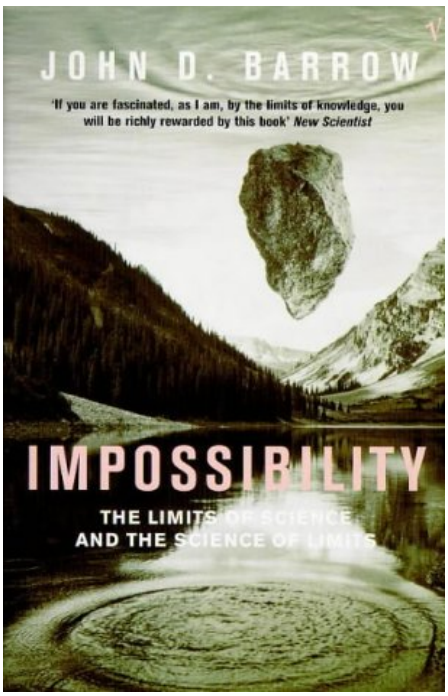

Impossibility: The Limits of Science and the Science of Limits

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Astronomer John Barrow takes an intriguing look at the limits of science, who argues that there are things that are ultimately unknowable, undoable, or unreachable.

Impossibility: The Limits of Science and the Science of Limits Details

Date	:	Published May 11th 1999 by VINTAGE (RAND) (first published 1998)
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Author	:	John D. Barrow
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From Reader Review Impossibility: The Limits of Science and the Science of Limits for online ebook

Mark says

Readability 4. Rating 4. Subtitled The Limits of Science and the Science of Limits. That about sets the tone. I got off onto the wrong foot with Barrow when he claimed the British started the internet, and never really got back on. I'm still not sure he has the Heisenberg Uncertainty Principle right. And his discussion of an inflationary universe that does not inflate at equivalent rates everywhere, and thereby results in pockets of the universe with different values for fundamental properties just wasn't convincing. All in all, it just didn't live up to its potential, and broke no convincing new ground for me.

Crimeny! says

after my life shattering acccident, i was struck (ha) with the notion that perhaps my nihilistic philosophy had been slightly skewed. reading this book comforted my morphine addled brain into a sort of peace coma. yes, a peace coma. it is an elegant meshing of science and philosophy. i recommend this to anyone struggling with wrapping their brains around the intangible...or even the tangible boundries of our thoughts and environs.

Ousama Bziker says

If you are into science/philosophy and want to know about the universe, this book is for you. If you sit in a spot at home or on the train just by yourself and keep asking metaphysical questions and how the world of science works, this is for you as well. If you are living your life aimlessly without rehearsing it at the end of the day, this is, absolutely, not for you. You will find this book boring and irrelevant. It is actually a matter of interest. This book made me lift my head up in the sky and keep thinking how the stars were born and how we look so small, and that science itself is so small to know everything about the creation of the earth, let alone the Milky Way. This book stresses the idea that science has limits, and that science cannot answer all the unanswered questions out there. It is worth reading, really!

Tom Fewings says

This book was filled with a lot of moments where you have to lift your head from the book and squint off into the near distance before returning your head back into the book. Mind boggling huge and complicated ideas distilled through accessible references.

Scott Kaelen says

When it comes to science and its limits it's impossible to beat this book. That last statement is known to be

true.

Frank Peters says

The title of the book is rather deceiving. In reality the book is a summary of what scientism (atheism + science) believes it knows, and what it believes it will eventually know. It was a disappointing read.

Ami Iida says

boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,boring, boring,.....trash!
You should not read it absolutely!

Brian says

"The limits of science--the science of limits" Can we learn everything there is to learn about the world and how it works? If not, why not? Someof the arguments get a bit esoteric, but still interesting to know about.

Simon Mcleish says

Originally published on my blog here in April 2000.

