

“Science Organized”: Positivism and the
Metaphysical Club, 1865–1875

Trevor Pearce

INTRODUCTION

“Positivist” is a tricky word. When a scientific approach is called positivist today, what is usually meant is that it attempts to understand minds, humans, or societies using methods from the natural sciences, purporting to maintain a strict value-neutrality.¹ Calling someone a positivist in philosophy, in contrast, evokes a vague sense that the person is for science and against metaphysics; but this on its own tells you almost nothing. How are we to identify particular claims as metaphysical? Different positivists will give different answers. What Anthony Giddens wrote in 1974 is still true:

I am grateful to Greg Radick, Elise Berman, Alex Klein, Lisa Rasmussen, Bernie Lightman, and several anonymous referees for comments on earlier versions of this paper. I also received helpful feedback from audiences at HOPOS 2012, the 2012 HSS/BSHS/CSHPS 3–Society meeting, the “Humanities Friday Lunches” series at UW-Madison, and the Philosophy colloquium at UNC Charlotte. Research for the paper was made possible by generous funding from the Andrew W. Mellon foundation and the Huntington Library. Finally, thanks to the American Philosophical Society, the Library of Congress, the Huntington Library, Houghton Library at Harvard University, and the Harvard University Archives for providing access to archival materials and permission to quote from some of those materials here.

¹ Anthony Giddens, ed., *Positivism and Sociology* (London: Heinemann, 1974), 3–4; see also Milton Friedman, “The Methodology of Positive Economics,” in *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953).

“the word ‘positivist,’ like the word ‘bourgeois’ has become more of a derogatory epithet than a useful descriptive concept.”²

One of the reasons for the vagueness of the term “positivist” is the sheer diversity of historical figures who have called themselves or been called positivists. Historians of philosophy, with few exceptions, have not attended to this diversity, focusing primarily on Auguste Comte, Ernst Mach, and those connected with the Vienna Circle. This paper turns instead to several non-canonical positivist philosophers—Chauncey Wright, John Fiske, and Francis Ellingwood Abbot—and the work they produced from 1865 to 1875. These marginal figures in the history of positivism should be of interest to philosophers for two reasons: First, they were involved in the early 1870s with the “Metaphysical Club” of Cambridge, Massachusetts, famous as “the birthplace of pragmatism.”³ Second, these thinkers engaged in discussions of the relationship between science and philosophy that foreshadowed those of the Vienna Circle over a half-century later. Positivists, pragmatists, and logical positivists alike had to tackle the question that haunts all philosophers committed to the unique importance of scientific inquiry in human knowledge-making (including naturalists today): what is left for philosophy to do, with so many of its traditional domains colonized by science and so many of its traditional questions dismissed as metaphysical, nonsensical, or useless? I will show in this paper that one answer given to this question by the positivists who participated in the Metaphysical Club was that the job of philosophy is to organize or unify the sciences, though they disagreed about the nature of this unification. As Fiske put it, “positive philosophy is science organized.”⁴

Wright, Fiske, and Abbot have not been completely ignored. There are intellectual biographies of all three, and historians of pragmatism such as Bruce Kuklick have discussed their views in some detail. Fiske and Abbot make appearances in Charles Cashdollar’s magisterial history of positivism

² Giddens, *Positivism and Sociology*, ix.

³ Philip P. Wiener, *Evolution and the Founders of Pragmatism* (Cambridge, Mass.: Harvard University Press, 1949), 18–30. For evidence of the club’s existence and information about its dates and members, see Max H. Fisch, “Was There a Metaphysical Club in Cambridge?,” in *Studies in the Philosophy of Charles Sanders Peirce: Second Series*, ed. Edward C. Moore and Richard S. Robin (Amherst: University of Massachusetts Press, 1964); Max H. Fisch, “Was There a Metaphysical Club in Cambridge? A Postscript,” *Transactions of the Charles S. Peirce Society* 17 (1981): 128–30; Max H. Fisch, “Introduction,” in *Writings of Charles S. Peirce: A Chronological Edition*, ed. Christian J.W. Kloesel, vol. 3 (Bloomington: Indiana University Press, 1986). For a popular account, see Louis Menand, *The Metaphysical Club* (New York: Farrar, Straus, and Giroux, 2001), 201–32.

⁴ John Fiske, “Past and Future of Philosophy,” *The World*, 10 January 1870.

and theology in the nineteenth century.⁵ In this paper I add to these discussions in two ways. First, rather than emphasizing the biographies of Fiske, Wright, and Abbot, I investigate the understanding of positivism that they shared. For instance, all three rejected the identification of positivism with the views of Comte. Second, I explore a series of neglected sources that expand our picture of what positivism meant to the philosophers of the Metaphysical Club: Fiske's lectures on positivism published in *The World*, key passages of which never appeared in his book *Outlines of Cosmic Philosophy*; book reviews by Wright not collected in *Philosophical Discussions*; and sections of correspondence redacted in *Letters of Chauncey Wright*.

The paper has two parts. In the first, I argue that positivism had by the 1860s become a "big tent" for thinkers opposed to traditional philosophical approaches and in favor of scientific methods across a range of fields. At the time, "positivism" was often used broadly to refer to what was seen as the perspective of modern science: claims about the world should be based on analyses of phenomena, without speculation about anything beyond those phenomena. Positivism in this sense was a philosophy that Fiske, Wright, Abbot, and others could support despite their opposition to many of Comte's more specific doctrines. In the second part, I describe discussions of the relation between science and philosophy in light of positivism. Fiske, Wright, and Abbot agreed that a central role of philosophy was to respond in some way or other to developments in science. Fiske and Wright, moreover, thought that philosophy's role could be to organize or unify the special sciences, even though they disagreed about what this unity would look like. I conclude by briefly exploring some implications of this story for our understanding of pragmatism and positivism more generally.

"BIG TENT" POSITIVISM

Before I talk about positivism and the relationship between science and philosophy, we need to make sure we know what "positivism" meant at

⁵ Milton Berman, *John Fiske: The Evolution of a Popularizer* (Cambridge, Mass.: Harvard University Press, 1961); Edward H. Madden, *Chauncey Wright and the Foundations of Pragmatism* (Seattle: University of Washington Press, 1963); Sydney E. Ahlstrom and Robert Bruce Mullin, *The Scientific Theist: A Life of Francis Ellingwood Abbot* (Macon, Ga.: Mercer University Press, 1987); Wiener, *Evolution and the Founders of Pragmatism*, 31–69, 129–51; Bruce Kuklick, *The Rise of American Philosophy: Cambridge, Massachusetts, 1860–1930* (New Haven: Yale University Press, 1977), 63–103; Jean De Groot, "Homegrown Positivism: Charles Darwin and Chauncey Wright," in *Nature in American Philosophy*, ed. Jean De Groot (Washington, D.C.: Catholic University of America Press, 2004); Charles D. Cashdollar, *The Transformation of Theology, 1830–1890: Positivism*

this time. Positivism was the invention of the French philosopher Auguste Comte. Famously, Comte suggested that in “the progressive march of the human mind”—both in history and in the lifetime of an individual—one could identify three stages corresponding to three philosophical methods: the theological (or fictive), the metaphysical (or abstract), and the scientific (or positive). In the first, phenomena are taken to be “produced by the direct and continuous action of supernatural agents”; in the second, these agents “are replaced by abstract forces”:

