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The Jesuits and Galileo: Fidelity to tradition and the adventure of discovery

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Abstract
This paper investigates the tensions within the Society of Jesus, especially at the Roman College, at the time of Galileo and how they were resolved or not in a spirit of accommodation which was maturing at that time and which has entered into the Jesuit bloodstream. Jesuits at the Roman College confirmed Galileo's earth-shaking observations, reported in his *Sidereus Nuntius*. Aristotle's physics was crumbling. Would Aristotelian philosophy, which was at the service of theology, also collapse? Controversies over the nature of sunspots and of comets held implications for the very foundations of Christian belief. Some Jesuits saw the threat and faced it with an astute view into the future; others, though pioneers as scientists, could not face the larger implications of the scientific revolution to which they contributed with Galileo. Much of what occurred can be attributed to the strong personalities of the individual Jesuit antagonists, and Cardinal Robert Bellarmine will prove to be one of the most important of those personages.

Keywords
Aristotelian natural philosophy, Bellarmine, Clavius, Copernicanism, Galileo Commission, Roman College

Introduction

The role of the Jesuits in the Galileo affair has been depicted at the two extremes as a concerted effort by the Society of Jesus to do him in, or as an effort on his behalf and in consort with him to save the Church from declaring itself on Copernicanism. Neither is true. Nor could we expect to find such a concerted effort in the Galileo affair, since such an effort has never been seen in the entire history of the Society.

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One must, in fact, distinguish both sides of the relationship: on the one hand there is Galileo, the person, as distinct from the Galileo affair and on the other hand there are individual Jesuits as distinct from groups of Jesuits who by profession and/or common scientific, philosophical or theological views express a common view of matters.

For simplicity and in an attempt to disentangle these distinct relationships, I shall discuss three periods: Galileo's teaching years at Pisa, his discovery years at Padua and his conflict years centered on the decree of 1616 condemning Copernicanism and the trial and condemnation of Galileo in 1633.

Galileo's Pisa years

After attempts to obtain a teaching position at Bologna, Padua and Florence, in July 1589 Galileo was called to a teaching position at Pisa. He taught the elements of mathematics and astronomy. His predecessor had taught the *Elements* of Euclid and Sacrobosco's *Sphere* (the classical treatise on the elements of Ptolemaic astronomy). What were the sources for Galileo's teaching? During the past decades through the research of Wallace and others[1] it has been well established that Galileo relied to a great extent upon lecture notes of Jesuits at the Roman College. This dependence of Galileo is particularly noteworthy as to his teaching in logic based on the *Posteriores Analytici* of Aristotle and on questions connected to Aristotle's *De Coelo* and *De Generatione*. There is more independence in his discussion of motion but even there concepts occur which are clearly dependent upon teaching at the Roman College. Thus, it was at the Roman College that Galileo came into contact with the Aristotelian and medieval way of questioning in natural philosophy. It was a conceptual approach that Galileo inherited and that he would adapt and question in future years. The Jesuits at the Roman College undoubtedly followed Aristotle in philosophy and Ptolemy in astronomy, at least for didactic purposes. As to their research and their thinking on issues in natural philosophy they would prove to be much more independent, within the confines of discipline imposed by the Society, than the majority of their counterparts in other centers of learning. Both they and Galileo would share the growing tensions between an Aristotelian natural philosophy and the new scientific discoveries, especially those of Galileo soon to appear. For the Jesuits this created an even more significant tension in the realm of theological and doctrinal issues since these relied heavily upon a 'Christianized' Aristotelianism.

There is a personal relationship involved in this connection of Galileo, the Pisan teacher, with the Roman College. In 1587 Galileo took a trip to Rome to meet Clavius for the first time and to seek from him a recommendation for a teaching chair in mathematics at Bologna.[2] This provided Galileo, according to Wallace, with an opportunity to gain first-hand knowledge of the teaching of the philosophy professors at the Roman College. It was then through his regular correspondence with Clavius that Galileo would have obtained the various teaching notes from the Roman College that he adapted to his own teaching at Pisa.

