Book Review

Mark van Atten. *On Brouwer*. Wadsworth Philosophers Series. Wadsworth/Thomson Learning, Belmont, 2004. viii + 95 pages.

1 Introduction

Mark van Atten's *On Brouwer* in the Wadsworth Philosophers Series is the most important introduction to Brouwerian intuitionism since the appearance of Arend Heyting's *Intuitionism. An Introduction* in 1956. Within the very small compass of 84 text pages, van Atten manages to convey a strong sense of the spirit of Brouwer's enterprise. Although, by his own admission, he does not attempt to convey the entire extent of Brouwer's philosophical views, leaving aside in particular "his mysticism, his philosophy of natural language, and the applicability of intuitionistic mathematics to the natural sciences" (p. vii), nonetheless, van Atten's presentation of Brouwer's views in the philosophy of mathematics proper does not suffer unduly from the limited number of pages. In considerable part this is a function of van Atten's strong focus on the "creating subject" as a central notion which ties together the development of Brouwer's career in intuitionistic mathematics. "At the beginning, the notion of the creating subject was already present but mostly implicitly so; the development of Brouwer's intuitionism consisted in the unfolding of this notion" (ibid.).

Van Atten's text is divided into six chapters, all but the fourth of which is suitable for a guided introduction to intuitionism at the upper undergraduate or postgraduate level; indeed, the author of this essay has used van Atten's volume in this way to (apparently) good effect. The fourth chapter, "Brouwer's Proof of the Bar Theorem," is considerably more challenging, despite van Atten's insistence that although Brouwer's proof of the bar theorem "is a bit technical, it is not particularly difficult" (p. 41). Although it is a pity to omit the chapter, since it is in a considerable sense the centerpiece of the volume, the omission does not seriously impair the flow of reading and there are only a few places in the last two chapters where points rely on references back to the proof of the bar theorem and its corollary, the fan theorem.