ROUTLEDGE INTERDISCIPLINARY PERSPECTIVES ON LITERATURE

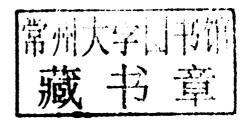
Resistance to Science in Contemporary American Poetry

Bryan Walpert



Resistance to Science in Contemporary American Poetry

Bryan Walpert





by Routledge 711 Third Avenue, New York, NY 10017

Simultaneously published in the UK

by Routledge

2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Routledge is an imprint of the Taylor & Francis Group. an informa business

© 2011 Taylor & Francis

First published 2011

The right of Bryan Walpert to be identified as author of this work has been asserted by him in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

Typeset in Sabon by IBT Global.
Printed and bound in the United States of America on acid-free paper by

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark Notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging-in-Publication Data

Walpert, Bryan.

IBT Global.

Resistance to science in contemporary American poetry / Bryan

p. cm. — (Routledge interdisciplinary perspectives on literature; 3) Includes bibliographical references and index.

American poetry—20th century—History and criticism.
 Science in literature.
 Literature and science—United States—History—20th century.
 I. Title.

PS310.S33W36 2011

811'.540936—dc23 2011020522

ISBN13: 978-0-415-89334-3 (hbk) ISBN13: 978-0-203-16155-5 (ebk)

Routledge Interdisciplinary Perspectives on Literature

- 1 Environmental Criticism for the Twenty-First Century Edited by Stephanie LeMenager, Teresa Shewry, and Ken Hiltner
- 2 Theoretical Perspectives on Human Rights and Literature Elizabeth Swanson Goldberg and Alexandra Schultheis Moore
- 3 Resistance to Science in Contemporary American Poetry Bryan Walpert

For Nancy

Acknowledgments

If on occasion the long road to this book felt more like labor than love, it was labor made lighter by generous support from the following: the University of Denver Weil Summer Fellowship that permitted me to jumpstart my thinking on this topic so many years ago; a Massey University semester's research leave; a Massey University Research Award that reduced my teaching load; a Massey University Research Medal-Early Career, which came with research funding; and both discretionary teaching release and generous research funding from Massey's School of English and Media Studies, which gave me the time to bring this project to completion and contributed funds to pay for publishing permissions. In particular, at Massey, I wish to thank Dr. John Muirhead, colleague, mentor, and friend, who as current Head of School provided unwavering support for the project. Thanks, too, to Dr. W. Scott Howard at the University of Denver, my friend and my former professor, for his ongoing support as well as for reading early drafts of some portions of this manuscript and helping me to find their focus, though he is not in any way responsible for any errors of fact or imagination. I owe a larger debt, too, to both men for showing me, in different ways, what it means to be an excellent academic. Many thanks to the colleagues who took on my teaching and administration during funded research leave, particularly Dr. Thom Conroy, and much gratitude, as well, to the anonymous reviewers, whose suggestions were critical to the final version of this book. Most of all, though, the labor would not have been possible without the love. Many thanks to my parents, Harold and Naomi, for the many gifts of the heart that make such an endeavor possible, and to my children, Abigail and Zachary, for reminding me each day what most matters. My greatest thanks goes to my wife, the scientist and thinkeroutside-the-box Nancy Golubiewski, who willingly bore too much of my burden and who, in my darkest day of despair, said, in the convincing casual manner reserved for the truly confident, that it could be done. This book is dedicated to her.

Credit and thanks are due, as well, to the authors and publishers who gave their kind permission to reprint material:

