are excluded, by definition, since these theories include supernatural inferences about the material world. As was previously discussed, both of these methods require faith. However, public schools and the courts arbitrarily exclude and indoctrinate people who subscribe to the non-materialistic scientific method. Only recognition of the faith-based assumptions inherent in each of

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25 See supra notes 19–24 and accompanying text.
26 See Benson, supra note 18, at 520 (“[A] properly constituted secular government (non-sectarian not non-faith) will see as necessary the due accommodation of religiously informed beliefs from a variety of cultures.”).
these methodologies will end the ideological exclusion and oppression.  

The ultimate implication of exclusively teaching the materialistic approach to the scientific method is that the state is forcibly indoctrinating students into the religion of secular humanism. According to the Council for Secular Humanism, “Secular humanism . . . is a philosophy and world view which centers upon human concerns and employs rational and scientific methods to address the wide range of issues important to us all.” Elements of the secular humanist belief system include: use of reason and science to understand the universe and solve problems, discouraging supernatural understandings of reality, protecting the Earth for the good of other species and future generations, skepticism toward untested knowledge, belief in common moral decency, separation of church and state, belief in agnosticism or atheism, belief in naturalism (i.e., no supernatural realm), belief that evolutionary theory is strongly supported by the evidence, and opposition to creationism in science classes. The beliefs of the religion of secular humanism emerge logically and

29 Benson, supra note 18, at 521 (“What can advertise itself as neutral is often anything but . . . . Until the necessarily "implicit faiths" are acknowledged, explicit faiths are at a marked disadvantage in finding any place in the public sphere, including: politics, public education, and law itself.”).


32 Id. (“We deplore efforts to denigrate human intelligence, to seek to explain the world in supernatural terms, and to look outside nature for salvation.”).

33 Id. (“We want to protect and enhance the earth, to preserve it for future generations, and to avoid inflicting needless suffering on other species.”).

34 Id. (“We are skeptical of untested claims to knowledge . . . .”).

35 Id. (“We believe in the common moral decencies: altruism, integrity, honesty, truthfulness, responsibility. Humanist ethics is amenable to critical, rational guidance. There are normative standards that we discover together. Moral principles are tested by their consequences.”).

36 Id. (“We are committed to the principle of the separation of church and state.”).

37 Council for Secular Humanism, supra note 30 (“Secular humanists are generally nontheists. They typically describe themselves as nonreligious.”).

38 Id. (“Secular humanists accept a world view or philosophy called naturalism, in which the physical laws of the universe are not superseded by non-material or supernatural entities . . . .”).

39 PAUL KURTZ, A SECULAR HUMANIST DECLARATION 21 (1980), (“[E]volution of the species is supported so strongly by the weight of evidence that it is difficult to reject it.”).

40 Id. (“[W]e deplore the efforts by fundamentalists (especially in the United States) to invade the science classrooms, requiring that creationist theory be taught to students and requiring that it be included in biology textbooks.”). This is particularly interesting since secular humanists apparently want to mix their religious beliefs with politics, and, more specifically, to prohibit the teaching of other religious beliefs that conflict with their religious beliefs.
necessarily from the materialistic scientific method.\textsuperscript{41}

II. CURRENT ESTABLISHMENT CLAUSE LAW ON EVOLUTION

A. Epperson v. Arkansas

In 1968, the Supreme Court heard the case \textit{Epperson v. Arkansas}, which was its first Establishment Clause case dealing with evolutionism.\textsuperscript{42} A 1928 Arkansas statute prohibited Arkansas public schools and universities from teaching the theory that people evolved from other species.\textsuperscript{43} The Arkansas statute was a product of religious fundamentalist opposition to evolutionism in the 1920s.\textsuperscript{44} The statute modeled the Tennessee law that was the subject of the famous \textit{Scopes} case.\textsuperscript{45} The Court held that the statute violated the “constitutional prohibition of state laws respecting an establishment of religion or prohibiting the free exercise thereof.”\textsuperscript{46} The Arkansas law prohibited one scientific theory out of the entire scientific discipline because the law conflicted with a religious group’s interpretation of Genesis.\textsuperscript{47} “The First Amendment mandates governmental neutrality between religion and religion, and between religion and nonreligion.”\textsuperscript{48} The Arkansas law failed the neutrality standard because it did not prohibit all teaching concerning the origin of life.\textsuperscript{49} Instead, the law targeted a specific theory that conflicted with the Bible.\textsuperscript{50}

B. McLean v. Arkansas Board of Education

In 1982, the Federal District Court in the Eastern District of Arkansas heard the case \textit{McLean v. Arkansas Board of Education}, which dealt with a recently passed Arkansas act that required public schools to give equal treatment to creation science and evolution science.\textsuperscript{51} The major issue in this case was whether the act violated the Establishment Clause,\textsuperscript{52} and the court applied the \textit{Lemon} Test to make this determination.\textsuperscript{53} The \textit{Lemon} Test has the following three prongs: “First, the statute

\textsuperscript{41} A.J. Ayer endorsed the Secular Humanist Declaration that the Council for Secular Humanism issued in 1980. \textit{Id.} at 28. This provides strong evidence for the link between logical positivism and secular humanism.

\textsuperscript{42} 393 U.S. 97 (1968).

\textsuperscript{43} \textit{Id.} at 98.

\textsuperscript{44} \textit{Id.}

\textsuperscript{45} \textit{Scopes} v. State, 289 S.W. 363 (1927); \textit{Epperson}, 393 U.S. at 98.

\textsuperscript{46} \textit{Epperson}, 393 U.S. at 103.

\textsuperscript{47} \textit{Id.}

\textsuperscript{48} \textit{Id.} at 104.

\textsuperscript{49} \textit{Id.} at 109.

\textsuperscript{50} \textit{Id.}

\textsuperscript{51} 529 F. Supp. 1255, 1256 (E.D. Ark. 1982).

\textsuperscript{52} \textit{Id.} at 1257.

\textsuperscript{53} \textit{Id.} at 1258.
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 government entanglement with religion.’”54 If any of these prongs is not satisfied, the law in question is unconstitutional.55

The court first held that the act violated the secular purpose prong of the Lemon Test.56 Deference must be given to the legislative purpose contained within an act, but this situation demanded attention to the historical context in which the act was implemented.57 The court looked at the legislative history of the act, including statements of people who supported the legislation, and found that its purpose was sectarian and not educational.58 The act was nothing more than an attempt to introduce the Biblical version of creation into the science curriculum.59

The court also concluded from the language of the act that its purpose and effect was to advance religion.60 The definition of creationism used within the act implicitly referred to Genesis, since it mentioned sudden creation out of nothing and a worldwide flood.61 The court concluded that the concept of creation out of nothing is necessarily a religious concept,62 and the major effect of the act would be to advance religious beliefs because of its correlation with the Genesis account.63

The court next concluded that the act could not have any educational purpose because creation science was not science as accepted by the scientific community.64 The court held that “the essential characteristics of science are: (1) It is guided by natural law; (2) It has to be explanatory by reference to natural law; (3) It is testable against the empirical world; (4) Its conclusions are tentative, i.e., are not necessarily the final word; and (5) It is falsifiable.”65 The concept of a sudden creation out of nothing fits none of these characteristics of science.66 In addition, at the time the case was decided, not one recognized scientific journal had

56 Id. at 1264.
57 Id.
58 Id.
59 Id.
60 Id.
61 Id.
62 Id. at 1265–66.
63 Id. at 1266.
64 Id. at 1267.
65 Id.
66 Id.
published an article on creation theory. The court did not believe that “such a loose knit group of independent thinkers in all the varied fields of science could, or would, so effectively censor new scientific thought.” The act also violated the advancement of religion prong of the Lemon Test, since if creation science was not science, the only effect of the act would be to advance religion.