In what is almost a response to John Horgan's The End of Science, Barrow examines the limitations of scientific thought from several different points of view with the aim of working out what science can say about what it cannot say. He skims quickly over some of the problems Horgan talks about, such as the increasing economic cost of scientific experimentation; these limitations are not scientific in nature (non-scientific events such as a change of government may change their nature) and there is little that can be said about them beyond acknowledging their existence.

Barrow is far more interested in the limitations inherent in modern scientific theories, such as the impossibility of knowing what happens outside the edge of the visible universe. He concentrates on the less well known ideas, rather than ploughing once again the well worn furrow of the popular account of relativity and quantum mechanics. His final section is a brief but sensible account of Gödel's Incompleteness Theorem and its relationship to physics. The problem with this relationship is that it is only possible to determine its nature when the more basic question of how mathematics is embodied in the universe is answered. If mathematical physics is only a description of patterns in the universe, for example, then there is not necessarily any connection. Even if sufficiently complex mathematics is in some way embodied in the universe - you need to have arithmetic with both addition and multiplication - then it is not at all clear what the physical version of a Gödel Undecideable Sentence would be (it would depend on the precise nature of the embodiment, for a start).

Barrow is less polemic than Horgan, more interested in the nature of the various types of scientific impossibility than in ramming home the point that there are limitations to science. Barrow is much more pro-science than Horgan - he is after all a research physicist - which means that his book is less excitingly iconoclastic but perhaps more informative. (The structure of the book also helps here; Horgan's is organised around interviews with prominent scientists which means that his main philosophical points are hidden behind personalities.)

Tymcat says

Size matters - if it comes to events in the physical world like star and planet forming or if you can light fire with your hands.
John D. Barrows "science of impossibility" shows us how lucky we are to be smaller than elephants but bigger than insects.
On a scale from atoms to giant stars this is somewhere inbetween, a very particular size - just right to be able to go shopping or to the moon. And size is not all. There are many moments of insight or "have to get up, check something" before reading on.

Giovanni says

I found this book interesting, though being packed with ideas, it sometimes makes it hard to read/follow and some concept are, I believe, oversimplified.
I found brilliant how the author managed to mix a wide variety of topics, giving often a picture which is quite clear in its foundamentals: from our logical systems, to the possibility of research and understanding, to the limits that the phyisical law impose us.
I believe, other than the fact that this many different ideas packed in little more than 200 pages makes it not very fit as a "goodnight read", there are two main issues with the book:
- the copy I read came from the library and was printed in 1997: there have been many discoveries in these last 21 years and this would make space for a new revised edition of the book
- the first chapter talks about logic. It also delves into the problems regarding the idea of "omnipotence" and, in practise, it suggests atheism as the only "reasonable" view. I would be fine with this, if the problem of "nature intelligibility" was treated better and there weren't long sections about "science fiction" (or better, theories which we shall never be able to prove). I mean, I am fine with proposing theories about things in the universe which we can't know because of the light speed, while stating they're not definitive. But talking about Omega civilizations which would be "god like to us", creating our universe...really, to me, it sounds like "I am fine with any idea, even the weirdest one, as long as it is not the one of a God in a classical sense".

Anyway, if only the tone of that first chapter was a bit lighter, I would give it a 5 star rating. Nonetheless, a good book.

Nguy?n says

This book was quite readable at each part of each chapter. However, it is really hard to follow the tenor. The author gave some different points of view and used them to prove that science has limit. But the bad thing is that, the book is fully speculate and less the scientific evidence.

This book also contains a very terrible error, on page 213:(original writing of the author): "Abel, aided by the work of Galois, finally establish an impossibility theorem". Abel died at 1829, and he did not only know about Galois's interest at that time but also Galois did submitted his work to Académie des sciences in 1831, two year after the death of Abel. So, how can Abel be aided by the work of Galois ?

I really like the aim of this book, but can not rate it more than 2 stars!

Carmen says

"Boundaries and limits"
