

*Some Intersections of  
Science, Coercion,  
Equality, Justice,  
and Politics—  
A Teapot Tempest  
Stirs Sciences*

Several authors discuss not only science contributions to society but also whether or not science can or should be non-political.♣

*Contributing Organizers:*

*Stephen Ledoux & James O’Heare*

## *Table of Contents*

- ❧ *On Typography & Related Resources ... vii*
- 1 *Introduction ... 3*
- 2 *Open Letter Addressing Coercive Practices ... 7*  
(by some of the signers)
- 3 *An Overview of the Reinforcers–Values–Rights–Ethics–and  
Morals Continuum ... 13*  
Stephen Ledoux
- 4 *The Law of Cumulative Complexity Reduces Old and  
New Misunderstandings*  
[with a potential impact on increasing equality]... 31  
Stephen Ledoux
- 5 *Why the Delays in Advancing the Natural Science  
of Behavior ... 41*  
Lawrence Fraley
- 6 *A Personal Response to a Tempest Too Small ... 53*  
Nia Barnett
- 7 *Some Natural Science Stands Inherently Political ... 65*  
Stephen Ledoux
- 8 *Racism, Politics, and Behaviorology ... 91*  
Michael Shuler
- 9 *Beyond GDP: Promoting Cultural Values as Reinforcers in the  
United States to Foster a Well–Being Economy ... 117*  
Dawn Kutza
- 10 *Sentient–Being Rights ... 129*  
James O’Heare

- 11 *Some Quotations Related to Science and Politics ...* 169**  
 (Various authors and an artist: B. F. Skinner, some authors of chapters in this book,<sup>1</sup> a *Special Section* of quotes from “An Open Letter on DAPL,” an article<sup>2</sup> by Jon Eagle Sr., the Tribal Historic Preservation Officer of the Standing Rock Sioux Tribe, about the Dakota Access Pipeline, and Cornelia Faust)
- ✂ *Further Readings ...* 181
- ✂ *A Very Short Bibliography ...* 183
- ✂ *About the Authors ...* 189 ☺

---

<sup>1</sup>Ledoux, S. F. & O’Heare, J. (Contributing Organizers). (2021). *Some Intersections of Science, Coercion, Equality, Justice, and Politics—A Teapot Tempest Stirs Sciences*. Los Alamos, NM: ABCs (available through “Print-On-Demand” at [www.lulu.com](http://www.lulu.com)).

<sup>2</sup>Eagle Sr., J. (Winter 2020). Conversation: An Open Letter on DAPL. *Earthjustice Quarterly Magazine*, Issue 153, pp. 32–34. [Readers should read the whole article! Visit [www.earthjustice.org](http://www.earthjustice.org).]

## *On Typography & Related Resources*

This book is set in the Adobe Garamond, Adobe Garamond Expert, and Tekton collections of typefaces. In addition, a valuable basis for the typographic standards of this work deserves acknowledgment. As much as possible, this book follows the practices described in two highly recommended volumes by Ms. Robin Williams (both of which Peachpit Press, in Berkeley, CA, USA, publishes). One is the 1990 edition of *The Mac is Not a Typewriter*. The other is the 1996 edition of *Beyond the Mac is Not a Typewriter*.

For example, on page 16 of the 1990 book, Williams specifies practices regarding the placement of punctuation used with quotation marks, an area in which some ambiguity has existed with respect to what is “proper.” In addition the present book follows the advice in these books about avoiding “widows” and “orphans.” People concerned with good typography use the term “widow” when less than two words remain on the last line of a paragraph. They use the term “orphan” when the first line of a paragraph remains alone at the bottom of a page, or when the last line of a paragraph remains alone at the top of the next page. Good typography helps improve the reading experience. Ignoring good typography can occasionally even leave readers stuck with a widowed orphan.

Perhaps ignoring good typography stems from a misguided notion that poor typography saves lines (or time) and thus dollars which, over a book-length document, it virtually never does... In this and a few other publishers’ books, a widow or orphan is considered a typo.

