

3. The Contexts of the Church, Patrons, and Colleagues: New Science and Traditional Power Structures

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Recent Narratives on Galileo and the Church: or The Three Dogmas of the Counter-Reformation

The Argument

This article confronts an old-new orientation in the historiographical literature on the “Galileo affair.” It argues that a varied group of historians moved by different cultural forces in the last decade of the twentieth century tends to crystallize a consensus about the inevitability of the conflict between Galileo and the Church and its outcome in the trial of 1633. The “neo-conflictualists” — as I call them — have built their case by adhering to and developing the “three dogmas of the Counter-Reformation”: Church authoritarianism is portrayed by them as verging towards “totalitarianism.” A preference for a literal reading of the Scriptures is understood as a mode of “fundamentalism.” And mild skeptical positions in astronomy are read as expressions of “instrumentalism,” or “fictionalism.” The main thrust of the article lies in an attempt to historicize these three aspects of the Catholic reform movement. Finally, the lacunae in insufficiently explored historiographical landscape are delineated in order to tame the temptation to embrace the three dogmas, and to modify the radical conflictualist version of the story of Galileo and the Church.

Introduction

In a fairly recent book, *Galileo, Bellarmine, and the Bible*, Richard Blackwell has taken upon himself the challenging task set forward by Olaf Pedersen in the 1980s: to study the Galileo affair not only from the perspective of historians of science, but also from that of the history of theology. Blackwell has focused his gaze on one theological issue, namely the role played by the Bible in the affair, which he studied with great acumen, in great depth, and presented with acute clarity. His research, however, has not allowed him to compromise either concerning the causes of the tragic encounter between Galileo and the Church in the seventeenth century, or about future perspectives. Basically, Blackwell believes that the tendency of the Church towards increasingly centralized authority was at the heart of past events

and has continued to characterize Catholicism up to the present day. He writes:

In effect, centrally institutionalized authority tends to evolve into power. Human frailty being what it is, the potential for abuse increases. We begin to see an emphasis on obedience rather than rational evaluation, on tests of faith, on loyalty oaths, on intimidation, on secret proceedings, on unnamed accusers and unspecified allegations, on the use of the courts to suppress recalcitrants — and ultimately on the whole repertoire of the Inquisition. This is not a fantasy scenario. Rather it is precisely what happened in the Galileo affair. (Blackwell 1991, 176–7)

On the last page, Blackwell turns to the present and, in accordance with his basic beliefs, assesses the situation thus:

If we turn to the present day, the respective situations of science and Catholicism have changed considerably. The Catholic Church has established a further centralization of its religious authority in the proclamation of the infallibility of the pope in 1870. Simultaneously its social, political and cultural power has lessened considerably. Meanwhile modern society has evolved more and more in the direction of the democratization of political authority and power. Also science has replaced religion as the dominant cultural force, and its power has increased tremendously through its marriage with technology. ... Yet despite these massive changes since the age of Galileo, the Catholic conception of the nature of religious faith and the logic of centralized authority related to it seem to remain untouched. Could there be a second Galileo affair? What has been learned from the first one? (Ibid., 179)

This last question has not been confined to the realm of rhetoric. For in yet another paper entitled “Could there be another Galileo case?” the author’s answer is stated in clear positive terms: “it is difficult to avoid the conclusion that intellectual honesty and freedom of thought may still not be strong enough in the Church to prevent the recurrence of another clash between science and religion, one similar to the Galileo affair” (Blackwell 1998, 366).

