

John Dobson Debunks the Big Bang

by Charles Hughes

MOVIE REVIEW

A Sidewalk Astronomer: A Film About Astronomy, Cosmology and John Dobson

by Jacobs Entertainment, Inc.

DVD and VHS, 78 min

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Available from www.telescopepictures.com

or Jacobs Entertainment, Inc.

P.O. Box 774, Harrison, N.Y. 10528

Here is a spectacular, and masterfully produced presentation, starring the inventor of the Dobson telescope, who boldly and humorously devastates two sacred cows of cosmology, the Big Bang and the expanding universe interpretation of the red shift. For Dobson, the whole universe is alive, bounded and not infinite, and the speed of light is not a "speed" at all.

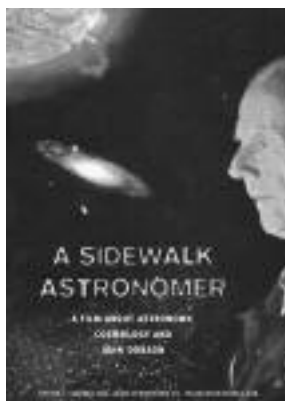
The film opens with a street scene, showing Dobson's art in engaging the mostly self-absorbed passersby to stop and look through his telescope. The wit and humor of his repartee draw you into the film, and it only gets better.

John Dobson has been called the most influential person in amateur astronomy in the last 50 years. Now, at age 91, he continues with the sidewalk astronomy he began in tours and lectures, and is always ready to teach a new amateur how to build one of the very large telescopes he became famous for.

Sidewalk Astronomers

Dobson began his innovations in amateur telescope-making in 1958, while a monk at a Vedantic monastery in San Francisco, and soon began taking his telescopes out on the streets to show the wonders of the universe to people of the city. He was expelled from the monastery in 1967 for his night absences and un-monkish behavior. He built his first very large telescope while still at the monastery, out of scrap wood and cardboard, using a 12-inch scrapped marine porthole for the mirror. He ground and polished this glass by hand. When it was completed, he aimed it at the Moon, and was so surprised by the sight that he decided that that everyone must see this for himself.

In order to get telescopes out on the streets, Dobson helped found an organi-



zation called the San Francisco Sidewalk Astronomers. So we see Dobson as the show commences, on the corner of 24th and Noe Streets in San Francisco, showing people the Moon through one of his homemade telescopes:

"That is the way it would look one hour before landing," John tells a youthful group.

"As I always say the exterior decorator does lovely work," he replies to the oohs and ahs.

"That crater you are looking at is as big as Texas."

"The universe is mostly hydrogen and ignorance." John explains the statement: "One reason that we do this is so people can see beyond their genetic programming."

We see Dobson next at the Stelafane Amateur Telescope Maker's convention in Vermont, in August 2003. This is the oldest and most famous such event, founded in the 1920s by Russell Porter, the father of the amateur telescope-making movement in the U.S.A.

David Levy, discoverer of 21 comets and leader of the amateur astronomy community, thanks Dobson for the incredible contribution he has made. Dobson explains that when he first started showing people how to make telescopes, he was asked, "Who is John Dobson? Is he an astronomer?"

John replied, "No, but when it comes to making telescopes out of junk, I'll stand my own ground."

The 'Big Bang'

Asked by a student about the age of the universe, Dobson discusses the "Big Bang" theory. "There are too many prob-

lems, such as getting everything out of nothing—that's the biggest problem." Describing in detail some of the other problems with the "Big Bang," Dobson sums it up: "We used to change the model to match the physics. That is *not* what they're doing now. They're changing the physics to match the model."

John describes his alternative to the "Big Bang," which he calls his "recycling" theory of the universe. The universe is not infinite, but bounded. "If the stuff recycles from the border, we don't have to have a beginning. It could be going like this all the time."

"It's alive," says Dobson, "The whole Universe is alive: The defining characteristic of a living organism is that it directs a stream of negative entropy upon itself, and, damn it all, the Universe does the same thing."

In a discussion of the speed of light, Dobson says it is not a speed, but the ratio of space to time. Time, says Dobson, is nature's way of keeping everything from happening at once. Space is nature's way of keeping everything from happening in the same place.

