Troubles in Paradise "In the Beginning" James Downard 1.6 • A Brief History of Creationism (Updated 16 February 2017)

1.6 Section 1: The lead up to the 1920s antievolution crusade.

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The fireworks of religion and politics aside, the primary reason why creationism gave up its ground in the scientific battle over the evolutionary origin of life is that it *never* rose to the challenge of presenting a genuinely competing theoretical structure, vying for scientific or even theological legitimacy on the merits of its explanatory power. However certain early Darwin doubters may have been, they never took the fateful step of actually doing substantive fieldwork or experimentation to back up their convictions. From the start, creationism has an entirely *reactive* tortucan enterprise, one devoted only to justifying their disbelief in whatever new evolutionary information working scientists kept uncovering.

The dearth of workable antievolutionary alternatives meant that over the next century after *Origin* of the Species what few Darwinian skeptics there were among active scientists suffered the "death of a thousand cuts" as their views were rendered increasingly irrelevant and obsolete, buried under a pile of discovery that persistently strengthened the evolutionary argument.

As we'll see in the chapters to come, paleontology played its part, starting with the likes of *Archaeopteryx*, that oh-so-early bird from the Jurassic that still retained its reptilian teeth and tail. As seen in Downard (2003b) and **Chapter 2** of Downard (2004), to this day antievolutionists can't wrap their philosophy around what it means for one (then several, and now quite a flock) of not quite birds to have existed before the first conventionally modern birds show up.

Then there were those fossil "cave men" that kept turning up, tracked in **Chapter 5** of Downard (2004), starting with Neanderthal in the 1850s, though in the rush of digging a few later ones would turn out to be hoaxes or misidentifications (like "Piltdown Man" and "Nebraska Man"), which creationists trot out to this day as a lever to topple over all the much larger body of legitimate fossils that served to trace the evolution of man from the primates: from the African Australopithecines to the busy genus of pre-sapiens *Homo* that spread across the globe before we appeared on the scene to become the big hominid on the block.

Considerably less known in the popular culture was the discovery of another branch of the ancient reptiles, this one leading off into the mammals—once again featuring exactly the sort of incrementally acquired mammalian features evolutionary theory expected. These include of course our trusty little Permian friends from my old dinosaur collection (*Dimetrodon, Sphenacodon*, and *Moschops*). Stars at last!

While paleontologists were inconsiderately digging up ever more examples of the intermediate forms of life that antievolutionists insisted never existed, other scientists were developing whole new disciplines to investigate things from the biological end. Mendelian genetics began to show how inheritable characteristics were preserved in little packets (we would call them *genes* today), and so

wouldn't mush up into an averaged blend the way earlier non-evolutionists had expected. With this former obstacle to evolutionary inheritance swept away, the renascent neo-Darwinian Modern Synthesis of the 1930s coalesced the work of Julian Huxley (1887-1975), Sewall Wright (1889-1988), Ronald Fisher (1890-1962), J. B. S. Haldane, Theodosius Dobzhansky and Ernst Mayr. After the genetic code was discovered in the 1950s, evolutionary biology moved on into the genomic phase of comparing the complete DNA maps of varied organisms to clarify what is related more closely to what, as well as examining (often experimentally) the physical mechanisms that have helped bring about all this diversity.

The subsequent evolution of evolutionary thinking is concisely described in Futuyma (1982, 23-43), Whitfield (1993, 10-17) with Gamlin & Vines (1986) illustrating the many applied examples for a general readership, and John Wilkins (2001) following how the concept of "evolution" has been expanded and refined over the years (beyond Darwin's natural and sexual selection to later ideas about genetic drift, canalization, and stabilizing versus directional selection). Sarkar (2004) summarized the Modern Synthesis as establishing "that natural selection sufficed as a mechanism for evolution," while Moran (2009b) reminded there was more to the process than that. Burian (1988) reflected some of the unresolved technical issues (notably whether there are levels of selection operating above the individual organism, and whether there are overarching principles to be coaxed from the patterns of evolutionary history) that would spur current research into the Evo-Devo era of Pigliucci & Müller (2010b) and Daniel Brooks (2011a-c) sketching out a still more comprehensive "Extended Synthesis" to integrate lessons from developmental biology that began to be uncovered in the 1990s.

If all this had just been a matter of physical evidence, the issue would have been settled long ago. But along with the 20th century came all the anxiety and uncertainty sufficient to ignite the first modern effort to back pedal evolutionary science. Waves of immigration had dramatically changed the demographic character of America, and threatened to marginalize the formerly dominant Protestant culture in a rush of Catholics and Jews. Then a surge in public school attendance began to expose the children of many devout families to the realities of modern scientific thinking for the first time, a science that had absorbed the evolutionary view decades before, as covered by Larson (1985, 15-27; 1997, 23-24) and Eve & Harrold (1991, 21).

While the scientific evidence weighed ever more against creationism, the social fallout of evolutionary thinking was far less "scientific." Then as now, political doctrines and social prejudices were not isolated from the process. Poorly understood ideas of "evolution" were pressed into service by a wide range of ideologies, from Herbert Spencer and John D. Rockefeller (1839-1937) on the moneybag-coddling right, through middle class 19th century Social Gospel progressive reformism, to Karl Marx (1818-1883) and the Russian anarchist Prince Peter Kropotkin (1842-1921) on the anticapitalist revolutionary left. Spencer's Social Darwinism was extrapolated willy-nilly to justify everything from abysmal labor relations in the steel mills of Andrew Carnegie (1835-1919) to European colonial dominance over the supposedly inferior locals. Meanwhile, with Evolution and History (but no God) supposedly on their side, radical leftists lurched toward their own equally dangerous socialist utopias. See Cole (1983, 18-21) on Social Darwinism and its relationship to populist antievolutionism, Leonard (2012) on shifting role of evolution for Social Gospelers, and Gould (1991a, 325-339), Chernow (1998, 154), Ruse (2001, 170-185), Ryan (2002, 25-31, 35-36) and Milner (2009, 266, 293, 393-394, 396-397, 406) for varied perspectives on political ideologies that have tried to make hay of evolution.

Such misuses of evolution stem partly from "the fallacy of naturalism" (the belief that whatever exists is necessarily good or desirable), a secular faith traced by Futuyma (1982, 208-213) and Burke (1985, 268-273) back long before Darwin to Jean-Jacques Rousseau (1712-1778) in the 18th century, and exemplified in the early 20th century by evolutionists like Julian Huxley, grandson of "Darwin's Bulldog." More currently, there is a strident cottage industry of creationist jeremiads decrying Communism and Nazism as the inevitable bitter fruits of accepting evolution, with only the latest installment being Ben

Stein's Expelled.

The proximate root of the serious creationist opposition to evolution was the 20th century. The disillusionment brought on by the exhausting apocalypse of the First World War was abruptly followed by such diverse threats as Bolshevism and a permissive Roaring Twenties morality that openly flaunted the Prohibition movement so many of the reformist creationists embraced—such as the Kentucky evangelist Leander Pickett (1859-1928) who digressed on the sins of alcohol in his antievolution screed, Pickett (1926, 99-100).

And if all that weren't bad enough, the arts and physical sciences were in convulsion, from modernist art and music to quantum theory and Einstein's relativity. The same progressive urges that had inspired many activist Christians to promote child labor laws and the income tax at the beginning of the new century, now saw in "modernity" much to save their children from.

And then there was religious faith—or, rather, the lack of it. "The fundamentalists' most alarming experience was that of finding themselves living in a culture that by the 1920s was openly turning away from God," Marsden (2006, 3). Half a century before, evangelicals had been a respected group in America, listened to on matters of culture and behavior. But "by the 1920s they had become a laughingstock, ideological strangers in their own land," Marsden (2006, x). It was an understandable urge to try to regain that lost moral ground.

Darwinism specifically became the focus for that conflict in 1921 when William Jennings Bryan unexpectedly launched an anti-evolution campaign. Bryan was deeply religious, conducting well attended Bible classes, such as the one pictured in Haught (2014, 2), but the impetus for the attack on evolution owed as much to politics as religion.

Having run unsuccessfully for president three times as a leading Democrat in the populist movement, Bryan had recently served as President Wilson's secretary of state, only to resign in pacifist outrage over the administration's increasingly bellicose response to Germany's employment of unrestricted submarine warfare. It was during his later war relief work—spearheaded by Herbert Hoover (1874-1964) representing the trying to be scrupulously neutral United States—that Bryan came to share the belief that German militarism was not only the main cause of the war (oversimplifying the dangerous interlocking alliances and general national ambitions that had been on a collision course since 1890) but also the virulent outcome of an unyielding "survival of the fittest" evolutionary philosophy.

Darwinian biologist and peace advocate Vernon Kellogg (1867-1937) supplied direct evidence for this mindset via his wartime chats with the German military in Kellogg (1917), including his own experience with German academic scientists, Branch (2015b). As opposed to the "live-and-let-live" American democratic ethos as it was possible to get, the cheery overconfident German intellectuals and field officers massed in a united block of anti-individualist lemmings, comingling fervent Sunday chapel attendance with their own distillation of what Kellogg termed "the worst of Neo-Darwinism" assigning an *Allmacht* ("all powerful") role for natural selection, devoid of mercy or compromise when applied to people. Oblivious to the idea that species could cooperate as well as compete in life's struggle, the German militarists reduced everything to the zero sum game of *conquest*, transforming the trench war cataclysm into just nature's noisy way of selecting the inevitable German winners when it came to ruling the world, *Deutschland über alles*.

And what if Germany should *lose* the war? Well then, they would have deserved to have been beaten, wouldn't they—that's what the *Allmacht* would mean if taken seriously. Except we know from the subsequent history that after the November 1918 armistice all too many Germans couldn't accept that they had been bested. The superior Germans couldn't really have lost, and so must have been *cheated* of their deserved victory, to the point where the traditional scapegoats of the Jews would be ratcheted up to horrific levels by that disgruntled war veteran Hitler.

With the benefit of that grim hindsight it was not an unreasonable fear that Bryan and others

embraced—that, left unchecked, such a mentality would only bring on more conflict and labor exploitation, Larson (1985, 30-39; 1997, 33-39) and Gould (1991a, 416-430).

Further fueling the disquiet of postwar Biblical traditionalists was the fact that "higher criticism" of the Bible had begun among *German* scholars, thus allowing the conflation of pacifist xenophobia with fears about materialist assaults on the godly American way of life. Although the German element has understandably faded in importance in the decades since, conservative Christian analysts like R. L. Thomas & Farnell (1998) continue to relate the practice of Biblical criticism to a bevy of supposedly underlying evolutionary presumptions.

Exactly coincidental with the antievolution crusade, American Protestant denominations were convulsed internally over whether they'd stick to the growing fundamentalist insistence on traditional Rock of Ages sureties or jump onto the modernist bandwagon that could accept evolution while allegorizing miracles and the Virgin Birth without breaking a sweat. From 1920 to 1925, Presbyterians, Baptists, Episcopalians and Methodists in the north thrashed over which fundamentalist/modernist lines would be drawn and whether they would cross them, Marsden (2006, 164-184). The battles rippled over geographical boundaries too, from Canadian Protestants to the historically insular Southern Methodists, such as Bob Jones Sr. (1883-1963), founder of the distinctly creationism-friendly *Bob Jones University*.

The popular perception of evolution as the willing tool of atheism further drew religious conservatives and organizations into Bryan's crusade, especially on the militant premilennialist wing of American Christianity, most notably the *World's Christian Fundamentals Association* founded in 1919 by Minnesota Baptist minister William Bell Riley (1861-1947) that objected to "the new infidelity, modernism," Hughes & Moore (2015), and sought to restore the doctrinal purity of an American Protestantism that in their view had got far too used to adapting their views to changing social conditions, such as accommodating the scientific proposition that *humans* had evolved along with everything else. This absolutist God-or-evolution split prompted Vernon Kellogg (1924) to take exception to where Bryan's campaign was headed, but by then the antievolutionary train had left the station.

At the state level, the issue drew on the populist conviction that local communities had the right to decide what their students were taught, ensuring at the very least that their institutions never offered instruction that conflicted with their deeply held beliefs (especially so for Darwinian evolution, which was characterized as a minority position that ought not be forced onto the skeptical majority). In that spirit, fundamentalists in six state legislatures in the South tried to restrict the teaching of evolution in public schools (South Carolina in 1921, Kentucky and Texas in 1922, Florida and Oklahoma in 1923, North Carolina in 1924, and Tennessee in 1925). A Riley-sponsored effort up north in Minnesota failed post-Scopes in 1927, by which time Riley was fulminating about a "Jewish-Bolshevik-Darwinist conspiracy," Hughes & Moore (2015).

William Jennings Bryan played a more direct role in the Florida efforts because he had taken up residence there (more on the irony of that later) and worked with likeminded legislators and academics to oppose evolution education along with promoting civil piety and alcohol prohibition, Haught (2014, 1-23). Bryan regarded the teaching of human evolution "from a beast" as "the greatest menace facing the church today," and many fellow Christians agreed, from the Miami Christian Council to the Southern Baptist Convention (who held their 1922 meeting in Jacksonville). Bryan labored on the education committee of the Presbyterian Assembly to keep the topic alive, hoping for an actual law (several attempts to pass a bill with teeth failed in the following years) but in the end the most that could be mustered in the Florida legislature was a non-binding resolution that rejected the public teaching of "atheism, agnosticism, or to teach as true Darwinism, or any other hypothesis that links man in blood relation to any other form of life."

The state's educational establishment largely ignored the resolution, including the devout

Prohibition friendly president of the University of Florida, Albert Murphree (1870-1927), who agreed with Bryan on many issues but couldn't quite jump on the Great Commoner's antievolution chariot. To avoid bumping into the state directive, a deal was worked out with their lead biologist C. Francis Byers (an entomologist for whom no biographical dates surface) to adopt the euphemism of "progressive development" instead of "evolution" and on Murphree's urging agreed to not explicitly mention *human* progressive development. Teaching the Controversy, 1923 Florida style.

It was only in Tennessee in 1925 that biblical literalist and Bryan-admirer John Washington Butler (1875-1952) succeeded in getting a bill with penalties passed explicitly prohibiting the teaching of human evolution, Nardo (1997, 23-25). When the governor Austin Peay (1876-1927) signed it into law he didn't really expect it to be enforced, but its very existence attracted the attention of the newly formed *American Civil Liberties Union*. Scouting around for potential venues to test the constitutionality of the nascent Butler Act, the *ACLU* found a willing crowd in the town boosters of Dayton, Tennessee, who expected a trial to gain national interest and bring in lots of tourist business. All they needed was a specific litigant, and that came in the person of local teacher John T. Scopes (1900-1970).

1.6 Section 2: The Scopes Trial—Progressive antievolutionism's last crusade

With the resulting "Monkey" Trial Dayton got its wish of being put on the national map—with a vengeance, as the conflict of fundamentalist Christianity with rampaging modernism jumped to the front burner in America, chronicled in short form by Ecker (1990, 173-176), DelFattore (2007, 40-47) and Milner (2009, 378-380) or in more depth by Larson (1985, 58-72; 1997), Nardo (1997), R. Moore (1998a-b; 2011c), or Weiss (2007). Interestingly, a 1924 Nebraska civil court case (ironically in William Jennings Bryan's backyard) involving a teacher who successfully sued for slander after having been called "mentally and morally unfit" because he had taught "Darwinism" sparked no broader notice, Shapiro (2013c).

The *Kulturkampf* conservative take on Scopes may be seen in Marvin Olasky (1987), who complained in Jerry Falwell's *Fundamentalist Journal* that "No one that I know of has set the record straight" on the Scopes Trial, which for him meant all the acid ink reporters of the period (such as the caustic Mencken) spilt reporting on the trial that lampooned in most unflattering terms the locals of Dayton for their distance from the modern educational world. As for the scientific basis for the general concept of natural evolution that had by the 1920s become a non-controversial topic in American scientific academe, Olasky (1987, 23-24) whittled the matter down to size with populist bravado: "Tennessee legislators saw their antievolution bill as a way of stopping proselytization for what they saw as a trendy but unproven evolutionary faith." But in insisting that "Many intelligent creationists were ready to explain to reporters the theological debate that lay behind the evolution versus creation issue," Olasky (1987, 23) pretty much gave the game away that what was at stake at the Scopes trial in 1925 was less a matter of evidential science than a theological trench that needed defense come what may.

The fact was, while the *ACLU* defense lined up platoons of scientists to argue the scientific legitimacy of evolution, the Tennessee prosecutors discovered to their chagrin there *were* no scientific witnesses to call to testify for their side. This forced an abrupt change in their tactics, from one upholding the statute's validity on empirical merit, to one resting solely on the state's legislative authority to direct the content of public education (a point that Olasky further misconstrued as "parental control over school curricula" for Falwell's clientele in 1987). To help conceal this sizable evidential pothole, the 1925 prosecution got *all* scientific testimony excluded—which ironically some of the defense team were very happy with, as it insulated their academic witnesses from being cross-examined not on the science but on their *religious* views. Although the various witnesses had been carefully selected as men of faith, they were no *WCFA* traditionalists (doubting, for example, doctrines like the virgin birth of Jesus), and the defense feared a probing cross-examination might, as the *ACLU*'s Arthur Garfield Hays (1881-1954) delicately put it, alienate the potential "support of millions of

intelligent churchgoing people who didn't question theological miracles," Larson (1997, 180-181).

Although citing Larson's book, YEC James Perloff (1999, 203-205; 2000) did not mention the absence of antievolutionary scientific witnesses for the prosecution any more than Olasky had a decade earlier, and interpolated his own wishful thinking when he wrote that Bryan was set to "ask his experts tough questions like: 'Where are the missing links?' Even worse, he might ask if they were atheists—which some could not deny without perjuring themselves." Perloff tactfully neglected to identify any of these supposedly closet *atheists* set to take the stand.

The survey of the Scopes trial by Weiss (2007, 128-129) gave Bryan's marshaling of the science side a fair nod (a lot of relevant evolutionary evidence only dated after his time), but Nardo (1997, 60-61) noted Bryan wasn't knowledgeable enough to actively rebut scientific testimony, and often resorted to quips appealing to his audience (a tactical trait Perloff appears to share with the Great Commoner). Even *CreationWiki* (2007h) backhandedly acknowledged that Bryan "never completely understood evolution."

Like his modern antievolutionary counterparts, Bryan freely repeated tropes he had not directly verified, as Glenn Branch (2016c-e) investigated regarding a particular catch phrase ("we may well suppose") that Darwin was accused of using 800 times in *Origin of Species*, supposedly building on conjecture over evidence. The phrase actually turned up only three times, and not as a surrogate for argument.

More significantly, Bryan was equally up to deploying authority quotes from scientific luminaries he approved of, again explored by the historically diligent Glenn Branch (2014ad-af).

Geneticist William Bateson (1862-1926) was the heaviest hitter for Bryan to crib from, but hardly surprising given the Bateson (1922) lecture that fed into the antievolutionary quote mill by quite correctly reflecting the pre-DNA uncertainty about the precise mechanisms of the origin of species. Evolutionists at the time weighed in to counter the authority quoting of Bateson just as critics of creationism do today, of course, such as zoologist Winterton Curtis (1875-1966) among the slated science witnesses at Scopes, Branch (2015e).

The same situation of science moving on applied to Albert Fleischmann (1862-1942), a minor German zoologist who around 1900 grew disenchanted with the "Darwin-Haeckel" model of evolution—the contentious German evolutionist Ernst Haeckel (1834-1919) will be popping up more later—and eventually slid into the world of Douglas Dewar (1875-1957) and the British Evolution Protest Movement. Sounding eerily like 21st century Intelligent Design advocates, Fleischmann (1933) contended the developmental biology of the various phyla defied the constraints of Darwin's evolutionary tree, with four snippets of his opinion duly quote-mined by *CreationRevolution* (2013).

Interestingly, *CreationRevolution* did not discuss any of the substantive points Fleischmann made, which was probably wise, since by 2013 biology was knee deep in Evo-Devo showing how *HOX* gene developmental systems crossed phyletic boundaries in a unifying manner thoroughly consistent with Darwin's old Tree of Life. Hence Fleischmann's 1933 opinions on developmental axes in animal embryos would be about as informative as trying to evaluate the suitability of carbon fiber versus ceramic flight surfaces for a hypersonic shuttle by relying only on the aeronautic experience gleaned from some familiar only with canvas and wood biplanes.

Much the same could be said of Bryan's invocation of Beale (1903a), a speech Lionel Beale (1828-1906) contributed to the *Victoria Institute* (something like a British counterpart of the *American Scientific Affiliation*) critical of biological evolution in general and its materialist conflicts with religion. While Beale was a pioneering advocate for scientific medical practice and use of microscopes in clinical pathology, he had several theoretical blind spots beyond just evolution. Persistently skeptical of the germ theory of disease, a prickly Beale (1875) fired a potshot at experimental physiologist John Burdon Sanderson (1858-1905) over his promotion of the idea. Foster (1958) chalked up Beale's skepticism on germ theory to the limitations of 19th century research when summing up Beale's contribution to

science technique (we'll encounter this same issue in section **1.7** regarding spontaneous generation), but Beale's clinging to vitalism cut to the core of scientific methodology.

Beale (1871; 1882a-c; 1887; 1893; 1901; 1903b) represented a long parade of denial that biological processes ultimately employed the same atoms and molecules that stars and planets were made of, prompting a retrospective of microscope use in British science by Richard Howey (2008) to dissect an 1881 address of Beale for its "deliciously silly, overblown rhetoric!" Confounding Beale's vitalist expectations, subsequent investigation using ever more powerful microscopes failed to derail the materialist agenda, eventually requiring today's ID counterparts to retrench into an "information" approach to proteins indisputably built from carbon-based amino acids spooled off from an all-molecular RNA/DNA template equally devoid of detectable vital essence.

Bryan's most dated chestnut purported to be from paleontologist Robert Etheridge (1819-1903) of the British Museum about the absence of fossil intermediates. Branch (2014s-v) eventually traced it back to an 1885 religious magazine: a letter from evangelical botanist George Edward Post (1838-1909) reporting on a conversation he had with Etheridge at the museum, which missive an unnamed "former colleague" of Post's had forwarded to the magazine evidently primed for its apologetic utility. Branch could find no corroborating evidence about Etheridge's antievolutionary doubts from his scientific publications. He did reflect the period, where evolution skeptics continued to operate in the observation collection mode, while their evolutionary counterparts fitfully plodded forward onto the more challenging terrain of theoretical explanatory context, and it was certainly possible that Etheridge harbored his views in private, only to blurt them out on that one occasion in 1885 when chatting with fellow Darwin-doubter Post.

