

BOOK REVIEW

Against the Tide: A Critical Review by Scientists of How Physics and Astronomy Get Done edited by Martin Lopez Corredoira and Carlos Castro Perelman. Boca Raton, FL: Universal Publishers, 2008. 268 pp. \$25.95 (paperback). ISBN 978-1599429939.

When, many years ago, I frequented the Physics Library of the University of Michigan, there was a cabinet that held a number of books that were characterized as “Weird Physics,” or some similar title. As I recall, the books were kept under glass and locked up. I can only wonder if it is still there, or whether other Physics Departments have some similar arrangement. (And not only Physics Departments!) But what happens to the humans who write such books? No longer are they burned at the stake (like Giordano Bruno), held under house arrest (like Galileo), or consigned to prison (Cf. USSR). But they have their punishments, nonetheless.

All members of the Society for Scientific Exploration (SSE), I am sure, know the high price to be paid for the research of taboo topics. Many have experienced the subtle, and sometimes not so subtle, hints to forget a subject altogether. Others have experienced the early derailment or termination of otherwise promising careers, the snickering dismissal by the toadies of dominant paradigms, and the worse consignment of taboo researchers by the powerful to various academic limbos for looking into forbidden subjects. The temptation to present my own trials is strong, but I will resist it. For we all have our own stories to tell. And we all hope for historical vindication.

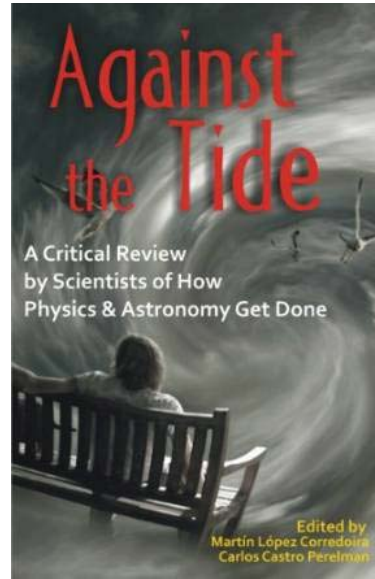
But in the meantime the realities are unpleasant. Here we have a volume, mostly by physicists and astronomers, that describes some of these realities. The book leads off with a brief but valuable review of previous literature on “resistance by scientists to scientific discovery” to use Bernard Barber’s phrase. This review, written by J. M. Companario and B. Martin, covers a great deal of key literature, and shows how dominant paradigms suppress potentially revolutionary data. For anyone interested in the general issues here, this chapter is an excellent place to start. Then we descend into the maelstrom, lovingly depicted on the book’s cover.

Scientists behave badly. Even a passing acquaintance with the history or sociology of science will present one with numerous case studies of arrogance, bribery, abuse of power, plagiarism, and data fudging. On the latter point, there is Stephen Brush’s essay “Should the history of science

be rated ‘X,’” where Brush answers in the affirmative (Brush 1974). But the present book is not a catalog of unprofessional behavior so much as one that catalogs the resistance to novel observation and theory, often carried out with “extreme prejudice” to the researcher.

In some cases the anomalous data cannot be published in mainstream journals, because the gatekeepers of whatever orthodoxy hold the gate against them, as Halton Arp writes here about his anomalous red-shift data. Or they are willfully misinterpreted as supporting orthodox claims, often in violation of common sense and manifest appearances. One thinks, for instance, of Michel Gauquelin and the “Mars Effect,” whose many replications seemed only to further enrage the guardians of canonical truth, and elicited from them further instances of unscientific behavior, for instance in the notorious “Starbaby” episode. Or consider the long delay in mounting what certainly appeared to be the correct head atop the numerous Brontosaurus (now Apatosaurus) skeletons in museums, due to the authority of Henry Fairfield Osborn (Gould 1997). In other cases, we have what is apparently a highly corrupt political system (e.g., Apostol’s essay in this volume regarding Romania), of which science is simply one part. Then the dark side of peer review, certainly a potential mechanism for protecting dogma and creating mediocrity, here scathingly explored by J. Marvin Herndon.