Finally, in the positive state, the human mind—recognizing the impossibility of obtaining absolute notions—gives up the search for the origin and destination of the universe and for knowledge of the intimate causes of phenomena, to apply itself solely to discovering, through the well-combined use of reasoning and observation, the effective laws of phenomena, i.e., their invariable relations of succession and similitude.⁶

The word “positive” was meant to convey a restriction to “observed facts” without speculation as to underlying causes or forces; the latter do not count as positive because they cannot be directly observed.⁷

Comte’s *Course of Positive Philosophy*, published in six volumes from 1830 to 1842, argued for a positive approach to all of the sciences, including what he called “social physics” or “sociology” (he coined the latter term). In the early 1850s he published his *System of Positive Politics*, in which positivism was identified with a “religion of humanity” that viewed humanity itself as a “Great-Being.” But not everyone who claimed the title “positivist” or who praised “positive science” or “positive philosophy” was a follower of Comte. Gillis Harp describes positivism as a spectrum, with orthodox Comtists at one end and looser affiliates at the other. In this section of the paper I will focus on the latter—on what I call “big tent” positivism.⁸ Mary Pickering has shown that Comte thought of such positivists as “insufficient,” in contrast to the “complete” positivists who accepted

and Protestant Thought in Britain and America (Princeton: Princeton University Press, 1989), 281–90, 297–302.

⁶ “Enfin, dans l’état positif, l’esprit humain reconnaissant l’impossibilité d’obtenir des notions absolue, renonce à chercher l’origine et la destination de l’univers, et à connaître les causes intimes des phénomènes, pour s’attacher uniquement à découvrir, par l’usage bien combiné du raisonnement et de l’observation, leur lois effectives, c’est-à-dire leurs relations invariables de succession et de similitude.” Auguste Comte, *Cours de philosophie positive* (Paris: Bachelier, 1830), 1:2–5.

⁷ Comte, *Cours*, 1:vii.

⁸ Gillis J. Harp, *Positivist Republic: Auguste Comte and the Reconstruction of American Liberalism, 1865–1920* (University Park: Pennsylvania State University Press, 1995), xii.

his political and religious views.⁹ These incomplete positivists were not Comteans, though they usually shared his preference for “effective laws” rather than “intimate causes” of phenomena. More generally, they combined an empirical orientation and a faith in modern science with skepticism about traditional philosophical approaches. This sort of positivism provided a “big tent” that sheltered a diverse group of naturalists and philosophers. Fiske, Abbot, and Wright disagreed about a great many things, but they were all positivists in this broad sense.

In the summer of 1860, having just moved to Cambridge, John Fiske wrote excitedly to his mother of the wonders he had seen in a Boston bookstore: “we saw the works of all the English Positivists . . . they comprise some of the first men of the century.” Fiske then provided a list that gives a sense of the breadth of his use of the term: it included philosopher-psychologists such as John Stuart Mill, Herbert Spencer, George Henry Lewes, and Alexander Bain; historians such as George Grote and Henry Buckle; and naturalists such as John Herschel, Charles Lyell, and Charles Darwin. He continued:

You might like to know who the great men are, to whose school I belong. No previous instance in the history of thought can be found, of so many great thinkers uniting under the same standard. . . . At present it seems, all departments of science are under the control of positivism. What does it mean?

Having mentioned Alexander von Humboldt and several other European thinkers, Fiske added, almost as an afterthought, “Comte himself.”¹⁰ Some of the figures listed by Fiske did not explicitly engage Comte’s work or raise the positivist flag; nevertheless, Fiske saw them all as “uniting under the same standard.” Fiske thus embraced a wide definition of positivism that made it synonymous with the method of modern science—a method, as he put it a few days earlier, that consists “in the restriction of our investigations to the sphere of the phenomenal.”¹¹

I am focusing on the philosophical (as opposed to the religious) aspects of positivism in America. For positivism in Britain, see T. R. Wright, *The Religion of Humanity: The Impact of Comtean Positivism on Victorian Britain* (Cambridge: Cambridge University Press, 1986).

⁹ Mary Pickering, *Auguste Comte: An Intellectual Biography*, 3 vols. (Cambridge: Cambridge University Press, 1993–2009), 2:555–56.

¹⁰ Fiske to Mary Fisk Green Stoughton, June 17, 1860, in Box 2, Papers of John Fiske, Huntington Library.

¹¹ Fiske to Jonathan Ebenezer Barnes, June 13, 1860, in Box 2, Papers of John Fiske.

Although many of them were not avowed Comtists, at least one person on Fiske's list had engaged at length with Comte's philosophy: John Stuart Mill. Early in his career, Mill deeply admired Comte and his work. In a letter of 1837 he called the *Course of Positive Philosophy* "one of the most profound books ever written on the philosophy of the sciences." He encouraged others to read Comte, writing for example to Alexander Bain in 1841: "Have you ever looked into Comte's *Cours de Philosophie Positive*? He makes some mistakes, but on the whole, I think it very nearly the grandest work of the age." Mill began a correspondence with Comte that same year, telling the French philosopher, "I always await each new volume [of the *Cours*] with a lively impatience and I read and reread it with a real intellectual passion."¹² The 1843 and 1846 editions of Mill's *System of Logic* contain many complimentary references to Comte, although some of these were removed in later editions, probably because Mill wished to disassociate himself from Comte's religious and political views.¹³ The members of the Metaphysical Club, who knew Mill's *Logic* for its discussions of induction and causation, saw Mill and Comte as closely linked despite their differences.¹⁴

In a much later essay from 1865, "The Positive Philosophy of Auguste Comte," Mill reflected on the importance of what I am calling "big tent" positivism. "Positivism" and "the Positive Philosophy," he wrote,

are symbols of a recognised mode of thought, and one of sufficient importance to induce almost all who now discuss the great problems of philosophy, or survey from any elevated point of view the opinions of the age, to take what is termed the Positivist view of things into serious consideration, and define their own position, more or less friendly or hostile, in regard to it. Indeed, though the mode of thought expressed by the terms Positive and Positivism is widely spread, the words themselves are, as usual, better known

¹² "J'attends toujours chaque volume nouveau avec une vive impatience et je le lis et le relis avec une véritable passion intellectuelle." Mill to John Pringle Nichol, December 21, 1837; Mill to Alexander Bain, Autumn 1841; Mill to Comte, November 8, 1841, in John Stuart Mill, *Collected Works*, 33 vols. (Toronto: University of Toronto Press, 1963–91), 12:363, 13:487–90.

¹³ See the *Collected Works* edition of the *Logic*, which notes variations between the different editions. See also Pickering, *Auguste Comte*, 1:536–38.

¹⁴ Mill, *Collected Works*, 7:323–27. Peirce, "Lecture on the Theories of Whewell, Mill, and Comte," MS 99 [1865], in Charles Sanders Peirce, *Writings of Charles S. Peirce: A Chronological Edition*, 8 vols. (Bloomington: Indiana University Press, 1982–), 1:205–23.

through the enemies of that mode of thinking than through its friends; and more than one thinker who never called himself or his opinions by those appellations, and carefully guarded himself against being confounded with those who did, finds himself, sometimes to his displeasure, though generally by a tolerably correct instinct, classed with Positivists, and assailed as a Positivist.