Incidentally, Branch noted an aspect of Post's motivational underpinnings: his umbrage over Edwin Rufus Lewis (1839-1907), whose July 1882 commencement address (delivered in Arabic) at the Syrian Protestant College in Beirut (in 1920 it became the American University of Beirut) stepped on the toes of the institution's conservative missionary founders by mentioning four notable scientists of the time: Charles Lyell, Louis Pasteur, Robert Koch, and Charles Darwin. The furor led to Lewis' dismissal, several faculty quit in protest, including fellow missionary and noted Arabic scholar Cornelius Van Alen Van Dyke (1818-1895), and the faculty shake up and student resignations and suspensions eventually boiled over into the first known student protest in the Arab world. The contending camps came to blows with serious injuries, Jeha (2004) and Musselman (2006, 286-287), and there was even a mini-exodus to Egypt of some Syrian journalists exercised over academic freedom, Farag (1972). The *Kulturkampf* pot was steaming even then.

Concerning Etheridge's paleontology, though, it is of interest that the more extensive 1885 source had Etheridge blithely affirming the fixity of species and insisting "There is no such thing as a fossil man." That wasn't really true even in 1885 (Neanderthal fossils being known by then) and suggested that perhaps Etheridge was not the most disinterested nor prescient figure to invoke when it came to fossil information, either in the 1880s or the 1920s when Bryan was on the scene, let alone in the decades since as the Etheridge "quote" continued to pop up in secondary creationist mining all the way to the present, as I found in April 2015 with an exchange on Twitter when a creationist confidently invoked Etheridge as an authority for skepticism and recommend our thread read a posting at the evangelical Soulwinners (2015) website.

Availing themselves of every opportunity to combat Satan, *Soulwinners'* short "Evolution Lie" quote mine collection included Etheridge as nicked from Scott Huse (1997, 158, 208n) who had in turn obtained it secondarily from Lindsay (1977, 16). As it happened, the flipped sequence of sentences in the Lindsay-Huse-*Souwinners* version suggests none of them had ever got anywhere close to reading the original Etheridge quote. And while Huse at least supplied a reference for where he got what he thought that "world famous paleontologist of the British museum" had said at some unspecified point in time, that vagueness necessarily carried on over into the *Soulwinners* version and thence to the

credulous Twitter sock-puppet.

An identically-worded version showed up in the even vaguer Steve Hall (2012b):

"Nine-tenths of the talk of evolutionists is sheer nonsense, not founded on observation and wholly unsupported by facts. This museum is full of proofs of the utter falsity of their views. In all this great museum, there is not a particle of evidence of the transmutation of species." (Dr. Etheridge, Paleontologist of the British Museum)

As Hall supplied no date or source information, it may never have dawned on him (or any in the equally derivative Taylor-Huse-Soulwinners-Twitter chain) that he had no idea who Etheridge was or when he lived or what information the paleontologist did or did not have at his disposal or had been disposed to assess or dismiss at any point in his scientific career. Which makes the caution of Glenn Branch two years later particularly apropos: "It's hard to know why anyone should be impressed with a second-hand uncorroborated paraphrase of a conversation that happened one hundred and twenty-nine years ago," Branch (2014v).

Returning to the Scopes Trial, though Chapman (2007, 177-179) was most impressed with the powerful arguments of *ACLU* council Dudley Field Malone (1882-1950)—so eloquent that he got a powerful ovation even from antievolutionists in court—the most incendiary exchanges involved the lead defense attorney Clarence Darrow (1857-1938). With their science witnesses off the agenda the defense repositioned too, and Darrow executed the now-legendary maneuver of calling Bryan to the stand as expert on the only field remaining: the Bible, whose stance on the origin of human beings it was the explicit purpose of the Butler Act to protect. Bryan was fine with that turn of events, since he intended to reverse the procedure by calling the defense team for questioning afterward, but that isn't how things worked out. Darrow's withering cross-examination of Bryan on the peculiarities of Biblical exegesis elevated the proceedings to both farce and tragedy, prompting the judge to cancel Bryan's planned cross of Darrow, and a week after the media circus concluded Bryan fell ill and died.

There is a further twist to the timing of Bryan's death apropos his Florida retirement plans. During his brief stint as a volunteer Nebraska National Guard Colonel during the Spanish-American War (which ended before they saw any action) Bryan had trained in Florida, Kazin (2006, 87-89). Though typhoid and malaria killed a few of his regiment there, Florida had become his retirement destination, Larson (1997, 38-39): "the aging Commoner moved to Miami for his wife's health and got in on the ground floor of the historic Florida land boom of the early twenties. Although publicly he played down his profits, the spectacular rise in land prices made Bryan into a millionaire almost overnight." Bryan did not live into the following year 1926, though, when a devastating hurricane burst the Florida real estate bubble (which would have given an altogether different meaning to *Inherit the Wind*).

The outcome was a draw for both sides. Scopes was duly convicted, but as that was a needed step towards the goal of challenging the law at the federal level that wasn't a problem—what did frustrate the *ACLU* was when the Tennessee high court overturned the conviction on a technicality (the judge shouldn't have set the fine, a nominal \$100), thus robbing them of the chance to take it to the Supreme Court. Sounding a lot like some of the jurists on the current Supreme Court (Justice Kennedy comes to mind concerning the *Greece v. Galloway* city council prayer case in 2014, to be discussed in due course), the juridical concurrence asserted that the act's prohibition of teaching any science doctrine that denied the Biblical creation story of man was strictly neutral, and in no way furthered any religious doctrine. *Kulturkampf* historian David Barton (2001a, 299-303) did not find this position even a smidge contradictory.

On a cultural level, press accounts of the proceedings painted creationism in very broad strokes, not only as retrograde defenders of religious bigotry, but now as parochially *southern* ones. Though this was not representative of Bryan's broadly based progressive movement initially, after Scopes the course of

anti-evolution legislation shrank to a largely conservative southern rural constituency.

The relationship broadly holds true today, where the correlation between Biblical literalism and creationism is strongest in the traditional Bible Belt, Duncan & Geist (2004), and roughly half of Southerners are creationists compared to only about a third of Northerners, Shermer (2006, xviii). Membership in the Southern Baptist Convention (formed back in 1845 when northern Baptists prohibited slave owners from being ordained as ministers) is among the most creationism-friendly of American denominations, though with local variation such as the less activist North Carolina branch noted by Toumey (1992, 39-41), and a demographic map of SBC concentration in 2000 linked by Harvey (2012a) follows the boundaries of the old Confederacy quite closely. Southern and rural also predominated in an *American Bible Society* (2014a) survey of the most and least "Bible-minded" American cities, at least according to the frequency of Bible consultation among over forty thousand respondents and whether they believed the Bible to be true, *Time* (2014). This Southern locus continues as creationism becomes repackaged as the less overtly religious Intelligent Design, Bowman (2008) finding regional divides more predictive of the degree of public school antievolution teaching than either the conservative "Red" vs. liberal "Blue" state splits or the pro-evolution fervor of state science standards.

1.6 Section 3: Hunter's Civic Biology—Vintage eugenics and the legacy of historical revisionism

In a pattern that would be replayed half a century later, though, the salient effect of all the brouhaha over the Scopes Trial was to induce a severe chill among textbook publishers, chronicled by Grabiner & Miller (1974), Cole (1983, 22-23), Larson (1985, 84-88), Eve & Harrold (1991, 27) and Randy Moore (2001b). Nature study was a common pursuit in American education, town and country, Rudolph (2011), but pre-Scopes high school science books said very little about how evolution might relate to that anyway.

Moore (2001b, 791) noted how the 1907 *Elements of Biology* by George William Hunter (1873-1948) hadn't used the word at all, and his 1911 *Essentials of Biology* skipped even Mendel's discoveries as "too difficult to explain to high school students." But as Bryan's antievolution crusade heated up, textbook publishers felt the heat and had added incentive to revise whatever evolution-laced editions they already offered. Gruenberg (1919; 1925), for example. Benjamin Gruenberg (1875-1965) and the less politically minded George Hunter were both knee deep in the progressive education movement developing in New York City, Pauly (1991), to empower the new generation with biological knowledge seen as vital for furthering civil hygiene in a crowded urban environment—including matters of *sex*, a theme that would eventually lead to the research of Alfred Kinsey.

Gruenberg openly covered evolution (including humans) in his 1919 textbook *Elementary Biology* and was a scheduled evolution witness at the Scopes Trial to boot—neither attribute likely to endear the author to 1920s antievolutionists. Gruenberg's 1919 textbook became contentious in Florida, spurred on by Boston businessman George Washburn (1959-1931), founder of the *Bible Crusaders of America*, Numbers (1992, 59-60). But by then Gruenberg's more cautious 1925 *Biology and Human Life* was available, in which all signs of evolution were thoroughly under wraps, and Washburn spearheaded the move to take that up as the replacement volume, Haught (2014, 8-11).

The book Scopes had used for the Butler Act challenge (one of two specified by the state of Tennessee for public school use) was Hunter's 1914 *A Civic Biology*, which had included only a few basic references to evolution (it hadn't even got its own chapter, but appeared just as a heading over five pages in the chapter on "Division of Labor, the Various Forms of Plants and Animals") and some biographical information on Darwin and Wallace was included later in the book, Hunter (1914, 192-196, 404-406)—the bulk of the volume was devoted to practical matters of plant identification and personal hygiene. But after the Scopes Trial, publishers either downplayed or removed altogether those fleeting references to evolution, including *A Civic Biology*.

The irony of removing the dreaded "evolution" word from later editions of Hunter was not lost on Gould (1991a, 428-429) who noted *A Civic Biology* still made the "egregious claim that science holds the moral answer to questions about mental retardation, or social poverty so misinterpreted." The original section on evolution in Hunter (1914, 196) had matter-of-factly characterized Caucasians as "the highest type" of human, though with no claim that this purported condition was due to "Darwinism" or any other process, and so owed less to any overt derivation from evolutionary theory than it did to the pseudoscientific racism and eugenics being promoted in early 20th century American biology, Larson (1997, 23), Black (2003, 75-76) and Kazin (2006, 289). *Both* Bryan and Darrow opposed eugenics, Weiss (2007, 127-129), though Shapiro (2013b) cautioned that part of Bryan's concern involved politics and time (where the heredity based eugenics would be operating at too slow a pace and so might discourage people from employing the much more rapid and accessible tool of progressive legislative reform).

Sadly it took a lot longer to expunge the faulty legacy of eugenics and racism from social science and popular culture generally than it did to exclude explicit references to technical Darwinian thinking. High school (1904-1963 period) and college (1907-1973) biology textbooks tended to accept the racial and cultural presumptions of eugenics until well after WWII, surveyed by Ladouceur (2008; 2011). The content of the college level *Man and the Biological World*, Rogers *et al.* (1942, 282-286), made it onto Ladouceur's list for its "propagandistic and highly deterministic" coverage of the lower socioeconomic status of groups having more children—and one may spot among its trio of entomologist authors a certain C. Francis Byers (the Florida prof who downplayed "evolution" terminology at the behest of Albert Murphree in 1923),

By the later 20th century, though, evolutionary science was far removed from the popularized myths of Hunter's era—a historical distinction that doesn't always make it through to evolution skeptics. Sociologist Steve Fuller (2008, 34-35) offered Hunter's book to illustrate how Darwin's theory "not only denied our divine origins but also appeared to rationalise racial inequalities" (we'll be returning to Fuller's involvement in the Dover case in section 1.7) while Michael Egnor (2013d) at *Evolution News & Views* disingenuously plopped all the dated sins of *A Civic Biology* exclusively at contemporary evolution's door. The effort to weld eugenics exclusively to "Darwinism" has been *Discovery Institute* trope for some time, such as John West (2007b, 128): "The eugenics movement drew direct inspiration from Darwinian biology. Yet today the Darwinian roots of eugenics tend to be downplayed by the popular media and by some scholars."

This *Kulturkampf* tendency to ignore the fine details when rushing towards the desired target spun out of control after Jerry Coyne (2013w) posted a vacation picture of himself at the tombstone of John Scopes, which Klinghoffer (2013as) deemed "somewhat ghoulish" and Egnor (2013f) tagged as "bizarre" in posts at *Evolution News & Views* while contending Scopes would have been teaching the objectionable racist eugenics of Hunter's book and consequently was no one to admire. Coyne (2013z) responded that Scopes was not a racist by any means, and that it was unclear whether he had covered much of anything from the Hunter text (Scopes being a substitute teacher volunteering to enter the case in order to challenge its constitutionality), which argument Egnor (2013f) characterized as "a shambles, and not worth a detailed reply." Instead, Egnor declared that, "Racism and eugenics were the hallmarks of the theory of human evolution in the early 20th century, representing a clear consensus of evolutionary biologists as well as other scientists and leaders in higher education and government. There were a few dissenters, but such skeptics were disdained in mainstream scientific circles," though he declined to offer any examples.

By then, Adam Shapiro (2013d) had caught wind of the fracas, and as an historian of the Scopes trial and its textbook ramifications, criticized Coyne on one point: while the Hunter textbook was mandated for use by Tennessee, Coyne was wrong to think this was forcing teachers like Scopes to violate the law prohibiting the teaching of evolution, because the text had actually been so timidly worded that it wasn't difficult to avoid tangling with the Butler Act—which criticism Coyne (2013ae) duly

acknowledged, while understandably noticing also how Shapiro's main guns were aimed squarely at Egnor's treatment. Shapiro accused Egnor of "an extremely subtle—and dishonest—rhetorical strategy" that tripped up on three historical counts:

Egnor states without citation: "Eugenic racism in 1925 was consensus science in the field of human evolution." This statement is wrong on several levels. It's wrong that eugenics was primarily about race (in 1925). It's wrong that eugenics was primarily considered an application of human evolution (as opposed to heredity). And it's wrong to claim that it was a consensus.

Shapiro noted how racism could hardly have been so prominent a factor in rejecting evolutionary theory when the most likely people to have noticed it failed to mention it, such as the African-Americans following the Scopes trial Moran (2003) had studied (religious African-Americans who disliked evolution used scriptural grounds to justify their opposition, not any claim to racism). And, while the utterly objectionable involuntary eugenic sterilization programs in America would become increasingly skewed towards minorities after WWII, it didn't start out that way: "In the 1910s and 20s, eugenics seems to have been less about race and more about class; specifically the class of people who were perceived as non-contributors to society: criminals, the 'feebleminded' and the immoral."

A check of Hunter (1914, 262-263) supported Shapiro's point that the eugenics of *A Civic Biology* had made no identification of racial characteristics as factors. Hunter's main example was a Revolutionary War era man who had seduced a "feeble-minded" girl, from which a "feeble-minded" son resulted, with 480 descendants of which 143 were similarly "feeble-minded," 34 were "sexually immoral," another 24 were drunkards, and 3 were epileptics. One can only imagine the treatments being afforded these people in the 19th century (including those three epileptics) once they got pigeonholed as "feeble-minded" by the discredited methodology of the era (the 58% of the man's progeny who evidently escaped these terrible hereditary fates were not discussed). But Hunter did offer a contrast: "The man who started this terrible line of immorality and feeble-mindedness later married a normal Quaker girl. From this line of 496 descendants have come, with no cases of feeble-mindedness. The evidence and the moral speak for themselves!"

Shapiro further noted, "Eugenics was considered an application of a biological principle of *heredity* more so than evolution (inasmuch as those could be seen as distinct principles)." Though modern evolutionary theory has integrated genetics fully, this was not seen as an inevitable connection back when *A Civic Biology* was written (recalling from section **1.4** above how full blown Darwinian natural selection driven evolution was not the dominant perspective).

Indeed, this disconnect was still going on decades later (just as the Modern Synthesis was emerging). Xenophobic University of Vermont eugenicist Henry F. Perkins (1877-1956) was a peculiar case in point, Dann (1991). Perkins conducted problematic eugenics surveys in the state from 1925 to 1936 and thought to mitigate the influx of deficient migrants like "gypsies" and French-Canadians by promoting summer tourism to the state. "Despite Perkins's training in genetics, he never employed its language to support the Eugenics Survey family studies; they were nonetheless strictly hereditarian," Dann (1991, 14). Perkins also appears to have channeled a few racial prejudices from his father, George Henry Perkins (1844-1933), a professor of biology and geology for whom small stature signified inferiority and the Teutonic stock manifestly surpassed all the lame competition like those Celts or Chinese.

Henry Perkins' legacy continued with Paul Amos Moody (1903-1986) at the University of Vermont into the 1970s, retooling eugenics to reflect modern genetics, *Eugenics* (2013b)—that would be the same Moody who's 1962 *Introduction to Evolution* textbook was noted back in section **1.3** regarding the slow appreciation of the paleontological implications of allopatric speciation. Moody's connection to

eugenics gets a curious postscript via the few antievolutionists who have tumbled onto Moody's book over the years (evidently without being aware of that aspect of his career). While Moody's upfront theistic evolution was objectionable to Bert Thompson (2001), David Noebel (2009) snipped Moody (1962, 514) for *The Schwarz Report: A Publication of the Christian Anti-Communism Crusade* because this "superb scientist" had happened to use the "design" buzzword that by 2009 was evidently all it took to get you inducted into the ID club. Noebel's redaction spooled down the daisy chain to the anonymous *Creation Facts* (2009) website, resolutely "Confronting the Lies of Evolution" to the limit of their ability to cut-and-paste.

Shapiro's point about genetic heredity being thought distinct from evolution during this period was further affirmed by antievolutionists. British barrister Henry Kindersley (1864-1942) was sure genetics posed a problem for evolution, Kindersley (1932, 194), while American theologian Floyd E. Hamilton (1890-1969) insisted that the known laws of heredity so restricted natural variation that they *ruled out* evolution being true, Hamilton (1935, 24-27). Clearly, any eugenics program building off what scientists thought they knew about genetic recombination and heredity was by no means joined to the hip with the bigger picture of evolutionary presumptions.

Indeed, even Intelligent Design boosters have been known to think in jingoist eugenics terms now and then (the idea that which human groups survive and breed matters), as Joshua Rosenau wryly noted in some August 2015 Tweets regarding two Jewish *Kulturkampfers* presumably well-insulated from any taint of Darwinist presumption: David Klinghoffer (2007) and media critic Michael Medved (2008a), both of whom eventually settled in the *Discovery Institute* orbit. While Medved rhapsodized about the "inherited traits" of our "American DNA" triumphing in the genetic marketplace, Klinghoffer recommended honing the procreative edge: "A Jew who believes in Judaism cannot have too many children."

Not that such details were slowing Egnor (2013h) down much, responding to Coyne and Shapiro with his own guns blazing: "Coyne hides behind the skirt of English historian Adam Shapiro, a self-styled expert on the trial who wrote a book about it." That remark required some chutzpa, what with the parade of ID extra-disciplinary claim jumping represented by biochemist Behe's *Darwin's Black Box* invading a quintet of biological fields not his own, Jonathan Wells' *Icons of Evolution* waxing bold on paleontology, or ex-philosophy professor Steve Meyer double dipping into genetics for *Signature in the Cell* and paleontology in *Darwin's Doubt*.

Shapiro's long-standing scholarly interest in the Scopes Trial, running from his dissertation and scholarly papers like Shapiro (2008) to the well-received Shapiro (2013a) book, counts for naught in Egnor's lopsided scale of expertise, who widened his range of accusation: "Why I would want to quote Shapiro's obscure book is unclear, when I quoted the actual text of *Civic Biology*. If I wanted to quote a water-carrier for eugenic historical revision, I had many other choices." Egnor then insisted Scopes had lied in his memoir about his not recalling how much of the evolution material in the Hunter book he had taught back in 1925, jacking up Scopes' sins to Nuremberg class: "Would you forget whether you gave a lecture endorsing eugenic genocide?" Probably not—but if Scopes never gave such a lecture, it would hardly be amazing if Scopes failed to remember this non-event decades later.

Egnor further advised Shapiro:

Shapiro, who brandishes his purported scholarship on eugenics and race, should read Lothrop Stoddard's classic 1920 eugenic text *The Rising Tide of Color Against White World-Supremacy*, published five years *before* the Scopes Trial, during which Shapiro claims that eugenics wasn't racist. Harvard-trained Stoddard was perhaps the early 20th century's most prominent scientific racist and a leading (and foaming) eugenicist.

In human evolutionary biology, race and class were joined at the eugenic hip, without a sliver of light between them.

Egnor might have chosen his ammo more carefully. So focused on his end game ("Eugenics was about hate, for which race was central") Egnor left all documentary nuances behind. Shapiro (2013e) responded to Egnor's "somewhat selective history of British and American eugenics in the 19th and early 20th centuries," and Egnor (2013i) fired back with the same assertions, resolutely trying to attach the Darwin anchor to the sinking eugenic ship. Shapiro (2013f) finally noted that Stoddard's academic background was in history, not science, and whatever racist eugenic slant his 1920 book might have had, it was irrelevant to the issue of what Scopes was accused of teaching from the 1914 A Civic Biology (Egnor's original accusation remember).

Actually, Egnor's labeling *The Rising Tide of Color* as a "eugenic text" was itself something of a stretch. While Stoddard (1883-1950) offered a long-winded historical diatribe about non-Nordic peoples (he would later embrace the "Aryan" term along with sidling up to the Nazis) being overwhelmed by everybody else, Stoddard (1920) did not actually recommend any explicit eugenic solutions to the problem. Eugenics didn't appear in his index, and the term popped up exactly twice (pp. 117 & 137 of the *Project Gutenberg* outline edition). The first was generic: "Eugenics among individuals is encouraging the propagation of the fit, and limiting or preventing the multiplication of the unfit. World-eugenics is doing precisely the same thing as to races considered as whiles," and then went on to discuss how immigration restrictions were part of this. The second mention was equally vague:

For race-betterment is such an intensely *practical* matter! When peoples come to realize that the *quality* of the population is the source of all their prosperity, progress, security, and even existence; when they realize that a single genius may be worth more in actual dollars than a dozen gold-mines, while, conversely, racial decline spells material impoverishment and decay; when such things are really believed, we shall see much-abused "eugenics" actually moulding social programmes and political policies.

As for what concrete policies Stoddard actually did recommend, this turned out to be that the imperialist ambitions of the superior Nordic race had to go, since contact with the colored hordes only risked contamination by assimilation or intermarriage (he characterized allowing Chinese immigration as "race-treason"), and to sustain this hunker down apartheid very stiff immigration laws needed to be enacted. Empirically problematic claptrap, to be sure—but this is still a long way from offering eugenics as a core policy ("foaming" or otherwise) to achieve the Nordic utopia. Stoddard's book was far more concerned with the fallout from the Great War, which he saw as opening the floodgates by the arming of colonial troops as well as the decimation of European soldiers in the trenches. That Stoddard would eventually get very friendly with the Third Reich shouldn't come as a surprise either (he was more "foaming" in *The Rising Tide of Color* when it came to the menace of Bolshevism and all too many conservatives would flip their anticommunism into blinkered enthusiasm for fascism) but few wading through the hundreds of pages of Stoddard (1920) could have seen how that grim alliance would play out decades later without using a well-focused crystal ball.