Also, since some confusing alternatives remain regarding the use of hyphens and dashes, this book would simply limit hyphens to separating the parts of words that break at a line end, although this book never breaks words at line ends, because good software (e.g., Adobe InDesign5) makes that old, hard to read practice unnecessary. (Too many publishers think that this—hyphenless lines, especially with “justified” text, like on this page—is impossible without producing “rivers of white,” but the book you hold in your hands, and many others by different publishers, prove otherwise.)

Beyond hyphens (i.e., “-”) “en dashes” (i.e., “—”) most commonly separate the whole words of compound adjectives, and “em dashes” (i.e., “—”) most commonly set off multiple-word—a compound adjective with an en dash—phrases or clauses (as with these examples). These easy-reading characteristics developed across humanity’s centuries of successful printing-press practices. Be aware, however, that ebook formatting, while it has its own benefits, typically destroys most of these easy-reading characteristics.

You can address correspondence regarding this book to the authors, or the publisher, ABCs (at [ledoux@canton.edu](mailto:ledoux@canton.edu)). You can find many articles mentioned herein from *Behaviorology Today* (ISSN 1536-6669), later renamed *Journal of Behaviorology* (ISSN 2331-0774), at [www.behaviorology.org](http://www.behaviorology.org) (the website of TIBI, The International Behaviorology Institute). You can also find full descriptions of many of the books mentioned herein, including sources for them, on the BOOKS page of this website, which does not sell books.☺

## Introduction

In the late summer of 2020, a paper titled “Open Letter Addressing Coercive Practices” was deemed worthy, having passed peer review, but was ultimately declined, because it was also deemed “political.” The implications of the resulting local “tempest in a teapot” resound far more widely than merely in the originating science of the paper’s authors, the natural science of behavior that some call *behaviorology* (e.g., see Fraley & Ledoux, 1992/2015). This book makes a better venue for this “Open Letter” paper, along with others that further explore the interrelated issues, considerations, and concerns. The papers collected here expand related perspectives on some of the implications, with the “Open Letter” paper being the first paper, setting the stage for the others.

Across its chapters this book emphasizes science contributing effectively to benefit society by exploring topics from a natural–science perspective, including applying science to the behavior involved in social issues related to coercion, equality, exploitation, and justice. Across some chapters this book also discusses whether or not or how much science is political, particularly under the current circumstances confronting humanity.

Here are some of the considerations, implications, and concerns, and the chapters and their authors who address them:

- ✂ Open Letter Addressing Coercive Practices—*by some of its signers*
- ✂ An Overview of the Reinforcers–Values–Rights–Ethics–and Morals Continuum—*Stephen Ledoux*
- ✂ The *Law of Cumulative Complexity* Reduces Old and New Misunderstandings [with a potential impact on increasing equality]—*Stephen Ledoux*
- ✂ Why the Delays in Advancing the Natural Science of Behavior—*Lawrence Fraley*
- ✂ A Personal Response to a Tempest Too Small—*Nia Barnett*
- ✂ Some Natural Science Stands Inherently Political—*Stephen Ledoux*
- ✂ Racism, Politics, and Behaviorology—*Michael Shuler*
- ✂ Beyond GDP: Promoting Cultural Values as Reinforcers in the United States to Foster a Well–Being Economy—*Dawn Kutza*
- ✂ Sentient–Being Rights—*James O’Heare*
- ✂ Some Quotations Related to Science and Politics —*by various authors*

Authors may or may not agree with each other, and each author states her or his own views in a manner respectful of “free speech.” These views received no editing for consistency either with the views of other authors or with the views of any organizational affiliations or with the views of this book’s organizers (i.e., Stephen Ledoux and James O’Heare served as “organizers” not “editors”). Also, the publisher edited only for typography and typos (and maybe missed some).

Stephen Ledoux and James O’Heare organized this book, because they saw it as an initial solution to the problem of the differences of views in the “teapot tempest” that arose around the “Open Letter” to which one or another chapter herein might allude. This solution involves providing generally longer, more thorough considerations (compared to the “Open Letter”) of the surrounding issues, as book chapters.