- Excerpts from *Meeting the Universe Halfway* by Karen Barad. Durham, NC: Duke University Press, 2006, 32–33, 49, 54, 56, 75, 106–107, 113, 115, 119, 122, 132, 134, 136, 139, 140, 143, 147–148, 156–157, 170, 178, 184–185, 192, 196, 198, 202–204, 206, 208–209, 217–218, 248, 369–370, 375–377, 383. All rights reserved. Reprinted with permission of the publisher.
- Bricuth, John. "A New Model of the Universe." In *The Heisenberg Variations*. Athens: The University of Georgia Press, 1976, 43–50. Reprinted with permission of the author.
- Deming, Alison Hawthorne. "16," "26," and "Essay on Intelligence: Two." In *The Monarchs: A Poem Sequence*. Baton Rouge: Louisiana State University Press, 1997, 19–20, 32, 29–30. Reprinted with permission of the author.
- Deming, Alison Hawthorne. "Fiber Optics and the Heart" and "Mt. Lemmon, Steward Observatory, 1990." In *Science and Other Poems*. Baton Rouge: Louisiana State University Press, 1997, 14, 53–56. Reprinted with permission of the publisher.
- Deming, Alison Hawthorne. "The Woman Painting Crates." In *Science and Other Poems*. Baton Rouge: Louisiana State University Press, 1997, 58–59. Reprinted with permission of the publisher.
- Excerpts from "Fog," from *My Alexandria*, by Mark Doty. Champaign: University of Illinois Press, 1993. Used with permission of the poet and the publisher.
- Goldbarth, Albert. "Farder to Reach." Copyright Albert Goldbarth. Excerpts reprinted with permission of the author.
- Goldbarth, Albert. "A Blank Wide Face." In *Marriage, and Other Science Fiction*. Columbus: The Ohio State University Press, 1994, 104–108. Copyright Albert Goldbarth. Reprinted with permission of the author.
- Goldbarth, Albert. "Stephen Hawking, Walking." In Marriage, and Other Science Fiction. Columbus: The Ohio State University Press, 1994, 57–58. Copyright Albert Goldbarth. Reprinted with permission of the author.
- Goldbarth, Albert. "Tarpan and Aurochs," "We're Just About to Observe the Edge of the Universe," and "Personal." In *Arts & Sciences*. Princeton: Ontario Review Press, 1986, 3–5, 8–9, 11–12. Copyright Albert Goldbarth. All rights reserved. Reprinted with permission of the author.
- Goldbarth, Albert. "One Continuous Substance" and "How the World Works: An Essay." In *Heaven and Earth: A Cosmology*. Athens: The University of Georgia Press, 1991, 113, 114–117. Copyright 1991 by Albert Goldbarth. Reprinted with permission of the publisher.
- Goldbarth, Albert. "Astronomy." In *Saving Lives*. Columbus: The Ohio State University Press, 2001, 32. Reprinted with permission of the publisher.
- Goldbarth, Albert. "Jan 31st: Degrees of the Same Thing," "Some Cloths," "Eye of the Beholder," "Zero: Terror/ Lullabye," "Some Secret," and "Hierarchy, Lowerarchy." In *Combinations of the Universe*. Columbus: The Ohio State University Press, 2003, 3–5, 53–56, 76–78, 87, 88–90, 91. Reprinted with permission of the publisher.
- "News from Home" from *Beyond* by Albert Goldbarth. Reprinted by permission of David R. Godine, Publisher, Inc. Copyright 1998 by Albert Goldbarth.
- Grosholz, Emily. "Trying to Describe the Reals in Cambridge" and "Poems Overheard at a Conference on Relativity Theory." In *The Abacus of Years: Poems*. Boston: David R. Godine, 2002, 13, 78–80. Copyright Emily Grosholz. Reprinted with permission of the author.
- Hoffmann, Roald. "What We Have Learned About the Pineal." In *Gaps and Verges*. Gainesville: University of Central Florida Press, 1990, 62–63. Reprinted with permission of the author.
- David Ignatow, "Poet to Physicist in His Laboratory." From Figures of the Human. Copyright 1964 by David Ignatow. Reprinted with permission of Wesleyan University Press.