Interestingly, evolution didn't play much of a role in Stoddard's thinking either. He didn't much like the "survival of the fittest" idea since he suspected the wrong sort of people might be all too capable of getting by (no mention of Darwin or Spencer here)—he wanted the "best" people to survive (which presumably would include his Harvard-educated self) rather than the merely fittest. Stoddard in turn had relied on Madison Grant (1865-1937) for the scientific side of things—another Nordic Race groupie, Grant was an avid nature conservationist who also advocated proactive eugenics to keep the human species similarly pruned and healthy, so here at least could be seen some of the deeper (and darker) links that Stoddard had begun to channel in 1920. Just how little of this derived from Darwin, though, was indicated by the introduction Grant wrote for Stoddard's book, where evolution was mentioned

only perfunctorily in relation to human origins. There was no attempt to identify what hereditary traits were desirable or if they existed in a sufficiently tight Mendelian manner to be amenable to selection (natural or artificial) in the first place, or at least direct the reader to someone who might have taken a stab at that—rather critical steps any eugenics argument claiming to be "scientific" would need to have taken if the idea was to apply the *Darwinian* model.

Egnor (2015e) hasn't backed off from his well-polished Darwin=Racism trope, accusing NCSE of whitewashing the history of "Scientific Racism" when Rosenau (2015f) highlighted the role of science students in opposing racist segregation of plasma at American blood banks. As Rosenau had quoted the Army's surgeon general acknowledging that the ban was based not on anything "biologically convincing" but on what was "psychologically important in America," it was clear Egnor was unwilling to examine any of the religious and cultural components of the racism of that time, falling back on his familiar misfired ammo of Hunter's Civic Biology, and putting up secondary links to the Wikipedia entries on "Madison Grant's The Passing of the Great Race (1916) and Lothorp Stoddard's The Rising Tide of Color: The Threat Against White World-Supremacy (1920)," as though that could substitute for reading their arguments in the primary sources and examining their context. Instead, Egnor just doubled down on his conviction that the racism exhibited by scientists of the period was fueled by Darwin's evolutionary theory (and apparently nothing else) until "ended largely by courageous scientists and others (largely religious people who believed in human exceptionalism) who spoke out against the scientific consensus." In a rejoinder, Rosenau (2015g) specifically noted how Science, the Journal of the American Medical Association, Scientific American, and the American Association of Physical Anthropologists all stressed at the time how the racist blood ban had no scientific basis. Where then was this "scientific consensus" racism other than in Egnor's own historically superficial ideological kaleidoscope?

As for the idea that eugenics was an exclusively evolutionary hobby, creationist psychologist William Tinkle (1892-1981) sinks that idea, having embraced eugenics in its heyday without choking, as evidenced by Tinkle (1927; 1933). But if Egnor wanted further evidence that people can be attracted to a eugenical social policy without taking the Darwinian plunge, one need look no further than *The Occidental Quarterly*, a rare example of a journal devoted to defending eugenics *today*, long after the practice had shriveled up in evolutionary circles, in *oeuvres* like "The Case for Eugenics in a Nutshell" by Van Court (2004), McDaniel (2006) on "America's Racialist Moment: Racism as Reform," and Rosit (2007) defending that "Prescient Patrician," Madison Grant.

And who is behind *The Occidental Quarterly*? No brigade of Darwinian hate mongers, but a very conservative band of *Kulturkampf* warriors who sound a lot like contemporary incarnations of Stoddard as they fret over immigration and threats to the white race, and whose connections to Republican and Congressional activities were reported by Blumenthal (2004). The journal's publisher is William Regnery, while his brother Alfred fields the conservative *Human Events* magazine (after a newsletter begun by the publishing house's conservative founder Henry Regnery) that often trumpets the findings of Intelligent Design, or extolling Wiker's *The Darwin Myth* (as seen in section **1.5** above). Regnery Publishing gets an unsympathetic listing at *RationalWiki* (2011b) for being "a clearinghouse for the bullshit no other publisher would ever touch," and just their titles in my own source list gives a flavor of how far reaching their vision has been, from Vallee's funky UFO mythologizing and Duesberg's lamentable AIDS denial to sectarian religious apologetics and prominent defenders of Intelligent Design:

Tom Bethell: *The Politically Incorrect Guide™ to Science* (2005).

Dinesh D'Souza: What's So Great About Christianity (2007).

——. Life After Death (2009).

Peter Duesberg: *Inventing the AIDS Virus* (1996).

Bernard Goldberg: Bias: A CBS Insider Exposes How the Media Distort the News (2002).

Guillermo Gonzalez & **Jay W. Richards.** The Privileged Planet (2004).

Robert J. Hutchinson: *The Politically Incorrect Guide™ to the Bible* (2007).

Phillip E. Johnson: Darwin on Trial. (1991).

Phyllis Schlafly & George Neumayr: No Higher Power (2012).

Robert Spencer: The Politically Incorrect Guide™ to Islam (and the Crusades) (2005).

Jacques Vallee: Anatomy of a Phenomenon (1965).

———. Passport to Magonia (1969).

Jonathan Wells: Icons of Evolution: Science or Myth? (2000).

——. The Politically Incorrect Guide™ to Darwinism and Intelligent Design (2006). **Benjamin Wiker:** The Darwin Myth: The Life and Lies of Charles Darwin (2009).

lan Wilson: The Bible Is History (1999).

Klinghoffer (2012k; 2015w) tiptoed past the *Occidental Quarterly* side of Intelligent Design publishing when he endeavored to saddle racist South Carolina gunman Dylann Roof (2015) to an "Evolutionary Racism" that Roof's own manifesto (which Klinghoffer linked to) made no mention of. Roof was high on anti-Semitic rants and pining for the good old days of Antebellum slavery, and Klinghoffer quoted a few sentences on breeds of animals that even Klinghoffer conceded wasn't "the evolutionary chatter you find at some neo-Nazi and white supremacist sites."

The group more directly inspirational for Roof connected to Jared Taylor's *American Renaissance* magazine. Perhaps unaware that Taylor used to be on *Occidental Quarterly*'s advisory board, Klinghoffer (2012k) skimmed *American Renaissance* much as Egnor had Stoddard:

To get a sense of the centrality of Darwinian eugenic considerations to the organization, you just have to spend a few minutes investigating the contents of the website, and of the affiliated *American Renaissance* magazine, which are well archived.

We have a fellow called Michael Levin on "The Evolution of Racial Differences in Morality," explaining how "Races appear to have evolved different levels of morality; this has important social consequences." In "Decline of the West," contributor Thomas Jackson laments "a century of genetic deterioration" and commends the insights of Darwin's cousin Francis Galton: "Today eugenics is held in universal disrepute but many objections to it are silly."

Peter Crittendon calls for "Ending a Historical Taboo" by "restoring the respectability of eugenics." In "The Origin of Races, Part I," Michael W. Masters praises a certain Seymour Itzkoff who

writes of the "encompassing embrace" of third-world immigration to Europe and the United States: "It is an embrace that will suck us back into evolutionary history if we delay too long." What Lothrop Stoddard called "the rising tide of color" may well be reversing the course of human evolution.

And on and on, American Renaissance is fully as obsessed with the insights of evolution and eugenics as the prominent neo-Nazi website Stormfront, except the material is presented in a superficially objective and scholarly fashion and the anti-Semitism is kept more under wraps—though evidently this last element comes out more freely in person at the conferences.

So, just how central was "Darwinian eugenics" to this band of racist ideologues? Although Michael Levin (1995) had included "evolution" in the title, not a single primary science source (Darwinian or otherwise) was mustered for any of its propositions, such as that "Evolutionary biology suggests an explanation for race differences in moral values." Levin further insisted that

"morality is advantageous only when others are moral" and trotted out his only citation, the influential Axelrod & Hamilton (1981) on the dynamics of the Prisoner's Dilemma—work on the natural evolutionary origin of cooperation even without everybody sharing the value (the opposite of what Levin had just claimed). That Levin didn't (and couldn't) document his many propositions with the evolutionary science field Klinghoffer wanted him to be drawing on, should have tipped Klinghoffer to the fact that however much racists may try to dress up their prejudice with the current scientific jargon, they're not going to be able to put any citation substance behind it, not in the Darwinian evolutionary literature of 1981, or 1995, let alone 2015.

Michael Masters (1996a) certainly accepted human evolution (though he got the chronology skewed even by 1990s standards), and dangled references to Darwin along the way, but for his main argument, that human racial differences "are real; and clearly reflect differing capacities to build and maintain civilization," rested on no foundation of evolutionary citation, but only an allusion to racists of time past, such as the seminal Aryan mythologizer, Arthur Comte de Gobineau (1816-1883). The second half of this superficial screed, Masters (1996b)—which Klinghoffer did not cite—went on to repeat all the debunked 1920s vision of Cro-Magnon superiority arising in Eurasia (rather than in Africa where the evolutionary work was by then clearly trending, and which Masters paid no attention to).

Peter Crittenden (1997) referenced a small list of general histories of the eugenics movement, but what he didn't do was offer any scientific works (such as from that hypothetical "Darwinian eugenics" operating in the contemporary world) to resuscitate eugenics' reputation as sound science, genetically or otherwise. Nor did Klinghoffer stoop to cover that base in 2015. As for Thomas Jackson (2011), that turned out to be a paean to a single credulously accepted source, and hardly a standard Darwinian one, the eugenics-promoting Richard Lynn (1996), whose specialized parsing of data eventually went on to Lynn (2005) intersecting Holocaust Denial. One of Jackson's baldest proclamations included the cheery affirmation that rich people "were presumably genetically superior." He didn't even try to document that one, not even with suppositions culled from Lynn.

The tendency for modern eugenics supporters to be rather weird racist xenophobes with a loose grip on sources, and not evolutionary scientists who study bones or DNA sequences for a living, finds additional support in the case of James Hart, who unsuccessfully ran for Congress in 2004 from Tennessee on a eugenics platform (where the GOP sprinted away from him in a hurry), Eugenics (2013a). J. Hart (1997) simultaneously distanced himself from the KKK and Nazi thinking on the eugenics issue while waving the free speech banner by defending Gary Lauck ("The children of the future thank you"), a neo-Nazi then serving a four-year sentence in Germany for his activity, Southern Poverty Law Center (2013b). J. Hart (2010) sounded like Stoddard (1920) déjà vu, advocating the impeachment of "Saddam Bush" for wanting to squander more American lives in the Iraq War and likewise relying on a questionable secondary resource for his supposedly Darwinian eugenics argument, John Glad (a retired professor of Russian Studies) on "Future Human Evolution: Eugenics in the Twenty-First Century." John Glad (2006, 21-44) offered a slim chapter on what he thought constituted a scientific foundation, which consisted of a brief mention of human evolution, a less brief defense of IQ testing of intelligence, and a very general argument that social cohesion couldn't survive too much diversity—all miles away from anything like a rigorous technical case. Unlike Grant in 1920 though, the level of biological understanding in the 21st century had grown so deep and vast that Glad's effort to sound scientific could only be characterized as piffle.

And then there's the gang surrounding President Donald Trump, whose family background already included a eugenics-style conviction that people (like himself) who are rich and successful became "winners" because they are genetically superior. Feder (2016) and Jones (2017) explored those convictions and the all-too-familiar resentment of a current crop of immigrants supposedly diluting Christian civilization seen in many of Trump's associates and advisors, including Steve Bannon.

It seems all sorts of people can dribble "scientific" concepts out in the course of riding their hobbyhorses, including evolution, but it doesn't necessarily follow that regular scientists would buy into their views or that they derived reasonably from them. The "evolutionary" eugenics of Stoddard-Grant in the age of crystal set radios and biplanes or the *American Renaissance* and Hart-Glad in a time of laptops and remote drones remind me of the generalized appeals to evolution in other pseudoscience works, such as Pauwels & Bergier (1968, 136-138) in the course of their mystery mongering approach to the world. You can call a slab of granite a steak, but I wouldn't recommend serving it for dinner, no matter how much spicy sauce you dump on it.

Interestingly, at the same time Egnor was engaging in daisy chain character assassination of Shapiro+Coyne+Scopes+Hunter+Darwin on the issue of 1920s American racism, a posting by Glenn Branch (2013j) for the National Center for Science Education's *Science League of America* serendipitously illustrated how far removed nativist racism could be from a belief in evolution. In the wake of the Scopes Trial, in 1926 the Senate considered amending the rules of radio broadcasting to allow the potential censoring of evolution shows, but ultimately rejected the idea. Firmly on the antievolution side in this matter was populist Prohibitionist white supremacist "Cotton Tom" Heflin (1869-1951), an Alabama Democrat who had helped draft the state's 1901 constitution that excluded blacks from voting (God had intended them to be the servants of white people, after all), and whose escapades are covered in assorted online venues, such as Watson (1982) and *US Senate* (2013).

Congressman Heflin took pride in having shot (with impunity) a black man Heflin had got in an argument with on a streetcar in 1908 for not sitting in the segregated section (and perhaps also having been drinking in public, a further unseemly affront to Heflin's Prohibitionist convictions), and cosponsored legislation establishing Mother's Day in the hopes voters wouldn't notice he also didn't approve of women voting either. Heflin's sojourn in the Senate derailed when the party denied him renomination after his anti-Catholic prejudice spurred him to support the Quaker-born Republican nominee Herbert Hoover for President in 1928 over the Catholic Democrat Al Smith (1873-1944) who also favored repealing Prohibition. By that time this paragon of tempered reason was in the news again for his apoplectic reaction to the captain of the New York University track team (who happened to be African-American) being allowed to legally marry a white girl: "Where are the white men of self-respect, of race pride? The great white race is the climax and crowning glory of God's creation," quoted *Time* (1930).

In the back-and-forth debate on the 1926 radio regulation proposal excerpted by Branch, Heflin had got all folksy by recounting how "old Uncle Rufus" back home got an antievolution resolution affirmed by his scripture-reading Negro constituents that "Resolved, God Almighty made all the niggers and most of the white folks, [328/329] but all them white folks what thinks they sprung from monkeys is right about it." There followed "Laughter in the Senate and galleries." And just how many of *them* swore by Darwin?

A further indicator of where actual racists fell in the antievolution campaign also occurred in 1926 when a coalition of "the Ku Klux Klan, women of the Ku Klux Klan, Junior Order of the United American Mechanics, Sons and Daughters of Liberty, Patriotic Order Sons of America, Patriotic Order of Americans, Daughters of America and the Order of Fraternal Americans" tried unsuccessfully to persuade the Virginia General Assembly to join the antievolution crusade, recounted by Branch (2014g), drawing on the period coverage of Dabney (1926, 354) and the more recent scholarly hunting of Wolfe (2012). Local Baptists opposed the Methodist-led effort and the antievolutionary Bible Bill died in committee.

Although formal efforts like these to reign in evolution education faded in the post-Scopes era, the clumsy downplaying of the topic in science textbooks and classroom instruction extended into midcentury, as paleontologist George Gaylord Simpson reminded in his 1961 essay, "One hundred years without Darwin are enough," excerpted in Mark Ridley (1997, 369-378)—a situation Stephen Jay Gould

(1999a, 139) and Kenneth R. Miller (1999, 10-11) recalled from personal experience, and which persists in many venues to this day, where even teachers who do not approve of creationist criticisms of evolution may downplay the topic to avoid conflict or even incorporate antievolutionary material under community pressure, Cornelia Dean (2005), Branch & Scott (2008), Paz-y-Miño C. & Espinosa (2009b, 672) and Scott (2010c, 242).

Martin Mawyer (1987a, 67) reflected this situation in a piece on creationist legislation efforts for the *Fundamentalist Journal*: "There was a time when students were told little or nothing about the theories of evolution-science. Now students are told little or nothing about the theories of creation-science." For this reason it was unnecessary to enforce any of the anti-evolution laws in the next decades after Scopes, for no human evolution was actually being taught—though Nardo (1997, 84) did note that some "enterprising" Tennessee teachers circumvented the Butler Act by talking about Darwin's forbidden book in literature class.

This implying also the converse: that to the extent evolution was taught directly, antievolutionary efforts would react to that, as the *NCSE* has found over the years, Wycoff (2008a). But back in the mid-20th century this was not so obvious, as the Scopes trial seemed to have settled the issue, abetted by decades of popular media that buffed the trial into a mythic ode where antievolutionism lay safely slain like Grendel in *Beowulf*, Larson (2009). All this quiet lulled many in the scientific community into thinking that creationism had "gone away," when it had only dozed off.

1.6 Section 4: Neapolitan Creationism—Scoop what you will of all that Deep Time

Many sources are available to navigate the creationist subculture. Numbers (1992) still provides the most thorough coverage of the history of traditional Biblical creationism, expanding on the survey Numbers (1982) supplied for *Science*. Eve & Harrold (1991) explored its sociological features, noting how only the radical animal rights movement has been so successful in challenging the presumptive authority of the scientific establishment (I would include anti-nuclear advocates as a third such group, peaking during the 20th century Cold War angst years). Tourney (1994) examined creationism as cultural anthropology, showing how the caricature of creationists as ill-educated Bible-thumping louts was both inaccurate and misleading to a genuine understanding of the source for their convictions. Larson (1985) surveyed anti-evolution legislative efforts, especially as they related to science education, and Eldredge (2000, 62-89) related the issues to the creation/evolution scientific debate.

In a nutshell, like Caesar's Gaul, 20th century American creationism may be divided into three parts. God, of course, was always in charge for them, but the details of what happened in Genesis—and most importantly when—were open to considerable interpretation. The dominant view embraced by conservative Christians circa 1920 was what would eventually be known as the "Day-Age" theory. It accepted the basic outlines of conventional geology, and allowed fossils (including ancient man) to belong to past creation "days" of unspecified duration. For these Day-Agers, the "facts of science" were not much of a problem.

But down in the trenches, significant changes were brewing regarding the finer points of creation chronology. Presbyterian minister Harry Rimmer (1890-1952) promoted the more specific requirement that the history of *human* life not exceed the confines of traditional Biblical teaching, though nonhuman fossils could still be ascribed to a Pre-Adamic age of indeterminate length. Referred to variously as the "Gap" or "Restoration" theory, this second side of creationist doctrine has enjoyed broad denominational appeal. Believers as disparate as C. I. Scofield (1843-1921) of the influential *Scofield's Reference Bible*, as did those "bad boys" of modern televangelism, Jimmy Swaggart and Jim Bakker. The Worldwide Church of God of Herbert W. Armstrong (1892-1986) favored Gap thinking, though his son Garner Ted Armstrong (1930-2003) supported Flood Geology creationism, Armstrong (2001). The Jehovah's Witnesses have embraced support for both the Day-Age and Gap theories, while Rimmer's forays into paleontology impressed DeRemer (1984) at Jerry Falwell's otherwise YEC-friendly

Fundamentalist Journal: "Discovering and studying human and animal remains furnished firsthand evidence to illustrate many lectures and refute evolutionists."

The distinctive third form of creationism, the full-blown Young Earth Creationism that would become the dominant breed of modern biblical antievolutionism, sprang from the brow of Ellen White (1827-1915), founder of the Seventh-day Adventists—though Toumey (1993, 33) noted the church would also embrace Gap Theory. Instead of passively accepting the standard geological framework, White declared God had arranged for to be taken on a guided tour of the Creation itself, allowing her to see how fossil life was actually the recent detritus of Noah's Flood (an event which the nasty "higher criticism" had supposedly banished to the moribund basement of mythological fantasy). With that the entire geological picture could be stuffed back into a Bishop Ussher-sized chronological box (where the 17th century theologian had pegged the world and universe as having been created roundabout 4004 BC), Branch (2014as).

By thus reinterpreting the context of the fossil record, in one bold stroke White simultaneously resuscitated the theologically momentous Deluge as a verifiable hydrologic event, and deftly pulled the rug from under evolution, which depended so heavily on the fossil sequence arrayed in the regular geological framework. Adventists run their own international network of schools to this day, and remain very touchy about maintaining doctrinal purity in the face of secular science information, as surveyed by the creationist Pitman (2010b) and the secular Willey (2012a-b).

In 1923, self-taught "geologist" and Adventist convert George McCready Price (1870-1963) tidied up White's Flood Geology for a more secular clientele in his book, *The New Geology* (Creation Scientists would be doing the same thing half a century later, as we'll see shortly). Price, incidentally, was the lone "scientist" the Scopes prosecution could scrape up in 1925, but as he was away in Europe at the time, he had to decline his spot in legal history.

Although the Scopes trial would affirm a state's right to dictate what was to be taught in their own publicly funded schools, William Jennings Bryan still would have liked to demolish evolution on an evidential front, but those scientists more accredited than Price who Bryan approached did not stampede to his corner, Numbers (1992, 55-57, 72, 98) and Branch (2014q-r). Little can be found on chemist Francis Perry Dunnington (1851-1944) of the University of Virginia, and even less on philosophy professor Charles B. McMullen of Centre College in Kentucky. More is known of Wheaton College biologist S. James Bole (1875-1956), a strict Fundamentalist and what would be called today an Old Earth creationist, who opposed evolution along with Higher Criticism, but couldn't be cajoled into testifying. This may have been fortuitous, as Bole slid around the conceptual map by using Price's *The New Geology* in his geology course while acknowledging that evolution even then had more of the facts on its side.

Farther afield, Johns Hopkins University gynecologist Howard A. Kelly (1858-1943) believed in the special creation of Adam and Eve, and so was willing to testify against human evolution, but did not reject evolution "of the lower creation" on scientific or religious grounds. Physicist Louis T. More (1870-1944) of the University of Cincinnati firmly objected to evolution thinking being applied to philosophy, but did not contend that the biological theory was necessarily wrong. More would have surfaced again secondarily had Cincinnati pastor Henry F. Lutz (1868-1926) been a witness; a former nonbeliever whose Christian faith included a firm belief in phrenology (relying on Alfred Wallace for it!), and whose predilection for quote mining remains popular among antievolutionists a century later.

Catholic nutrition crusader and combative antievolutionist Alfred McCann (1867-1931) was also a prospective witness, but didn't approve of Bryan's support of Prohibition, Numbers (1992, 72-73) and Branch (2015g). And then there was devout Flat Earth believer Wilbur Voliva (1870-1942), who offered to testify, Branch (2014an) drawing on the chronicle in Garwood (2007, 188-218) of Voliva's authoritarian utopian cult and the pancake planet he espoused. Had Price or Voliva been grilled by Clarence Darrow, that potential fireworks might well have eclipsed Bryan's celebrity in the matter.

