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Cover: The departure of Isis from Byblos, illustration from ‘The Myths of Ancient Egypt’ by Lewis Spence, 1917 (colour litho), Paul, Evelyn (1870–1945), Private Collection, The Stapleton Collection, Bridgeman Images.

The Holy Office in the Republic of Letters: Roman Censorship, Dutch Atlases, and the European Information Order, circa 1660

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Abstract: This essay reconstructs the story of hidden collaborations between the Amsterdam bookseller Johannes Janssonius and the Roman Inquisition in 1660. It provides evidence that the papacy tacitly permitted the circulation of an explicitly Copernican book at a surprisingly early date and that the Protestant publisher was eager to curry favor with the Holy Office by secretly submitting texts to Catholic censorship. Building on recent scholarship that depicts Catholic censors as mediators between the Church and Italian authors, the essay argues that, in the second half of the seventeenth century, they came to play a similar role in an international, multiconfessional context. Censorship should not be construed merely as an external force, impeding the creation and communication of knowledge; it was an integral component of the European information order, shaping scholarship and how it moved. The Holy Office was a node in the Republic of Letters.

INTRODUCTION: SCIENCE, CENSORSHIP, COMMERCE

The *Celestial Atlas, or Universal Harmony*, by Andreas Cellarius is one of the most recognizable works in the history of science, its spectacular star maps and cosmological diagrams among the most successful scientific images ever printed. First published in Amsterdam in 1660, the plates were reissued numerous times in the seventeenth and eighteenth centuries.¹ Today they are ubiquitous, illustrating countless books as well as a popular wall calendar. To offer only a few examples, they provide the cover art to the current edition of Thomas Kuhn’s

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¹ The engraved frontispiece gives the title as “Atlas Coelestis, seu Harmonia Macrosmica.” The title page has Andreas Cellarius, *Harmonia macrosmica, seu Atlas universalis et novus, totius universi creati cosmographiam generalem et novam exhibens* (Amstelodami: apud J. Janssonium, 1661). The 1660 edition is rare, and I have not seen it. See Johannes Keuning, “The Novus Atlas of Johannes Janssonius,” *Imago Mundi*, 1951, 8:71–98, esp. p. 91; and Robert van Gent, *Andreas Cellarius: Harmonia Microsmica of 1660: The Finest Atlas of the Heavens* (Los Angeles: Taschen, 2006).

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The Copernican Revolution, Peter Dear's *Revolutionizing the Sciences*, the Wiley Blackwell *Companion to the History of Science*, and two bestsellers by Dava Sobel. The atlas's images, especially its diagrams of the Ptolemaic, Tychoonian, and Copernican world systems, are well known; but the book in which they first appeared, which also contained over three hundred pages of Latin text, remains obscure.

The *Celestial Atlas* was not written for experts, and seventeenth-century astronomers and natural philosophers seem to have paid it little notice. (An exception was Christiaan Huygens, who noted that its diagrams contained errors and failed to take account of recent discoveries.) Cellarius presented his book as a kind of popularization, albeit one aimed at an elite, Latin-reading audience. Lamenting that many in the "Republic of Letters" shrank away from astronomy, put off by the difficulty of its subject matter and the rancor of its debates, he explained that his purpose was not to contribute new knowledge but, rather, to present accessibly the astronomical knowledge that others had achieved, including their contrary opinions.² In fact, the primary audience for the opulent, oversized volume consisted of wealthy bibliophiles and aficionados of cartography, who were not primarily drawn by the textual commentaries. Then, as now, the images were the main attraction. Cellarius's *Atlas* has been a famous and sought-after book but not a very influential one, which may be the reason for its neglect by historians of science. But influence is not the only measure of significance. The history of the production and reception of the *Celestial Atlas*—its text as well as its plates—rewards attention.

In 1660 the twenty-nine plates of the *Celestial Atlas* were examined by Catholic censors in Rome. This has been known for some time, thanks to a draft of a judgment (*censura*) prepared for the "Sacred Congregation" by Athanasius Kircher, which survives among the Jesuit scholar's manuscripts.³ According to Kircher, there was no reason to prohibit Cellarius's representation of the Copernican system, since it was presented as a "hypothesis," a mathematical model, not as a description of reality. (See Figure 1.) The judgment would seem to have been heeded: the book was not placed on the Index of Prohibited Books and circulated in Italy without controversy. Kircher's report provides evidence that the *Celestial Atlas* was known in Rome in the year of its publication. It also would seem to indicate that its depiction of the Copernican system raised concern among the ecclesiastical authorities, leading the Holy Office or the Congregation of the Index to solicit a review. On the basis of this document, John Heilbron has described Kircher as helping to set the Church's increasingly lenient policy toward Copernicanism after midcentury.⁴

Like others who examined this document, Heilbron assumed that it was written after the book's publication. This was not the case. The judgment was written *before* the book was published. Kircher alluded to this fact, writing that he had examined only the diagrams of the *Celestial Atlas*, not the text, and that a definitive evaluation would not be possible until the complete work appeared.⁵ Despite this statement, Heilbron understandably took it for granted that