In short, positivism must be taken seriously; the term “positivism” is used more frequently by its critics than its defenders; and even those who do not want to be called positivists are often correctly classified as such. In the remainder of his essay, Mill praised Comte’s *Course* for presenting a “wonderful systematization” of the philosophy of the sciences, though he did identify “a few capital errors”—e.g., its dismissal of the science of psychology.¹⁵

But although Mill appreciated the philosophy of the *Course*, he opposed the religion and politics of the *System*: whereas the former was “essentially sound,” the latter were “false and misleading.” Mill criticized what he called Comte’s “later speculations” in a companion essay, and the two texts were ultimately published together as a single book.¹⁶ As Pickering notes, this volume popularized the idea that, “in the late 1840s, Comte rejected the scientific thrust of his ‘first career,’ epitomized by the *Cours*, and became a crazed religious reformer when he launched his ‘second career.’”¹⁷ Mill’s endorsement of the first Comte and his rejection of the second provided more space in the “big tent”: not only could one be a positivist while dissenting from Comte’s doctrines, one could even be a Comtist while doing so.

Fiske and Chauncey Wright both reviewed Mill’s book in January of 1866. One theme that appeared in their reviews—and in an essay by Francis Abbot published a few months later—was that the core of positivism was not specifically Comtean. Mill, in his essay, had glossed Comte’s account of positive philosophy as the claim that

we have no knowledge of anything but Phaenomena; and our knowledge of phaenomena is relative, not absolute. We know not

¹⁵ John Stuart Mill, “The Positive Philosophy of Auguste Comte,” *Westminster Review* 83 (1865): 339–41, 367–68, 373–75.

¹⁶ Mill, “The Positive Philosophy,” 341; John Stuart Mill, “Later Speculations of Auguste Comte,” *Westminster Review* 84 (1865): 1–42; John Stuart Mill, *Auguste Comte and Positivism* (London: Trübner, 1865).

¹⁷ Pickering, *Auguste Comte*, 3:3.

the essence, nor the real mode of production, of any fact, but only its relations to other facts in the way of succession or of similitude.

Mill, who subscribed to this view, pointed out that positivism in this general sense did not originate with Comte.¹⁸ Fiske and Wright subsequently emphasized this point in their reviews, as did Abbot in his related article. Fiske wrote that

the “positive” method of contemplating phenomena is doubtless becoming exclusively prevalent with scientific explorers; and for this reason, the name “positivism,” after losing its more special connotations, is perhaps destined to become the designation of scientific thought in general.

Abbot echoed this assessment:

According to Comte himself, Positivism originated with the earliest dawn of real science; but first took definite shape, as a scientific method, in the hands of Bacon, Descartes, and Galileo. [Comte] laid no claim whatever to the discovery of this method, and hence never claimed to be the founder of Positivism; yet Positivism and Comtism are confounded by many, who fail to observe that the latter is a very imperfect embodiment of the former.¹⁹

Agreeing with this catholic definition, Wright also followed Mill in his description of the core of positivism:

The foundation of positivism was laid by M. Comte’s predecessors in the school to which Mr. Mill himself professes allegiance, and, though now often referred to under the name of positivism, does not belong exclusively to M. Comte or his followers. This foundation is the doctrine of the relativity of human knowledge, which denies to human intelligence the power to know anything except phenomena and their orders of co-existence and sequence.

¹⁸ Mill, “The Positive Philosophy,” 342. Mill’s language of “succession” and “similitude” mirrors that of Comte, quoted above.

¹⁹ John Fiske, “Mill’s Positive Philosophy of Auguste Comte,” *North American Review* 102 (1866): 278; Francis Ellingwood Abbot, “Positivism in Theology,” *Christian Examiner* 80 (1866): 235–36.

According to Wright, the foundation of positivism was the idea that humans can know only the relative and not the absolute—an idea that was not specifically Comtean. Wright said that this foundation was “now often referred to under the name of positivism,” and contrasted this “larger sense” of the word with “the special sense in which it denotes what was original with M. Comte himself.”²⁰ The larger sense of positivism is the one that unified Fiske, Wright, and Abbot, even though they sometimes shied away from the term because of discomfort with its Comtean connotations.²¹

The idea of the relativity of knowledge, presented by Wright as “the foundation of positivism,” was primarily associated not with Comte but with the Scottish philosopher William Hamilton. In a famous essay of 1829, later collected under the title “Philosophy of the Unconditioned,” Hamilton claimed that “the mind can conceive, and consequently can know, only the *limited*, and the *conditionally limited*. The unconditionally unlimited, or the *Infinite*, the unconditionally limited, or the *Absolute*, cannot positively be construed to the mind.” As a result, he concluded, “our knowledge . . . can be nothing more than a knowledge of the relative manifestation of an existence, which in itself it is our highest wisdom to recognise as beyond the reach of philosophy.” Hamilton expressed this philosophical humility, inspired by that of Immanuel Kant, with the phrase “learned ignorance”—that is, “the rational conviction by the human mind of its inability to transcend certain limits.”²²

Hamilton’s ideas were at the height of their influence around the time of his death in 1856. For example, in an early essay of 1857, Wright quoted

²⁰ Chauncey Wright, “Mill on Comte,” *The Nation* 2 (1866): 20.

²¹ Under pressure from Herbert Spencer, Fiske ended up abandoning the term “positivism” in 1871. Compare, for example, John Fiske, “Past and Future of Philosophy,” *The World* (10 January 1870): 2; and John Fiske, “Cosmic Philosophy—Science and Theism,” *The World* (25 August 1871): 2. For Fiske’s debate with Spencer over the term “positivism,” see Fiske to Spencer, October 6, 1869, Box 5, Papers of John Fiske; Spencer to Fiske, November 1, 1869 and February 2, 1870, HM 13721 and 13722, Huntington Library; Fiske to Spencer, September 29, 1871, Box 5, Papers of John Fiske. For Fiske’s later distinction between positivism and cosmism, see John Fiske, *Outlines of Cosmic Philosophy, Based on the Doctrine of Evolution, with Criticisms on the Positive Philosophy*, 2 vols. (London: Macmillan, 1874), 1:93–95. For Wright’s criticisms of a narrower version of positivism—that of “Mr. Comte and his followers”—see Chauncey Wright, “The Philosophy of Herbert Spencer,” *North American Review* 100 (1865): 425–34.

²² William Hamilton, *Discussions on Philosophy and Literature, Education and University Reform* (London: Longman, Brown, Green and Longmans, 1852), 12, 14. On “learned ignorance,” see Hamilton, *Discussions*, 37, 601. For Hamilton’s influence on American philosophy, see Bruce Kuklick, *A History of Philosophy in America, 1720–2000* (Oxford: Oxford University Press, 2001), 65–69.

