History of an Idea

The Question: How did we get from Isaac Newton's theistic science of 1687 to Charles Darwin's atheistic science of 1859, a span of a mere 172 years?

If there is a single theme running throughout, it is that following the Thirty Years Wars of religion of 1618-1648 (hereinafter, "TYW"), many scholars increasingly accepted the supposition that the accepted method for apprehending truth about God (its *epistemology*) differs fundamentally from the accepted method for apprehending truth about nature. Scientific knowledge was to be gained rationally, while religious knowledge was to be gained by faith – that is, *non*-rationally. This has become known as *the divided field of knowledge.*

The Christians at the forefront of the Scientific Revolution – Copernicus, Kepler, Galileo, Newton, et al. – embraced biblical revelation concerning both God and nature, but they then added another epistemology to it, namely, empiricism, the method of experiment and observation. Crucially, this new way of knowing was itself spurred by their biblical worldview, a topic explored earlier. (*See* Science and Religion: Exploding the Myth of Conflict, https://joshualetter.com/2024/12/05/science-and-religion-exploding-the-myth-of-conflict/.)

All this changed with the Wars of Religion of 1618-1648 (hence, the "Thirty Years War," hereinafter "TYW"). The intelligentsia, fatigued with sectarian violence, sought an alternative to the Bible as a basis for morality, ethics, and law, and they believed they had found it in the universal human rational capacity. The conception of the Bible as the very Word of God Himself had seemed to require believers to defend that Word by force of arms. Replacing the Bible with the universal human rational capacity as a basis for morality seemed to have promise as a means of preventing further religious conflict.

The effect of this move was disastrous. Removing religion from science deprives science of normative values (abortion, assisted suicide, *in vitro* fertilization, etc.), while removing science from religion deprives religion of objective validity (moral relativism, You can't prove God, You do you). This is the *divided field of knowledge* (hereinafter, "DFK").

Equally unfortunate is that the means of knowledge was seen as rational in the case of science, and non-rational in the case of religion – the infamous "leap of faith." As Stephen Jay Gould, the late twentieth century's leading popularizer of neo-Darwinian theory, famously declared, "science treats factual reality, while religion struggles with human morality." But as Phillip Johnson rightly noted, this is "naturalistic metaphysics in a nutshell. . . . The power to define 'factual reality' is the power to govern the mind. . . . [A} command of God can hardly provide a basis for morality unless God really exists." But if He exists, there may be empirical evidence of His existence, provided we will permit ourselves to see it.

For these reasons it seemed imperative to seek an understanding as to when, how, and why the Western mind became entranced by this fallacy. I went back to Roger Bacon (1214-1292), ("Greater Work," 1267), the Franciscan monk who "extolled experimentation so ardently that he has often been viewed as a harbinger of modern science more than 300 years before it came to bloom." (https://www.britannica.com/biography/Roger-Bacon.)

I began there and searched for the most influential scholars, philosophers, and scientists from the period in question to see if I could trace the history of this idea, the divided field of knowledge. The result (which I realize is rudimentary), is set forth in two attachments to this essay. Attachment 1 is merely a time line, a list of influential scholars, without my commentary; Attachment 2 is the same time line, but with my commentary added. My thinking is simply that the reader's ability to visualize the progress of DFK will be facilitated if one can see the whole at a glance, and that a condensed version will be conducive to that end.

What you may notice from Attachments 1 and 2 is that prior to the TYW, major scientists were all or nearly all Christians; but after the TYW many scholars embraced deism; and what's more, many who continued in their biblical worldview after the TYW nevertheless contributed their voices to the promotion of DFK; among them were several of the most influential intellectuals of their times: Descartes, Newton, Locke, Kant. Additionally, you may also notice that there was a crescendo in such thinking in the Nineteenth Century, exemplified in the thought of Hegel, Comte, Kierkegaard (another Christian), Mill, Darwin, Marx, Draper, Nietzsche, and Freud. And finally, the Twentieth Century also contributed to this way of thinking in the work of Jaspers, Barth, Bultmann, the Scopes trial (and its film adaptation Inherit the Wind), Heidegger, Camus, Sartre.