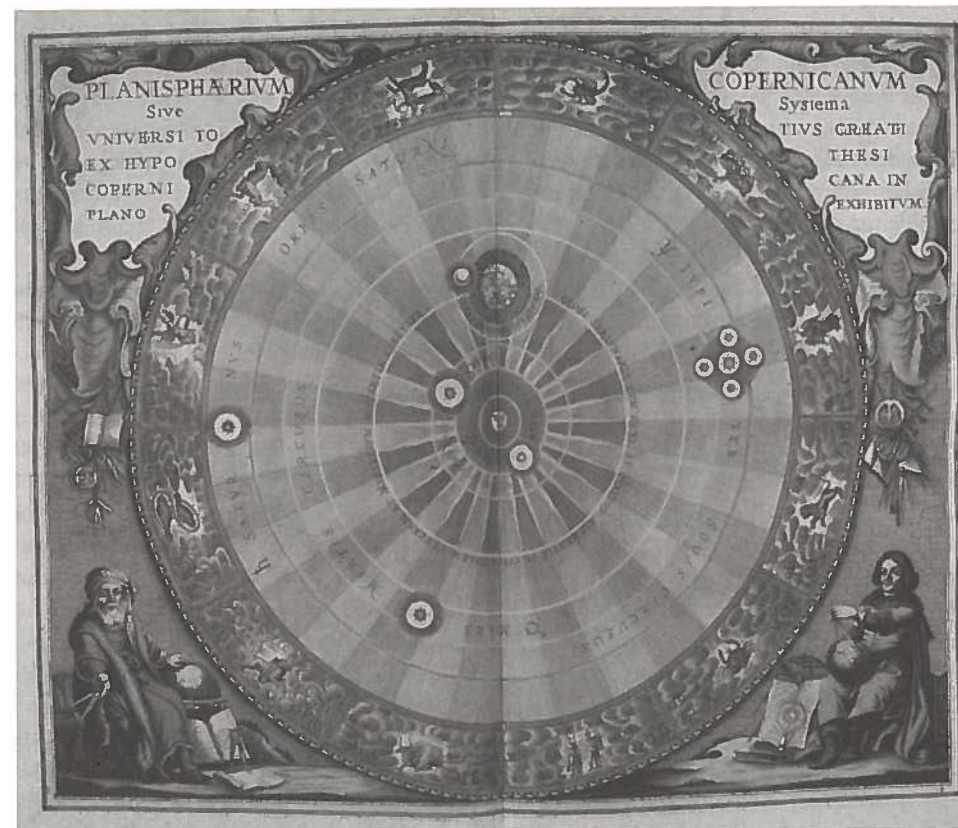


Figure 1. Cellarius explicitly labeled the diagrams of the Copernican and other systems as hypotheses, as visible in the fourth line of the cartouche, above: "The Copernican Planisphere or System of the Entire Created World according to the Copernican Hypothesis." Andreas Cellarius, *Harmonia macrocosmica, seu Atlas universalis et novus*, Heidelberg University Library, A 776 A Gross RES, Plate 4. (CC-BY-SA 3.0.)

Kircher was writing about a "new astronomy book"—that is, a recent publication. After all, what other scenario would have generated the *censura*? The Congregation of the Index was not in the business of examining foreign, Protestant books before publication. The idea that a Dutch publisher would have submitted a forthcoming work by a Protestant author to the Roman censorship would hardly have come to mind; if it had, it would have seemed implausible, if not bizarre. But that is precisely what happened.

Another copy of Kircher's judgment, hitherto unknown, is extant at the Archive of the Congregation for the Doctrine of the Faith (formerly the Sacred Congregation of the Roman and Universal Inquisition).⁶ It is part of a large dossier that reveals the context of its production. In March 1660 Elizeus Weyerstraet, agent (and grandson-in-law) of the Amsterdam bookseller Johannes Janssonius, arrived at the gates of Rome on a sales trip, transporting over three thousand volumes. Customs agents seized his wares and turned them over to the Holy Office, thus setting in motion the gears of papal bureaucracy and generating the paper trail that has allowed

² Christiaan Huygens, *Correspondance, 1660–1661* (The Hague: Nijhoff, 1890), Vol. 3, pp. 446–447; and Cellarius, *Harmonia macrocosmica*, fols. 5v–6r, pp. 2–3.

³ Athanasius Kircher, "Censura Operis Jansoniani qui Atlas Coelestis inscribitur," 4 July 1660, Archivio della Pontificia Università Gregoriana (APUG) 563, fol. 102rv. The earliest reference to this document that I am aware of is Maria Reindl, *Lehre und Forschung in Mathematik und Naturwissenschaften, insbesondere Astronomie, an der Universität Würzburg von der Gründung bis zum Beginn des 20. Jahrhunderts* (Neustadt an der Aisch: Degener, 1966).

⁴ John Heilbron, "Censorship of Astronomy in Italy after Galileo," in *The Church and Galileo*, ed. Ernan McMullin (Notre Dame, Ind.: Univ. Notre Dame Press, 2005), pp. 279–322, esp. p. 291. See also Heilbron, *The Sun in the Church: Cathedrals as Solar Observatories* (Cambridge, Mass.: Harvard Univ. Press, 1999), p. 191.

⁵ Kircher, "Censura Operis Jansoniani" (cit. n. 3): "Utrum verò dictus Athlas Coelestis, in huius expositione systematis, hanc sententiam doceat, et defendat, tunc patebit cum opus integrum lucem aspexerit."

⁶ Archive of the Congregatio pro Doctrina Fidei (ACDF), S.O., C.L. 1655–1660, fol. 600r.

me to reconstruct these events.⁷ In addition to books intended for sale, most of which were returned after inspection, Weyerstraet possessed materials related to two forthcoming publications. These materials were not confiscated, but Weyerstraet presented them to the Holy Office on his own initiative, requesting, as a favor, that it examine them. One of these was Gerardus Mercator's *Atlas minor*, a popular geographical work from Janssonius's back catalogue. The publisher desired the Holy Office to "correct" the text so that he might produce an edition acceptable for a Catholic audience. The other work was the *Celestial Atlas*, already in production but not yet published. Weyerstraet provided the Inquisition with copies of its engraved illustrations, which he asked them to review so that Janssonius could ensure that they would not raise hackles with an important market sector. The Holy Office obliged on both accounts, instructing its agents to proceed quickly and to treat the Dutch bookseller kindly (*humaniter*).⁸

