Reviewed by Gary Hatfield
Review: The Realistic Empiricism of Mach, James, and Russell: Neutral Monism Reconceived, by Erik C. Banks

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Erik Banks aimed to stimulate a revival of interest in the philosophy of Ernst Mach and, particularly, in Mach’s neutral monism, a position also adopted by William James and Bertrand Russell. He was particularly interested in Mach’s attempt to solve (or perhaps dissolve) the mind–body problem. Banks also wanted to extend the views he attributed to Mach, James, and Russell into a fundamental metaphysical and epistemological position entitled “realistic empiricism.” He would thereby provide a further articulation of the relation between the mental and the physical and would also do something that he believed Mach and company failed to do: provide a construction of space, physical and psychological, from aspatial elements. In the service of this project, he authored more than a dozen articles and two books. The first book focused on Mach, with considerable attention to his historical context and to the influence he had on James and Russell; it was entitled Ernst Mach’s World Elements: A Study in Natural Philosophy (Dordrecht: Kluwer, 2003).

In the present volume, Banks characterizes his method as “historico-critical” and credits Mach with its inspiration. Here he must have in mind especially Mach’s The Science of Mechanics in Its Development: Historico-Critically Presented (first German edition, 1883). Banks’s version of the method, like Mach’s, involves engaging both philosophy and science. As he put it, “Most of my ideas and source materials come from rooting around in the history of science and following my interests there” (viii). At the same time, Banks is more systematically philosophical than Mach. He espouses a “naturalist philosophy,” according to which “philosophy without science is empty and science without philosophy is blind” (viii). He also believes that in “rooting around” in the history of science, he will often be uncovering the philosophical origins of scientific ideas. As he put it, “I see philosophy and science as continuous: methodological and speculative ideas that originate in philosophy, over many years, are gradually refined until they can be articulated quantitatively and tested and so become part of empirical science, at which point their origins are usually forgotten” (viii). In the present work, Banks gleans philosophical ideas from an open mixture of philosophy and science in Mach, James, and Russell, and extends those ideas in his own voice (29).

The body of the book consists in a substantial introduction, six chapters, and an appendix. The Introduction situates neutral monism in the careers of Mach, James, and Russell, develops the notion of a common “realistic empiricism” in the three authors, and articulates the metaphysics and epistemology of this position. The name “realistic empiricism” is not found in our three authors; it names the position that Banks develops through historical reconstruction. The authors themselves spoke variously of a philosophy based on the notion that the world can be constructed out of “sensations,” “elements,” “primal stuff,” “pure experiences,” or “momentary (event) particulars,” a conception dubbed “neutral monism” by Russell. (Russell so-named the position while still a critic of it, before signing on late in 1918.) The first two numbered chapters concern, respectively, Mach’s physical theories as a doctrine of elements and his philosophy of mind. Chapter 3 reconstructs James’s “direct realism” in the context of neutral monism, as articulated in articles starting from the 1904 “Does Consciousness Exist” and collected in his Essays in Radical Empiricism (1912). Chapter 4 looks at Russell’s neutral monism, from his acceptance of the position in “On Propositions” (1919), through his Analysis of Mind (1921), to his Analysis of Matter (1927) (and beyond). Chapter 5 develops Banks’s own version of “realistic empiricism,” which he also calls an “enhanced physicalism.”
Chapter 6 offers a construction of extension out of un-extended elements. An appendix gives a concise outline of the position herein labeled “realistic empiricism.”

In some previous work, Banks has offered contextualist historical accounts of Mach’s conception of what Banks calls “world elements,” and he also has developed the beginnings of what he now calls realistic empiricism. The present work lies more on the side of reconstruction than contextualist historical articulation. Accordingly, the Introduction lays out Banks’s conception of realistic empiricism in relation to interpretations he has previously developed for Mach, James, and Russell, and in relation to other notions of empiricism. The Introduction also signals ways in which Banks finds Mach (especially) to have been misinterpreted.

