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# Revolutions in Mathematics

Donald Gillies (ed.)

Oxford University Press (1992)

## Authors



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## Abstract

Social revolutions--that is critical periods of decisive, qualitative change--are a commonly acknowledged historical fact. But can the idea of revolutionary upheaval be extended to the world of ideas and theoretical debate? The publication of Kuhn's *The Structure of Scientific Revolutions* in 1962 led to an exciting discussion of revolutions in the natural sciences. A fascinating, but little known, off-shoot of this was a debate which began in the United States in the mid-1970's as to whether the concept of revolution could be applied to mathematics as well as science. Michael Grove declared that revolutions never occur in mathematics, while Joseph Dauben argued that there have been mathematical revolutions and gave some examples. This book is the first comprehensive examination of the question. It reprints the original papers of Grove, Dauben, and Mehrtens, together with additional chapters giving their current views. To this are added new contributions from nine further experts in the history of mathematics, who each discuss an important episode and consider whether it was a revolution. The whole question of mathematical revolutions is thus examined comprehensively and from a variety of perspectives. This thought-provoking volume will interest mathematicians, philosophers, and historians alike.

## Keywords

[Mathematics Philosophy](#) [Mathematics History](#)

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Thomas Kuhn in 20th Century Philosophy

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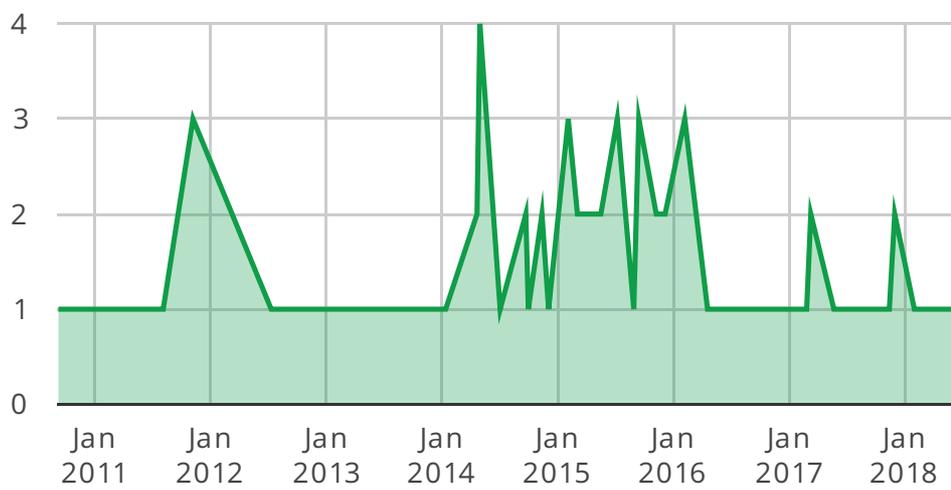
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