Why would a Dutch publisher voluntarily submit to Catholic censorship? And why would the Inquisition and the Index use their limited resources to help a heretic businessman maximize profits? In answering these questions, this essay advances a number of related arguments about censorship, the international book trade, and scholarly communication between Italians and Protestants. With respect to Copernicanism, while recent studies have made the case for the papacy's relatively permissive attitude once the initial uproar of the Galileo affair died down, this essay provides evidence suggesting that it condoned the circulation of a pro-Copernican text decades earlier than previously known. More broadly, the episode reconstructed here illuminates a poorly understood moment in European cultural history—after the Peace of Westphalia, before the Enlightenment—when the long cold war between Catholics and Protestants continued to structure intellectual life but *de facto* practices of pluralism and toleration emerged, giving rise to unexpected phenomena. The discovery of cosmopolitan papal censors working with profit-seeking Dutch booksellers to facilitate cross-confessional communication points to the inadequacy of the usual ways of thinking about censorship. As the papacy shifted its focus from the external Protestant threat to the orthodoxy of Catholics within Italy, Roman censorship increasingly relied on cooperative, personal relationships between authors and censors.⁹ I argue that, in the wake of the Peace of Westphalia, this censorship regime became permeable to Protestants, leading to forms of cross-confessional interaction unthinkable in the first half of the century. The international book trade, centered in Holland, drew the Roman Curia and Protestant merchants into mutually beneficial associations based on reciprocal concessions. Roman censorship is not adequately understood simply as an impediment to the circulation of knowledge. The Inquisition and the Index facilitated certain kinds of exchange at the same

time that they blocked others. They were components of an international, multiconfessional information order, shaping scholarship and how it moved.

I use the expression "information order," popularized by C. A. Bayly, to emphasize the entanglement of information (words, ideas, "content") with the structures that condition its circulation (media, institutions, networks). As an analytic tool, "information order" helps the historian of knowledge to understand the activities of individuals or groups in terms of their position within systems of communication that are inseparable from social, political, and economic structures. It accommodates formal knowledge as well as implicit assumptions and habits of thought, while allowing for the heterogeneous and composite nature of such systems; one can conceive of different information orders overlapping with one another and of smaller ones as constituents of larger ones.¹⁰ European scholars acted within an information order that was shaped by many elements, including the values and practices of the Republic of Letters, the economic logic of the book trade, and the power of political and religious institutions.

CENSORING THE CELESTIAL ATLAS

Johannes Janssonius (1588–1664) was a Dutch cartographer, publisher, and bookseller whose Amsterdam firm was one of the dominant players in the international book trade. His flagship publication, inaugurated in 1638, was the *Atlas novus*, an ever-expanding series of luxurious, double-folio map books that had evolved from Mercator's groundbreaking *Atlas* of 1595. The *Celestial Atlas* constituted its spectacular finale. Much less is known about the book's author, Andreas Cellarius (ca. 1596–1665). A German from the Palatinate, he studied in Heidelberg before migrating to the United Provinces, where he worked as a schoolmaster, settling in Hoorn. Prior to the atlas for which he is remembered, Cellarius published a German treatise on military fortifications (1645) and a Latin description of Poland (1652).¹¹ The *Celestial Atlas* contained two parts. First was a general introduction, comprising an account of the origin and structure of the cosmos, a lengthy discussion of cosmic harmonies that emphasized alchemical astral medicine, and a disciplinary history of mathematics and astronomy from Adam to the present. The atlas proper consisted of a series of diagrams and star maps, accompanied by extensive textual commentary. Following its famous representations of the competing world systems, the bulk of the atlas depicted the universe from a geocentric perspective. Cellarius planned a second volume that would treat Copernican astronomy in more detail, but this never appeared.

Of the two works that Weyerstraet submitted for review, the *Celestial Atlas* was more urgent. The Holy Office assigned the task to two experts: Michelangelo Ricci, an in-house censor (*consultor*) with a strong background in mathematical sciences; and an external reviewer (*qualificator*), Athanasius Kircher, a mathematician and natural philosopher at the Roman College of the Society of Jesus. Both censors agreed that there was no reason to prohibit the plates. Ricci described the diagrams as "especially useful to geographers and students of celestial matters" and as containing "nothing contrary to good morals or faith." Because the captions explicitly identified the diagrams as "hypotheses" (see Figure 1), he concluded that they were meant merely to explain the different world systems, not to assess their truth. The word "hypothesis" played a key role in debates over Copernicanism. Following traditional scholastic usage, it referred to a supposition that was not necessarily true; in astronomy, "hypothesis" was the term

¹⁰ C. A. Bayly, *Information and Empire: Intelligence Gathering and Social Communication in India, 1780–1870* (Cambridge: Cambridge Univ. Press, 1996), esp. pp. 3–6. Simon Schaffer applies the concept to seventeenth-century European scholarship in "Newton on the Beach: The Information Order of *Principia Mathematica*," *History of Science*, 2009, 47:243–276.

¹¹ Keuning, "Novus Atlas of Johannes Janssonius" (cit. n. 1); and Gent, *Andreas Cellarius: Harmonia Microcosmica of 1660* (cit. n. 1), p. 239.

⁷ I will treat the entire episode in detail in a book-length study, currently in preparation.

⁸ ACDF, S.O., C.L. 1665–1660, fol. 643r (statement, signed by Weyerstraet, describing confiscation of books and request to review atlases); and ACDF, S.O., Decreta, 1660, fols. 110r (command to treat the bookseller kindly), 112r (command to review the materials as requested by Janssonius).

