GALILEO

DECISIVE INNOVATOR

MICHAEL SHARRATT

nd Revolution





THE STRANGEST PIECE OF NEWS

ive to admit atly against to be either

t is useful to nim famous. ould now be apletely forne rests was otical instruwhich were in Italy and lculating inal of instrucprofessor at useful to the turely there ry alive for a m and, if the local society But he would

ontemporary, observed the August 1609, Id be seen on nius: Englishing accused of mself: he had rough all its y discovered rthshine that Moon looked ere a vaine of I over'. But, d physics, he

es, he did so I he followed e rare gift of son who was more or less



1 Galileo: the frontispiece of Viviani's De locis solidis (Florence, 1701).

understand. He also had a very good conceit of his own amazing abilities and was to find it difficult to allow others a share in the glory that he thought was his alone. He is most widely remembered for his brilliant but unsuccessful campaign to use the novel telescopic discoveries to gain acceptance for the (more or less) Sun-centred system of the universe proposed decades earlier by Nicolaus Copernicus (1473–1543)



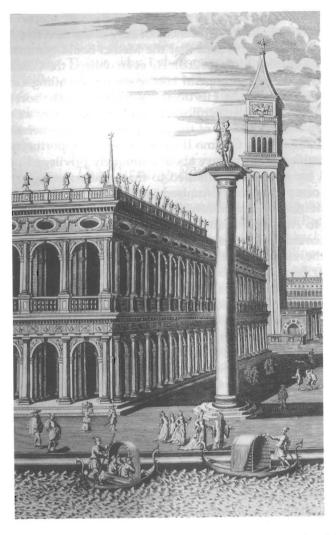
2 Galileo, from *Serie di ritratti d'uomini illustri toscani*, volume 2 (Florence, 1768).

tions of how science should be approached, questions which needed tackling if physics was ever to be emancipated from Aristotelian philosophy. His life would be simpler to write if the unhappy consequences of his commitment to Copernicanism could be given a brief mention and then disregarded, as he taught us to disregard air resistance in the free fall of heavy bodies. But that simpler life would not be

Galileo's. He responding to a vacuum: he many of his impersuasibl after he had

There was al ously though 'exceeding ri Copernicanis way Galileo Duke of Tuse the body of t publish on th promised ful must be exc motion or lig wandering a incidental re declaration. where Galile gave them b removing ar that Earth ha this seemed disappeared Sun or the E could anyon on the Earth So, though (the true syst transferring available to the true con can be said t nicanism ser that that wa

THE STRANGEST PIECE OF NEWS



3 The tower from which Galileo showed off his telescope: a detail from a view of St Mark's Square, Venice, Nouveau Théâtre d'Italie . . . sur les desseins de feu Monsieur Jean Bleau [i.e. Blaue], tome 1 (The Hague, 1724).

zecchini, on condition that it was not taken apart to discover its secret (10: 250, 255). Sarpi was appointed to examine its merits, but did not recommend purchase, doubtless because he already knew that Galileo could produce something better. Galileo did in fact come to Venice with an instrument that magnified eight or nine times and showed it off

to sever scribed i which w earlier th their disunlikely secret. Li with just would no all, quite Galileo's 115–17, 5

> This p was acci

simply co the Vene intelliger who rew step whe would be notable a point of expense a could use of copyir Galileo co makers a extent at knowleds already w and that worrying In The

plano-con mention had no re That was spygglass inverted facture as astronom oval ring

THE DIALOGUE AND GALILEO'S CONDEMNATION

ti and an device. In reports of aree could Salviati's

en Galileo cean, was ous choice dence that ntions are to Galileo tler means the early ose friends their good ase, biting urrent disould have r it should all come to ling of the iich I post-

n Galileo's the Pope's logue on the this topic, ng that the pal topic of nt tasks: to

show that

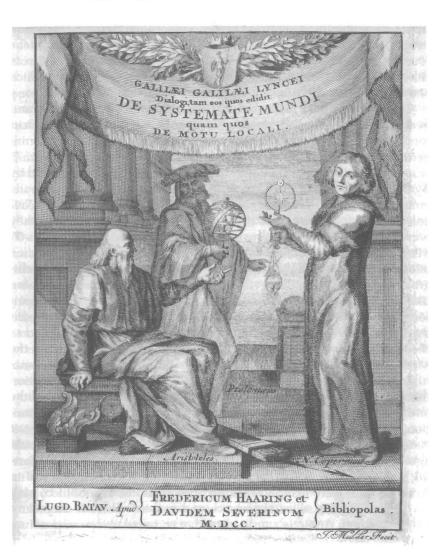
r, when the estial phend the Sun

s than did

y. This is sion arises se devoted

opernicanı the Earth

ure of the



23 The frontispiece of the Latin version of the *Dialogue* and *Discourses* (Leyden, 1700) showing Aristotle, Ptolemy and Copernicus

First Day

The contrast between the unchangeable heavens and the elementary \vee world was based on the distinction between the rectilinear motion