As for *The New Geology*, though Price is still venerated in Adventist circles, such as Dean Harris (2004), mainstream geology was far from impressed, including those evangelical scientists who founded the *American Scientific Affiliation* (ASA) in 1941 when the *American Association for the Advancement of Science* (AAAS) began to seem too evolutionary for them. But as they thoroughly accepted the findings of modern geology, the *ASA* dismissed Flood Geology as rank pseudoscience.

An intriguing exception was one of the ASA's founders, William Tinkle, noted above apropos eugenics, whose Christian catastrophism distanced him from the ASA trajectory fairly early on. Creationism of any stripe was such a minority position by the time the ASA began publishing their Journal in 1949 (eventually renamed Perspectives on Science and Christian Faith) they didn't even bother presenting any Flood Geology papers to rebut, and sufficed with Kulp (1950) summarizing the evidence against it. Tinkle's contrarian views were relegated to occasional letters and editorial caveats, such as to the conventional geological position presented by Erdman (1953).

For those who wanted their Bible straight up, though, Flood Geology might have seemed ideal but for its Adventist associations. Flood Geologists also tended to regard full Day-Agers as hopelessly spineless compromisers with standard geology (much as doctrinal Intelligent Design believers feel today about Theistic Evolutionists). So for many years sectarian squabbling kept the three branches of creationism either at each other's throats, or at least glowering at each other over their stout denominational fences.

The disdain YEC believers have for their OEC brethren's biblical interpretations remains steadfast and absolutely uncompromising, as evidenced by Bert Thompson (1994a-b), Bill Morgan (2005c,z) or Terry Mortenson (2009b). Theistic evolutionists are even further off the biblical map, of course, where the placid acceptance of evolution by the *American Scientific Affiliation*'s Keith Miller (2001) may be contrasted with the succinct Bill Morgan (2005q): "science does not show it and the Bible does not teach it," and Morgan (2005e) warning that theistic evolution is a "cancer" killing any church embracing it. Because millions of years of evolution is littered with pre-Adamic sin death, Hank Hanegraaff (2005d) concluded "theistic evolutionists only wind up perverting God's Good News into no news, as we remain dead in our sins." Nutting & Nutting (1985) are less flashy than Hanegraaff but field similar reasoning, and Bob Ellis (2013d) was equally firm that the Bible and evolution cannot be reconciled. The distinctly *Kulturkampf* theological conservatism of the rejection of theistic evolution was explicitly reflected by Sam Petitfils (2014) of the *Bibletruth* website, affirming that "*Bibletruth* believes theistic evolution runs contrary to the creation account in Genesis and thus does not count it among the conservative views."

William Dembski (2006d, 100-101) referred obliquely to creationist disdain for theistic evolution while keeping his own predilections mum, but others have been more upfront about connecting the dots.

Hanegraaff (2005d) recommended Phillip Johnson's *Darwin on Trial* and Morris & Parker's *What is Creation Science?* for further study on the apostasy of theistic evolution, and Hanegraaff (2005h) cited *Darwin on Trial* again for an "intermediate level" assessment of "evolutionism and creationism" issues. The presence of *Darwin on Trial* in Hanegraaff's apologetic toolkit heralded that, though seldom so blunt as Morgan, Intelligent Design's objections to Theistic Evolution run just as deep, and likewise turn on theology more than science. This attitude even extended to the quirky sociologist Steve Fuller (2008, 95) pompously declaring "ID theory is much less pseudoscience than theistic evolution is pseudoreligion—religion with all the heart but none of the brain engaged."

When ID defender Hartwig (1995) highlighted the Evangelical or Catholic affiliations of the ID researchers for *Moody Magazine* (such as Dembski and Behe respectively) he readily tagged their collective efforts as a conflict of *creationists* versus *evolutionists*. And critics of Intelligent Design from Lenny Flank (2006b) to Barbara Forrest (2008c, 190; 2010a, 171) who have culled through the ID paper trail haven't had to dig too far before spotting just how little wiggle room there is between the "new" supposedly religion-free ID and the "old" scripture-obsessed Christian creationism.

While William Dembski has been quoted in Hall (2002) that the designer "could be space aliens" and Phillip Johnson was similarly disingenuous for Freedberg (2002) that "in principle it could be space aliens of high intelligence who did the designing," these public concessions did not reflect what either of them actually believed. Bill Dembski, for example, who explicitly ruled out extraterrestrials as an ID option in a February 2002 appearance on D. James Kennedy's show, Scott (2007, 69).

Casey Luskin (2008h) dug himself into the deepest hole on this point, triumphantly accusing Richard Dawkins (2008a) of misrepresenting ID for claiming their theorists "often use the alien scenario to distance themselves from old-style creationists" when they were upfront about their personal belief in God. Luskin conducted a Google search for the phrase "for all we know, the designer might be an alien from outer space" which Dawkins had put in quotation marks. That turned "up only one hit: his article."

Dawkins was thus guilty of paraphrasing and Luskin of disingenuousness, since not only had Luskin's Google quest missed Dembski and Johnson expressing exactly that position (even though not using the precise wording Dawkins trotted out) but so did Michael Behe in a passage Luskin went out of his way to quote. Behe himself is hard to peg on what he thinks, with Eugenie Scott (2009, 86) suspecting he may be sliding away from whatever brand of "theistic evolution" he did (sorta-kinda) embrace.

While the "space alien" dodge Dawkins was complaining about has faded from the ID apologetic quiver in the years since Luskin's harrumph, the issue remained as to how far-ranging the *theoretical* options are in practice for the purportedly unidentified (or unidentifiable?) ID designer (and only just the one?) apart from the personal convictions of the many design advocates who (by just happenstance?) were theologically conservative Christians. No non-Christian alternative was recognized as persuasive by Phillip Johnson (2002d), for instance, but compared to the legalistically precise Berkeley law professor, Dembski has been revealingly candid on several occasions. Dembski (1999b, 84) declared ID was simply "the Logos theology of John's Gospel restated in the idiom of information theory," which put Design theory exclusively on the block of sectarian Christian creationism (the Gospel of John being neither particularly Jewish nor Islamic).

The years since have further clarified Dembski's position on the YEC-ID-Theistic Evolution scale. In an interview with Devon Williams (2007) at Focus on the Family's *Citizen Magazine* to promote his new book with Jonathan Wells (*The Design of Life*, one of two replacements for the creationist *Of Pandas and People*) Dembski acknowledged that "The Designer of intelligent design is, ultimately, the Christian God." And when blogger Johnny Helms (2009) decided "William Dembski is a practicing 'theistic evolutionist'," based on Dembski (2009c), *The End of Christianity*, Dembski was quick to clarify: "I don't endorse evolutionary theory." Indeed, no apostate evolutionist he: "I'm an old-earth creationist" who accepts the Southern Baptist Convention position on Biblical inerrancy, and "I believe Adam and Eve were literal historical persons specially created by God," comments quoted with eye-widening interest by skeptic Josh Rosenau (2010a).

No wonder then that ID advocates get a sour face when Theistic Evolution comes up: it is no small trick to figure out how any "literal" Adam and Eve can be shoehorned into the known history of early humans and their hominid precursors, but the issue can never go away for ID followers any more than it can for overt creationists precisely because of its theological underpinning. As Daniel Akin (1994) President of the Southeastern Baptist Theological Seminary put it in his take on the creation/evolution issue: "A historical Adam & Eve is a must and not negotiable."

So when Joshua Swamidass (2012) in the *Wall Street Journal* took to task rising Republican star Marco Rubio's waffling on how old the Earth might be as a surrogate for uninformed evolution denial, *Evolution News & Views* (2012ab) responded not with an examination of the physical verity of Rubio's "less-than-thoughtful, unrehearsed comments" about geochronology but with a criticism of theistic evolutionists for insufficiently keeping the *theistic* aspect properly in focus: that if they allow for more than just billions of years and common descent, but insist on "Life emerging from unguided, unplanned, purposeless churning, with random variation and natural selection as the primary mechanisms

underlying the process," then this "poses obvious problems in reconciling it with a traditional theistic framework, Christian or Jewish." But it was precisely the point of the geology example that Christian scientific thinking had been able to incorporate all those billions of years into a refreshed theological framework, so why not unguided secondary causes for living systems too? Well, not if the "traditional theistic framework" was in fact what the *Evolution News & Views* advocates are not about to modify in any meaningful ways, come what may down the scientific evidence chute.

Likewise, and in striking contrast to his spin on Abraham Lincoln's putative theistic evolution (noted in section **1.4** earlier), the *Discovery Institute*'s John West (2012d) let the doctrinal cat out of the bag by expressly assailing the conflicts theistic evolution purportedly had with "traditional Christian teaching about the original goodness of creation and its subsequent 'Fall'," for their *Parent's Guide to Intelligent Design*. So much for ID being intrinsically separate from a particular religious perspective (a unique pair of people in Eden falling into original sin sounds pretty much the way Henry Morris' creationists conceive of it)—for *only* that Christian theological point was touched on as a source of conflict in the *DI* parental guide.

An interesting case study concerns Francis Collins' *BioLogos Foundation*. Given his prominence with the Human Genome Project, Collins got an early sympathetic Adventist take from Clausen (2000), but as Collins' *BioLogos* unapologetically pressed on to defend theistic evolution the welcome mat was pulled in. *SABBSA* (2010i) pegged their support of evolution as "Satan's Newest Attack!" and *Answers in Genesis* weighed in all frowny face with *jesus.org* editor John UpChurch (2011b) decrying "The Danger of BioLogos" while a Ken Ham video assaulted "The Anti-biblical Teachings of BioLogos"—eliciting a remarkably measured retort by Christian biologist Darrell Falk (2011) at the *BioLogos* website.

Falk was no stranger to contention by this time: some years before, accusations that his embrace of theistic evolution at the conventionally creationist Point Loma Nazarene College was destroying his students' faith drew the intervention of Point Loma alumnus James Dobson of *Focus on the Family*, stemmed after a block of Falk's students affirmed their faith had not been compromised, Stafford (2012). Falk (2010c-d) garnered a further sideswipe from the ID camp when he attended "The Vibrant Dance of Faith and Science" conference organized by Andy Crouch, senior editor of *Christianity Today*. This turned into a "bait and switch" rumble, with the ID participants using Falk's presence for a "showdown" of worldviews on how far evolutionary evidence would be given credence, variously covered by Hoppe (2010ai), Matheson (2010u) and Anika Smith (2010b).

When expedient, though, ID advocates have been willing to disingenuously shanghai theistic evolutionism for apologetic purposes, as when the *Discovery Institute*'s Jonathan Witt (2005a) claimed a poll of doctors showed 60% rejected "Neo-Darwinism"—never mind that the poll indicated over 77% accepted evolution (whether guided by a deity or not) and over 57% deemed Intelligent Design "religiously inspired pseudo-science," *Jewish Theological Seminary* (2005). Jonathan Witt (2006) similarly spun another survey of doctors by *HCD Research* (2005), which the design-friendly *Access Research Network* subsequently absorbed secondarily, *ARN* (2006).

Such tactics only underscore the peculiar position ID plays on the modern creationist landscape, as we'll be seeing recurrently as we explore the antievolutionary landscape. Because there is too much naturalism in Theistic Evolution to wrap their heads around, their hearts are left to gravitate to the simpler God-dominated worldview represented by rigid creationists, provided they can avoid coming to blows over how many zeroes there are in the age of the Earth or whether tyrannosaurs were vegetarians before the Flood.

That ID advocates have to tread so carefully here may be credited to the unflagging enthusiasm of Henry Morris, a civil engineer whose study of Rimmer in the early 1940s led him to Price's book. Cleaving off any remaining Adventist connotations, Morris is the fellow who mutated Price's minority Flood Geology position into the formidable doctrine of today's Scientific Creationism.

1.6 Section 5: The Gospel According to Henry Morris—Young Earth Creationism goes "mainstream"

Isaac Asimov once observed the solar system consisted of "Jupiter plus debris." In the cosmos of professional creationism, Henry Morris performed the Jovian role. Of eleven main creationist associations listed by Toumey (1994, ix), five were Morris' handiwork—besides the comprehensive account in Numbers (1992), see Eve & Harrold (1991, 120-135) for clear passage through the forest of creationist organizations, in and out of the Morris preserve. Morris was one of the seminal "Team of Ten" who founded the *Creation-Research Society* (CRS) in 1966. With Rev. Tim LaHaye (1926-2016), an End Times preacher known for his *Left Behind* apocalypse book series (filmed starring Kirk "Crocoduck" Cameron), Morris established the Christian Heritage College, and with Kelly Segraves these three set up the *Creation-Science Research Center* there in 1970. Morris also had a long, though unofficial, link with the *Center for Creation Studies* at Jerry Falwell's Liberty University. Finally, after a schism with Segraves over denominational neutrality and political activism (Morris favored retaining church affiliation and focusing on educational efforts), he established the influential *Institute for Creation Research* (ICR) in 1972, which served as base of operations for the indefatigable Duane Gish and remains a major creationist player.

Parenthetically, Christopher Cagan (2003) waved off Morris' association with Falwell with some sprightly legalistic hairsplitting: "Although Jerry Falwell and Henry Morris (the leader of the Institute for Creation Research) may have met, they had no organic connection, they are not members of the same church or denomination, and they certainly are not working together in a dangerous monolithic movement to crush all opposition under their feet." Well that is fine, isn't it? Nobody need fret over the *ICR* claims being channeled by Falwell among his conservative compatriots over several decades or the creationist viewpoints presented at Liberty University or on Falwell's radio broadcasts, because there was no "organic connection" between them—like what, an umbilical cord, or a contract signed in blood?

An interesting illustration of the mindset at Liberty University concerns Purdue-trained geneticist Lane Lester, an "alumnus of the BSCS textbook project, who had been rescued from evolution by Gish," Numbers (1992, 290). Having worked for many years as a research scientist for Morris, Lester became director of Liberty University's *Center for Creation Studies* in the 1980s, and set up its "Museum of Earth and Life History," which Susan Harding (2000, 219-226) explored during her research on Jerry Falwell. One display offered "evidence of the Flood: a bird's nest containing a fragment of Noah's diary (Birdis Nestialis Noahinsis); a piece of Indian Corn extracted from the mouth of a woolly mammoth (Acornis Copi); and a black frame case with a dozen small animal bones sticking out of a bed of unadorned plaster of paris," Harding (2000, 223). When Harding questioned Lester about this "overtly preposterous" exhibit he acknowledged it was a student joke. The problem was nothing on the display indicated that to the unwary observer. Eventually the exhibit was removed—and the museum itself was closed in the mid-1990s (ostensibly for budgetary reasons).

Although the Southern Baptist Henry Morris was open and generous in acknowledging to historian Ronald Numbers the intellectual debt he owed to Price's work, as well as the criticism of radiometric dating by Price's disciple Clifford Burdick (1894-1992), Numbers (1992, 194-195, 399n), that information has atrophied in the creationist community. Angela Hunt (1987) did not allude to the role of Price's work in the genesis of Henry Morris' Flood Geology in her paean at the *Fundamentalist Journal*, for example, and when I mentioned the history of YEC at Mike Riddle's *Answers in Genesis* presentation at a local Spokane, Washington church in March 2010, Riddle steadfastly insisted there was no such connection. One of the church members at Riddle's 2010 presentation (who prided himself on his direct contact with Morris and Gish) likewise declared how Morris derived his Flood Geology arguments simply by "reading the Bible." Georgia Purdom & Mark Looy (2011) summarily reject Numbers' account at the *AiG* website, which causes the *SABBSA* (2011f) to stand out from the pack for at least acknowledging *The*

New Geology as "inspiration and basis" for The Genesis Flood in what was for them a better than average summary of the history of the creation-evolution controversy.

Perhaps more amazingly, the pleasant young pastor of a local Spokane Adventist church I spoke with after some antievolution presentations in 2012 was totally unaware that Young Earth Creationism derived from his own denomination's White and Price, and a young ex-Adventist I met at a meeting of the Eastern Washington University Atheists club in 2013 also had never heard of the Adventist-YEC historical link in her own understanding of the faith. The propensity for historical revisionism among *Tortucan*-driven institutions will be seen to play as critical a role in the dynamics of modern *Kulturkampf* creationism as does their wanton disregard of the formal scientific literature.

Stepping back for the bigger picture, just as the rise of Bryan's creationism was spurred on by the Brave New World of the 1920s, all it took for Scientific Creationism to crystallize was the customary social crisis, this time after another World War had brought on even more upheaval, Toumey (1994, 23-24). Though we tend to view the 1950s with "Leave It To Beaver" nostalgia, beyond the surface conformity of the suburban tract lots lurked the grimy paranoia of Joe McCarthy. Add to that the traditional "What Is the World Coming To?" mentality, where with one well-aimed pelvic wiggle Elvis Presley could send fundamentalist preachers into paroxysms over modern "degeneracy" as pessimistic as their 1920s predecessors. And of course there was even more Communism afoot, a genuinely dangerous ideology that could also play the role of expedient boogeyman.

When the Soviet Union was first into space with Sputnik, America's political leaders had to deal with the unsettling prospect of perhaps being fatally behind on the Cold War learning curve, and amid the furious effort to revamp the high school science curricula that ensued, the Biological Sciences Curriculum Study (BSCS) duly reinstated all the evolutionary work that had piled up since Scopes' day—and still active, as noted by Witham (2002b, 74-79). With that stimulus the somnolent creationist movement perked up in a hurry.

That 1920s fundamentalism might stem from a profound dissatisfaction with modern life was understandable. What was to prove so unexpected for secular science half a century later was how these same processes acted along entirely new demographic lines, accompanying the growth of large metropolitan and suburban areas. Scientific Creationism was no longer a rural southern eccentricity, but this realization had yet to invade the cultural and scientific establishments. Indeed, when arch-skeptic Martin Gardner (1957, 123-139) dissected Price and Rimmer in Fads & Fallacies in the Name of Science, he did so as one might have extinct life forms (coming himself from a deeply religious background, Gardner was impressed by Price, but that youthful dalliance failed to survive a strong dose of college level geology). Relegating creationism as Gardner did to somewhere between "monkey gland" medical quackery and Salem witchcraft did not prepare readers for the prospect of an active Creation Science that was about to flex its muscles.

Even the meticulous George Marsden (2006, 231-257), in updating his classic 1980 book on American Fundamentalism, although spotting the new suburban connections of the renascent Religious Right taking center stage in the political arena (something the old fundamentalism of Bryan's day never managed), missed complete how that burgeoning *Kulturkampf* network was at the core of the renewed campaigns against evolution. The narrow creationist efforts of Henry Morris and the later ecumenical morphing of its essential tropes (minus the geochronology fireworks) into Intelligent Design by Phillip Johnson evidently fell well below Marsden's scholarly radar.

Some of this misperception was ironically reinforced by the evocative 1955 hit play inspired by the Scopes Trial, Jerome Lawrence and Robert E. Lee's *Inherit the Wind*, brilliantly filmed in 1960 by the leading issues director of the day, Stanley Kramer (1913-2001), just as the seeds of the new creationism were being sown. With "creationism" as something nobody supposedly believed in any more, the play and film were concerned with different issues: the Cold War anxiety over freedom of expression and opposition to McCarthyist mob assaults on academic integrity. *Inherit the Wind* also appeared just as

the civil rights movement was heating up, which would have given its picture of rural Southern bigotry a far from stereotypical cast. In that context the fierce townspeople of the fictional Hillsboro represented a lot that was genuinely unattractive and dangerous about fundamentalist ideologies then and now.

Moreover, by the time Creation Science was getting into full swing the Scopes Trial had slipped into a dim historical limbo—for example, Ravitch & Finn (1987, 66) noted that a disconcerting 62.8% of students surveyed didn't even know what the trial was about. So for many people the film *became* the trial. Although many of the play and movie's strongest moments were taken directly from the trial transcript (such as Darrow's powerful peroration about how making a crime of teaching evolution in the schools today was just the first step in "marching backward to the glorious ages of the sixteenth century when bigots" were busy burning enlightened people), a great many liberties were nonetheless taken in setting up the fictional confrontation, as covered by Randy Moore (1999e) or Benen (2000b). Even as a kid, though, I wasn't thrown by this, as I couldn't help noticing that everybody's names were *different*: Brady for Bryan, Drummond for Darrow, Hornbeck for Mencken and Cates for Scopes.

There was a real Henry Drummond (1851-1897), by the way, a Scottish evangelist and theistic evolutionist whose Social Darwinist opinion of the poor as biologically parasitical is criticized by C. Zimmer (2000e, 17-19). A parenthetical note on chronological precision here: antievolutionary biophysicist Cornelius Hunter (2003a, 114) referred to "The eighteenth-century theologian Henry Drummond." Of course he might have got him confused with the Henry Drummond (1786-1860) who was an MP and founder of the Catholic Apostolic Church, but his dates would have him more properly belonging to the 19th century too.

Creationist lawyer Wendell Bird (1989, Vol. 2, 334-335) showed a far broader disinterest in the finer points of chronology in his astonishingly repetitive tome *The Origin of Species Revisited* when he touched on the topic of Old Earth creationism, listing Harry Rimmer (1890-1952), Douglas Dewar (1875-1957) and George McCready Price (1870-1963) as coming from "the early nineteenth century." Bird may never have realized his own mistake because he didn't stop to put dates to these folk, but see Numbers (1992, 60, 73, 94, 141) for their particulars. Price, of course, was a prickly defender of *Young* Earth creationism through most of his career. Evidently caught in his own temporal backwash, Bird went on to drag William "Lord Kelvin" Thomson (1824-1907) and Philip Henry Gosse (1810-1888) into the *eighteenth* century.

While we're on the subject of getting the historical base straight, I must give a nod to the Reverend D. James Kennedy (1930-2007), whose Coral Ridge Ministry radio and television broadcasts from Florida promoted both YEC and ID advocates with great enthusiasm for many years. In his apologetic book, *Skeptics Answered: Handling Tough Questions About the Christian Faith*, Kennedy (1997, 95) referred to "one of the most famous historians, writers, and skeptics of the first half of this century—H. G. Wells, who wrote the famous *Outlines of History*. Probably best known for his science fiction and movie directing, he was, by profession, a historian as well as a very outspoken skeptic of Christianity."

While Herbert George Wells (1866-1946) did supply a penetrating screenplay for the 1935 science fiction classic *Things to Come* (directed by William Cameron Menzies), it was *Orson Welles* (1915-1985) who was the one actually known for film directing. Kennedy may have slipped a name association cog here (as Cleone Weigand did when morphing Jack Parr into Jack Carson in section **1.3** above) because of Welles' famous radio broadcast of the other Wells' *The War of the Worlds* that scared the pants off Depression-era Americans in 1938. Kennedy's memory glitch reminded me of the creationist children's book that Stephen Jay Gould (2002a, 988) commented on, where a picture of robber baron Jay Gould (no relation) had been used to illustrate him!

