

## BOOK REVIEWS

Matthias Neuber and Adam Tamas Tuboly, eds., *Ernest Nagel: Philosophy of Science and the Fight for Clarity*. Cham, Switzerland: Springer. 348 pp. \$159.99. Hardcover and softcover (2022).

Philosophy of science as a discipline came into its own in North America during, roughly, the twenty-five years from 1945 to 1970. No one did more in those years to shape its problematic agenda and institutional structure than Ernest Nagel. In stature and impact, he was as significant as Rudolf Carnap and Carl Hempel. At Columbia University he trained many of the leaders of the field's next generation, such as Patrick Suppes, Isaac Levi, Henry Kyburg, and Kenneth Schaffner. His 1961 book, *The Structure of Science: Problems in the Logic of Explanation*, served for years as the advanced introductory philosophy of science textbook for many still younger students. But it is a sad and curious fact that he is less well remembered today than are the leading members of the European logical empiricist diaspora. The full history of North American philosophy of science cannot be written without giving full credit and attention to Nagel's legacy, in part because he was the one really prominent figure who was trained not in Europe but in the United States, as an undergraduate at City College and a graduate student at Columbia, and so was the product of a philosophical tradition very different than that which shaped his immigrant and refugee contemporaries, and that distinction made a difference in the way in which North American philosophy of science developed, even though Nagel made common cause, in many ways, with the new arrivals. The volume under review here aims to fix this historical shortcoming.

The volume's editors present us with twelve papers that cover every important aspect of the life and philosophical work of Nagel plus a fascinating previously unpublished oral history interview with Nagel and an unpublished paper from the same year as *The Structure of Science* that gives a synoptic view of Nagel's understanding of what are the core issues in the philosophy of science. On the historical side, Nagel's daughter-in-law, the mathematician, Yvonne Nagel, contributes a biographical sketch and Sandcr Verhaegh outlines Nagel's philosophical development, rightly stressing the huge influence on Nagel of his undergraduate teacher, Morris Raphael Cohen, with whom Nagel co-authored his first book, *An Introduction to Logic and Scientific Method* (1934). Fons Dewulf provides a very informative account of how it was that the topic of scientific explanation and understanding came to play a dominant role in Nagel's thinking, and Thomas Moorman tells the important story of Nagel's evolving attitude toward Carnap's version of logical empiricism.

Six papers focus on Nagel's very significant and, in some instances, surprisingly early interventions in debates involving specific problem areas. Raphael van Riel discusses Nagel's views on idealization in science. David Atkinson and Jeanne Peijnenburg look at Nagel's perceptive, early remarks on the uncertainty principle in

quantum mechanics, and Marij van Strien examines his equally thoughtful discussions of whether quantum mechanics could be regarded as a deterministic theory (his answer was “yes”). Nagel’s extensive work on probability, especially his defense of what he termed a “truth frequency” interpretation, is the focus of Maria Carla Galavotti’s excellent paper. Bohang Chen reminds us of Nagel’s clearheaded, and, again, surprisingly early thoughts on teleology and functionalism in biology, and Matthias Neuber reviews his not unrelated views on method in the social sciences, with a focus on their sharing a common methodology with the physical sciences, this from a time when the philosophy of social science was only just beginning to be established in the literature. Looking back over these six chapters, one gets the impression that no other major figure in mid-twentieth-century philosophy of science made so many important contributions to such a wide range of topics. Certainly not Carnap or Hempel.

