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978-1-107-02726-8 - Science, Democracy, and the American University: From the Civil War to the Cold War

Andrew Jewett

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Science, Democracy, and the American University

This book reinterprets the rise of the natural and social sciences as sources of political authority in modern America. Andrew Jewett demonstrates the remarkable persistence of a belief that the scientific enterprise carried with it a set of ethical values capable of grounding a democratic culture – a political function widely assigned to religion. The book traces the shifting formulations of this belief from the creation of the research universities in the Civil War era to the early Cold War years. It examines hundreds of leading scholars who viewed science not merely as a source of technical knowledge, but also as a resource for fostering cultural change. This vision generated surprisingly nuanced portraits of science in the years before the military-industrial complex and has much to teach us today about the relationship between science and democracy.

Andrew Jewett is Associate Professor of History and Social Studies at Harvard University, where he also participates in the History of American Civilization and Science, Technology, and Society graduate programs. He received his PhD from the University of California at Berkeley and previously taught at Yale University, Vanderbilt University, and New York University. He has held fellowships from the American Academy of Arts and Sciences, the National Academy of Education/Spencer Foundation, and the Cornell Society for the Humanities.

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ANDREW JEWETT

Harvard University



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Preface

This book seeks to explain what several generations of thinkers had in mind when they devoted their lives to the project of making America scientific. In writing it, I benefited from many important studies of science and values that have appeared in recent decades. This theme has weighed heavily on the minds of American scholars since the 1960s, when the mobilization of technical expertise in the service of war, counterinsurgency, and domestic surveillance generated widespread criticism of putatively value-neutral knowledge. Yet as I waded through primary sources from the late nineteenth and early twentieth centuries, I noticed that questions of democratic theory and practice frequently loomed behind debates about religious belief, scientific authority, and epistemological frameworks in a way that scholars had not recognized.

In that context, it struck me that the question “What should we believe?” often referred to a democratic “we” – the citizens of the United States. And the answers given seemed to be powerfully shaped by what the askers believed to be the cultural, social, and political effects of particular truth claims and methodological approaches. Moreover, remarkably few of the arguments I found prefigured today’s understanding of science as a purely technical, value-neutral practice. In fact, from the 1860s to the 1960s, scientific thinkers in the United States repeatedly insisted that science *did* imply certain values – in fact, exactly those values needed to sustain the cultural foundations of American democracy.

At the heart of my argument is a claim of complexity: *Many more scholars addressed the question of science and democracy, and many more understandings of those key terms and their relationship flourished among them, than historians have realized.* The reader may believe that one of the voices I present here is right. My own sympathies, such as they are, will be fairly clear. Yet I am not prepared to choose once and for all between the competing arguments – only to listen with care and respect.

During this book’s long gestation, many colleagues, friends, and family members listened to me in such a manner. Without them, the project would never have come to fruition. As a graduate student in the Department of History

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at Berkeley, financial support from the Jacob K. Javits Fellowship Program kept me enrolled and department administrator Mabel Lee kept us all sane. The wise counsel of several influential teachers, especially Paula Fass, Robin Einhorn, and Don McQuade, helped point me in the right direction, both intellectually and professionally. So did Cathryn Carson and Tom Leonard, who served on my dissertation committee and provided welcome support on the job market. David Hollinger deserves special thanks for his many contributions to this project and to my career over the years. Anyone who knows his work will recognize its profound impact on my own. Less obvious but equally important has been David's expert guidance through the ins and outs of the profession, his friendship, and, most of all, his example. As a source of inspiration for young intellectual historians, David is second to none.

During my first week of graduate school, David also introduced me to Healan Gaston, a fellow student and, as fate would have it, my future wife. Other students and friends offered camaraderie and compassion during those years: Dee Bielenberg, Molly and Daryl Oshatz, Dan Geary and Jennie Sutton, Andy Lakoff, Guian McKee, Julia Svihra, Buzzy Jackson, Susan Haskell Khan and Rehan Khan, Line Schjolden, Laura Mihailoff, Debbie Kang, Samantha Barbas, Jennifer Burns, Kevin Schultz, Paddy Riley, Rachel Hope Cleves, Amanda Littauer, Heather McCarty, Sarah Carriger, Fred Shoucair, Cole Ruth, Tim and Jenn David-Lang, Erbin Crowell and Kristin Howard, Ann Pycha and Ivan Ascher, Dave and Lyssa Gilson, Jason Grunebaum, Dana Ingersoll, Heather Blurton, Hoday King, Jesse Gora, Yoonah Lee, Raoul Bhavnani, Rebecca Lemov, Helen Tilley, Jennifer Gold, Louise Nelson Dyble, Eric Klinenberg, J. P. Daughton, Chad Bryant, Charles Postel, Justin Suran, Ania Wertz, Ben Lazier, Sam Moyn, Ajay Mehrotra, Abe Levin, Lorien Redmond, Kristina Egan, and Brian Austerman. Subsequent endeavors have brought us closer to additional members of the remarkable mid-1990s cadre of Berkeley students, especially Jason Smith, David Engerman, Diana Selig, and Julian Bourg.