1.6 Section 6: The *Inherit the Wind* Weather Report—Major cold front with recirculating bursts of hot air

The background context for Inherit the Wind should have clued anyone in that this wasn't a

documentary on the Scopes Trial, but alas not everyone has their detail detectors switched on or in working order. Indeed, it may be argued that only a hopelessly naïve bumpkin should presume that *any* film about a historical subject could be taken as any more than accidentally close to the truth, as deftly documented by the assorted essays in Carnes (1995) ranging from Hollywood Biblical and costume epics to trendy liberal message pictures and Soviet agitprop.

Conflating the Scopes Trial with *Inherit the Wind* in this populist way, antievolutionists have been bristling over every deviation from the 1925 original. Idaho creationist Chuck Missler retread James Perloff (1999, 197-214) to this end as Perloff (2000), while Bill Morgan (2005ae-af) at *Creation vs. Evolution* expressed comparable concern that impressionable students would be exposed to this "very anti-Christian book and play" (*book?*) whose use of fictionalized characters was "a license to smear."

Answers in Genesis offered in-house analysts David Menton (1996), and a DVD lecture and booklet revamp of Menton (1984) was recommended in turn by David Wright (2006b) under "Inherit the Prejudice" at AiG's website section to set the record straight on that "terrible anti-Christian movie" (without offering any specific criticisms of the film's contents himself, though). Farther out on the secondary citation grapevine, a PowerPoint presentation lecture by Jobe Martin (2006) relied solely on Menton's account. Interestingly, Martin never referred to the fictional characters' by name, which may well have been because Menton (1984; 1996) had put BRYAN and DARROW in as the speakers in the excerpts from the play and film instead of calling them BRADY and DRUMMOND. Given Martin's peculiar understanding of the "evolutionary science journalist" Milton in section 1.3 above, it may well have been that Martin hadn't realized that the folk in the play and movie were in fact fictionalized.

For the *Alpha Omega Institute*, medical pathologist David Demick (2005a) sought to remind readers "of what really happened" in the trial as opposed to "the way in which this event has been distorted by humanists—especially through the well-known play and movie," *Inherit the Wind*. For example, Darrow was "cited for contempt of court" (evidently forgetting that this incident was incorporated into the play and film) and "The Scopes trial reminds us that creationists are not only confronted by distortions of evidence and outright lies, but also by smear tactics, ridicule and unfair suppression." Demick discussed none of the excluded scientific evidence that was being contended at the time (some early human evolution data and the example of fossil horse evolution were on the scene by then) so readers might get a glimpse as to what counted as "distortions," nor any details of the "humiliating series of barbed and sarcastic questions in which Darrow did his best to heap scorn upon the Bible and conservative Christians." Since all that was in the trial transcript, though, Demick had lots to choose from: from exactly how long the days of Creation were, whether the Sun actually did tarry for Joshua over Gibeon, or how Chinese history was supposed to be crammed into the Biblical picture.

Darwin critic Windchy (2009, 103-135) devoted a full chapter to "The Great Scopes Scam," though his grip on the finer points was no tighter than the rest of *The End of Darwinism*. The McCarthy Era context of the play and film thoroughly eluded him, but as a film history buff I couldn't pass up this gem on the casting of the film version: "Spencer Tracy, who won an Academy Award for his performance as the character based on the defense attorney Clarence Darrow," and "Gene Kelly, better known as a dancer, who somehow was cast as the character representing the cynical, pro-Darwinian columnist H. L. Mencken."

Sorry, Eugene, but Kelly was an accomplished dramatic actor who also could sing and dance (and eventually become primarily known for that through his films done at the Freed Unit at MGM), much like James Cagney who could hoof and emote with equal verve over at Warner Brothers. Stanley Kramer had indulged in a similar casting-against-type move the year before when he had fellow MGM hoofer Fred Astaire portray the guilt-ridden nuclear physicist in his moving 1959 doomsday film *On the Beach*. As for Spencer Tracy's 1960 Oscar, that would be news to Burt Lancaster, who won that year for *Elmer Gantry* (Tracy was nominated though).

Over in ID apologia land, the mantel of Scopes as a teacher persecuted for bucking entrenched

authority has proven an attractive trope for a group so anxious to be seen as the victim of Darwinist oppression. This was the tack taken by *Family Action Counsel of Tennessee* founder David Fowler (2011), for example, covered by Lebo (2011l, r-s) regarding an attempt to inject ID into the schools there under the guise of promoting critical thinking and academic freedom (a recurring theme in the antievolutionist controversy, as we shall see).

But peek behind the scholarly curtains and Intelligent Design has no less ideological a take on the details of the Scopes case as their YEC counterparts.

Starting at the top, Phillip Johnson (1997b, 24-36)—reprised for the *Regent University Law Review* (Regent University an institution founded by *Kulturkampf* warrior Pat Robertson) as Johnson (2001a)—cited Carol Iannone (1997), who had returned the back scratching by offering Johnson's *Darwin on Trial* as her main prop for the idea that "the proof for Darwin's theory remains spotty." In his analysis for the Detroit Baptist Theological Seminary (that sidestepped the science evidence for evolution then or since), Gerald Priest (1999, 66) cited only Iannone to establish that Bryan and his views were not "crushed at Dayton." The *Discovery Institute* (2001a, 143-144) Viewer's Guide to the PBS series *Evolution* also drew on Iannone's treatment.

Johnson (2004b) later alluded to *Inherit the Wind* in an article for *Touchstone* magazine on the baneful frequency of evolutionary "propaganda" (part of a special issue on "Darwin's Last Stand?"), condensing the Scopes Trial into a "farce" that was converted "into a moving tale of vicious persecution by Christian ministers that bears little resemblance to what actually happened."

One may pause briefly over Johnson's use of "ministers" in the *plural*: since there is only *one* antievolution minister in the play and film (inspiring lots of angry citizens), while another pro-evolution cleric is explicitly set to testify in court, Johnson's trope showed how readily the imagery of the film could get dissolved into a fog of ideological nitpicking. Recalling from above that *all* of the scientific witnesses in the real trial were religious believers, *Inherit the Wind* was actually downplaying the participation of Christian evolutionists!

By the time Casey Luskin penned his 2009 *Liberty University Law Review* analysis (and that would be Jerry Falwell's YEC-friendly Liberty University, remember) claiming evolution's supporters were encouraging "violations of the Establishment Clause" by opposing the inclusion of Intelligent Design arguments in science education, Johnson's treatment had petrified into iconic status, as Luskin (2009m, 403) specifically framed his coverage as one showing "the impropriety of the common '*Inherit the Wind* stereotype." A most curious place to start, as Luskin never alluded to the topic again, so that any reader wading through his eighty-seven page treatment would end their adventure none the wiser as to what this "*Inherit the Wind* stereotype" supposedly involved.

Likewise Edward Sisson (2004b; 2010, 77) in the *Touchstone* "Darwin's Last Stand?" issue and article in the *Evidence for God* anthology edited by William Dembski and Michael Licona, twice summarily decreed how *Inherit the Wind* had shown the Darrow-Bryan exchange "in a false light" without supplying any examples of literary misdemeanor or corroborative documentation (many of the juiciest exchanges in *Inherit the Wind* were drawn directly from the trial transcript, such as the "I don't think about things" example).

More revealing of the ultimately heterodox nature of ID apologetics, though, would be Wayne House (2008b, 179-190), revamped from a 2001 *Regent University Law Review* article. An ostensibly ID-oriented advocate, House nonetheless actively raided the explicitly creationist website *bible.ca* for what was by then the rather dated account by the creationist Menton (1984). Incidentally, *Interactive Bible* (1994) fulminated how *Inherit the Wind* constituted "Intellectual Pornography."

Running in the opposite direction is YEC Jerry Bergman (2010a) stewing Menton, Perloff and Johnson together in his treatment, where the rabble-rousing evangelical crowds that had descended on Dayton were laundered down to a mild mannered "innocent minority" grievously maligned by the "grossly perverted events of the Scopes Trial to advance a specific social agenda."

What all these treatments have in common is a most selective reading about what "inaccuracies" they want to complain about, and thus suggesting why they are going to the trouble. Take Carol lannone declaring, "Bryan was not a biblical literalist." It is quite true that the fictional Matthew Harrison Brady's affirmation of literal 24-hour creation days was not the position of Day-Age believer William Jennings Bryan, though even that isn't quite as it appears at first glance (where Bryan only appeared to accept geological time scales, but in practice clung to the tradition Ussher chronology for all major biblical episodes).

Henry Drummond's folksy tolerance was also spared the scalding atheism of Clarence Darrow, whose attitudes got shunted instead over to the H. L. Mencken stand-in Hornbeck, as noted in Larson *et al.* (2008). Which brings us to another interesting point: where the film ended up. Of all the critics only Carol lannone alluded to the concluding scene, which undermines the supposedly pro-atheist perspective claimed for it. After Brady's death it is the Hornbeck character (played by Gene Kelly with deft cynicism, Windchy take note) who gets raked over the philosophical coals by Drummond, accusing Hornbeck of never rubbing two nouns together except to "blow something up," and ultimately of not believing in *anything*.

But the dramatic license of the playwrights cut both ways, where the fictional characters hardly reflect all the bumpy aspects of their real life counterparts. While disapproving of the Klan's hatred of Catholics and Jews, Democrat William Jennings Bryan was also very much a politician, and steered well clear of the race problem boiling over during his time, deciding eventually that segregation was part of the divine will, and even blocking criticism of the KKK in the 1924 Democratic party platform because it deflected them from defeating the Republicans (Calvin Coolidge running for his own term after becoming president after Harding's death), Kazin (2006, 93-94, 227-228, 280-281, 284). In a piece for *AiG* on "William J. Bryan's Fight against Eugenics and Racism in the Scopes Trial," Jerry Bergman (2013b) invoked Kazin's book on Bryan's admiration for Jefferson and the American Republic, but successfully managed to overlook Bryan's tacking around segregation and the KKK.

Incidentally, in the Coyne-Shapiro-Egnor flap above, Shapiro (2013d) had brought up Bryan's maneuver on the 1924 anti-KKK plank along with recalling Tennessee's school segregation history, prompting Egnor (2013h) to leap in defense of the state's sullied honor by inserting different words into Shapiro's mouth: "Tennessee was one of the minority of states that refused to pass a eugenic sterilization law. Shapiro slanders the good people who tried to prevent the teaching of racist eugenic swill to their children," and "After insulting Tennesseans for rejecting Darwinian filth about human evolution and asserting that blacks liked being compared to apes by Darwinists, Shapiro tries to stick the KKK label on Bryan, who detested and fought the Klan all his life. Such is Shapiro's 'scholarship.' Carrying water for eugenics is no easy task, not pretty."

Whether Egnor eventually castigates Kazin for his Bryan scholarship on those very matters remains to be seen. As for Egnor's counterargument on the sterilization issue, while Tennessee never adopted a compulsory sterilization law, they still operated institutions for the feeble-minded—and not very well run ones according to *Eugenics* (2013a). If lynchings are taken as another indicator of a less than rosy racial environment among the "good people" of Tennessee, the state fell around average for Southern states (totaling 204 murdered from 1882-1968), *Tuskegee* (2013).

Which brings us to consider another character attending the theatrical Cates Trial, *Mrs.* Matthew Harrison Brady, Sarah, who in *Inherit the Wind* was a most gracious and wonderful woman, whom Drummond rightly held in the highest esteem. In a pamphlet on Bryan's life and *Inherit the Wind* done for Bryan College, Cornelius (2007, 3) tersely reminded that "Instead of Bryan being mothered by his wife, he took care of her, for she was an invalid," and "Bryan and his wife were on good terms, and she did not admire Clarence Darrow." There was no hint of the rather tawdry bigotry of the real Mary Bryan, mentioned by Kazin (2006, 291-292): from her commenting on the Jewish attributes of lead ACLU lawyer Arthur Hayes (1881-1954) to her *eugenical* fears that the evangelical hoi polloi at Dayton were

regrettably just the sort of people whose intermarrying threatened to weaken the American stock!

In its selective swipe at *Inherit the Wind* the creationist *Interactive Bible* (1994) reprinted an earlier version of the Cornelius piece, as well as John Morris (1995a) claiming the science of 1925 did not support evolution, and the inevitable Menton (1984), but honors for evasive bravado here fall on Jerry Bergman (2010a, 64). Even though directly citing Kazin (2006) two pages later, Bergman managed to miss the segregationist waffling of Bryan as well as the anti-Semitism and eugenics tint of Mrs. Bryan, and successfully avoided intimating that there might have been scads of racist Christians inhabiting the era (the KKK were no bastions of evolutionist atheism) in his haste to whittle the unapproved bad guy list to but one side: "The evolution of the 1920s that Bryan opposed was blatantly racist and sexist."

These many differences between play and reality should have prompted the critics to consider the deeper relevance of what the authors of *Inherit the Wind* were up to: it is Hornbeck's strident iconoclasm that is castigated at the end of the film, as much as the angry fundamentalism of the Hillsboro mob. That many audiences then and now could fail to catch the deeper affirmation of tolerance and thoughtfulness *Inherit the Wind* represented shouldn't be that big of a surprise once you understand how many tortucans there are in the world. Although Harvard college audiences of the 1960s may have cheered at every jab at Brady, as Phillip Johnson (1997b, 30) complained, that may have been no deeper an enthusiasm as the cries with which later audiences would respond when the Millennium Falcon escaped Darth Vader by slipping into hyperspace in *Star Wars*.

The high irony of the *Inherit the Wind* revisionism is that while the views of the fictional Brady (a creation of the world in 4004 BC and every jot and tittle of the Bible being incontrovertibly true) were not representative of 1920s creationism, as Gregg Easterbrook (1999) pointedly reminded of Bryan in his criticism of *Inherit the Wind*, they are *exactly* the present day positions of *Answers in Genesis*, the website ID-friendly Mr. House so freely lifted his Menton article from, or the YEC *Conservapedia* (2012a) piece on the Scopes Trial that drew on Easterbrook secondarily.

Though at times even YEC advocates try to keep Bryan v. Brady on the back burner, such as a May 1, 2010 installment of the *Days of Praise* emails at the *Institute for Creation Research* on *Inherit the Wind* avoiding the subject while insisting the film depicts "creationists and Bible believing Christians as fanatical buffoons."

The YEC journal *Reason & Revelation* has at least shown some consistency here, with Garry Brantley (1994) staunchly defending literal 24-hour creation days while Brad Bromling (1996) and John Morris (2011a) go against the YEC apologetic grain by criticizing Bryan for being insufficiently biblical in his willingness to accept long geological ages betwixt the Genesis acts as well as a localized Flood. "The end result? Christianity largely retreated underground and withdrew from the public arena," harrumphed John Morris, which may be something of a surprise for the generations of very active Christians during this period of their supposed eclipse.

While it is disingenuous enough of the YEC side of the revisionists to criticize *Inherit the Wind* for not reflecting Bryan's views when it is actually Brady's position they believe in today, the deafening silence of the ID side here is far more telling. None have ventured whether the Biblical analysis proffered by modern creationists contains anything questionable.

Take Phillip Johnson. Although calling the play "a bitter attack on Christianity, or at least the conservative Christianity that considers the Bible to be in some sense a reliable historical record," Johnson never tried to identify which Scripture (if any) being thrashed over by "Brady" and "Drummond" might have qualified as *historically reliable* (the stopping of the sun for Joshua at the Battle of Jericho, for instance). As for the many pseudoscientific arguments actually offered by Price or Rimmer back in the 1920s, reprised in fresh paint by today's creationists, Johnson has ventured no farther than writing "some creationists really have made crazy arguments," Johnson (1997b, 41) or offering purely descriptive comments on the popularity of Creation Science in Johnson (2008, 23-27).

It is precisely how one decides that something is a "crazy" argument that is at the heart of the

creation/evolution debate, and Johnson's studied reluctance to invade that area represents a profound measure of just how useless Intelligent Design promises to be from a methodological perspective. But hardly useless from the standpoint of religious apologetics, which is the ultimate reason why the *Inherit the Wind* revisionists are so exercised about its alleged distortions. Whether it is Johnson or *Answers in Genesis*, the revisionists are aiming for bigger game than factual accuracy in popular films. It involves nothing less than how people perceive themselves, their nature and ultimate purpose in life.

As noted by anthropologist Christopher Toumey, there was a deep theoretical division between 1920s creationism and its 1950s Flood Geology reincarnation. Those earlier creationists had focused on the issue of *human* descent, and did not (at least in theory) necessarily preclude significant evolution for everything else. Their objections hinged on the seeming determinism of evolutionary postulates, and the chief proponents of that were usually clergy. But a lot of scientific evidence had come along since the 1920s, and the new Scientific Creationism of Henry Morris faced a very different factual landscape. Evolutionary thinking had so completely integrated human evolution that it was no longer possible to keep the two separate.

Enamored now of "scientific" geological exposition, the new creationists affirmed those "slippery slope" implications of Darwinist thinking by opposing *all* significant naturalistic evolution. And in a fascinating about-face, Tourney (1994, 49) noted how it was now not the *determinism* of evolution that so bothered creationists, but it's supposed *randomness*.

This extends from Young Earth creationists like Donald Chittick (1981, 44-45) to Intelligent Design advocates like William Dembski, expecting order not randomness to underlie God's universe, Kern (2000). A twist to this thread concerns Dembski (2006d, 101-102) extoling eccentric libertarian Robert Ringer as a suitable "critic of Darwinism," with subsequent communication leading to Ringer offering Dembski (2010c; 2011a) a platform for a *Kulturkampf* rant on "Saving Our Freedoms from Darwin" in which Dembski claimed "it's easy to understand why so flimsily a supported theory commands such vast support, especially among our ruling elite. It provides an incredibly effective means of social control." Offering not a shred of evidence that Darwin-inspired ideas have translated into *any* observable tool of "social control" (let alone an "incredibly effective" one, Dembski spotted the behaviorist chestnut of B. F. Skinner (1972) and the recent libertarian paternalism of Thaler & Sunstein (2008) as exemplars of those who see "utopia as just around the corner if only people can be properly herded into the right social, political, and economic environment." To what extent the hypothesized herding instinct of behaviorist paternalism contributed to such actual social occurrences as the Wall Street meltdown of 2009 (or the popularity of Ken Ham at the *Family Research Council*) Dembski didn't venture.

Ringer (2011b) meanwhile waxed metaphysical at *WorldNet Daily* that the universal snow globe would be devoid of free will-facilitating indeterminacy after the "so-called Big Bang" were it not for putative shaking by a "Supreme Power"—muddling notions of "infinite" and "random" when it came to earthquakes and hurricanes into a mix that Ed Brayton (2011) dubbed "gibberish." Which may be contrasted with yet another antievolutionary contrarian: David Berlinski (2011) paddling up the determinism stream the other way, against the current, insisting random (but nonetheless natural) biological processes like genetic drift somehow repudiated general evolution.

Alas, Ringer or Berlinski notwithstanding, Schrödinger's evidential cat had slipped out of that bag some time ago. As Laura Snyder (2011, 197) noted, early 19th century thinkers disliked the very idea of randomness as unscientific, but modern physics has had to embrace it as part of the fundamental fabric of the universe. And John Dewey recognized the importance of unpredictability when it came to evolution in a famed 1909 lecture, Milner (2009, 134-135)—a nuance overlooked by Nancy Pearcey (2001, 489-493) busily "deconstructing" Dewey's pragmatic "instrumentalist" approach to knowledge as incongruent with the sort of "transcendent, eternal Truth" she believes in.

Whether antievolutionists like it or not (or think about it or not), Dewey's insight has not been overturned by subsequent scientific investigation. Stochastic (random) effects pervade our lives,

Mlodinow (2008), and biological processes are no exception. Some technical examples on gene expression: Smolen *et al.* (1999), Azevedo & Leroi (2001) contrasting McAdams & Arkin (1997) with Britten (1998), Fedoroff & Fontana (2002) re Elowitz *et al.* (2002), and Munsky *et al.* (2012). At the developmental level, Matheson (2010t) highlights the implications of Bénazéraf *et al.* (2010) on random motion in amniotic embryo elongation, while a commentator on Matheson's piece called attention to Lizunov & Zimmerberg (2006) on the "Brownian ratchet" employed by bacterial cells. Similar stochastic processes contribute to cell division in plants, Prusinkiewicz (2011) re Besson & Dumais (2011).

Even more interestingly, order can emerge from the underlying genetic "noise" in a variety of contexts: Paulsson *et al.* (2000), Berg *et al.* (2000) and Buckee *et al.* (2011). The deeper structures of this process may be glimpsed in the theoretical modeling of Kepler & Elston (2001), Swain *et al.* (2002) and Sasai & Wolynes (2003). The downside is real too: such leaky randomness can be exploited by pathogens or otherwise lead to disease, Arkin *et al.* (1998) and Cook *et al.* (1998).

What this aside on randomness illustrates is the persistent disconnect between the range and depth of the existing scientific literature and the dollhouse version of it fielded by antievolutionists, too anxious to pigeon issues as philosophy instead of foraging as widely as possible among the facts of nature. It underscores also the deep logical imperative driving their tactical efforts: in order to rescue the traditional biblical worldview of humanity as special creation, antievolutionists cannot allow even the scientific camel's nose under the tent. As we'll be exploring in the chapters to come, discovery after discovery is elbowed aside to keep the design path clear of inconvenient factual debris. Ultimately the whole evolutionary shebang has to be junked, since at every stage it throws roadblocks in front of the *Kulturkampf* caravan.

Just as Scientific Creationism was the sanitized version of Adventist Flood Geology, Intelligent Design would offer a **Creationism Lite** that could appeal to anybody who balked at the naturalistic implications of current scientific thinking. No more would antievolutionists need to get into fights over geochronology. All that potential division could be flung aside in a Kumbaya "Teach the Controversy" unity that inevitably dispensed with most of the fiddly bits along the way.

1.6 Section 7: Scientific Creationism Goes to Court—Epperson v. Arkansas and McLean v. Arkansas

That transformation of Flood Geology into Creation Science and thence into Intelligent Design turned upon a chain of events taking place in the *Inherit the Wind* venue of American courtrooms. While the BSCS project certainly woke antievolutionists up, it was a legal decision that got the juggernaut actually moving. In 1968 the Supreme Court *Epperson v. Arkansas* ruling struck down a 1929 Arkansas statute passed in the waning days of the post-Scopes chill banning any teaching that included the evolution of human beings from "lower" forms. The state adjudications leading up to the federal case and their broader ramifications are covered by Larson (1985, 98-119), Ecker (1990, 79), Shermer (1997, 154-172), Randy Moore (1998c-d; 1999a), Hamburger (2002, 422-434, 454-476) and DelFattore (2007, 46-55).

