

# *Archimedes*

*Volume 9*

# Archimedes

NEW STUDIES IN THE HISTORY AND PHILOSOPHY OF  
SCIENCE AND TECHNOLOGY

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VOLUME 9

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# Lenses and Waves

Christiaan Huygens and the Mathematical Science  
of Optics in the Seventeenth Century

*by*

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# Preface

“Le doute fait peine a l’esprit.  
C’est pourquoy tout le monde  
se range volontiers a l’opinion de ceux  
qui pretendent avoir trouvè la certitude.”<sup>1</sup>

This book evolved out of the dissertation that I defended on April 1, 1999 at the University of Twente. At the successive stages of its development critical readers have cast doubts on my argument. It has not troubled my mind; on the contrary, they enabled me to improve my argument in ways I could not have managed on my own. So, I want to thank Floris Cohen, Alan Shapiro, Jed Buchwald, Joella Yoder, and many others. Most of all, however, I have to thank Casper Hakfoort, who saw the final text of my dissertation but did not live to witness my defence and the further development of this study of optics in the seventeenth century.

This book would not have been possible without NWO (Netherlands Organisation for Scientific Research) and NACEE (Netherlands American Commission for Educational Exchange) who supplied me with a travel grant and a Fulbright grant, respectively, to work with Alan Shapiro in Minneapolis. The book would also not have been possible without the willingness of Kluwer Publishers and Jed Buchwald to include it in the Archimedes Series, and the unrelenting efforts of Charles Erkelens to see it through.

During the years this text accompanied my professional and personal doings, numerous people have helped me grow professionally and personally. I want to thank Peter-Paul Verbeek, John Heymans, Petra Bruulsema, Kai Barth, Albert van Helden, Rienk Vermij, Paul Lauxtermann, Lissa Roberts, and many, many others.

Still, the idea to study Huygens and his optics would not have even germinated – let alone that this book would have matured – without my life companion, Anne, with whom I now share a much more valuable creation. Thank you.

Fokko Jan Dijksterhuis  
Calgary, June 2004

This book is dedicated to Casper Hakfoort  
In memory of Lies Dijksterhuis

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<sup>1</sup> Undated note by Christiaan Huygens (probably 1686 or 1687), *OC21*, 342