When Galileo first visited him Clavius was already at the height of his fame at the age of 50 years. He had single-handedly founded the world-renowned school of mathematics at the Roman College and had published various treatises in mathematics and astronomy, which had a wide circulation. He had played an important role in the reform of the calendar under Pope Gregory XIII. Galileo, who was 30 years his junior and had just begun his scientific career, presented to Clavius his theorems on the barycenter of parabolic conic figures of revolution, one of the first indications of Galileo's talent both in theory and in practical matters. A personal relationship based upon a deep esteem for one another was born at that time and would last, despite some travails, until Clavius's death in 1612. As we shall see, Galileo's relationships with other Jesuits were not so cordial.

Galileo's years in Padua

Galileo was 28 years old when he began teaching in Padua and, as he himself said, he spent the happiest 18 years of his life there. Padua was part of the Venetian Republic, which at that time found itself in opposition to Rome on various issues. The Jesuits were the defenders of Papal authority and several of Galileo's friends, defenders of the independence of the Venetian Republic, found themselves in opposition to the Jesuits (Fantoli, 2003: 75–76). This, undoubtedly, had some influence on Galileo's attitude to the Jesuits, but it is also clear that Galileo maintained a cordial and productive relationship with Clavius and his disciples at the Roman College. Furthermore, there were at the time polemics between the university authorities at Padua and the Jesuits who were trying to establish their own center of higher studies there. Galileo was surely influenced by the spirit of those times and even wrote satirically about the Jesuits when they were finally expelled from the Venetian Republic:

> Last evening at two o'clock in the morning the Jesuit Fathers were sent away with two boats, which were to lead them that night out of the state. They all left with a Crucifix hung on their necks and a lighted candle in their hands . . . I believe that they will have also left Padua and the rest of the state, with much weeping and pain of the many ladies who are devoted to them. (Favaro, 1968, X: 158)

In 1604 a nova appeared. Clavius aroused Galileo's interest by asking him whether he had observed it. The nova of 1572 had already excited interest since the failure to observe parallax indicated that it was among the fixed stars and, therefore, directly threatened the Aristotelian notion of the immutability and incorruptibility of the heavens. Clavius, together with Tycho Brahe, was convinced of this and had published it in a 1585 edition of his commentary on the *Sphere* of Sacrobosco. This was a serious threat to one of the fundamental assertions of Aristotle's natural philosophy. Was the same true of the nova of 1604? Galileo was moved by Clavius's urging and gave a series of lectures in which he asserted that observations of the nova were clear

evidence against Aristotelian natural philosophy. He did not at this time speak directly of Copernicanism, but there are implications that he was beginning to see the fall of the natural philosophy of Aristotle and the rise of Copernicanism. His correspondence with Clavius indicated that the latter was of the same mind, but less strongly moved towards Copernicanism.

The apparent death knell to Aristotelian natural philosophy came with Galileo's telescopic observations, published in his *Sidereus Nuntius* (Starry Message), of the myriad of stars of the Milky Way, of the Medicean satellites of Jupiter, of the phases of Venus, of the mountains and craters on the moon and of the sunspots. The Jesuits at the Roman College were at first skeptical of Galileo's observations. Since Galileo was convinced of the veracity of his observations and knew that the Jesuits, at least Clavius and his disciples, would be objective in their evaluation, and that their opinion would carry a great deal of weight, he urged them to carry out further observations with a better telescope. Galileo showed Jupiter's satellites to the Jesuits in Florence and they were convinced. His hope was that they in turn would urge their brothers at the Roman College to carry out like observations. Finally, Clavius by dint of continued observations with a better telescope became convinced first of the Medicean satellites, then of the phases of Venus and then of the irregularities on the moon. While both Galileo and Clavius were persuaded that the observations of the phases of Venus were a very strong indication that Venus circled the sun, Clavius would opt, under the pressure of pseudo-theological considerations, for the hybrid system of Tycho Brahe (while the other planets orbited the sun, the sun orbited the earth), whereas Galileo would opt for Copernicanism.[3]