- Inez, Collette. "Seven Stages of Skeletal Decay." Getting Under Way: New & Selected Poems. Brownsville, Oregon: Storyline Press, 1993, 23-24. Reprinted by permission of the author.
- Jones, Alice. "The Blood." Reprinted with permission of the author.
- Osman, Jena. "The Periodic Table as Assembled by Dr. Zhivago, Oculist." From The Character. Boston: Beacon Press, 1999, 26-41. A full web version is available at http://epc.buffalo.edu/authors/osman/. Excerpt reprinted by permission of the author.
- Retallack, Joan. Message to the author. February 14, 2006. E-mail. Reprinted by permission of the author.
- Retallack, Ioan, "AID/I/SAPPEARANCE," "Not a Cage," and "Steinzas in Mediation." Reprinted by permission of the author from Procedural Elegies / Western Civ Cont'd/. Roof Books, 2010.
- Retallack, Joan. Excerpts from The Poethical Wager. Copyright 2004 by the Regents of the University of California, Published by the University of California Press. Reprinted with permission of the publisher.
- The lines from "Phantasia for Elvira Shatayev." From The Dream of a Common Language: Poems 1974–1977 by Adrienne Rich, Copyright 1978 by W.W. Norton & Company, Inc. Used by permission of the author and W.W. Norton & Company, Inc.
- "Achieving Perspective," "The Compassion of the Iris" and "The Rites of Passage." From Song of the World Becoming: New and Collected Poems 1981-2001 by Pattiann Rogers. Minneapolis, MN: Milkweed Editions, 2001. Copyright 2001 by Pattianne Rogers. Reprinted with permission from Milkweed Editions (www.milkweed.org).
- The Seasons (Oxford English Texts) by James Thomson (1981): "Spring", lines 208–212; "Summer", lines 1556–1558, 1560–1562, 1730–1748, 1753–1756. Reprinted with permission of Oxford University Press.
- Stanton, Maura. "Computer Map of the Early Universe." Glacier Wine. Pittsburgh: Carnegie Mellon University Press, 2001, 22. Reprinted with permission of the author.
- Walpert, Bryan. "AIDS and the Postmodern Subject: Joan Retallack's 'AID/I/SAP-PEARANCE." Poetics Today 27.4. Incorporated in revised form with permission of Duke University Press.
- "Pastoral 1 [First Version]" and "Spring and All: (VIII) at the faucet of June." By William Carolos Williams, from The Collected Poems: Volume 1, 1909-1939, copyright 1938 by New Directions Publishing Corp. Reprinted by Permission of New Directions Publishing Corp.
- "Pastoral 1 [First Version]" and "Spring and All: (VIII) at the faucet of June" By William Carolos Williams, from The Collected Poems: Volume 1, 1909-1939. Edited by A. Walton Litz and Christopher MacGowan. Carcanet Press Limited. Reprinted with permission of Carcanet Press Limited.
- Willis, Elizabeth. Second Law. Bolinas, CA: Avenue B, 1993. Reprinted with permission of the author.

Contents

	Acknowledgments	ix
	Introduction	3
1	Popularization, Praise, and the Aesthetic Pleasures of Science	15
2	Poetry, Science, and Claims on Knowledge	29
3	The Ghost of Romanticism: Perception and Imagination	61
4	The Ghost of Modernism: Relativity of Knowledge	92
5	The Ghost of Language: The Postmodern Subject and the <i>Poiesis</i> of Science	116
6	The Ghost of Science: Knowledge as Intervention	145
	Epilogue	180
	Notes Works Cited	189 197 213
	Index	210

"It is easy to imagine a world full of poets who do not build radio telescopes. They're very smart, but we don't hear from them."

Carl Sagan

"The constant question: what things can be known only by means of poetry?"

Joan Retallack

Introduction

It may be possible to quantize gravity in the harmonic gauge with ghost fields.

Einstein's equations do not hold, and thus the theory differs from that in the temporal gauge. (1–6)

Emily Grosholz, from "Poems Overheard at a Conference on Relativity Theory."

(SECOND LAW)

swoon through comforting

to fetter

Crest to cREST

a projection compassing

spirit or BEAM of an original

against the brow of time (V. 1-6)

Elizabeth Willis, from "Second Law"

Contemporary American poets are obsessed with science. The interest is obvious from a quick browse through the poetry shelves at any good bookstore: Individual poems (e.g., Emily Grosholz's "Poems Overheard at a Conference on Relativity Theory"), collections (e.g., Quantum Lyrics by A. Van Jordan), and anthologies (e.g., Kurt Brown's Verse & Universe: Poems About Science and Mathematics) make science their explicit theme. Why the interest? To hear poets describe it, their interest in science stems from a desire to bridge a gap between disciplines that have lost sight of how much they have in common. Both, it is sometimes said, are forms of investigation. "[T]he view from either side of the disciplinary divide seems to be that poetry and science are fundamentally opposed, if not hostile to one another," laments poet Alison Hawthorne Deming, explaining this is due to what is perceived as an obvious difference: "Scientists are seekers of fact; poets revelers in sensation." Deming disputes such simple distinctions. "How could the great questions about the nature of existence be separated into subjects, professions, vocabularies that had little to say to one another?" she recalls asking herself as a student in science class ("Science and Poetry" 183). Or as the poet Kelly Cherry, in 1994, envisioned the ideal relationship between poetry and scientist,