⁹ I use the shorthand "Roman censorship" to refer to the censorship regime of the papacy, which aspired to universality, although in practice its direct influence was confined almost entirely to the Italian peninsula. Its chief organs, the Roman Inquisition or Holy Office (founded in 1542) and the Index of Prohibited Books (founded in 1571), were separate institutions, with a history of rivalry owing to their overlapping mandates regarding censorship. By the middle of the seventeenth century, however, the Inquisition had established its primacy. Both played a part in the events treated in this essay, with the Index following commands issued by the Holy Office. See Marco Cavarzere, *La prassi della censura nell'Italia del seicento tra repressione e mediazione* (Rome: Edizioni di Storia e Letteratura, 2011); Elisa Rebellato, *La fabbrica dei divieti: Gli indici dei libri proibiti da Clemente VIII a Benedetto XIV* (Milan: Bonnard, 2008); Vittorio Frajese, *Nascita dell'Indice: La censura ecclesiastica dal Rinascimento alla Controriforma* (Brescia: Morcelliana, 2006); Gigliola Fragnito, ed., *Church, Censorship, and Culture in Early Modern Italy* (Cambridge: Cambridge Univ. Press, 2001); and Christopher Black, *The Italian Inquisition* (New Haven, Conn.: Yale Univ. Press, 2009), Ch. 7.

for a mathematical model that was useful for calculating, irrespective of whether its premises corresponded to physical reality. Even as the word's meaning evolved during the seventeenth century, approaching its modern sense of an unproven but probable theory, for Catholic scholars "hypothesis" remained a powerful term of art that enabled heterodox ideas to be discussed in a permissible manner.¹²

Like Ricci, Kircher emphasized that the plates presented the different world systems hypothetically and were therefore unobjectionable. He explained that the Copernican system could be considered in two ways, either as a "pure hypothesis" for calculating the motions of the heavenly bodies or as a physical account of the true structure of the universe. While the Holy Office rightly condemned the latter, the former was not merely permissible but essential for the science of chronology. Kircher thus deemed the diagrams to contain absolutely nothing contrary to orthodox faith. But he noted that it would not be certain whether the *Celestial Atlas* upheld the illicit physical interpretation of Copernicanism until it was published with its textual commentaries. After receiving Ricci's and Kircher's judgments, the Holy Office decreed that, although it would still be necessary to see the texts, so long as they did not contain anything "absurd" (in 1616 the Holy Office had declared heliocentrism to be "philosophically absurd") the atlas would by no means be prohibited.¹³

CORRECTING THE *ATLAS MINOR*

The Holy Office responded to Janssonius's other request at a more leisurely pace. The *Atlas minor* was an affordable, small-format "pocket atlas," derived from the 1606 Amsterdam edition of Mercator's *Atlas*. First published in 1607, it had not been reissued in Latin since 1637, although recent German editions had been popular.¹⁴ The original Mercator *Atlas* (1595) had been placed on the Roman Index at the turn of the century, primarily on account of its introductory chapters, which advanced the author's unorthodox views about the creation of the world.¹⁵ The *Atlas minor* had never been specifically prohibited in Rome and did not contain the sections that had disturbed the censors of the 1595 *Atlas*. But the banning of the original edition, as well as the independent prohibition—"until corrected" (*donec corrigatur*)—of the *Atlas minor* by the Spanish Index in 1612, might have made Janssonius wary. Correcting a work—indicating every passage that must be revised—was significantly more laborious than simply determining that a work required correction or should be prohibited outright. As a consequence, despite grand ambitions at the turn of the seventeenth century, the Roman Index rarely carried out expurgations. Nonetheless, in March 1661, in compliance with a command issued by the Holy Office the previous June, the secretary of the Index ordered his staff to correct the *Atlas minor*, so that the "famous Amsterdam printer Janssonius" might publish an edition that would not

offend Catholic readers. The task was eventually completed by two consultants, Stefano Gradi and Giovanni Bona.¹⁶

The *Atlas minor* belonged to the genre of early modern cosmography that combined cartography (maps) with descriptive geography (texts). The concerns of the censors pertained to the latter. They were troubled by passages that spoke too negatively about Catholicism, too positively about other religions, or expressed political views at odds with those of the papacy. Thus Cambridge and Oxford were no longer to be described as "workshops of piety whence humanity and religion diffused to all the world," and "heretics" were not to be given honorifics. For example, the phrase "the opinion of the great Scaliger," referring to the famous Huguenot scholar, should be changed to "the opinion of Scaliger." The patriarch of Constantinople should not be compared to the pope, and the Greek and Russian churches should not be described as denying purgatory. Saint Patrick was not to be called credulous, and the history of the wars of religion must not be told with a Protestant bias. A reference to Marsilio of Padua should be deleted, lest it arouse curiosity about his fourteenth-century critique of papal authority, and Charles V's decree forbidding ecclesiastics from buying property without his consent should not be praised. These were the kinds of corrections—all easily implemented—that the censors recommended in 1663.¹⁷ Presumably they were communicated to Amsterdam, although a corrected edition never appeared, perhaps owing to Janssonius's death in 1664.

In 1666, however, Janssonius's heirs published a different single-volume world atlas, the *Atlas contractus*, a splendid in-folio, featuring a selection of plates from the *Atlas novus*. The accompanying text did not follow the Roman expurgations, but one cannot say that it ignored them. The editors replaced most of the text of the *Atlas novus* and the *Atlas minor* with new material. Although it is impossible to know if the Roman censors' reports played any role in this decision, one is struck by the extent to which the *Atlas contractus* refrained from discussing religion and politics in comparison to the earlier versions. (I could find only one instance in which the text of the *Atlas contractus* corresponded to a passage mentioned in the expurgations of the *Atlas minor*. This was a reference to a rock formation in Lower Saxony that resembled a rooster sporting a papal tiara, which the censor marked for deletion since, in his opinion, it made fun of popes. It was not excised.)¹⁸

THE ENIGMA OF THE *CELESTIAL ATLAS*

The *Celestial Atlas* was already in production when Weyerstraet brought the plates to Rome, and Janssonius completed the first edition after his assistant returned to Amsterdam. In effect, the *Celestial Atlas* had a secret imprimatur from the Roman Inquisition. It was not entirely unknown for Catholic censors and Protestants to collaborate. In the late sixteenth century, the Basel printer Ambrosius Froben worked openly with a papal censor to produce an edition of the Talmud that would conform to the Roman Index, at the behest of a Jewish patron.¹⁹ In

¹² ACDF, S.O., Decreta, 1660, fols. 112r, 118v (assignments of Ricci and Kircher); and ACDF, S.O., C.L. 1655–1660, fol. 599r (Ricci's judgment). Regarding "hypothesis" see John Russell, "Catholic Astronomers and the Copernican System after the Condemnation of Galileo," *Annals of Science*, 1989, 46:365–386, esp. pp. 369–370; and Marcus Hellyer, "Because the Authority of My Superiors Commands': Censorship, Physics, and the German Jesuits," *Early Science and Medicine*, 1996, 1:319–354.