The McLean opinion could not be a better example of how the materialistic approach to the scientific method legitimizes the exclusion of alternatives to evolution science, such as creation science, from class curriculum. The court’s appeal to the dominance of the materialistic approach to the scientific method in the scientific community only serves to demonstrate the central thesis of Lyotard:

[T]he conditions of truth, in other words, the rules of the game of science, are immanent in that game, . . . they can only be established within the bonds of a debate that is already scientific in nature, and . . . there is no other proof that the rules are good than the consensus extended to them by the experts.

It should be no surprise that no peer-reviewed scientific journal had published an article on scientific creationism at the time that McLean was decided. It is not a scientific conspiracy that produced this result. As Foucault pointed out, it is the “political relations [that] have been established and deeply implanted in our culture”—“the power relations that permeate the whole fabric of our existence.” Even though reliance on both the materialistic and the non-materialistic approach entails faith, there is great risk in publishing something that runs so contrary to the norms of the scientific community.

67 Id. at 1268.
68 Id.
69 Id. at 1272.
70 See supra notes 12–16, 64–68.
71 LYOTARD, supra note 12, at 29.
72 Since the time of this opinion, however, some peer-reviewed intelligent design literature has been published. Although open hostility from those who hold to neo-Darwinism sometimes makes it difficult for design scholars to gain a fair hearing for their ideas, research and articles supporting intelligent design are being published in peer-reviewed publications. Examples of peer-reviewed books supporting design include The Design Inference (Cambridge University Press) by William Dembski, and Darwin’s Black Box (The Free Press) by Michael Behe. . . . Discovery Institute, Top Questions, http://www.discovery.org/cse/topQuestions.php (last visited Oct. 8, 2006).
73 FOUCAULT, supra note 2, at 17.
C. Edwards v. Aguillard

In 1987, the U.S. Supreme Court heard the case Edwards v. Aguillard, and addressed whether the statute in question violated the Establishment Clause. The State of Louisiana passed the Balanced Treatment for Creation-Science and Evolution-Science in Public School Instruction Act (Creationism Act), which prohibited public schools from teaching evolution science unless accompanied by creation science. Public schools were not required to teach either evolutionism or creationism, but if a public school wanted to teach one, the act required that it also teach the other. The Supreme Court cited the Lemon Test as the legal standard that it would use to determine the constitutionality of the Creationism Act.

The Court noted that it must consider some distinct issues when applying the Establishment Clause to the unique context of elementary and secondary public schools. Although the courts should offer considerable deference to the decision-making of local school districts, they still must conform to the requirements of the First Amendment. Courts must be particularly careful in ensuring compliance with the Establishment Clause in elementary and secondary schools because parents entrust their children to these schools with the assumption that schools will not advance religious views that conflict with the private beliefs of the students and their families. There is great potential risk because of the compulsory nature of education and the role that teachers play as role models. The Court concluded that in “no activity of the State is it more vital to keep out divisive forces than in its schools.”

The Court then looked to the first prong of the Lemon Test to

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75 Id. at 581.
76 Id.
77 Id. at 582–83; see also supra note 54 and accompanying text. “The Lemon test has been applied in all cases since its adoption in 1971, except in Marsh v. Chambers . . . . The Court based its conclusion in that case on the historical acceptance of the practice.” Edwards, 482 U.S. at 583 n.4.
78 Edwards, 482 U.S. at 583–84 (“The Court has been particularly vigilant in monitoring compliance with the Establishment Clause in elementary and secondary schools.”).
79 Id. at 583.
80 Id. at 583–84 (“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.”).
81 Id. at 584 (“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.”).
82 Id. (quoting Illinois ex rel. McCollum v. Bd. of Educ., 333 U.S. 203, 231 (1948) (Frankfurter, J., opinion)).
determine whether the actual purpose of the state was secular, and held that the Creationism Act lacked a secular purpose.\textsuperscript{83} The stated purpose of the law was academic freedom, but it was unclear whether this meant academic freedom for the teachers to express or for the students to hear both sides of the issue.\textsuperscript{84} Regardless of how it was interpreted, the Act did not advance either of these purposes.\textsuperscript{85} The Act did not advance the academic freedom of teachers since teachers had the freedom to teach alternatives to evolutionism prior to the passage of the Act.\textsuperscript{86} It did not advance fairness for students for a number of reasons.\textsuperscript{87} It required development of curriculum guides for creationism but imposed no such requirement for evolutionism.\textsuperscript{88} The Act supplied resource services for creationism that it did not supply for evolutionism.\textsuperscript{89} It prohibited schools from discriminating against anyone who taught creationism, but did not forbid discrimination against anyone who taught evolutionism.\textsuperscript{90} The Court said that the goal was not to expand the science curriculum, but rather to discredit evolutionism by counter-balancing the teaching of evolutionism with creationism at every point.\textsuperscript{91}

The Court also held that the Creationism Act had a religious purpose because of the historical conflict between evolutionism and the teachings of certain religious groups.\textsuperscript{92} The Court cited the \textit{Epperson v. Arkansas} case as evidence for its holding.\textsuperscript{93} \textit{Epperson} involved a statute that prohibited the teaching of evolutionism,\textsuperscript{94} and the Court held that it was unconstitutional to target and prohibit a single scientific theory about the origin of life because it conflicts with the Biblical teachings of religious groups.\textsuperscript{95} The \textit{Edwards} Court concluded that the Creationism Act advanced the religious view that a supernatural being created human beings.\textsuperscript{96} The primary purpose of the act was to advance a particular religious belief in violation of the First Amendment.\textsuperscript{97} The Court finished its opinion with the rather open-ended statement that "[w]e do not imply that a legislature

\textsuperscript{83} Id. at 585.  
\textsuperscript{84} Id. at 586.  
\textsuperscript{85} Id.  
\textsuperscript{86} Id. at 587.  
\textsuperscript{87} Id. at 588.  
\textsuperscript{88} Id.  
\textsuperscript{89} Id.  
\textsuperscript{90} Id.  
\textsuperscript{91} Id. at 589.  
\textsuperscript{92} Id. at 590.  
\textsuperscript{93} Id.; \textit{Epperson v. Arkansas}, 393 U.S. 97 (1968).  
\textsuperscript{94} \textit{Epperson}, 393 U.S. at 98.  
\textsuperscript{95} Id. at 98, 106–07.  
\textsuperscript{96} \textit{Edwards}, 482 U.S. at 591–92.  
\textsuperscript{97} Id. at 593.
could never require that scientific critiques of prevailing scientific theories be taught.”

However, the Court concluded that the Creationism Act did not accomplish this with a secular purpose.

The reasoning of the Court in Edwards is paradoxical. The Court began its opinion by discussing the great injustice that would occur if public schools indoctrinated students with beliefs that conflict with their private beliefs. However, the Court then concluded that the purpose of the Creationism Act was a “sham” because the supporters of the Act were religious fundamentalists who opposed the indoctrination of their children with evolutionary theory. One might question whether the Court was opposed to the indoctrination of all students, or if, instead, the Court was more concerned about the target of the indoctrination.

