

MATHEMATICS AND MODESTY IN THE SOCIETY OF JESUS:
THE PROBLEMS OF CHRISTOPH GRIENBERGER

CENODOXUS: Wakeful and easeless are my days and nights, consumed in careful studies

SELF-LOVE: But time cannot consume what all men's praises render immortal.

CENODOXUS: Yet how easily such honours can be gained. My life's whole purpose is therefore this: by glorious deeds to ensure that I and all my glory never perish. This die I've cast.¹

MODESTY

In 1609 Jakob Bidermann's "Comico-Tragedy" *Cenodoxus, or the Doctor of Paris* was performed on the stage of the Jesuit college in Munich. The play, first produced seven years earlier in Augsburg, deals with the story of a Parisian scholar who, despite maintaining an ascetic public demeanour, privately prided himself on his unparalleled erudition. In Bidermann's graphic account, based loosely on the legend of St Bruno, the eleventh-century founder of the Carthusian order, Cenodoxus, recast as a Renaissance humanist, is finally condemned to eternal torment for the sin of *kenodoxia* or vaingloriousness.² The Munich production of the play provoked a memorable reaction, described in the preface to the first collected edition of Bidermann's dramatic works.³ At first the audience laughed at the opening comic scenes, but as the play progressed the mood gradually changed to one of astonishment and horror as the spectators realised the enormity of the sins portrayed and became aware of the power of hell. By the end of the play, the terrified members of the audience were contemplating their own sins in stunned silence. The impact of the play was immediate. Fourteen members of the audience went into retreat to perform the *Spiritual Exercises* of St Ignatius, just as in the play Bruno had retreated into the wilderness to found his monastery and lead a life of spiritual contemplation. The actor who played Cenodoxus himself then joined a Jesuit novitiate, and passed the rest of his life in the religious modesty of the Society of Jesus.⁴

It is difficult to find a more poignant example of the way the Jesuit order in general, and the Jesuit spiritual teachings embodied in the *Spiritual Exercises* in particular, were perceived amongst the ruling elites of early modern Europe as constituting a powerful antidote to pride, *superbia*, or vaingloriousness. Ignatius

himself, following Gregory the Great and Thomas Aquinas, frequently emphasized the interdependence of modesty and obedience in his writings, arguing that disobedience, the ultimate enemy of the social fabric of the Jesuit order that he had founded, was an inevitable consequence of vaingloriousness.⁵ The *Rules of the Society of Jesus*, first published in 1582 as a guide to the different functions and modes of social behaviour of Jesuits, contained a series of *Rules on Modesty* attributed to Ignatius. These rules, originally composed around 1555⁶ and well entrenched by the 1580s, really amounted to rules of bodily deportment. Members of the Society, in order to display modesty, humility and religious maturity, had to keep their heads pointing straight forward, their necks inclined slightly downward. Eyes were to be kept lowered, especially when talking to others; wrinkling of the nose was to be avoided; walking more quickly than necessary was discouraged; and all gestures were to display humility and move the observer to devotion.⁷ Speech, too, was to display modesty and edification.⁸ Biographical writings about eminent Jesuits, taking their lead from Ribadeneyra's widely read biography of Ignatius,⁹ laid great emphasis on the qualities of modesty, humility, and self-abnegation advocated by the Jesuit *Constitutions* and *Rules*.

DEPORTMENT AND SCIENTIFIC PRACTICE

Before the development of societies and institutions devoted exclusively to scientific pursuits in Europe from the 1660s onwards, and the subsequent emergence of codified and tacit forms of professional ethics specific to such institutions, natural philosophers and mathematicians attempting to make novel claims about the natural world were obliged to look outside science for models of acceptable conduct in the prosecution and presentation of their work. Rather than being obliged to acquiesce into a single model of personhood, scientific practitioners were free to make their own creative synthesis from a smorgasbord of religious and courtly models, to name just two of the more obvious options. Steven Shapin has emphasized the extent to which Robert Boyle drew on the social mores of the English gentleman in order to provide a social basis for credibility in the reporting of scientific observations. In a similar vein, Mario Biagioli has argued that Galileo fashioned himself as a natural philosopher by successfully deploying the vocabulary of Medicean dynastic emblematics.¹⁰