During graduate school, I also enjoyed the company of older friends, many of whom I met during my undergraduate days at Berkeley: Chris Welbon, Nathaniel Gordon-Clark, Jeremy Wallach, Eric Volkman, Dan Callahan, Danae Vu, Teresa Nero-Wirth, Melissa Gutierrez, Preeti Ramac, David Schuster, Alex Farr, Chuck and Cathy Brotman, Dafna Elrad and Brandon Sahlin, Chris von Pohl, Steve von Pohl, Shalene Valenzuela, Andy Clay, Kennedy Greenrod, Jim Alumbaugh and Rima Kulikauskas, Mary Cosola, Ken Stockwell and Anne Heindel, and Anne Eickelberg and Rick Weldon. And then there is Joh Humphreys, with whom I started to hash out some of the vexing questions raised in this book before it was even a glimmer in my eye.

After receiving my PhD, I embarked on what can only be described as an epic academic journey. During the first year, at the American Academy of Arts and Sciences, Leslie Berlowitz, Pat Spacks, and James Carroll provided a rousing introduction to the world of Big Thought. I learned a great deal from the rest of my cohort as well: Anne Mikkelsen and Dan Sharfstein, Joseph Entin and Sophie Bell, Jay Grossman, Page Fortna and Pete Beeman, Eric Bettinger,

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and David Greenberg and Suzanne Nossel. Alexandra Oleson, Malcolm Richardson, and James Miller also deserve thanks for ensuring that the year would be productive, as do Charlie Hogg and Jonna Meyler (and Lucky) for making us feel at home in Cambridge. For a visiting position at Yale the following year, I have Jon Butler and Glenda Gilmore to thank. The friendship of David Greenberg, Mark Brilliant, Dietmar Bauer and Susi Schwarzl (and Sebastian), and Jennifer Klein made our time in New Haven especially memorable. A generous fellowship from the Spencer Foundation and the National Academy of Education supported my work in New Haven and then in Tennessee, where Dan Usner gave me a chance to teach American intellectual history at Vanderbilt. Devin Fergus, Diana Selig, Laura DeSimone, Adam Nelson, Benita Blessing, John Rudolph, Norman and Cassie Fahrney, Michael Blick, and Corey Blick enriched my experience in those years.

On yet another fellowship, at the Cornell Society for the Humanities, Brett de Bary provided warm encouragement, and the cold winter days also seemed brighter for the presence of Heidi Voskuhl, Kevin Lambert, Suman Seth, Angela Naimou, Aaron Sachs, Walter Cohen, Petar Bojanic, and Jason Smith. Then it was on from Ithaca to Princeton, where I commuted to a position at NYU's John W. Draper Interdisciplinary Master's Program in Humanities and Social Thought. Robin Nagle and Robert Dimit showed me the ropes, while an extraordinary group of master's students taught me as much as I taught them. On the train to New York, I had the great privilege of stopping in to join Carla Nappi, the late Phil Pauly, and others in a discussion group led by Jackson Lears and Ann Fabian at Rutgers. Back in Princeton, I got to know Jason Josephson, Rebecca Davis and Mark Hoffman, Alan Petigny, Jim McCartin, and Leigh Schmidt and Marie Griffith through Healan's fellowship at the Center for the Study of Religion, and Larry Glickman and Jill Frank through the Center for Human Values.

At Harvard, many colleagues in the History Department and the Social Studies program helped me keep the project moving forward as I learned to balance the roles of junior faculty member and new father. Liz Cohen and Jim Kloppenberg expertly guided the History Department, and many other colleagues – especially Nancy Cott, Lisa McGirr, Sven Beckert, Vince Brown, Laurel Ulrich, David Armitage, Joyce Chaplin, Jill Lepore, Walter Johnson, Evelyn Higginbotham, Carrie Elkins, Erez Manela, Kelly O'Neill, Andy Gordon, Alison Frank, Ann Blair, Dan Smail, Charlie Maier, Roger Owen, and Emma Rothschild – shared their insights and good humor. Peter Gordon, Maya Jasanoff, Ian Miller and Crate Herbert, Mary Lewis and Peter Dizikes, Tryg Throntveit, and Rachel St. John deserve special thanks for their support and friendship. In Social Studies, Richard Tuck, Anya Bernstein, Michael and Coral Frazer, Verity Smith, Bo-Mi Choi, Thomas Ponniah, Darra Mulderry, and Jona Hansen helped me wrap my brain around the canon of Western social theory. Elsewhere in the university, Heidi Voskuhl, Sindhu Revuluri and Nina Moe, Rebecca Lemov and Palo Coleman, Jeremy Greene, Jeanne Haffner, Alex Wellerstein, Chris Phillips, and Robin Bernstein provided welcome companionship too. I also benefited