It would be one thing to draw a hard distinction between fact and value if the two realms of knowledge were somehow to continue to carry on a robust intercourse; but the bifurcation of knowledge inevitably effects a demotion of value, purpose, and meaning. The glory of scientific methodology lies in the expectation that its findings will be submitted for critique by a wider community in accordance with widely-accepted criteria. Its conclusions therefore have an authority which value claims do not necessarily enjoy – lacking, as they do, comparable agreed-upon criteria. How fortunate we are that in the Twentieth Century it is the hard sciences which have begun to effectively resist materialism and DFK, with the discoveries of an absolute beginning, the fine-tuning of the laws of physics, and DNA! Scientific advancements having clear theistic implications are thus the very best remedy for DFK.

Thomas Alderman
November 2026

History of an Idea – Attachment 1

A.D.

33 The Resurrection of Jesus
40 The Gospel of Matthew
45 The Gospel of Mark
54-68 The Neronean persecution
55 The Gospel of Luke
62 The Book of the Acts of the Apostles
65 The Gospel of John
?? The Book of Revelation
66 Paul is executed
70 The destruction of Jerusalem

Beginning of the Scientific Revolution

1267 Roger Bacon (1214-1292)
1513 Machiavelli (1469-1527)
1543 Copernicus (1473–1543)
1609 Johannes Kepler (1571-1630)

1618 Beginning of Thirty Years War
1620 Francis Bacon (1561-1626)
1621 Kepler (1571–1630)
1633 Galileo's trial

Beginning of the Enlightenment

1637 Descartes
1648 End of Thirty Years War

1651 Hobbes
1661 Boyle
1687 Newton
1689 Locke
1740 Hume
1748 Montesquieu
1759 Voltaire
1781 Kant
1799 Laplace
1802 Paley

1804 Death of Immanuel Kant (end of the Enlightenment, according to some)

The Romantic period

1807 Hegel
1830 Comte
1843 Kierkegaard
1859 Mill
1859 Darwin
1867 Marx
1874 Draper
1885 Nietzsche
1899 Freud

The Modern Period

1905 Einstein
1913 Jaspers
1915 Einstein
1919, 1922 Barth
1920 Sanger
1921 Bultmann
1922 Alexander Friedman pronounces GTR to be true
1925 Scopes trial
1927 Heidegger
1927 Lemaitre
1929 Hubble
1942 Camus
1943 Sartre
1946 Hoyle, Stellar nucleosynthesis
1948 Kinsey
1953 Watson and Crick
1953 DNA
1959 Popper
1960 Birth control
1960 Inherit the Wind
1961 Dicke, fine-tuning of the laws of physics
1962 Thomas Kuhn, The Structure of Scientific Revolutions
1963 Friedan, The Feminine Mistique
1964 Penzias and Wilson discover the cosmic microwave background radiation (CMBR).
1983 Paul Davies, The Cosmic Blueprint
1992 Cosmic Background Explorer (COBE) confirms Big Bang cosmology.
1998 A Brief History of Time by Stephen Hawking (1942-2018)
2006 George Smoot is awarded Nobel for COBE.
2006 Vilenkin, Borde, and Guth declare that the universe had an absolute beginning.

History of an Idea – Attachment 2

(Preliminary notes:

Most of the dates in the left-hand column are the dates of the publication of each thinker's most influential work; a few are the dates of important events, just for context.)

"SEP" is the Stanford Encyclopedia of Philosophy, online at plato.stanford.edu, on which I relied whenever I could.)

"Gemini" is the A.I. feature of the Google Chrome browser.

"DFK" is the divided field of knowledge.)

A.D.

33 The Resurrection of Jesus

33 The Gift of the Holy Spirit

40 The Gospel of Matthew[i]

45 The Gospel of Mark

54-68 The Neronean persecution

55 The Gospel of Luke

62 The Book of the Acts of the Apostles

65 The Gospel of John

?? The Book of Revelation

66 Paul is executed

70 The destruction of Jerusalem

70 to 1267: Many important events not germane to our topic.

Beginning of the Scientific Revolution

1267 "Greater Work" by Roger Bacon (1214-1292)

Franciscan monk. A major early proponent of experimental science.[1]

[1]https://www.britannica.com/biography/Roger-Bacon

Bacon is "Considered among the fathers of empiricism and is credited with establishing the inductive method of experimental science via what is called the scientific method today."

https://en.wikipedia.org/wiki/List of Christians in science and technology. .

Bacon "regarded the study of nature as a truly religious activity" (Gascoigne 2010: 215). "Natural philosophy [*i.e.*, science], after the Word of God", Bacon asserted in the Novum Organum, "is the best medicine for superstition and most highly recommended food for faith."