¹³ ACDF, S.O., C.L. 1655–1660, fol. 600r (Kircher's judgment); and ACDF, S.O., Decreta, 1660, fol. 135r (decree about the atlas).

¹⁴ Cornelis Koeman *et al.*, "Commercial Cartography and Map Production in the Low Countries, 1500–ca. 1672," in *The History of Cartography*, Vol. 3: *Cartography in the European Renaissance*, ed. David Woodward (Chicago: Univ. Chicago Press, 2007), pp. 1296–1383, esp. pp. 1332–1333; and Johannes Keuning, "The History of an Atlas: Mercator–Hondius," *Imago Mundi*, 1947, 4:37–62, esp. pp. 46–47.

¹⁵ Ugo Baldini and Leen Spruit, eds., *Catholic Church and Modern Science: Documents from the Archives of the Roman Congregations of the Holy Office and the Index*, Vol. 1: *Sixteenth-Century Documents* (Rome: Libreria Editrice Vaticana, 2009), Tome 3, pp. 2055–2067.

¹⁶ ACDF, Index, Diarii, Vol. 6 (1655–1664), fol. 98v. Gradi and Bona examined a copy of the 1621 edition: *Atlas minor Gerardi Mercatoris a I. Hondio plurimis aeneis tabulis auctus atque illustratus* (Amhemii: apud Ioannem Janssonium, 1621) (hereafter cited as *Mercator, Atlas minor*).

¹⁷ ACDF, Index, Protocolli, L2, fols. 136r–141r (Gradi's judgment), 144r–147v (Bona's judgment); and ACDF, Index, Diarii, Vol. 6 (1655–1664), fol. 120v (receipt of the judgments).

¹⁸ *Atlas contractus, sive Atlantis majoris compendium* (Amstelodami: Apud Joannis Janssonii p.m. Haeredes, 1666). I compared it to Gerhard Mercator, *Atlas novus, sive descriptio geographica totius orbis terrarum*, 3 vols. (Amsteoldami: Apud Henricum Hondium & Joannem Janssonium, 1637); and Mercator, *Atlas minor*. Gradi noted the offending description of the rock formation at ACDF, Index, Protocolli, L2, fol. 138v.

¹⁹ Amnon Raz-Krakotzkin, *The Censor, the Editor, and the Text: The Catholic Church and the Shaping of the Jewish Canon in the Sixteenth Century* (Philadelphia: Univ. Pennsylvania Press, 2007), pp. 69–70; and Stephen Burnett, "The Regulation of Hebrew Printing in Germany, 1555–1630: Confessional Politics and the Limits of Jewish Toleration," in *Infinite Boundaries: Order,*

the 1620s, the Congregation of the Index allowed a copy of its internal reports on Hugo Grotius's banned *De iure belli et pacis* to be leaked to the Protestant author in order to facilitate his preparation of a corrected edition. This exceptional gesture was part of a covert, high-level Catholic effort to convert the famous Dutch scholar. Grotius was deliberately kept unaware of the Curia's involvement in what, to him, seemed to be an unofficial overture from Catholic friends. Regardless, he declined to revise his work, much less change his faith.²⁰ Janssonius in 1660 is the only example known to me of a Protestant outside the papacy's jurisdiction requesting Roman censorship secretly and for works without a Catholic author. This does not mean that we are dealing with a unique occurrence—by nature a “secret imprimatur” eludes detection. As common or rare as such events might have been, the logic of Janssonius's action is easy to grasp. A Protestant, but also a devout capitalist, he wanted to sell the *Celestial Atlas* in Catholic territories like Italy without impediment from ecclesiastical censorship.

Weyerstræet provided only the plates of the *Celestial Atlas*, and the Holy Office conditioned its promise that the book would not be prohibited on the rectitude of its textual content. As it turned out, the published text was blatantly pro-Copernican. This important fact has gone almost entirely unnoticed in discussions of the *Celestial Atlas*, which have described Cellarius as impartial in his presentation of the rival cosmologies.²¹ The misunderstanding may be attributed in part to the use of the term “hypothesis” in the plates. But it is due above all to the book's preface. There, Cellarius announced that he would not take sides in debates over the motions and arrangement of the Earth, Sun, and other heavenly bodies; he would simply illustrate the opinions of different authors with diagrams and explain the reasons by which each supported his claims. “It shall be left entirely to the kind and friendly reader,” he wrote, “to render his assent to the one which agrees with his judgment or which he may appraise to be closest to the truth.” This declaration was belied, however, by the textual commentary that accompanied the diagrams of the Copernican theory in the body of the work. There, Cellarius described Galileo's condemnation by the Holy Office as contrary to the opinion of “almost all the great mathematicians of our time,” referring readers to the works of Galileo, Gassendi, Kepler, and Lansberg, who had proven the Copernican theory with “certain arguments and geometrical principles.” Cellarius concluded his exposition by providing detailed “solutions” to the main arguments against heliocentrism—astronomical, physical, and scriptural—leaving little doubt that he considered it foolish to believe that such a “perfect hypothesis” did not correspond to physical truth.²² Furthermore, the book's allegorical frontispiece (not submitted to the Roman censors with the other plates) depicted Urania, the muse of astronomy, holding a heliocentric sphere, while putti elevated a representation of the Copernican theory above its inferior rivals. (See Figure 2.)



