also prompts me to add the following points to my criticisms of the book.

On the issue of his originality, Rhodes has chosen to make his "discovery" of the A-bombs on Guam his test case. Too bad for him. It was Roger Dingman who first published the story (based partly on Curtis LeMay's diary), in the winter 1988/89 issue of *International Security*. Similarly, Rhodes failed to get there first on such other matters as America's 1946–47 A-bomb situation (see David Rosenberg's essays) and the Soviet A-bomb's imitation of the US weapon (see David Holloway's *Stalin and the Bomb*). Putting it bluntly, Rhodes's claims of newness are often overblown.

As for the Oppenheimer issues, it is evident from a careful reading of Rhodes's endnotes that he did not examine some of the crucial "perjury" materials, which were declassified by about 1991. Nor did he use the archives of Fermi, Urey, Feynman, DuBridge and Rabi, among others who supported Oppenheimer. If Rhodes had done more archival work (which is essential for any serious, well-researched history), he may well come to understand, appreciate and question why about a dozen prominent people (more than the handful he noted) had long suspected Oppenheimer, even though their suspicions were unreasonable.

My emphasis on the date of J. Carson Mark's anti-Teller remarks was not intended to denigrate Mark, whom I admire, but to stress the dangers of uncritically using retrospective eyewitness accounts of events that happened decades earlier. *Dark Sun* makes my case by drawing repeatedly on LeMay's blustery 1984 claims about events that happened 25–35 years earlier, by failing to mention that Cyril Smith's 1967 recollection was uncertain on some 1949 H-bomb matters and by relying without caveat on Willard Libby's confused oral history.

I am astonished to think that Rhodes believes an undergraduate *cum laude* degree is a sufficient qualification for writing reliable history. Much more is required.

Also, I am amused to see that Rhodes thinks I am biased against him because of what he asserts is a criticism of me in the book—and what I construe as a peculiar quibble too trivial to inspire bias.

Finally, Rhodes's response includes a type of distortion that mars *Dark Sun* itself in places. He rebukes me for inaccurately stating that "about half" of the book is on the Soviet fission program and atomic espionage, but strangely he omits the rest of my sentence, which made it clear that "about half" also includes the US fission program and LeMay's A-bomb activities. In doing so, Rhodes distorts my basic point, which is that about half of *Dark Sun* deals with non–H-bomb matters.

Barton J. Bernstein
Stanford University
Stanford, California

GORELIK REPLIES: I confined the scope of my review to my professional field, the history of Russian physics. I tried to point out, in quite a concrete way, some deficiencies on the Russian side of Rhodes's book, notwithstanding his ability as an analyst and writer. However, my main point was that, when Rhodes was doing his research, the available Russian documentary resources on H-bomb history were too poor, and government secrecy and self-censorship were still too strong, for him to have been able to write a realistic and comprehensive account.

Rather than reargue any of the points I covered in my review or those being raised by Rhodes, I prefer to simply use this limited space to draw people's attention to the fact that the Russians are now starting to release historically valuable information on the development of the Soviet H-bomb. President Boris Yeltsin has decreed that documents from the long-secret Soviet atomic archives be published. Declassified information on Soviet H-bomb history is already being presented at scientific meetings. Veterans of the Soviet atomic project are beginning to offer informative firsthand recollections.

The combined outcome is likely to be a wealth of new material that eventually will shine a bright light on both Soviet/ Russian and Western thermonuclear history.

Gennady Gorelik
Boston University
Boston, Massachusetts

Raise the *PT* Ante

The publisher's reply to the letters commenting on the March issue's split cover (May, page 91) is well put, and I hope your readers caught the irony of his words.

As members of the various American Institute of Physics societies, PHYSICS TODAY readers get this fine periodical practically free of charge. Some of us certainly wouldn't mind torn or even missing copies once in a while (although I have never experienced such a problem).

Perhaps you should start charging a fair price for PHYSICS TODAY. That might make it respectable in the eyes of any ungrateful readers.

Herbert Kobayashi
Edgewater, Maryland

Attempts at Humor—Again

In her letter (June, page 83) commenting on my letter concerning capital punishment as a topic for attempts at humor, Julie S. Link attributes to me a view that was nowhere expressed in my letter. While I suppose I am "against cancer" (whatever that means), I am not "dead set" against capital punishment. It may be an appropriate, and even necessary, response to some crimes.

Reuben E. Alley
Annapolis, Maryland

Postscript on Biedenharn Obit

In our obituary of Lawrence C. Biedenharn Jr (June, page 74), we should have noted that, after his retirement from Duke University in 1993, Biedenharn became an adjunct professor of physics at the University of Texas at Austin and held that position until he died.

In addition, Biedenharn received his PhD at MIT under the direction of Victor Weisskopf—not, as we wrote, John Blatt.

Edward G. Bilpuch
Horst Meyer
Berndt Müller
Duke University
Durham, North Carolina

Motion Proposed: Beyond Boltzmann

The ubiquity of Lévy distributions in nature, amply related in Klafter, Shlesinger and Zumofen's beautiful article, "Beyond Brownian Motion" (February, page 33), can be understood in a compelling way by studying Constantino Tsallis's generalized statistical mechanics.[1]

Tsallis's work goes back to 1988,[2] and it could well be thought of as being "Beyond Boltzmann."

References

1. C. Tsallis, S. V. F. Levy, A. M. C. Souza, R. Maynard, Phys. Rev. Lett. **75**, 3589 (1995).
2. C. Tsallis, J. Stat. Phys. **52**, 479 (1988).

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