

Preface

THESE ESSAYS ARE BASED ON LECTURES delivered at a one-day conference at the British Academy in March 1998. The series to which they belong was created by a bequest from George Dawes Hicks (1862–1941), who was Professor of Moral Philosophy at University College London from 1903 to 1928. He was elected FBA in 1927, and a memoir by W. G. de Burgh is to be found in the Academy's *Proceedings*, volume 27 (1941). Hicks believed passionately that contemporary philosophy should be approached through its historical antecedents. (Indeed, at times he resembled a bowler who takes such a long run-up that he never actually reaches the crease.) Not surprisingly, he stipulated that the lectures he endowed were to be on the history of philosophy, ancient or modern.

Two of the present pieces engage directly with mathematics and mathematical proofs; the third relates to the inerrancy that goes with proofs and the necessity that belongs to their conclusions. But they are not to be read as contributions to a work on the philosophy of mathematics and logic — they all fall squarely under Hicks's rubric.

Why, asks M. F. Burnyeat, did Plato make mathematics the core curriculum for the future rulers of his Utopia, with a decade of training in arithmetic, geometry, astronomy, and harmonics? More to the point, why these particular branches of mathematics? Because, Burnyeat says, the structures abstractly studied in these subjects, especially harmonics, are the very structures that the rulers are to establish in the ideal city and the souls of its citizens. For Plato had a distinctively non-modern version of a vision that many later philosophers have partially shared: a vision of the world as it is objectively speaking. Value is out there as part of 'the furniture of

the world' because mathematical proportion is there, and mathematical proportion is the chief expression of the objective goodness of the design of the Divine Craftsman, who wants the cosmos to be as like himself as material circumstances allow.

Why, asks Ian Hacking, is mathematics so central to the history of Western philosophy? Because, he replies, some of the great philosophers have been overwhelmed by their experience of live mathematics, especially the experience of grasping a proof. As a result, both philosopher-mathematicians such as Descartes and Leibniz and onlookers like Plato and Wittgenstein have generalised from these experiences to the whole field of knowledge or the whole of philosophy. Hacking argues, too, that it was reflection on these mathematical experiences that gave substance to the capital terms of art — a priori, necessary, analytic — that have been applied across the board and even thoughtlessly lumped together.

How, finally, do we acquire modal knowledge — information about which things are necessary, or possible, and which not? 'By reason' was a common answer among early modern philosophers, but how is reason supposed to give us such knowledge? Jonathan Bennett scrutinises the account of modal knowledge offered by Locke, and two accounts offered by Leibniz, and finds them wanting. He believes that we still have no good account and that the problem is insoluble without a return to an 'idealist' metaphysics of modality of the sort announced and defended, albeit briefly, by Descartes.

The Editor would like to thank Rosemary Lambeth for her work in arranging the Dawes Hicks conference, the Academy's publications staff for their work in arranging the publication of this volume, and Mrs Elizabeth Teague for her skilful copy-editing.

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