SEP (https://plato.stanford.edu/entries/francis-bacon/#NatPhiRelLaw)

1513 The Prince by Niccolo Machiavelli (1469-1527)

1543 On the Revolutions of the Heavenly Spheres by Nicolaus Copernicus (1473-1543)

Showed that the Earth orbits the sun and not vice versa.

A Christian neo-Platonist who expected physical reality to reflect the precision of mathematics and who was disturbed by the Ptolemaic model's contrivances and lack of elegance.

The beginning of modern science and the beginning of the end for Aristotelianism's "armchair rationalism."

1609, 1621 New Astronomy by Johannes Kepler (1571-1630)

Discoverer of the elliptical paths of the planets around the sun, in contrast to Aristotle's assumption that the planets, being divine, would have circular orbits since a circle is a perfect shape.

Kepler believed that "God wanted us to recognize natural laws, and God made this possible by creating us after his own image so that we could share in his own thoughts."

Stephen C. Meyer, Return of the God Hypothesis (Harper Collins 2021), 36.

1620 New Method by Francis Bacon (1561-1626)

Bacon is "Considered among the fathers of empiricism and is credited with establishing the inductive method of experimental science via what is called the scientific method today."

https://en.wikipedia.org/wiki/List of Christians in science and technology. .

Bacon "regarded the study of nature as a truly religious activity. . . . Natural philosophy [*i.e.*, science], after the Word of God", Bacon asserted in the Novum Organum, "is the best medicine for superstition and most highly recommended food for faith."

SEP, https://plato.stanford.edu/entries/francis-bacon/#NatPhiRelLaw

1621 Epitome of Copernican Astronomy by Johannes Kepler (1571-1630)

1618-1648 Thirty Years War

The religious wars of the 17th Century were a watershed in the history of philosophy. Thereafter, as we shall soon see, scientists and philosophers began going to great lengths to avoid expressly grounding their ideas on the Bible, lest they provoke another round of sectarian strife. Resort was often made to DFK. Generally, they relied on their own powers of reasoning to gain knowledge. In the event, what this amounted to is that they affirmed as "self-evident" many doctrines which had been part of the prior era's biblical synthesis. The prime example of this, I suppose, is the belief in inherent human dignity, expressed in the American Declaration of Independence: "We consider these truths to be self-evident." They considered those ideas to be self-evident merely because they were so close to the prior era that they were unable to imagine a world in which those ideas did not prevail.

1633 Galileo's trial.

Smack in the middle of the Thirty Years War.

I have discussed Galileo's trial at some length elsewhere. It is a very important part of the story. See Science and Religion: Exploding the Myth of Conflict, Introduction (https://joshualetter.com/2024/12/05/science-and-religion-exploding-the-myth-of-conflict/); and Exploding the Myth, Part Four: Whatever Happened to Theistic Science? (https://joshualetter.com/2024/12/27/science-and-religion-exploding-the-myth-of-conflict-4/.

1637 Discourse on the Method by Rene Descartes (1596-1650).

The beginning of the Enlightenment, according to some, which, according to some, ended in 1804 with the death of Immanuel Kant.

Descartes was a practicing Catholic throughout his life.

His famous "I think, therefore I am" was an attempt to find truth by the power of human reason alone – that is, unaided by divine revelation, which the Enlightenment erroneously identified as the cause of religious strife. In fact, it is not religious belief itself which causes strife; rather, it is the assumption that it is a legitimate use of the power of the state to enforce right religious belief which causes strife.

Descartes did not explicitly endorse DFK, but he helped lay the groundwork for it by seeking an alternative to the Bible as a source of moral authority.

1638 Two New Sciences by Galileo Galilei (1564-1642)

The "Two Books" metaphor: scripture is one book and nature another book. Both books having the same author, there can be no contradiction between them. If they seem incompatible, it is because we have not yet understood one or the other or both. Galileo specifically affirmed that in some cases it might be our interpretation of scripture which must give way. (The Pope was prepared to do exactly that in Galileo's case, until Galileo insulted him.) "The metaphor of the book of nature . . . implied the legitimacy of scientific endeavor, since it affirmed that nature supplied a secondary source of authoritative revelation about the character and wisdom of the creator."

Meyer, 48.

1641 Meditations by Rene Descartes (1596-1650).

1651 Leviathan by Thomas Hobbes (1588-1679)

Hobbes is the earliest explicit instance of DFK that I have found, albeit a somewhat ambiguous one. He does not appear to draw a hard dichotomy between the two realms of knowledge. He did, however, hold that there are two kinds of knowledge: there is knowledge from sense experience, and there is scientific knowledge.