The Court did not follow the precedent that it established in Epperson. The overriding concern of Epperson was one factor—neutrality. The Epperson Court held that the Arkansas statute was unconstitutional because it was not neutral toward religion. The Court held:

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

The problem with the statute in Epperson was its lack of neutrality. The government prohibited the teaching of a belief because it conflicted with another belief. The Court explicitly stated that Arkansas could have constitutionally prohibited all teaching about the origin of life in public schools. The Crea-
tionism Act at issue in Edwards achieved this neutrality since it simply required that schools teach either both or none. The Court’s holding in Edwards conflicted with the precedent set in Epperson since Edwards prohibited communities from requiring that science classes teach creationism with evolutionism.  

The Court also operated on the assumption that the mere inclusion of creationism with evolutionism in the curriculum is an advancement of religion and an attempt to counterbalance and discredit evolutionary theory at every point. Consider this scenario: A philosophy teacher at a public high school will only teach proofs opposing the existence of God in his philosophy class, and he refuses to teach any proofs supporting the existence of God because he believes that the concept of God is religious and not philosophical. Religious fundamentalist parents at the school express their outrage that this teacher is teaching their students an atheistic belief system that is contrary to the Bible. Because of outrage expressed by the religious parents, the school district passes a policy requiring that teachers give equal time to proofs supporting and opposing the existence of God. How could this policy be constitutional under the Supreme Court’s analysis in Edwards? The teacher, after all, was just teaching the students philosophy, and religious parents do not have a right to counterbalance philosophical theories at every point with their personal religious beliefs. The statute lacks a secular purpose since the school only implemented the statute in reaction to outrage expressed by a specific religious sect, and including the proofs for the existence of God would clearly advance the religious viewpoint that there is a God.  

Fairly

105 See Epperson, 393 U.S. at 97–98, 106–07. The Supreme Court used some language toward the end of the Edwards opinion that indicates that the Court is not foreclosing the possibility of teaching alternatives to evolution. See Edwards, 482 U.S. at 593. However, this is likely only an attempt by the Court to soften the impact of the opinion by creating an impression of moderation that probably does not exist in practice. The reasoning that leads the Court to its holding in Edwards indicates that the exclusion of alternatives containing supernatural explanations is likely to be near absolute. Id. at 591–93.

106 Edwards, 482 U.S. at 589 (“[T]he Act . . . has the . . . purpose of discrediting ‘evolution by counterbalancing its teaching at every turn with the teaching of creationism . . . .’”) (quoting Aguillard v. Edwards, 765 F.2d 1251, 1257 (5th Cir. 1985)); id. at 592 (“The legislative history documents that the Act’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.”); id. at 593 (“The legislation therefore sought to alter the science curriculum to reflect endorsement of a religious view that is antagonistic to the theory of evolution.”).

107 Id. at 589.

108 Id. at 590–92.

109 Id. at 592–93.
presenting various perspectives on an issue is the essence of neutrality.

The Court did not even address the argument that it is important to present both sides of an issue. The Court sidestepped this argument and cited other parts of the statute that it thought were unfair.\textsuperscript{110} However, even if those other parts of the statute were unfair, that still does not address the fairness of the statute’s most important provision, which is the requirement that schools teach both or none. The Court’s concern about the unfairness of other parts of the statute is also unfounded because those parts of the statute were remedial measures. This statute was addressing a problem, which was the systematic exclusion of creationism from science classes.\textsuperscript{111} The statute required the development of curricula for creationism because there was no such curriculum in existence.\textsuperscript{112} The statute correctly assumed that a curriculum dealing with evolutionism was already in existence.\textsuperscript{113} The statute also attempted to correct the specific problem of discrimination against creationists.\textsuperscript{114} Even if these remedial measures were unconstitutional, the Court should have merely struck them down instead of using them to justify striking down the more important parts of the statute that the legislature would have wanted left in place.\textsuperscript{115} These remedial measures were tangential to the overriding purpose of the statute.

\textsuperscript{110} Id. at 588–89.
\textsuperscript{111} See id. at 630 (Scalia, J., dissenting) (“The Louisiana legislators had been told repeatedly that creation scientists were scorned by most educators and scientists, who themselves had an almost religious faith in evolution.”).
\textsuperscript{112} Id. at 631.

In light of the unavailability of works on creation science suitable for classroom use . . . and the existence of ample materials on evolution, . . . science teachers . . . would need a curriculum guide on creation science, but not on evolution, and that those charged with developing the guide would need an easily accessible group of creation scientists.

\textsuperscript{113} See id.
\textsuperscript{114} Id. at 630 (“It is hardly surprising, then, that in seeking to achieve a balanced, ‘nonindoctrinating’ curriculum, the legislators protected from discrimination only those teachers whom they thought were suffering from discrimination.”).
\textsuperscript{115} The Supreme Court has held that a court should refrain from invalidating more of the statute than is necessary . . . “[W]henever an act of Congress contains unobjectionable provisions separable from those found to be unconstitutional, it is the duty of this court to so declare, and to maintain the act in so far as it is valid.” Regan v. Time, Inc., 468 U.S. 641, 652 (1984) (quoting El Paso & Northeastern Ry. v. Gutierrez, 215 U.S. 87, 96 (1909)). “Whether an unconstitutional provision is severable from the remainder of the statute in which it appears is largely a question of legislative intent, but the presumption is in favor of severability.” Id. at 653.
D. Freiler v. Tangipahoa Parish Board of Education

In 1999, the U.S. Court of Appeals for the Fifth Circuit heard an Establishment Clause case that dealt with the Tangipahoa Parish Board of Education’s requirement that teachers read a disclaimer before the start of any unit that would deal with the topic of evolutionary theory. The following statement was the required disclaimer:

It is hereby recognized by the Tangipahoa Board of Education, that the lesson to be presented, regarding the origin of life and matter, is known as the Scientific Theory of Evolution and should be presented to inform students of the scientific concept and not intended to influence or dissuade the Biblical version of Creation or any other concept.

It is further recognized by the Board of Education that it is the basic right and privilege of each student to form his/her own opinion and maintain beliefs taught by parents on this very important matter of the origin of life and matter. Students are urged to exercise critical thinking and gather all information possible and closely examine each alternative toward forming an opinion.

The sole issue before the court was whether the disclaimer at issue violated the First Amendment. The court concluded that it would apply the Lemon Test to make this determination because it was the applicable law, even though it had been the subject of substantial criticism.