Blackwell’s book, together with his article published two years ago, mark a twist in the historiography of the Galileo affair. A new kind of energy seems to permeate the general framework in which some of the literature of the 1990s is being written. Blackwell’s work is not unique in focusing the gaze on the authoritarianism that characterized the Counter-Reformation Church. A seminal paper in this direction has been William R. Shea’s “Galileo and the Church,” published a few years earlier in the widely read volume entitled *God and Nature*. Shea has not chosen to isolate the issue of scripture interpretation from the complex political and personal circumstances as well as from the major theological and scientific issues of the period. Nevertheless, like Blackwell, he tended to stress the new cultural authoritarianism that had engulfed the Counter-Reformation church and was at the root

of the affair. The authoritarian ideals, he thought, mostly manifested themselves in the insistence on the exclusive rights of theologians to interpret the Scriptures and on narrowing down interpretive options: "The Catholic church, attacked by Protestants for neglecting the Bible," he wrote, "found itself compelled, in self-defense, to harden its ground. Whatever appeared to contradict Holy Writ had to be treated with the utmost caution" (Shea 1986, 119). At the end, Shea chooses to account for the clash between Galileo and the Church in terms of an "underlying conflict between the authoritarian ideal of the Counter-Reformation and the nascent desire and need for freedom in the pursuit of scientific knowledge" (*ibid.*, 132).

A more extreme view of Church authoritarianism has recently appeared in Marcello Pera's "The God of theologians and the god of astronomers: An apology of Bellarmine," published in the *Cambridge Companion to Galileo*. Pera understands the clash between scientific claims and truths of faith as a matter of principle that transcends the limits of specific historical circumstances. His structural analysis of the relation of science and religion leads him to the following conclusive remark about the Galileo story: "The conflict was much deeper and transcended the *dramatis personae* of the time. It was a conflict between two principles, that is, the principle that science can investigate any factual question ... and any principle that certain factual questions cannot be investigated by science because they are articles of faith" (Pera 1998, 382).

Pera's a-historical perception of the science/religion dynamics — which he attempts to back by a historical interpretation of the Galileo affair — becomes only too manifest as he casts doubt upon the sincerity of present-day Catholic strategies that claim separation between the two domains. Such separation, he contends, is not possible, because it contradicts the essential interests of any religion. Therefore:

the fire of new Galileo affairs is still smoldering under the ashes that were thought to be cold. Such cases do not depend on historical circumstances, the imprudence of men, the transition from one tradition to another, or the power and prerogative of institutions; they are constitutive. The clash between science and religion is linked to two overlapping, although irreducible, forms of experience and the "logics" of their conceptual organization. (*Ibid.*, 368)

The works of Shea, Blackwell, and Pera exemplify a contemporary trend in the literature on the affair, even though they differ from each other in depth, sophistication, historical orientation and important nuances. In these works the *conflict* at the heart of the relationship between religion and science is intensified either as a characteristic feature of the Catholic Counter-Reformation or as a structural and necessary feature of all religions everywhere. From the perspective of these writers, Galileo's encounter with the church became a struggle over the monopoly of the interpretation of Scripture. The results of such struggle were obviously inevitable, given the balance of power between the two sides.

While Galileo scholars, historians of the Counter-Reformation, and philosophers are deepening our knowledge of past events, revising our interpretations and sharpening our understanding of pre-modern Catholic culture, the Catholic church itself has initiated a project intended to foster the spirit of dialogue between science and faith. In the framework of that project Pope John Paul II established a Study Group to explore the history of the Copernican-Ptolemaic controversy of the sixteenth and seventeenth centuries and, in particular the role of Galileo in that controversy. The work of this Study Group has resulted in a series of publications by the Vatican Observatory, among them the monumental volume of Annibale Fantoli, translated into English as *Galileo for Copernicanism and for the Church*. (Fantoli 1996). Other volumes concerned with the history of the same controversy, such as Brandmüller's *Galileo e la Chiesa*, have seen light under the auspices of the Pontificia Commissione di Studi Galileiani. In addition to those studies, works related to the controversy are being published by Catholic university presses. Pierre-Noël Mayaud's volume *La Condamnation des Livres Coperniciens et sa Revocation* (Mayaud 1997), issued by the Pontificia Universitas Gregoriana, is an excellent example of the latter. The professed intention of all those writers is historical not apologetic. In his preface to Fantoli's book, George V. Coyne has succinctly clarified this point: "This is not an apologetic work in which the author takes sides. It is rather a sincere effort at an objective analysis whose purpose is to contribute to the good of both science and the Church." Hence, it seems natural, perhaps, that they exhibit a parallel tendency to construct their stories in the form of an *inevitable clash* between Copernicanism, Galileo, and the Church. Two short references will suffice to exemplify this point.

