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‘Absurd in Philosophy’: The 1616 Decree Against Copernicanism and the First ‘Retrial’ of Galileo

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'Absurd in Philosophy': The 1616 Decree Against Copernicanism and the First 'Retrial' of Galileo.

Introduction

In 1633, the famed astronomer and mathematician, Galileo Galilei, was imprisoned by the Roman Inquisition on charges of heresy. He would spend the remainder of his days under house arrest.

Yet this was not the first time Galileo faced misfortune in Rome. In 1616, the cosmological worldview that he advocated for, Copernican heliocentrism, was condemned by the Holy Office of the Roman Inquisition as heretical. There is no shortage of literature on the topic, however there are none that treat it as a distinct historical episode. Instead, it usually portrayed as a prelude to the aforementioned final decision in 1633.[1]

This interpretation of 1616 has been challenged, notably by Henry Ansgar Kelly, who argued that in terms of procedure, the episode of 1616 had little in common with that of 1633 in terms of procedure and outcome: it was instead an investigation into whether or not heliocentrism was heretical, and did not end with serious consequence as none of Galileo's works were prohibited.[2] Likewise, Blackwell has argued that the 1616 trial was completely different to its 1633 counterpart in terms of the defendant, the complaints, the evidence, and the legal processes.[3] Though valuable, Kelly's institutional approach and focus on Inquisitorial procedure does not address the motivations behind the decision, nor the personal relationships that could have impacted such procedure.[4]

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[1] Ernan McMullin, 'The Galileo Affair: Two Decisions', *Journal for the History of Astronomy*, vol.40, no.2 (2009), pp.191-212. p.198.
[2] Henry Ansgar Kelly, 'Galileo's Non-Trial (1616), Pre-Trial, (1632-1633), and Trial (May 10, 1633): A Review of Procedure, Featuring Routine Violations of the Forum of Conscience', *Church History*, vol.85, no.4 (2016), pp.724-761. pp.733-735.
[3] Richard Blackwell, 'Could There Be Another Galileo Case?', in in *The Cambridge Companion to Galileo*, ed. by Peter Machamer (Cambridge: Cambridge University Press, 1998), pp.348-366. p.351.
[4] Kelly, 'Galileo's Non-Trial', p.727.

Building on this nascent idea of the 1616 condemnation as a more self-contained historical event, this dissertation will treat it as such. It will address the build-up to the decrees of the Holy Office and the Congregation of the Index in March and February 1616, the decrees themselves, and how they were received by Galileo's allies. By examining and comparing private correspondence, Inquisitorial records, and a much-understudied pro-Galileo polemic, it will provide an insight into the development, delivery, and reception of the decree against Copernicanism.

Scholars and laymen alike have long emphasised the significance of the Galileo Affair.

Because of this extensive scholarship and assigned importance, the Galileo Affair has been approached from a number of historiographical standpoints. The oldest is that of scientific history. Earlier works helped to establish the myth of Galileo as a persecuted genius, facing down a Church that sought to suppress reason and learning at all costs. J.J. Fahie characterised Galileo's Aristotelian, Jesuit, and Church enemies as 'drawn together against the philosophical tyrant who threatened them with the penalties of too much knowledge'.[5] This idea was pervasive for many years: in a foreword to Stillman Drake's translation of Galileo's *Dialogue Concerning the Two Chief World Systems*, Albert Einstein wrote that Galileo 'possesse[d] the passionate will, the intelligence, and the courage to stand up as the representative of rational thinking against the host of those, who, relying on the ignorance of the people and the indolence of teachers in priest's and scholar's garb, maintain[ed] and defend[ed] their positions of authority'.[6] This image of Galileo as a lone scientific prodigy, fighting against his obscurantist contemporaries, has since faced sustained attack. Works such as Lane Cooper's 1935 *Aristotle, Galileo, and the Leaning Tower of Pisa* challenged the myth of him having discovered his

[5] J.J. Fahie, *Galileo: His Life and Work* (London: John Murray, 1903), p.146.
[6] Albert Einstein, 'Foreword', in Galileo Galilei, *Dialogue Concerning the Two Chief World Systems*, trans. by Stillman Drake (Berkeley: University of California Press, 1967), pp.vi-xx. p.vii.

laws of falling bodies by dropping objects from its famous tower, and Alexander Koyré's 1939 *Études Galiléennes* rebuked the concept of Galileo as a pioneer of the experimental scientific method.[7] Surprisingly, Galileo does not feature heavily in the works of Thomas Kuhn, with one of the key points about Galileo in *The Copernican Revolution* being that he did not in fact prove the Copernican world-system.[8] Since then, the key works of scientific history relating to Galileo have been ones that place him within a broader scientific or natural philosophic milieu. Wallace, for instance, has explored his relations to the Jesuits of the Collegio Romano.[9]

Addressing the Affair from the opposite side, theological and institutional historians have focussed on the actions of the Church. One focus has been on the Inquisition as an institution, through the works of Kelly and Mayer.[10] Also of note are the works of Coyne and McMullin, who examined the Church's position on Biblical exegesis, as did Blackwell, through the works of Cardinal Robert Bellarmine.[11] Others, like Giorgio de Santillana and Pietro Redondi turned to examine what Galileo did wrong, reversing the presuppositions of Church failure found in the early scientific histories.[12]

It has also been analysed through a political lens: Miller has highlighted that even the more recent histories, despite being far more nuanced than seeing the Galileo Affair as a simple binary along the axioms of science and religion or novelty and authority, still portray it as a doctrinal or

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[7] Lane Cooper, *Aristotle, Galileo, and the Leaning Tower of Pisa* (Ithaca: Cornell University Press, 1935); Alexander Koyré, *Galileo Studies*, trans. by John Mepham (Hassocks: Harvester Press, 1978).
[8] Thomas S. Kuhn, *The Copernican Revolution* (Cambridge: Harvard University Press, 1957), p.224.
[9] William A. Wallace, *Galileo and His Sources: The Heritage of the Collegio Romano in Galileo's Science* (Princeton: Princeton University Press, 1984), pp.xi-xii.
[10] Kelly, 'Galileo's Non-Trial'; Thomas F. Mayer, *The Roman Inquisition: A Papal Bureaucracy and its Laws in the Age of Galileo* (Philadelphia: University of Pennsylvania Press, 2013); Thomas F. Mayer, *The Roman Inquisition: Trying Galileo* (Philadelphia: University of Pennsylvania Press, 2015).
[11] George V. Coyne, S.J., 'Science Meets Biblical Exegesis in the Galileo Affair', *Zygon,* vol.48, no.1 (2013), pp.221-229; Ernan McMullin, 'The Galileo Affair: Two Decisions'; Richard J. Blackwell, *Galileo, Bellarmine, and the Bible* (Notre Dame: University of Notre Dame Press, 1991).
[12] John Russell, 'What Was the Crime of Galileo?', *Annals of Science*, vol.52, no.4 (1995), pp.403-410; Giorgio de Santillana, *The Crime of Galileo* (Melbourne: Heinemann, 1958); Pietro Redondi, *Galileo Heretic*, trans. by Raymond Rosenthal (Princeton: Princeton University Press, 1987).