The first question was whether the state action at issue had a secular purpose under the first prong of the Lemon Test. The school board offered three purposes for the statute: “(1) to encourage informed freedom of belief, (2) to disclaim any orthodoxy of belief that could be inferred from the exclusive placement of evolution in the curriculum, and (3) to reduce offense to the sen-
sibilities and sensitivities of any student or parent caused by the teaching of evolution.”121 The court had to determine whether the disclaimer furthered the stated purposes of the school board.122 If the disclaimer furthered one articulated purpose and that purpose was secular, the disclaimer would not violate the secular purpose test.123 The court held that the disclaimer failed to further freedom of belief because the disclaimer told students that evolutionism did not have to affect what they already know, and this violated the principle of critical thinking.124 The court concluded that the disclaimer did further the other two stated purposes of disclaiming orthodoxy and decreasing the offense of parents,125 and the court held that these were both secular purposes.126

The court next had to determine whether the disclaimer conveyed a message of endorsement or approval in violation of the second prong of the Lemon Test.127 The court held that the disclaimer primarily protected a particular religious belief, which was the Biblical view of creation.128 Three factors in the disclaimer led the court to this conclusion:

1. the juxtaposition of the disavowal of endorsement of evolution with an urging that students contemplate alternative theories of the origin of life;
2. the reminder that students have the right to maintain beliefs taught by their parents regarding the origin of life; and
3. the “Biblical version of Creation” as the only alternative theory explicitly referenced in the disclaimer.129

The court concluded that the disclaimer as a whole encouraged students to meditate upon religion in general and the Biblical narrative specifically.130 Although introducing religious concepts in schools would not be prima facie unconstitutional, there is a clear difference between comparative religion classes or history classes and the disclaimer at issue,131 because the disclaimer

121 Id.
122 Id. (“In undertaking such a ‘sham’ inquiry, we consider whether the disclaimer furthers the particular purposes articulated by the School Board or whether the disclaimer contravenes those avowed purposes.”) (citation omitted).
123 Id. (“If the disclaimer furthers just one of its proffered purposes and if that same purpose proves to be secular, then the disclaimer survives scrutiny under Lemon’s first prong.”).
124 Id. at 345.
125 Id.
126 Id.
127 Id. at 346 (“Lemon’s second prong asks whether, irrespective of the School Board’s actual purpose, ‘the practice under review in fact conveys a message of endorsement or disapproval.’”) (quoting Doe v. Santa Fe Indep. Sch. Dist., 168 F.3d 806, 817 (5th Cir. 1999)).
128 Id.
129 Id.
130 Id.
131 Id. at 347.
does not provide understanding of different religions. The court concluded that the disclaimer violated the second prong of the Lemon Test and the Endorsement Test because it advanced religion.

The court in this case reached the correct holding for the wrong reasons. It is acceptable (and in fact necessary) for schools to teach alternatives to evolutionism in science classes because it is important for schools to offer diverse perspectives on issues instead of just imposing one view on students. Teaching different perspectives on the origins of life would not advance religion any more than teaching the pro-life and pro-choice positions on abortion would somehow advance the pro-life position. If directly teaching so-called religious alternatives in the curriculum would not advance religion, then the infinitely more conservative step of reading a disclaimer would surely not advance religion in the way that the court describes. However, the school district may have been advancing the religion of secular humanism through its failure to teach alternatives as an actual part of the curriculum. If the disclaimer violated the Establishment Clause, it is only because it did not go far enough in presenting actual alternatives to secular humanism in science classes.

E. Kitzmiller v. Dover Area School District

In 2005, the U.S. District Court for the Middle District of Pennsylvania heard Kitzmiller v. Dover Area School District, which involved a disclaimer about evolutionary theory that the School District required teachers to read to students in ninth-grade biology classes. The court held that the disclaimer was an unconstitutional violation of the Establishment Clause as it failed both the Endorsement Test and the Lemon Test. Most of the court’s analysis centered on the facts of the specific disclaimer in this case, which is not particularly relevant to this article since such disclaimers are a much weaker version of what this article proposes.

132 Id.
133 Id. at 348.
134 The court explicitly states in its opinion that teaching comparative religion would be acceptable. Id. at 347 (“[I]t might well be said that one’s education is not complete without a study of comparative religion or the history of religion and its relationship to the advancement of civilization.”) (alteration in original) (quoting Sch. Dist. of Abington v. Schempp, 374 U.S. 203, 225 (1963)). Teaching evolution and its alternatives is no different from comparative religion, since both compare the religion of secular humanism against others. The failure to recognize that science classes are currently advancing religion legitimizes the exclusion and indoctrination.
136 Id. at 764–65.
137 Id. at 765. Most of the court’s analysis centered on the facts of the specific disclaimer in this case, which is not particularly relevant to this article since such disclaimers are a much weaker version of what this article proposes.
decisions that have dealt with evolutionism, the determining issue in this case was whether the alternative theory at issue was a scientific theory. The court held that intelligent design is not science. Intelligent design violates the rules of the scientific discipline that have excluded the possibility of supernatural causation since the 16th and 17th centuries. Science intentionally excludes questions relating to the meaning and purpose of the world, and supernatural explanations are not scientific. “This self-imposed convention of science, which limits inquiry to testable, natural explanations about the natural world, is referred to by philosophers as ‘methodological naturalism’ and is sometimes known as the scientific method.” The court reasoned that including supernatural explanations is a “science stopper” because “once you attribute a cause to an untestable supernatural force, a proposition that cannot be disproven, there is no reason to continue seeking natural explanations as we have our answer.” The court pointed out that every major scientific association that has considered the question has concluded that intelligent design is not science. The court, therefore, held that intelligent design

138 Id. at 738 (“[Intelligent Design’s] failure to meet the ground rules of science is sufficient for the Court to conclude that it is not science . . . .”); id. at 765 (“[T]he Board’s ID Policy violates the Establishment Clause. In making this determination, we have addressed the seminal question of whether ID is science. We have concluded that it is not, and moreover that ID cannot uncouple itself from its creationist, and thus religious, antecedents.”).

139 Id. at 735.

140 Id. The court’s conclusion is factually incorrect. The approaches of scientists to the scientific method have been far more diverse than the court describes. Sir Isaac Newton (1642–1727), one of history’s most important scientists, is an excellent example. Scientists and historians are trying to reconcile the Isaac Newton they thought they knew with the Isaac Newton they’re discovering in his private papers.

Only recently made available to the public, at the National Library in Jerusalem, these documents are now revealing that for Newton, religion and science were inseparable, two parts of the same life-long quest to understand the universe.

Newton himself wanted to design a universe in which God was absolutely present and absolutely powerful. There’s an enormous irony there. In the 18th century, gangs of interpreters, most of them French, will take the God out of Newton’s world. It’s a very common image of what the Newtonian world was, that it was soulless, that it was mechanical, that it really wasn’t theologically motivated at all.

Now, ironically, that’s very anti-Newtonian, because Newton argued that God had to be present, you couldn’t read him out of the universe.


141 See Kitzmiller, 400 F. Supp. 2d at 735.

142 Id.

143 Id. at 736.

144 Id. at 737.
“fails to meet the essential ground rules that limit science to testable, natural explanations.” 145

The court only proves one truth through its reasoning in this case. If one relies on an exclusively materialistic definition of science, one will necessarily classify anything that is supernatural as unscientific. The question is whether there is any basis for the presupposition that science must be exclusively materialistic in its inferences. As has already been discussed, the materialistic conception of the scientific method entails as much faith as the non-materialistic approach to the scientific method. 146 Even if every scientist on the planet endorsed the materialistic approach to the scientific method, it would not become any more verifiable.

The court argued that allowing supernatural explanations would be a “science stopper” since it would destroy the need to search for natural explanations. This is logically untrue. The materialistic approach to the scientific method allows for only natural theories. The non-materialistic approach to the scientific method allows for both natural theories and supernatural theories. Under the non-materialistic approach, people will be just as free to search for natural explanations as they are under the materialistic approach. Both theories have the goal of increasing knowledge about the sensible world. The existence of a supernatural theory will not stop people from searching for other possible natural theories. However, even if this were a risk, there is an equal risk that the materialistic approach to the scientific method could produce absurd theories in a desperate attempt to find a materialistic explanation where no reasonable one exists. Regardless of how one resolves these practical questions, it will not implicate the ultimate position at issue here, which is that belief in either approach to the scientific method requires faith. The fact that a certain method appears to be practical does not necessarily mean that it is true.