He believed that God is a physical being and that morality arises from a social compact, not from divine commandment.

> SEP, Hobbes' Philosophy of Science, https://plato.stanford.edu/entries/hobbes-science/)

1661 The Skeptical Chemist by Robert Boyle (1617-1691)

". . . largely regarded today as the first modern chemist, and therefore one of the founders of modern chemistry, and one of the pioneers of modern experimental scientific method." Wikipedia.

Regarded devotion to the study of nature, like devotion to the study of scripture, as "an act of Piety," especially since he thought God desired "to have his Works regarded and taken Notice of."

> Meyer, 48.

Clearly there is some overlap between eras: the Enlightenment began before the Scientific Revolution was over. (Indeed, neither ever ended. We are all rationalists; we are all materialists, and all post-moderns, because all of those movements once had cachet and are still in the air we breathe, as it were.)

1677 Baruch Spinoza (1632-1677)

Pantheist.

According to the SEP, Spinoza believed that "[P]hilosophy and religion, reason and faith, inhabit two distinct and exclusive spheres, and neither should tread in the domain of the other.

SEP, https://plato.stanford.edu/entries/spinoza/#Biog].

That's about as clear as you can make it. But it's more complicated:

He thought of religion and science as being concerned about different things: religion had to do with morality and science had to do with questions of fact. Yet at the same time he also held, according to SEP (and in accordance, I suppose, with his pantheistic worldview), that "The study of Scripture, or Biblical hermeneutics, should . . . proceed as the study of nature, or natural science, proceeds: by gathering and evaluating empirical data, that is, by examining the 'book' itself – along with the contextual conditions of its composition – for its general principles." Said Spinoza: "I hold that the method of interpreting Scripture is no different from the method of interpreting Nature."

SEP, https://plato.stanford.edu/entries/spinoza/#ReliScri].

I couldn't have said it better myself. Spinoza thus appears to be an instance of holding two diametrically opposed ideas in mind simultaneously. He seems to have one foot in each camp.

1687 Mathematical Principles of Natural Philosophy by Isaac Newton (1643-1727)

Discoverer of gravity; inventor of the calculus.

He said: "This most beautiful system of the sun, planets and comets, could only proceed from the counsel and dominion of an intelligent and powerful Being."

"General Scholium," in Mathematical Principles of Natural Philosophy (1687) in Great Books of the Western World, Robert M. Hutchins, ed. (Chicago: Encyclopedia Britannica, n.d.), 369.]

Newton was agnostic as to the age of the universe; he entertained the possibility that it is static and eternal.

1688 The Glorious Revolution (the beginning of the Enlightenment according to many – 51 years after Descartes' work.)

1689 Two Treatises of Government and Essay Concerning Human Understanding by John Locke (1632-1704)

Anglican.

He said: ". . . [T]hat Part of the Angels rebelled against GOD, and thereby lost their first happy state: and that the dead shall rise, and live again: These and the like, being Beyond the Discovery of Reason, are purely matters of Faith; with which Reason has nothing to do.

SEP IV.18.8, N: 694.

Famous for his social compact theory of morality.

A mere two years after Newton. An early, clear instance of DFK. One may ask why religious truth should be "beyond the discovery of reason" – clearly Newton, for one, would not have agreed, for he found in nature decisive evidence of God's existence.

It is disappointing when a believer such as Locke overlooks the plain meaning of Paul's letter to the Romans, where he clearly affirms God's amenability to observation (Romans 1:20), indeed observation in a rigorously scientific sense. Was Locke, because of the recency of the wars of religion (1618-1648), attempting to preempt conflict over religious matters? We may never know.

1715 Death of French King Louis XIV (the beginning of the Enlightenment, according to some)

1740 A Treatise of Human Nature by David Hume (1711-1776)

Famed for his oft-refuted argument against miracles.

I am surprised to say that I have not identified Hume's view on this particular question (that is, on DFK). He considered religion to be mostly superstition, and maybe that explains why our topic was of no great interest to him.

If there are no miracles, then the notion of any epistemology of faith becomes untenable.

1748 The Spirit of the Laws by Montesquieu (1689 – 1755)

SEP: Deist.

Spirit of the Laws was proscribed by the Catholic Church.

Champion of religious liberty and the separation of powers.

Limited research does not show his opinions concerning the relationship between science and religion or between epistemologies. He may have been one of the few Enlightenment figures who did not contribute to DFK.