Whereas the court environment in which Galileo worked for at least part of his life promoted visibility and authorship – the attachments of texts, inventions, and observations to a proper-name¹¹ – the cultural values promoted in the Jesuit order generally emphasized invisibility and self-abnegation, denying “authorship” to all but a relative few, denoted sometimes by the term *scriptor* in the catalogues of the Jesuit houses. Individual glory was, in general, to be shirked in favor of the collective glory of the order. In disciplining their adversaries in theological and philosophical disputes, Jesuit authors made frequent use of terms like *jactantia* and *jactatores*, using the inappropriate deportment of opponents to discredit their arguments. The playwright Jakob Bidermann himself, after the successes of his

theatrical castigations of *superbia*, was brought to Rome to act as General Revisor for Jesuit literary works, where he had the opportunity to police the humility of a large number of learned Jesuit writers in person for almost twenty years.¹²

Admittedly, many Jesuit mathematicians also worked in a courtly environment. Galileo's opponent in the dispute over sunspots, Christoph Scheiner, is one example.¹³ Nonetheless, careers such as Scheiner's manifest the deep tensions between the type of deportment suitable to a court and the ready-made, modest "personality" provided by the Jesuit prescriptive literature and inculcated through the practice of the *Spiritual Exercises*.¹⁴ Precisely for this reason I would like to look more closely in the present article at a Jesuit mathematician who worked almost exclusively within Jesuit-controlled institutions. I believe that the strategies of self-abnegation,¹⁵ deployed by Christoph Grienberger, who availed himself of every opportunity to remove his name from texts penned by him and optical and astronomical instruments designed by him and built with his own hands, can reveal much about what it was to be both a Jesuit and a skilled mathematical practitioner in the early seventeenth century. At the outset, this may appear to be a task of some difficulty, as the "person" that we would like to understand is a person who manifests himself by disappearing – erasing his tracks in the history of science with remarkable dexterity and even managing to avoid an entry in the *Dictionary of Scientific Biography*. However, through the indiscretions of some of his Jesuit colleagues, through his own epistolary confessions to his senior mathematical colleague, Christoph Clavius, and through the discovery of a significant number of anonymous manuscripts that I attribute to Grienberger (some of which are published in the appendix), the public and private selves of this elusive individual begin to emerge. Where Galileo found a source of legitimation for certain types of mathematical practice in the colorful world of the Medici court in Florence, his exact contemporary Grienberger found his Archimedean point for the upward leverage of the status of mathematics deep within the complex bureaucratic structure of the Jesuit order.

WHO WAS CHRISTOPH GRIENBERGER?

Bamberg, Bamberger, Banbergiera, Gamberger, Ghambergier, Granberger, Panberger – the list of names used by his contemporaries to refer to Christoph Grienberger goes on and on.¹⁶ Print has a tendency to fix the orthography of proper names, and Grienberger's name was one that, with the exception of a slim book of star-charts and a set of trigonometric tables,¹⁷ rarely appeared in print during his life. In approaching the question "Who was Christoph Grienberger?," I do not aim to provide anything like a biography of the sort that Charles Gillespie might have chosen to include in the DSB.¹⁸ Instead, I would like to look at how people wrote about Grienberger and how Grienberger wrote about himself. I would like to examine Grienberger's own production in terms of texts and instruments, and his moderation of the productions of others – in his work as a revisor of mathematical works written by Jesuits and in his strategies of

The New Science and Jesuit Science
Seventeenth Century Perspectives

Feingold, M. (Ed.)

2003, IX, 270 p. 18 illus., Hardcover

ISBN: 978-1-4020-0848-1