III. ESTABLISHMENT OF RELIGION AND SECULAR HUMANISM

The current precedents of the federal courts concerning the teaching of evolutionism in public schools violate the Establishment Clause. The First Amendment to the United States Constitution says, “Congress shall make no law respecting an establishment of religion . . . .” 147 The Lemon Test is the primary legal standard that the federal courts have applied in recent evolution-
ism cases to determine whether state actions violate the Establishment Clause.\footnote{See, e.g., Edwards v. Aguillard, 482 U.S. 578, 582–83 (1987); McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1258 (D. Ark. 1982); Freiler v. Tangipahoa Parish Bd. of Educ., 185 F.3d 337, 344 (5th Cir. 1999); Kitzmiller, 400 F. Supp. 2d at 765.} Therefore, the Lemon Test will be applied to determine whether the failure to incorporate alternatives to evolutionary theory in public school science classes violates the Establishment Clause.

The Lemon Test requires that: “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 government entanglement with religion.’”\footnote{Lemon v. Kurtzman, 403 U.S. 602, 612–13 (1971) (citations omitted) (quoting Walz v. Tax Commission of New York, 397 U.S. 664, 674 (1970)).} The failure to include alternatives to evolutionary theory is unconstitutional under the second prong of the Lemon Test. The second prong of the Lemon Test requires neutrality toward religion. In Epperson, the Court held:

Government . . . must be neutral in matters of religious theory, doctrine, and practice. It may not be hostile to any religion or to the advocacy of no-religion; 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.\footnote{Epperson v. Arkansas, 393 U.S. 97, 103–04 (1968); id. at 104 (“As early as 1872, this Court said: ‘The law knows no heresy, and is committed to the support of no dogma, the establishment of no sect.’”) (quoting Watson v. Jones, 80 U.S. (13 Wall.) 679, 728 (1871)); Larson v. Valente, 456 U.S. 228, 244 (1982) (“The clearest command of the Establishment Clause is that one religious denomination cannot be officially preferred over another.”).}

Therefore, since neutrality is the legal standard, the issue here is whether exclusively teaching evolutionism in science classes is neutral toward religion.

Primary and secondary public education is a special setting for the application of the Establishment Clause.\footnote{Id., 482 U.S. at 583–84.} When families place their children in the public education system, they expect that the school will not indoctrinate their children with belief systems that conflict with their own beliefs.\footnote{Id.} Additionally, the state exerts substantial coercive power with mandatory attendance requirements.\footnote{Id. at 584.} Many families do not have the resources to seek out alternative educational arrangements for their children. The unique setting of public education demands elevated concern because of the risk of indoctrination that is in-
herent in public education.

The Supreme Court has established precedents that help determine when teaching religion in public schools is neutral. In *Zorach v. Clauson*, the Court found that a state violates the principle of religious neutrality if it engages in religious instruction that only represents the views of a particular sect.\textsuperscript{154} The Court held in *Epperson* that the state violates the principle of neutrality if it tailors education to the principles or prohibitions of a particular religious group or dogma.\textsuperscript{155} On the other hand, in *School District of Abington Township v. Schempp*, the Supreme Court held that an education is incomplete without classes on the history of religion or comparative religion.\textsuperscript{156} Public schools can integrate study of the Bible and religion when presented objectively.\textsuperscript{157} The key principle for the Court is neutrality. Public schools can educate students about religion, but they cannot side with particular beliefs when educating about religion.

Secular humanism is a religion under the Establishment Clause. The Supreme Court held in *Epperson* that the requirement of neutrality between different religious sects, and between religion and nonreligion, is central to the Court’s First Amendment jurisprudence.\textsuperscript{158} The necessary implication of this principle is that the state cannot favor secular humanism over theistic religious beliefs. The Supreme Court has held that secularism is a religion in a few cases, including *School District of Abington Township*.\textsuperscript{159} “We agree of course that the State may not estab-

\textsuperscript{154} 343 U.S. 306, 314 (1952).

Government may not finance religious groups nor undertake religious instruction nor blend secular and sectarian education nor use secular institutions to force one or some religion on any person. . . . The government must be neutral when it come to competition between sects. It may not thrust any sect on any person. . . . It may not coerce anyone to . . . take religious instruction.

\textit{Id.}

\textsuperscript{155} Epperson, 393 U.S. at 106 (“There is and can be no doubt that the First Amendment does not permit the State to require that teaching and learning must be tailored to the principles or prohibitions of any religious sect or dogma.”); id. at 106–07 (“It forbids alike the preference of a religious doctrine or the prohibition of theory which is deemed antagonistic to a particular dogma.”).

\textsuperscript{156} 374 U.S. 203, 225 (1963) (“[O]ur education is not complete without a study of comparative religion or the history of religion and its relationship to the advancement of civilization.”). The Court is not indicating here that schools cannot teach religion in science classes; it merely used religion classes as an example. What is important is the underlying principle, which says that it is perfectly fine to incorporate religion in public school curriculum as long as the presentation is neutral.

\textsuperscript{157} Id. (“Nothing we have said here indicates that such study of the Bible or of religion, when presented objectively as part of a secular program of education, may not be effected consistently with the First Amendment.”).

\textsuperscript{158} Epperson, 393 U.S. at 103–04.

\textsuperscript{159} 374 U.S. at 225; Torcaso v. Watkins, 367 U.S. 488, 495 n.11 (1961) (“Among religions in this country which do not teach what would generally be considered a belief in the existence of God are Buddhism, Taoism, Ethical Culture, Secular Humanism and oth-
lish a ‘religion of secularism’ in the sense of affirmatively opposing or showing hostility to religion, thus ‘preferring those who believe in no religion over those who do believe.’” Additionally, a long line of Supreme Court and Federal Circuit cases have held that non-theistic beliefs like atheism fall within the definition of religion under the First Amendment. Therefore, secular humanism is a religion under the First Amendment.

The exclusive teaching of evolutionary theory in public schools is an advancement of the religion of secular humanism. There is an inherent connection between evolutionary theory and the secular humanist worldview. Secular humanists generally reject knowledge that science cannot test. Since one cannot directly test the supernatural, secular humanists inevitably adopt a naturalistic worldview, which is the belief that there is only a natural realm and no supernatural. Any secular humanist theory about the origin of life cannot rely on the supernatural because that would be inconsistent with naturalism. Therefore, there is an inherent link between secular humanism and evolutionary theory because evolutionism is an exclusively materialistic theory about the origin of life.

