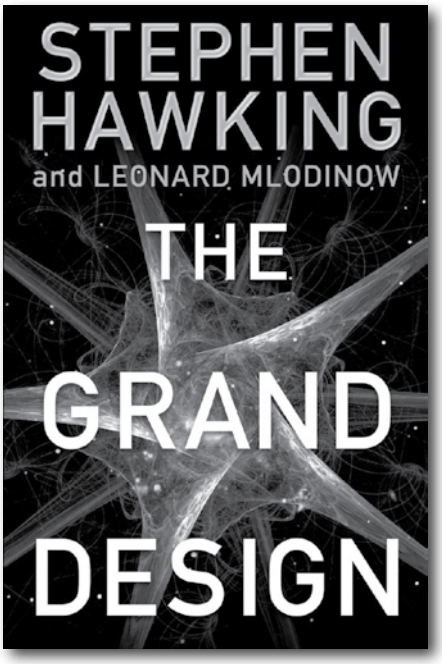
# Hawking atheopathy: famous physicist goes beyond the evidence




A review of
***The Grand Design***
*by Stephen Hawking and Leonard Mlodinow*
Bantam Press, London, 2010

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### A brief history of Hawking

Stephen Hawking (b. 1942) is one of the best-known scientists in the world today. Yet his achievements are not so widely known. His greatest contribution was probably a combination of quantum mechanics and relativity: in 1974, he mathematically showed that black holes, a verified prediction of general relativity, will slowly lose mass through a quantum mechanical effect that would result in emission of radiation. It's notable that the much vaunted peer-review process initially rejected this eponymous Hawking Radiation.[1] In 1979, he was awarded the prestigious Lucasian Chair of Mathematics at the University of Cambridge, England, which he held for 30 years. This chair was once held by the great creationist scientist Sir Isaac Newton.

Yet he has never won the Nobel Prize, since the committee insists on experimental evidence—only fairly recently has science produced good evidence for black holes as a whole, so evidence for an extremely weak radiation from them is beyond current detection methods. And in 2004, he retracted one of his major theories: in 1975, he argued that a black hole would obliterate all information about the nature of the matter inside, even overpowering quantum mechanical laws that would preserve it. But he now believes that some information would escape.

Hawking's fame largely rests on his popular-level book *A Brief History of Time: From the Big Bang to Black Holes* (1988). This was a huge best-seller, but has also been called "the most widely unread book in the history of literature". Another major contributor is how he has overcome his severe disability caused by Amyotrophic Lateral Sclerosis (ALS), commonly called Lou Gehrig's Disease, that has left him dependent on a wheelchair and speech synthesizer.

This book was more famous for its philosophy than for its science, with his famous rhetorical question, "What place, then, for a creator?"[2] and the conclusion:

> "If we find the answer to that [i.e. why it is that we and the universe exist], it would be the ultimate triumph of human reason—for then we would know the mind of God."

Yet in his book, he had to admit:

> "This [big bang] picture of the universe ... is in agreement with all the observational evidence that we have today. … Nevertheless, it leaves a number of important questions unanswered ... (the origin of the stars and galaxies)."[3]

Actually the big bang has come under severe attack from other cosmologists. But even granting that Hawking is right for the purpose of discussion, an inability to explain such important cosmological things as stars and galaxies is a major shortcoming.

Later, Hawking belatedly realized that a 'theory of everything' is a fantasy that founders on *Gödel's incompleteness proof*: that in any theoretical system as complex as arithmetic or above, there would always be true statements that cannot be proven within the system.[4]

Hawking has also made some headlines with some way-out pronouncements. In 2000, he proclaimed that genetic engineering of humans is inevitable, admitting it will cause great social and political problems. One article quotes Prof. Hawking as saying: "It may not be in accord with democratic or egalitarian principles, but evolution has never been politically correct."[5] Unfortunately evolution-based eugenics ideas *were* politically correct for the first few decades of the 20th century.

Earlier this year, Hawking warned against contact with aliens, as the consequences would be devastating: "If aliens visit us, the outcome would be much as when Columbus landed in America, which didn't turn out well for the Native Americans." Yet he insisted that we should colonize space or perish: "Our only chance of long-term survival is not to remain inward looking on planet Earth, but to spread out into space."

### *Atheistic faith masquerading as science*

As usual with atheistic scientists, Hawking's atheopathy long predated

his science. His influential mother Isabel was a Communist, and in his teen years he admired the strongly anti-Christian mathematical philosopher Bertrand Russell.

As with Dawkins, his arguments for atheism are puerile, e.g.