It does perhaps seem that deists were less likely to subscribe to DFK than were theists. Voltaire's approach, and Hume's, for example, are similar to Montesquieu's. That could, I imagine, be due to the fact that deists were unconcerned with finding assurance of salvation or discovering religious truth at all. If they thought that there was nothing to be learned, they would have no need to figure out how to go about learning it, and they would be unconcerned about finding the pathway to eternal life. It could also be an expression of their disgust over the wars of religion. It could have been both.

1759 Candide by Voltaire (1694-1778)

"Les Philosophes" were 18th-century European Enlightenment intellectuals, primarily in France, who championed reason, scientific inquiry, and individual liberty over traditional religious dogma and feudalism. Key figures included Voltaire, Rousseau, Diderot, and Montesquieu, who promoted tolerance, progress, and critical thinking. Some were Christians (Descartes, Locke), some deists (Voltaire, Montesquieu), and some, atheists (Diderot).

1781 Critique of Pure Reason by Immanuel Kant (1724-1804).

Deep Protestant roots, but unorthodox and complex in adulthood.

Gemini: Considered himself a Christian.

Kant correctly observed that if, as Newton had speculated, the universe were static and infinite, then it would have an infinite past and would not have had a beginning; and if

there had been no beginning, then there would have been no need for a cause. Matter and energy might then be all that there is. I surmise that it was in large measure the combined influence of Newton and Kant which perpetuated this idea of an eternal universe well into the 20th Century, even though neither actually reached a conclusion on the matter. Either way, the notion persisted at least until Einstein (1915), 134 years later – encompassing the entire Nineteenth Century! And even then it took the scientific community until 2006 to finally throw in the towel, when George Smoot was awarded the Nobel prize in physics for his work confirming Big Bang cosmology.

Although an eternal universe does not have a direct bearing of DFK, it is clear enough that the tendency of such a belief is to weaken religious truth-claims. If there was no beginning, then maybe Nietzsche was right.

But for present purposes it is Kant's advocacy for DFK which is of greater interest to us:

> ". . . [T]he doctrine of morality and the doctrine of science may each be true in its own sphere. I have, therefore, found it necessary to deny knowledge of God, freedom, and immortality, in order to find a place for faith."
>
> SEP, "Immanuel Kant."
> https://plato.stanford.edu/entries/kant/

In other words, there is, according to Kant, a divided field of knowledge. He claims to have justified our beliefs in God and morality (his "categorical imperative": "Act only according to that maxim whereby you can at the same time will that it should become a universal law"), but he thinks they are unverifiable: he declares faith and fact to be mutually exclusive!

It would be difficult to overstate Kant's influence over Western philosophy. Kant also advanced a materialistic theory for the formation of the solar system, in which a nebula – a cloud of gas and dust — condenses under the force of gravity to form the sun and the planets. Kant's proposal evolved into the modern model, and contributed even further to the acceptance of DFK.

1789 French Revolution

1793-4 Reign of Terror

1790s Rise of Romanticism

1799 On Religion: Speeches to Its Cultured Despisers, by Friedrich Schleiermacher (1763–1834)

> Early career: pantheist. Later: A failing effort to reconcile with orthodox Christianity.
>
> "Religion's essence is neither thinking nor acting, but intuition and feeling."
>
> In his 1829 open letters to Lücke he especially emphasizes the pressing need to defend religion against the twin threats posed to it by modern natural science and modern historical-philological scholarship.
>
> > SEP, https://plato.stanford.edu/entries/schleiermacher/#PhilReli

1799-1825 Celestial Mechanics by Pierre-Simon Laplace (1749-1827)

> Elaborating on Kant, Laplace proposed a mechanical process for the formation of the solar system (the "proto-planetary disk").
>
> It is unclear whether he was an atheist or a deist. According to some reports, he told Napoleon that he had "no need for . . . the [God] hypothesis"; others maintain he said he had no need to suppose that God intervened to keep the solar system running. (Wikipedia, Pierre-Simon LaPlace, https://en.wikipedia.org/wiki/Pierre-Simon_Laplace.

