

# Evolution of a Controversy

## The War over Darwin



TEACHING CREATIONISM IN THE CLASSROOM???

**IN FRANCE, CHARLES DARWIN'S THEORY OF EVOLUTION IS TAUGHT WITH THE SAME DEFERENCE AS ISAAC NEWTON'S LAW OF GRAVITY. IN THE UNITED STATES, CREATIONISTS AND PROPONENTS OF EVOLUTION HAVE BEEN ENGAGED IN A LONG-RUNNING BATTLE OVER HOW TO TEACH THE ORIGINS OF MANKIND IN PUBLIC SCHOOLS. AURÉLIE GODET PROVIDES A BRIEF HISTORY OF REACTIONS TO DARWIN IN ENGLAND AND AMERICA.**

**W**hile history textbooks usually refer to 18th-century Britain as the cradle of Enlightenment philosophy, 19th-century Britain could fairly be described as “science-obsessed”. Though the meaning, value and purpose of the scientific approach were not yet clear among those who were still called “natural philosophers”, its products certainly aroused the curiosity of the layman. London’s Great Exhibition, meant to showcase and highlight Britain’s superior scientific and technological achievements, drew six million people in six months, from May 1st to October 15, 1851.

### Of Dodos & Men

Under the glass-plated roof of the specially constructed Crystal Palace, visitors could find up-to-date information on new steam engines and advances in the field of telegraphy. A whole side nave was dedicated to machines in motion in order to give the interested citizen an insight into production processes. The public could also discover the fascinating world of exotic crafts and stuffed

wild animals. English taxidermist Abraham Bartlett received especially rave reviews for his life-size reconstruction of the extinct dodo bird<sup>1</sup>. A prime example of Britain's technical wizardry, the stuffed dodo also served as a reminder that species were neither immortal nor immutable. Eight years later, Charles Darwin was to give his own explanation for the emergence and extinction of species: natural selection.

The year 1859 undeniably constitutes a keystone in the "century of science". Nothing was more talked about that year than Darwin's *The Origin of Species*, a book that overthrew the dogma of special creation (*i.e.*, creation using supernatural processes) by explaining speciation in terms of the struggle to survive and propagate among organisms that differ in their abilities because of randomly occurring variations. Darwin tried to soften the blow by invoking at least one creative act for the purpose of getting life going (see inset 1) but soon came to regret his use of "religiously correct" language. By the time he penned his treatise *The Descent of Man* (1871), he no longer felt the need to cater to public opinion with veiled references to the Creator.

The following extracts illustrate Darwin's growing rhetorical confidence, from *The Origin of Species* (1859) to *The Descent of Man* (1871).

"Probably all the organic beings which have ever lived on this earth have descended from some one primordial form, into which life was first breathed"

"Man is descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World. [...] The Quadrumana and all the higher mammals are probably derived from an ancient marsupial animal, and this through a long line of diversified forms, either from some reptile-like, or some amphibian-like creature, and this again from some fish-like animal!"

Naturally, such audacity was badly received in the clerical community. The Anglican establishment, led by the Bishop of Oxford Samuel Wilberforce, quickly indicated its rejection of evolutionism. The response to *The Origin of Species* and *The Descent of Man* was equal-



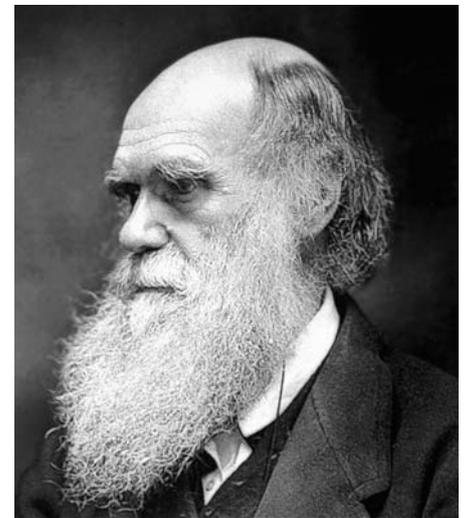
ly half-hearted in the scientific community. Though some biologists declared themselves convinced by the author's theory, most of them hesitated to accept it due to the unexplained ability of individuals to pass their special abilities to their offspring. By the mid-1870s, however, nearly all naturalists of repute in Britain had embraced some theory of organic evolution. This rapid conversion owed a lot to the empirical evidence Darwin and others marshalled in favour of the transmutation of species.

