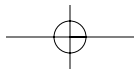
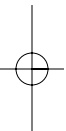


THE ACCADEMIA DEL CIMENTO



THE ACCADEMIA DEL CIMENTO

*and its
European Context*



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ANTONIO CLERICUZIO
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Editors

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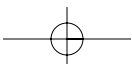
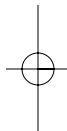
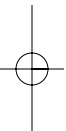
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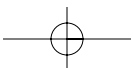
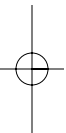
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Acknowledgements

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Introduction

The significance of scientific groups, societies, and other gatherings in the development of early modern science is well-established. The past fifty years have seen numerous volumes devoted to various aspects of the early history of the major national academies, such as the Royal Society of London and the Académie Royale des Sciences, and many more are undoubtedly forthcoming. The publication, now almost forty years ago, of W. E. Knowles Middleton's seminal study *The Experimenters: A Study of the Accademia del Cimento*, established for historians of science the position of the Florentine academy among the important scientific organizations of the period. More recent publications, in the form of both articles and books, by several contributors to this volume and by others have further extended our knowledge and understanding of the Cimento. But more work remains to be done and disseminated, since comparatively less attention has been paid to early modern Italian academies (at least in the anglophone literature) than to their Northern siblings.

Some reasons for this situation are not difficult to identify. Most obviously, the national French and English academies were (or rather, have been) longer-lived and more populous entities. But some factors disadvantageous to the Cimento date from its own era. Perhaps most notably, the Accademia's sole corporate publication, the *Saggi di naturali esperienze* was not only delayed in its publication by several years, but also presented a selective or restricted view of the Cimento's activities, and moreover, was compiled rather halfheartedly by one who did not fully share the academicians' keen commitment to experimental science. Furthermore, the more or less nationalistic portrayals of the origins and labors of the Royal Society by its secretary Henry Oldenburg (among others) and of the Académie Royale by its *secrétaire perpétuel* Bernard de Fontenelle, tended to gloss over or even to misrepresent the Cimento and its work in an attempt to cast greater luster upon their own societies, their histories and contributions. More recently, standard twentieth-century narratives of the Scientific Revolution, by tracing a trajectory for early modern science that departs from Italy scarcely to return after the death of Galileo, accordingly led to a diminished attention to Italian developments—such as the Cimento—that date from the second half of the seventeenth century. Nonetheless, the Cimento's clear emphasis on experiment

and collaborative work places it squarely in the mainstream of early scientific societies.

The papers that follow in this volume take Cimento studies in several new directions. The first half of the volume expands our view of the Cimento's activities in two ways. First, these papers display a greater diversity to both the Cimento's scientific activities and its intellectual sources than has been widely recognized. The emphasis on physics evident in the *Saggi* does not, for example, represent the substantial work of the academicians in chemistry, anatomy, astronomy, medicine, the life sciences, and other areas. Likewise, the apparent emphasis on experiment of a Baconian sort may serve to hide the theoretical or explanatory systems drawn upon and developed by academicians, and within the context of which the Cimento's experiments were designed, viewed, and interpreted. Second, several papers examine more closely particular individuals who were connected with the Cimento. Owing to the Cimento's rather loose structure and its short period of formal activity, it proves necessary to examine the concurrent and subsequent careers and activities of those connected with the academy in order to flesh out a fuller understanding of the institution's activities and impact. Thus, many papers in this volume study the broader context of Cimento academicians, including (most prominently) Giovanni Alfonso Borelli as well as Antonio Oliva, Marcello Malpighi, Francesco Redi, Carlo Rinaldini, Niels Stensen, and others, as well as the activities of the circle of natural philosophers operating in Pisa, heirs to the Cimento's legacy, such as Carlo Fracassati, Alessandro Marchetti, Lorenzo Bellini, and Donato Rossetti.

The second half of the volume resituates the Accademia del Cimento in the broader context of seventeenth-century scientific academies and the republic of letters. The example and experience of the Cimento influenced, and can be profitably compared with, similar institutions set up in Rome, Bologna, Naples, London, Paris, and in a more diffuse sense, all across Europe. One common message here is the importance of correspondence networks that linked together—or endeavored to link together—scholars residing in widely separated geographical locales. While some of these connections succeeded in creating important links and exchanges within a far-flung *respublica litteraria*, others proved resistant to serious development, often owing to priority concerns, or to personal or political dissonances. Yet there remains a sense of a commonality of purpose and endeavor linking the natural philosophical academies of the late seventeenth century, in part the expression of jointly-held commitments and goals. Additionally, the specific connections forged between members of the Cimento (both during and after the period of the Accademia's activity) and scholars elsewhere in Italy or further afield in Europe points out the danger of thinking about societies in too rigidly “institutional” or blandly sociological a sense. Especially in the case of the Cimento, which was largely free from formalized structure and established rules, a due understanding must come from a compilation of close studies of individuals

active within it, as exemplified by the papers in this volume. For such societies were themselves compilations of individuals who, despite the commonalities that bound them together, nevertheless often held divergent, even opposing, views on various subjects and practices, and who moreover forged unique (but overlapping) constellations of correspondents and collaborators with themselves—and not the institution itself—at their center.

The work of evaluating the activities and place of the Accademia del Cimento is aided by the survival of substantial artifacts and records from the period of its activity. Far from being restricted to the official accounts of the *Saggi*, scholars have many other sources of historical information. Besides the materials published already in the eighteenth century by Giovanni Targioni Tozzetti and others, a large amount of unedited manuscript material is preserved in Florence, and indeed, new sources of information continue to be uncovered in various archival deposits, as more than one of the following papers bears out. Additionally, the extensive survival of experimental apparatus from the Cimento's work is virtually unparalleled in the case of any other experimental enterprise of the seventeenth century; these items are on deposit at the Institute and Museum of the History of Science in Florence.

Most prominently in regard to documentary sources, we are pleased to announce that within the context of the celebration of the 350th anniversary of the foundation of the Accademia del Cimento (of which this volume forms a part), the Institute and Museum of the History of Science in Florence has made a huge cache of material available for on-line consultation. The new website includes the most important editions and translations of the *Saggi di naturali esperienze* published in 1667 by Lorenzo Magalotti, as well as 1,725 manuscripts relating to the Accademia del Cimento that are preserved at the National Library in Florence. The entire correspondence of the Cimento academicians is now easily available there; scholars are encouraged to visit the site at <http://fermi.imss.fi.it/rd/bd?progetto=583&lng=eng>.