1804 Death of Immanuel Kant (end of the Enlightenment, according to some).

1807 The Phenomenology of Spirit by G.W.F. Hegel (1770-1831)

> According to Francis A. Schaeffer, Hegel rejected the classical epistemology or way of knowing, which had been based on the principle of non-contradiction – that is, that A is not non-A. It is this principle, Schaeffer avers,

that enables us to communicate propositionally. If you say, "this is true, you ought to believe it," others may or may not agree, but even if they do not agree, they understand that you are making a fact-claim which is either true or false. If we abandon the principle of non-contradiction, our fact-claims become meaningless and communication comes to a screeching halt. (Sounds a lot like post-modernism. Welcome to the 21st Century!)

Instead of the law of non-contradiction, Hegel proposed that civilizational progress occurs by means of a thesis, followed by an antithesis formed in reaction to the thesis, and the resolution of the tension between them by means of a synthesis reconciling the thesis and the antithesis. By so doing, Hegel "changed the world, [which] has never been the same." Instead of "this is true and its opposite is false," both could be true; but to get there we must forget the law of non-contradiction. Doing so may seem to work in the humanities, but not in the hard sciences, further contributing to the bifurcated field of knowledge.

Francis A. Schaeffer, The God Who is There, 20.

1830-42 Course of Positive Philosophy by Auguste Comte (1798-1857)

Comte held that science is limited to naturalistic accounts of natural phenomena. Ascribing them to God, he believed, is a primitive effort to gain knowledge, amounting to superstition, and which is supplanted by "positive" knowledge as science advances.

1843 Either/Or and Fear and Trembling by Soren Kierkegaard (1813-1855)

Christian.

Faith is not objectively justified on the evidence, he believed. "The problem," writes Kierkegaard, "is not to understand Christianity, but to understand that it cannot be understood." Therefore one must take that famous "leap of faith" to become a Christian despite the lack of evidence.

SEP, https://plato.stanford.edu/entries/kierkegaard/#LifeWork.)

Talk about "giving away the farm"! At John 5:24, Jesus assures us that all who believe in the one who sent Him shall have eternal life. What does it mean to believe? It means that you have made a judgment that the evidence (that is, everything in one's entire experience) supports the truth of the proposition in question. If it is your judgment that the evidence does not support the truth of the proposition in question, then you may hope it is true, but you do not believe it, and no "leap of faith" is going to enable you to form a belief contrary to your judgment of the evidence.

At the same time, the evidence for the Resurrection of Jesus is entirely satisfactory. (Separate topic.)

1859 On Liberty by John Stuart Mill (1806-1873)

Heterodox theist. Like Hobbes, known for his embrace of utilitarianism. Whatever is conducive to human flourishing is good.

There are two difficulties with this. One, people cannot agree on what constitutes human flourishing, and two, too many people are unimpressed with your philosophy: they see what they want, and they take it. What society needs is not whatever is useful, but a coherent basis for discerning what is true. People need to believe in the righteousness of their program in order both to conform their own conduct to what is right as a matter of conscience, and to have enough confidence in that truth to be willing to restrain antisocial behavior.

1859 The Origin of Species by Charles Darwin (1809-1882)

He proposed that living organisms arose through impersonal, random processes.

Darwin did not directly address our question. His successors, however, correctly saw, if reluctantly, that the theory in its naturalistic form implies that religious beliefs themselves are the product of impersonal and hence, nonrational processes. This does not directly imply DFK, but what is even worse, the implication of nonrationality applies not just to religion and morality, but to all knowledge.

We must always be careful to distinguish evolution by natural selection from naturalism. It is more important to insist that whatever process God used to bring man into existence, we know that it was He who did it, than it is to insist that He did or did not employ any given process in doing it. That said, it should also be carefully noted that the chorus of dissent from neo-Darwinism is growing louder and may be nearing a crisis.

1867 Das Kapital by Karl Marx (1818-1883)

Hegelianism applied to economic theory.

1874 Draper, John William (1811-1881)

History of the Conflict between Religion and Science (first published 1874; Kindle Edition Double 9 Books 2025; public domain).

Draper's thought doesn't exactly fit our theme, as he affirms only one epistemology for the discovery of both fact and value. He denies, however, that knowledge of *any* sort is to be gained by faith. That is, *only* science can yield knowledge:

> . . . [T]here is a world of eternal truth. That world is not to be discovered through the vain traditions that have brought down to us the opinions of men who lived in the morning of civilization, nor in the dreams of mystics who thought that they were inspired. It is to be discovered by the investigations of geometry, and by the practical interrogation of Nature. [Kindle Location 582.]

Thus, although Draper does not expressly claim DFK, his peremptory dismissal of anything he deems to be non-scientific has the same practical effect.