Some critics may question why teaching evolutionism would advance secular humanism if some theistic religious groups also believe in evolutionism. There are two answers. First, even if

\[\text{ers.}). \ See also Zorach, 343 U.S. at 314 ("To hold that it may not would be to find in the Constitution a requirement that the government show a callous indifference to religious groups. That would be preferring those who believe in no religion over those who do believe."); id. ("But we find no constitutional requirement which makes it necessary for government to be hostile to religion and to throw its weight against efforts to widen the effective scope of religious influence."); id. at 315 ("We cannot read into the Bill of Rights such a philosophy of hostility to religion.").\]

\[\text{160 Sch. Dist. of Abington Twp., 374 U.S. at 225 (quoting Zorach, 343 U.S. at 314).}\]

\[\text{161 Wallace v. Jaffree, 472 U.S. 38, 52–53 (1985) ("At one time it was thought that this right merely proscribed the preference of one Christian sect over another, but would not require equal respect for the conscience of the infidel, the atheist, or the adherent of a non-Christian faith such as Islam or Judaism. . . . [T]he Court has unambiguously concluded that the individual freedom of conscience protected by the First Amendment embraces the right to select any religious faith or none at all."); Torcaso, 367 U.S. at 495 ("We repeat and again reaffirm that neither a State nor the Federal Government can constitutionally force a person "to profess a belief or disbelief in any religion." (quoting Everson v. Bd. of Educ., 33 U.S. 1, 15 (1947)); Kaufman v. McCaughtry, 419 F.3d 678, 682 (7th Cir. 2005) ("[T]he Court has adopted a broad definition of 'religion' that includes non-theistic and atheistic beliefs, as well as theistic ones."); Reed v. Great Lakes Cos., 330 F.3d 931, 934 (7th Cir. 2003) ("[R]eligion includes antipathy to religion. . . . If we think of religion as taking a position on divinity, then atheism is indeed a form of religion.").\]

\[\text{162 Council for Secular Humanism, supra note 30 ("We are skeptical of untested claims to knowledge. . . .").}\]

\[\text{163 Council for Secular Humanism, supra note 30 ("Secular humanists accept a world view or philosophy called naturalism, in which the physical laws of the universe are not superseded by non-material or supernatural entities . . .").}\]

\[\text{164 KURTZ, supra note 39, at 28.}\]

it is possible for evolutionary theory to be consistent with the beliefs of some groups, science classes do not teach this form of evolutionism. Science classes generally teach evolutionism with no supernatural element. Therefore, whether evolutionism can be theoretically reconciled with religion is irrelevant since science classes rarely teach that permutation of evolutionism and religion. Second, even if evolutionism, as taught in science classes, complements the beliefs of some religious groups, there is still a violation of the Establishment Clause, since the exclusive teaching of evolutionism would advance the beliefs of some Christian religious denominations over the beliefs of other Christian religious denominations. The legal standard explicitly requires government neutrality between religious sects. Teaching evolutionary theory exclusively in public school science classes would advance the religious beliefs of Christian religious groups that believe in a non-literal interpretation of Genesis, and it would discriminate against Christian religious groups that believe in a literal interpretation of Genesis.

Some people may wonder why it is necessary to teach alternatives to evolutionism in science classes instead of in religion or social studies classes. There are a few reasons. First, indoctrination in science classes is uniquely dangerous because of how the norms of the scientific discipline mask its religious content. Only directly teaching alternatives in science classes will make students aware of ideological content. Second, even if schools offered religion classes, they would likely not have the same status as science classes since they would probably be electives instead of required courses. Third, science teachers generally present evolutionary theory as uncontested truth. It is unlikely that supernatural religious beliefs would get the same uncontested status if taught in other classes. Fourth, the exclusion of supernatural theories from science classes marginalizes religious belief. It creates the impression that secular humanism is a practical device that allows people to understand the world today, and religion is only an object of historical study concerning some de-

("Both Defendants and many of the leading proponents of ID make a bedrock assumption which is utterly false. Their presupposition is that evolutionary theory is antithetical to a belief in the existence of a supreme being and to religion in general.").

166 Epperson v. Arkansas, 393 U.S. 97, 103–04 (1968); Larson v. Valente, 456 U.S. 228, 244 (1982) ("The clearest command of the Establishment Clause is that one religious denomination cannot be officially preferred over another.").

Government may not finance religious groups nor undertake religious instruction nor blend secular and sectarian education nor use secular institutions to force one or some religion on any person. . . . The government must be neutral when it comes to competition between sects. It may not thrust any sect on any person. . . . It may not coerce anyone to . . . take religious instruction.

ranged people of the past. It also marginalizes religion by creating the implicit assumption that religion has nothing to say about science. Fifth, would it be objectionable to teach the non-materialistic approach to the scientific method and creation science exclusively in science classes and to teach secular humanism in social studies? If there is truly no marginalization that occurs through just teaching the materialistic scientific method and evolutionism in science classes, then there should be no objection to a reversal of this situation.

A few cases have specifically addressed whether teaching evolutionism exclusively in science classes violates the Establishment Clause, and all of the cases have held that it does not. In 1972, the U.S. District Court for the Southern District of Texas heard *Wright v. Houston Independent School District*.\(^\text{167}\) The plaintiff sought an injunction that would prohibit the School District and the State Board of Education from teaching evolutionism without critical analysis and alternative theories.\(^\text{168}\) The plaintiffs argued that evolutionary theory was contrary to the Bible, and that the uncritical presentation of evolutionism in science classes was, therefore, a direct attack on their religious beliefs by the state, which violated the Establishment Clause and the Free Exercise Clause.\(^\text{169}\) The plaintiffs argued that the state was establishing a secular religion through its uncritical presentation of evolutionism,\(^\text{170}\) and that the teaching of evolutionism was directly contrary to the principle of legal neutrality that the Supreme Court established in *Epperson*.\(^\text{171}\)

The court rejected the plaintiffs’ claim.\(^\text{172}\) Arkansas promoted religion by legislative means in *Epperson*, but there was no official state or school district policy, which required that teachers only teach evolutionism.\(^\text{173}\) The court did not think it was significant that the textbooks had a bias in favor of evolutionism.\(^\text{174}\) “This Court has been cited to no case in which so nebulous an intrusion upon the principle of religious neutrality has been condemned by the Supreme Court.”\(^\text{175}\) There was no evidence that students could not challenge their teacher’s presentation of evolutionism, and the law in *Epperson* prohibited dis-

\(^{168}\) Id. at 1208.
\(^{169}\) See id. at 1209.
\(^{170}\) Id.
\(^{171}\) Id.
\(^{172}\) Id. at 1210.
\(^{173}\) Id.
\(^{174}\) See id.
\(^{175}\) Id.
The court concluded that there was an insufficient connection between the First Amendment concept of religion and evolutionism. The court concluded that the First Amendment concept of religion and evolutionism. Science and religion deal with similar issues and sometimes have conflicting opinions, but the government cannot prohibit ideas that are contrary to a particular religious belief. Teachers cannot stop discussing every scientific issue where a religion has a conflicting belief. Offering equal time to all theories is not a solution to the problem. Every religion in the world has a belief about the origin of life, and there is no way to decide which theories to teach. The court concluded that the proposed solutions would create more problems than they attempted to solve.

There are a number of problems with the court’s analysis. The court claimed that nothing in Epperson indicated that the bias in this case was significant enough to justify holding it unconstitutional, but the Court in Epperson stated directly that a “[s]tate may not adopt programs or practices in its public schools or colleges which ‘aid or oppose’ any religion. This prohibition is absolute.” Additionally, it is true that there was a legislative action in Epperson, but there is no reason why a legislative action or school district policy is necessary. The quoted statement above indicates that Epperson prohibits “practices,” and that there could still be an unconstitutional state action even without an official policy. The fact that the actions of the state of Arkansas were worse in Epperson than the actions of the Houston School District does not make the actions of the Houston School District constitutional since the prohibition against bias in education is absolute under Epperson.

The court argued that science and religion deal with similar topics, and that the government cannot prohibit everything in science that conflicts with religious beliefs. This statement demonstrates yet again that courts justify the exclusion of alternative perspectives by masking secular humanism with scientific discourse. Furthermore, if one assumes that an issue that comes up in science class is a point of strong ideological disagreement because it conflicts with religious beliefs, it would make sense to

176 Id.
177 Id.
178 Id. at 1211.
179 Id.
180 Id.
181 Id.
183 Wright, 366 F. Supp. at 1211.
include alternative perspectives on that issue.