With the country thrashing out the issues of school desegregation and the Vietnam War, antievolution laws seemed as anachronistic as doilies on Danish modern furniture. All save Justice Hugo Black (1886-1971) thought such laws *ought* to be unconstitutional—what the justices had difficulty agreeing on was *why*. Some felt the law vaguely worded, others that it infringed on educators' free speech, but the tack the court majority ended up taking was that it sought religious establishment.

Larson noted Black's rural Alabama Baptist background may have influenced his differing opinion. Sharing the populist Democratic tradition with Bryan, Black had been elected to the Senate with strong support of the KKK (who's very long list of things they didn't like included evolution). Larson (1997, 250-257) further relates the case to the Scopes mythos, noting that Abe Fortas (1910-1982)—"a working class Jewish boy growing up in the Baptist citadel of Memphis"—was a high school student during the 1925 Dayton trial. "Fortas dearly wanted to decide the Epperson case, and did so as one of his last

majority opinions before a financial scandal forced him from the bench," Larson (1997, 254).

This ambiguity fueled the parsimonious coverage of *Epperson v. Arkansas* by Intelligent Design booster Wayne House (2008b, 192-196). Bypassing the historical roots of antievolution legislation (so clearly embodying partisan religious conviction rather than any imbibing of science findings), House (2008b, 194) opined "that the Supreme Court fails to explain how the statute lacked a secular purpose," as though it were possible for any statute disallowing the teaching of current evolutionary views on *human* origins solely because they conflicted with a particular theological mandate to have a "secular" purpose.

Epperson v. Arkansas set up a constitutional hurdle that forced creationists to adopt an equally gymnastic legislative strategy, one promoting "equal treatment" for creation and evolution. Provided one were thorough enough, a seemingly Bible-free "creation model" might be offered as an equally scientific contender with the "evolution model." (That the results just happened to coincide exactly with the retooled Biblical creationism could be sidestepped as further indication of how "genuine science" served in the end to affirm scriptural truth.) Many creationists would have preferred no evolution be taught at all, of course, but given the new legal circumstances, at least this approach attached to any exploration of evolution an appropriate creationist riposte.

The high water mark for the initial Creation Science phase of anti-evolution legislation came in the early 1980s. An increasing activism among conservative Christians was invigorated by the more general conservative realignment going on in American politics. The new Reagan administration sent encouraging signals to both abortion opponents and creationists, although neither sentiment translated into any substantive action at the federal level. While Jerry Falwell's "Moral Majority" duked it out with Norman Lear's "People For the American Way" in the public arena, efforts to affect the content of public school science education proceeded in about half the states, surveyed by Eve & Harrold (1991, 146-160) and Lloyd Bailey (1993, 202-204). Haught (2014, 51-101) covered creationist activity in Florida during the 1980s.

Proposals to give equal time to creationism in schools sprouted in the legislatures of 19 states, *Creation/Evolution* (1981). One of the first off the block was the "balanced treatment" act in Arkansas. Since it was the rejection of their 1929 anti-evolution statute by the Supreme Court that had started all this fuss, there may have been some haste in redressing the state's dishonor. The legislator who offered the bill manifested no familiarity with the scientific issues involved, and had simply copied the text from one proposed by creationist activist Paul Ellwanger (we'll return to him in the next section 1.7), who in turn had relied on a draft concept by lawyer Wendell R. Bird. Newly-elected Governor Frank White (1933-2003), fresh from defeating newcomer Bill Clinton with help from Falwell's muscle-flexing Moral Majority, promptly signed it into law, R. Moore (2015b)—which just as promptly got challenged, mainly by Arkansas clergy (the lead plaintiff, William McLean, was a Presbyterian minister) appalled at so bald an attempt to codify in the public schools the narrow sectarian views of what Genesis meant for Creation Science, as though that were the only alternative to evolution (political fallout included White losing to Clinton in 1982).

See Edwords (1982a), Ecker (1990, 133-138), R. Moore (1999b) and Milner (2009, 380-381) for coverage of the court challenge, *McLean v. Arkansas*. McKown (1982) explores the role of Wendell Bird's convoluted definitions of science in the Arkansas case, and Eldredge (1982, 86-87; 2000, 93-94) tellingly compares Bird's 1978 *ICR* summary of Creation Science beliefs with the very similar language of the Arkansas Act 590. (This tendency to retread antievolution legislation will get a reprise in the spate of "critical thinking" efforts in the 21st century.)

Though Yale University law professor Stephen Carter (1987, 984) offered the novel position that the *constitutionality* of creationist legislation shouldn't depend on whether it had any scientific validity at all (even "appallingly shoddy and naive" evidence offered no intrinsic legal obstacle for him), in a turnabout of the Scopes era, the state's case in Scopes II depended on demonstrating that competent scientists

really did accept this particular category of creationism as sound empirical science rather than theological mandate. They had a tough time.

The one witness they could round up who wasn't a creationist was mathematician Chandra Wickramasinghe, colleague of Fred Hoyle (whose contrarian barricading of Steady State cosmology from the encroaching Big Bang hordes is still pressed into service by Young Earth creationism, as we'll see later). Called to question the probability of life arising purely through random processes (which no evolutionist was arguing at the time), Wickramasinghe inconveniently repudiated the very literal creationism being offered as the alternate model, Larson (1985, 160).

Rather disingenuously, Morris & Morris (1996b, 190) remarked that Wickramasinghe "was even willing to testify for the creationist side at the creation law trial in Arkansas in 1981." There were no references, and the Morrises did not explain to their readers that Wickramasinghe did not support the *ICR* version of creationism. Mawyer (1986, 62) performed a similar housecleaning for the *Fundamentalist Journal* by not going into details about which Creation Scientists were involved or what they said in their testimony, except to complain that "Nearly every one of the creation witnesses testified that creationism was not a science and that their positions were motivated by biblical beliefs, not scientific findings."

Tricked into telling the truth under oath! What a dirty legal trick that was.

All this was because the Arkansas trial marked the first time that full-blown Creation Scientists had their say on the witness stand, and it was not a pretty sight. Physicist Robert Gentry defended his extraordinary "polonium halo" claims for a young earth (see **Dinomania**), and sprinkled discussion of his and other testimony through his later book, Gentry (1986). Fully half of the ten antievolutionary witnesses were members of Henry Morris' *Creation Research Society*, Berra (1990, 134-136), though there was a tale to tell there. Although the *CRS* listed Donald Chittick as a "consultant", his court deposition indicated he had never done any consulting for them, though as a member he did receive their publications, Chittick (1981, 12-13, 21-22). Such institutional credential-padding and namedropping aside, Chittick included occasional Creation Science courses in his teaching at *George Fox University* (founded as a Quaker college, *George Fox* has since distanced itself from the explicit creationism fellow-Quaker Chittick represented), but in 1988 Chittick left such academic roughhousing to became an "adjunct professor of chemistry" at Morris' *Institute for Creation Research, CMI* (2015).

Part of the apologetic debacle decried by Mawyer above involved Chittick, who didn't dispel the suspicion that Creation Science was more about "creation" than "science" when he couldn't be pinned down on whether he could ever accept a scientific fact that conflicted with his view of Bible teaching, Chittick (1981, 51). Then again, Chittick (1981, 33-34) airily admitted he had testified on behalf of a Washington state creationism bill without stopping to read it first, and first "glanced" over the Arkansas bill about which he was to declaim only on the morning of his deposition. This cart-before-horse attitude offers an insight to Chittick (1981, 42-43) affirming that he had become a Creation Scientist not because of any religious epiphany, but only after studying the "fossil record, geophysical processes, geophysical-geochemical processes, orderliness in the universe and the writings of biochemists who looked at life processes"—all fields notably removed from his physical chemistry area of expertise.

Two insights come from Chittick's path to Creation Science. First, it was revealing that Chittick (1981, 51, 55-56) hung a lot of his belief in Creation Science on the "orderliness" of the universe. So much so that unless things operated in an utterly chaotic way, with no discernible physical laws in evidence, Chittick would always find a way to shoehorn in the Creator's "intelligence" as catch-all explanation for anything that proved *orderly*. Inevitable self-organization or things naturally evolving without direct plan within an otherwise orderly framework were functionally excluded from Chittick's option list *a priori*.

The second insight involves scholarly methodology. From where had he obtained such specialized information on fossils and geochemical processes? There is no indication Chittick's research went much

beyond culling the content of creationist articles, which he likely did for two perfectly legitimate *Science* papers he offered as evidence, Dalrymple & Moore (1968) and Noble & Naughton (1968) on dating volcanic deposits, both staples of creationist secondary source citation on down to the present day. Having let others do his thinking for him, it was just a matter of subsequently calibrating his far from independent findings against a YEC Biblical yardstick his source pundits had already employed in their framing of the papers in the first place.

Such *post hoc* reinforcement of sublimated *a priori* religious conviction by selective secondary redaction will play out repeatedly in the Intelligent Design version of antievolutionism that would come on the scene 20 years later.

As for the court fiasco, Chittick (1984, 253) remained evasive in print, discussing neither the details nor the ruling except to castigate the news media for its "distortions" of the case (none of which he enumerated). He referred the reader instead to *The Creator in the Courtroom* by Norman Geisler for "a fairly thorough documentation of this." Geisler's book was unavailable for my current inspection, though McIver (1988a, 2; 1988b, 85) suggests overall it was useful but flawed. Geisler (1982) did offer a condensed version for the *Fundamentalist Journal*. The distilled Geisler certainly bristled with recriminations, from accusing Wendell Bird of promoting false accusations about the competence of the pro-creation legal defense to insisting the "theologically liberal Methodist" Judge Overton (1939-1987) of being "overtly biased against creationism" because (1) he "did not believe in creationism as defined by Act 590, (2) his son was "an evolutionary biology teacher" and (3) the "theologically liberal Methodist Bishop" testified in opposition to teaching Creation Science.

To put this bias charge in perspective, Ravitch (2008a, 1063) reminded that "academic freedom is not boundless. For example, one would not expect that a geology department would have to credit, fund, or otherwise support research arguing that the earth is flat. Nor would an astronomy department have to credit or support research attempting to prove (but not disprove) that our solar system is the center of the universe."

So imagine if we replaced the topic of "creationism" with *geocentrism*, and a judge was accused of inappropriate bias because (1) they held to that "Earth revolves around the Sun" thing, (2) their son turned out to be an admitted *heliocentric* astronomer, and (3) the man's denominational leader further appeared to frown on the idea of giving geocentrism equal time in public school science classes. What manner of judge could be scraped up with a functioning brain stem that wouldn't stumble on Geisler's criteria? (And just in case you think this is an unfair and niggling "beating a long dead horse" example in this day and age, just wait till we discuss the 1999 Kansas School Board in the next section 1.7.)

But bringing up Geisler in the first place may not have been the best move on Chittick's part, as Geisler's testimony in Arkansas was rather a reprise of Bryan at the Scopes Trial, such as when he revealed how UFOs were "a satanic manifestation in the world for the purpose of deception," and that he had gleaned this subtle intelligence from that authoritative compendium, *Reader's Digest*, Lyons (1984, 358), Gilkey (1985, 76-77) and McIver (1987, 9). Geisler (1982, 21) grumped how the ACLU attorneys were "playing to the press" in "bringing up sensational matters, like UFOs" without revealing it was his own view on this point that was involved, or that one might justifiably regard those as pertinent to assessing Geisler's analytical expertise in general—creationist beliefs about satanic UFOs are noted in **Chapter 3** of Downard (2004).

Gene Lyons (1984, 359) was especially struck by Geisler's Byzantine hermeneutics:

The most profound part of Geisler's testimony was his attempt to prove that the "Creator" of the universe and life mentioned in Act 590 was not an inherently religious concept. After citing Aristotle, Plato, and one or two other classical philosophers who supposedly believed in a God or gods without worshipping them—albeit not as creators of the world "from nothing"—Geisler offered his most thundering proof: the Epistle of

James. He cited a line of Scripture to the effect that Satan acknowledges God, but chooses not to worship Him. "The Devil," he said, "believes that there is a God." Whee! If Geisler has not yet squared the circle in his meditations, he has at least, well, circled it. Who would have thought one could prove the Creator a nonreligious idea by means of hearsay evidence from Beelzebub?

While Gentry and Chittick are peripheral figures in doctrinal creationism today, Norman Geisler remains an active influence into the Intelligent Design era, such as when actor turned Christian activist Kirk Cameron (2008) or conservative ideologue David Limbaugh (2014) readily invoked Geisler & Turek (2004) as a reliable apologetic resource. *Whee* indeed!

Given such testimony, and even without the parade of pro-evolution scientists called as witnesses (including Stephen Jay Gould), the presiding Federal District Court Judge Overton found no reason to regard the Arkansas law as any other than trying to further a religious purpose, and so ruled in 1982.

Participants on the evolution side have offered commentary on the case, from philosopher Michael Ruse (1984) to Langdon Gilkey (1985), a liberal theologian with considerable misgivings about the proposed law's implications for religion. Gilkey and Hanson (1986, 189-213) included the full texts of the statute along with Judge Overton's ruling, with Overton (1982) also available solo in D. Wilson (1983, 206-222) and Montague (1984, 365-397). An online resource is the "McLean v. Arkansas Documentation Project" at *antievolution.org*.

Creationists Gish (1982) and John Whitehead (1982) of the *Rutherford Institute* offered measured comments on the case at the time, but the poor showing of their side and subsequent judicial fallout has not encouraged dwelling on the subject since. The perspective of time failed to show, though, as House (2008b, 197-200, 210, 260n) continued his Intelligent Design **Creationism Lite** version of "not dwelling on the subject," castigating "Judge Overton's simplistic understanding of science and religion" while neglecting to mention any of the creationist testimony—though he did quote Geisler in a note complaining about "distorted" media coverage (nothing on those satanic UFOs, of course).

And in another curious wrinkle from around that time, in 2007 the Judge's stockbroker son Warren Overton (1969-2011) penned a glowing Foreward to one of creationist Kent Hovind's books, which Glenn Branch (2017a) noted must have been done while Warren was serving his prison sentence for bank fraud and check kiting. Hovind's more grandiose brush with the law on tax evasion will be covered in section **1.7**.

1.6 Section 8: Not Crying Uncle Yet—Louisiana's Balanced Treatment Act and Edwards v. Aguillard

A parallel effort in Louisiana resulted in the 1981 Balanced Treatment for Creation-Science and Evolution-Science Act. Similar to the Arkansas act except even more deliberately worded to avoid triggering court disapproval, local school officials weren't hot to press the issue, though: "When the Louisiana Department of Education failed to implement the Balanced Treatment Act, Senator Keith filed suit seeking to have the Act declared constitutional and to force its implementation," Schimmelpfennig (1987, 239). Wendell Bird was again involved in the legal defense, along with John Whitehead, and Louisiana attorney general William Guste kept the issue burning all the way to the Supreme Court, Edwards v. Aguillard (1987), which bluntly declared it unconstitutional (though unenforced it remains on the books, surviving a 2013 repeal effort!) and signaled that mere packaging was not going to solve the problem of how to reflect creationist teachings in public school science curricula, Ecker (1990, 72-76), R. Moore (1999c-d) and DelFattore (2007, 55-60). Larson (1985, 147-163) wrote prior to the 1987 Supreme Court ruling, but described the concurrent Arkansas and Louisiana legislative campaigns in some detail, including Wendell Bird's more active involvement in the latter case. Toumey (1992, 33-34) and Ruth Brown (2002, 226-233) covered the less successful attempts to try Arkansas-style legislation in

North Caroline and Tennessee.

All of which may be compared to the dervish spin of Mawyer (1987a-b) in the *Fundamentalist Journal*, relying all too readily on the pronouncements of Bird and company on how valid the Creation Science evidence supposedly was—without actually mentioning any of the grubby details on display in **Chapter 3** of Downard (2004). Or David Barton (2003, 432) similarly accepting the Balanced Treatment Act's demurs that it only wanted the "examination of *'scientific* data' and the *'scientific* evidence' for either position.

Mawyer (and Barton more distantly) kept their conclusions sealed off from a primary problem with the YEC court case: that to pass legal muster by the 1980s legislation had to clear the three hurdles of the *Lemon* test (named for a prior Establishment Clause court case decided in 1971). Any proposed law must have (1) a genuine secular purpose but (2) not favoring or limiting religion, and in pursuit of that (3) not cause "an excessive government entanglement" with religion. Legislation that snagged on any one of the prongs could be held unconstitutional—and failing on all three was a slam-dunk. Schimmelpfennig (1987) questioned whether the first prong was too hard to pin down to be truly useful, but in any case the Lemon Test was never held to mean that a proposed law could have no religious implications at all, a point *Edwards v. Aguillard* (1987) explicitly assured: "A religious purpose alone is not enough to invalidate an act of a state legislature. The religious purpose must predominate."

But that is exactly what the legislative history of the Balanced Treatment Act showed, starting with the intent declared by Senator Bill Keith, to "assure academic freedom by requiring the teaching of the theory of creation *ex nihilo* in all public schools where the theory of evolution is taught," which notion was specifically identified as "scientific creationism" and which was in turn defined as "the belief that the origin of the elements, the galaxy, the solar system, of life, of all the species of plants and animals, the origin of man, and the origin of all things and their processes and relationships were created *ex nihilo* and fixed by God." Such concepts not only bore an "inescapable religiosity" about them (unless Mawyer wanted to take a stab at arguing that Senator Keith was engaged in a clandestine effort to slip Vishnu or Marduk through the door here, and not the God of Abraham as incarnated as Jesus Christ), but represented exclusively the narrow Christian biblical doctrines of the Young Earth Creationism whose advocates (overtly channeling the positions of the *Institute for Creation Research* and the *Creation Research Society*) were the only ones testifying for it.

Consequently, the Supreme Court in *Edwards v. Aguillard* wasn't going out on any long limb when it concluded that both the earlier Arkansas and later Louisiana "legislatures acted with the unconstitutional purpose of structuring the public school curriculum to make it compatible with a particular religious belief." As for the "scientific evidence" that creationists offered in support of their position, "Whatever the academic merit of particular subjects or theories, the Establishment Clause limits the discretion of state officials to pick and choose among them for the purpose of promoting a particular religious belief."

Mawyer (1987b, 56) ignored all of the Lemon Test argument in the ruling and simply repeated the mantra that "the primary purpose of the Act was not to advance religion, but to promote academic freedom." Though *Kulturkampf* activists like William Graves (2001, 561-562) continued to see things differently, grumping that the ruling marginalized belief in a Creator, while "It is permissible, however, to teach an unscientific theory, evolution, which undermines those religious beliefs."

Though the *ICR* thought to keep the Balanced Treatment legislative flame alight with subsequent "clarifications," Matsumura (1998b), a fallback creationist position landed on teacher activism. Kelly Segraves and Duane Gish told Mawyer (1987b, 57) they thought the ruling didn't preclude teaching Creation Science provided it was done voluntarily, as have Nutting & Nutting (1987) and Robert Simonds (1989). More recently *CreationWiki* (2009d) opined: "none of these cases prohibited teachers from teaching creationism or intelligent design in school." Intelligent Design would pick up this thread themselves, as we'll see.

Segraves pursued this "camel's nose under the tent" approach in another way. In 1981 he sued the state of California on behalf of his children, claiming the state's science education policy on teaching evolution violated their religious freedom by saying things that conflicted with their beliefs. While Segraves' suit pointedly did not call for teaching Creation Science in the schools, by demanding secular science content be trimmed to never conflict with those views it amounted to the same thing. The court opinion by Irving Purless (1981) did not buy this argument (recommending only that the state do better at communicating their policy of avoiding theological issues in presenting scientific information), to the satisfaction of NCSE (2009) but not *CreationWiki* (2014b). It was interesting that in offering instances where evolutionary content might be provocative, the *CreationWiki* account noted only the origin of life and human relation to apes, not the full blown Flood Geology dogma Segraves (1975; 1977) and *CreationWiki* embrace.

Human-ape relations would surface in quite another way, though, regarding a 2015 antievolution lawsuit. Despite the unpromising legal standing of the "evolution is a religion" trope, West Virginia creationist Kenneth Smith (2015) cast this frayed net even wider, suing not only his local school board and the Department of Education, but also Francis Collins (in his capacity as director of the National Institute of Health) to have them cease and desist teaching an ideology "that just doesn't exist and has no math to back it." Smith appended to his suit the even less plausible wrinkle that somehow or other his daughter's intention to become a veterinarian would be thwarted by her being taught evolution along the way.

One must turn to Kenneth Smith (2008; 2013) to discover what that vigilant parent deemed "math" analysis and to what human-ape relations issue he sought to apply it: Adam & Eve were 100% white, you see, but when Cain shacked up with a gorilla (which is a biologically impossible hybridization, unbeknownst evidently to Smith), giving birth to a 50% ape daughter, descendants like the 75% ape Enoch thereby spawned the dark-skinned human races. One can see how such traditional biblical racism (which the likes of *CreationWiki* studiously prefers not to notice) coupled with truly barebones utilitarian math might utterly demolish (at least in the mind of its overconfident author) the dithering of evolutionary genetics, obsessed as they are with merely analyzing the actual DNA of real humans (and gorillas, while we're about it).

Meanwhile, Robert Simonds vigorously promoted his side of the *Kulturkampf* argument through two of his organizations: *Citizens for Excellence in Education* and the *National Association of Christian Educators*. Interviewed in 1993 following the Vista, California school board's voting 3-2 to require "discussions of divine creation" in their history-social sciences and arts courses, Simonds enthused that the so-far limited move (as religious history was already included under the state's humanities study guidelines) was to "make schools better" in part by having "a policy that would not portray the teaching of evolution as a scientific fact, which it is not," de Lama (1993). Covering the Vista affair for the *Los Angeles Times*, Granberry (1993; 1994a-b) noted the conservative Christian board members' parallel concerns of favoring creationism and objecting to the state's gay-tolerant sex education program while running up district debt by building two new unneeded schools, leading eventually to a recall effort. Ken Ham (1993) reflected the twin *Kulturkampf* concerns of YEC in his commentary on Vista for the *ICR*, complaining that the insistence on teaching "atheistic evolutionary philosophy" that tolerates such things as homosexuality constituted "nothing less than absolute mind control."

Although the Vista board mandate was dividing the community, encouraging parents who looked forward to creationism being taught properly in their schools at last, while appalling others like local marine biologist John Ljubenkov (1946-2013), Simonds reminded how this new enlightened stance reflected a groundswell of 3611 conservative Christians elected to school boards the previous year, including 38 in the San Diego area that included the Vista board's Deidre Holliday (who just happened to be a member of Simonds' *Citizens for Excellence in Education*). Another of the boards' pro-mandate trio was John Tyndall, an accountant at the *Institute for Creation Research* (based locally there in the San

Diego area) who had unsuccessfully lobbied to get *Of Pandas and People* used as a supplemental science text in Vista, Gillis (1994, 650). The mandate itself was drafted by Sacramento lawyer David Llewellyn, who's *Western Center for Law and Religious Freedom* was playing its part in that conservative Christian political activism Simonds found so encouraging. Liberal Goldin (1993) offered a considerably less sanguine assessment of the Vista campaign, where the rigid ideological commitments were not always openly made known to voters, as "Christian right candidates disguise themselves as middle class populists."