ideological struggle.[13] He argues that such arguments 'do not appeal to causal factors specific enough to the historical moment', advocating for the introduction of a European perspective.[14] Though he puts it the most eloquently, Miller was not the first to emphasise the role of politics in the Galileo Affair. Both Segre and Biagioli emphasised the role of Galileo as a courtier of the Medici in Florence, placing him as primarily a courtier rather than a mathematician after his move to the city-state from Padua in 1610.[15] Wootton combined the political and scientific approaches, emphasising the role of Cosimo de Medici, the Grand Duke of Tuscany, in trying to prevent his skirmishes with the Aristotelians of Ludovico Delle Colombe's Pigeon League.[16]

A recent development of particular significance to this essay is the study of conceptions of Galileo's interactions with the Inquisition. Works such as Segre's 'Light on the Galileo Case?', and 'The Never-Ending Galileo Story' alongside Finocchiaro's *Retrying Galileo* have highlighted the significance of the legacy of the Galileo trial and changing interpretations surrounding the legitimacy of its outcome.[17] However, these have a flaw stemming from faulty periodisation: both tacitly assume that discourse and interpretations of the Inquisitions judgement begin in 1633. This leaves a gap of 17 years since the initial promulgation against Copernicus unaddressed, and fortunately supplies the theoretical framework required to fill that gap: Finocchiaro's vision of the legacy of the event as a series of 'retrials', where the decision was scrutinised and reassessed.[18] Using this 'retrial' approach,

[13] David Marshall Miller, 'The Thirty Years War and the Galileo Affair', *History of Science*, vol.46, no.1 (2008), pp.49-74. p.49.
[14] Ibid, pp.50-51.
[15] Mario Biagioli, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: University of Chicago Press, 1993), p.3; Michael Segre, 'Galileo as a Politician', *Sudhoffs Archiv*, vol.72, no.1, (1998), pp.69-82. p.71.
[16] David Wootton, *Galileo: Watcher of the Skies* (New Haven: Yale University Press, 2013), pp.109-110.
[17] Michael Segre, 'Light on the Galileo Case?', *Isis*, vol.88, no.3, (1997), pp.484-504; Michael Segre, 'The Never-Ending Galileo Story', in *The Cambridge Companion to Galileo*, ed. by Peter Machamer, pp.388-416; Maurice A. Finocchiaro, *Retrying Galileo, 1633-1992* (Berkeley: University of California Press, 2005).
[18] Maurice A. Finocchiaro, *Retrying Galileo*, p.6.

this dissertation will fill in the 17-year gap left by previous scholars in the study of interpretations of the trial of 1616. This will be achieved in three steps.

Chapter I, 'The Black and White Hounds', will provide a background to the condemnation of Copernicanism by critically addressing the discourse surrounding the decrees of 1616, assessing how the case against Galileo and Copernicanism was built and changed in focus and intensity. It will start with Niccolo Lorini's complaint to the Florentine branch of the Inquisition in 1615 and proceed to contrast it with a deposition made in Rome by Tommaso Caccini in the same year. This will reveal that the first phase of the condemnation was centred around Biblical exegesis, though the seriousness of the complaint intensified with the intervention of Caccini.

Chapter II, 'The Decree of the Holy Office', will then discuss the decrees made in 1616 by the Holy Office and the Congregation of the Index. Their implications and reception will be considered, using the private correspondence of Galileo himself and a fellow prominent Copernican, Johannes Kepler, to raise the question of how the decision was immediately received by those it would impact. Galileo's response in a set of letters to the Tuscan Secretary of State will be used to show that his interpretation of the issue was entirely different to that of the Dominicans who complained against him, as he was more concerned with preventing his enemies from slandering him than with the decrees that banned the belief in heliocentrism as heretical and had mandated amendments to Copernicus' *De Revolutionibus*.

Chapter III, 'The First Retrial: Tommaso Campanella and his *Apologia*', will go on to address the aftermath of the Holy Office's decree. It will focus in on a treatise written by the Dominican friar Tommaso Campanella, an acquaintance of Galileo who, at the time of the decree against Copernicanism, was serving the 17th year of a lifelong imprisonment in a Neapolitan dungeon for heresy and conspiracy against the Spanish Crown. Campanella's *Apologia pro Galileo* is a truly

remarkable work that appraises the arguments for and against such a decision (as well as who would be fit to decide), ultimately deciding that it would be in the interest of the faith to not censor Galileo. Before the arguments can be explored, it will be demonstrated that the *Apologia* was – contrary to the historiographical consensus - actually written after the decree of 1616. This will be shown using the correspondence from the previous chapter as new evidence in the debate surrounding when the *Apologia* was written. It will then be used to explore the aftermath of the 1616 decree through Maurice Finocchiaro's approach of a 'retrial' of Galileo, and to challenge the periodisation of the discourse surrounding the trial by demonstrating that the Holy Office's ruling was facing challenges as soon as it was made.[19]

Chapter I: The Black and White Hounds

In 1609, Galileo Galilei was a professor of mathematics at the University of Padua, then part of the Republic of Venice.

His fortunes would quickly change however, with his perfection of an optical magnifying device: the telescope. He turned it to the heavens and made a slew of discoveries: mountains on the Moon, the phases of Venus, and the moons of Jupiter, to name but a few. In 1610 he would release a book, dedicated to the Grand Duke Cosimo II of Tuscany, called *Siderius Nuncius* ('Message from the Stars', or 'Starry Messenger'), which proved a hit in the bookshops, with all 550 copies selling out within a week, and a cheap counterfeit also being circulated.[20] It was also in the *Siderius Nuncius* that Galileo would announce his support for the doctrine of the sixteenth-century astronomer, Nicolaus

[19] Ibid, p.6.
[20] Wootton, *Galileo: Watcher of the Skies*, pp.105, 101.

Copernicus, who, contrary to the geocentric (Earth-centred), geostationary (Earth at rest) Aristotelian worldview that was dominant at the start of the early modern period, proposed a new system with the sun at the centre (heliocentrism), and a mobile Earth.[21] This would prompt a feud with the Aristotelian natural philosophers, representatives of whom would condemn Galileo to the Florentine and Roman Inquisitions.[22]

This chapter will explore the origins of the Holy Office's 1616 decree against Copernicanism. Using the original documents of the Inquisition, it will analyse the specifics of the complaints raised against Galileo and Copernicus. It will address two key issues: how the attack on the Copernican doctrine was constructed, and how the nature of this attack changed. This second point will be demonstrated through the comparison of primary documents, an approach which has contributed much to the historiography of the Galileo Affair.[23] Starting with the initial complaint made to the Inquisition in Florence by Niccolo Lorini, it will examine the hardening of the Dominican attack on Galileo from one of general concern, to claiming that he had broken specific ecclesiastical laws. This source comparison will show that the attack on Galileo grew in the intensity and specificity of its claims. It will also demonstrate that for the Dominican preachers Lorini and Caccini, the problem raised by Galileo was one of Biblical exegesis: a matter of who should be able to interpret Scripture, and how they should go about it.