The last of the twelve papers is rather different in kind from the rest and is, in my opinion, by far, the most interesting. This is Eric Schliesser’s thought-provoking paper on the political situation and impact of the content of Nagel’s philosophy of science and Nagel’s actions in helping to professionalize the discipline of the philosopher of science. Schliesser’s main goal is to critique George Reisch’s portrayal of Nagel in his book, *How the Cold War Changed Philosophy of Science: To the Icy Slopes of Logic* (Reisch 2005). Reisch argues that, by championing a predominantly formal approach to the philosophy of science, Nagel played a leading role in turning the discipline away from the strongly socially and politically engaged agenda that had characterized especially the left wing of the Vienna Circle before World War II, most notably in the person of Otto Neurath, and that was still being pushed by Philipp Frank at Harvard in the 1950s. Schliesser thinks this a serious misreading of Nagel’s intentions and impact. He reminds us, as had the volume editors in their introduction, “Ernest Nagel and the Making of Philosophy of Science a Profession,” that Nagel was, in his day, a rather prominent public intellectual, writing on many topics of then current concern, well beyond the philosophy of science, and often for a broader public audience. He rightly stresses Nagel’s acute concern from the 1930s through the darkest days of the Cold War that reason was under serious threat from authoritarian political challenges and obscurantism in other forms. He makes clear that Nagel saw his efforts to sustain and promote scientific rationality as aiming not only to oppose such threats but also to further the betterment of the human condition. The real question, however, is whether or not Nagel saw a role for scientists and philosophers of science in public affairs, qua scientists and philosophers. To borrow an image from Hans Reichenbach, should scientists and philosophers of science merely provide technical tools for factually evaluating alternative paths of action, leaving the choice of a path to the policy makers, or do they have a professional responsibility for also promoting what they take to be the best route to progressive social and political change (Reichenbach 1938, 14)? I am not neutral in this debate, having suggested a reading of Nagel’s professional political role much like that which Reisch presents. Nagel certainly cared about making a better world. But I see his liberal faith that scientific rationality will save us as just a more recent expression of the Enlightenment faith that the truth shall set one free, and as equally naive.

One very specific service to history that this collection of papers can perform deserves highlighting. It should put to death once and for all the widespread but fundamentally mistaken view that Nagel was John Dewey’s student and, thus, Dewey’s

philosophical legatee. Much of Nagel's philosophy of science has a pragmatist feel, as there was in the work of so many thinkers who grew to intellectual maturity in the United States in the first half of the twentieth century. How could it be otherwise? But, in Nagel's case, an equal or greater debt was owed to Charles Saunders Peirce, especially in his work on probability. As regards Nagel's specific relationship to Dewey at Columbia, we learn from the mentioned, oral history interview that Nagel apparently took only one course from Dewey, this on "Types of Logical Theory," which Nagel did not like. He said of Dewey: "He was a very difficult lecturer. You didn't know what on earth he was talking about . . . almost as bad as his writing." Nagel adds; "I never got to know him very well" (269). He remarks at another point in the interview: "Now, Dewey I found extremely impressive as a human being, but I'm not really sure that I understood the pragmatism that he represented" (294). One final quotation makes clear Nagel's summary view; "So . . . I have this sense of being unbalanced in my feeling toward Dewey. He was a fine human being and fought for the right things, but the quality of his philosophical work is not as good."

Reading this book brought vividly to mind all that I so much enjoyed about Nagel's work when I first encountered it in graduate school. First is the unmatched clarity, which is highlighted in the volume's title. Then there is the calm, dispassionate manner in which he thought his way through every issue. There is the vast learning upon which he easily drew to illustrate just about any point. And there is his ability to bring unsurpassed analytic rigor to every question while deploying it in a way that is not overwhelming or intimidating. As a postdoctoral fellow at Columbia in the early 1980s, I was privileged to get to know Nagel fairly well. I was welcomed to the weekly, Tuesday noon philosophy of science lunches at the faculty club and the monthly, greater New York philosophy of science seminars. I remember a very kind person, generous with his time and his commentary. I remember a person open to new ideas and eager to learn. Nagel is someone whom we must remember well, for the philosophy of science as we know it today was shaped by him as much as by any other of our forebears.

Unfortunately, the review must end on an unhappy note. This volume is rich, interesting, and valuable in all the ways described. But Springer is to be faulted for its abysmal production values. A proper copy editing, with special attention to the English, would have made reading several of the papers much easier. Likewise, the volume obviously did not get a proper proofreading, there being scads of typos and missing words. In a couple of places, there are even vast blank spaces right in the middle of a paper. Lastly, the value of the volume is significantly diminished by the lack of an index. Deep-pocketed Springer could have sprung for more and better.

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## References

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