Hamilton making a point that foreshadowed pragmatism's emphasis on action: "In *action* are thus contained the existence, happiness, improvement, and perfection of our being; and knowledge is only precious, as it may afford a stimulus to the exercise of our powers, and the condition of their more complete activity."²³ Hamilton's star fell quickly, however, due in large part to a famous attack on his philosophy by Mill that appeared in 1865—the same year as his Comte book.²⁴ After reading Mill's attack, Charles Sanders Peirce complained to Wright about its polemical style: "The contradictions in Hamilton are well brought out; but with a malicious intent. Mill wants to root out this philosophy, by adequate arguments or by inadequate ones." Francis Bowen wrote to Abbot that Mill's argument was "much like a very rotten carpet, through which one can stick his finger at almost any point." Wright had been unsure what to think upon first reading the book: "I have read Mill's Hamilton once and I find it much more difficult to say what I think and feel about it than I anticipated. I feel at present more in the condition of a learner than a critic." Nevertheless, Wright soon gravitated to Mill's position: as Peirce recalled, the effect of Mill's *Examination of William Hamilton's Philosophy* on Wright "was to complete the demolition of what little remained of his early Hamiltonianism."²⁵

According to Wright, Hamilton's philosophy had been attractive to many because of its compromise position: although it adopted from the opponents of orthodoxy "the doctrine of the relativity of human knowledge," it attempted to reconcile this doctrine "with the authorized religious or orthodox philosophy."²⁶ Ironically, however—as Bernard Lightman has described in detail—this attempted compromise led directly to agnosticism. Henry Longueville Mansel, an Oxford philosopher inspired by Hamilton,

²³ Hamilton, *Discussions*, 39; quoted in Chauncey Wright, "Growth," *The Monthly Religious Magazine and Independent Journal* 18 (1857): 186.

²⁴ Kuklick, *The Rise of American Philosophy*, 20. Hamilton outlined a compromise between direct realism and skeptical empiricism that Mill and others found untenable.

²⁵ John Stuart Mill, *An Examination of Sir William Hamilton's Philosophy, and of the Principal Philosophical Questions Discussed in His Writings*, 2 vols. (Boston: William V. Spencer, 1865). Peirce to Wright, September 2, 1865, Chauncey Wright Papers, American Philosophical Society. Francis Bowen to Abbot, March 24, 1866, "American Autographs, Harvard College, 1861–1878," Box 20, Papers of Francis Ellingwood Abbot, Harvard University Archives. Wright to Charles Eliot Norton, July 23, 1865, Item 8274, Charles Eliot Norton Papers, Houghton Library, Harvard University. Published in James Bradley Thayer, ed., *Letters of Chauncey Wright, with Some Account of His Life* (Cambridge, Mass.: John Wilson and Son, 1878), 84. MS 620 [1909], Charles Sanders Peirce Papers, Houghton Library, Harvard University.

²⁶ Chauncey Wright, "Mill on Hamilton," *North American Review* 103 (1866): 251. See also Chauncey Wright, "Mill on Hamilton," *The Nation* 1 (1865): 278–81.

argued in his 1858 lectures *The Limits of Religious Thought* that “the Finite cannot comprehend the Infinite,” and that we thus cannot have “knowledge of God’s Nature.”²⁷ Thomas Henry Huxley, most famously associated with agnosticism, was part of this same tradition. In a letter reflecting on his coining (in 1869 or thereabouts) of the term “agnostic,” Huxley emphasized Hamilton’s “learned ignorance”:

Agnostic therefore in the sense of a philosophical system is senseless: its import lies in being a confession of ignorance—a warning set up against philosophical and theological phantasms which was never more needed than at the present time when the ghost of the “Absolute” slain by my masters Hume and Hamilton is making its appearance in broad daylight.²⁸

Thus Hamilton’s doctrine of the relativity of knowledge, with its emphasis on our epistemic limits, was seen as the basis of not one but two radical philosophical doctrines—agnosticism and positivism.

Given these connections, it is no surprise that orthodox thinkers at Harvard were strongly opposed to positivism. Only after the election of a reformer president, Charles William Eliot, was positivism taught there—and then not in a regular class but as part of a new postgraduate lecture series.²⁹ The acting president prior to Eliot’s election, Andrew Preston Peabody—Plummer Professor of Christian Morals at Harvard beginning in 1860—had published a scathing attack on the positive philosophy just a few years before. Peabody called positivism “our besetting danger at the present moment,” worrying that it had “made large and rapid inroads.” He concurred with Fiske that many scientific practitioners were positivists, but where Fiske was triumphant Peabody was despairing:

In all the natural sciences, an alarmingly large proportion of the younger adepts—many of them men of commanding ability in

²⁷ Henry Longueville Mansel, *The Limits of Religious Thought* (Oxford: J. Wright, 1858), 100; Bernard Lightman, *The Origins of Agnosticism: Victorian Unbelief and the Limits of Knowledge* (Baltimore: Johns Hopkins University Press, 1987), 1–90. On Herbert Spencer’s relation to these discussions, see Mark Francis, *Herbert Spencer and the Invention of Modern Life* (Ithaca, N.Y.: Cornell University Press, 2007), 109–86.

²⁸ Huxley to James Avery Skilton, December 10, 1889, as quoted in Lightman, *Origins of Agnosticism*, 13.

²⁹ *A Catalogue of the Officers and Students of Harvard University, for the Academical Year 1869–70* (Cambridge: Sever, Francis, 1869), 102–3; Francis Greenwood Peabody, “The Germ of the Graduate School,” *Harvard Graduates Magazine* 27 (1918): 180–81.

research and generalization—are already pronounced positivists, and are doing all that man can do to legislate God out of his creation.

The ultimate goal of science, for Peabody, was not mere laws of phenomena but “the synthesis of the things that are seen and temporal and the things that are unseen and eternal.”³⁰

Both Fiske and Wright wrote negative reviews of Peabody’s pamphlet soon after it appeared—Fiske for *The World* and Wright for the *North American Review*.³¹ Wright opened his review by distinguishing the narrow and broad senses of positivism then current. Although “positivism” was initially “the distinctive name of the philosophy of M. Comte,” it had taken on a broader sense that according to Wright had “a well-accredited and important significance”:

All positivists, so called, are agreed in regarding the methods of discovering truth exemplified in the maturest of the modern sciences, as the methods of all true knowledge, namely, the methods of induction from the facts of particular observations, and are agreed in ignoring all problems as idle and foolish which cannot receive such solutions.³²

Wright spent the rest of his review defending various doctrines of this “big tent” positivism, particularly those of Mill, from Peabody’s attacks. Fiske, after accusing Peabody of throwing “sophomorical mud” rather than making arguments, also alluded to positivism’s big tent:

In attacking positivism, [Peabody] is at war not with Comte alone; he is at war with Mr. Mill, Mr. [George] Grote, Mr. [Henry] Buckle, Mr. [Baden] Powell—with “an alarmingly large proportion of the younger adepts” “in all the natural sciences,” such as

³⁰ Andrew Preston Peabody, *The Positive Philosophy* (Boston: Gould and Lincoln, 1867), 4, 28. For biographical details on Peabody, see Edward J. Young, *Andrew P. Peabody, D.D., LL.D.: A Memoir* (Cambridge, Mass.: John Wilson and Son, 1896).

³¹ Wright’s original draft was apparently so passionate that his friend Jane Norton suggested he tone it down: Wright to Jane Norton, no date, Item 104, Letters Received by the Norton Family, Houghton Library, Harvard University. Peabody’s name is redacted in the published version of the letter: Thayer, *Letters*, 135–36. Jane Norton was the sister of Charles Eliot Norton, editor of the *North American Review*.