On 7th February 1615, the Dominican preacher Niccolo Lorini gave a written complaint to the Florentine branch of the Roman Inquisition. Presenting himself as one of 'the black and white hounds of the Holy Office', he was concerned with a letter circulating in Florence, amongst groups of people

[21] Galileo Galilei, *Siderius Nuncius*, 1610, trans. by William R. Shea (Sagamore Beach: Watson, 2009), p.92
[22] For accounts of the controversies with the Aristotelians, see Wootton, *Galileo: Watcher of the Skies*, and Lecture V in Oliver Lodge, *Pioneers of Science* (Cambridge: Cambridge University Press, 2012).
[23] Redondi, *Galileo Heretic*, p.8.

known as 'Galileists', who followed the teachings of Copernicus.[24] The letter in question was Galileo's 'Letter to Benedetto Castelli'. He claimed that after consulting with the leaders of his Convent of St. Mark, they were concerned by the arguments made in it: 'that certain ways of speaking in the Holy Scripture are inappropriate; that in disputes about natural effects the same Scripture holds the last place; that its expositors are often wrong in their interpretations; that the same Scripture must not meddle with anything else but articles concerning faith; and that, in questions about natural phenomena, philosophical or astronomical argument has more force than the sacred or the divine one'.[25] Clearly, Lorini found much at fault with Galileo's writing, principally that he prioritised astronomical observation over Scriptural truth, and that in doing so he would enable a careless reading of Holy Scripture and cause the downfall of Aristotelian thinking.

Unfortunately for Lorini, the anonymous Florentine Inquisitor who was tasked with assessing the complained-about Letter to Castelli found nothing seriously wrong with it. He did highlight that some phrases and words were used incorrectly, but ultimately concluded that 'though it sometimes uses improper words, it does not diverge from the pathways of Catholic expression'.[26] With regards to the concerns about Scriptural exegesis, the Inquisitor had this to say: 'where it says "that in the Holy Scripture one finds many propositions which are false if one foes by the literal meaning of the words", etc., granted that this sentence can be taken in a benign sense, nevertheless at first impression is sounds bad. Certainly it is not right to use the word falsehood, in whatever manner it be attributed to Holy Scripture, for it is the infallible truth in every way'.[27] Thus, at the first hurdle of the Scriptural attack on Copernicanism, Lorini had fallen. Galileo's work, that allegedly challenged

[24] 'Lorini's Complaint'. Cited in Maurice Finocchiaro, *The Galileo Affair: A Documentary History* (Berkeley: University of California Press, 1989), pp.134-135. p.134.
[25] Ibid, p.134.
[26] 'Consultant's Report on the Letter to Castelli', 1615. Cited in Maurice Finocchiaro, *The Galileo Affair: A Documentary History* (Berkeley: University of California Press, 1989), pp.135-136. p.136.
[27] Ibid, pp.135-136.

Holy Scripture for authority, was found to be free of heresy. This reveals a rift within the Church specifically on the issue of literalist Scriptural exegesis: the Inquisitor objects only to the wording of Galileo's claims that Scripture can seem untrue if literally, not the sentiment itself. In fact, as his scrutiny made no judgement on that sentiment, it can be taken as a tacit endorsement that literalism was not the only permitted method of Biblical exegesis.

Despite the original complaint being rebuked by the Consultant's Report, the conflict with the religious authorities had only begun. On 20th March 1615, another Dominican, Tommaso Caccini, made a complaint, this time in person at the Holy Office in Rome.

Caccini's deposition (which is a document intended to be used to inform judicial proceedings) differed in its focus and intensity of argument to Lorini's complaint. Whilst Lorini's message was concerned and subdued, Caccini's personal appearance at the Holy Office saw him unleash a salvo of complaints against Galileo. Whilst Lorini was voicing general concerns, Caccini was equipped with knowledge of which Scriptural passages Galileo had allegedly misinterpreted, and which pieces of ecclesiastical law he had broken. He cited the Tridentine Reforms, claiming that he had warned Galileo's supporters that 'no one was allowed to interpret divine Scripture in a way contrary to the sense on which all the Holy Fathers agree, since this was prohibited by both the Lateran Council under Leo X and by the Council of Trent'.[28]

When the significance of the Council of Trent with relation to Scriptural exegesis has been brought up by scholars, it is usually with regards to the opinion of Cardinal Robert Bellarmine, who was regarded as the most important of all the Cardinals at that time and specialised in controlling

[28] 'Caccini's Deposition', 20th March 1615. Cited in Maurice A. Finocchiaro, The Galileo Affair: A Documentary History (Berkeley: University of California Press, 1989), pp.136-141. p.137.

those errant in the faith.[29] Bellarmine did indeed cast a long shadow: in 1600 he had ordered the Copernican Giordano Bruno to be burned alive for heresy, and has since earned the nickname of the 'hammer of the heretics' in the necrology of the Sacred College.[30] The essence of his view on Scripture was that because the words of the Bible came from the Holy Spirit, then everything contained in them is a matter of faith and should be taken literally, unless the evidence to the contrary in physical matters was overwhelming.[31] He believed that the Copernican theory had not been proved and was unlikely to be – this did leave room for investigation, however such work must be done with tact, and the theory must not be accepted until it has been conclusively proven: only then would Bellarmine countenance reinterpreting Scritpure.[32] This may seem somewhat liberal and accommodating, though Kuhn reminds us that we do not know what Bellarmine would have regarded as 'proof' of Copernicanism, and furthermore that any 'proof' provided would be weighed up against Bellarmine's literal Scriptural exegesis.[33]

Parallels must be drawn between Bellarmine's view and that of Caccini. Crucially, they both take a view of the Tridentine decree that offers far less scope for non-Churchmen to interpret Scripture. In his paraphrasing of the Council's decrees, Caccini omits the passage that restricted the inarguable opinion of the Holy Fathers to 'matters of faith and morals'.[34] This implies that Caccini believed that Scripture held the last say as evidence, thus placing his tirade against Galileo in line (at least in practice) with Bellarmine's own views on Scripture: that everything was a matter of faith, even passages that had once been open to metaphorical interpretation. The views of Caccini and

[29] Mayer, *The Roman Inquisition: A Papal Bureaucracy,* pp.72-73.
[30] Redondi, *Galileo Heretic*, p.5.
[31] Robert Bellarmine, 'Letter to Paolo Foscarini', 12th April 1615. Cited in Maurice A. Finocchiaro, The Galileo Affair: A Documentary History (Berkeley: University of California Press, 1989), pp.67-69. p.68.
[32] Ibid, p.68; Wallace, *Galileo and His Sources*, p.294.
[33] Kuhn, *The Copernican Revolution*, p.198.
[34] Rivka Feldhay, 'Recent Narratives on Galileo and the Church: Or the Three Dogmas of the Counter-Reformation', *Science in Context*, vol.14, iss.1 (2001), pp.219-237. p.230.

Bellarmine are in accordance, claiming – contrary to Galileo and indeed the Council of Trent – that astronomy was a matter of faith and morals.[35] This emphasis on a literalist reading of the Bible on the part of Galileo's critics also places the findings of our analysis of Caccini's deposition in accord with Feyerabend's thesis: that the Church used the Bible as its boundary of truth, and that boundary was shut to non-Churchmen, especially those who overstepped their field of expertise.[36] Feldhay notes that it was this interpretation of the Tridentine decree that brought Copernicanism into conflict with the Church, rather than the Council of Trent itself.[37] Caccini's omission with regards to what exactly the Council of Trent was legislating, when combined with Bellarmine's literalism, paints a picture of the views that the Inquisitors would have been exposed to when assessing Copernicanism.

