

Book Reviews

JOSEPH E. BRENNER, **Logic in Reality**, Springer, 2008, ISBN 978-1-4020-8374-7, XXII, 362 pp., hardcover, US\$174.57.

Has logic anything to do with reality? This is probably the most often asked question by the first year philosophy students. Joseph Brenner in his book tries not only to give an affirmative answer to this question but also offers his own approach to logic, an approach that is supposed to fit reality in the most appropriate way. To accomplish this he starts with reality itself. He examines the relationships between the three disciplines that in his opinion are concerned with the description of reality: ontology, metaphysics, and logic.

For Brenner, reality operates according to the principle of change (based on the dynamic opposition and contradiction) which he considers a logical principle. This attitude subscribes to the dialectical point of view represented by a strong group of logicians (Graham Priest among them) whose philosophy rests on the belief in true contradictions. But Brenner goes even further. For him “The real world is only possible because it is conditionally logically contradictory, that is, partly inconsistent [...]. A world that is totally non-contradictory is an abstract entity” (p. 134).

This large volume (362 pages of small print) consists of introduction, eight chapters, conclusion, and two appendices. First, Brenner introduces his logic of-and-in reality (LIR) as a non-propositional calculus together with its ontology. His objective is to use them in order to provide some important insights into aspects of reality, in particular to define the basis and structure of a relation between reality and appearance. Then, he goes on to survey a vast number of existing theories, trying to find a way to support their

insights and intuitions or to refute them, looking at the matter from the LIR's viewpoint.

The range of subjects, areas, and notions that Brenner deals with is tremendous: most of the non-classical logics, truth theory, energy, mathematical physics, quantum theory, mereology, set theory, gestalt theory, catastrophe theory, probability, differential calculus, continuum hypothesis, statistics, laws of nature, philosophy of mind, time, space, relativity theory, cosmology, evolution, thermodynamics, and cybernetics. A reader of those parts of this book may feel helpless, and overwhelmed. Especially while reading those sections and paragraphs that are packed with statements of what LIR can do in all those areas, and do not allow space for a thorough justification.

As for the "logical" part of the book, one must say that it leaves the reader far from being satisfied. The formal part of the system of LIR is presented in more descriptive than analytical way, so that the reader misses the opportunity to experience how it actually works. Besides, the formalism introduced in Chapter 2 is never seriously used in the chapters that follow. (I have a strong impression that the book could do perfectly well without Chapter 2) For this reason it is not a book on logic but a book on philosophy with logic as one of the key words in it.

This book should not be treated as a complete piece of work. It is an invitation to a wider discussion rather than a conclusion of a discussion. This is an attempt rather than a solution. Many of the theses presented there are either controversial ("[...] the limitations of logic to linguistic concepts, which do not and in fact cannot apply to real entities, should be removed" (sp. XVIII)) or too general ("[...] dualities that are ontological predicates of LIR [...] all characterize or are inherent in energy, in all its forms" (p. 99)). As such they require competent responses from the community of philosophers who work in this field. Some of the responses might be devastating, but those should be welcomed by Joseph Brenner, since they belong to the LIR's category of dynamic opposition—considered by him the most important formal category.

Summing things up, *Logic in Reality* is a book that contains an abundance of information, hard to assimilate by an unprepared reader. It is a challenging read.

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