The court stated that equal time is not feasible because there are too many theories. Is there any other place in public education where this would be a legitimate excuse? A teacher could not simply state: “We do not have time to teach both the pro-life and pro-choice positions this semester so we are just going to teach you the pro-choice perspective. After all, in the abortion literature alone, there are at least thousands of different viewpoints on the issue.” This clearly does not justify failing to make a good faith effort to include diverse perspectives. Maybe this argument would be more credible if schools taught two perspectives instead of one. It is possible to offer students the big picture on these issues. There are many theories, but there are common themes that schools can teach in a significantly more inclusive manner than singular indoctrination.

In 1980, the D.C. Circuit Court of Appeals heard Crowley v. Smithsonian Institution. The appellants in that case filed a civil action against the Smithsonian Institution in the United States District Court for the District of Columbia because the Smithsonian presented two exhibits involving evolutionary theory. “The 1978 exhibit, the ‘Emergence of Man,’ is described in an accompanying pamphlet as ‘the story of how, when and where modern human beings evolved from hominid ancestors who lived millions of years ago.’” The appellants argued that advocating the theory of evolutionism was unconstitutional support for the religion of secular humanism, and they requested an injunction that would either prohibit funding for evolutionism or require equal funding for Biblical creationism.

The D.C. Circuit rejected the claim that the exhibits established a religion of secular humanism. Although the exhibits referred to evolutionism, they did not refer to evolutionism as the only credible theory about the origin of life, nor did they mention anything about religion or secular humanism. The exhibits did nothing to disparage any religious belief. Even if evolutionary theory relied on faith instead of scientific proof, as the appellants claimed, that would not by itself prove that the evolutionism exhibits established a religion of secular humanism. One cannot infer that anything one believes on faith is a religion simply be-

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184 Id.
185 636 F.2d 738 (D.C. Cir. 1980).
186 Id. at 740.
187 Id. at 741.
188 Id. at 740.
189 Id. at 741.
190 Id.
191 Id. at 742.
cause some religions rely on faith.\textsuperscript{192} The involvement of the government in an area of importance to religious believers does not mean that the activity is supporting a religion.\textsuperscript{193} For example, government advocacy supporting or opposing abortion would not establish a religion even though there are religious concerns at stake in the issue.\textsuperscript{194} “[I]t does not follow that a statute violates the Establishment Clause because it ‘happens to coincide or harmonize with the tenets of some or all religions.”\textsuperscript{195} The court also pointed to past precedents that support diffusion of scientific knowledge and prohibit any special protection for religious groups from the competition that comes from scientific information.\textsuperscript{196} The court affirmed the decision of the district court concluding that that the exhibits did not establish a religion of secular humanism.\textsuperscript{197}

There are a few problems with the court’s reasoning in Crowley. The court states that even if evolutionism is unverifiable, that alone does not make it a religious belief.\textsuperscript{198} This is true, but evolutionism is a religion because it takes a position on an issue that has always been at the center of religious belief systems, i.e., the origin of life and the universe. It is an advancement of religion when the government adopts a distinctly materialistic belief about the origin of life that directly conflicts with other religious beliefs. The court reasons that evolution is not a religion just because it coincides with the beliefs of secular humanism. However, there is a distinction between regulating morals and supporting doctrine. A state can prohibit murder, but a state cannot coerce people into believing that murder is wrong because God prohibits it. The Seventh Circuit has found that taking a position on divinity, whether affirming or denying, is itself a religious belief.\textsuperscript{199} Similarly, taking a position on the origin of life is a religious belief regardless of the position that one takes since this issue is at the heart of religious belief.

The court arbitrarily creates a higher burden of proof in this case for theistic religious belief than for non-theistic religious belief. In some federal cases, the courts have held that a mere ref-

\textsuperscript{192} Id.
\textsuperscript{193} Id.
\textsuperscript{194} Id.
\textsuperscript{195} Id. (quoting McGowan v. Maryland, 366 U.S. 420, 442 (1961)).
\textsuperscript{196} Id. at 744.
\textsuperscript{197} Id.
\textsuperscript{198} Id. at 742.
\textsuperscript{199} See Kaufman v. McCaughtry, 419 F.3d 678, 682 (7th Cir. 2005) (“[T]he Court has adopted a broad definition of ‘religion’ that includes non-theistic and atheistic beliefs, as well as theistic ones.”); Reed v. Great Lakes Cos., 330 F.3d 931, 934 (7th Cir. 2003) (“[R]eligion’ includes antipathy to religion. . . . If we think of religion as taking a position on divinity, then atheism is indeed a form of religion.”).
ference “to creation out of nothing” is by itself an advancement of religion, but the federal courts will not infer that a purely materialistic evolutionary process is an advancement of the religion of secular humanism. In the context of theistic religion, mere correlation is enough to prove a violation of the Establishment Clause. In the context of non-theistic religion, only explicit endorsement is sufficient for the courts. The federal courts violate the principle of religious neutrality when they require a higher degree of proof to demonstrate an establishment of theistic religion than is required to demonstrate an establishment of secular humanism.

In 1994, the Ninth Circuit Court of Appeals heard *Peloza v. Capistrano Unified School District.* The plaintiff, a high school biology teacher, sued the school district, arguing that evolutionism is a religion, and that forcing him to teach evolutionism was, among other things, a violation of the Establishment Clause. He argued that evolutionism is a religion that relies on chance instead of a creator to explain the origin of life. The court applied the Lemon Test to determine whether there was a violation of the Establishment Clause. The court held that exclusively teaching evolutionism does not establish a religion because the Supreme Court and the Ninth Circuit have never held that evolutionism or secular humanism are religions under the Establishment Clause, and the weight of the precedent and the dictionary definition are to the contrary. The court also stated

200 Compare Edwards v. Aguillard, 482 U.S. 578, 591 (1987) (“The preeminent purpose of the Louisiana Legislature was clearly to advance the religious viewpoint that a supernatural being created humankind.”), and McLean v. Ark. Bd. of Educ., 529 F. Supp. 1255, 1265 (E.D. Ark. 1982) (“The argument that creation from nothing in 4(a)(1) does not involve a supernatural deity has no evidentiary or rational support. To the contrary, ‘creation out of nothing’ is a concept unique to Western religions. In traditional Western religious thought, the conception of a creator of the world is a conception of God.”), and Kitzmiller v. Dover Area Sch. Dist., 400 F. Supp. 2d 707, 718 (M.D. Pa. 2005) (“[A]nyone familiar with Western religious thought would immediately make the association that the tactically unnamed designer is God . . . .”), with *Peloza v. Capistrano Unified Sch. Dist.*, 37 F.3d 517, 521 (9th Cir. 1994) (“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.”), and Crowley, 636 F.2d at 741 (“The concept of evolution was referred to in these exhibits. . . . The exhibits did not mention religion in general or Secular Humanism in particular. Neither by their terms nor by implication did the exhibits disparage religion or any religious tenet.”), and Wright v. Houston Indep. Sch. Dist., 366 F. Supp. 1208, 1210 (S.D. Tex. 1972) (“Plaintiffs’ case depends in large measure upon their demonstrating a connection between ‘religion,’ as employed in the first amendment, and Defendants’ approach to the subject of evolution. The Court is convinced that the connection is too tenuous a thread on which to base a first amendment complaint.”).