4 Resistance to Science in Contemporary American Poetry

It is rather like two cultures meeting, then, this interchange between scientist and poet. It is rather like conversation and friendship. It is rather like strolling hand-in-hand across a shrinking suspension bridge flung over the endless drop into our unknowing. Finally, here at the end of the twentieth century, it must be, for all our sakes, rather like scientist and poet accompanying each other into the twenty-first. (135)

One project of this book, not to put too fine a point on it, is to give the lie to such sentiments. Not to the idea that science and poetry should hold hands across the suspension bridge, but to the idea that poets believe they should. It is obvious that poets who make such statements have a great interest in—and appreciation for—science; I am not suggesting otherwise. But this book argues that despite publicly expressed sentiments of rapprochement, the "hostility" to which Deming refers remains alive and well on poetry's side of that divide—albeit often implicitly—in her own poems and in those of her contemporaries. A related project of this book is to trace the types of resistance to science, in particular to scientific authority, in the work of four major poets and to suggest why some of these resistances are stronger than others. Specifically, I argue that the ghosts of romantic and modernist poetics haunt the work of several of these poets. These poetics dictate the forms of resistance to scientific authority that the poems offer and, further, inscribe the limitations of that resistance. By contrast, I will argue, the poets whose poetics are self-consciously postmodernist—those who direct their attention to the materiality of language—forward the most persuasive arguments against the idea that science holds the strongest claim, or the only claim, to knowledge. But the final project of this book will be to suggest that even these postmodernist poems take aim at a phantom—a science that does not truly exist. As a result, by the end of this book I will return full circle to argue that poetry and science do, in fact, have something in common. What they have in common centers on the practice of intervention, rather than representation. A poetics of intervention, as I will show, is in sympathy with contemporary science studies scholarship or, rather, with science as the more cutting-edge scholars in that discipline conceive of it. And it is via the conception of science offered by science studies that a bridge between poetry and science—a walk together across Cherry's suspension bridge—becomes possible.

Poets and other writers have been making conciliatory statements not just for decades but for centuries. "Why not get on with the job—the surely important and necessary job—of breaching the spiritual iron curtain?" Aldous Huxley wrote nearly five decades ago, referring to a divide he saw between literature and science (56). Hugh MacDiarmid, writing in the same decade as Huxley, argued that science offered fresh material for poetry to engage: "The programme for poetry I advocate is in Walt Whitman's words: to conform with and build on the concrete realities and theories of the universe furnished by science" (243). Kelly Cherry has argued that by "asking

the same questions in our different languages of science and art, we learn to translate ourselves into one another, we see that we are different words for the same humanity" (131). Kurt Brown speculates that the scientist and poet have in common a similar intellectual enterprise: "Perhaps the kind of imagination it takes to conceive of a radical and complicated new scientific theory, and prove it, is not so different from what is required to envision, compose and successfully execute a great poem" (Introduction xiv). Referring to several late 20th-century poets who reference science in their work, M. L. Williams similarly insists, "They must inhabit a multitude of worlds of spaces and times, to recover a semblance of nature, of home, of self and other, of the grand 'project' of being alive and conscious in the universe"; Williams adds, "The previous sentence also describes the efforts of our most brilliant scientists today" (18). Perhaps the most famous injunction to bridge the gap between science and poetry is now two centuries old. The poet should "follow the steps of the man of science," the English Romantic poet William Wordsworth exhorts in his Preface to the second edition of Lyrical Ballads (1802), "carrying sensation into the midst of the objects of the Science itself" (753). He places no form of science out of the poet's reach; the poet will be able to "aid the transfiguration" of science to "flesh and blood" (753).

