

Thomas Uebel and Christoph Limbeck-Lilienau (Eds.). *The Routledge Handbook of Logical Empiricism*. Routledge 2021. 424 pp. \$250.00 USD (Hardcover ISBN 9781138122000).

Many curious things can happen to a philosophical movement, but as we do not seem to develop actual philosophical panopticons yet, the most prestigious event is getting ‘handbooked.’ That is exactly what happened recently to logical empiricism (meaning the same here as logical positivism and abbreviated as LE). After a major Cambridge Companion that was published exactly fifteen years ago, an even bigger *Routledge Handbook of Logical Empiricism* was undertaken this time by Thomas Uebel and Christoph Limbeck-Lilienau.

Logical empiricism was a strange, unique, and powerful movement, ranging with its sources, main activities, and direct influences through the twentieth century, but operating daily between the early 1920s and late 1960s, first in Europe, then in North America. A group of scientifically minded philosophers and philosophically inclined scientists, mainly in Vienna and Berlin, but with intellectual children and relatives in France, Italy, England, Poland, and the Scandinavian regions, tried to revolutionize the ideal and practice of philosophy, by injecting some revolutionary science into it with some socially engaged oil. That much we can say surely, although many would already warn us about certain reservations (what science, what measures, what sociality, and why?). Logical empiricism was always a hard nut to crack regarding its own definition, emic and ethic understanding. This, up to a certain point, can be seen as its strength (allowing different methodologies, fields, moves, and trajectories) and as its weakness (resulting in fierce internal debates, backstabbing campaigns, and numerous external misunderstandings). What is still taken for a certainty is logical empiricism’s transformative role in the history of scientific and analytic philosophy, perhaps also within the broader cultural life of ‘Westernity’ (sometimes for the good, other times for the worse).

The *Handbook* is structured around four major parts and themes. The first concerns ‘the cultural, scientific, and philosophical context and the development of logical empiricism.’ In this part, the reader gets acquainted with the major sources of and influence on the individual logical empiricists, and the movement get situated within the then-available alternative positions. The usual suspects are well represented here by Michael Stöltzner (on the crisis in physics), Matthias Neuber (neo-Kantianism), Elisabeth Nemeth (Ernst Mach), Anastasios Brenner (French conventionalism), and Fynn Ole Engler (Einstein).

The second part concerns the ‘characteristic theses of and specific issues in logical empiricism.’ As an important and systematic section of the book, the basic concepts and problems that logical empiricists dealt with for decades are discussed in a condensed but still comprehensive manner. Chapters are devoted to logic and mathematics (Erich Reck), truth (Pierre Wagner), verificationism (James Justus), noncognitivism (Anne Siegetsleitner), unity of science (Jordi Cat), explanation (Stathis Psillos), theory of science (William Demopoulos), probability (Marta Sznajder), induction (Flavia Padovani), confirmation (Jan Sprenger), and ontology (Gregory Lavers).

Just as concepts and problems defined LE in Europe and in the United States, the movement often defined itself in relation to other contemporary movements, both similar and dissimilar. One



could hardly imagine a volume about LE without Wittgenstein and we are not left hungry by Johannes Friedl; Matthias Neuber considers Cassirer, while Artur Koterski discusses Popper and his students; as usual, Jan Woleński presents the Lvov-Warsaw School, and Ilkka Niiniluoto the Northern European influences. The Anglophone reception (by Christopher Pincock) and the pragmatist leanings and forerunners (by Massimo Ferrari) each earn a chapter.

Finally, the fourth part of the volume tries to measure the legacy of LE across disciplines and fields. Richard Creath dissolves certain myths about Quine, Gürol Irzik puts Kuhn in his place in the story, Thomas Uebel sheds comprehensive light on his ‘bipartite metatheory’ reading, while Alan Richardson tries to redefine the North American scene and the notion of legacy and influence.

There are many well-known names, topics, problems, and historical achievements here. Nonetheless, every part contains a few gems that reveal further layers, making the reader wonder about the fate and future of LE, as well as which of its genuine sources were hidden in the shadows for philosophical comfort and historical ease.

