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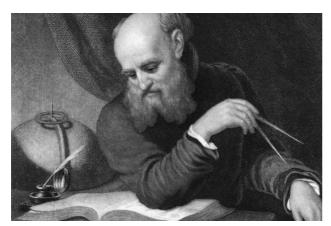
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## OPINION | COMMENTARY | HOUSES OF WORSHIP

## Galileo and the Pandemic

His lockdown in Florence complicated his relationship with the church's censors.

By Nuno Castel-Branco Dec. 30, 2021 6:25 pm ET



Galileo Galilei
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I was completing a doctorate in the history of science and technology at Johns Hopkins University in March 2020, when the pandemic upended my professional life as it has countless others. The university administration sent an email announcing the closing of campus and encouraging researchers "to focus on the activities that can be completed remotely, such as writing papers and grant proposals, and completing data analysis."

It will take years to understand the full implications of asking scientists around the world to isolate themselves and do science from home. But one of the most famous and <a href="mailto:misunderstood">misunderstood</a> trials of history—the Galileo affair—offers some hints of what the global lockdowns may mean for the scientific community. Although commonly interpreted as a battle between science and religion, Galileo's condemnation by the Catholic Church was more complex. It also involved a book retracted

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because of a pandemic.

Early in the 17th century, a top cardinal <u>warned</u> Galileo that unless "there were a true demonstration that the sun," not the Earth, "is at the center of the world," he couldn't teach his Copernican ideas publicly. At stake was that the Scriptures "appear contrary" to it. But years later Galileo was encouraged by his <u>friend</u> Pope Urban VIII to publish his observations and theories in a book, which became known as "The Dialogue on the Two Chief World Systems."

In 1630 Galileo traveled to Rome to submit the book to the Vatican for a censorship check. The chief censor, a Dominican friar friendly to Galileo, was aware that Copernican ideas weren't supposed to be taught publicly. He probably also saw that Galileo's proof wasn't that strong. (It would take several <u>decades</u> for observational confirmation of Copernicanism to appear). Yet after asking for another opinion from one of his aides, the censor approved the book, pending some revisions. Happy with this decision, Galileo returned to Florence while the manuscript remained in Rome.

Then a plague hit Italy. Political borders closed and people stayed indoors. To make matters worse, the main sponsor of Galileo's book in Rome died around this time. Because of these restrictions, Galileo decided to publish the book closer to home. After some resistance, the censor in Rome agreed to ship the manuscript to Florence. But lockdowns complicated the process, and the book was sent in parts. When the censors in Florence received the first chapters, they saw that it already had a first approval from Rome. They didn't worry much about revisions, and the book was sent to the press even before the last parts arrived in Florence. Moreover, Galileo's extra revisions weren't read by the Roman censor.

The book finally came out, but its revision process had been highly irregular. For example, as a revision request, Galileo had to write about the scientific impossibility to confirm the Copernican hypothesis—an idea held by Pope Urban. But Galileo decided to write it in such a way that the claim that Copernicanism couldn't be proved came across as ridiculous. The pope felt betrayed on reading the book. Under the immense political and religious pressure from the continuing Thirty Years' War—the same conflict that brought the plague to Italy—the pope decided to react. "The Dialogue" was taken out of circulation, and Galileo abjured his ideas before the Roman Inquisition. He offered to write a final chapter softening his arguments, but it was too late.

If Galileo hadn't rushed the book's publication and the censors had followed the normal procedures, the book probably wouldn't have been forbidden, and the narrative of a battle between science and religion wouldn't have begun.

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Centuries later, when our lockdowns began, shifting scientists' priorities to writing-oriented tasks seemed like a good solution. And modern communications technology makes the problems that bedeviled Galileo less likely to occur. Yet a major change in work habits under a stressful situation—and prolonged physical isolation from collaborators—will always have unforeseen consequences. It will take an uncommon level of vigilance and self-scrutiny, and an understanding of history, to help predict and avoid such problems.

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