201 37 F.3d 517 (9th Cir. 1994).
202 Id. at 519.
203 Id.
204 Id. at 520.
205 Id. at 521.
that the U.S. Supreme Court concluded in Edwards v. Aguillard that evolutionism is not a religion. Finally, the court concluded that evolutionary theory is a scientific theory arrived at through scientific study, and that it is not a religion.

The court’s conclusion that secular humanism is not a religion under the Establishment Clause is problematic. After all, the Supreme Court explicitly stated in two cases that secularism is a religion, and held in two cases that atheism is a religion. The Ninth Circuit only cited two Federal Circuit cases in support of its position, and neither case supports the court’s position. The first case cited by the court was Smith v. Board of School Commissioners. In Smith, the court concluded at the outset of the case that it did not need to rule on whether secular humanism was a religion because the facts in that specific case could not prove a violation of the Establishment Clause even if secular humanism were a religion. The holding in Smith does not support the conclusion that secular humanism is not a religion.

The court’s second citation was to a quotation from Laurence Tribe in United States v. Allen, which concluded that courts

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206 Id.
207 Id. at 521–22.
208 Sch. Dist. of Abington Twp. v. Schempp, 374 U.S. 203, 225 (1963) ("[T]he State may not establish a 'religion of secularism' in the sense of affirmatively opposing or showing hostility to religion, thus 'preferring those who believe in no religion over those who do believe.'" (quoting Zorach v. Clauson, 343 U.S. 306, 314 (1952))); Torcaso v. Watkins, 367 U.S. 488, 495 n.11 (1961) ("Among religions in this country which do not teach what would generally be considered a belief in the existence of God are Buddhism, Taoism, Ethical Culture, Secular Humanism and others."). See also Zorach, 343 U.S. 306, at 314 ("To hold that it may not be to find in the Constitution a requirement that the government show a callous indifference to religious groups. That would be preferring those who believe in no religion over those who do believe."); id. ("But we find no constitutional requirement which makes it necessary for government to be hostile to religion and to throw its weight against efforts to widen the effective scope of religious influence."); id. at 315 ("We cannot read into the Bill of Rights such a philosophy of hostility to religion.").
209 Wallace v. Jaffree, 472 U.S. 38, 52–53 (1985) ("At one time it was thought that this right merely proscribed the preference of one Christian sect over another, but would not require equal respect for the conscience of the infidel, the atheist, or the adherent of a non-Christian faith such as Islam or Judaism. . . . [T]he Court has unambiguously concluded that the individual freedom of conscience protected by the First Amendment embraces the right to select any religious faith or none at all."); Torcaso, 367 U.S. at 495 ("We repeat and again reaffirm that neither a State nor the Federal Government can constitutionally force a person 'to profess a belief or disbelief in any religion.'" (quoting Everson v. Bd. of Educ., 33 U.S. 1, 15 (1947))).
210 Pelota, 37 F.3d at 521 n.5 (citing Smith v. Bd. of Sch. Comm’rs, 827 F.2d 684, 690–95 (11th Cir. 1987)).
211 See Smith, 827 F.2d at 689.

The Supreme Court has never established a comprehensive test for determining the “delicate question” of what constitutes a religious belief for purposes of the first amendment, and we need not attempt to do so in this case, for we find that, even assuming that secular humanism is a religion for purposes of the establishment clause, Appellees have failed to prove a violation . . . .

Id.
should consider anything that is arguably non-religious to be not a religion under the Establishment Clause. The court in *Allen* stated that it did not even fully agree with the quotation from Tribe, but in that case, the court found it helpful since the issue was whether possession of nuclear weapons by the federal government was a religion. In light of all of the Supreme Court precedent holding that both secularism and atheism are religions, it is difficult to understand how the Ninth Circuit reached the conclusion that secular humanism is not a religion.

The Ninth Circuit also advanced a dictionary definition that said that religion includes belief in the supernatural. Supreme Court precedent clearly has more legal authority than Webster's Dictionary on the meaning of the First Amendment. In addition, if the Ninth Circuit had considered the implication of this definition for situations beyond this single case, the court, without question, would not have advanced this definition. Making belief in the supernatural the definition of religion would exclude atheists and agnostics from the protection of the First Amendment since the First Amendment only protects the free exercise of religion.

The court also pointed to the holding of *Edwards v. Aguillard* to support its conclusion that evolutionism is not a religion under the First Amendment. However, the court failed to cite a specific page number in *Edwards* that supports this conclusion. The reason that the court could not cite a particular page is that the Supreme Court never specifically addressed the issue of whether evolution is a religion. However, the Ninth Circuit may have assumed that it was implied in *Edwards*. In any case, it is ultimately irrelevant whether *Edwards* held that evolution-

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212 *Pelozza*, 37 F.3d at 521 n.5 (citing United States v. Allen, 760 F.2d 447, 450–51 (2d Cir. 1985)).

213 See *Allen*, 760 F.2d at 450–51 (“Although we need not follow him to that extreme in this opinion—supporting nuclear armaments being a good deal more than ‘arguably’ non-religious—we find his analysis helpful and provocative.”).

214 *Pelozza*, 37 F.3d at 521 n.4 (“According to Webster’s, religion is the ‘belief in and reverence for a supernatural power accepted as the creator and governor of the universe.’”).

215 See supra note 161 and accompanying text.

216 U.S. CONST. amend. I (“Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . . .”). Note that the word religion is used only once in the First Amendment, which means that it would be nearly impossible to arrive at different definitions of religion for the Free Exercise and Establishment Clauses. Therefore, the logical implication of the court’s dictionary definition is that it would be constitutional to pass laws prohibiting atheism and agnosticism.

217 *Pelozza*, 37 F.3d at 521 (“The Supreme Court has held unequivocally that while the belief in a divine creator of the universe is a religious belief, the scientific theory that higher forms of life evolved from lower forms is not.”) (citing *Edwards v. Aguillard*, 482 U.S. 578 (1987)).

218 Id.
ism is not a religion since the Supreme Court should overturn Edwards by holding that failure to teach alternatives to evolutionism violates the Establishment Clause.

CONCLUSION

The public education system and the courts have systemically excluded alternatives to evolutionary theory from public school science classes. The primary rationale for excluding alternatives to evolutionism is the idea that supernatural religious beliefs do not belong in science classes because they are unscientific. This reasoning is nothing more than a façade because the materialistic scientific method that legitimizes the exclusion of alternatives to evolutionary theory is just as unverifiable as belief in the supernatural. The hegemony of the materialistic approach to the scientific method has allowed the religion of secular humanism to flourish in public school science classes under the mask of scientific objectivity. Only recognition of the faith-based assumptions that are inherent in both the materialistic and non-materialistic scientific methods will create the possibility of ending the unjust indoctrination that is plaguing public schools.

Teaching evolutionism without alternative theories in public school science classes advances and establishes the religion of secular humanism. The legal standard is neutrality, and excluding alternatives to evolutionism could not be a more explicit violation of this standard. The state is compelling students to attend science classes that engage in religious instruction. Epperson is the only evolutionism case that reached the right holding for the right reason. The Court correctly held that neutrality toward religion was the standard, and a statute that prohibited the teaching of evolutionism was not neutral, which proves that the true constitutional standard is to teach either all or none. Subsequent federal court cases, which have dealt with the issue of evolutionism, violate the principle of neutrality contained in the Lemon Test because they have the effect of advancing the religion of secular humanism.