Riding on the crest of his telescopic observations, now authenticated by the Jesuits at the Roman College, Galileo planned another trip to Rome. The day after his arrival on 29 March 1611 he paid a long and cordial visit to the Jesuit astronomers and mathematicians at the Roman College. In addition to Clavius, these included Grienberger and Maelcote. Cardinal Bellarmine had heard of Galileo's observations and wished to know if they were true and what implications they held. He turned to his fellow religious thinkers at the Roman College. Clavius, Grienberger and Maelcote unanimously confirmed Galileo's observations with the exception that Clavius hesitated on the interpretation of the apparent irregularities on the surface of the moon.

Clavius's hesitation is a small episodic event but it is very revealing of a typically Jesuit response to an increasingly complex and strategic development in human culture. Clavius is in his last years and he is conditioned by an Aristotelian natural philosophy, which saw the moon as a perfect celestial body. That philosophy is closely aligned to Catholic doctrine to which he is loyal. As a mathematician and astronomer, theology and Catholic doctrine are not his business. As a Jesuit, they are. He is aware of the weight that his opinions carry in the sphere of natural philosophy; but he is also aware that his natural philosophy has a serious influence on doctrine. Were he younger, he would have been bolder, knowing that he would be required to defend and respond to his positions. He refused to leave a heritage of

declarations which were still open to discussion and to which he would not be around to respond.

During his visit to Rome Galileo was honored by an academic assembly at the Roman College with the participation of numerous cardinals and other personages of Roman Society. The official oration, entitled *Nuntius Sidereus Collegii Romani* (Starry Message of the Roman College)[4] which clearly alluded to Galileo's book of celestial discoveries, lauded Galileo for his observations and announced that they had been confirmed by the Jesuit astronomers and mathematicians at the College. There were, however, what appeared to be a few deliberate ambiguities in the discourse and it left to the listeners any philosophical conclusions to be drawn from the observations. Galileo was, of course, flattered with the honor paid to him but some of the ambiguities in the talk must have displeased him. For instance, there was an allusion to the fact that the oval form of Saturn (now known to be the rings, which could not be resolved with the telescopes then available) and the phases of Venus were first discovered at the Roman College; and there was no mention of Galileo's claim in the longer title of his book, *Sidereus Nuntius*, that he had discovered the astronomical use of the telescope. Indicative of Galileo's displeasure is the fact that, although he treasured very much the support of the Jesuits at the Roman College, he never mentions the academic assembly in any of his correspondence of that period. On the other hand, it is clear from all reports of that assembly that no one else was aware of Galileo's displeasure and that Maelcote certainly had no intention of offending him. However, Maelcote was cautious about discussing the observations in terms of geocentrism or heliocentrism. Without a doubt such caution was inspired by the attitude of Clavius, who in the second edition of his *Opera Mathematica*, after discussing Galileo's telescopic observations, says: 'Since that is the way things are, let the astronomers see how they can manage the celestial orbs in such a way that they are able to save the phenomena' (Clavius, 1611: vol. III, 775).

It is clear from other such statements of Clavius and those of his Jesuit colleagues at the Roman College at that time that they were retreating from the system of Tycho Brahe and hesitatingly approaching Copernicanism. Athanasius Kircher testified to this when he wrote:

> Clavius and with him the other Jesuits would not have disapproved the opinion of Copernicus, in fact, they would not have been very far from it. They would, however, have been pushed and obliged to write in favor of the common opinions of Aristotle. (Favaro, 1968: XV, 254)

The hesitation was shared by the Jesuit philosophers and theologians of the Roman College, who were not pleased with the all too positive appreciation of Galileo's discoveries rendered by Maelcote and especially the anti-Aristotelian implications of those discoveries. Grégoire de Saint-Vincent, a renowned Jesuit mathematician who was present at the assembly, recalled years later in a letter to Huygens that the statements of the Jesuit astronomers on the observations of

Galileo were accompanied by murmurings on the part of their philosopher colleagues (Paschini, 1965).