³² Chauncey Wright, “Peabody’s Positive Philosophy,” *North American Review* 106 (1868): 286.

Messrs. [William] Grove, [John] Tyndall and Huxley, we presume;
in short he is at war with the present age.³³

Fiske and Wright were thus quick to come to the defense of positivism, even though they rejected many of Comte's doctrines.

In 1868, Fiske wrote an editorial in *The Nation* attacking Peabody's candidacy for the Harvard presidency. The very next year, Fiske was asked by the victorious Eliot to teach a new course (mentioned above) on "The Positive Philosophy" at Harvard:

And now lo, cometh C.W. Eliot, our new + good prex, and commands me to deliver 18 lectures on Positivism before the postgraduate class in the University, next November + December. How can I refuse such a chance of driving a wedge into the college, + perhaps ultimately securing a position here?³⁴

Both Fiske and Wright saw the new lecture series—Wright joined in the next year, teaching psychology—as a way to oppose orthodoxy. In January of 1870, Wright wrote to Grace Norton that in his lectures he hoped to "prevail against the hosts of the enemy and put to rout the forces which Prof. [Francis] Bowen, Dr. [Andrew Preston] Peabody and the Cambridge Divinity School still continue to demand for the subjugation of the human mind."³⁵

Fiske's Harvard lectures on the positive philosophy were all published in the New York newspaper *The World*. The topic of his first lecture, appropriately enough given his broad notion of positivism, was not Comte's views but "The Relativity of Knowledge." Concluding a long argument drawing on both Mansel and Herbert Spencer, Fiske placed agnosticism (though not naming it as such) at the heart of positivism:

By whatever road we travel, we are brought up at last against the same impassable barrier. By no power of conception or subtlety of

³³ John Fiske, "The Positive Philosophy," *The World* (23 November 1867): 11.

³⁴ Fiske to Manton Marble, July 7, 1869, Box 22, Manton Marble Papers, Library of Congress. For Fiske's editorial, see John Fiske, "The Presidency of Harvard College," *The Nation* 7 (1868): 547–48.

³⁵ *A Catalogue of the Officers and Students of Harvard University, for the Academic Year 1870–71* (Cambridge: Riverside, 1870), 108–11. Wright to Grace Norton, January 13, 1870, Item 299, Letters Received by the Norton Family. The names of Bowen and Peabody, as well as the mention of the Divinity School, are redacted in the published version: Thayer, *Letters*, 159.

reasoning can we break down or undermine the eternal wall which divides us from the knowledge of things in themselves. . . . From the very organization of our minds, we can form no cognition into which there do not enter the elements of *likeness*, *difference*, and *relation*; so that the absolute, which presents none of these elements, is utterly and forever unknowable.³⁶

What then can we know, according to Fiske? As he put it in his next lecture—using language common to Comte, Mill, Wright, and Spencer—we know only “phenomena in their relations of coexistence and sequence.”³⁷ Positivism, for Fiske as for Wright, was fundamentally agnosticism about the non-phenomenal.

In the late 1860s, the philosophers who would soon be involved with the Metaphysical Club were thus deploying a much more general idea of what it meant to be a positivist than that found in the work of Comte. For Fiske and the others, positivism was a big tent. As Wright wrote to Abbot in 1867, “I am almost confident that you will come out in what you call ‘empiricism’—in what Mill calls the experiential philosophy, or what Comte called positivism!”³⁸

POSITIVISM, SCIENCE, AND PHILOSOPHY

The Harvard philosopher Francis Bowen was strongly opposed to positivism in any sense of the word. Wright, in the letter quoted above, placed him alongside Peabody among the “hosts of the enemy” at Harvard. In a review of Harriet Martineau’s 1853 translation of Comte’s *Course*, Bowen set out his decidedly negative view of the “Positive Philosophy”:

M. Comte has endeavored to extend the principles and the limitations of mere physical science over the whole field of human knowledge, and thus to pluck up metaphysics and theology by the roots. . . . Strictly speaking, then, the system is not a “philosophy”

³⁶ John Fiske, “Relativity of Knowledge,” *The World* (November 13, 1869): 2. This passage is repeated in Fiske, *Outlines*, 1:15. Cf. Herbert Spencer, *First Principles* (London: Williams and Norgate, 1862), 82.

³⁷ John Fiske, “The Scope of Philosophy,” *The World* (November 15, 1869): 2. This passage is repeated in Fiske, *Outlines*, 1:39. Cf. Spencer, *First Principles*, 84–85; Wright, “Mill on Comte,” 20.

³⁸ Wright to Abbot, July 9, 1867, “Wright, Chauncey and J. B. Thayer,” Box 48, Papers of Francis Ellingwood Abbot. Published in Thayer, *Letters*, 100–107.

of any sort, but an attempt to destroy and eradicate philosophy altogether.³⁹

Bowen's claim that positivism was "an attempt to destroy and eradicate philosophy" shows that the positive philosophy, despite its name, was often seen as an attack not just on orthodox philosophy but on philosophy more generally. In this section, I will show that Fiske and Wright did not see positive philosophy as necessarily self-undermining; instead, they suggested that such a philosophy could organize or unify the sciences, while disagreeing about the form of this organization.

In Comte's view, metaphysics had been superseded by positive science—so what was the philosophy in the positive philosophy? Abbot offered one bold answer to this question in an October 1867 letter to Wright:

I am convinced that philosophy needs wider observation and higher generalization, a more comprehensive survey of fundamental facts and a deeper insight into their relations, laws, and causes. There is but one method of discovering truth, namely, the scientific method; and until philosophy applies this as faithfully as physical science has done, I look for no stable speculative results.

Abbot believed that this "new philosophy" could "render even metaphysics a genuinely *positive science*." A complete anatomy and physiology of human knowledge, he thought, would allow philosophers to approach metaphysics "not in the dogmatic method of the *a priori* school, but in the light of universal science, physical and mental."⁴⁰ According to Abbot, the proper goal of both philosophy and positivism was "the unification of knowledge." Abbot did not pursue this approach in metaphysics, but in theology it involved identifying the basic postulates presupposed by science: "the assumption of a *perfect unity in limitless variety* is the absolute condition of all scientific study of existence." Abbot called this "faith in the universe" the "grand postulate of physical science," and claimed that "faith in man—faith in the nobility of human nature" was the corresponding postulate of spiritual science or scientific theology.⁴¹

³⁹ Francis Bowen, "Martineau's Translation of Comte's Philosophy," *North American Review* 79 (1854): 206–7.

⁴⁰ Abbot to Wright, October 1, 1867, "Wright, Chauncey and J. B. Thayer," Box 48, Papers of Francis Ellingwood Abbot.

⁴¹ Abbot, "Positivism in Theology," 240; Francis Ellingwood Abbot, "A Radical's Theology," *The Radical* 2 (1867): 592.