If it is possible to read Wordsworth as relegating poetry to mere translator, its function merely to put a human face on cold facts, to act in the extreme as a popularizer of science, that is not how he intended it and more to the point here not how many poets since have taken it. As science has gained in authority, literature has largely been relegated to amusement, and poetry even further marginalized because it is now primarily associated with the lyric, which is in turn associated with personal "expression" and, in the eyes of its least charitable critics, solipsism. So poets who turn frequently to science do so not slavishly, out of pure admiration or awe. As I will argue in this book, an important aspect of lyric poetry's relationship with science is a quiet resistance to the notion that science is the exclusive or best source of knowledge about the world. This book investigates the source of resistance, locating it, epistemologically, in two forms: a negative argument (an argument against scientific authority) and a positive one (an argument for alternative forms of knowledge). The negative argument, as I will show, is located in the tension between subjectivity and the scientific method; it is an argument for the limitations of scientific knowledge. The positive argument is based on the distinction between making and discovering. This argument finds a place for poetry as knowledge and suggests that place is poiesis, making. One goal of this book is to trace the manner in which both forms of poetic resistance to scientific authority, the negative and the positive, manifest themselves in contemporary American poetry. Specifically, I will show how they recapitulate romantic, modernist, and postmodernist paradigms as poets struggle to maintain an epistemic place for subjectivity and, therefore, for lyric poetry.² Another goal is to suggest why such inheritances matter: Even those inheriting their arguments from romantic and modernist poetics do so from a contemporary standpoint; when postmodernist arguments with science slip into their work, these poets must resort to asserting, rather than enacting, arguments that their inherited poetics cannot accommodate. This book is not meant to be an encyclopedic survey. In largely taking four poets as case studies, the objective is to illustrate a strain of resistance and to show how it manifests itself in the palimpsest of poetics that is contemporary American poetry. That is, this book is not meant to cover the entire field of the interrelation of poetry and science. Rather, these poets are chosen to represent specific strategies of engagement with science, or more specifically particular ways of engaging the resistance to scientific authority.

If the selection seems a rather ambitious aesthetic range, the fact is that interest in science cuts across the spectrum—"mainstream" to "experimental"—of contemporary American poetry. By way of illustration, I left the library not long ago with two books of poems in my hands, The Abacus of Years by Emily Grosholz and Second Law by Elizabeth Willis. These two books stem from two very different conceptions of poetry. Grosholz writes poems in a narrative and discursive style marked by full, sweeping sentences. In contrast, Willis's poems, which might be categorized as "postmodern" or "experimental," are marked by disjunction, by the absence of full sentences or conventional syntax and grammar. What these two books—books written from opposite ends of the poetry spectrum at the end of the 20th century—have in common is science.

Scattered throughout Grosholz's collection are references to mathematics and to scientific ideas, beginning with the title of the collection and extending to such pieces as "Poems Overheard at a Conference on Relativity Theory." Though Willis does not title individual poems, the title of the collection itself refers to science, as indicated by a back-cover blurb that calls this book "an allegory of the spirit constrained by that mysterious resistance to order described by the second law of thermodynamics." Science provides a model, metaphorically, for the disjunctive method at work in her poetry.

Though science acts as common ground for two poets who otherwise appear quite disparate—who write on either side of a contemporary argument about the definition of poetry—the concept of "science poetry," for want of a better term, still surprises many. This is a view exploited on the back cover of *The Abacus of Years*; it states that "the relationship of science, mathematics, and metaphysics to our everyday life" is a topic "largely unexplored by American poets of our time."

Nothing is further from the truth. Pattiann Rogers and Alison Hawthorne Deming are just two of our contemporary poets who have developed reputations for writing about science. Albert Goldbarth is another who turns to the subject frequently, as evidenced by such book titles as Arts & Sciences (1986) and Marriage, and Other Science Fiction (1994).

Joan Retallack returns often to science, which is referenced at times in the titles of her poems, for example, "Here's Looking at You Francis Bacon," but which appears most often in the language that she uses, for example, quotations from the physicist Niels Bohr. In addition, many poets tackle the subject on a more occasional basis, as evidenced by several anthologies over the past few decades. Songs From Unsung Worlds: Science in Poetry, a 1985 anthology edited by Bonnie Bilyeu Gordon under the auspices of the American Association for the Advancement of Science, offers in excess of 200 pages of science-related poetry, primarily by contemporary writers. More recently, in 1998, poet Kurt Brown brought together about 170 contemporary poems on subjects that range from mathematics to biology to physics to earth sciences in Verse & Universe: Poems About Science and Mathematics (Milkweed Editions). Keith Allen Daniels edited an anthology of science fiction and speculative science poems, 2001: A Science Fiction Poetry Anthology for Anamnesis press.3 One need only turn to a recent poetry journal or two to find additional examples. These are only some of the latest. W. Eastwood's 1961 anthology A Book of Science Verse: The Poetic Relations of Science and Technology collected science-related poems from the first century BC through the 1950s.

