

# The Politics of Science before Scientism

*By Mark B. Brown\**

**Andrew Jewett.** *Science, Democracy, and the American University: From the Civil War to the Cold War.* xii + 402 pp., index. Cambridge: Cambridge University Press, 2012. \$99 (cloth).

When scientists today fret over popular “denial” of climate change and human evolution, or when activists call for more public engagement in the politics of science, they often suggest that we face unprecedented challenges. But Andrew Jewett’s rich and compelling study shows that earlier thinkers faced similar issues in different contexts. It thus provides valuable resources for understanding the politics of science, and it may also inspire a certain humility and magnanimity in today’s debates. Between the 1860s and the 1960s, Jewett shows, a large and diverse group of American thinkers “contended that science, as they understood it, offered the basis for a cohesive and fulfilling modern culture” (p. 9). Jewett calls them “scientific democrats.” Weaving a narrative from short discussions of an astounding number of thinkers, Jewett shows that their “belief in science’s political promise operated as a central driving force in the development of the American scientific enterprise” (p. 11). Going beyond explicit commentaries on science and democracy, Jewett recovers the “subterranean presence” of “vernacular traditions of political thought” (p. 18) within controversies over the purpose of university education, the methods of academic disciplines, the possibility of value-neutral science, the relation of science and religion, and many other disputes. Scientific democrats located the promise of science not primarily in industrial production, administrative efficiency, or science literacy but, rather, in the moral education of citizens.

Part 1 of the book examines how scientific democrats shaped American universities in the decades after the Civil War. University leaders at Cornell, Harvard, Johns Hopkins, and elsewhere hoped that science-driven universities could replace denominational colleges, and Protestant Christianity more generally, as the nation’s key source of moral and civic education. They believed that science embodied a republican way of life opposed to the Gilded Age’s valorization of commercial and partisan interests. They argued that science could foster a humble, cooperative, deliberative pursuit of the common good and that “the scientific enterprise reflected the true spirit of Christianity at work” (p. 39).

These early scientific democrats differed sharply over the requirements of scientific method, the relation of science and religion, and the role of government in the economy.

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*Laissez-faire* advocates like Edward L. Youmans and William Graham Sumner argued that scientifically determined laws of nature require limited government. In contrast, “ethical economists” like Richard T. Ely argued that science reveals the need for an activist state to promote human flourishing. In philosophy, positivists of different stripes argued for a narrow conception of scientific method, applied to a narrow set of questions. Conversely, pragmatists developed an expansive conception of science that embraced all forms of systematic inquiry, and they extended it beyond the natural sciences to include social and ethical questions. The leading figure in this respect was John Dewey, who is also the red thread of Jewett’s book. For Dewey, Jewett writes, science was “a form of communication and a tool for ethical change,” which “offered reliability without certainty and persuasion without coercion” (p. 96).

Part 2 focuses on the heyday of scientific democracy during the 1920s and 1930s, centered in what some at the time called “cultural sciences,” which included many of today’s social sciences and humanities, as well as biology. Against the common notion that disciplinary professionalization led immediately to normative disengagement, Jewett shows how scientific democrats developed a value-laden, contextual, constructivist conception of science. A wide range of scholars agreed that science could improve democracy by revealing the relational, psychological basis of social cohesion. Some focused on the disinterested motives associated with science, while others emphasized the contribution of science to causal knowledge and publicly beneficial action. But thinkers in a variety of disciplines—Dewey, Franz Boas, Edward A. Ross, George Herbert Mead, and many others—agreed that the cultural sciences could foster societal renewal and self-government. The public uptake of scientific modes of thought promised to render unnecessary both transcendent moral laws and direct state regulation (p. 129).