Corroborating Caccini's views with that of Bellarmine reveals that a strict adherence to Scriptural literalism in all matters, including astronomy, was not limited to the Cardinal – though not an official Church position, it was widespread amongst the Inquisition and its Dominican allies. With Caccini's interpretation of the Council of Trent expanding the application of Church dogma to all matters that the Church Fathers allegedly agreed on, and Bellarmine's strict literalism, the Scriptural argument could be easily levied against Copernicanism.

A comparison of the attacks levied against Galileo indicate the development in severity of an argument that aimed to censor the mathematician based on his supposed misguided and illegal foray into the realm of Biblical exegesis. This is in line with the findings of historians who have emphasised that it was Galileo's exegesis, not an abstract Church obscurantism, that lead to the condemnation

[35] George V. Coyne, 'Science Meets Biblical Exegesis in the Galileo Affair', *Zygon*, vol.48, no.1 (2013), pp.221-229. p.222.
[36] Paul Feyerabend, 'Galileo and the Tyranny of Truth', in *The Galileo Affair: A Meeting of Faith and Science. Proceedings of the Cracow Conference, May 24-27 1984*, ed. by George V. Coyne, S.J. (Vatican City: Vatican Observatory, 1985), pp.155-166. pp.159-160.
[37] Feldhay, 'Recent Narratives on Galileo,', pp.230-231.

of Copernicanism in 1616.[38] It also concurs with Redondi's argument that Galileo faced his predicament in 1616 due to his push towards a form of Biblical exegesis that was guided by his own discoveries, as opposed to contemporary Catholic dogma.[39]

However, it is important to emphasise that though Lorini and Caccini were certainly attacking Galileo based on the idea of Church's exclusive right to interpret Scripture, their arguments were not the same in either form or intensity. The Scriptural attack on Galileo and Copernicanism was heterogenous and polycentric in origin, though the arguments made were strikingly similar. This similarity has caused speculation as to whether the attacks were coordinated: Mayer connects them to a vague anti-Galilean conspiracy group led by Rafaello Delle Colombe (the brother of Ludovico).[40] The case clearly escalated, from one that could be written off by a Florentine Inquisitor, to one which occupied the Holy Office in Rome and accused the Copernicans of crimes against specific pieces of ecclesiastical law.

Chapter II: The Decree of the Holy Office

With the case against Galileo thus established, the Holy Office's Consultants' Report on Copernicanism was completed on 24th February 1616, and the Congregation of the Index released a decree on 5th March that suspended Copernicus' *De Revolutionibus*, the book upon which the Copernican astronomy was based, until its offending passages were corrected. This chapter will address the meanings of these, placing an emphasis how they were received by those that they would impact: Galileo and Kepler, the two leading Copernicans of the time.

[38] J.L. Heilbron, *Galileo* (Oxford: Oxford University Press, 2010), p.220.
[39] Redondi, *Galileo Heretic*, p.13
[40] Mayer, *The Roman Inquisition: Trying Galileo*, pp.8-12.

The Decree of the Holy Office assessed two key points: first, that 'the Sun is the centre of the world and completely devoid of local motion', and second, that 'the Earth is not the centre of the world… but it moves as a whole and also with diurnal motion'.[41] It found that the first point was 'foolish and absurd in philosophy, and formally heretical since it explicitly contradicts in many places the sense of Holy Scripture, according to the literal meaning of the words and according the common interpretation and understanding of the Holy Fathers and the doctors of theology'.[42] The second was given 'the same judgement in philosophy and that in regard to theological truth it is at least erroneous in faith'.[43] This decision has been interpreted as a doctrinal clarification, as the Church did not previously have a codified stance on the heliocentric principle.[44] It has also been regarded as a mistaken theological decision that enforced literalism over a well-established tradition of accommodating scientific discoveries within exegesis.[45] Both of these are well-founded in the light of the previous chapter's discussion of exegesis, however they fail to take into account what the Copernicans themselves made of the Decree – this chapter will address this historiographical shortcoming.[46]

Then, on the 5th of March 1616, the Congregation of the Index made its decision: Copernicus' *De Revolutionibus* would be suspended until amended, and a work by the Carmelite Antonio Foscarini that defended Galileo's Scriptural exegesis would be banned.[47] The key point from this source is not what it prohibits, but what it does not: Galileo was not mentioned at all. Furthermore, the

[41] 'Consultants' Report on Copernicanism', 24th February 1616. Cited in Finocchiaro, *The Galileo Affair,* pp.146-147. pp.146-147.
[42] Ibid, p.146
[43] Ibid, p.146.
[44] Finocchiaro, *Retrying Galileo*, p.18.
[45] McMullin, 'The Galileo Affair: Two Decisions', pp.196-197; Coyne, 'Science Meets Biblical Exegesis', p.225.
[46] For an Inquisitorial interpretation, see Heilbron, *Galileo*, p.221.
[47] 'Decree of the Index', 5th March 1616, Ibid, pp.148-150. p.149.

amendments made to Copernicus' works were only to do with his interpretation of Scripture, not the astronomical principles themselves.[48]

In keeping with our focus on contemporary interpretations of the Church's decisions, we must address what Galileo himself thought of this decree. This will be done by analysing two letters to the Tuscan Secretary. His most immediate response is found in a letter written the day after the Index's decree to the Tuscan Secretary of State, Curzio Picchena. He states at the opening of the letter that its purpose was to relay the news of the decisions of the Holy Office and of the Congregation of the Index.[49] Galileo's interpretation of the decree in this letter is intriguing and is worthy of reflection: he believed himself to be the victor in a struggle against personal adversaries. He remarks on Caccini, claiming that the friar had referred to Copernicus' work as 'heretical and against the faith' and 'tried orally and in writing to make this idea prevail, but events have shown that his effort did not find approval with the Holy Church'.[50] This passage indicates that Galileo, despite being fully aware of the condemnation of key aspects of the Copernican doctrine, as well as the censorship of *De Revolutionibus*, did not believe himself to be on the losing side. His letter reported that 'she [the Church] has *only* decided that that opinion does not agree with Holy Scripture, and thus only those books are prohibited which have explicitly maintained that it does not conflict with Scripture'.[51] The only work that was outright banned was a letter by Paolo Foscarini that maintained that Copernicanism was in accord with Scripture. In fact, Galileo's name did not appear anywhere on the decree, and Copernicus' *De Revolutionibus* only faced minor corrections in relation to its usage of Scripture. In Galileo's own words, 'I am not mentioned, nor would I have gotten involved in it if, as I said, my enemies had not dragged me into it'.[52] In Galileo's opinion in the immediate aftermath of

[48] Ibid. pp.149-150.
[49] Galileo Galilei, 'Letter to the Tuscan Secretary of State', 6th March 1616. Ibid, pp.150-151. p.150
[50] Ibid, p.150.
[51] Ibid, p.150. Emphasis added.
[52] Ibid, p.150.

the decrees of the Holy Office and the Congregation of the Index, he had escaped from his detractors, who had tried and failed to weaponise the Holy Office and the Congregation against him. After all, he himself had faced no punishment, and none of his works were even to be amended.