Figure 2. The muse of astronomy holds a heliocentric sphere while gesturing at a levitating emblem of the Copernican theory. At her sides in the foreground are Tycho Brahe and Copernicus. Ptolemy, in a turban, points to an open book, while a princely figure with a feathered cap holds a diagram of the heliocentric cosmos. Andreas Cellarius, *Harmonia macrocosmica, seu Atlas universalis et novus*, Heidelberg University Library, A 776 A Gross RES, Frontispiece. (CC-BY-SA 3.0.)

Disorder, and Reorder in Early Modern German Culture, ed. Max Reinhart and Thomas Robisheaux (Kirkville, Mo.: Sixteenth Century Journal Publishers, 1998), pp. 329–348, esp. pp. 337–344. I thank Anthony Grafton for calling this comparison to my attention.

²⁰ Cavarzere, *La prassi della censura nell'Italia del seicento tra repressione e mediazione* (cit. n. 9), pp. 128–132; and Nicholas Hardy, *Criticism and Confession: The Bible in the Seventeenth Century Republic of Letters* (Oxford: Oxford Univ. Press, 2017), pp. 221–225.

²¹ See, e.g., R. H. Vermij, *The Calvinist Copernicans: The Reception of the New Astronomy in the Dutch Republic, 1575–1750* (Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, 2002), pp. 235–236. William Ashworth, “Allegorical Astronomy,” *Sciences*, 1985, 25(5):34–37, notes that “it is usually presumed that [Cellarius] . . . was uncommitted to the question of the true structure of the universe” (p. 36) and argues that the atlas's frontispiece was a coded Copernican allegory; but he makes no reference to Cellarius's explicit textual defense of Copernicanism. Volker R. Remmert, “In the Sign of Galileo: Pictorial Representation in the Seventeenth-Century Copernican Debate,” *Endeavour*, 2003, 27:26–31, describes Cellarius in passing as sympathizing with Copernicanism (p. 28).

²² Cellarius, *Harmonia macrocosmica* (cit. n. 1), fol. 6r, pp. 23–24, 36–43.

Other sections of the *Celestial Atlas* had the potential to raise inquisitorial eyebrows. In particular, the book began with a long account of the creation of the universe, elaborated around the Genesis narrative—precisely the kind of subject matter that led the Index to ban Mercator's original *Atlas* of 1595. Cellarius's cosmogony might have been less heterodox than Mercator's, but topics such as the creation of human beings, the nature of the bodies of Christ and Adam, and the immortal human soul, all treated at length, were matters of grave concern to Roman censorship. Had the text been reviewed, it would certainly have been prohibited. But it wasn't. After the prepublication review of the plates, initiated by the Dutch publisher, the *Celestial Atlas* was never further examined, even though it circulated in Rome and Italy soon after its publication.

We are confronted by several interrelated puzzles. Why did the preface of the *Celestial Atlas* promise to abstain from taking sides in the cosmological controversy when the relevant section of the book was a partisan defense of Copernicanism? If Janssonius was so concerned about Catholic censorship, taking the extraordinary measure of seeking approval of the plates from Rome, why did he publish a book that violated the Church's ban on Copernicanism? And why did the Roman authorities nonetheless allow it to circulate in their jurisdiction?

THE CHURCH AND COPERNICANISM IN THE SEVENTEENTH CENTURY

The Church's position on Copernicanism was ambiguous, ambivalent, and inconsistent. In 1616 Roman censors placed Copernicus's *On the Revolutions of the Heavenly Spheres* on the Index and banned all works teaching that the Earth moves and the Sun is motionless.²³ In 1633 the Holy Office found Galileo guilty of "vehement suspicion of heresy" for having upheld the Copernican doctrine, which was "false and contrary to the divine and Holy Scripture," and prohibited his *Dialogue on the Two Chief World Systems*.²⁴ In the centuries that followed there would be considerable debate as to whether the Holy Office had defined Copernicanism as heretical or as a theological error of a lesser sort and also about the nature of Galileo's crime—was it heresy or disobedience? After 1633, no further books were banned by name on account of Copernican teachings, but the general prohibition of 1616 remained in force until 1758. (The prohibition on Galileo's books was not lifted until 1835.) The dominant narrative of Italian history, going back at least to the nineteenth century, describes the Church's rejection of Copernicanism, and the influence of the Inquisition and the Index more broadly, as all but extinguishing the flame of modern science and culture in Italy. But more recent studies, gaining pace since the opening of the Holy Office's archives in 1998, describe a more complex and dynamic situation.²⁵

After Galileo's trial, the Curia exhibited no great enthusiasm for enforcing the ban on Copernicanism. Many papal officials found the decision unfortunate, if not an outright mistake,

²³ Significantly, Copernicus was not banned outright but instead received the milder judgment of "prohibited until corrected." The required corrections amounted to a dozen small changes, easily implemented by pen. See Maurice Finocchiaro, ed., *The Galileo Affair: A Documentary History* (Berkeley: Univ. California Press, 1989), pp. 200–201.

²⁴ *Ibid.*, p. 291; and Galileo Galilei, *Opere*, ed. Antonio Favaro, 20 vols. (Florence: Barbéra, 1890–1909), Vol. 19, p. 405.