A key part of early twentieth-century scientific democracy, Jewett shows, was the concept of emergent evolution, which offered a nondeterministic, biologically grounded conception of human subjectivity. Emergent evolution allowed scientific democrats to reconcile scientific naturalism with free will. Another part of scientific democracy was the conviction that scientific ideas could not be expected to diffuse through society on their own, but needed to be actively promoted by experts. Thinkers like Dewey and Mary Parker Follett advocated close interaction between experts and citizens, while the political scientist Harold D. Lasswell “called on social scientists to use any means necessary to protect the public from itself” (p. 176). Similar issues arose in debates over the university curriculum. Opposed to the growing emphasis on vocational skills, both scientific democrats and humanists like Irving Babbitt promoted the establishment of general education courses, even as the humanists rejected the alleged “scientism” of scientific democracy.

The charge of scientism was later repeated by Reinhold Niebuhr, Lewis Mumford, and other critics who, despite sharing many of the scientific democrats’ political goals, insisted on equating their philosophical naturalism with amoral materialism. Rather than seeking common ground with the scientific democrats, humanist critics of scientism aligned themselves with neo-Thomists and other conservatives who believed society requires fixed moral foundations. In this respect, Jewett persuasively argues, mid-twentieth-century cultural leaders “missed a historic opportunity to explore more nuanced conceptions of the scientific enterprise and to fight effectively against those who would subordinate intellectual life to the imperatives of capitalism” (pp. 222–223).

Part 3 examines how this missed opportunity undermined scientific democracy between the 1930s and the 1950s. In opposition to scientific democracy and the cultural scientists who defended it, physical scientists and humanists formed an implicit coalition to promote

a view of science as politically autonomous and value free, as well as “an image of a socially detached, creative individual” (p. 231). Similarly, Jewett explains, during the 1940s the philosophy, history, and sociology of science abandoned their earlier social contextualism in favor of a view of science as self-regulating. Meanwhile, in response to national struggles against the Great Depression, totalitarianism, and Soviet Communism, many scientific democrats circled the wagons and repositioned themselves as defenders of American ideals. Margaret Mead, Gunnar Myrdal, and others came to enlist science in the service of “consensus liberalism,” which “reconciled the ideal of popular sovereignty with the fact of expert administration” (p. 234). These scientific democrats argued that experts could speak for fundamental American values—and in opposition to current public opinion, if necessary.

By the 1950s, most American commentators saw a strict division of labor between the natural sciences and the humanities, with the social sciences either ignored or denigrated as failed efforts to apply natural scientific methods to society (p. 310). Some social scientists fled to the humanities; others refashioned themselves as value-neutral “behavioral scientists.” Philosophy and psychology were split down the middle (p. 338). And even much humanistic scholarship became highly abstract, specialized, and distant from public concerns. “Criticism of value-neutrality had itself become a mode of expertise for philosophers” (p. 340).

And what has it become for historians today? To what extent is Jewett’s book a work of scientific democracy? Jewett notes that his own sympathies, “such as they are, will be fairly clear,” and they lie with a Deweyan version of scientific democracy. But he is “not prepared to choose once and for all between the competing arguments—only to listen with care and respect” (p. vii; see also pp. 19, 365–374). Scientific democrats would arguably seek a middle ground between these extremes, and, indeed, much of the book goes beyond listening and thoughtfully defends Deweyan perspectives. But one result of Jewett’s erudition is that the trees sometimes threaten to overwhelm the forest, and more explicit conceptual and normative analysis might have been helpful at points.

Jewett also notes that “when I speak of scientific democrats my emphasis is on the ‘scientific’ side of the phrase” (p. 10). He explains that his invocation of the term “democracy” echoes “the vernacular connotation of a polity defined by popular sovereignty—a polity in which the will of the people reigns supreme, in general if not in every detail” (pp. 9–10). This broad conception of democracy allows Jewett to include an extremely wide range of thinkers in his study, but it sometimes leaves the political implications of scientific democracy unclear. Jewett examines with meticulous care “what the scientific democrats meant by ‘science’” (p. 14), but he devotes much less attention to their views on democracy.

Nonetheless, *Science, Democracy, and the American University* is a major achievement. It reveals the historical contingency and unfortunate costs of the ideal of value-free science, and it debunks the conflation of science with scientism still common in the humanities. It shows that humanism and scientism are two sides of the same coin, forged in opposition to a once lively and still promising discourse of socially embedded, politically relevant scientific practice.