The hesitation on the part of the philosophers was soon reinforced by a circular letter of 24 May 1611 from Father General Claudio Acquaviva to all Jesuits in which he recommended 'uniformity of doctrine.' He was speaking of the philosophy of Aristotle, baptized by St. Thomas Aquinas, placed by St. Ignatius in the Constitutions as the basis for the teaching of philosophy and reconfirmed in the *Ratio Studiorum* issued by Acquaviva himself in 1599. That persistent requirement of fidelity to Aristotelianism had nothing to do directly with Copernicanism. It was motivated by the conviction that it furnished a solid basis for philosophy and, upon adaption, for the so-called 'preambles of the faith.' But Acquaviva's letter certainly reflected a growing preoccupation with the enthusiasm of the Jesuit astronomers at the Roman College for the telescopic observations of Galileo and the anti-Aristotelian implications that could be drawn from them.[5] The natural philosophy of Aristotle was crumbling.

The structure of the Aristotelian system was a whole. If the natural philosophy of Aristotle crumbled, would the structure itself give way? How then to maintain 'uniformity of doctrine'? There was not, of course, an open, public schism among the philosophers, mathematicians and astronomers of the Roman College. Loyalty to a tradition, reinforced by religious superiors, remained the dominant factor. But the Jesuit astronomers were steadily embracing Copernicanism. The mathematicians might resolve the tension by taking refuge in the notion that all world systems, those of Ptolemy, of Brahe and of Copernicus, were mere mathematical expedients and in that sense hypothetical.

There is an ambiguity involved in the use of the word 'hypothesis' and it would be well to clarify it so that one can understand the extent to which the Jesuits had the same view as that of Galileo. There are two distinctly different uses of the word: a mathematical expedient to predict celestial events or an attempt to understand the true nature of the heavens. This important difference in meaning must be seen against the history of the word's use from antiquity through medieval Christianity to the time of Copernicus through to Galileo. The best historical example of this is, of course, the case of Osiander. In his attempt to save Copernicus, Osiander, unbeknownst to the author and contrary to his intent, wrote his famous preface to advise the reader that the *De Revolutionibus Orbium Coelestium* of Copernicus was intended to be, in the tradition of medieval astronomy, only in the former sense, a mathematical expedient. There is no doubt that Galileo understood his own investigations to be an attempt to understand the true nature of things. It is well known that he preferred to be seen as a philosopher of nature rather than a mathematician. It can be debated as to whether Galileo himself was ever convinced that he had irrefutable proofs for Copernicanism (involved in that debate would be the very meaning of proof for him and for us) but it cannot be denied that he sought evidence to show that Copernicanism was really true and not just a mathematical expedient. Galileo rejected that Copernicanism was a hypothesis in the former sense. He sought

to find experimental verification of it in the latter sense. Most of the Jesuit astronomers at the Roman College were of the same stance.

The case of Bellarmine is quite different. In his early years of teaching at Louvain he had shown a very independent view of Aristotle (Baldini and Coyne, 1984). He did not hold, for instance, that the heavens were immutable and incorruptible. As he matured as a Jesuit, it became clear that he was neither a devotee nor an opponent of Aristotelian natural philosophy. With respect to Aristotle he was an eclectic. Whatever supported Catholic doctrine in that natural philosophy was fine; what was indifferent to Catholic doctrine was up for grabs. For Bellarmine the issue was that a sun-centered universe, that of Copernicus and Galileo, appeared to be untenable theologically because it contradicted Scripture. The view of Bellarmine's role in the Galileo affair was officially presented by Pope John Paul II in his acceptance of the apparent conclusions of the Galileo Commission.

