
Michel Bourdeau, Mary Pickering, and Warren Schmaus, eds. *Love, Order, and Progress: The Science, Philosophy, and Politics of Auguste Comte*. Pittsburgh: University of Pittsburgh Press, 2018. Pp. xiv+402. \$49.95 (cloth). ISBN 0-8229-4522-3.

Auguste Comte was one of the most important and influential philosophers of the nineteenth century, but you would never know it by looking at the syllabus of a standard course in nineteenth-century philosophy. Although such courses usually only cover German idealism and existentialism, British and American philosophers were also in frequent and enthusiastic conversation with positivism: John Stuart Mill's *Auguste Comte and Positivism*, which praised Comte's "wonderful systematization" of the sciences, appeared in 1865; William James read the work of Comte and his follower Émile Littré in 1870, perhaps in connection with John Fiske's course on "the positive philosophy" at Harvard; Edward Caird published *The Social Philosophy and Religion of Comte* in 1885, a book to which John Dewey was "especially indebted"; Jane Addams's earliest work was shaped by Comte's religion of humanity; and W. E. B. Du Bois read Harriet Martineau's translation of Comte in 1891 as a graduate student at Harvard. Comte also had an indirect influence via Herbert Spencer, who borrowed several ideas from the French philosopher, including social statics and dynamics, organism-environment correspondence, and altruism.¹

1. John Stuart Mill, *Auguste Comte and Positivism* (London: Trübner, 1865), 53; Edward Caird, *The Social Philosophy and Religion of Comte* (Glasgow: Maclehose & Sons, 1885); John Dewey, *Outlines of a Critical Theory of Ethics* (Ann Arbor, MI: Inland, 1891), vi; Marilyn Fischer, *Jane Addams's Evolutionary Theorizing: Constructing "Democracy and Social Ethics"* (Chicago: University of Chicago Press, 2019), 36–38. On positivism at Harvard, see *Catalogue of the Officers and Students of Harvard University*,

The goal of this book, conceived at a HOPOS meeting in 2008 and edited by Michel Bourdeau, Mary Pickering, and Warren Schmaus, is to provide “the best general overview in English of Comte’s entire philosophy” (3). It succeeds admirably. The chapters are thorough but also comprehensible to those who, like this reviewer, are familiar only with narrow aspects of Comte’s work. My one general complaint is that, apart from the whirlwind tour provided in Pickering’s conclusion, there is little discussion of how later figures received and transformed Comte’s philosophy. This reception history is of particular importance to members of HOPOS, since many of Comte’s readers—like Charles Sanders Peirce, mentioned briefly by Pickering—played key roles in the history of philosophy of science (301).

Love, Order, and Progress opens with Schmaus’s account of Comte’s general philosophy of science. Schmaus credits Comte with “having helped to bring about the shift away from traditional epistemology grounded in philosophy of mind and toward a philosophy of science that answered to the history of science” (54). Comte’s dismissal of empirical psychology is explained by the French institutional dominance of Victor Cousin, who accepted the spiritualist argument “that we can have direct perception of the activity of the will” (29; see also 142–44). Comte countered that there were only two ways to study the mind: by considering its organic conditions or by looking to its products, that is, through biology or sociology (30). After discussing Comte’s famous law of three stages (theology, metaphysics, science) and his hierarchy of the sciences (mathematics, astronomy, physics, chemistry, biology, sociology), Schmaus argues that Comte struggled to balance an undeclared realist commitment to the “universal order of nature” with “an instrumentalist view about the use of hypotheses in science” (45).