Galileo's evidently joyful thoughts were further developed in another letter to Picchena on 12th March, which recounted an audience that he had with Pope Paul V on the 11th. This built upon his perceived triumph evident in the previous letter, as he claimed that the Pontiff told him that 'I [Galileo] was so regarded by His Holiness and the whole Congregation that they would not easily listen the slanderers, and that I could feel safe as long as he lived', and that 'he was very ready at every occasion to show me also with actions his strong inclination to favour me'.[53] Reading this, there is an undeniable irony given what would happen in 1633. Of course, Galileo was unaware of this, and in 1616 his opinion of the Church – at least the one he relayed to Florence – was that the institution was his protector, and that he enjoyed the favour of the Pope himself.

It must be argued that Galileo's perceived position of strength was actually quite well-founded. After all, none of his works had been prohibited, it appeared that he could still investigate Copernicanism as long as he did not hold it to be true, and he seemingly had the Pope protecting him. Given the Pope's control over the Inquisition, it would seem that he was now indeed protected by the Holy Office.[54] Therefore, it seems from Galileo's correspondence that his interpretation of the 1616 condemnation of Copernicanism was that the Inquisition was now protecting him from malicious people who had attempted to have him condemned for heresy. As the anonymous Florentine Inquisitor had protected Galileo from Lorini's complaint in 1615, so would the Pope in 1616 from whatever may come.

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[53] Galileo Galilei, 'Letter to the Tuscan Secretary of State', 12th March 1616. Ibid, pp.151-153. p.151
[54] Mayer, *The Roman Inquisition: A Papal Bureaucracy*, p.9.

This interpretation of the decree may seem somewhat anticlimactic. There is yet more evidence to support this idea that the Copernicans were not panicked by the decree. It is also apparent in the correspondence of the Imperial Mathematician, Johannes Kepler. In a letter to Remus Quietanus of 4th August 1619, Kepler remarked that 'The first I heard of my book being prohibited in Rome and in Florence, was from your letter… I pray you send me the formula of censure'.[55] Though the promulgation against Copernicus certainly troubled Kepler, as his *Epitome of Copernican Astronomy* was prevented from circulation, it is curious that he would be unaware of the 1616 decree. Furthermore, the existence of the decree did not stop Kepler or Galileo from researching or publishing – it is therefore not surprising that the decrees of the Holy Office and of the Congregation of the Index were a relief to Galileo and went completely unnoticed by Kepler.

It is clear from the letters of Galileo and Kepler that the decrees of the Holy Office and of the Index were not viewed as especially important or restrictive. The most revealing aspects of the sources discussed are twofold: that Galileo (unlike Lorini and Caccini) believed the 1616 affair to be about him being slandered – this is also apparent in a certificate from Cardinal Bellarmine; and that the actual impacts of the decrees, in the opinions of the Copernicans, were of minimal or even positive consequence.[56]

However, not all believed the decrees to be of minor consequence: the final section will deal with the *Apologia Pro Galileo* of the Dominican friar Tommaso Campanella, which addressed at length the condemnation of 1616.

Chapter III: The First Retrial: Tommaso Campanella and his *Apologia*.

[55] Johannes Kepler, 'Letter to Remus Quietanus', 4th August 1619. Cited in M.W. Burke-Gaffney, *Kepler and the Jesuits* (Milwaukee: Bruce, 1944), p.101.
[56] Cardinal Bellarmine's Certificate, 26th May 1616. Cited in Finocchiaro, *The Galileo Affair,* p.153.

Of course, Galileo's misfortunes did not end in 1616. After a break from writing, he published *The Assayer* in 1623 and the *Dialogue* in 1632, which led to his formal imprisonment and condemnation for heresy by the Inquisition in 1633. That episode, however, is not the concern of this dissertation. Its business is with the more immediate aftermath of the 1616 decree, and principally establishing contemporary conceptions of the Holy Office's decisions. To do this, I will use the approach of understanding the legacy of the Galileo Case as a series of retrials, as pioneered by Maurice Finocchiaro in *Retrying Galileo*, in which a 'retrial' constituted 'a serious examination of whether, how, and why his condemnation was right or wrong'.[57] In utilising his method on the outcome of the 1616 trial, I will simultaneously apply Finocchiaro's very useful approach to new sources and challenge the periodisation of the subsequent Galileo Affair, which he places as starting in 1633, right at the end of the original affair of 1613-1633.[58] This periodisation is problematic as it excludes interpretations before 1633. Furthermore, in Segre's study of conceptions of Galileo, he does not address conceptions of the man within his lifetime in detail, only briefly mentioning Maffeo Barberini's poem *Adulato Perniciosa* of 1620, which references Galileo.[59] These interpretations of the discourse on the affair create a dividing line between the event and the commentary on it in 1633, which was not the case. Instead, I propose instead that in the aftermath of the 1616 trial, there was already a 'retrial' in progress, as contemporary writers commented on the judgement.

To formulate this first 'retrial' of Galileo, I will focus on Tommaso Campanella O.P.'s fascinating *Apologia Pro Galileo*, which was – allegedly - written in early 1616, and published in Frankfurt by the Lutheran Tobias Adami in 1622.[60] It details the arguments for and against the

[57] Finocchiaro, *Retrying Galileo,* p.6.
[58] Ibid, p.360.
[59] Michael Segre, 'The Never-Ending Galileo Story', p.389.
[60] The scholarship of this treatise uses the English 'Thomas' and Italian 'Tommaso' interchangeably, as well as the Latin '*Apologia*' and English '*Defence*'.

condemnation of the Copernican theory, as well as how and by whom such a decision could be made. The *Apologia* was then promptly banned in Rome in 1623. It is of great interest, especially because of the available documents surrounding the trial in 1616, it is (especially in the Anglophone historiography) amongst the least utilised.[61] Depending on our answer to the key debate surrounding it – that being its date of composition – it is also perhaps the least understood.

There are several reasons for this lack of use. A key one, highlighted by Blackwell, is that it is not included in Favaro's *Opere di Galileo Galilei*, which serves as the starting point of most scholarly accounts of the Affair.[62] This means that there is a methodological predisposition toward either excluding the *Apologia* or simply being unaware of it. Furthermore, as pointed out by Bonansea and Blackwell, the earliest readily available English translation, that being Grant McColley's 1937 edition, was simply not of a high enough standard to be useful in a scholarly setting.[63] It is not surprising then, that comparatively more attention has been paid to it since a new English edition was released in 1994, though the continued usage of the *Opere* as the definitive sourcebook for Galilean scholars means that the *Apologia* is unfortunately not likely to become a staple in the historiography.

The previous lack of attention given to Campanella's *Apologia* should not deter us from using it in the context of analysing the aftermath of the 1616 decree – quite the opposite. Before delving into its contents, however, we must interrogate its provenance, and address the key debate surrounding it, which is about its date of production.

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[61] Richard J. Blackwell, 'Preface' in *A Defence of Galileo the Mathematician from Florence,* ed. by Richard J. Blackwell (Notre Dame: University of Notre Dame Press, 1994), pp.ix-xi. p.ix; Grant McColley, 'Preface', in *The Defence of Galileo of Thomas Campanella, For the First Time Translated and Edited, with Introduction and Notes*, ed. by Grant McColley (Northampton: Smith College, 1937), pp.v-vi. p.v.

[62] Blackwell, 'Preface', p.ix.