Whereas Abbot wanted to make philosophy itself—along with theology—into a science, Wright and Fiske thought that positive philosophy could organize the sciences. As Francesca Bordogna has shown, the relationship of the sciences to one another and to philosophy was a major topic at the turn of the twentieth century. William James and Hugo Münsterberg, among others, engaged in debates about “the ordering and unification of knowledge.”⁴² Decades earlier, however, positivists were already interested in organizing knowledge, and particularly scientific knowledge. Two of the most influential philosophical works of the nineteenth century, Comte’s *Course of Positive Philosophy* and Spencer’s *System of Synthetic Philosophy*, were structured around classifications of the sciences, and although philosophers disagreed about the correct taxonomy, they shared the organizational goal.⁴³ For Comte, Mill, and others, the new philosophy that would supersede traditional forms was a philosophy of the sciences. But what was meant by the latter phrase? For Mill, “the philosophy of a science” was

the science itself, considered not as to its results, the truths which it ascertains, but as to the processes by which the mind attains them, the marks by which it recognizes them, and the coordinating and methodizing of them with a view to the greatest clearness of conception and the fullest and readiest availability for use: in one word, the logic of the science.⁴⁴

The philosophy of a science, in other words, concerned its methodology rather than its concrete findings. One way to organize the sciences was to seek their common logic and method, as Mill had attempted to do in his *System of Logic*.

Wright and Fiske likewise argued that although traditional philosophy was outmoded, philosophy could retain relevance by transforming itself into the philosophy of science. As Wright wrote to Abbot in 1869,

Positivism, to be sure, so far as it pretends to be a philosophy at all is more than the body of the sciences. It must be a system of the

⁴² Francesca Bordogna, *William James at the Boundaries: Philosophy, Science, and the Geography of Knowledge* (Chicago: University of Chicago Press, 2008), 220.

⁴³ Spencer criticized Comte’s classification, whereas Mill endorsed it: Herbert Spencer, “The Genesis of Science,” *British Quarterly Review* 20 (1854): 108–62; Mill, “The Positive Philosophy,” 356–64.

⁴⁴ Mill, “The Positive Philosophy,” 368.

universal methods, hypotheses and principles which are founded on them, and if not a universal science in an absolute sense, yet must be coextensive with actual knowledge and exhibit the consilience of the sciences.⁴⁵

According to Wright, who was probably thinking of Mill's *System of Logic*, positivist philosophy would be a "system" of the methods and principles of the sciences—a logic of the sciences. His use of the term "consilience"—literally "jumping together"—alludes to the work of William Whewell, who had himself published a *Philosophy of the Inductive Sciences* in 1840. Just as Whewell argued that "cases in which inductions from classes of facts altogether different have . . . jumped together, belong only to the best established theories," Wright implied that the best philosophy would be a system consistent with and following from the many different sciences. Science's "consilience of inductions" was analogous to philosophy's "consilience of the sciences." (This invocation of Whewell in an account of positivism is somewhat ironic, since Whewell, shortly before his death in 1866, had reiterated his view "that [Comte] is quite unworthy to be made the serious subject of discussion among philosophers.")⁴⁶

Does identifying a common logic or "system of the universal methods" of the sciences really count as organizing or unifying them? Mill called logic "the science of science itself," claiming that it concerns the relation between data and the conclusions that can be properly inferred from those data. His *System of Logic* was primarily a discussion of the common methods of the sciences. For example, he thought that laws of nature were determined either experimentally or via deduction from more general laws under particular conditions. These points held for psychology or sociology as much as for astronomy or tidology.⁴⁷ Thus the identification of a common logic or method does organize and unify the sciences: it explains why psychology and astronomy are both *sciences*. The use of the word "system" by both Mill and Wright, indicating an organized group of objects, makes this clear.

Fiske went further: he thought that positive philosophy could provide more than a methodological unification. In "The Past and Future of Philosophy"—the last of his 1869 lectures on the positive philosophy at

⁴⁵ Wright to Abbot, February 10, 1869, "Wright, Chauncey and J.B. Thayer," Box 48, Papers of Francis Ellingwood Abbot. Published in Thayer, *Letters*, 140–42.

⁴⁶ William Whewell, *The Philosophy of the Inductive Sciences, Founded upon Their History*, 2 vols. (London: John W. Parker, 1840), 2:230; William Whewell, "Comte and Positivism," *Macmillan's Magazine* 13 (1866): 358.

⁴⁷ Mill, *Collected Works*, 7:10, 8:844–48, 865–69.

Harvard—he sketched a more ambitious picture of the philosophical enterprise. Francis Greenwood Peabody recorded Fiske as saying that “we must now throw all philosophy overboard;—or make it harmonize with Science,—this latter thing the Positive Philosophy was, will + alone can do.”⁴⁸ But how was this harmony to be achieved? In his second lecture Fiske had asked the following question: if it cannot attain knowledge of the noumenal realm, “what scope is there left for philosophy?” His answer was that whereas each of the sciences investigates a specific domain of phenomena, philosophy seeks to unify these different domains:

While science studies the parts, philosophy studies the whole. While science, in its highest development, is an aggregate of general doctrines, philosophy, in its highest development, must be a fusion of all general doctrines into a universal doctrine. . . . Thus is philosophy vindicated, and its function is seen to be equally important with that of science.⁴⁹

Whereas Wright was skeptical that philosophy could be “a universal science in an absolute sense,” Fiske gave it exactly this role.

Returning to the theme in his final lecture, Fiske outlined what he called the “five cardinal propositions of positive philosophy”:

- I. That all knowledge is relative.
- II. That all unverifiable hypotheses are inadmissible.
- III. That the evolution of philosophy, whatever else it may be, is a continuous process of deanthropomorphization.
- IV. That philosophy is the synthesis of the doctrines and methods of science.
- V. That the critical attitude of philosophy is not destructive, but constructive; not skeptical, but dogmatic; not negative, but positive.

Fiske claimed that someone who endorsed the first two tenets but “confin[e]d himself entirely to special scientific analysis” was not truly a positivist: “to become a positivist in the strict sense of the word, one must see that

⁴⁸ “Historical Resumé,” Series 2, Francis Greenwood Peabody, *Notes of Lectures on Philosophy by Francis Bowen, John Fiske* [etc.]: *Delivered to Graduate Students in Harvard College, 1869–70* (HUC 8869–370), Harvard University Archives. Cf. Fiske, “Past and Future of Philosophy,” 2.

⁴⁹ Fiske, “The Scope of Philosophy,” 2. These passages reappeared with slight changes in Fiske, *Outlines*, 1:39–40, 43.

there is both room and need for a philosophy, and that philosophy is the complete organization of scientific doctrines and methods.”⁵⁰ Scientific explorers were perhaps imbued with the positive spirit, but they were not positive philosophers unless they were doing philosophy.

