

# LETTERS

## More Spirited Debate on Physics, Parapsychology and Paradigms

Jonathan P. Dowling voices his concern about *Physical Review A*'s publication of Henry P. Stapp's paper (July 1995, page 78). Like Dowling, I am concerned by this story, but for precisely the opposite reason. Stapp says that he "was forced by the referee and editors" to exclude part of his paper from the published version. I believe that this is indeed a form of ideological censorship of heresy.

Superficially, Dowling's position appears to be a defense of true physics from the intrusion of psychics and other crackpots. However, under more careful scrutiny, it turns out to be an attack on the freedom of a scientist to present his interpretation of the results of his work as they naturally evolve. Dowling's position, therefore, makes him an unsuspecting bedfellow of the very people he apparently wants to save science from. As Stapp argues in his reply, to resolve the matter, we need more, not fewer, independent experimental verifications (or refutations) of the effects claimed by Helmut Schmidt, Robert Jahn and others. One cannot exorcise unorthodox claims by repeating mantras that they are "pseudoscience."

Nobody denies the need to maintain very high standards of refereeing in *Physical Review A*. However, to discourage people from submitting experimental or theoretical work based on clear ideological premises is to do a clear disservice to the scientific community.

ALEXANDER A. BEREZIN  
McMaster University  
Hamilton, Ontario, Canada

I think that Jonathan P. Dowling's letter and Henry P. Stapp's response should be viewed in a wider context.

In the course of its long history, physics has gone through two major

paradigm shifts, the transition from Aristotelian to Newtonian physics, and the transition from Newtonian to contemporary physics. Additional major paradigm shifts are likely to take place, but it is impossible to tell when or in what form. It may be possible, however, to suggest the direction a major shift is likely to take.

Back in the 1950s, Erwin Schrödinger came up with such a suggestion. He noticed that contemporary science is based on an unacknowledged and crucial abstraction that he called "the principle of objectivation." He wrote: "By this I mean what is also frequently called the 'hypothesis of the real world' around us. I maintain that it amounts to a certain simplification which we adopt in order to master the infinitely intricate problem of nature. Without being aware of it and without being rigorously systematic about it, we exclude the Subject of Cognizance from the domain of nature that we endeavor to understand. We step with our own person back into the part of an onlooker who does not belong to the world, which by this very procedure becomes an objective world. [Our] science . . . is based on objectivation, whereby it has cut itself off from an adequate understanding of the Subject of Cognizance, of the mind. But I do believe that this is precisely the point where our present way of thinking does need to be amended, perhaps by a bit of blood-transfusion from Eastern thought. This will not be easy, we must be aware of blunders—blood-transfusion always needs great precaution to prevent clotting. We do not wish to lose the logical precision that our scientific thought has reached, and that is unparalleled anywhere at any epoch."<sup>1</sup>

If Schrödinger is right, then the next paradigm shift will have to do with a change in our understanding of the role of consciousness in relation to the physical world. This is the context in which I see Stapp's work as immensely valuable.

I am as convinced as the next physicist that the "Schmidt effect" is a spurious one. But when an examination of the current paradigm is the

continued on page 81

## Lise Meitner

*A Life in Physics*  
RUTH LEWIN SIME

"At last the exhilarating, poignant, and ultimately shocking story of the great physicist Lise Meitner has been fully and vividly told. Deprived of the Nobel Prize she so clearly deserved for her contribution to the discovery of nuclear fission, Lise Meitner has never been given the attention she deserves in the history of 20th-century physics. Now, with grace, style, and great authority, Sime sets the record straight." —Susan Quinn,

author of *Marie Curie: A Life*

An Alternate Selection of the Library Science Book Club, A Centennial Book, California Studies in the History of Science, \$34.95 cloth, illustrated

## The Key to Newton's Dynamics

*The Kepler Problem and the Principia*

J. BRUCE BRACKENRIDGE

"Lucid, important, and fills a large gap in the existing literature. Brackenridge is undoubtedly that gifted, patient teacher that one expects from a quality liberal arts college."

—Alan E. Shapiro,

University of Minnesota

Brackenridge clearly explains the surprisingly simple analytical structure that underlies the determination of the force necessary to maintain ideal planetary motion.

\$50.00 cloth, \$19.95 paper, illustrated

## Understanding Relativity

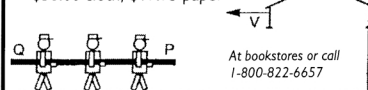
*A Simplified Approach to Einstein's Theories*

LEO SARTORI

"An extraordinarily well-written, well-researched, and carefully thought out piece of work. . . . The discussions of the paradoxes of relativity and of cosmology are the best discussions of these topics at an elementary level that I have ever seen."

—Roger A. Freedman,  
U.C., Santa Barbara

\$50.00 cloth, \$19.95 paper



UNIVERSITY OF CALIFORNIA PRESS

Circle number 12 on Reader Service Card

Letters submitted for publication should be addressed to Letters, PHYSICS TODAY, American Center for Physics, One Physics Ellipse, College Park, MD 20740-3843. Please include affiliation, mailing address and daytime telephone number. We reserve the right to edit letters.