Bellarmine is said by the Pope, echoing Cardinal Poupard, who had given a previous address, to have been the one:

> . . . who had seen what was truly at stake in the debate [since he] personally felt that, in the face of possible scientific proofs that the earth orbited around the sun, one should 'interpret with great circumspection' every biblical passage which seems to affirm that the earth is immobile and 'say that we do not understand rather than affirm that what has been demonstrated is false.'[6]

John Paul II, following Cardinal Poupard, is offering an interpretation of Bellarmine's *Letter to Foscarini* in which he finds two conclusions that appear to make Bellarmine both the most open-minded of theologians and respectful of science. One must be circumspect in interpreting scriptural statements about natural phenomena in the face of possible scientific proofs contrary to the interpretation. If such proofs are forthcoming, one must reinterpret Scripture. Note that the epistemic primacy here is given to Scripture. Since Galileo had no irrefutable proofs of Copernicanism, the current interpretation of Scripture by theologians, including Bellarmine, should remain, but always subject to reinterpretation. Is this a correct presentation of Bellarmine's position?

Cardinal Poupard interprets Bellarmine as saying: 'As long as there are no proofs for the movement of the Earth about the Sun, it is necessary to be cautious in interpreting Scripture.'[7] What Bellarmine actually says is: 'Should proofs be had, then we must go back and reinterpret Scripture.' The difference is: Bellarmine did not say: 'Theologians should be cautious *now* in interpreting Scripture in expectation that proofs for Copernicanism might appear' but rather '*on the day in the future* that proofs might appear, theologians must be cautious in interpreting Scripture.'

This interpretation of Bellarmine's position, first by Cardinal Poupard and then by Pope John Paul II, is based on only a partial and selective reading of the *Letter to*

Foscarini. In the passage immediately preceding the one cited by the Pope, Bellarmine had taken a very restrictive position by stating that:

> Nor can one answer that this [geocentrism] is not a matter of faith, since if it is not a matter of faith 'as regards the topic', it is a matter of faith 'as regards the speaker'; and so it would be heretical to say that Abraham did not have two children and Jacob twelve, as well as to say that Christ was not born of a virgin, because both are said by the Holy Spirit through the mouth of the prophets and the apostles. (Finocchiaro, 1989: 67–69)

Clearly if geocentrism is a matter of faith 'as regards the speaker' then openness to scientific results and circumspection in interpreting Scripture are simply ploys. They lead nowhere. Furthermore, Bellarmine cites Scripture itself in the person of Solomon to show that proofs for Copernicanism are very unlikely. At the end of the *Letter to Foscarini* Bellarmine appears to exclude any possibility of proof by stating that our senses clearly show us that the sun moves and that the earth stands still, just as on a ship one senses that it is the ship that is moving and not the shoreline. Both the Pope and Cardinal Poupard cite Bellarmine's statement:

> I say that if it [geocentrism] were really demonstrated . . . then it would be necessary to proceed with great circumspection in the explanation of the Scriptural texts which seem contrary to this assertion and to say that we do not understand them, rather than to say that what is demonstrated is false. (Finocchiaro, 1989: 67–69)

What they do not cite is the next sentence of Bellarmine: 'But I will not believe that there is such a demonstration until it is shown me.' From the concluding sentences of the letter it is clear that Bellarmine was convinced that there was no such demonstration to be shown. A further indication of this conviction of Bellarmine lies in the fact that he supported the decree of the Congregation of the Index, which was aimed at excluding any reconciliation of Copernicanism with Scripture. If Bellarmine truly believed that there might be a demonstration of Copernicanism, why did he not recommend waiting and not take a stand, a position embraced, it appears, by Cardinals Barberini and Caetani? And why did he accept to deliver the admonition to Galileo in 1616?