> "We are such insignificant creatures on a minor planet of a very average star in the outer suburb of one of a hundred billion galaxies. So it is difficult to believe in a God that would care about us or even notice our existence."

Yet King David was equally aware of our tininess compares with the universe, and came to a different conclusion (in Psalm 8:3–5):

> "[3]When I look at your heavens, the work of your fingers, the moon and the stars, which you have set in place,
> "[4]what is man that you are mindful of him, and the son of man that you care for him?
> "[5]Yet you have made him a little lower than the heavenly beings and crowned him with glory and honour."

Similarly, as C.S. Lewis pointed out, the medieval theologians were well aware that compared to the vastness of heavens, the earth was but a point in space. But somehow modern antitheists think this is news, regarding it as a profound disproof of God, as if God needed a small universe to exist. And if the universe were small, then these same atheopaths would probably whine, "If God is so great, then why didn't He created anything else?"[6]

### *Marriage*

He met his future wife Jane (née Wilde) in 1962, a year before he was diagnosed with his degenerative illness. Jane is a scholar in her own right, with a doctorate in Medieval Portuguese Literature. She is also a Christian, and unwisely violated Paul's command against unequally yoking with an unbeliever (2 Cor 6:14)—they married in 1965. Jane did not expect him to live very long; he had been given two years—the time the eponymous Lou Gehrig (1903–1941) survived his diagnosis. But somehow, this engagement made a huge difference in his life, as he admitted, "What really made a difference was that I got engaged to a woman named Jane Wilde. This gave me something to live for." His biographers said:

> "There is little doubt that Jane Wilde's appearance on the scene was a major turning-point in Stephen Hawking's life. The two of them began to see a lot more of one another and a strong relationship developed. It was finding Jane that enabled him to break out of his depression and regenerate some belief in his life and work. For Hawking, his engagement to Jane was probably the most important thing that ever happened to him. It changed his life, gave him something to live for and made him determined to live. Without the help that Jane gave him, he would almost certainly not have been able to carry on or had the will to do so."[7]

Their marriage soon produced three children. Yet although Stephen lived far longer than anyone expected, his body deteriorated markedly. Jane said in 1986, "Without my faith in God, I wouldn't have been able to live in this situation." Unfortunately, Stephen's antitheism became more dogmatic and vicious, which caused major conflicts. Yet she stuck with him, following 1 Corinthians 7:12–17. But eventually Stephen ended the marriage after 25 years. Jane later wrote an insightful autobiography, revealing the conflicts between her Christian faith and Stephen's dogmatic atheism.[8]

## New atheistic book

Hawking has again made the headlines with his new book, co-authored with science writer and physicist Dr Leonard Mlodinow, strangely called *The Grand Design*.[9] This supposedly proves that no Creator was necessary. Yet once again, he goes way beyond the evidence. And there are people who have not been impressed with the book who we would expect to welcome it. The ultra-liberal and anti-Christian *New York Times* published a review:

> "The real news about *The Grand Design*, however, isn't Mr. Hawking's supposed jettisoning of God, information that will surprise no one who has followed his work closely. The real news about *The Grand Design* is how disappointingly tinny and inelegant it is. The spare and earnest voice that Mr. Hawking employed with such appeal in *A Brief History of Time* has been replaced here by one that is alternately condescending, as if he were Mr. Rogers explaining rain clouds to toddlers, and impenetrable.
> "*The Grand Design* is packed with grating yuks. 'If you think it is hard to get humans to follow traffic laws,' we read, 'imagine convincing an asteroid to move along an ellipse.' (Oh, my.)"[10]

### *Extrasolar planets*

For example, he cites the discovery of extrasolar planets[11] as a turning point against Isaac Newton's belief that the universe must have been planned:

> "That makes the coincidences of our planetary conditions—the single Sun, the lucky combination of Earth-Sun distance and solar mass—far less remarkable, and far less compelling as evidence that the Earth was carefully designed just to please us human beings."

Yet extrasolar planets have caused far more problems for evolutionary models of stellar systems, i.e. the Nebular Hypothesis.[12–15] For example, to obtain 'hot Jupiters', evolutionists must propose that they formed far enough from the star for water vapour to condense, then migrated inwards.[14] Other extrasolar planets have highly slanted or even retrograde orbits, i.e. in the opposite direction to their star's spin.[16,17] Rather, extrasolar planets suggest our solar system is unique and young.[18]

### *Hawking fails logic and meta-science*

Hawking's key assertion is that the big bang followed inevitably from the laws of physics so needed no creator, "because there is a law such as gravity, the universe can and will create itself from nothing."