²⁵ See Baldini and Spruit, eds., *Catholic Church and Modern Science* (cit. n. 15), Vol. 1, Tome 1, pp. 1–91; Maria Pia Donato and Jill Krayer, eds., *Conflicting Duties: Science, Medicine, and Religion in Rome, 1550–1750* (London: Warburg Institute, 2009), esp. the editors' introduction and the contribution by Paula Findlen, "Living in the Shadow of Galileo: Antonio Baldigiani (1647–1711), a Jesuit Scientist in Late Seventeenth-Century Rome" (pp. 211–254); Francesco Beretta, "L'héliocentrisme à Rome à la fin du 17e siècle: Une affaire d'étrangers? Aspects structurels d'un espace intellectuel," in *Savants étrangers et cosmopolitisme de la culture scientifique romaine*, ed. Antonella Romano (Rome: École Française de Rome, 2003), pp. 529–554; McMullin, ed., *Church and Galileo* (cit. n. 4); and Romano, ed., *Rome et la science moderne* (Rome: École Française de Rome, 2008), esp. the contribution by Donato, "Scienza e teologia nelle congregazioni romane: La questione atomista, 1626–1727" (pp. 595–634).

and, in any case, astronomical doctrine was not a matter of great moment. (Within the realm of natural science, which was of less concern to the Inquisition and the Index than usually imagined, atomism was a more sensitive issue.) John Heilbron has advanced this viewpoint forcefully, arguing that Church officials significantly mitigated the Copernican ban by engaging in a deliberate policy of nonenforcement. He proposes a periodization of four phases between 1630 and 1820, in which Italians were able to discuss Copernican astronomy with ever fewer constraints and gyrations. He makes the years around 1670 an early turning point, when blanket condemnation of heliocentrism gave way to allowing discussion so long as it was explicitly defined as a hypothesis, citing Kircher's review of the *Celestial Atlas* as an example of how influential Jesuit astronomers prepared the way.²⁶ While this essay's reconstruction of the Curia's encounter with the *Celestial Atlas* confirms the broad contours of Heilbron's picture, it suggests that his second phase began earlier. Since the examination of the plates was not instigated by the Catholic authorities, as Heilbron assumed, but by the Dutch publisher, the episode offers no evidence that the Roman officials were concerned about the hypothetical treatment of Copernicanism in 1660. On the contrary, both Kircher and Ricci took it for granted that discussing heliocentrism as a hypothesis was unproblematic—as if they were ratifying a policy that was already established, rather than articulating something new or controversial. In the immediate wake of Galileo's spectacular failure to finesse precisely this issue in 1632, Italian censors and astronomical writers no doubt chose to err on the side of caution. But by 1660 talking about Copernicanism "hypothetically" seems already to have become accepted practice.

While it is not altogether surprising that the Roman authorities approved of diagrams depicting heliocentrism as a "hypothesis," that they allowed the *Celestial Atlas* to circulate in Italy despite the text's nonhypothetical endorsement of Copernicanism is a scenario that even the latest, most nuanced scholarship would not lead us to expect. It must be acknowledged that there is no direct evidence that officials within the Congregations of the Index and the Inquisition ever became aware that the text of the atlas violated their decrees. But, given that Janssonius sent a copy to the Vatican Library in 1661 (as we will see later in this essay), that the Holy Office had decreed that its approval was conditional on the textual content of the completed publication, and that the frontispiece of the work announced the book's partisan preference for heliocentrism, it is highly probable that some individuals within the Curia noticed that the *Celestial Atlas* was a Copernican work but chose not to make an issue of it. Even if it were the case that no curial official noticed the explicit Copernicanism of the atlas, we would still be left with a scenario in which the Roman authorities did not deem it a priority to ensure that Janssonius had complied with the Holy Office's decree. Francesco Beretta has found evidence of books espousing heliocentrism (probably from Germany) circulating in Rome in the 1690s.²⁷ But the fact that such a work circulated three decades earlier, under the benign neglect, and very possibly with the outright complicity, of the Curia, is a significant new finding for our understanding of the status of Copernicanism in seventeenth-century Italy.

PROTESTATIONS AND PROTESTANTS

The combination of an anodyne or apologetic preface with contradictory, controversial content was, in fact, not an uncommon phenomenon in early modern publications—specifically, in those produced under the pressure of Catholic censorship. The most famous example is the book that ignited the controversy that Cellarius described. Galileo's *Dialogue on the Two Chief*

²⁶ Heilbron, "Censorship of Astronomy in Italy after Galileo" (cit. n. 4), esp. pp. 290–292; and Russell, "Catholic Astronomers and the Copernican System after the Condemnation of Galileo" (cit. n. 12).

²⁷ Beretta, "L'héliocentrisme à Rome à la fin du 17e siècle" (cit. n. 25).

World Systems (1632) began with a preface—demanded by ecclesiastical censors as a condition for granting imprimatur—that praised the Holy Office’s wise condemnation of Copernicanism before presenting a forceful defense of its truth, albeit beneath a conceit of fictiveness.²⁸ Such “protestations” (*proteste*) of doctrinal innocence were a familiar feature in less famous works by Catholic authors espousing controversial opinions—unofficial hagiographies with introductions that denied that their subjects were saints, for example, or astrological prognostications whose prefaces disavowed the efficacy of astrology. It is tempting to view these practices as disingenuous, to think of *proteste* as subversive acts of subterfuge. But such a judgment misunderstands the papacy’s aims and attitude. Appearances mattered, and obedience in itself, as much as doctrinal conformity, was the desired outcome of Catholic censorship. As a visible act of submission, *proteste* could function as signs of deference to the Church’s authority. The atypical case of Galileo notwithstanding, the Roman censors were often satisfied by these disclaimers, which they sanctioned or even requested.²⁹

As a German Lutheran living and publishing in the Protestant Dutch Republic, Cellarius was entirely beyond the reach of the Holy Office and under no pressure to disavow Copernicanism. Nonetheless, in light of the circumstances of the book’s production, which demonstrate Janssonius’s concern with appeasing Catholic censorship, we may fairly surmise that the declaration of cosmological neutrality was included in the introduction to minimize the chances that the work would be banned in Rome. The preface to the *Celestial Atlas* should thus be recognized as an example of a previously unidentified phenomenon: a *protesta* written and published by Protestants in order to satisfy Catholic censorship.

If my argument about the preface is correct, the content of the *Celestial Atlas* was substantively transformed by Janssonius’s voluntary engagement with Roman censorship. The encounter did not lead to a bowdlerized text—although Janssonius was prepared to take such measures in the case of the *Atlas minor*. But even if Cellarius’s endorsement of heliocentric astronomy remained in the body of the text, we should not underestimate the significance of a modified preface. Then as now, prefaces were among the sections of a book that were most likely to be read, which was precisely why censorship placed so much emphasis on them. Indeed, in the specific case of the *Celestial Atlas*, modern commentators have been misled about the author’s stance on Copernicanism as a result of not reading beyond the introduction. The firm denial of support for Copernicanism in the preface might well have allowed the book to circulate in Italy without interference from the Church.