In the next chapter, Michel Blay discusses Comte’s idiosyncratic account of mathematics, glossed as “the systematic elaboration of analytical algorithms and their development of increasingly richer systems of calculus by way of the establishment of relations between the various magnitudes of physics”

for the *Academical Year 1869–70* (Cambridge, MA: Sever, Francis, 1869), 102; Trevor Pearce, “Science Organized: Positivism and the Metaphysical Club, 1865–1875,” *Journal of the History of Ideas* 76 (2015): 451–55. On James and Du Bois, see James, *Diary*, vol. 1, seq. 96 and seq. 108, item 4550, William James Papers, Houghton Library, Harvard University, <https://iif.lib.harvard.edu/manifests/view/drs:45436722>; “Library Charging Lists, 1891–1892,” UAIH 50.15.60 (vol. 147), seq. 221, Harvard University Archives, <https://iif.lib.harvard.edu/manifests/view/drs:15861352>. On Spencer’s borrowings, see Thomas Dixon, *The Invention of Altruism: Making Moral Meaning in Victorian Britain* (Oxford: Oxford University Press, 2008), 202–6; Trevor Pearce, “From ‘Circumstances’ to ‘Environment’: Herbert Spencer and the Origins of the Idea of Organism-Environment Interaction,” *Studies in History and Philosophy of Biological and Biomedical Sciences* 41 (2010): 247–48.

(59). Blay argues that Comte's positive kinematics implicitly relied on a foundational "principle of continuity"—along with associated "conceptions of time, space, speed, etc."—to ground the link between facts and their quantitative expression (59, 67). Blay then shows that Comte's positivist approach to optics, which refused to "venture hypotheses on the nature of underlying objects," was fruitfully extended by Pierre Duhem in the 1890s but then undermined by twentieth-century developments.

Astronomy, the topic of Anastasios Brenner's chapter, was central to Comte's role as a public philosopher: he presented a course on that science, "directed primarily to workers," for 17 years (77). The course was a recruitment tool. As one convert recalled, "Comte knew very well that astronomy is the best means to recognize, among the minds disposed for abstraction, those that are capable of dealing readily with the difficult problems of sociology and morals" (79). Comte's approach to astronomy was similar to his approach to optics: hypotheses should only anticipate future observations and should avoid "any recourse to fluids and other fictitious entities" (82–83). However, Brenner follows Gaston Milhaud in identifying several places in which Comte goes beyond his own strictures: hypotheses, says Comte, can serve "to present *conveniently* [*commodément*] the phenomena as a rough draft"; moreover, "there is no absolute separation between observing and reasoning. No observation can or should be purely *objective*" (84, 90). Brenner concludes by emphasizing the role of imagination in science, a feature neglected by Comte (91).

Laurent Clauzade demonstrates in the following chapter that Comte was a philosopher of biology—that is, someone engaged in "epistemological reflection on a unified field . . . bearing on the phenomena of life" (93). Comte defined life, following Henri de Blainville, as continuous "composition and decomposition." But he also added a new emphasis on "the two correlative conditions of a determinate organism and a suitable medium [*milieu*]" (97). Clauzade could have done more to direct readers to prior work on the idea of *milieu* in biology: for example, Georges Canguilhem argued that the notion was jointly popularized by Comte and the historian Hippolyte Taine, a point that would have tied in nicely with Pickering's related discussion in the conclusion (255–56).² Despite its centrality to his definition of life, however, Comte

2. Georges Canguilhem, *La connaissance de la vie* (Paris: Hachette, 1952), 161; translated in Georges Canguilhem, "The Living and Its Milieu," *Grey Room*, no. 3 (2001): 7–8. See also Jean-François Braunstein, "Le concept de milieu, de Lamarck à Comte et aux positivismes," in *Jean-Baptiste Lamarck, 1744–1829*, ed. Goulven Laurent (Paris: CTHS, 1997); Trevor Pearce, "The Origins and Development of the Idea of Organism-Environment Interaction," in *Entangled Life: Organism and Environment in the Biological and Social Sciences*, ed. Gillian Barker, Eric Desjardins, and Trevor Pearce (Dordrecht: Springer, 2014), 14–17.

was “wary of explanations . . . that turned the *milieu* into the crucial factor that shaped minds or organisms” (105). This was consistent with his embrace of Franz Joseph Gall’s phrenology, which assumed “the innateness of the fundamental dispositions” (121). That said, Comte also used “cerebral physiology,” the science at the interface of biology and sociology, to show that mental variation was primarily historical rather than characterological, with social evolution corresponding to the strengthening of social faculties (122–23).

