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978-0-521-87951-4 - The Science of Harmonics in Classical Greece

Andrew Barker

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THE SCIENCE OF HARMONICS IN CLASSICAL GREECE

The ancient science of harmonics investigates the arrangements of pitched sounds which form the basis of musical melody, and the principles which govern them. It was the most important branch of Greek musical theory, studied by philosophers, mathematicians and astronomers as well as by musical specialists. This book examines its development during the period when its central ideas and rival schools of thought were established, laying the foundations for the speculations of later antiquity, the Middle Ages and the Renaissance. It concentrates particularly on the theorists' methods and purposes and the controversies that their various approaches to the subject provoked. It also seeks to locate the discipline within the broader cultural environment of the period; and it investigates, sometimes with surprising results, the ways in which the theorists' work draws on and in some cases influences that of philosophers and other intellectuals.

ANDREW BARKER is Professor of Classics in the Institute of Archaeology and Antiquity at the University of Birmingham.

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O dear white children, casual as birds,
Playing among the ruined languages,
So small beside their large confusing words,
So gay against the greater silences . . .

W. H. Auden, *Hymn to Saint Cecilia*

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Preface

I did most of the research for this book and wrote the first draft during my tenure of a British Academy Research Professorship in the Humanities in 2000–2003. It was a great privilege to be awarded this position, and I am deeply indebted to the Academy for its generous support of my work, which would otherwise have been done even more slowly or not at all. I am grateful also to the University of Birmingham for freeing me from my regular duties for an extended period. In that connection I should like to offer special thanks, coupled with sympathy, to Matthew Fox, for uncomplainingly taking over my role as Head of Department at a particularly difficult time, and to Elena Theodorakopoulos, Niall Livingstone and Diana Spencer for shouldering a sack-full of other tasks that would normally have come my way. Many others have been splendid sources of help, encouragement and advice. I cannot mention them all, but here is a Mighty Handful whose members have played essential parts, whether they know it or not: Geoffrey Lloyd, Malcolm Schofield, David Sedley, Ken Dowden, Carl Huffman, Alan Bowen, André Barbera, Franca Perusino, Eleonora Rocconi, Donatella Restani, Annie Bélis, Angelo Meriani, David Creese, Egert Pöhlmann, Panos Vlagopoulos, Charis Xanthoudakis. My sincere thanks to all these excellent friends. Jim Porter and another (anonymous) reader for the Press read two versions of the entire typescript in draft; without their comments, to which I have done my best to respond, the book would have been a good deal less satisfactory than it is. I appreciate the magnitude of the task they generously undertook, and though they added substantially to my labours I am exceedingly grateful for theirs. This is the fourth book of mine to which the staff of Cambridge University Press have served as midwives, and they have amply lived up to the standards of efficiency, courtesy and patience which I have come to expect and appreciate. My thanks to all concerned on this occasion, and especially to my admirable copy-editor, Linda Woodward, both for her careful work on the lengthy typescript and for the gratifying interest she took in its contents. Thanks, too, to my

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oldest son, Jonathan Barker, who showed me how to solve certain vexing mathematical conundrums; and as always, to the rest of my family and especially my wife, Jill, for their continuing patience and encouragement.

I can only regret that David Fowler is no longer here to be thanked. His untimely death has deprived me and many others of a friend and colleague whose enthusiasm and insatiable curiosity were infectious and inspiring, and whose lively and sympathetic humanity put some warmth and light into this cynical world. He was one of the most charming people who ever trod the earth, and he will be sadly missed.