This is an angry book, and one can hardly blame its authors for their anger. Cynicism comes easily when big wheels in science have entourages and publicity machines worthy of rock stars. Corredoira asks “What do Astrophysics and the World’s Oldest Profession Have in Common?” and then proceeds to show the reader just what. It is difficult to disagree with Corredoira’s caricatures of peer review, conferences, and funding policies. Sometimes there are genuine scoundrels, as John Crewdson’s book *Science Fictions* (2002) alleges Robert Gallo to be. But real scoundrels, I believe, are rare. Yet, again and again, the mere fact of unequal power itself leads to minor figures being squashed beneath the wheels of the Juggernaut of the superstar. And power also generates the toady phenomenon in all its glory. One wonders whether, in earlier centuries, when science had to struggle



for funding, these phenomena were so common. But today budgets can be very big. Build a supercollider and hierarchies will assert themselves immediately. It makes one want to go off to an island or a mountain retreat (Corredoira lives in the Canary Islands) and escape. Yet the question of causation and the comparison of differences in scientists' behavior in different countries is important. The last essay, by Carlos Castro Perelman, fairly bubbles with outrage.

But what is the alternative? Do some societies still have savants who don't have giant budgets, publicity machines, toadies, and outsized egos? And does anything important happen in such societies? And if these savants discover anything really important, how long will they resist all the charms of Big Science? Where there is success, I believe, this success is usually translated into power.

We might recognize that very similar suppression to that which attends anomalies research is the fate of intellectual dissidents in science who simply are simply guilty of holding a minority view. Often the "science monopolies" that Henry Bauer describes in his book on the subject have henchmen (or women) who are all too ready to carve up the heretics (Bauer 2012). In many respects this recalls the Catholic Church's pursuit of the Albigensians, many of whom resided in the city of Toulouse, which the Church proposed to wipe out during a crusade starting in 1207 AD. When one of the Papal Legate's retainers wondered if they would kill a lot of innocents as a side effect, he was told: "Kill them all. The Lord will recognize his own" [and presumably the innocents would thus be admitted to heaven]. They certainly killed a lot of them. One wonders if Donald Menzel, an astronomer whose "skepticism" about UFOs went rather far, was not engaged in an intellectual crusade of a similar type through his three books on UFOs.

I might note, in passing, a number of ways in which anomalistics researchers manage to go about their important business. The first model is to wait until enough academic power is attained, so that they cannot easily be dislodged (think J. Allen Hynek, Robert Jahn, and John Mack). This is why the SSE, rather than being filled by the young and rebellious, is largely peopled by full and emeritus professors. I would even counsel the young to keep their mouths shut until at least they have tenure. However, tenured professors who speak up, such as David Jacobs (UFOs) and Roy Mackal (Loch Ness), often advance no further once they do. Another model is the one I chose, which is to pick a less-demanding university and so largely be left in peace. This involves greatly revising one's ambitions regarding cushy positions, but still allows a considerable climb reputationally, both in academia per se and in one's chosen field of anomalistics. Model III is

the submarine approach, where one stays out of sight and works as a secret agent. But this usually means no anomalies publications, except under a pseudonym, and almost never any money for anomalies research. I have a colleague who chooses to work in this manner. He is known to a small number of UFO researchers, but his own colleagues do not suspect his deviant activity.

As I indicated earlier, this book has quite a number of horror stories of the variety to which many of us (unhappily) have become accustomed. But it is short on analysis about why this happens, how “normal” it is, and what can be done about it. D. Rabounski’s set of principles of scientific freedom is good, but needs more discussion. Henry Bauer’s essay on science ethics views science as a filtering system, so that by the time science hits the textbooks it is much more likely to be true. I mostly agree, but textbooks also create their own distortions. Dr. Bauer’s view is certainly a common view among scientists, but to my mind rather glib about the process by which a hypothesis becomes a fact.

In summing up, I would say that *Against the Tide* is helpful in allowing us to see the glaring problem of unfettered conflict in science regarding heretical views and anomalistics. Frankly, much of the book is absolutely on target. But then science is a complicated business. Conflict is often endemic. Political, commercial, and reputational issues are unlikely to go away. Success leads to power, and power leads to abuse. We can and must fight abuse when it involves science we care about. But as for making it go away generally, I am not hopeful.

An index would have been helpful.

Finally, I would like to apologize for the late review of this book. Life often gets in the way of one’s academic responsibilities.

RON WESTRUM

Emeritus Professor of Sociology
Eastern Michigan University

References Cited

- Bauer, H. H. (2012). *Dogmatism in Science and Medicine*. Jefferson, VA: McFarland.
Brush, S. (1974). Should the history of science be rated ‘X’? *Science*, 183:1165–1172.
Gould, S. J. (1997). *Bull for Brontosaurus*. New York, NY: W. W. Norton.