Dobson tells a joke about Adam and Eve. Adam asked God why he made Eve so attractive. "God replies, "So you'd like her." Adam then asks God, "But why did you make her so stupid?" God replies, "So she'd like you." He also tells a joke about scientists who think that they can create life. God is curious, so they take him down to the lab. The scientist says to God "First you take some dirt." God replies, "Get your own dirt."

The Dobson Story

Dobson was born in 1915 in Beijing, China. His maternal grandfather was the founder of Beijing University. His mother was a musician; his father taught zoology at the university. In 1927, Dobson's parents moved with him to the United States amid political chaos in China. He attended college at the University of California at Berkeley, graduating in 1943 with a degree in Chemistry.

Motivated by a desire to see the universe as closely as possible, he became

interested in telescopes, but noticed that the small-aperture devices available to amateurs did not gather enough light to show celestial objects such as nebula and galaxies in their true details of brightness and color. The solution would be the use of very large optics made from cheap glass portholes of 12- to 24-inch diameter.

Such large optics, mounted the usual way in the pre-Dobson era, would require a mount weighing a ton or more! Dobson's solution was a simple system where the telescope tube had truncheons on the sides like a cannon barrel. The tube was carried in a notched box which rotated on a wood base. The scope had two degrees of freedom, elevation of the tube, and rotation on the base. That was all it needed.

Producer Jeffrey Jacobs, president of Jacobs Entertainment, has been active in the independent film industry for 35 years. He met John Dobson in 1986



John Dobson: the most influential person in amateur astronomy in the last 50 years.

A Dobsonian telescope built by the author.

when he first looked through one of his telescopes. "He displays endless wonder," says Jacobs. "When I found out that no one had made a documentary about him, I knew that I had to do it."



Courtesy of Charles Hughes

Creating a Nuclear Renaissance With the Truth

by Greg Murphy

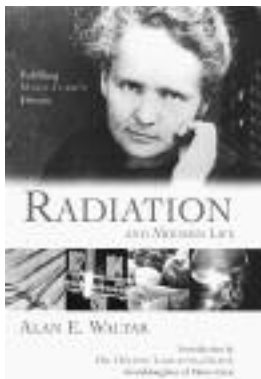
Radiation and Modern Life

by Alan Waltar

Amherst, N.Y.: Prometheus Books, 2004
Hardcover, 336 pp., \$24.95

This book represents a real effort to get out the truth about radiation, and nuclear power in general. This approach should be used as a way to organize a grassroots campaign to create a nuclear renaissance, in opposition to what the American Nuclear Society (ANS) has proposed—a campaign based on the statements of Gaia madman James Lovelock, who turned pro-nuclear out of his fear of global warming.

The American Nuclear Society, and the nuclear community in general, think that they must appeal to authority figures like Lovelock, instead of simply building a campaign based on *telling the truth*. The ANS and other nuclear representatives treat nuclear power and radiation as some form of mysticism that everyday people can not understand. In this way, they allow the anti-human and anti-nuclear environmentalists to set the terms of the debate.



Ammunition

Alan Waltar's book provides the ammunition to destroy some, if not all, of the myths about radiation and nuclear power, and does so with easy-to-understand language, with examples of how radiation and nuclear science affect and improve our lives everyday.

Today's college students in the field of nuclear engineering, as well as a small group of old-timers, readily tell you that the biggest mistake in the early days of developing nuclear science and nuclear power was not telling the truth about

radiation. The industry failed to fight for nuclear power plants and labs by not levelling with the population about how really *small* the danger of radiation is: and that failure allowed the nuclear industry to be all but shut down.

Waltar's book goes a long way to address that issue.

The book is put together with a real ordering principle, which makes it a very useful reference book. It opens with an excellent introduction by Hélène Langevin-Joliot, which sets the tone of the book. The introduction needs to be highlighted as a lesson to people how the discoveries and their applications do really advance mankind and civilization.

Waltar arranged the book in sections—agriculture, medicine, space exploration, and so on—and in each section he explains how radiation or nuclear energy has advanced the progress in that field. Each section builds on the next, with a thought of what is possible in the future from discoveries that are known, toward discoveries yet to be found. The author provides facts and charts to illustrate his points, but the best thing is his

sense of humor, using anecdotal stories and humorous examples to explain the more technical terms and ideas.