To expedite broad dissemination of the papers in this book, the authors retain control over the rights to publish their papers elsewhere. The more places wherein these kinds of pieces appear, the better for everyone. (Any income that the book might produce, after paying its costs, gets distributed to science-supporting organizations, beginning with The International Behaviorology Institute [TIBI], although TIBI played no role in the organizing or production of this book, which happened completely independently of TIBI.)

This book’s chapters focus on various aspects of “*coercion, equality, justice, exploitation, divisiveness, and politics intersecting science*” with behaviorology as the anchoring science (see Further Reading [in the back of this book]). Some aspects simply involve applying science to such social areas, while others involve more direct political implications. This focus covers the characteristics of topics that already came up as considerations and concerns in the original “Open Letter” and the documents of the “tempest in a teapot” that swirled around its not being published in the discipline’s journal.

Regarding citations and references to science-related or other literature, some authors follow a fairly standard pattern of citations (in the text, as “author, year”) with reference lists at the end of each chapter while other authors integrated their references directly into their texts. Wherever possible, however, footnotes get limited to the opening of a chapter; otherwise their content gets worked into body text, or into citations/references. The organizers followed this policy for various reasons, a major one being that footnotes—at chapter ends or at the back of the book—often drive readers nuts.

The organizers did not design this book to try to cover everything related to its topic, because they recognize that no one has a monopoly on all the topics that could be included. The book covers some related areas, and the organizers and chapter authors look forward to other authors covering related topics in other journal articles or books.

The organizers suggested to the chapter authors that, for their writing, their audience is at least (a) for the record(!), (b) for natural scientists, especially those who cannot help but be involved in political considerations—especially at present, a present whose conditions and contingencies might persist for too many decades—which in particular includes natural scientists of behavior, and (c) that large portion of the general readership of the culture who, regardless of educational background, are concerned about how issues like these play out,

because they affect the viability of the future, which means people's children and grandchildren. (Although writing this Introduction occurred before the 2020 U.S. General Election, its concerns go beyond any election outcome.)

The organizers also recognized that authors might need to touch on various principles or practices of behaviorological science. In such cases we relied on authors to provide readers, who may lack familiarity with the natural science of behavior, with brief summaries of those principles or practices, supported with citations and references to available, appropriately leveled materials (e.g., see the BOOKS page at [www.behaviorology.org](http://www.behaviorology.org) where books that “introduce” behaviorology range from a doctoral-level book [Fraley, 2008] to a textbook for behaviorology majors or graduate students [Ledoux, 2014] to a general-audience primer [Ledoux, 2017] to books of newspaper columns [Ledoux, 2020, 2021]).

Given the value of terminology—for consistency and cohesion across chapters—the organizers and authors agreed on maintaining the usual meaning of standard terms in our science. Due to relevance, this seemed so appropriate for the terms *values*, *rights*, *ethics* and *morals* that an early chapter overviews these terms for readers' convenience. (These terms are used in this book the same way that Larry Fraley used them in a chapter of his 2008 *General Behaviorology...* book, which is the same way that Stephen Ledoux used them in a chapter in his 2014 *Running Out of Time...* book; see the references.)

The basic premise of this book is that a variety of connections, some inevitable, tie natural sciences to politics, and for the natural science of behavior, many of these connections are completely inescapable. These connections need, and deserve, a closer look and more elaboration and dissemination.

Why? Because the natural science of behavior discovered the functional relations between independent environmental variables and behavior dependent variables that focus on the reality, the fact, that no magical or mysterious or spontaneous accounts, such as inner-agent accounts, are needed to understand, explain, predict, or exert control—either beneficial or coercive—with respect to behavior. This discard of agentialism by this natural science puts science—which ultimately means all science—in a kind of conflict with all the pre-scientific, unscientific, and anti-scientific secular and theological accounts that get used in societies around the world to help justify the earlier and current coercive, exploitative, divisive, unequal, and unjust aspects of any society, regardless of any benefits that these accounts might otherwise provide.