[63] Ibid, p.ix; Bernardino M. Bonansea, 'Campanella's Defence of Galileo', in *Reinterpreting Galileo*, ed. by William A. Wallace (Washington D.C.: Catholic University of America Press, 1986), pp.205-240. pp.207-208.

Its writer was the Dominican friar Tommaso Campanella, originally of the region of Calabria in southern Italy. He joined the Dominicans at the age of 13 and learned about the key thinkers of the Church: men like Sts. Augustine of Hippo and Thomas Aquinas. Campanella, however, was no ordinary friar. He actively rejected the orthodoxy of Aristotelian philosophy and embraced the teachings of Bernardino Telesio, which drew him into conflict with the religious authorities.[64] He was punished for his philosophical beliefs by the Dominicans in 1592; for criticising the Church's organisation and dogma in 1594; and convicted of heresy in 1597 and 1598. In 1599, he was arrested following a failed plot against Spain in Naples. His role was unclear, though it was guided by his political philosophy, in which he advocated for a world-state under the sole rule of the Pope. He was charged with heresy and conspiracy (which necessitated two trials – one civil, one religious), and was sentenced to spend the rest of his life in prison.

Campanella's links to Galileo are accepted as having formed in 1592 in Padua, when Galileo delivered him a letter from the Grand Duke. The two men became acquaintances due to their shared dislike of Aristotle.[65] This background information is key for understanding the production of the *Apologia*. With this established, the key debate over the *Apologia* may now be addressed.

The question of when, why, and for whom the *Apologia* was written forms the crux of the historiographical debate surrounding Campanella's treatise. In the scholarship, this manifests itself into one simple question: 'when was the *Apologia* written?'.[66] This debate is very important for the analysis of the source, as it impacts how it must be envisioned: if it predates the Holy Office's decree, then it can be used as a window onto the decision-making process of the Inquisition.[67] However, if it

[64] Blackwell, 'Introduction', in *A Defence of Galileo*, pp.1-34. pp.1-9 provides a good outline of Campanella's life.
[65] Ibid, pp.7-8.
[66] For an excellent English appraisal of this debate, see Bonansea, 'Campanella's Defence of Galileo', pp.208-214.
[67] Blackwell, 'Introduction', in *A Defence of Galileo*, pp.1-34. p.20.

was written afterwards, it becomes a reflection on the events of 1616. This forthcoming section will demonstrate that the *Apologia* in its final form was likely not completed before 5th March 1616, and that owing to it not being released in a general manner until 1622, it constitutes a retrospective questioning of the events of 1616: the first 'retrial' of Galileo.

In his critical appraisal of the *Apologia* (and its first English translation), Grant McColley places its composition in the early months of 1616, though does not come to a specific conclusion as to in which month. He places the impending decree of 1616 as the catalyst for it, and noting that the *Apologia's* lack of internal consistency, its repetitions, and its poor organisation indicate that it was rushed.[68] Strengthening this, he cites several specific pieces of internal evidence: that Campanella places the current year as 1616, and writes as though Copernicanism had not yet been condemned, quoting such passages as '"it is unnecessary that the investigations of Galileo should be forbidden… a misfortune which is about to occur"'.[69] He briefly mentions two letters to Galileo that mention it: one from Jacob Failla on 7th September 1616 that outlines the *Apologia*, and one from Campanella on 3rd November 1616 regarding it.[70] The placing of the *Apologia* as being written in early 1616 does have quite strong backing in internal evidence, however it is not verified externally until 6 months after its alleged completion. This leaves the argument reliant on one key assumption: that Campanella could be taken at his word.

This assumption was challenged by Luigi Firpo in 1968, who paid close attention to the dedicatory passage at the start of the *Apologia*. This dedication claimed that the treatise was written at the behest of Cardinal Boniface Caetani, who was one of the Cardinal Inquisitors, and would be later tasked with making the amendments to Copernicus' *De Revolutionibus*. Caetani would die in

[68] McColley, 'Introduction', in *The Defence of Galileo*, pp.vii-xliv. p.vii.
[69] Ibid, pp.vii-viii.
[70] Ibid, p.vii.

June 1617 before starting this task. For Firpo, the idea that Caetani would ask Campanella to write the treatise is 'absurd' – instead, it was Campanella who added a posthumous dedication to him to insure himself against a backlash owing to the contents of the *Apologia.*[71] Firpo believes that based on this, the proposal that it was written before the condemnation is untenable: Caetani was ordered to make the condemnation on 7th March 1616, and died the next year, making him the perfect cover for Campanella's mistakes.[72] According to this hypothesis, the *Apologia* was written in the summer of 1616, with the dedication being written after-the-fact.[73]

1971 was a busy year for proponents of the pre-decree thesis, however. Salvatore Femiano released his own edition of the *Apologia*, in which he claimed that writing it after the Index's condemnation would have been pointless, and that Caetani asked Campanella to write the *Apologia* to inform his decision-making whilst deliberations were ongoing in the Holy Office.[74] Likewise, J.J. Langford took the dedicatory passage at the start of the *Apologia* as truthful, also claiming that the treatise was written at the request of Cardinal Caetani, which he used as evidence to suggest that the case against Galileo was not merely open-and-shut.[75] The pre-decree thesis is currently more accepted than Firpo's, though his idea that it was merely framed as a response to Caetani has endured.[76]

To introduce this much-needed new evidence to this debate, it is worth connecting two letters to the dating of the *Apologia*. Firstly, Kepler's 'Letter to Remus', which indicated that even the

[71] Luigi Firpo, *Apologia di Galileo* (Turin: Unione Tipografico-Editrice Torinese, 1968), p.21.
[72] Ibid, p.21.
[73] Ibid, pp.19,21.
[74] Salvatore Femiano, *Apologia per Galileo* (Milan: Marzorati Editore, 1971), p.26.
[75] Jerome J. Langford, *Galileo, Science and the Church* (Ann Arbor: University of Michigan Press, 1971), p.83.
[76] John M. Headley, 'Campanella on Freedom of Thought: The Case of the Cropped Periscope', *Bruniana and Campanelliana*, vol.2, no.1/2 (1996), pp.165-177. p.168.

Imperial Mathematician was unaware of the decree; and Galileo's 'Letter to the Tuscan Secretary of State', which provides a potential start date for the composition of the *Apologia*.

If Kepler were not aware of the decree of 5th March 1616 as Imperial Mathematician, then why would Campanella know? This exposes a second assumption of the pre-decree thesis: that Campanella would have known that the decree had been made as and when it happened. Here it is worth remembering some biographical information: he was confined to the dungeon during 1616, and his letters to Galileo went unanswered. It is entirely possible that Campanella heard of the impending decree after it had actually been passed, and hurriedly wrote it over the summer.

