

Five Cheers for Galileo: “The Two Millionth Volume”

Vice President Neuhauser, Mr. and Mrs. Firenza, dear friends and colleagues:

I would like to start with special thanks to Bob O'Neill, the Burns Librarian and Chair of the Two Millionth Book Committee, and to the University Librarian Jerome Yavarkovsky, for this splendid occasion. It took from 1863 to 1987 to achieve Boston College's millionth volume, more than 124 years! But it has taken just 16 years for this great library to acquire the second millionth volume.

My brief remarks are going to consist of five cheers, five cheers for this wonderful book, Galileo's great Alle Macchie Solari.

Cheer One—for the book itself.

This is a magnificent work of art. Just come and look at it! We are justly proud at Boston College of our great rare books collection at the Burns Library. It is one of the great museums of the art of the book. And what a splendid book this is! It consists of just three letters to Galileo's special friend Mark Welser, Counselor to the Holy Roman Emperor, describing Galileo's observation of sun spots through the telescope that Galileo himself invented. Today this short book today would earn Galileo not one, but three Nobel Prizes.

First, Galileo proved by his observations of sun spots that the earth revolves on its axis. Secondly, he postulated the principle of inertia—that heavenly bodies keep moving

in perpetual motion in a universe essentially free of resistance. Third, his observations of the sun spots also confirmed that the earth revolves around the sun, not the sun around the earth. Three Nobel Prizes, all found in this little book. The science faculty here today must be deeply jealous!

Cheer Two—that this book is a gift.

This book comes to the BC Libraries as a special gift from the library of the great Italian mathematician and physicist, Pasquale Sconzo, who died in 1994. BC's Libraries have always been based on private generosity. Even before Boston College was founded in 1863, Father Joseph Shaw S.J. left his extensive library, plus \$4000, to "help found a Jesuit college in Boston." Now Pasquale Sconzo's family has given this book to Boston College in the same spirit, and in special recognition of this wonderful man. Pasquale Sconzo was born in Palermo, Italy, and became the chief scientist at the Federal Space Systems Division of IBM. There he developed the calculations for the Gemini and Apollo space missions, including the highly complex docking and space rendezvous procedures still in use by American space flights today. This extraordinary gift from his family is in recognition, not just of his brilliance, but of his kindness and generosity as a human being. I am proud to say that his daughter, Wega Firenza and her husband Angela Firenza, are with us today. Thank you so much.

Cheer Three—that this is a great book about science.

In preparing these remarks I have been looking at the extraordinary achievements of our science departments and the famous Weston Geophysical Observatory. Today, the

Biology and Physics Departments share the 80 million dollar state of the art Higgins Hall, while the Chemistry Department enjoys the wonderful new Merkert Building. Both are showcases of innovative design that encourage direct communication between the student and the empirical researcher. How appropriate it is that one of Boston College's new Rhodes Scholars is a physics major, Paul Taylor '04. The list of awards for all three of these faculties is extraordinary. The Chemistry Faculty this year alone won five major national honors, including the Cope Award, the Novartis Award, the Pfizer Award, the National Jesuit Book Award, and a \$300,000 cancer research fellowship. Whether it be astrophysics, synthetic organic chemistry, cell biology, neuroscience, metathesis technology, or earthquake prediction, Boston College leads the way.

Cheer Four—that this book is by a man of faith.

Galileo, the great scientist, was a loyal Catholic to the end, and it was not easy for him. It was this very book that began Galileo's troubles with the Catholic church. The 1616 proscription barring Galileo from future publications about the Copernican theory, which may have been forged, apparently came directly from the publication of the Alle Machie Solari three years before. Galileo had attacked the great Jesuit astronomer, Christopher Scheiner, in rough terms. Even his best friends found Galileo to be a difficult and undiplomatic man. But his troubles were within the Catholic church, not with it. Galileo was not only a faithful Catholic to his death, he was supported for most of his life by papal stipends and other ecclesiastical offices, and some of his greatest supporters, including the Dominican Thomaso Campanella, were churchmen. (Thomaso

Campanella looked exactly like our former Executive Vice President, Frank Campanella!) Pope Paul V himself took a personal interest in Galileo's support.

But Galileo had his enemies, too, and he was deposed by the Roman Inquisition four times. He was finally sentenced to indefinite home arrest—an imprisonment that lasted to his death. But Galileo never lost his faith in the Church itself. In 1632, under an intense interrogation that lasted two weeks, Galileo said, "Do not make me say I have not been a good Catholic for I have been one and will remain one no matter what my enemies say." To its everlasting credit, his Church never renounced him as a heretic. The Pope Urban VIII sent a special blessing to Galileo as a dying old man, and Galileo was buried in sacred ground at Santa Croce in Florence.

Cheer Five—a cheer for Boston College.

This book is a courageous and mature choice for a two millionth book. In one gesture, it unites our Catholic Jesuit heritage with a commitment to academic freedom and unfettered research. Pope John Paul, in 1979, spoke of the need to reconcile faith and science in a passionate speech before the Pontifical Academy of Sciences. His subject for that speech was Galileo. At the Pope's instruction, a special Commission was formed. In October, 1992, it vindicated Galileo, and lifted the edict of inquisition. On that occasion the Pope said something I thought was very moving. "Galileo sensed in his scientific research the presence of the Creator who, stirring in the depths of Galileo's spirit stimulated him and anticipating and assisting his intuitions." Thus did the Church

acknowledge fully and candidly its debt to its undiplomatic, combative, intransigent, courageous, brilliant and, above all, loyal son Galileo.

Thank you.