A. Fantoli, for example, never tires of stressing the inevitability of the condemnation of Galileo. In spite of his initial warm relationship with the Jesuits, the enthusiastic reception — which did not necessarily mean acceptance — of his works by many clergymen, and the good will accorded to him by Urban VIII, Fantoli is convinced that Galileo could not escape the severe judgment of the Church. The root of evil, according to Fantoli, lay in the coming into being of a censoring institution like the Roman Inquisition. A grave error of its qualifiers — theologians buttressed in a crumbling, but intransigent, philosophical position, and incompetent in the field of science — brought about an abuse of power which "will have its inevitable sequel in the trial and condemnation of Galileo in 1633." (Fantoli 1996, 236). Faithful to this line of argumentation, Fantoli concludes his story of the trial by claiming:

it would have been difficult for the trial to have come to a conclusion different than the actual one. Galileo had, without doubt, violated a precept of the Holy Office (even considering only the one given to him by Bellarmine in a "benign" form) and had upheld, at least as probable, a doctrine declared to be contrary to Holy Scripture (decree of Index of 1616). As such, he had from the viewpoint of his judges, incurred a "serious suspicion of heresy"

from which he could not be absolved except by a public abjuration. It was likewise inevitable that, as expiation for his crime, he be condemned to the prison of the Holy Office. (*Ibid.*, 439)

But Fantoli is not alone among Catholic writers who are convinced of the inevitability of the trial and its consequences. In the introduction to his history of the congregation of the Index, Pierre-Noël Mayaud likewise speaks of the error committed by the Church in its condemnation of Copernicanism. In this book, and especially in its first part, he aims to expose, however, the inevitability of such error:

Nous chercherons a montrer, en particulier dans la conclusion de la I^{ère} Partie, les raisons de cette erreur et comment elle e'tait inevitable. Ce serait pur anachronisme en effet de negliger la profondeur, a l'epoque, de l'attachement a une lecture litterale de l'Ecriture aussi longtemps que rien d'absurde n'en decoulait et qu'aucune raison valable que s'y opposait; independamment de toutes les autres raisons avancees par des historiographes modernes, c'est essentiellement dans une fidelite a l'Ecriture, infiniment respectable, que l'Eglise a ose prendre une telle decision, et ceci a une epoque ou il n'y avait aucunes separation des savoirs." (Mayaud 1997, 2)

The return, in the 1990s, of a somewhat diluted and more sophisticated version of the "conflictualist" mode of narrating the story of Galileo and the Church should be understood against the background of the two traditional narratives that have dominated the historiography of the "Galileo affair" since the nineteenth century. As is well known, the "Conflict of Science and Religion" was first constructed by J. W. Draper and A. D. White, where the Galileo case was constitutive in laying down a whole research project. The project was designed to demonstrate the necessary and inevitable conflict between two modes of thought, two kinds of intellectual practices, and two ways of existence in the world. The trial of Galileo involved the silencing of a correct scientific theory, the humiliation of the most prestigious mathematician and philosopher of the period, and the creation of a general atmosphere of fear, suspicion, and coercion. Hence, the lesson to be drawn was of a systematic repression of human free thought by the obscurantist and authoritative church. Thus, the Galileo affair represented the culmination of long standing historical tendencies inherent in the Catholic world, a negative model for subsequent events such as the Darwinian scandal, and a constant threat for similar clashes in the future.