Philosophy as “the synthesis of the doctrines and methods of science” involved two things: synthesis of doctrines and synthesis of methods. The latter was exemplified by work done on the logic of science by Comte and Mill, and Fiske here referred to Mill’s discussion of what “the philosophy of a science” amounted to. “But,” said Fiske, “a synthesis of methods is one thing and a synthesis of doctrines is another thing. A system of philosophy, as we have seen, must include both.”⁵¹ Fiske’s prime example of the synthesis of scientific doctrines was the philosophy of Herbert Spencer. In his second lecture, Fiske claimed that in applying the notion of evolution to everything from solar systems to societies, Spencer had “discovered a truth in philosophy—a truth applicable not merely to one order of phenomena, but to all orders.” The progress from homogeneity to heterogeneity (or “evolution”) in embryological development, discovered by Karl Ernst von Baer, was a result of science; using evolution as a principle to unify the sciences was an achievement of philosophy.⁵²

Thus doing philosophy, for Fiske, amounted to synthesizing the content and not merely (as for Wright) the methods of science. This activity was also itself scientific and progressive. As he wrote in the climactic paragraph of his final lecture,

the Spinozas and Berkeleys of the future will, I believe, be the interpreters and co-ordinators of the scientific truths obtained by the labors of special inquirers. Such, I believe, is the result to which the whole course of both metaphysical speculation and of scientific discovery has hitherto been irresistibly tending. The positive philosophy—which is something wider than the systems of Comte or Spencer or any individual thinker—is the philosophy which has from the first been steadily gaining ground, never losing an inch of territory which it has once secured. It is the only philosophy which, as based upon verified data, and entertaining no hypotheses which may not sooner or later be subjected to critical tests, contains within itself a principle of indefinite growth. . . . In short, its

⁵⁰ Fiske, “Past and Future of Philosophy,” 2. The list of tenets also appeared in Fiske, *Outlines*, 1:257.

⁵¹ Fiske, “Past and Future of Philosophy,” 2.

⁵² Fiske, “The Scope of Philosophy,” 2. See Spencer, *First Principles*, 148.

habits of thought are the habits which science nurtures. Its methods are the methods of science. Its doctrines are the doctrines of science. Positive philosophy is science organized.⁵³

Fiske's stirring finale could have been a rallying cry for "big tent" positivism: "Positive philosophy is science organized." It is easy to imagine a class of recent Harvard graduates, not to mention the scientifically inclined readers of *The World*, seduced by such rhetoric.

Although Wright appeared to share this view of *positive* philosophy as philosophy of science—at least supporting Mill's synthesis of methods—he also often spoke of *metaphysical* philosophy as a complement to science (though he did not himself pursue this metaphysical approach). In a long 1865 essay on Spencer's philosophy, Wright criticized the distinction made by Comte and others between the "subjective method" of traditional philosophy and the "objective method" of positive science. The difference, argued Wright, was about motives and not methods:

By a subjective motive we mean one having its origin in natural universal human interests and emotions, which existed before philosophy was born, which continue to exist in the maturity of philosophy, and determine the character of an important and by no means defunct order of human speculations. By an objective motive we mean one having an empirical origin, arising in the course of an inquiry; springing from interests which are defined by what we already know, and not by what we have always felt,—interests which depend on acquired knowledge, and not on natural desires and emotions.

Wright claimed that "the questions of philosophy proper are human desires and fears and aspirations—human emotions—taking an intellectual form," and insisted that "science follows, but does not supersede, this philosophy." Paralleling his treatment of religion, Wright linked philosophy with the emotional and practical rather than with the empirical and scientific. He even suggested that philosophy "be classed with the Religions and with the Fine Arts, and estimated rather by the dignity of its motives, and the value it directs us to, than by the value of its own attainments."⁵⁴

Although this treatment, clearly distinct from a vision of philosophy as

⁵³ Fiske, "Past and Future of Philosophy," 2. This material was not included in *Outlines*.

⁵⁴ Wright, "The Philosophy of Herbert Spencer," 429–30, 432.

organizer of the sciences, seems to denigrate it, Wright thought that traditional philosophy remained useful in its way. In a later paper, “The Evolution of Self-Consciousness,” Wright returned to the idea that science and philosophy were complementary:

The whole nature of modern civilized man includes both these conflicting tendencies in speculation, the metaphysical and scientific; the disposition to regard the phenomena of nature as they appeared naturally and serviceably in the primitive use of language and reflection, and the disposition of the Positivist to a wholly different interpretation of them. This conflict exists, however, only where either disposition invades the proper province of the other; where both strive for supremacy in the search for a clearer knowledge of these phenomena, or where both seek to satisfy the more primitive and instinctive tendencies of the mind.

That this conflict was not necessary, but only the result of science or metaphysics straying outside of its “proper province,” was shown by the analogous “opposition of science and poetry; one contemplating in understanding and in fixed positive beliefs the phenomena which the other contemplates through firmly established and instinctive tendencies.”⁵⁵ Wright thus anticipated the view of the twentieth-century logical positivist Rudolf Carnap, who argued that metaphysics was the expression of a *Lebensgefühl* (attitude towards life) and infamously claimed, “metaphysicians are musicians without musical ability.”⁵⁶ Wright and Carnap were not opposed to modes of thought focused on instincts, attitudes, and emotions; they were only opposed to those who claimed the mantle of science for any approach going beyond the phenomena. Thus Wright wanted metaphysics classed with religion and the arts, and Carnap viewed metaphysics as the pseudo-scientific analogue of music. (Wright may have been slightly more sympathetic than Carnap: criticizing a St. Louis Hegelian, he wrote, “I am not so much a positivist as to deny that mystical and poetical philosophies are valuable products of human genius; but then they must be works of real genius—of a Plato, a Hegel or an Emerson.”⁵⁷)

⁵⁵ Chauncey Wright, “Evolution of Self-Consciousness,” *North American Review* 116 (1873): 294.

⁵⁶ “Metaphysiker sind Musiker ohne musikalische Fähigkeit.” Rudolf Carnap, “Überwindung der Metaphysik durch logische Analyse der Sprache,” *Erkenntnis* 2 (1931): 240.

⁵⁷ Wright to Charles Eliot Norton, July 24, 1866, Item 8278, Charles Eliot Norton Papers. Published, with the target of Wright’s criticism—“a leader in a lively little society of thinkers in St. Louis”—redacted, in Thayer, *Letters*, 87.

Although Abbot, Wright, and Fiske were all positivists in the broad sense described in the first part of this paper, they still disagreed fundamentally about a great many things. Abbot wanted to make metaphysics into a science. Fiske and Wright rejected the idea that metaphysics could be scientific, but they also rejected Bowen's claim that positivism would destroy philosophy. Instead, they outlined a possible new role for the philosopher as unifier and organizer of the sciences. On this view, philosophy would systematize the methods and even (for Fiske) the content of the special sciences. Wright, following Mill, saw positive philosophy as a synthesis of methods; Fiske, following Spencer, saw it as a synthesis of both methods and doctrines. Spencer was the subject of their most serious disagreement: Fiske was Spencer's foremost American popularizer, whereas Wright was one of his harshest critics, accusing Spencer of bringing the metaphysical notion of progress into the domain of science.⁵⁸ Nevertheless, Fiske and Wright were good friends, and respected one another's work. After Wright's death, Fiske recalled how the two of them would stay up past two o'clock in the morning, deep in philosophical conversation. It was clear to Fiske where Wright's philosophical sympathies lay:

Mr. Wright always appeared in the light of a most consistent and unqualified positivist. He hardly could be called a follower of Comte, and I doubt if he even knew the latter's works save by hearsay. But he needed no lessons from Comte. He was born a positivist, and a more complete specimen of a positive philosopher has probably never existed.⁵⁹

Unlike some positivists, Wright believed that metaphysics or traditional philosophy—like religion—had a role to play in the realm of practical values, though not as a science. But like Fiske, he thought that positive philosophy could act as an organizer of the sciences.