For this reason, the book is a good place to start for people who are concerned about radiation and nuclear power, and want to learn more. This writer, in fact, learned many new ways that radiation is used to better our lives. For example, did you know that radiation is used to sterilize contact lens solution?

The Curie Tradition

Dr. H el ene Langevin Joliot, who wrote the introduction, is a French scientist and granddaughter of Marie and Pierre Curie. Her introduction begins with how a simple discovery by her grandfather of the piezoelectric effect made it possible

to measure the radiation that is given off by elements like uranium; and this led to the discovery of radium.

She continues recounting the discoveries of her grandmother, as well as those of her mother, Ir ene, who discovered artificial radiation. Langevin-Joliot uses these discoveries as a backdrop to point to the need for nuclear power and further discoveries to brighten the future for all mankind. She includes a special call for the youth of the world to take seriously the study of science, and make the vision of Marie Curie come to life.

Langevin-Joliot concludes with a section from her grandfather's Nobel Prize lecture: "One can imagine that in criminal hands, radium could become very

dangerous, and here one must ask oneself if humanity gains anything by learning the secret of nature, if humanity is ready to profit from this or whether such knowledge may not be destructive for it. I am one who thinks like Alfred Nobel, that humanity will draw more good than evil from new discoveries."

The answer to the problems of new discoveries, Langevin-Joliot writes, is to understand, and we need to continue with the scientific research necessary to achieve solutions that will optimally benefit society.

This thought goes a long way to provide the optimism that is necessary to build a nuclear renaissance with the truth.

A Medical System from Hell

The Patient from Hell: How I Worked with My Doctors to Get the Best of Modern Medicine and How You Can Too
Stephen H. Schneider, Ph.D. with Janica Lane
Cambridge, Mass.: Da Capo Press, 2005
Hardcover, 300 pp., \$25.00

Well-known climate scientist Stephen Schneider has written about his harrowing but successful battle against a rare form of cancer, mantle cell lymphoma, with the double aim of pointing out the stupidity of the HMO mindset that rules the U.S. medical system, and helping other patients advocate to get the best possible care.

Anyone who has had cancer or another serious illness, or who has been involved with negotiating the medical care for a seriously ill person, will identify with the problems Schneider discusses. As Schneider notes at the beginning, today's health care is practiced as "medicine by the numbers" where doctors treat and prescribe for the "statistically average patient," and not the non-average individual before them, who may very well benefit from innovative measures. (Schneider did.)

The other anti-patient issue that Schneider trenchantly describes is the cost-benefit mentality, where the primary factor governing treatment is saving money for the institution or HMO giving care, and not what's best for the patient. How Schneider got around this limitation probably saved his life. "If



modern medical institutions can bring themselves to realize that a patient's chances of survival could increase dramatically if spending on that patient's treatments rose from, say \$300,000 to \$305,000 (less than 2 percent), a revolution in first-world health care could ensue," he writes.

Schneider cautions that he is not anti-doctor; he is talking about the patient or patient-advocate working with the doctor to come up with an optimal treatment plan for the particular patient—a plan that is not necessarily the same as the standard protocol.

Some Ironies

I greatly sympathize with Schneider; his was not an easy fight, and he and his wife, like many others fighting a deadly disease, more than once lived through hell. But as I read the several "commercials" sprinkled throughout

the narrative for his thesis of man-induced global warming, I wondered why Schneider still so devoutly believes in the concept of a statistically "average" temperature for a world that has such uniquely different climate zones, and such complex, very long-term astronomical cycles. Climate science would benefit from a return to a more traditional science basis—but that's not where the research money or the culture is today.

So, we have the irony (1) that both climate science and U.S. health care are driven by profit-seeking, not by truth-seeking, and certainly not by a desire to promote the general welfare; and (2) that both climate science and U.S. health care operate on the basis of a nonexistent statistical universe.

Another irony was to see the devoted support Schneider received throughout his ordeal from one of the most ardent anti-population fanatics, biologist Dr. Paul Ehrlich (he's the one who thinks we need to reduce the human population by two-thirds, to 2 billion)!

Overall, I think this book can be helpful for a patient or advocate fighting a dread disease and trying to get the best possible care. But the larger fight is a political one to establish a health system where you don't have to be a "patient from hell"—or a well-known scientist—to overcome a deadly illness.

—Marjorie Mazel Hecht