Floris Heukelom. ***Behavioral Economics: a history***. Cambridge, UK: Cambridge University Press, 2014, 238 pp, [price missing], ISBN 978-1-107-03934-6.

In an influential essay of 1932, Lionel Robbins of the London School of Economics wrote that economists should be wary of partnerships with psychologists. Robbins worried that since psychology "change[d] its fashion" often and suddenly, economists would be faced by the frightening prospect of regularly rewriting their discipline "from the foundations upwards." The shifting ground of fashionable psychology could not be relied upon as bedrock for economics, and Robbins insisted that his autarkic route led to "various theorems … capable of explaining a manifold of social activity more varied and rich … than anything yet entering the psychological laboratory" (Robbins, 1932, pp. 84, 86). This judicious neglect for the motives and processes of decision-making had illustrious predecessors. Eighty years before, John Stuart Mill had discussed the method of political economy and reached similar conclusions. Mill described political economist as operating with a compact tool kit of "general characterizations" of economic motives. Mill assured that with only three elements, the pursuit of wealth and its two counters, an aversion for labor and the desire for the "present enjoyment of costly indulgences", all of the laws of political economy could be constructed (Mill, 1844). Between the 1840s and the 1930s much intellect and conviction were committed to assert the autonomy of economics from its intellectual kin including but not exclusively, from psychology. Today by contrast, eighty years since Robbins' essay, economics and psychology are involved in deep and unprecedented ways. Floris Heukelom's book explains what happened. The intellectual focus of *Behavioral Economics: a history* is set on controversies in the study of decision-making under uncertainty. The book's sociological focus is set on a community of scholars committed to bring psychology and economics into contact and cooperation.

In the last decade "behavioral economists" have been greeted with academic, political, and popular acclaim. In 2002, Daniel Kahneman received a Nobel prize for his work with Amos Tversky. Paul Orszag and Cass Sunstein were influential members in the first Obama administration. A spate of paperbacks have appeared to sate the reading public's curiosity for the group's quirky insights. Despite the eminence and corresponding attention behavioral economists has attained, their history is not well understood. Heukelom's book helps us realize the extent of our ignorance. One salient mistake recurrent in the lore of the discipline, is to assume a substantial debt owed by the current generation to the work of Herbert Simon. Heukelom shows that the capture of the term of "bounded rationality" is a (late) afterthought and Kahneman and Tversky's use of Simon's phrase "heuristics" was fundamentally different from the original. Rather than looking to Simon, Heukelom sets the scene beginning with the reception of John Von Neumann and Oskar Morgenstern's axioms of rational behavior, which led to Leonard (Jimmie) Savage's restatement of expected utility theory (chapter two).

The centerpiece of Heukelom's narrative is an epistemological reorientation of economics. Economists' cherished distinction between positive vs normative claims was surrendered in the 1980s for a normative vs descriptive difference taken from psychology. The positive vs normative dichotomy, inherited from the 1840s-1930s boundary work, took positive to mean what is in the world and normative as what there should be. The conception taken from psychology held normative as denoting universally accepted norms of reason, and descriptive as the observations of subjects' choices.

Heukelom has the long view of the epistemic priors of early postwar economists, and can thus make out the long shadow of Mill. He is more tentative when addressing the legacy of German psychophysics in the work of American mathematical psychologists. The lines that join the decision theories of the mid-twentieth century and their past is thus a matter left unresolved in the monograph. Heukelom pays singular attention to the work of the psychometricians at the University of Michigan, prominently among them the teachers of Amos Tversky, Ward Edwards and Clyde Coombs (chapter three). Where Heukelom's account is most compelling is in unpacking the Tversky and Kahneman collaboration. Kahneman had no expertise in decision research but his work on perception contained a crucial insight that the two men explored to great effect in the 1970s at Hebrew University. That insight was to eschew probabilities and utilities as anchoring absolutes of choice and instead examine changes in values. Individual judgment was shown to be fraught by biases and heuristics born of the processing of the choice situation (chapter four).

It was not by force of ideas alone that Kahneman and Tversky had their message heard in economics. In the 1980s and 1990s their success was an outcome of the advocacy and intellectual management of Eric Wanner. Wanner had worked with George Miller at the Center for Cognitive Studies and had a doctorate in psycholinguistics from Harvard. Wanner found himself in positions of influence first as editor of Harvard University Press's Cognitive Studies series, later as program director of the Sloan Foundation, and finally as President of the

Russell Sage Foundation. Although the funds controlled by Wanner remained small they were an indispensible catalytic to support the research and careers of enthusiasts of the Kahneman and Tversky project (chapter five). The philantropies' programs gave the group its name and brought together people and approaches that linked to prospect theory and the heuristics and biases program tenuously. Reading Heukelom's book one can appreciate how the coherence of behavioral economics was achieved primarily by the stability and charisma of its eminent personnel but also by a give and take between generations and disciplines. The two systems theory that Kahneman showcased in his Nobel lecture and in popular print, is an appropriation of the ideas of a new cohort of scholars, rather than an inevitable development of his 1970s work with Tversky (chapter six).

Robbins and Mill would cast a reproachful look at the twenty-first century entanglements of psychology and economics and would be similarly dismayed by economics' appreciation of evidence from experiments and field studies. The tectonic movements in the valuing of evidence aided the eruptive ascent of behavioral economics, and together are indispensible to understand the landscape of present day economics.

Mill, John S. (1844). Essays on Some Unsettled Questions of Political Economy. London: John W. Parker.

Robbins, L. (1932). An Essay on the Nature and Significance of Economic Science. London: Macmillan & Co.