According to Wikipedia, ". . . Professor Ronald Numbers has pointed to Draper's book as a source of popular misconceptions about historical conflict between science and religion, saying that it was 'less of a dispassionate history, which it wasn't, than a screed against Roman Catholics,' motivated by personal animus at the behavior of his sister, a Catholic nun, regarding the death of his son." It is "now recognized as thoroughly inaccurate."

But it was very popular. Draper's book was translated into 10 languages and was reprinted 50 times in the U.S. alone. No doubt the western mind was already receptive to DFK; but Draper's book must have significantly promoted DFK's acceptance.

1885 Thus Spoke Zarathustra by Friedrich Nietzsche (1844-1900)

God is dead.

Gemini: "Nietzsche famously wrote that true science and religion dwell on different stars. They have no innate affinity or enmity because religion deals with comforting dogmas and meaning, while science deals with rigorous empirical methodology and cold facts."

(You are beginning to see what I am driving at. But we are about to reach a crescendo.)

1899 The Interpretation of Dreams by Sigmund Freud (1856-1939)

Schaeffer: God, who is non-determined, created man as non-determined, in contrast to Freud, who claimed we are determined by psychological factors beyond our control. (Schaeffer 103.)

Gemini: "Sigmund Freud viewed science and religion as mutually exclusive and inherently antagonistic. He famously described religion as an 'illusion' and a form of neurosis, arguing that religious beliefs are merely wish-fulfilling fantasies created to help humans cope with the harsh realities of nature and mortality. Freud, an ardent champion of the Enlightenment, believed that valid knowledge could only be constructed upon empirical evidence and reason, whereas religion relied on faith and dogma."

1905 Special relativity by Albert Einstein (1879-1955)

In response to the evidence for the Big Bang, he acknowledged "the necessity for a beginning"[1] and "the presence of a superior reasoning power." At one time, however, he stated he believed in the religion of Spinoza.

> Lincoln Barnett, The Universe and Dr. Einstein (New York: William Sloane Associates, 1948), 106.

1913 General Psychopathology by Karl Jaspers (1883-1969)

> "He lays a great deal of emphasis on the need to wait for a non-rational 'final experience', which would give meaning to life. . . . The fact that it is an existential experience means that it cannot be communicated."
>
> Schaeffer, 22-23.
>
> If it cannot be communicated, then nether can it be critiqued.

1915 General relativity by Albert Einstein (1879-1955)

1919, 1922 Epistle to the Romans by Karl Barth (1886-1968); Church Dogmatics (1932-1967)

1920 Woman and the New Race by Margaret Sanger (1879-1966)

1921 History of the Synoptic Tradition by Rudolf Bultmann (1884-1976)

1941 Demythologizing the Bible by Rudolf Bultmann (1884-1976).

> Christian faith is, and should be, comparatively uninterested in the historical Jesus, he claimed, and centered instead on the transcendent Christ. Christian faith, he asserted, is faith in the kerygma ("proclamation") of the church, into which Jesus may be said to be risen.
>
> Bultmann argued that people could no longer think in the mythological terms used in the New Testament and that these myths needed to be interpreted in existential terms.
>
> https://www.britannica.com/biography/Rudolf-Bultmann
>
> Gemini: Rudolf Bultmann believed in the strict separation of science and religion. He argued that science deals with the empirical, observable world using cause-and-effect, while religion addresses personal existence and moral meaning. He famously sought to demythologize the Bible so that modern, scientifically minded people could still understand its spiritual message.

1922 Alexander Friedman pronounces Einstein's General Theory of Relativity to be true, meaning that the universe is expanding. There is a God. But his work was not soon widely published.

1925 Scopes trial

I have addressed this elsewhere. It is an important part of the story. See Science and Religion: Exploding the Conflict, Part Four, https://joshualetter.com/2024/12/27/science-and-religion-exploding-the-myth-of-conflict-4/

1927 Being and Time by Martin Heidegger (1889-1976

Gemini: Heidegger believed that modern, technical, calculative science separates humans from the "ground" of existence and the "holy," necessitating a shift toward a contemplative, ontological understanding of being, as described in his Cambridge University Press – Heidegger's Concept of Science.

The Weakening of Religion: He saw theology as a "positive science" that relies too heavily on human intellectual constructs and rigid dogmas. By trying to prove God's existence like a mathematical theorem or reducing faith to a rational system, religion lost its experiential and mystical depth.