CONCLUSION

The positivist approach to philosophy described in this paper is closely related to both pragmatism and logical positivism, two of the most influential philosophical movements of the twentieth century. As I have argued,

⁵⁸ Wright, "The Philosophy of Herbert Spencer," 449–50. See also John Fiske, "Chauncey Wright," *Radical Review* 1 (1878): 700–702.

⁵⁹ Fiske, "Chauncey Wright," 703–4.

positivism in the late nineteenth century was a “big tent” for thinkers who embraced modern science and rejected traditional philosophy. Of the five individuals involved with the Metaphysical Club who published work in philosophy—Wright, Peirce, Abbot, James, and Fiske—a majority were “big tent” positivists. Two others linked to the club, Francis Greenwood Peabody and Joseph Bangs Warner, were actually in attendance at Fiske’s 1869 lectures at Harvard on positive philosophy.⁶⁰ The figures now primarily associated with the club and with pragmatism, Peirce and James, were explicitly critical of positivism.⁶¹ Nevertheless, both thinkers embraced aspects of positivism. James insisted on taking a “positivistic and non-metaphysical” approach in his psychology, for which he was criticized by Peirce in an anonymous review that focused on the proper relationship between science and philosophy.⁶² Peirce’s own early work often investigated the very questions that Wright assigned to positive philosophy, namely, questions of scientific methodology. He gave lectures on “The Logic of Science” in 1865 at Harvard in which he criticized the accounts of science given by Whewell, Mill, and Comte. His first publications dealt in part with probable inference—induction and hypothesis—as the basis of all scientific inquiry. And “Illustrations of the Logic of Science,” the series of articles that supposedly stemmed from Metaphysical Club meetings in the early 1870s, had as its aim “to describe the method of scientific investigation.” Later in his career, Peirce—like Spencer—even developed a general evolutionary cosmology.⁶³ Thus even though he was very critical of positivism, much of Peirce’s philosophical work can be seen as part of the project of synthesizing the doctrines and methods of science.

⁶⁰ *A Catalogue of the Officers and Students of Harvard University, for the Academical Year 1869–70*, 103. For a list of individuals involved with the Metaphysical Club, see Fisch, “Introduction,” xxx.

⁶¹ Charles Sanders Peirce, “[Critique of Positivism],” MS 146 [1867–68], in Peirce, *Writings*, 2:122–30; William James, “Quelques considérations sur la méthode subjective,” *Critique Philosophique* 12 (1878): 407; William James, “The Sentiment of Rationality,” *Mind* 4 (1879): 340. James read several works related to positivism in 1869–70: see the list of books at the end of the first volume of his *Diary* (Item 4550), William James Papers, Houghton Library, Harvard University.

⁶² William James, *The Principles of Psychology*, 2 vols. (New York: Henry Holt, 1890), 1:182. On James’s approach and Peirce’s criticism, see Alexander Klein, “*Divide et Impera!* William James’s Pragmatist Tradition in the Philosophy of Science,” *Philosophical Topics* 36 (2008): 129–66; Alexander Klein, “Science, Religion, and ‘The Will to Believe,’” *HOPOS* 5 (2015): 72–117.

⁶³ Charles Sanders Peirce, “On the Logic of Science,” MSS 94–101 [1865], in Peirce, *Writings*, 1:161–302; Charles Sanders Peirce, “On the Natural Classification of Arguments,” *Proceedings of the American Academy of Arts and Sciences* 7 (1867); Charles Sanders Peirce, “The Fixation of Belief,” *Popular Science Monthly* 12 (1877): 12; C. S. Peirce, “The Architecture of Theories,” *The Monist* 1 (1891): 161–76.

Later pragmatists such as John Dewey also championed “the scientific attitude.”⁶⁴ But even closer to the debates of Wright, Fiske, and Abbot were the logical positivists of the 1930s. We have seen that both Wright and Carnap emphasized the kinship of metaphysics and the arts, opposing these to science. The logical positivists also frequently discussed the proper role of philosophy in an age of science. According to Moritz Schlick, “through philosophy statements are clarified, through the sciences they are verified.” Carnap argued—as had Wright and Fiske, on occasion—that under positivism “the logic of science takes the place of the inextricable tangle of problems which is known as philosophy.” And finally, the unity of science movement spearheaded by Otto Neurath had as its main goal to organize the sciences, although Neurath’s “encyclopedic” notion of unity was expressly opposed to Fiske’s view of philosophy as a “super science.”⁶⁵ Thus all of these positivists shared the view that philosophy could play the role of organizing and unifying the sciences, though they disagreed about the form that organization should take and about whether philosophy itself was a science.⁶⁶

Today, although philosophy of science is a thriving subfield of philosophy, most scholars emphasize disunity and plurality.⁶⁷ Spencerian and Carnapian syntheses are seen as naïve—as belied by the complex realities of scientific institutions, objects, and projects. Nevertheless, in studies focused on general scientific methodology there are echoes of Wright’s (and Carnap’s) synthesis of methods.⁶⁸ And Peter Godfrey-Smith describes “philosophy of nature” as engaged in a project that looks very

⁶⁴ John Dewey, “Unity of Science as a Social Problem,” in *International Encyclopedia of Unified Science*, ed. Otto Neurath (Chicago: University of Chicago Press, 1938).

⁶⁵ “Durch die Philosophie werden Sätze geklärt, durch die Wissenschaften verifiziert.” Moritz Schlick, “Die Wende der Philosophie,” *Erkenntnis* 1 (1930): 8; Rudolf Carnap, *The Logical Syntax of Language*, trans. Amethe Smeaton (London: Kegan Paul, Trench, Trübner and Co., 1937), 279; Otto Neurath, “Unified Science as Encyclopedic Integration,” in *International Encyclopedia of Unified Science*, 20.

⁶⁶ On philosophy as a science, see Alan W. Richardson, “Toward a History of Scientific Philosophy,” *Perspectives on Science* 5 (1997): 418–51; Alan W. Richardson, “Philosophy as Science: The Modernist Agenda of Philosophy of Science, 1900–1950,” in *In the Scope of Logic, Methodology and Philosophy of Science*, ed. P. Gärdenfors, J. Wolenski, and K. Kijania-Placek, vol. 2 (Dordrecht: Kluwer, 2002).

⁶⁷ Peter Galison and David J. Stump, eds., *The Disunity of Science: Boundaries, Contexts, and Power* (Stanford: Stanford University Press, 1996); Stephen H. Kellert, Helen E. Longino, and C. Kenneth Waters, eds., *Scientific Pluralism* (Minneapolis: University of Minnesota Press, 2006).

⁶⁸ Colin Howson and Peter Urbach, *Scientific Reasoning: The Bayesian Approach*, 3rd ed. (Chicago: Open Court, 2005); Elliott Sober, *Evidence and Evolution: The Logic Behind the Science* (Cambridge: Cambridge University Press, 2008), 1–108.

much like Fiske's (and Spencer's) synthesis of doctrines: "working out what the raw science is really telling us, and using it to put together an overall picture of the world."⁶⁹ There is perhaps still room for philosophy as science organized.

University of North Carolina at Charlotte.

⁶⁹ Peter Godfrey-Smith, *Philosophy of Biology* (Princeton: Princeton University Press, 2014), 4.