Across the Atlantic, the reception given to Darwin's ideas was fairly similar. After a slow start in the early 1860s, the idea of organic evolution quickly won the allegiance of American biologists. In 1872, paleontologist Edward Drinker Cope observed that "the modern theory of evolution has [...] met with remarkably rapid acceptance by those best qualified to judge of its merits". As in England, some Protestant intellectuals tried to prove the theory invalid by showing its inconsistency with central elements of the Christian message. Charles Hodge, the principal of Princeton's Theological Seminary, thus famously equated Darwinism with atheism because it enabled one to account for design without referring it to the agency of God. Yet, such voices remained isolated – at least until the rise of fundamentalism in the 1910s.

## Monkey Business

Fundamentalism emerged within mainline Protestant denominations as a reaction to both the increasing radicalism of

theological liberals and the cultural disruptions following the First World War. Determined to drive the scourge of modernism out of church and society, its advocates championed a literal reading of the Bible. Though Darwinism was not their main concern, their most widely distributed tract, the twelve booklets called *The Fundamentals*, did take aim at evolutionary teaching in schools. Soon, sympathizers across the country



CHARLES DARWIN (1809-1882)

CHARLES DARWIN ACTUALLY STARTED AS A GEOLOGIST, UNTIL A FIVE-YEAR VOYAGE ON H.M.S BEAGLE LED HIM TO OBSERVE THE TRANSMUTATION OF SPECIES AND DEVELOP HIS THEORY OF NATURAL SELECTION. IN 1838, FULLY AWARE OF THE LIKELY REACTION, HE STARTED RESEARCHING TO MEET ANTICIPATED OBJECTIONS. WHEN LEARNING IN 1856 THAT A FELLOW NATURALIST NAMED ALFRED RUSSEL WALLACE HAD DEVELOPED A SIMILAR THEORY, HE AGREED TO A JOINT PRESENTATION AT THE LINNEAN SOCIETY ON JULY 1, 1858. ONE YEAR LATER, HE FINALLY PUBLISHED ON THE ORIGIN OF SPECIES BY MEANS OF NATURAL SELECTION.

Graph from PY

assumed the position that public education should be silent on the issue of human origins. Bills outlawing evolutionary teaching appeared in five southern and border-state legislatures. On March 23, 1925, the governor of Tennessee Austin Peay signed one of them into law, laying the groundwork for the first big test case known as “the Scopes monkey trial”.

Barely two months after the passage of the Butler Act<sup>2</sup>, a science teacher named John Scopes accepted the American Civil Liberties Union’s

“Teach both. You know, don’t be afraid of education. Healthy debate is so important, and it’s so valuable in our schools. I am a proponent of teaching both.” **Sarah Palin** in a televised gubernatorial-candidate debate KAKM Channel 7, October 25, 2006



entreaty to test its constitutionality and publicize its perceived threat to freedom. Clarence Darrow, the most famous defence attorney of the day, immediately volunteered to help him. The World’s Christian Fundamentals Association reacted by asking former presidential candidate William Jennings Bryan to represent their cause. The trial, which lasted from July 10 to July 21, did not end the way the ACLU hoped it would. Though the Creationist movement was ridiculed by Darrow’s clever attacks, Scopes was found guilty of teaching evolution and was fined \$100. What’s more, the defence’s failure to have the Tennessee law declared unconstitutional left other legislatures free to enact similar measures. Unsurprisingly, numerous anti-evolution bills appeared across the United States in the months following the trial.

During the ensuing three decades, the anti-evolution movement and opposition efforts by the ACLU died down, due to both sides’ inability to enforce or repeal the existing laws. The truce ended in 1965 when a science teacher from Little Rock filed a suit against the state of Arkansas, arguing that the anti-evolution statute voted in 1928 violated her freedom of speech. After a series of legal setbacks, her appeal was accepted by the U.S Supreme Court early in 1968. In the

landmark *Epperson v. Arkansas* case, the High Court presided by Earl Warren stroke down anti-evolution laws on the grounds that the U.S Constitution does not permit a state to tailor its requirements for teaching to the principles of any particular religious doctrine.

