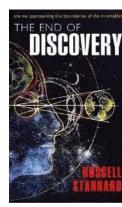
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The End of Discovery: Are We Approaching the Boundaries of the Knowable? by Russell Stannard. Oxford/New York: Oxford University Press, 2010. 228 pp. \$24.95. ISBN 978-0199585243.

In 1872 the physiologist Emil du Bois-Reymond surveyed "The Limits of Science" in a keynote address to an annual meeting of his colleagues. Eight years later he returned to the subject in a lecture to the Prussian Academy of Sciences that discussed "Seven Shortcomings" in our understanding of the world. Reprints of both speeches did well: "The Limits of Science" went

through eleven editions in German, not counting sales in English, French, Italian, Romanian, Serbian, and Russian. As du Bois-Reymond admitted, he was far from the first to delimit the boundaries of knowledge: Philosophers from Locke to Kant had referred to unanswerable questions, and scientists such as John Tyndall and Thomas Henry Huxley had indicated the failures in their mechanical models of nature. But du Bois-Reymond had a knack for rhetoric, and his audience had expected him to defend the efficacy of reason in overcoming ignorance and superstition. Contemporaries reported that his speech hit them "like the unexpected explosion of a mine," coming as it did



from "the center of the center of science," his chair at the University of Berlin, the leading university in the world at the time.

Since then authorities on science have imitated du Bois-Reymond's example. Some, such as John Horgan or John Barrow, have developed the argument of his first lecture, pointing to the essence of matter, the nature of consciousness, and other riddles impervious to the investigations of cosmology and neuroscience. Others, like Roger Penrose and Stephen Hawking, have taken up the theme of his second lecture in reviewing the outstanding problems of their field. Russell Stannard belongs to this second category of scientific popularizers. After a nod to the philosophy of mind, he devotes eleven chapters to the current state of astronomy and physics. His book has the merit of clear exposition and easy style. In terms of originality, however, it is no match for the theses of Penrose and Hawking, and in terms of insight, it pales beside the analyses of Horgan and Barrow. Anyone with any abiding interest in whether science has limits would do better to look at the work of Stannard's peers, if not his predecessors.

Gabriel Finkelstein
Associate Professor of History, University of Colorado Denver
Gabriel.Finkelstein@ucdenver.edu