This book enters an established critical tradition of investigating how literature engages science. Initially, as G. S. Rousseau documents in his essay "Literature and Science: The State of the Field," critics ("traditionalists-philologists") simply documented references to science throughout literature (584); later, others ("the theorists") went a step beyond by investigating the meaning of scientific terms in particular works and how these meanings changed—for example, how a notion such as "Great Chain of Being" changed over centuries and why (584–85). Rousseau classifies Marjorie Nicolson, whose work has been foundational in the field, as the best of both types of critics. The rise of structuralism and the development of what Rousseau calls "critical pluralism" (the diversity of literary criticism that includes Freudian criticism, Marxist criticism, deconstruction, etc.) in the 1960s and 1970s shifted the emphasis in literary criticism to "self-reflectiveness," which in turn tended to "deflect serious students (the few who remain) from literature and science, a nonvalid field for all these approaches except for the few traditional ones" (590).

Rousseau's survey of the field concludes in the late 1970s with this gloomy assessment, but he was mistaken. The connections between literature and science have continued to intrigue critics, who have responded in both monographs and occasional essays. Some critics, notably Katherine N. Hayles, use scientific paradigms as a means to discuss literature⁴; others investigate the effect of scientific paradigms on literary strategies or explore the metaphors that influence both science and literature⁵; others investigate the scientific basis for humanity's interest in creating literature.⁶ Some of these strategies will prove useful in what follows. My primary interest lies, however, in the use to which poets put science, a topic that tends to be

tackled in the form of the occasional essay. Maura High (1990) suggests that "poets are drawn to science precisely because its relation to poetry is problematical" (338) and proceeds to offer an array of snapshots of contemporary approaches. At some points, she presents the use of science as a kind of technique: Some poets "capitalize on the oddity of a scientific term" while others use scientific "imagery" to startle, for example (338). At other points, she suggests that science provides a type of emotional content; some poets, for example, speculate on the internal lives of scientists. Kelly Cherry (1994) takes a similar survey approach, showing how a variety of contemporary poets use scientific language, imagery or ideas to understand the world as science understands it; she gives as an example one of her own poems, "The Rose," which she says uses a "scientifically taxonomic" approach for a fresh "take" on her subject (127). In The Measured Word (2001), Kurt Brown gathers a number of such essays by poets on the subject of poetry and science; Cherry's essay is among them. Others in the volume range from examinations of the use of science by specific authors (e.g., "A. R. Ammons and the Poetics of Chaos" by Daniel Tobin) to the use of scientific paradigms as a way to structure a poem (e.g., "Fractal Amplifications: Writing in Three Dimensions" by Alice Fulton). Even more recently, in 2005, the journal Interdisciplinary Science Reviews devoted an issue to "Science and Poetry," which included another essay on fractal poetics by Fulton alongside essays that range from considerations of the sympathies between science and poetry (Riordan) to the way Ian McEwan treats the two disciplines in his novel Saturday (Rees-Jones).

My concern is with how poets conceive of their relationship with science and, further, enact that relationship. I have been particularly interested in Cherry's suggestion that poetry and science are both ways of knowing, as well as in assertions both by High ("The Poetry Lab"), who explores critical attitudes toward science implicit or explicit in poems, and by Emily Grosholz ("Poetry and Science") that poetry can take the form of opposition to science. Specifically, the very poets who argue that more connects than separates the two disciplines seem in their work to prickle at the notion that science has been given or has taken upon itself a greater authority than poetry as a means to, or form of, knowledge. Their poems implicitly resist the exclusive authority of science to tell us how to make sense of our world. As I hope to show, contemporary poems frequently seek both to present human subjectivity as the place that science falls short and, often, to elevate human subjectivity or experience as an epistemic alternative to science. That is, they suggest that the subjectivity that underlies poetry offers a means to understand the world, a knowledge that is as valid as science. As Deming explains, "in an age that values aggregate data, poetry—all true art—insists upon the passionate importance of the individual," which, as she explains, involves "the turning inward to explore the world through the lens of subjective experience"—though this "does not necessarily mean a turning away from the world" (Writing the Sacred 44). Or as