Second, Galileo's 'Letter to the Tuscan Secretary of State' could explain how Campanella heard of the decision before Kepler. In this, he mentions an upcoming trip to Naples, which Finocchiaro and Drake believe could have been to visit his ally Paolo Foscarini, and perhaps Campanella as well.[77] It is not unreasonable for Galileo to have given Campanella key information about the decree – in fact, this would explain the issue of how an imprisoned heretic knew of the actions of the Inquisition before the Imperial Mathematician, to whose work the decree was especially relevant. Though Finocchiaro remarks that Galileo may not have gone through with such an act owing to the decrees and Bellarmine's warning, the Letters to the Secretary did show that Galileo believed he had won and was protected by both the Pope and Bellarmine.[78] As Blackwell has noted that Campanella was allowed to have some visitors in prison, there is therefore no real reason why the meeting would not have occurred.[79]

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[77] 'Letter to the Tuscan Secretary of State', 6th March 1616. p.150; Finocchiaro, *The Galileo Affair*, pp.344-345; Drake p.218; Stillman Drake, *Discoveries and Opinions of Galileo* (New York: Random House, 1957), p.218.
[78] Finocchiaro *The Galileo Affair*, pp.344-345; 'Letter to the Tuscan Secretary of State', 6th March 1616, p.151; 'Letter to the Tuscan Secretary of State', 12th March 1616, p.152.
[79] Blackwell, 'Introduction', p.9.

This meeting having occurred would also explain how Campanella knew to dedicate the treatise to Caetani, to whom Campanella attributed power 'to determine what has been correctly said and what should be defended or rejected, since this role has been entrusted to you by the Sacred Senate'.[80] In his letter of 6th March 1616, Galileo wrote that 'correction of these two books [Copernicus' *De Revolutionibus* and Diego de Zuñiga's *On Job*] has been assigned to Lord Cardinal Caetani': this is information that he could easily have given to Campanella. A final key point that figured into Campanella's work was that a condemnation of Galileo's works was forthcoming – given that Galileo often claimed that a group of malicious actors were in continuous conspiracy against him, it would be logical for Campanella to write a treatise advocating against this.[81]

This new evidence suggests that the impetus for Campanella's writing was actually Galileo himself visiting Naples and relaying his interpretation of the decree. This runs counter to several arguments of the pre-decree thesis: especially Femiano and McColley's assertion that writing the *Apologia* after the decree would have been pointless.[82]

Going to such lengths to determine the time at which the *Apologia* was composed may seem almost pedantic, but it is very important with regards to how it should be interpreted. Furthermore, it is significant for demonstrating the first 'retrial' of Galileo, which can now be established as having been formulated in the summer of 1616.

How then, did Campanella retry Galileo, and what was his verdict? It should be no surprise given his personal history, philosophical beliefs, and relationship with Galileo that it was not favourable to the

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[80] Tommaso Campanella, *A Defence of Galileo the Mathematician from Florence*, in *A Defence of Galileo the Mathematician from Florence,* ed. by Richard J. Blackwell (Notre Dame: University of Notre Dame Press, 1994) p.39.
[81] 'Letter to the Tuscan Secretary of State', 6th March 1616, pp.150-151; 'Letter to the Tuscan Secretary of State', 12th March 1616, p.152.
[82] Femiano, *Apologia*, p.26; McColley, 'Introduction', p.vii.

Holy Office. His treatise was, in both form and method of argumentation (the deference to the authority of the Church Fathers and the stacking of references to classic works as a form of evidence), typical of the time.[83] Its many references to Campanella's own works, and those of Sts. Augustine and Thomas Aquinas are dealt with in depth in both McColley's and Blackwell's editions.[84] Headley's article 'Campanella on Freedom of thought' offers a deep dive into the selective use and misuse of Scripture and theological works, that largely stems from Campanella's lack of access to reading resources in prison.[85] The focus here is not to locate Campanella's references, but to assess the implications of his arguments as a 'retrial' of Galileo.

The *Apologia* starts with Campanella outlining the key question that he wished to answer: 'whether the philosophical view advocated by Galileo is in agreement with, or is opposed to, the Sacred Scriptures'.[86] He answers this in the form of a *disputatio* in five parts, with the first two outlining the arguments for and against Galileo, the third introducing the hypotheses required to answer his question, and the final two responding to the arguments against Galileo, and evaluating the ones in favour of him.[87] The objections to Galileo raised by Campanella were largely Scriptural, whereas those in favour are primarily appeals to Church figures, for instance how *De Revolutionibus* was dedicated to the Pope Paul III, Cardinal Cusa, or their contemporary leading Jesuit, Father Clavius, all of whom were either believers of heliocentrism or were not opposed to it.[88]

Campanella then sets up three hypotheses to prove his case, which revolve around who is fit to judge the case: they must love God, have a high level of theological and astronomical knowledge,

[83] Blackwell, 'Introduction', pp.15-16.
[84] See McColley, *The Defence of Galileo*; Blackwell, *A Defence of Galileo*.
[85] Headley, 'Campanella on Freedom of thought', p.165.
[86] Campanella, *Defence*, p.41.
[87] Ibid, p.41.
[88] Ibid, pp.43-50.

and that they must accept these basic rules.[89] It is then no surprise that he claims that due to astronomy being a new field, and that Scriptural passages were open to interpretation, that there were none fit to judge. This essentially denied the authority of the theologians to censor Copernicanism and Galileo, running counter to the purpose of the Holy Office, which was to maintain orthodoxy.

Furthermore, he goes on to turn the tables on the Aristotelians, responding to the arguments against Galileo by citing the pagan beliefs held by Aristotle, and asserted that such beliefs still plagued the Church at the time of writing.[90] He then contrasted the theologians who mistakenly clung to the pagan Aristotelianism with Galileo, whose works based on observations of the Book of Nature (in which, according to Campanella, God's truth could also be found) were being used to extirpate Aristotelianism. For Campanella, this made Galileo worthy of praise, as 'the overthrow of the teachings of infidels and the errors of pagans is not the destruction of theology, but the strengthening of Christianity'.[91]

In his final judgement on the arguments in favour of Galileo, Campanella draws two key conclusions. First, directly contrary to the Holy Office's decree, that 'the views of Galileo… are in agreement with the ancient and the modern interpretations of Sacred Scripture. Therefore they are also in agreement with the Sacred Scriptures themselves on astronomical matters'.[92] Second, that based on an understanding of Sts. Aquinas and Augustine, 'it is not possible to prohibit Galileo's investigations and to suppress his writings without causing either damaging mockery of the

[89] Ibid, pp.51-80.
[90] Ibid, pp.83-84.
[91] Ibid, p.85.
[92] Ibid, p.122.

Scriptures, or a strong suspicion that we reject the Scriptures along with the heretics, or the impression that we detest great minds'.[93]

Before concluding this dissertation, a reflection on how Campanella's retrial configured within the previously established interpretations of the Dominicans and Galileo is in order. The attitude of Campanella with regards to the decree clearly differed from Galileo's, despite the two men being on the same side of the conflict. Tying in our observations on the two letters to the Secretary, it is abundantly clear that Galileo and Campanella had different views on both the meaning and stakes of the conflict with the Inquisition. For Campanella, it was imperative for the good of the faith that Galileo be allowed to continue his work, and the struggle against Aristotelianism was of prime importance for the removal of pagan influence from the Christian faith.

Furthermore, the opponents that Galileo and Campanella formulated in their minds were very different. Galileo's enemies were individuals machinating against him, whilst he was protected by the Mother Church. It was not a matter of heresy, but of protection from malicious actors who had tried and failed to incriminate him. Campanella, on the other hand, was engaged in battle with an institution that he believed was itself heretical and falsely pushing its own unproven and pagan natural philosophy.