Mach, James, and Russell share a conception that finds sensations, elements, pure experiences, or event particulars to be basic. They claim that these elements are neither physical nor mental, but become characterizable as physical or mental when brought into the right kind of relation to other elements. Thus, Mach describes in great detail how sensations or elements, organized in one way, fall under the instrumental concept of “body”; organized another way, they fall under the concept of “self.” Thus, an item that is seen as small and hard, when it falls on a bell, is followed by a sound; when seen under a certain light, it appears red. We place this set of experiences under the concept of a persisting object, which, Mach emphasizes, is an instrumental concept for grouping the experienced elements. If we put the same elements in relation to our own perspective, we may experience the taste of coffee, followed by the sound of the bell, followed by the sight of a red item. If, while looking at the red item, we press the side of the eye, we see two red items. Here we have the sequence of elements organized in relation to the instrumental concept of the self or ego. James gives a similar example of the set of elements or pure experiences that constitute a table in a room, as opposed to a chain of experiences of an observer looking at the table. Russell echoes this analysis.

Banks has a particular conception of this position. Whereas one might believe that Mach, James, and Russell took the elements to be primitives, Banks finds there are physical forces underlying them. This theme is carried through the interpretation of the three authors and is articulated in present-day terms in Chapter 5. This suggests that Banks is interpreting the three authors as having a position akin to a dual aspect monism in which the physical side of the dual aspect is more basic. In his own account, micro-events can be shared between manifestations of elements as physical or mental. The mental arises only as a manifestation of physical events put in the right relations. This is not a form of emergentism for him, but is supported by a distinction between micro-elements and macro-manifestations.

The Introduction compares Banks’s realistic empiricism to other forms of empiricism, under four heads. First, while traditional empiricism focuses on observables and perhaps takes observables to exhaust the content of what can be thought, realistic empiricism allows elements to be posited that extrapolate in a continuous manner from the character of observed elements. Second, realistic empiricism “is not a second-order study of the methods, language, or structure of what ‘science says’” (4). It does not focus on methodology but offers a first-order theory of the real. Third, it is not an account of “the empirical content of a science,” or of “a priori structural or linguistic frameworks” (4). It is not part of the linguistic turn. Fourth, it offers an “umbrella theory” for uniting physics and psychology in a naturalistic manner that is continuous with science. From this fourfold comparison, one might foresee a theme of the book: that, however much the logical positivists might have connected themselves with Mach or claimed him as an inspiration, in Banks’s interpretation Mach is not a proto logical positivist.

Chapters 1–4 carry forward an interpretation of the neutral monists that makes the physical more basic than the psychological. For that reason, some might find that Chapters 1 and 2 violate Mach’s conception that the elements are neither physical
nor mental. Indeed, on some readings, Mach himself pushes the elements in the psychological direction by calling them “sensations” and famously saying that the world is constructed of sensations. Also of note is that, in Chapter 4, Banks pushes back against a “structuralist” reading of Russell in the *Analysis of Matter*. Banks rightly observes that Russell is willing to posit unobserved event particulars of unknown quality, which must be conceived by analogy with observed event particulars. These unobserved event particulars are posited to avoid gaps in physical thought that would occur if only observed qualities were allowed. There is merit in this case for unobserved, qualified particulars in Russell. At the same time, there is room to ask whether Russell might not have been a structuralist about the science of physics, while also acknowledging entities into his account of matter (as we conceive it) that are not captured by the structural description in physics but are posited in relation to observed qualities.

Banks has provided us with a worked-out version of neutral monism that renders it as a form of physical realism. In so-doing, he offers a conception of Mach that acknowledges him as a figure of interest, apart from any inspiration that he may have given to logical empiricism. The book also directs wanted attention to the development of Russell’s thought after his conversion to neutral monism. And there are other insights to be gained from portions of the book not detailed here. Historians and philosophers of science interested in nineteenth- and early twentieth-century physics and psychology should find much to engage with in this work.

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