However, logic doesn't seem to be his strong point; 'self-creation' is self-contradictory. Something can do something—including create—only if it exists; something not yet existing has no power to do anything, *including create itself*.

And for such a great scientist, he seems rather clueless about the *meta-science issues*, i.e. the assumptions that *overlie* science and allow it to work. For example, his comment presupposes that laws can do anything, but I've pointed out before that this type of claim:

> "… treats natural laws as real entities. In reality, scientific laws are *descriptive* of what we observe happening regularly, just as the outline of a map describes the shape of a coastline. Treating scientific laws as prescriptive, i.e. the cause of the observed regularities, is like claiming that the drawing of the map is the cause of the shape of the coastline."[19]

Similarly, Prof. John Lennox, who defeated Dawkins in a debate,[20] in his review of Hawking, pointed out:

> "But contrary to what Hawking claims, physical laws can never provide a complete explanation of the universe. Laws themselves do not create anything; they are merely a description of what happens under certain conditions.
>
> "What Hawking appears to have done is to confuse law with agency. His call on us to choose between God and physics is a bit like someone demanding that we choose between aeronautical engineer Sir Frank Whittle[21] and the laws of physics to explain the jet engine.
>
> "That is a confusion of category. The laws of physics can explain how the jet engine works, but someone had to build the thing, put in the fuel and start it up. The jet could not have been created without the laws of physics on their own—but the task of development and creation needed the genius of Whittle as its agent.
>
> "Similarly, the laws of physics could never have actually built the universe. Some agency must have been involved.
>
> "To use a simple analogy, Isaac Newton's laws of motion in themselves never sent a snooker ball racing across the green baize. That can only be done by people using a snooker cue and the actions of their own arms."[22]

Hawking also plays the usual 'warfare of religion vs science' for all its worth. Thus his hero has long been Galileo, despite the fact that his dispute was really science vs science (see, for example, "The Galileo quadricentennial"[23]).

Hawking also credits the Ionian Greeks with discovering the nature of scientific laws. But he ignores the extensive research that shows that science itself thrived only under the Christian worldview, and was stillborn in other cultures, *including ancient Greece*. Thus it thrived in the European middle ages under a general Christian worldview, and even more so with the explicit biblical worldview of the Reformation (see "The biblical roots of modern science"[24]). This was due to the presuppositions required for science to work in the first place, including the reality and rationality of both the universe and our own thoughts.[25]

Lennox, a mathematician who is also very learned in the philosophy of science, raises the same points:

> "The very reason science flourished so vigorously in the 16th and 17th centuries was precisely because of the belief that the laws of nature which were then being discovered and defined reflected the influence of a divine law-giver.
>
> "One of the fundamental themes of Christianity is that the universe was built according to a rational, intelligent design. Far from being at odds with science, the Christian faith actually makes perfect scientific sense.
>
> "Some years ago, the scientist Joseph Needham made an epic study of technological development in China. He wanted to find out why China, for all its early gifts of innovation, had fallen so far behind Europe in the advancement of science.
>
> "He reluctantly came to the conclusion that European science had been spurred on by the widespread belief in a rational creative force, known as God, which made all scientific laws comprehensible."[22]

### *Multiverses*

Hawking's whole edifice rests on 'M-theory'. The book claims, "M-theory is not a theory in the usual sense. It is a whole family of different theories." This predicts that "ours is not the only universe". Rather, "Instead M-theory predicts that a great many universes were created out of nothing." And here is their punch line:

> "… their creation does not require the intervention of some supernatural being or god. Rather, these multiple universes arise naturally from physical law. They are a prediction of science."

But given that these can't be observed, even in principle, this is unscientific.

But they argue that it would explain why some will inevitably have the characteristics for life, and if ours wasn't one of them, then we wouldn't be here to observe it. This is a variant of the so-called 'anthropic principle' (from Greek *anthrōpos* ἀνθρωπος = man). This sounds profound but it's actually no explanation at all. As Christian philosopher and apologist William Lane Craig pointed out:

- If you were dragged before a trained firing squad, and they fired and missed:
- it is true that you should not be surprised to observe that you are not dead, but
- it is equally true that you *should* be surprised to observe that you are alive.

If you were asked, "How did you survive?", it would be inadequate to answer, "If I didn't, I would not be here to answer you."[26]

Multiverses supposedly explain the existence of ours with special characteristics. But this is really special pleading, i.e. an explanation these atheists accept for the universe but would not tolerate for a second to explain anything else. Consider if we found a pattern of markings which spelled your name on a beach. Naturally you would conclude that an intelligent agent had written it. This is more plausible than thinking that wind and wave erosion somehow produced that pattern by chance, *even though there is an extremely tiny probability of this happening*.