In Part 1, Hans-Joachim Dahms reconstructs the sources of LE within the German Youth Movement, a revolutionary gathering of young German boys and girls who tried to redefine themselves along cultural and political lines, involving Carnap, Reichenbach, Neurath and others. Christian Damböck takes a new turn in the historicism and *Geisteswissenschaften* debate and relates Carnap and Neurath to Dilthey and others, showing the early richness of the movement. Michael Heidelberg shows what LE owes to Hermann von Helmholtz, and Mark Textor does the same with Bolzano and Brentano. Christoph-Limbeck Lilienau reconstructs the precursors to LE within the first circle of Neurath, Frank, and Hahn, and the Erlangen conference from 1923 (which was Carnap’s and Reichenbach’s endeavor). We get some institutional history as well from Friedrich Stadler (the Ernst Mach Society) and from Nikolay Milkov (Society for Scientific Philosophy in Berlin), and finally women in LE got the well-deserved attention from Frederique Janssen-Lauret.

Although the second part mainly covers the well-known topics, relatively new or less treated topics are included as well: thus David J. Stump discusses the relative *a priori* (which might be considered as the motor behind the whole rehabilitation of LE), nonstandard logicism is discussed by Georg Schiemer, the seemingly metaphysical mind-body problem by Sean Crawford, but most interestingly, political economy by John O’Neill. The last topic shows the enduring influence and legacy of Neurath that surely needs to be considered by everyone working on LE.

In the last part of the volume, treating the post-positivist critics and legacy, what the reader could find refreshing and amusing is how A.W. Carus broadens our picture of Carnap and places him on the scale of history of philosophy, discussing reason from Plato to Kant. Another very new issue is Sahotra Sarkar’s take on formal epistemology and how it relates to LE.

What can the interested reader learn from this *Handbook*? All chapters show that the majority of the LE theses were dropped mainly because of their internal difficulties, though in many cases the philosophical climate simply changed in a direction that did not favor certain proposals and issues anymore. LE was a highly misunderstood movement, both in life and after its death. This book neatly presents how these theses contributed both to the received views of LE (while also clarifying them) and to its reevaluation in the last few decades. There is much to learn here.

It must have been a hard task to select all the topics to be discussed in such a handbook. LE was a highly diverse, far-reaching, and ramified movement, with lots of spin-offs, intentional and inadvertent consequences, to say nothing of all the inner members, external members, loose associates, friendly visitors, constructive critics, and haters who influenced people in Vienna and Berlin. Thankfully, Uebel and Limbeck-Lilieneau do a fine job in selecting the well-respected authors who started the rehabilitation of LE as well as some younger scholars, who could write about all the old and the new topics, producing a fine balance. The volume's general perspective is something that could be tagged as 'new conservatism': selecting new and largely forgotten topics and perspectives that emerged just recently and conserving them by handbooking them now. One should not discuss LE in general without taking stock of the youth movement, ecology, rationality, continental philosophy, and female scholars.

Nonetheless, one should express a little disappointment over missing topics and names – keeping in mind, of course, that every handbook is selective, and decisions have to be made; the question is whether the balance turns out to be more conservative or more refreshing. Philipp Frank, Edgar Zilsel, Viktor Kraft, and Friedrich Waismann are obviously the names which are either entirely missing, or just mentioned here and there, although – apart from Kraft – all are just coming back into the literature. As for missing topics, though unity and reductionism are discussed in the volume, the unity of science as a socio-political movement with various turns and trajectories in Europe and America is painfully missing, along with a detailed take on the scientific world-conception and the politics of LE. Hints are there, of course, but perhaps there is already too much in the volume to complain about what else could have been included.

All in all, *The Routledge Handbook of Logical Empiricism* is a must-have for everybody who wants to be introduced to logical empiricism or have a quick and comprehensive view of its context and theses. It is also a very useful undertaking for anybody who is already familiar with the major names and issues, but would like to have a more general picture, and something on the bookshelf to consult when needed.

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