A Call for "Meditative Thinking": To escape the limitations of both, Heidegger advocated for a meditative, poetic approach to life. He believed that true wisdom is found by letting go of the need to classify, measure, or define the divine, allowing Being to simply reveal itself.

1927 A Homogenous Universe by George Lemaitre (1894-1966)

Unaware of Friedman's work, Lemaitre showed Einstein's math to be correct, which implies an expanding universe, which implies a beginning, which implies a creator.

1929 Edwin Hubble (1889-1953) observes the recession of the galaxies, proving that the universe is expanding, which implies a creator.

1942 The Stranger by Albert Camus (1913-1960)

SEP: the world is unknowable and life is without meaning.

There was a rumor that Camus professed faith in Christ shortly before his death in a traffic accident.

1943 Being and Nothingness by Jean-Paul Sartre (1905-1980)

"Existence precedes essence." That is, one defines oneself. Insofar as human identity is concerned, then, either there is no truth or there are any number of truths and there is no reason to expect them to be consistent. Indeed, there is no reason to wish them to be consistent. ("You do you.")

1946 Stellar nucleosynthesis by Fred Hoyle (1915-2001)

Hoyle identified the process whereby the elements of the periodic table are produced in the stars. (See https://joshualetter.com/2025/02/20/what-about-laplaces-protoplantary-disc/.)

"A "superintellect has monkeyed with physics, as well as with chemistry and biology. . . ."

1948 Sexual Behavior in the Human Male by Alfred Kinsey (1894-1956)

1953 Sexual Behavior in the Human Female by Alfred Kinsey (1894-1956)

1953 Watson and Crick discover the molecular structure of DNA.

1959 The Logic of Scientific Discovery by Karl Popper (English. German pub. 1934)

"Karl Popper has been one of the most important philosophers of science of the twentieth century. . . . Popper and Gould "maintain that science and religion are independent enterprises."

> Stephen Jay Gould and Karl Popper on Science and Religion, Scientia et Fides, 4(2)2016 (chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://dadun.unav.edu/server/api/core/bitstreams/5811a1f6-5691-4ab5-b5fb-7621be407f52/content#:~:text=What%20is%20puzzling%20is%20how,rejected%20and%20at%20the%20same

Popper: religion is not science because it is unfalsifiable.

There are two problems with this reasoning. One, although many religions (one might say every religion *except* Christianity) are unfalsifiable, Christianity is not. The Resurrection of Jesus is just as amenable to investigation as other unrepeatable events. Two, philosophers of science now agree that falsifiability is sometimes dispensable as a criterion in scientific methodology.

In 1980 Gould, in announcing that Darwinian gradualism was dead, described science and religion as "non-overlapping magisteria."

1960 Birth control

1960 Inherit the Wind

Previously addressed. This is an important part of the story. See Science and Religion: Exploding the Myth of Conflict, Part Four, https://joshualetter.com/2024/12/27/science-and-religion-exploding-the-myth-of-conflict-4/

1961 Fine-tuning of the laws of physics by Robert H. Dicke (1916-1997).

As far as I know Dicke was the first to notice that the universe is astonishingly calibrated to be hospitable to life.

1963 The Feminine Mystique by Betty Friedan (1921-2006)

1964 Penzias and Wilson discover the cosmic microwave background radiation (CMBR), confirming Big Bang cosmology. Some cosmologists remain holdouts.

1983 Paul Davies

He once promoted atheism and is still opposed to Intelligent Design theory, but has conceded that "the laws [of physics] . . . seem themselves to be the product of exceedingly ingenious design." He further states: "[There] is for me powerful evidence that there is 'something going on' behind it all. The impression of design is overwhelming."

Paul Davies, The Cosmic Blueprint (New York: Simon & Schuster, 1988), 203; Paul Davies, "The Anthropic

Principle," Science Digest 191, no. 10 (October 1983), 24.]

1992 Cosmic Background Explorer (COBE) confirms Big Bang cosmology.

1998 A Brief History of Time by Stephen Hawking (1942-2018)

> Commenting on the Fine-Tuning of the Universe, he stated that "It would be very difficult to explain why the universe should have begun in just this way, except as the act of a God who intended to create beings like us."
>
> [Stephen Hawking, A Brief History of Time (New York: Bantam Books, 1996), 129-131.]

2006 George Smoot is awarded Nobel for COBE. He famously described looking at his map of the infant universe as being "like looking at God."

2006 Vilenkin, Borde, and Guth declare that the universe had an absolute beginning.

Many Worlds in One.