The upshot is that individual creationists have continued to slip their views into school on their own (unless they garner enough attention to trip up on the law), while organized efforts have tended to focus on either revising the curriculum at the grass roots school board level, or bypassing the public school process altogether by disseminating their information directly through home schooling or Christian academies, as they had done for many years. With that, the situation fell into a reprise of the 1920s cease fire, again abetted by some textbook publishers who turned circumspect about offending potential markets with inadequately veiled references to evolutionary thinking in their high school science texts, Hughes (1983), Eve & Harrold (1991, 9-10) and Bennetta (1999), a situation which more recent activism by the *National Center for Science Education* has sought to redress, Scott (1999a).

And there things might have remained, were it not for a new wrinkle in the antievolutionism tale, the emergence of a veneered academic Intelligent Design movement to give the ramshackle engine a new head of steam. Aimed at revamping the college academic environment from the top rather than trying to stuff antievolutionary positions in from the grassroots level, this side of the Intelligent Design movement paid less attention to the fiddly-bit content of science education than to assailing its underlying secular philosophy in a string of law review articles not likely to be coffee table fodder for the traditional creationist: Phillip Johnson (1992a; 2001a), John Zingarelli (1997), David De Wolf *et al.* (2000), Drew DeMott (2001), DeWolf (2001), William Graves (2001), Nancy Pearcey (2001). Francis Beckwith (2002), T. Mark Moseley (2003), Arianne Ellerbe (2004), Johnny Buckles (2006), De Wolf *et al.* (2007), Stephen Trask (2007), Thomas Folsom (2008) and Casey Luskin (2009m,an).

The trend of things could be seen in some of the fallout from the dissent Justice Antonin Scalia (1936-2016) penned on the 1987 ruling striking down the 1981 Louisiana "balanced treatment" law, joined in this opinion by Chief Justice William Rehnquist (1924-2005). Various commentators spotted this new legalistic wrinkle, such as Strahler (1987, 528), McKown (1993, 153-155) and Randy Moore (1999d, 179) on Scalia, and Ecker (1990, 74) regarding Rehnquist.

The Rehnquist court inherited some rather flexible precedents when it came to separating church and state, Redlich (2002), and Rehnquist's majority religion friendly "nonpreferentialism" opposition to Establishment Clause neutrality found an ally in Scalia, as well as Justices Anthony Kennedy and Clarence Thomas, Terry (2008) and Koppelman (2009). See also "separationist" Epps (2006) and "originalist" Claeys (2006) for contrasting assessments of Rehnquist's judicial influence. For an example of firebrand original intent judicial conservatism, complete with interlaced secondary arguments gleaned from creationists on how belief in evolution has been destroying the American judiciary, Oklahoma attorney William Graves (2001) at the *Regent University Law Review* will do.

1.6 Section 9: Riding off the Rails—Antonin Scalia's Edwards v. Aguillard dissent

Applying such principles to the creationism venue has suffered from the limited scientific understanding of the dissenting Justices. Gould (1991a, 450-460) noted that Scalia's dissent was founded "in large part, upon a misunderstanding of science"—notably the persistent conflation of "evolution" with "how life began," rather than as the study of what has happened to life once it had appeared (by natural or supernatural means)—more on this **Origins or Bust** issue in section **1.7**). As we'll see, there's a lot more wrong with Scalia's perception than only that, a suite of methodological misapprehension that runs through antievolutionary thought at every level, from how you are supposed

to work out what constitutes sufficient evidence for coming to reasonable scientific conclusions, to the many cultural presumptions circling around their religious campfire when it comes to the origins of matter, life and man.

More salient is how neither Scalia (nor Rehnquist tagging after) discerned anything even remotely scientifically spurious about the "creation model" evidence under consideration in the Balanced Treatment Act, giving one pause to wonder to what degree a firm grounding in basic scientific principles had penetrated American legal education. Scalia (1987) averred (with his own *italic* emphasis) that:

the parties are sharply divided over what creation science consists of. Appellants insist that it is a collection of educationally valuable scientific data that has been censored from classrooms by an embarrassed scientific establishment. Appellees insist it is not science at all, but thinly veiled religious doctrine. Both interpretations of the intended meaning of that phrase find considerable support in the legislative history.

At least at this stage in the litigation, it is plain to me that we must accept appellants' view of what the statute means. To begin with, the statute itself defines "creation science" as "the *scientific* evidences for creation and inferences from those *scientific* evidences."

Although Scalia's argument was longer than Powell's majority opinion it was dissenting from, the justice declined to evaluate the accuracy of any of the Creation Science evidence, which he neither endorsed nor repudiated, though he did remind that the bill's supporters held Creation Science to be "a strictly scientific concept that can be presented without religious reference." Later in the dissent, Scalia adjusted his fence straddling by directing his gaze more in the creationist direction (once more, Scalia's *italics*):

Perhaps what the Louisiana Legislature has done is unconstitutional because there is no such evidence, and the scheme they have established will amount to no more than a presentation of the Book of Genesis. But we cannot say that on the evidence before us in this summary judgment context, which includes ample uncontradicted testimony that "creation science" is a body of scientific knowledge, rather than revealed belief. *Infinitely less* can we say (or should we say) that the scientific evidence for evolution is so conclusive that no one could be gullible enough to believe that there is any real scientific evidence to the contrary, so that the legislation's stated purpose must be a lie.

Left on the sideline was the fundamental methodological question: do people who believe things that aren't true ever offer "evidence" for their position? And if so, are there any standards at all whereby such assertions are to be evaluated and, where appropriate, rejected?

But as far Scalia was concerned, he had only "to ascertain what the members of the Louisiana Legislature believed"—if they thought they were serving a secular purpose (or even just professed that intention), then that settled it for him. The idea that the legislators may have been mindful that they had to keep the religious underpinnings of their views under wraps given the way the courts had been ruling appears not to have occurred to Scalia, gymnastically willing to give them all the benefit of the doubt no matter what the outcome was—an open invitation for legislators to conceal motives and intentions in order to poke holes in the Wall of Separation interpretation of the Establishment Clause, Gey (2000).

Overall, though, the "secular purpose" prong has been upheld in the courts. A Kentucky effort to have the Ten Commandments posted on the wall of every public school classroom (*Stone* v. *Graham*) thought to slide through the courts by including a declaration affirming its purely secular purpose (as

though they could conceal the partisan connection to the God of Abraham with a smiley face sticker) but it was still declared unconstitutional in 1980, Schimmelpfennig (1987, 244-245).

The *Lemon* Test's legislative intention prong has bothered some legal critics, such as Maryland lawyer Kendrick Whitmore (2007, 441-441, 446-449), who objected to the "bias" of the *Stone* v. *Graham* ruling and pressed on to recommend Scalia's *Edwards* v. *Aguillard* dissent as persuasive, Similarly for the cursory coverage of *Edwards* v. *Aguillard* by House (2008b, 200-202) noting how Scalia and Rehnquist "reprimanded" the majority on this point. Neither stopped to examine what specific details had played a role in Scalia arriving at his opinion.

There were two presentations made to the Louisiana legislators.

At the District Court stage, Scalia noted that Louisiana had "submitted the affidavits of two scientists, a philosopher, a theologian, and an educator, whose academic credentials are rather impressive." The scientists turned out to be San Francisco State University biologist Dean Kenyon (coauthor of *Of Pandas and People*, whose vacuous coverage of Punctuated Equilibrium we have already encountered, including Kenyon's 1984 Louisiana affidavit), and William Scot Morrow, a biochemist "known for his libertarian ideals" during his forty years at Wofford College in South Carolina, according to the biographical archive at *Wofford College* (2013). Morrow had earlier testified in favor of the Arkansas Balanced Treatment statute and later wrote the introduction to creationist Robert Gentry's polonium halo book, suggesting a quixotic open mind more in the barn door manner. The flavor of Morrow's testimony is hinted at by the assessment of his Arkansas involvement by Duane Gish (1982): "Dr. Morrow, although an evolutionist and an agnostic, maintained that creationists actually look at more data than do evolutionists and that an inquiry approach involving multiple working hypotheses was a superior teaching method."

Arguing that "creation science is as nonreligious as evolution," the Kenyon (1984) affidavit astonishingly tried to amputate the *Creation* from Creation Science: "Creation-science does not include as essential parts the concepts of catastrophism, a world-wide flood, a recent inception of the earth or life, from nothingness (ex nihilo), the concepts of kinds, or any concepts from Genesis or other religious texts." Norman Geisler (1982, 22) had put a similar spin on the previous Arkansas creationism case, contending the Creation model to be presented in their schools wasn't based on the Bible even a smidge, but solely on scientific evidence—pay no attention to the man behind the curtain!

But Kenyon undermined Geisler's impression by proceeding in his own affidavit to graft some of the severed parts back on, contending that, "Either the universe evolved from the big bang or other initial state (cosmic evolution), or it was created (cosmic creation)." And how exactly was that distinct from *ex nihilo*? Or that "Microevolution is change within local populations at or below the species level. Creationist scientists do not dispute, but accept, microevolution." No speciation at all? So how does that differ from fixed created *kinds*? One begins to wonder whether Kenyon even understood what his own position was.

But supposing Kenyon's de-creationized Creation Science was the Real McCoy, what exactly was going on over at the *Creation Research Society* and comparable organizations? Everything being published by the self-identified Creation Scientists there would not actually *be* Creation Science. Now, just how plausible does that sound, and how ever could Kenyon have imagined otherwise? As it happens, we have some information to the contrary: just as the Louisiana trial was hitting the fan, Morris & Parker (1987, 52) were noting in their explanation of *What Is Creation Science?* how Kenyon had become a creationist convert in the 1970s after reading Whitcomb & Morris' *The Genesis Flood*. Kenyon even supplied a cheery introduction to *What Is Creation Science?* in which he lauded the authors for their "superb ability to avoid undisciplined speculation and to keep their reasoning in close conformity with the actual facts of nature," Morris & Parker (1987, iv).

So one may note Morris & Parker (1987, 223-252) devoted a whole chapter to "Catastrophism in Geology." And while there was no mention of the Flood or any Bible quotes (the book was specifically

tailored for the secular audience, much as Price had done with his *The New Geology*), Morris & Parker (1987, 14) had no reluctance to insist: "there is no real scientific proof, or any unequivocal evidence, that the earth is older than several thousand years," and Morris & Parker (1987, 262) touched on the *ex nihilo* issue with: "The testimony of the true facts of science is thus in full support of the Creation Model. That is, at some point of time, say **T**₀, the Space/Mass/Time cosmos was simply *created*, brought into existence in fully developed and functioning form right at the beginning." And Morris & Parker (1987, 120, 179) defined the fixity of species/types as a direct *prediction* of their Creation model. All of these being positions Kenyon's 1984 affidavit had assured Louisiana's legislators weren't part of Creation Science doctrine. Cue the smoke and mirrors.

All this might be thought to put a cap on just how "scientific" his reasoning could have been, given the geological absurdities of Whitcomb & Morris (1961), and making it even less convincing that anyone in 1984 could have had no inkling at all that Creation Science was Flood Geology, up front and center—though the coverage of Kenyon's development as a creationist in Dave Nutting (1998b) and *Think & Believe* (1998b) suggests he may not have been all that attentive to the broader context or implication of the ideas he waded into during this period.

Interestingly, as Kenyon almost testified at the Arkansas creationism trial but was apparently dissuaded by Wendell Bird, Edwords (1982a, 43), one can't help wondering whether this was due to his curiously feeble grasp of what he had been reading for a decade. Kenyon would offer yet another enthusiastic preface a few years later to Wendell Bird (1989, Vol. 1, xv-xvi), where he described that wandering two-volume monstrosity (three times longer than it needed to be because it followed the lawyerly practice of declaring what he intended to say, then repeating *all that* in the part devoted to saying it, only to cover it all *again* in a summary section) as both "clearly organized" and "of great merit." Morris & Morris (1996c, 178) later stated more obliquely that Kenyon "had become a creationist, partially through reading creationist books"—perhaps "partially" reading was the right term after all.

The remaining Louisiana affidavit figures were philosopher Terry L. Miethe (dean of the Oxford Study Centre), lowa priest William G. Most (1914-1999), and educator Robert J. Clinkert. My search for this writing did not uncover any noteworthy contributions from them regarding antievolutionism in general or Creation Science in particular. Clinkert is perhaps the oddest of the lot: at the time of the Louisiana trial his professional work involved research on things like language disorders and dyslexia, such as Clinkert (1978), while on theology Clinkert (1987) opined for his creationist readers the seeming decline of liberal biblical hermeneutics. Move on a few decades, though, and Clinkert (2011) had evolved a *long* way, espousing a very atypical view of the Old Testament whereby *gay rights* were protected and it was homophobia that was a heretical doctrine! The world is full of surprises.

While the District Court material had been relegated to a note in Scalia's dissent, more attention was paid to the presentation given to educate the Louisiana legislature on the merits of the law. Here is how Scalia represented what "scientific" information they had at their disposal:

Most of the testimony in support of Senator Keith's bill came from the Senator himself, and from scientists and educators he presented, many of whom enjoyed academic credentials that may have been regarded as quite impressive by members of the Louisiana Legislature. To a substantial extent, their testimony was devoted to lengthy, and, to the layman, seemingly expert, scientific expositions on the origin [p622] of life.

In other words, the legislators were being spoon-fed only one side of the argument, the creationist one (Scalia did not venture an opinion as to whether there might be something dodgy about that process). Only a few had some scientific background: chemist Edward Boudreaux had become a creationist in 1975 but is only a minor player on the creationist scene, with the brief write-up at

CreationWiki (2010j) mentioning his academic credentials but offering little relating to creationism. An interview of Boudreaux (2001) suggests that his expertise dissipated rapidly regarding topics outside his field, such as when he reprised the typical creationist talking point: "A number of evolutionists openly admit that the coveted fossil record is devastating to the entire scheme of organic evolution, be it neo-Darwinism, punctuated equilibrium or whatever." Boudreaux became the head of the Rocky Mountain Creation Fellowship in 2009, which focuses on proving dinosaurs and people coexisted, CreationWiki (2009f), and a 2012 YouTube video lecture by Boudreaux on the Vapor Canopy theory for Noah's Flood turned up at Creation Sensation (2013).

By contrast, geologist John Morris (son of Henry Morris) is a major player at the *ICR*, and has capably followed in his father's footsteps when it comes to the evidential origami skill of folding a selective data set until they resemble the very restrictive YEC model sheet. As for the remainder of the Louisiana witnesses, prickly antievolutionary crusader (and non-scientist) Luther Sunderland (1929-1987) also testified for the Balanced Treatment Act, while the others have left no discernable presence as of this 2013 review (identified only as **Kalivoda**, **Reiboldt**, and **Ward** in Scalia's dissent).

Just as he had with the District Court affidavit group above, Scalia did not delve into any of their backgrounds or expertise when he summarized the five claims offered by this august parade to the legislature, all of which turned out to be very dependent on being able to distinguish pseudoscientific wishful thinking from genuine scientific and scholarly methodology: The first was a lulu (the **boldface** this time is mine, to highlight the text specifically in Scalia's summary):

 "There are two and only two scientific explanations for the beginning of life evolution and creation science," so that "any evidence that tends to disprove the theory of evolution necessarily tends to prove the theory of creation science, and vice versa."

So there is no *non-ICR* theory of the origin of things to balance out that creation/evolution teeter-totter? Other Christians present no alternatives either, let alone Hindus or Native Americans? The Catholic Scalia thus did not notice at this point how the deck was being ostentatiously stacked in favor of only *one* game, the YEC one, thus repudiating at the get-go any idea that the legislation somehow wasn't related to their very parochial religious dogma. While creationists were certainly dedicated to framing the issue in this either/or way, it said a lot about Scalia's thinking that he was so open to letting them get away with it—and that "vice versa" caveat rings hollow, as I know of no instances (and Scalia certainly offered none) where creationists have ever allowed any evidence to be taken as disproving their position, let alone acknowledging that it in turn weighs for evolution.

2. "The body of scientific evidence supporting creation science is as strong as that supporting evolution. It may be stronger," since "Evolution is merely a scientific theory or 'guess'." Indeed, evolution "is a very bad guess at that. The scientific problems with evolution are so serious that it could accurately be termed a 'myth."

Here the Creation Science assertions were running off the methodological rails big time, for the idea that scientific theories are merely *guesses* happens to be colossally wrong (think Gravitational Theory, Relativity Theory, Quantum Theory, or the Germ Theory of disease, for that matter). This is a common enough mistake for nonscientists to make, cropping up repeatedly in the creation/evolution debate, such as Steven Newton (2014c) taking note of creationists questions submitted over *Buzzfeed*, but that only underscores the populist magnitude of *Scalia* failing to perceive the mistake as a mistake.

Gregory (2008b) has explained why evolution is simultaneously a "Fact, Theory, and Path," and any

thorough investigation of how particular hypotheses (such as how much hybridizing went on among archaic *Homo sapiens* and their Neanderthal cousins) are explored in the course of refining evolutionary relationships (where the more general *theory* would still hold *H. sapiens* and Neanderthals to be indisputable natural relatives) would see that the scientists involved are operating way above the "guess" level. So at this point one may further marvel at Scalia's failure to consider whether the creationist witnesses might not be accurately representing *anything* about what they claimed comprised evolutionary evidence, or to what extent the Louisiana legislators were any better at detecting when they were being tendered a pseudoscientific bill of goods.

 "Creation science is educationally valuable. Students exposed to it better understand the current state of scientific evidence about the origin of life," while "Creation science can and should be presented to children without any religious content."

Scalia did not inquire whether exposure to the *ICR* spin actually did enhance understanding of the "current state of scientific evidence"—a recent study of Australian science students by Buckberry & Burke da Silva (2012) and my own experience over the years with what creationists think they know about relevant technical literature suggest not.

Arguing a bit later that "The Act's reference to 'creation' is not convincing evidence of religious purpose," Scalia sounded like Norman Geisler at the Arkansas trial: "to posit a past creator is not to posit the eternal and personal God who is the object of religious veneration," evidently forgetting that the organizations purveying the "scientific evidence" in Arkansas and Louisiana (such as the *ICR*, from whence derived John Morris) required member belief in exactly (and *only*) that. Alabama attorney John Zingarelli (1997) offered a similar parsing of "creation" in a *Regent University Law Review* article.

The effort in the Louisiana case to sell Creation Science as 100% Bible Free didn't set well with creationists who wanted the link to the biblical foundation to be plain and clear, however, such as John Robbins (1949-2008) who accused the *CRS* approach of being "hostile to Christianity," Robbins (1987). But as with Kenyon's spin control above, the fact remained that when not trying to sell the carefully trimmed product to legislators, Creation Scientists never deviated from a strict concordance between the Bible and the evidence of nature, and so could readily agree to just the "scientific evidence" being presented since they were sure there was only one destination once that was done. "The biblical model is always at least compatible with the general creation mode," declared Henry Morris (1987, 19, 57) to Jerry Falwell's *Fundamentalist Journal* readership, so that "the real facts in the created world of God bear precisely the same testimony." Similarly, when YEC David Plaisted (2006) affirmed: "Why Teaching Creationism in the Public Schools is Not Teaching Religion."

Scalia bought into all this, and acted as though Creation Science not only operated from a pristine Ivory Tower of careful reasoning and evidence, but had also been unjustly kicked out of that loft by the machinations of mainstream science:

4. "Although creation science is educationally valuable and strictly scientific, it is now being censored from or misrepresented in the public schools." In fact, "Teachers have been brainwashed by an entrenched scientific establishment composed almost exclusively of scientists to whom evolution is like a 'religion.' These scientists discriminate against creation scientists, so as to prevent evolution's weaknesses from being exposed."

At no point did Scalia question whether this populist rant even slightly correlated to the actual situation in modern science—which would naturally have been harder to evaluate given the narrow slice

of witnesses presented by Keith. In *Edwards v. Aguillard*, "Justice Brennan cited the testimony of the president of the Louisiana Science Teachers Association, who said that no new legislation was necessary to allow the teaching of any scientific concept based on established fact," Schimmelpfennig (1987, 253), which related to the idea that the Balanced Treatment Act was aimed at allowing the introduction of evidence that couldn't pass muster without that leg up.

The giant issue in the case was therefore whether a motivated minority could be granted the exclusive right to impose their filter on establishing things to be facts for the general population, with the imprimatur of law about it, a thoroughfare more than broad enough to permit the YEC caravan Richard Bliss (1983) had in mind when he complained about "Evolutionary Indoctrination and Decision-Making in Schools" over at the *Institute for Creation Research*.

A bit later Scalia bent over backwards to justify another mandate of the law, further cementing the hold doctrinal creationists were being gifted:

the Act requires the Governor to designate seven creation scientists who shall, upon request, assist local school boards in developing the curriculum guides. § 17:286.7B. But none of these provisions casts doubt upon the sincerity of the legislators' articulated purpose of "academic freedom"—unless, of course, one gives that term the obviously erroneous meanings preferred by the Court. 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. 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.

Louisiana science teachers who thought the "scientific evidence" being put forward by the *ICR* and company was arrant twaddle would not be accorded any "academic freedom" of their own to demure—they would have no choice but to present the creationist-approved conception of a "balanced" curriculum. And so did Scalia offer a blank check to the nation's legislators when it comes to public education: you may decree just about anything you like, provided you sincerely believe it to be so. Flat Earth anyone?

5. "The censorship of creation science has at least two harmful effects. First, it deprives students of knowledge of one of the two scientific explanations for the origin of life, and leads them to believe that evolution is proven fact; thus, their education suffers, and they are wrongly taught that science has proved their religious beliefs false. Second, it violates the Establishment Clause. The United States Supreme Court has held that secular humanism is a religion."

There are two large and misleading bombs being thrown in this final claim. First that it would apparently be impermissible for secular education to ever say *anything* that conflicts with someone's religious belief. The Louisiana case got started in the first place after Keith's son came home saying his religious beliefs were ridiculed by a teacher at school—according to Schimmelpfennig (1987, 238), asked on the origin of man, the reply Keith's son had given ("God created the world, and God created Man.") was considered unsatisfactory. Concern over human evolution has been the primary hot button issue along with the origin of life, but those are not the only issues where theological toes can be stepped on.

