

***A Sense of the Mysterious:  
Science and the Human Spirit***

by Alan Lightman

Pantheon Books

**A Reading and Discussion Guide**

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**SUMMARY:**

At first glance, *A Sense of the Mysterious* appears to be a cozy slip of a scientific work, but Alan Lightman, author of *Einstein's Dreams* and *The Diagnosis*, pulls a virtual Jack in the Box with this wide-ranging biographical and philosophical text. While the sheer mass of the topics at hand may force a reader to put this slim book aside for reflection, the pull of essays-to-come is too strong to ignore for long.

Roughly in thirds, the first part of the book is dedicated almost entirely to Science. We learn about the role of the metaphor in scientific explanation and how our own understanding of language can lead to pitfalls in the discovery of new concepts. Next, we are treated to biographical sketches of Einstein, Feynman, Teller, and Rubin. By the time the reader has reached the point of no return (the final third), Lightman engages us in philosophical musings about everything from sexism to Communism.

**DISCUSSION QUESTIONS:**

1. Is Science truly an undertaking best approached by a group? Are the arts too heavily individualized?
2. As a greater focus is placed on the scientific in our schools, are we losing language as a means of self expression - and thus hurting science in the process?
3. Is Science too cold and pure to attain?
4. In what ways has Science changed since Aristotle?

5. What is the lure of biography? Do we seek to avoid the mistakes of our heroes and villains and align ourselves with their successes?
6. Genius seems to make for poor company. How and why does this happen?
7. Why do we give away Pandora's gift so freely as we age?
8. What does Lightman mean when he says, "Boys can't be girls." p.171
9. Lightman discusses the strange nature of the personal epiphany. How does he describe this? Do you believe there can be a shared epiphany or breakthrough – or is this only a phenomenon that only occurs in the realm of the self?
10. Viewing the world in a black and white mathematical fashion is a comforting way to live. This absolute certainty appeals to the author. As we age, complexity and uncertainty ooze into everyone's equation. Does this film spoil Scientia in turn?
11. How does the author's arrangement of his essays guide our thoughts? Do we circle away from his worldview, or towards it?

#### **BACKGROUND INFORMATION:**

*Excerpted from the author's website: <http://www.mit.edu/~humanistic/faculty/lightman.html>*

Lightman was born in Memphis Tennessee, son of Richard Lightman, a movie theater owner, and Jeanne Garretson, a dancing teacher and volunteer Braille typist. From an early age, he was entranced by both science and the arts and, while in high school, began independent science projects and writing poetry.

In 1981, Lightman began publishing essays about science, the human side of science, and the "mind of science," beginning with Smithsonian Magazine and moving to Science 82, The New Yorker, and other magazines. Since that time, Lightman's essays, short fiction, and reviews have appeared in numerous magazines and journals including The American Scholar, The Atlantic Monthly, Boston Review, Daedalus, Discover, Harper's, Nature, The New Yorker, The New York Review of Books, The New York Times, Science 86, and Smithsonian,

In 1989, Lightman was appointed professor of science and writing, and senior lecturer in physics, at the Massachusetts Institute of Technology. In 2001, Lightman cofounded the Graduate Program in Science Writing at MIT, which accepted its first students in the fall of 2002. In the same year, he resigned this position to allow more time for his writing and became adjunct professor at MIT.

## ADDITIONAL RESOURCES:

*The Elegant Universe* : <http://www.pbs.org/wgbh/nova/elegant>  
by Brian Greene

*Complexity: The Emerging Science at the Edge of Order and Chaos*  
by Mitchell Waldrop. There is also a similar title by noted anthropologist Roger Lewin.

*Nicomachean Ethics* : <http://classics.mit.edu/Aristotle/nicomachaen.html>  
by Aristotle

*The Curious Incident of the Dog in the Night-Time*  
a novel by Mark Haddon

*Galileo's Daughter* : <http://www.galileosdaughter.com>  
by Dava Sobel

*Zen Physics: The Science of Death, the Logic of Reincarnation*  
by David J. Darling

“The Butterfly” by Orison : <http://orison.calabashmusic.com>  
available on Celtic Odyssey



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