As a final comparison, its should be noted that Campanella's *Apologia* answered the Scriptural challenge of the Dominicans head-on. Therefore, with regards to what each actor perceived the object of conflict to be (Scriptural interpretation), Campanella and the anti-Galilean Dominicans had a lot in common, though Campanella's stakes were a lot higher. Lorini and Caccini (along with Bellarmine) held a view derived from the Council of Trent that restricted Scriptural exegesis to those

[93] Ibid, p.123.

who held institutional power. The *Apologia* made quite the opposite argument: that knowledge of both theology and astronomy should be required to make a judgement on Scripture with regards to the heliocentric theory, and Campanella thus denied the authority of potential censors over Galileo's work.

Conclusion

The story of Galileo's trial of 1616 ended in 1623 with the banning of Campanella's *Apologia Pro Galileo*. Of course, the Galileo Affair would continue – unfortunately, this study cannot. This final section will sum up what has been said thus far and reflect on the implications of this study on the historiography.

To conclude, let us turn back to the key questions laid out in the introduction. Firstly, how did the case against Galileo develop? On the part of the Dominicans who complained to the Holy Office, the stakes were increased in the immediate aftermath of the Letter to Castelli being found as compliant with Scripture and the faith. Caccini's attack on Galileo was far more organised than Lorini's, demonstrating a refinement in the anti-Galileo position, from claiming a sense of general concern at a letter being circulated, to citing specific laws, notably those of the Council of Trent, that Galileo had broken. It is important to note that both Bellarmine and Caccini held views on Scriptural exegesis that were in excess of the decree of Trent that they used. Therefore, the case based on Scripture developed from Lorini, where it was a problem of the Bible being misinterpreted or disregarded, through to Caccini and Bellarmine, where Scriptural literalism was elevated above all else, even in natural matters which had nothing to do with faith or morals.

As the Church did not have a codified set of rules on the specifics of Scriptural exegesis, a historiographical gap is present in reconstructing the views of Churchmen and Inquisitors with regards to it. A good approach for this may be similar to Mayer's prosopographical *The Roman Inquisitition: A Papal Bureaucracy*, in which he assessed the personalities of the majority of Inquisitors between 1610 and 1635.[94] He notes that the diplomatic repositories of the Inquisition have not been fully exploited, which would be a good starting point for sources on this topic.[95]

The second key question regarded the decrees of the Holy Office and the Congregation of the Index, promulgated in early 1616, and their reception by the Copernicans Galileo and Kepler. Despite the fact that both of the astronomers would have works prohibited due to the 1616 decree in the future, their response to the decree was not indicative of the misfortune to come. Galileo, for his part, was seemingly emboldened by it, and glad to be under the protection of the Papacy and the Holy Office. Kepler, on the other hand, was completely unaware of it until his *Epitome of Copernican Astronomy* faced bans in Rome and Florence. Crucially for those developers of the heliocentric model was the simple fact that the decree did not ban the investigation or discussion of Copernicanism – only holding it to be true was a heresy.

An interesting further avenue of enquiry for this topic would be to analyse the *Opere* and other sources for Galileo's reflections on the 1616 decrees. It was not appropriate for this essay, but Galileo does offer a brief reflection on the Holy Office's decision in the address to the reader of his 1632 *Dialogue Concerning the Two Chief World-Systems*.[96] There is no reason why other works such as *The Assayer* or his lengthy correspondence with his daughter cannot be utilised – at least in part- as retrospectives on his career. This could assist in fulfilling the late Stillman Drake's idea for his own

[94] Mayer, *The Roman Inquisition: A Papal Bureaucracy,* p.38.
[95] Ibid, p.8.
[96] Galileo Galilei, *Dialogue Concerning the Two Chief World Systems*, p.5.

form of *Galileo Studies*: a history of ideas approach to Galileo that uses internal evidence and psychological plausibility to reconstruct his personality.[97] This combines methods from the history of ideas with biography to illuminate what Drake believes is a shortcoming with intellectual history: that its insights 'still leave us in the dark with respect to the work of an individual as he approached it, performed it, regarded it, and evaluated it'.[98]

The final key question was to explore how the 1616 decision was reflected upon. In doing this, Campanella's underutilised *Apologia Pro Galileo* provided an ideal case study for the idea of a 'retrial' of Galileo, challenging the judgement of the Holy Office. It contributed to the debate surrounding the production of the *Apologia*, challenging the thesis that places it as before 5th March 1616 due to the pre-decree thesis' unwarranted assumptions. It demonstrated that much of the evidence used to support that thesis could equally point to the one advocated for here: that it was written in the summer of 1616, and not released at a large scale until 1622. Furthermore, it tied in the correspondences of Kepler and Galileo to demonstrate that Galileo himself provided the impetus for the *Apologia* to be written with his visit to Naples. As it was written after the decree, the *Apologia* contained a serious reappraisal of the morality of the decree, thus constituting a 'retrial'. The outcome of this first retrial was one that denied the authority of the Inquisition to decree against Galileo and Copernicus. Though nominally written for Cardinal Caetani to assess the arguments for and against Galileo, the *Apologia* constituted an attack on the authorities in Rome, placing them in the wrong as followers of a false and pagan philosophy. Campanella's retrial raised the stakes of the condemnation far higher than the reflections of his ally Galileo: it became an issue far greater than demonstrating the proof of Copernicanism or preventing slander. The trial became tied to much

[97] Stillman Drake, *Galileo Studies: Personality, Tradition, and Revolution* (Ann Arbor: University of Michigan Press, 1970). p.14.
[98] Ibid, p.14.

broader issues, especially the pursuit of truth and the ideal relationship between the religious authorities and scientific endeavour.

The exploration of the aftermath of the 1616 decree through this treatise raises several more questions: did others question the decision as Campanella did? If so, what (if anything) did their arguments have in common? Conversely, did some celebrate the decree? Useful starting points for this investigation may be the writings of the members of Ludovico Delle Colombe's Pigeon League, or Melchior Inchofer's *Tractatus Syllepticus* of 1633.[99] Further avenues of inquiry may be found in the works of Giovanni Magini and Martin Horley, who had been hostile to Galileo since the release of *Siderius Nuncius*: the former wrote it off as 'pretentious', and the latter wrote a work, *Some Brief Remarks Against the Starry Messenger*, in response.[100] All were staunch opponents of Galileo; using their writings would serve as excellent counterweights to Campanella's *Apologia*.

The Galileo Affair will continue to be reinterpreted and reassessed indefinitely. It is nigh impossible to predict what it will represent and how it will be judged by future generations. However, this dissertation has highlighted that the retrials of Galileo developed as soon as his original ordeal in 1616 ended and has made new insights into contemporary conceptions of Galileo and the justifications for the ban of the Copernican doctrine, as well as contributing a radical new understanding of Campanella's *Apologia Pro Galileo*.

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[99] An English translation of *Tractatus* Syllepticus can be found in Richard J. Blackwell, *Behind the Scenes at Galileo's Trial: Including the First English Translation of Melchior Inchofer's Tractatus Syllepticus* (Notre Dame: University of Notre Dame Press, 2006), pp.105-206.

[100] Annibale Fantoli, *The Case of Galileo: A Closed Question*, trans. by George V. Coyne (Notre Dame: University of Notre Dame Press, 2012), pp.30-31.

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