Recent studies have emphasized the importance of preventive self-censorship as a factor shaping the publications of Italian authors. The case of the *Celestial Atlas* and the *Atlas minor* suggests that the international nature of the scholarly book trade could also lead Protestants to respond to Catholic censorship with similar measures. Rodolfo Savelli has shown how publishers beyond the jurisdiction of the Spanish and Roman inquisitions—in Paris, Lyon, Cologne, Douai, and even Geneva—nonetheless responded to their decisions by producing editions of legal books that conformed to the corrections specified in the Spanish *Index Expurgatorius*. For booksellers, Spanish and Italian censorship created a niche market, which could be exploited by means of expurgated editions that were advertised as such on their title pages.³⁰ The *Celes-*

²⁸ Sergio Pagano, ed., *I documenti vaticani del processo di Galileo Galilei (1611–1741)* (Vatican City: Archivio Secreto Vaticano, 2009), pp. cxx–cxxii, 53–57.

²⁹ Marco Cavarzere, “The Workings of a Papal Institution: Roman Censorship and Italian Authors in the Seventeenth Century,” in *Praktiken der Frühen Neuzeit: Akteure, Handlungen, Artefakte*, ed. Arndt Brendecke (Cologne: Böhlau, 2015), pp. 371–385, esp. pp. 379–380.

³⁰ Rodolfo Savelli, “Il libro giuridico tra mercato, censure e contraffazioni: Su alcune vicende cinque-seicentesche,” in *Itinerari in comune: Ricerche di storia del diritto per Vito Piervigiani* (Milan: Giuffrè, 2011), pp. 187–305, esp. pp. 204–205, 294–304. Re-

tial Atlas was different because it was issued in a single edition intended for Protestant and Catholic markets alike. It bore no visible sign of compliance with Catholic censorship. Janssonius never brought out a revised edition of the *Atlas minor*, but, had it appeared, it probably would have followed the model of the *Celestial Atlas*’s uniform edition. In silently accommodating his product to the strictures of the Holy Office, Janssonius engaged in something more akin to the self-censorship common among Italian authors, who sometimes negotiated with their censors prior to publication.

There were, of course, great differences between the situation of Catholic authors in Italy and Protestant authors or publishers trying to reach Italian readers. For Italians, self-censorship was not motivated merely by the desire to disseminate one’s work; it was also a matter of honor and social standing, on account of the penalties faced by and the stigma that attached to the author of a prohibited book.³¹ For Janssonius, the motive was profit. While the particular circumstances of his atlases—the Dutch publisher sending materials to Rome and directly engaging the Holy Office in prepublication censorship—might have been unusual, the underlying rationale applied broadly. Other Protestant authors and publishers who hoped to reach multiconfessional audiences likely took similar measures, independently and undetectably, though how many did so is impossible to say. The impact of Catholic censorship might have extended much farther than we have imagined.

CENSORSHIP AND MARKETING STRATEGY

In 1660 Janssonius was eager to increase sales. Following two decades of unprecedented book production in the Dutch Republic, during which Amsterdam emerged as Europe’s most important center of printing and distribution, his warehouses were bursting with stock, old and new. By one estimate, “Latin scholarly, semi-scholarly, and literary works” (the sort of books that made up most of the shipment that Weyerstraet transported to Rome) accounted for more than one third of Dutch book production in this period.³² Competition among the major firms was sometimes friendly, sometimes bitter, but always intense. Not only did they regularly print versions of the same or similar works—most famously, the rival great atlases of Blaeu and Janssonius; as resellers, they vied with one another to supply foreign customers. As the Dutch book industry’s growth rate slowed, pressure mounted to find new revenue streams. Weyerstraet’s trip to Rome was not the only such initiative that Janssonius launched at this time. The *Celestial Atlas*’s dedication to Charles II points to a parallel effort to tap into the English market, following the Anglo–Dutch War and the Stuart Restoration. Italy represented a large market for Dutch booksellers, who were also keen to import Italian books for resale to Northern European customers. The papers of Lucas Holstenius, Rome’s most important librarian and intelligencer, record visits to Rome by members of the Elzevier, Janssonius, and Blaeu families in the 1630s, 1640s, and 1650s.³³ Occasionally Holstenius ordered books directly from Holland, but for the most part the Dutch firms relied on third parties for distribution. In the 1650s the Venetian partnership of Combi and La Noù emerged as the most important Italian reseller of Dutch and German books.³⁴

garding preventive self-censorship see Cavarzere, *La prassi della censura nell’Italia del seicento tra repressione e mediazione* (cit. n. 9), p. 1; and Baldini and Spruit, eds., *Catholic Church and Modern Science* (cit. n. 15), Vol. 1, Tome 1, pp. 85–91.

³¹ Baldini and Spruit, eds., *Catholic Church and Modern Science*, Vol. 1, Tome 1, p. 53.

³² W. T. M. Frijhoff and M. Spies, *1650: Hard-Won Unity* (New York: Palgrave Macmillan, 2018), pp. 277–278.

³³ For a visit by one of Elzevier’s sons in 1642 see Biblioteca Apostolica Vaticana (BAV) Barb. Lat. 2181, fol. 115; by one of Janssonius’s sons in 1647, Biblioteca Vallicelliana MS Allacci CXLVI, fol. 344rv; by Blaeu’s son Willem in 1656, BAV Barb. Lat. 6486, fol. 48.

³⁴ Alfonso Mirtò, “Libri veneziani del Seicento: I Combi-La Noù ed il commercio librario con Firenze,” *La Bibliofila*, 1992, 94:61–88.