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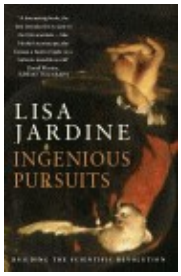
Reviews

'Ingenious Pursuits'

reviewed by Julia Hawkins



Ingenious Pursuits: Building the scientific revolution

by Lisa Jardine

Reviewed by Julia Hawkins (Millennium Mathematics Project)

Professor Jardine's latest book is a broad survey of a remarkable period in history, the so−called Scientific Revolution. The premise of Jardine's narrative is that we currently live on one side or the other of a gulf in understanding between the sciences and the arts − the so−called "Two Cultures" defined by C P Snow − and her aim is to show, by illustrating the roots of modern science, that this cultural divide is a modern construct. Jardine therefore focuses her attention on the overlap and interchange of science, mathematics and the arts throughout the intellectual ferment of the seventeenth and eighteenth centuries.

The book does not deal solely with mathematics, although it naturally devotes considerable attention to the remarkable mathematical advances made during the period by Newton, Halley, Kepler and Galileo, among many others. By placing these discoveries and advances in context it becomes possible to gain far more appreciation of the intellectual climate of the time and the background against which these mathematical discoveries were made.

Jardine is particularly accomplished at unravelling the symbiotic relationship between the huge strides in science and mathematics during the period and the development of trade and the commercial sector. Equally, she reveals the often murky motivations behind advances in scientific knowledge, such as the close

intertwinings of Newton's mathematical and astronomical discoveries with his interest in the occult and preoccupation with foretelling the future, and sheds light on the interplay of personalities and the impact of politics and funding crises (even then!) on scientific research.

The book is lavishly and beautifully illustrated and highly readable. If one had a criticism, it might be that it is a little too superficial − to some extent this is perhaps inevitable, given the huge span of the subject matter. The narrative will help to place scientific and mathematical advances in context rather than focussing on a detailed exploration of the nature of the discoveries themselves. (Clearly, this is a perfectly valid approach, but it might have been interesting, for example, during a discussion of the discovery of the catenary curve in 1691 by Leibniz, Huygens and Bernouilli and its subsequent revolutionary architectural application in the dome of St Paul's, to have actually included the equation in the text − although we do get an illustration from Huygens' 1646 paper.) However, for a reader interested in a broad overview of the period, it is a fascinating and entertaining survey.

Book details:

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Lisa Jardine
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