A change in the climate: Galileo and the Jesuits

An abrupt transition in Galileo's relationship with the Jesuits is clearly seen in his controversy with the Jesuit Christoph Scheiner, a professor of mathematics at Ingolstadt, on the priority of the discovery of sunspots and all that ensued with respect to their exchanges concerning the nature of the spots. In reality, spots on the sun had already been observed in the Greco-Roman world, as well as in China. So the true dispute is not about priority of discovery but about priority of a correct understanding of the spots and their significance as to Aristotelian natural

philosophy and Copernicanism. If the spots were truly irregularities on the sun's surface, then this was again damning evidence against the Aristotelian incorruptibility of the heavenly bodies. Furthermore, the motion of the spots across the disk of the sun can be interpreted – and was so interpreted by Galileo – as evidence for heliocentrism. Scheiner wrote several letters to his colleague Welser in which he denied that the spots were on the sun and claimed that they were 'wandering stars' passing in front of the sun. He published these letters under a pseudonym, Apelle, at the recommendation of his provincial superior.[8] Welser sent this publication to Galileo, who responded with the suggestion that the spots were 'clouds' on or contiguous to the surface of the sun. Galileo was prudent and courteous in his reply, even though he tentatively denied the hypothesis of Apelle, whom he did not know at that time to be Scheiner. Through subsequent correspondence, always through the intermediary Welser, the discussions began to get a bit more acrimonious and Apelle even disputed Galileo's priority of the discovery of the phases of Venus. Friends of Galileo, including Federico Cesi, the founder of the *Accademia dei Lincei*, found out that Apelle was an unnamed Jesuit and encouraged Galileo to publish his letters to Apelle/Welser so as to establish priority for his views. He did so with a publication of the *Accademia dei Lincei* entitled *Istoria e dimostrazioni intorno alle macchie solari* (A history and some demonstrations with respect to sunspots). Unfortunately, a polemical preface to the book was written by the secretary of the *Accademia*, Angelo de Filiis. Galileo was very uneasy about the preface, since he did not want to run the risk of alienating the Jesuits. The preface was toned down but Galileo's fears still came to be realized. Protests to the preface came from the Jesuits of the Roman College and, even though they could distinguish de Filiis from Galileo, the publication caused a distinct cooling off of the relationship between Galileo and the Jesuits of the Roman College.

The events of 1616 and 1633

In 1616 the Congregation of the Holy Office issued a decree in which Copernicanism was condemned: it was absurd in philosophy (contradicting Aristotle) and formally heretical to hold that the sun was stationary at the center of celestial motions; it was absurd in philosophy and, therefore, suspect of heresy that the earth moved. The 'therefore', although not formally in the wording of the decree is justified and very important. For the consultors of the Holy Office, the natural philosophy of Aristotle was so 'sacred' that to deny it was tantamount to heresy. Soon after that decree appeared, at the behest of the Pope Galileo was summoned to appear before Cardinal Bellarmine to accept a private admonition not to promote Copernicanism. In 1633 Galileo was condemned by the same Holy Office for having, in fact, in his *Dialogue* promoted Copernicanism, contrary to the injunction given to him in 1616. What part did the Jesuits have in all of this?

The Jesuit Cardinal Bellarmine, of course, played a key role in the events of 1616. There have been many caricatures of his role, most notably de Santillana's *The Crime of Galileo* (1955). The most faithful historical reconstruction of his role is

given by Fantoli (2003: 138–168) and I summarize it here. Bellarmine was not a dye-in-the-wool Aristotelian, as noted above. But he was profoundly convinced, contrary to the statement of Cardinal Baronio, replayed by Galileo, that: 'Scripture teaches us how to go to heaven and not how the heavens go;' in some instances the Scriptures do teach a natural philosophy. The best presentation of his position is in his *Letter to Foscarini*, which has, as I have described above, been misinterpreted by the Church in the most recent attempts to eradicate the 'myth' of Galileo.