In the next chapter, extending this last point, Vincent Guillin highlights the complex relationship between biology and sociology. Despite the holistic perspective common to both, with anatomy mirrored in social statics and physiology mirrored in social dynamics, Comte argued that sociology was distinct in its use of the historical method, forming “the whole of human events into coordinated series that clearly show their gradual connection” (147–48, 152). Later thinkers who embraced biological evolution, such as Herbert Spencer, could of course deny this Comtean distinction. Unlike Spencer, however, Comte claimed that the other sciences were in a sense dependent on sociology, which would “regulate the natural progress of the various sciences” and give them a “synthetic perspective,” allowing them to “better respond to the needs and problems of mankind” (158). This perspective, along with the origins of Comtean sociology as a response “to the various ills of modernity,” also explains his dismissal of political economy: the economic analysis of society is inseparable from “its intellectual, moral, and political analysis” (130, 146).

For reasons of space and given the readership of this journal, I will discuss only one of the chapters focused on Comte’s social and political thought: Jean Elisabeth Pederson’s analysis of art, emotion, and gender. The topic of Pederson’s chapter is encapsulated by a shift in the positivist slogan from “Order and Progress” in the 1840s to “Love as the principle, and Order as the base; Progress as the goal” in the early 1850s (201). Despite this shift, which seemed to elevate the importance of aesthetics, emotions, and women, Pederson shows that the pattern was actually one of “significant continuity in spite of dramatic change” (214). In his later philosophy, for example, Comte continued to claim that “the principal function of art is always to construct the types with whose bases science furnishes it,” thus fulfilling a merely “accessory office” (200). Likewise, although he claimed that “true human unity” depends not on reason but on sentiment, he also said that “the mind should always be the minister of the heart, and never its slave” (204). Finally, although women, because of their supposed connection to art and emotion, appeared to gain status in Comte’s final system, this status was only superficial. As Pederson puts it, “The crucial point about Comte’s idealized feminine representation of Humanity is not so much

that she is herself a woman as that she is a woman who is mothering a son who will grow up to become a man” (213).

This book should become the standard work in English on Comte’s philosophy. As mentioned above, its only shortcoming is that, often, it merely hints at connections between Comte’s philosophy and that of other thinkers—Pederson’s discussion of radical Saint Simonian women and Andrew Wernick’s comparison of Comte and Nietzsche on nihilism are happy exceptions. Pickering’s conclusion demonstrates that Comte’s relation to other scientists and philosophers—especially those in Latin America—promises to be a fruitful area of future research.³

Trevor Pearce, *University of North Carolina at Charlotte*

3. For a start on this research, see Gregory D. Gilson and Irving W. Levinson, eds., *Latin American Positivism: New Historical and Philosophical Essays* (Lanham, MD: Lexington, 2013); Natalia Priego, *Positivism, Science, and ‘The Scientists’ in Porfirian Mexico: A Reappraisal* (Liverpool: Liverpool University Press, 2016); Carlos Alberto Sánchez and Robert Eli Sanchez Jr., eds., *Mexican Philosophy in the 20th Century: Essential Readings* (New York: Oxford University Press, 2017), chaps. 1–2; Elías José Palti, “Positivism, Revolution, and History in Brazil,” in *The Worlds of Positivism: A Global Intellectual History, 1770–1930*, ed. Johannes Feichtinger, Franz L. Fillafer, and Jan Surman (Cham: Palgrave Macmillan, 2018); Adriana Novoa, “Chaos in the House of Reason: Positivism in the Americas, 1830–1890” (unpublished paper).