Subsequent rulings helped define the boundaries of this decision. In a 1981 case, a parent sued California, claiming that classes in which evolution was taught prohibited his children’s free exercise of religion. The Sacramento Superior Court ruled that teaching evolution did not infringe on religious freedom. Creationists next tried to argue that their view should not be excluded on grounds of separation of Church and State, because it was not religion but science. In 1981, the Arkansas legisla-



ture passed a bill requiring “balanced treatment” of what they called “creation-science” and “evolution-science”. The court struck down the law in the 1982 *McLean v. Arkansas* case, finding that “creation-science” was not science, but religion. The U.S Supreme Court came to the same conclusion in the 1987 *Edwards v. Aguillard* case, striking down Louisiana’s “Creationism Act” which required the teaching of creationism whenever evolution was taught. In a more recent case, *Kitzmiller et al. v. Dover Area School District* (2005), the Pennsylvania court overturned a policy that would require teachers to tell their students about “Intelligent Design”, a subtler version of Creationism that avoids mentioning God.

All these victories illustrate the growing respect science has earned in the American courts over the past 80 years. They hardly reflect, however, the standing of Darwin’s theory in American public opinion.

## One Nation, Deeply Divided?

As shown in the graph, a plurality of Americans (45%) come down on the side of a creationist approach to human origins when asked to choose between three statements that describe the origin and development of the human race. Though they are not necessarily anti-evolution militants, they feel that it is unfair to teach Darwin’s theory only. Slightly fewer (36%) agree with a statement that reflects an evolutionary process guided by God, and only a small number (14%) agree with an evolutionary process in which God had no part. These figures have remained essentially stable since Gallup started asking this question in 1982. It seems, therefore, that independently of the courts’ decisions since 1981, Americans are still divided over the issue of evolution.

Why is it that the law cannot resolve the evolution-creation controversy? The answer is quite simple: the stakes are too



high to make any compromise possible. Partisans on both sides do not worry so much over the content of Darwin’s theory as over the wellbeing of America’s children. Evolutionists consider that only good science education can enable their children to face the future intelligently. On the other hand, Creationists are afraid that belief in evolution will make their progeny question moral principles – as can be seen in the following quote from the leader of an anti-evolution group, Answers in Genesis: “Students in the public schools are being taught that evolution is a fact, that they’re just products of survival of the fittest. There’s not meaning in life if we’re just animals in a struggle for survival. It creates a sense of purposeless and hopelessness, which I think leads to pain, murder and suicide”.

Ultimately, therefore, the “war over Darwin” is a war over what values America should be built on. The conflict cannot end until one camp has been vindicated both by law and popular opinion. Since this prospect will probably not materialize any time soon, it is safe to assume the controversy will continue in American courts, legislatures and school boards well into the twenty-first century. John McCain,<sup>3</sup> and Barack Obama’s<sup>4</sup> respective recent middle-of-the-road statements that “every American should be exposed to all theories” and that “I do believe in evolution. I don’t think that is incompatible with

Christian faith.” already suggest that evolution teaching will remain an issue in American schools – and courts – for years to come. ■

1. Formerly an inhabitant of Mauritius, the Dodo was said by Dutch explorers to have existed on the island between 1598 and 1600 but to have disappeared soon afterwards.

2. The act forbade “any teacher to teach any theory that denies the Story of Divine Creation of man as taught in the Bible, and to teach instead that man has descended from a lower order of animal”.

3. GOP debate at Saint Anselm College June 3, 2007.

[http://www.ontheissues.org/2008/](http://www.ontheissues.org/2008/John_McCain_Education.htm)

[John\\_McCain\\_Education.htm](http://www.ontheissues.org/2008/John_McCain_Education.htm)

4. Obama: Democratic Compassion Forum at Messiah College Apr 13, 2008. [http://www.ontheissues.org/2008/Barack\\_Obama\\_Education.htm](http://www.ontheissues.org/2008/Barack_Obama_Education.htm)

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