But under multiverse reasoning, there are an infinite number of parallel universes containing every possible quantum state—"In infinite space, even the most unlikely events must take place somewhere."[27]

So if a person had an *a priori* bias that no one could have written your name, he could argue that we just happen to be in one of the tiny fraction of universes where this improbable erosion pattern arose naturally. If this sounds totally unreasonable, then, by the same logic, so is the atheistic preference for an infinite number of universes over a Creator.[28]

It's notable that his ideas have been criticized by none other than his greatest collaborator on black holes, Sir Roger Penrose.[29] Penrose reviewed his old friend's book,[30] and commented on "Hawking's strange-sounding philosophical standpoint of *theory-dependent realism* put forward here". I.e. Hawking has proven nothing; rather, his whole edifice depends on a very shaky theory of physics, and Penrose explains that this is "'M-theory', a popular (but fundamentally incomplete) development of string theory. … M-theory enjoys no observational support whatever."

String theory itself, let alone M-theory that stems from it, is most dubious. An editorial in *New Scientist* lamented about how the fancy mathematics of string theory really prove nothing in reality:

> "But these equations *tell us nothing about where space and time came from* and describe nothing we would recognize."[31]

This also cited a running joke among cosmologists:

Q: why is our universe unique?
A: it's the only one that string theory can't explain![32]

### *Hawking's collaborators disagree*

As above, Penrose is most critical of Hawking's current book. He also criticized Hawking's previous best seller—in the film version of *A Brief History of Time*, he said (although he claims no religious beliefs):

> "There is a certain sense in which I would say the universe has a purpose. It's not there just somehow by chance. Some people take the view that the universe is simply there and it runs along—it's a bit as though it just sort of computes, and we happen by accident to find ourselves in this thing. I don't think that's a very fruitful or helpful way of looking at the universe, I think that there is something much deeper about it, about its existence, which we have very little inkling of at the moment."

Another of Hawking's major collaborators is George Ellis.[33] Yet he is not an atheist but a Quaker and Platonist, and winner of the Templeton Prize. Ellis is much more aware than Hawking of how cosmogonic models are heavily dependent on philosophical *assumptions*. In an interview in *Scientific American*, Ellis was quoted as follows:

> "'People need to be aware that there is a range of models that could explain the observations,' Ellis argues. 'For instance, I can construct you a spherically symmetrical universe with Earth at its center, and you cannot disprove it based on observations.' Ellis has published a paper on this. 'You can only exclude it on philosophical grounds. In my view there is absolutely nothing wrong in that. What I want to bring into the open is the fact that we are using philosophical criteria in choosing our models. A lot of cosmology tries to hide that.'"[34]

Photograph courtesy of wikipedia.org

**Figure 1.** Stephen Hawking

Last year, Prof. Ellis gave an interesting private lecture at a university in South Africa, which was attended by creationist engineering student E. van Niekerk, who reports:

> "He (carefully) disagrees with this atheistic fluff that Hawking and his fellow colleagues generate. He for instance told us why the multiverse idea does not solve the problem of design, or why this universe is here. He also slipped something else. There either has to be an eternal being/God, or an eternal universe, and he does not seem convinced that this universe can be eternal (even with fluctuations of existence etc.). Although he is not a biblical creationist, he said there is one piece in the Bible that was very 'reasonable'. That is the opening words of the gospel of John, namely: 'In the beginning was the Word, and the word was with God, and the Word was God'."

### Summary

- Hawking's greatest works were in black hole physics.

- He has courageously fought against a terrible physical disability. His Christian wife Jane was a great support, but he left her after 25 years of marriage.
- His fame largely rests on weak attempts to exclude God based on tendentious physics. His atheism was present early, and was an assumption he brought to his physics; it was not derived *from* his science. It was also a source of growing conflict in his marriage that stretched it to breaking point.
- Hawking's latest work contains flaws in logic and the philosophy of science. E.g. 'self-creation' is logically contradictory, and the laws of science cause nothing to occur but, rather, describe what does occur.
- He proposes a theory of multiverses, but this is not scientific since they can't be observed.
- His M-theory isn't supported by a shred of experimental evidence.
- Thus a summary of Hawking's approach is:
  - The universe looks designed, but a designer is not allowed.
  - So there must be some other explanation.
  - Let's resort to some other religious ideas to explain the appearance of design (e.g. the multiverse).
  - Then let's use even more religious ideas to support our religious ideas.
  - And then let's claim it is science to show no designer was necessary.
  - We win!

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