Anyone embracing the claims of Young Earth Creationism is going to be repeating "evidence" that will make regular science teachers blanch, no getting around it, with endless opportunities for mixed signals. A Kentucky high school student "Jacob" complained to *Answers in Genesis* (2000e) how

"evolutionist doctrines have been crammed down my throat, and my belief in the Lord Jesus Christ has been ridiculed without respite," though he offered no examples of that abuse apart from a teacher who overheard a conversation he had with another student over "the science of special creation" and told him that he was "ignorant" and expressed sympathy for "science teachers who have to cope with students like me."

So was the Kentucky teacher even a nonbeliever, or just someone who considered Flood Geology pseudoscience? The *Young Earth Creation Club* (2002a) didn't stop to consider such possibilities when Jacob's case was added to their list of "Religious/Scientific Bigotry in the Public Schools and Scientific careers." The "shoved down our throats" metaphor continues to show up in antievolutionary culture as Intelligent Design becomes the package of choice for their beliefs, such as in a Montana "objective origins" school board battle recounted by Victoria Clark (2004) where no actual instances of persecution could be documented. Once a siege mentality takes hold, though, no Intelligent Design filter is fine enough to guarantee what manner of antievolution evidence will be excluded, so that Robert Gentry's polonium halos are considered far more legitimate than the paleontology or geology evidence they will not accept, such as the views in *Young Earth Creation Club* (2002b)—all of which is still up and running for visitors to their website in 2014.

The second grenade in Scalia's fifth topic was the arbitrary conflation of the physical argument for natural evolution with the purely philosophical position of Secular Humanism, which has been an active cottage industry among creationists for some time, which has been an active cottage industry among creationists for some time, evidently picked up from the influential fundamentalist apologetics of Francis Schaeffer (1912-1984), Marsden (2006, 244-246). When Dale Crowley of the *National Bible Knowledge Association* unsuccessfully sued the Smithsonian Institution in 1978 over its evolution exhibits, it was on the grounds that taxpayer money was being spent to promote the "religion" of evolution (atheism in its trendy new garb of "secular humanism").

In the "equal time" taffy pull, while one camp insisted how *nonreligious* Creation Science could be, their compatriots were simultaneously trying to haul evolution over the metaphysical wall to declare it just as *religious* as creation, Toumey (1994, 49). Such arguments persist today, from YEC Randall Hedtke (2002) to the busy ID apologetics of John Calvert (2009), Cornelius Hunter (2009a-b) and Casey Luskin (2009m; 2014aq) detecting atheistic underpinnings to evolution at every turn before answering yea to "is atheism a religion?" Calvert's 2009 piece will come up again in section **1.7** regarding the Dover case

Courts can deem secular humanism as a "religion" insofar as equal protection and access are concerned regarding people's deeply held beliefs, though not without qualms from the secular camp, such as Jerry Coyne (2014z), but underlying such legal opinion there is an ongoing *Kulturkampf* context that cannot be overlooked.

Readers of Jerry Falwell's *Fundamentalist Journal* were warned by Beck (1982, 16) that, "secular humanism is dangerous and must be opposed because it makes the gospel unintelligible"—though one might argue that the Bible is quite capable of doing that on its own, without any outside assistance—and this theological perspective provides a panoramic worldview in which creationism offers a compact rallying cry. When Norman Geisler (1983b) decried "What Is Happening to Our Freedom?" in a piece for the *Fundamentalist Journal*, he brought up the Arkansas trial as a cautionary example—but never mentioned the YEC beliefs that were at the root of it, but spent pages complaining about the inroads of Secular Humanism. By the time Arizona State University legal scholar Marianne Jennings (2000) contributed a guest column for the conservative watchdog group *Accuracy in Media* about enforcement of the Establishment Clause, creationism only appeared as a peripheral caboose in a long train of *Kulturkampf* grievances:

Instruction in science and social issues absent religious perspective is state imposition of secularism. Imagine a faith Catholic child required to sit sullen but mute

through discussions on birth control. Think of the awkward moments a Mormon child feels as she sits through discussions of safe sex, AIDS and condoms. Think of the permissible discussions of Kwanza as a Christian child remains silent about her family's celebration. Without a discussion of abstinence, the school has advocated a faith of promiscuity and egoism. Absence of creationism is a state position against religion.

There is a modest kernel of truth to the Secular Humanism trope that fuels such concern, since in its capitalized version it has been offered as a secular religion for people less impressed with the godly ones, as I noted of John Dewey's ambivalence on religion when discussing Joe Renick in section **1.4** above. But granting all that, how exactly is one to pirouette from so narrow a pedestal to perform a proxy tarring of the broad population of working evolutionary scientists, as the Louisiana Creation Scientists tried to do, involving many tens of thousands of people? The presumption that the scientific community operates as some invidious cabal (never mind the religious convictions of many of them) was a caricature that Scalia seemed in no hurry to discard.

Such philosophy aside, there is a deeper methodological snag that Scalia showed no awareness of. In what possible way would any Secular Humanist "religion" of particular scientists bear on the *methodological cogency* of the work they do in their field? Say, a paper on the evolution of vertebrae in sauropod dinosaurs, or any other natural history subject—either the work has marshaled sufficient evidence to make its case or it has not. Which means, of course, that there should exist standards of evidence to be compared to.

Although the Big Picture philosophies of scientists certainly play roles in driving what interests or annoys them, they are methodologically *irrelevant* when playing the science game itself. There is no such thing as Buddhist chemistry or Secular Humanist astronomy or Christian geology or Hindu paleontology—there is only chemistry, astronomy, geology and paleontology, grounded on observation and openly displayed reasoned argument. As the pretentiously named *International Center for Scientific Integrity* (2013a) put it: "In science, motives don't matter—only the evidence matters." Unfortunately, the external resources for "the evidence" offered at *International Center for Scientific Integrity* (2013c) consisted of only Cornelius Hunter, Casey Luskin and John West, along with Kuhn (1970) dangled as though ID represented an impending "paradigm shift" on a par with the examples covered by Thomas Kuhn (1922-1996) in *The Structure of Scientific Revolutions* (most recently in modern physics from quantum theory to Einstein).

Certainly a creationist scientist could do science just as easily as an atheist—unless their ideologies were getting in the way of what data they were presenting, precluding their acceptance of theologically unacceptable results, at which point the background philosophy would definitely matter. Or should have, unless the upshot of *Edwards v. Aguillard* was ignored. While Steve Fuller (2008, 42) skipped over the issue in his cursory mention of *Edwards v. Aguillard* before marching off to the Dover case, Rachel Ramer (1994) offering antievolutionary debating tips for Hank Hanegraaff's *Christian Research Institute* objected to the *Edwards v. Aguillard* inquiry into the religious predilection of the Creation Science witnesses as "beside the point." A check of *CRI*'s website in March 2014 found Ramer's piece reposted with a 2009 date but without revision (or improvement).

These methodological underpinnings of science are surveyed in **Chapter 1** of Downard (2004), but for now it will suffice to note that here lies a deep root of why creationism crashes and burns so thoroughly (though never in their own reflection)—a major analytical fallacy that Scalia might have spotted more easily had he not acted as though Senator Keith's miniscule creationist road show could somehow substitute for the working scientific community and the range of their actual beliefs.

Having condensed the pith of the creationist complaints, Scalia repeated the mantra that Mawyer did above: "Senator Keith repeatedly and vehemently denied that his purpose was to advance a particular religious doctrine." And here we stumble onto another mighty technicality Scalia persisted in

not seeing. Provided one didn't specifically favor Baptist or Catholic or any other sectarian vantage, one might spin yourself into thinking you were staying clear of endorsing any *particular* religious view in the Louisiana case. But the law was playing favorites nonetheless, as even Scalia ought to have known, given that he summarized it in the first point above: *only* Creation Science (as conceived and packaged exclusively by doctrinal Christian Young Earth Creationists) was deemed *by law* to be the sole alternative to the (purportedly godless) evolution.

Now imagine if you passed a law mandating that everyone who didn't feel up for walking or using public transportation had to get a car. You further insisted you are not favoring any particular manufacturers in this endeavor, but the law declares that the only cars to merit licensing shall be those bearing the constellation Pleiades on their grill. In such an event you might feel that the lawmakers were protesting a bit too much, and check to see whether any of their relatives might be working at a Subaru dealership (no offense to the car company, by the way, they just happen to have a product logo well suited to my analogy).

But Scalia was already flying too high over the data to tumble over such fine distinctions. Earlier in his dissent he had shown far grander ambitions for the Balanced Treatment Act:

Our cases in no way imply that the Establishment Clause forbids legislators merely to act upon their religious convictions. We surely would not strike down a law providing money to feed the hungry or shelter the homeless if it could be demonstrated that, but for the religious beliefs of the legislators, the funds would not have been approved.

Scalia did not want to "deprive religious men and women of their right to participate in the political process. Today's religious activism may give us the Balanced Treatment Act, but yesterday's resulted in the abolition of slavery, and tomorrow's may bring relief for famine victims." As explored in **Chapter 6** of Downard (2004), the supporters of Bible-based human slavery were just as active as religiously motivated abolitionists (which is why America ended up fighting a Civil War to resolve the "controversy" there), and so represents a dicey moral episode that Scalia might well have done not to have brought up—but the famine relief example was a plain category mistake. Government funding of famine relief would involve only the delivery of food and services to the afflicted parties; it would say nothing about matters of fact (such as whether certain people might have been descended from a particular son of Noah after he Flood) or conceptual ideas about whether droughts were divinely directed (independently of whether some of the religious participants in the relief efforts or their backers might have believed such things).

The Balanced Treatment Act operated in an entirely different realm. Matters of physical fact (such as the age of the Earth, the fixity of species, or even how stars form and heavy elements are generated within them) were being dictated by legislative fiat, based exclusively on the claims fielded by groups deriving *all* their conclusions about what sort of evidence would be deemed permissible to be *true* being based on a rigidly nonnegotiable theological mandate. Schoolteachers in turn would be forbidden *not* to follow this playbook, required to bring up all this "scientific evidence" whenever the conventional scientific framework was presented.

It is thus very revealing that the majority opinion in *Edwards v. Aguillard* directly addressed what it was the act advocated (as quoted above) while Scalia effortlessly glided past its specific content or potential application as he dashed off to defend the Louisiana legislature, deciding that the law couldn't have flown "on the wings of fundamentalist religious fervor" because "only a small minority of the State's citizens belong to fundamentalist religious denominations" (as though religious conservatives in heavily Catholic Louisiana couldn't have been just as sympathetic to creationist views without camping in an overtly "fundamentalist" church). Since the act did resoundingly pass in the end, Scalia might have thought through this step in his logic a bit more thoroughly.

And so a legal case which involved Young Earth Creationists being given privileged license to define what constituted valid scientific argument was morphed by Scalia into nothing more than an occasion to recognize the right of people with strong religious convictions not to be barred from the public square (such as people feeling obliged to offer criticism of evolutionary thinking) or ever have their belief shins poked by whatever they might encounter in public education (no matter what that belief may be) provided it was based on a religious conviction. Here we have the ultimate *Get Out of Jail Free* card, though in Louisiana only one group was afforded the luxury of drawing one.

Scalia has neither revised nor retreated from this logic since. In 1994, the Tangipahoa Parish Board of Education in Louisiana wanted a disclaimer to be made whenever "the origin of life and matter" was mentioned, reminding students that such instruction was "not intended to influence or dissuade the Biblical version of Creation or any other concept," and "urged to exercise critical thinking and gather all information possible and closely examine each alternative toward forming an opinion."

The Supreme Court struck down the Tangipahoa Parish disclaimer as yet another effort to slip scientifically spurious creationist arguments in through the cracks, though not ruling whether less explicitly religious disclaimers were prohibited, DelFattore (2007, 63-66). Scalia (2000) again dissented, joined once more by Rehnquist and the newer Justice Clarence Thomas, offering this revealing expression of what "innocuous" meant in their perception:

The only aspect of the disclaimer that could conceivably be regarded as going beyond what the rehearsing statement purports to approve is the explicit mention—as an example—of "the Biblical version of Creation." To think that this reference to (and plainly not endorsement of) a reality of religious literature—and this use of an example that is not a contrived one, but to the contrary the example most likely to come into play—somehow converts the otherwise innocuous disclaimer into an establishment of religion is quite simply absurd.

In Regent University Law Review articles, Drew DeMott (2001) and David DeWolf (2001, 462-466) defended the parish's stance. Like Scala, DeMott and DeWolf failed to consider what constituted relevant information, or how students were supposed to assess it in an environment flush with creationist "fact" resources, from What is Creation Science? to the burgeoning Intelligent Design literature that included Of Pandas and People. Though Francis Beckwith (2006, 110-114) recognized that the Bible focus capsized their case, he thought a purely anti-materialist slant would have been acceptable. All of which reflected a reluctance to address the sectarian motivations behind the disclaimer: that Biblical Creation was "the example most likely to come into play" because the people involved were obsessed with that aspect over all others, and operated a "design" train of their own with a long line of baggage behind their well stoked locomotive..

Who couldn't get all warm and fuzzy over the American fair play tolerance of dissenting views in such an environment of exuberant academic freedom?

But were there no limits to this argument by legislative plebiscite? Were the players only the Young Earth Creationists seeking to erase six orders of magnitude from the age of the Earth, or the Intelligent Design advocates who by 1994 were waving copies of Denton's *Evolution: A Theory in Crisis*? Couldn't others get to bring their ball too, from historical revisionists skeptical of the Holocaust to people who think advanced ancient civilizations founded on alien intervention had existed—or even newer players, such as those who believe CIA demolition experts brought down the Twin Towers on 9/11? As we'll be seeing in due course, there are lots of people who have their own "critical thinking" agendas to further, however little Antonin Scalia or Drew DeMott or David DeWolf stopped to think about it.

Although no antievolutionist legislation has percolated up to the SCOTUS level since Tangipahoa Parish to prod his lack of curiosity on the evolution data front, speaking at his granddaughter's High

School graduation in 2015, Scalia noted that "Humanity has been around for at least some 5,000 years or so"—a sufficiently truncated chronological frame (our species has been around for closer to 200,000 "years or so" in a hominid lineage running back several millions) to excite the suspicion of observers like Stone (2015c) that the Justice might actually accept the YEC model that he had so blithely defended in his *Edwards v. Aguillard* dissent. Or at the least, like William Jennings Bryan before him, Scalia's own Map of Time may well have numerous chronological equivalents of "Here Be Dragons" scribbled in along the seldom viewed margins indicating sundry stuff going on prior to events recounted in the Bible.

1.6 Section 10: Running with Scissors—Antievolutionists embrace the "logic" of Scalia's dissent

Not surprisingly, the creationist defenders Mawyer (1987a-b) and Wendell Bird (1989, Vol. 2, 445) quoted the Scalia/Rehnquist 1987 dissent with evident approval, since it gave antievolutionists a potential lever (the academic freedom issue) to pry the school education door open wide enough for them to pile on in, dragging whatever "scientific evidence" baggage they might have along with them. Nutting & Nutting (1987) at the *Alpha and Omega Institute* would be an example of what that might entail (defending full blown Creation Science with no deviations then or since), and *Think & Believe* (1987c) tendered a "Bravo for Scalia and Rehnquist—two clear thinkers!"

The shape of the double standard methodological myopia to come was represented over in ID-land by DeWolf *et al.* (2000, 109) when they decided "*Edwards v. Aguillard* affirmed the right of teachers to discuss alternative scientific theories of origin in their classroom." Gonzaga University law professor David DeWolf (2001) offered a similar argument solo, stressing the academic freedom of teachers to "teach the controversy" over evolution and "correct misinformation" on the way. *The Christian Law Association* (2000) likewise affirming that teachers could not be prohibited from presenting "credible scientific information in a public school science class that refutes the theory of evolution."

As usual, none dived into how one is to define what is "credible" and by whom, but the examples they did allude to suggested some implicit underlying notions. DeWolf *et al.* (2000) proposed how a hypothetical "John Spokes" would be justified in offering *Icons of Evolution* or Dembski and Behe in science class, and DeWolf (2001, 478) fielded *Icons of Evolution* alone, while *The Christian Law Association* offered Behe's "irreducible complexity" and Charles Thaxton's claims on the implausibility of a naturalistic origination for life, which work they claimed "has not been refuted by evolutionary scientists." Says who? Behe and Thaxton?

By that logic DeWolf *et al.* and *The Christian Law Association* were ready to leapfrog over the details of Creation Science to award an exclusive scientific dispensation to these new league of ID investigators: the warrant to proclaim their own validity independent of the judgment of the broader scientific community and thereby avoid the messier task of having to earn their credibility by weathering the test of time. But who granted Intelligent Design special rights here? Can't those Ph.D.'s Duane Gish or Robert Gentry play this game too?

While DeWolf (2001, 469, 472) dangled "the troublesome question of whether creation-science is really science," he ventured no answer to it—willing to quote evolutionists who think Creation Science is dreadful, but silent on what his own views might be. DeWolf and company certainly offered no purely empirical reason to *reject* the Creation Science evidence none of them discussed (much as they showed insufficient gumption to "critically analyze" their own side's ammo), so who were they to say Gish or Gentry were *wrong*, or to deny their arguments their day in the free-for-all court of politicized scholastic opinion in the absence of that? By all means teach *that* controversy too.

Whether they wanted to think about the issue or not, the problem remained, because Creation Science wasn't about to shutter the windows just because of the *Edwards v. Aguillard* setback. From over on the evolution science side, Ranse Traxler (1993) reported in a letter to *The American Biology Teacher* on his study of Illinois public schools in 1989 for the National Center for Science Education, hot on the heels of *Edwards v. Aguillard*:

When I discovered that the Peoria Public School District was encouraging members of the Institute for Creation Research (ICR) to present creationism as science to their students and was using an ICR publication as a biology textbook, I contacted the Biology Department at nearby Bradley University. I was shocked to learn that they already knew about it and that they refused to address the issue, even though one of their professors had children in the district and was an official of the Illinois State Academy of Science!

When I discovered that the Collinsville Public School District supported teaching creationism as science and backed a science teacher who was telling his students that "contrary to your textbooks, there is no scientific evidence for the earth and universe being greater than 10,000 years old," I contacted the scientists at nearby Southern Illinois University. Again I was shocked to learn that they knew about it and that no one would speak up against it, even though one of the biology professors had children in the district!

When I contacted the Illinois State Board of Education about this, they replied 1) they had no influence over the individual school districts, 2) there was no problem with creationism in our schools, and 3) the school districts were free to present creationism as science to the students! When one concerned scientist did go to the Capitol to speak to the State Board on the issue, the official he talked to questioned his religious beliefs, tried to convert him and stated that he supported teaching creationism in Illinois public schools!

But over in the gestating ID camp, the account of *Edwards v. Aguillard* in Phillip Johnson (1997b, 54, 125) was no more interested that DeWolf *et al.* in what actual teachers might have been doing in real science classes in the years since the ruling. Instead, Johnson's Notes on *Edwards v. Aguillard* and Scalia's dissent showed what *Kulturkampf* buttons were ready to be pressed when he fretted over bumper stickers:

The Justices probably did not mean to lay down a rule that the official theory of evolution may not be criticized or questioned in public school classrooms, but that was the effect of their decision. The Justices who signed the majority opinion seem to have been fooled by arguments from the science establishment that every claim made by the scientific elite about 'evolution' is a matter of neutral fact and that all opposition to materialism comes from people who want to read the Bible to students instead of teaching them science. Perhaps a Justice who drives home in the evening from the Court will by now have noticed the 'Darwin fish' bumper stickers on cars—showing a fish with legs in mockery of the Christian fish symbol on other cars—and will realize that the Supreme Court has been duped into taking sides in a religious debate.

Thus did Johnson adroitly sidestep the social and historical background for the Louisiana legislation as deftly as Mawyer and Bird and Scalia did before him, or DeWolf and the legal gang were doing contemporaneously. Antievolutionism was rooted in a very literal Biblical creationism and not the sanitized Intelligent Design movement Johnson was keen on nurturing. The "Darwin fish" appeared when this fervent Creation Science was at its height, and the people most likely to be campaigning for equal time for creation in public schools were conservative Christians liable to sport the fish symbol.

It is revealing that Johnson used "mockery" to describe the "Darwin fish" (rather than, say, a "parody" in affirmation of naturalistic evolution)—a characterization reflecting the personal religious

sensitivity of Johnson more than the snarky motivations of creationism critics. Johnson expressed similar umbrage later that year when he waved one of the Darwin tetrapods about during the "Firing Line" evolution debate (more on that event later). Ditto Johnson (2000, 82): "Why else would persons who want to mock the Christian fish symbol choose to decorate their automobile bumpers with a fish with legs?"

Johnson's attitude was comparable to the protagonist of Christopher Lane's 1999 creationist novel *Tonopah* (published by the religious Zondervan press) who characterized a "Celebrate Diversity" bumper sticker and the Darwin medallion as "statements against Christianity—against God himself," Lane (199, 144). The potboiler plot was a sort of Green YEC meets Rambo in Area 51: Melissa Lewis, a dedicated creationist Flood paleontologist (there are so many!) dug up Mesozoic dinosaur era human fossils, but when her work unknowingly trespassed on a secret Nevada base some gratuitous mayhem ensued at the hands of murderous government flunkies out to prevent disclosure of a 1950s atomic test mishap. Paleontology was targeted in another creationist novel from this period reviewed by Skip Evans (2000), this time featuring a virtuous YEC PhD paleontologist candidate whose knowledge helped convict Darwin retroactivity in a mock science trial (file under foregone conclusions).

That secular bumper stickers might be targeted for wit rather than blasphemy reminds me of a similar waggish sentiment some years ago, advocating the ultimate in geographic self-determination: REUNITE GONDWANALAND (the southern half of the Pangea supercontinent, since fragmented into South America, Africa, Australia, and Antarctica). It would require a truly Johnsonian or Lane-class focus to deem that a *radical political* statement rather than something a geology lover intended to be *droll*, but such a touch of whimsy is difficult to slip through an incensed *Kulturkampf* gauntlet.

The creation/evolution bumper sticker war has continued apace, of course, Johnson and "Melissa Lewis" notwithstanding, with a creationist one labeled "Survival of the Fittest" showing a larger *ichthus* labeled "Jesus" devouring the Darwinian rival—and one on "Survival of the Forgiven," where the Christian fish is about to swallow the fleeing (and obviously disconcerted) "Darwin" critter. There are also medallion versions where the fish is identified variously as "Jesus," "IXOYE," or "Truth." Though *Breakpoint* writer G. Shane Morris (2014) ultimately scraped the disintegrating *ichthus* from his car once it dawned on him that "nobody other than my Creationist friends ever mentioned it."

The concern over the Darwin Fish sparked by the creationist resurgence signified that the cultural links between the "new" Intelligent Design and the old religious Creation Science were far stronger than defenders like Johnson were disposed to admit.