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Good friends and colleagues I met on the conference circuit warrant prominent mention as well. Sarah Igo, Jessica Wang, John Carson, Ted Porter, Amy Kittelstrom, Daniel Immerwahr, Tom Stapleford, Joel Isaac, Jennifer Ratner-Rosenhagen, Andrew Hartman, Tim Lacy, Chris Loss, Chris Nichols, Gabe Rosenberg, Ethan Schrum, Martin Woessner, Joy Rohde, Michael Kimmage, Patrick Slaney, Nicole Sackley, and Guy Ortolano have taught me much about my project as well as theirs. Danielle Allen, Rob Reich, Philippe Fontaine, Susan Lindee, John Beatty, Keith Benson, and Alan Richardson offered opportunities to discuss my research in congenial settings and added their own insights.

And then – at long last – there is the book itself. Many people read all or part of the manuscript: Howard Brick, Jamie Cohen-Cole, Nancy Cott, Henry Cowles, Katrina Forrester, Healan Gaston, Joe and Kay Gaston, Dan Geary, David Hollinger, Joel Isaac, Jim Kloppenberg, Susan Lindee, Adam Nelson, Ron Numbers, Julie Reuben, Mitchell Stevens, Tryg Throntveit, and Jessica Wang. Dee Bielenberg and Eleanor Goodman deserve special mention for going beyond the call of duty. I also want to thank the anonymous readers of the manuscript and the ever-patient Lew Bateman at Cambridge University Press for their crucial contributions to the process. Howard Brick warrants extra thanks

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Although printed sources proved most useful for capturing the tone of American public debates on science and democracy, archival work also shaped this project in important ways. I am grateful to the staffs of the Bancroft Library at the University of California-Berkeley; the Manuscript Reading Room at the Library of Congress; the Houghton, Pusey, and Andover-Harvard Theological Libraries at Harvard; Manuscripts and Archives at Yale; the Manuscripts Department of the American Philosophical Society; the Smithsonian Institution Archives; the National Archives and Records Administration in College Park, Maryland; the Hoover Institution at Stanford; the Wisconsin Historical Society; the University Archives and Jacques Maritain Center at Notre Dame; the Burke Library at Union Theological Seminary; and especially the Rare Book and Manuscript Library at Columbia.

I grew up in a family full of creative, dedicated teachers of science, mathematics, and engineering. Their commitments to pedagogical innovation and the value of careful thought overlapped with the Deweyan tenor of The School in Rose Valley, where I spent eight formative years. I want to single out my parents, grandparents, and in-laws for their enduring love and unflagging support: Mary and Howie Ditkof, John and Lisa Jewett, Joe and Kay Gaston, Sam and the late Debbie Mercer, Gretchen MacDonald, the late Dutch and Jo Schober, and the late Healan Baker. My deep thanks also to the rest of the Mercer, Jewett, Ditkof, Schober, Gaston, and Baker clans. This unusually large extended family was a source of great joy as I sought to balance work and play – and of forgiveness as I repeatedly erred on the side of work. It was a particular treat to have Cass and John Bing and Bob and Eileen Mercer nearby while in Princeton. Louise and Dave DeNight, Tom and Barb Mercer, Allyson Mercer and the late Paul Shunskis, and Barb Carr provided homes away from home in Pennsylvania. Carey Shunskis, Stephen Mercer and Melissa Estrella, and Tom and Lynne Baker (and Kate Sonderegger) represented the New England outposts of the families. In California, Charlie and Laura Jewett, Sarah and Chris Candela, John Powers and Kimmie Burgandine, Josh and Shannon Powers, and Debbie Schober and Mike Long shared their families and our tribulations. And in Tennessee, Josephine and Andrew Larson and their children helped out in countless ways. I am also grateful to a sadly departed menagerie – a loyal gecko, a flock of plucky parakeets, and a soulful rabbit – for their company during the long years in the academic wilderness.

Finally, I owe almost boundless thanks to Healan Gaston and Joseph Jewett, the heart and soul of my family. They have loved me through thick and thin, celebrated my successes and helped shoulder my burdens, and been the light at

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the end of each long workday. Healan and I were best friends and intellectual companions before we became life partners; her influence on this book and on my understanding and appreciation of the scholarly life are simply inestimable. Joseph reminds me daily that many, many things are more important than books, or at least grown-up books. Together, they never let me forget the power of love and laughter in this world.