## LETTERS (continued from page 15)

issue, one's convictions should not be a cause for action or inaction because the convictions are based on the paradigm. If there is a way to examine, in a rigorously scientific manner, claims of effects that defy the paradigm, such examinations should be encouraged.

Stapp, a physicist of impeccable reputation, has conducted just such an examination. He studied the Schmidt effect both experimentally and theoretically. I believe that he should be commended for his efforts, and his results should be publishable in the most prestigious journals.

### Reference

1. E. Schrödinger, *Mind and Matter*, Cambridge U. P., Cambridge, UK (1958), pp. 37, 54.

**SHIMON MALIN**  
Colgate University  
Hamilton, New York

**D**OWLING REPLIES: I strongly disagree with Berezin's assertion that my letter is "an attack on the freedom of a scientist to present his interpretation of the results of his work." My objection was and is specifically to Stapp's paper being published in *Physical Review A*—not to it's being published in what I would consider another, more appropriate publication, such as the *Journal of Parapsychology*.

Berezin also makes it sound as though all scientists should have the freedom to present their own interpretation of their own work in *Physical Review A* without going through the editorial and refereeing process. Again, I disagree—although I do support him in believing in the "need to maintain very high standards of refereeing in *Physical Review A*."

Like Stapp, Berezin argues that we need even more experiments on paranormal phenomena. For the most part, the results of relevant experiments undertaken over the last four decades have not proved to be reproducible by independent experimenters. Accordingly, I really do not see the value of conducting yet more experiments.

Malin believes we are on the verge of a paradigm shift having to do with the role of consciousness in relation to the physical world, and that Stapp is a brave pioneer whose results "should be publishable in the most prestigious journals." Again, I disagree—and I don't think I am alone in taking this position. The *Physical Review* editorial board has changed

its policy so that purely conjectural papers on the foundations of quantum mechanics are no longer acceptable for publication.

**JONATHAN P. DOWLING**  
US Army Missile Command  
Redstone Arsenal, Alabama

## Once More unto the Gordon & Breach

**T**his letter is Gordon & Breach's response to the joint statement of the American Institute of Physics and the American Physical Society in the January edition of *PHYSICS TODAY* (page 58).

The societies' description of the lawsuit creates the impression that Judge Leonard B. Sand ruled for them. But the judge has yet to rule on the merits of G&B's lawsuit and in fact ruled against the societies on the major legal point. In his decision, the judge distinguished between publication of the surveys in society journals and "secondary use" of them—that is, using the surveys in advertising or promotional materials or presentations. While protecting the former activity, he refused to protect actual promotional uses. He held that there was ample evidence that AIP and APS were engaging in these secondary uses to promote the sale of their own journals, a commercial objective that has nothing to do with the debate about escalating journal prices.

The judge's exact words were that "Defendants' use of the surveys directly to target relevant consumers is precisely the type of promotional activity that the Lanham Act seeks to regulate. . . . This element of consumer-orientation—of directly targeting relevant purchasers—pervades virtually all of defendants' secondary uses. We find it dispositive."

This has been G&B's point from the beginning: The Barschall surveys are not exercises in academic research; they are sales pitches for society journals. Because G&B will prove that the surveys are false or misleading, the use of those surveys to promote society journals as a better value than those of commercial publishers violates American unfair competition law (the Lanham Act).

The evidence, mostly from the societies' own files, shows that Barschall worked together with the marketing and business officials at the societies to develop his second survey in a way that would be helpful to the business interests of AIP and APS. Indeed, Barschall asked AIP and APS

business officials—not an editor—if he should do a survey, inquiring "Would it be useful . . . in particular, what additional information would be helpful?" The response from AIP's director of publishing (to whom the marketing department reported) was to encourage him to go forward. Barschall later circulated drafts to AIP and APS business officials and received suggestions on how to rewrite them so they would better serve the societies' interests. AIP and APS also worked with Barschall to time the publication of the second survey so that reprints could be sent to subscribers with the societies' renewal notices in the fall. Their goal was to use the survey to justify their recent price increases. Only because G&B objected to the survey and communicated this to AIP and APS was the planned subscriber mailing aborted. But as the judge detailed in over seven pages of his opinion, other promotional activities did in fact occur. In short, the societies were motivated by a blatant commercial goal—to persuade consumers to buy society journals.

The AIP/APS joint statement also misleadingly describes the results of the European cases. It totally omits the case in France, which G&B initially won and which is now on appeal. It also misstates some of the findings in Switzerland and Germany, where courts held that the societies, in publishing the surveys, intentionally aimed to influence the purchasing decisions of scientific libraries in order to give the societies a competitive edge. The courts also expressed serious doubts about Barschall's methodology, but did not believe that physicists and librarians in those countries would have been fooled by the surveys. Judge Sand has expressly held that the findings of the European courts are not binding on an American court.

Since the societies issued their joint statement, a Swiss appellate court has held that the commercial court hearing the case there must also consider new evidence submitted by G&B concerning the societies working closely with Barschall to use the survey to influence the purchasing decisions of subscribers. Accordingly, the appellate court has sent the case back for further proceedings.

AIP and APS constitute just two of hundreds of scientific publishers to feel the effect of library budget cuts and subscription cancellations. But using their venerated status as scientific societies to present their own advertising as science is unfair not just to other publishers, but to their own subscribers and members. If the so-