That conflict, that incommensurability, forces politics on all natural sciences because, in spite of “cherry-picking” attempts, a denial of any science can lead to a denial of all sciences. In cultures around the world, society remains constructed around a wide range of institutions responsible for maintaining the culture. The result, however, of so many of these institutions being grounded in theological and secular pre-scientific, unscientific, and anti-scientific accounts, is that conflicts arise between these accounts and the facts that sciences discover. These conflicts erupt in most cultural areas, from cartoons (e.g., “Fight Truth Decay”) to the largest scale political arenas. Such developments inevitably make sciences political to some extent that deserves our attention. This book provides some of that added attention.♣

## References (with some annotations)

- Fraley, L. E. (2008). *General Behaviorology: The Natural Science of Human Behavior*. Canton, NY: ABCs (a 1,600–page, doctoral–level book with a full description on the BOOKS page at [www.behaviorology.org](http://www.behaviorology.org)).
- Fraley, L. E. & Ledoux, S. F. (1992/2015). Origins, status, and mission of behaviorology. In S. F. Ledoux. *Origins and Components of Behaviorology—Third Edition* (pp. 33–169). Ottawa, Canada: BehaveTech Publishing. ABCs first published this multi–chapter paper in 1992, and it appears—unchanged—in each edition of the *Origins...* book after that. All editions were in hardcover, with this ... *Third Edition* published by BehaveTech Publishing. Then in 2020 ABCs released the ... *Third Edition* in softcover for “Print–On–Demand” at [www.lulu.com](http://www.lulu.com) (click on the magnifying glass and enter an author’s name). For a complete description, see the BOOKS page at [www.behaviorology.org](http://www.behaviorology.org). This paper also appeared across 2006–2008 in these five parts in *Behaviorology Today*: Chapters 1 & 2: 9 (2), 13–32. Chapter 3: 10 (1), 15–25. Chapter 4: 10 (2), 9–33. Chapter 5: 11 (1), 3–30. Chapters 6 & 7: 11 (2), 3–17. See the JOURNAL page at [www.behaviorology.org](http://www.behaviorology.org).
- Ledoux, S. F. (2014). *Running Out of Time—Introducing Behaviorology to Help Solve Global Problem*. Ottawa, Canada: BehaveTech Publishing (a 600–page textbook for majors and graduate students).\*
- Ledoux, S. F. (2017). *What Causes Human Behavior—Stars, Selves, or Contingencies?* Ottawa, Canada: BehaveTech Publishing (a 450–page general–audience primer).\*
- Ledoux, S. F. (2020). *Explaining Mysteries of Living*. Canton, NY: ABCs. This is a still–available early edition of (2021) *Explaining Mysteries of Living (Expanded)*. Los Alamos, NM: ABCs. These are versions of a book of 72 newspaper columns on the basic principles and practices of behaviorology, with several column–supporting papers. The “expanded” edition also has numerous added color graphics.\*
- Ledoux, S. F. (2021). *Science Is Lovable—Volume 2 of Explaining Mysteries of Living*. Canton, NY: ABCs. This is a still–available early edition of (2021) *Science Is Lovable—Volume 2 of Explaining Mysteries of Living (Expanded)*. Los Alamos, NM: ABCs. These are versions of a book of 72 more newspaper columns on deeper topics in behaviorology, including some initial scientific answers to some of humanity’s ancient but as yet inadequately answered questions (e.g., about values, rights, ethics, morals, language, consciousness, personhood, life, death, reality). The “expanded” edition also has numerous added color graphics plus several column–supporting papers.\*🌀

---

\*These books and many others all have full descriptions on the BOOKS page at [www.behaviorology.org](http://www.behaviorology.org) and they are now available “Print–On–Demand” at [www.lulu.com](http://www.lulu.com) (click the magnifying glass and enter an author’s name).