While the personality and high Church office of Bellarmine might tend to dominate any judgment of the role of the Jesuits, he is not necessarily representative of a Jesuit position, if there be such. Probably most representative is that of the Jesuit astronomers of the Roman College, although simplifications are required even here to be able to speak of a Jesuit position. The Jesuit astronomers were not ivory tower 'pure scientists.' They lived and breathed a climate of diversity and intellectual intensity with their philosopher and theologian colleagues. They were devoted with the same fidelity to tradition and Church teaching, but they were also participants in the birth of modern science. Even the preliminary discoveries of that science were challenging the existing basis of Catholic doctrine and the very meaning of Scripture. There was no philosophy of nature to replace that of Aristotle, which was crumbling under the onslaught of astronomical observations. The position of the Jesuit astronomers in general was one of expectation and certainly not one of timidity or fear. The adventure of scientific discovery was only beginning. Eventually all else would accommodate itself to what the universe had to say to us.

In the end I turn to a study in contrasts between the Jesuits Inchofer and Bellarmine. The Jesuit Melchiorre Inchofer was appointed to the commission to examine the *Dialogue* of Galileo in view of the trial of 1633.[9] Bellarmine had died in 1623. But what would have been the exchange between them at that dramatic moment in history, the trial of Galileo? Inchofer, although not at all competent in the fields of astronomy and physics, took a strong stand in favor of geocentrism. He probably reflected the opinions of Scheiner. In responding to the questions placed to him concerning the *Dialogue* he went far beyond normal critical responses and he formulated severe and insidious accusations against Galileo, in contrast to the other members of the commission. His personal situation was a curious one. He was himself at that time under investigation by the Holy Office because of his publication of a book which sought to vindicate the authenticity of a letter said to have been written by the Virgin Mary to the people of Messina.

There could hardly be a greater contrast between these two Jesuits: one, Inchofer, set in his ways on geocentrism, but through ignorance of the facts, and not open to discovery; the other Bellarmine, devoted to the Church and searching for a compromise between the new discoveries about the universe and fidelity to Scripture. Where between these two extremes were Jesuits in general with respect to Galileo? If one is forced to speak of 'Jesuits in general' of that epoch, and there is some value in doing so, then they were clearly on the side of openness to discovery. They would have sought to keep the Church from declaring itself on a worldview that was in its infancy. This is what Galileo sought, and rightly so.

In the Galileo case the historical facts are that further research into the Copernican system was forbidden by the decrees of 1616 and then condemned in 1633 by official organs of the Church with the approbation of the reigning Pontiffs. Galileo was a renowned world scientist. The publication of his *Sidereus Nuntius* (the Starry Message) established his role as a pioneer of modern science. He had provoked anew the Copernican–Ptolemaic controversy. Observational evidence was increasingly overturning Aristotelian natural philosophy, which was the foundation of geocentrism. Even if Copernicanism in the end proved to be wrong, the scientific evidence had to be pursued. A renowned scientist, such as Galileo, in those circumstances should have been allowed to continue his research. He was forbidden to do so by official declarations of the Church.

Why did Bellarmine not take this position in 1616? I surmise that in the end he was seriously mistaken in judging that Scripture actually taught anything about natural philosophy. That is, for his time, an understandable but serious mistake.

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Notes

1. See principally Wallace (1977, 1984).
2. For a description of this first meeting of Galileo with Clavius see Fantoli (2003).
3. For a thorough discussion of the verification by the Jesuits at the Roman College of Galileo's observations see Fantoli (2003).
4. This talk is found in Favaro (1968, III, Part 1).
5. For further details on these matters see Blackwell (1991).
6. John Paul II (1992: 271 ff). For an English translation see *Origins*, 22 (12 November 1992): 370–375. The text cited here is in No 9, para 2.
7. Poupard (1992: 93–97). For an English translation see *Origins*, 22, (12 November 1992): 370–375. The text cited is in No 2, para 3.
8. The publication is known as *Tres epistolae de maculis solaribus ad Marcum Welserium*, and was published under the pseudonym of *Apelles post tabulam latens*.
9. For a discussion of the role of Inchofer see Redondi (1987) and Shea (1984).

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