In spite of the enormous influence of the paradigm of necessary conflict upon the research area of "science and religion," by the end of the 1950s its overwhelming predominance eventually gave way to an alternative conceptual framework. In this framework, science and religion were separate cultural domains, each invested with authority within its own boundaries, but complementing each other's perspective on nature and man. Proper respect of these boundaries could have pre-

vented the unnecessary clash were Galileo not so eager to convert people to the Copernican view without enough evidence, and had not the Church reacted so defensively. In the words of J. J. Langford, one of the prominent scholars in this tradition, the lesson to be drawn from the Galileo affair is completely different from that formulated by the tradition of Draper and White:

Galileo was both a scientist and a believer; it was Galileo the scientist who wrote, Galileo the believer who recanted. But the lesson of his conflict with the Church is not that science and faith are essentially opposed. The lesson lies rather in its dramatic verification of what disaster can come to science or faith when either of these is extended beyond its proper boundaries and enters the domain of the other. A theologian qua theologian has no more authority in speaking about a matter of pure science than does a scientist in discussing Revelation and the Transcendent. (Langford 1966, 180)

Within the paradigm of separation, the story of Galileo and the Church has been interpreted mostly in contingent terms, hinging upon the personality and psychology of Galileo, or the regretful mistakes of some uninformed theologians. Galileo and the Church officials at the time tended to meddle with each other's authority. In this they both committed serious errors that brought about tragic results.

On this historiographical background, present-day conflictualist tendencies require analysis and explanation. My aim, in the following pages, is two-fold: I shall first attempt to show how the "inevitability of a conflict" is being built into the story through particular elaborations of the "three dogmas of the Counter-Reformation." In these stories, typical authoritarian attitudes of the early modern period are anachronistically interpreted as verging towards "totalitarianism." A preference for a literal reading of the Scripture is understood as a mode of "fundamentalism." And mild skeptical positions in astronomy are read as expressions of "instrumentalism." Healthy skepticism vis-à-vis these three dogmas, I shall argue, is long overdue. I shall therefore delineate the lacunae in "unexplored" historiographical landscapes that may tame the temptation to embrace the three dogmas mentioned above. In the epilogue to the paper I shall put forth the question of the "ideological undertones" which "Neo-Conflictualism" — both of clericals and of anti-clericals — carries with it and suggest ways of avoiding this position altogether. Needless to say, my comments are not offered as a detached exercise, a position I cannot claim in view of my long-term involvement in the field of Galileo studies. Rather, my suggestions should be read as an exercise of self-positioning in a dynamic field, which requires periodical withdrawals and recurrent reassessments.

Counter-Reformation Authoritarianism: A Form of “Totalitarianism”?

In recent historical literature, the attempt to prove the authoritarian nature of the Counter-Reformation church concentrates on a reading of two major decrees formulated by the Council of Trent in an early session of 1546. In these decrees the status of Catholic traditions and the monopoly of the Church over the interpretation of the bible were stated as articles of Catholic dogma. Blackwell believes that the construction of the Catholic concept of “tradition” as expressing divinely revealed truth was at the heart of the authoritarian spirit of the Counter-Reformation. Such a construction denied the “polyphonic” nature of tradition that historically allowed for a plurality of voices in biblical interpretation. Blackwell supports his reading with a quotation from the original text of the first decree, stating that both books of the Old and New Testaments and the traditions were “dictated either orally by Christ or by the Holy Spirit” (Decrees of The Council of Trent Session IV, “Decree on Tradition,” 8 April 1546. In Blackwell 1991, Appendix I, 181, 9). Furthermore, according to Blackwell, the Council of Trent did not seriously concern itself with the contents of possible interpretations. Rather, its primary interest in authority restricted its concerns to protecting the identity of the class of interpreters who were perceived as guardians of Church monopolies over the holy message. This perception relies on the formulation of the second decree concerning the Holy Scriptures according to which “no one, relying on his own judgment and distorting the Sacred Scriptures according to his own conception, shall dare to interpret them contrary to the sense which Holy Mother Church, to whom it belongs to judge of their true sense and meaning, has held and does hold, or even contrary to the unanimous agreement of the Fathers” (Decrees of The Council of Trent Session IV, “Decree on the Edition and on the Interpretation of the Sacred Scriptures,” 8 April 1546. In Blackwell 1991, Appendix I, 183). Blackwell contends that “this passage is not about dogma but about authority” (Blackwell 1991, 12), and concludes that the unanimous agreement of the Fathers became, during the Counter-Reformation, a “touchstone to determine the content of the Apostolic Tradition of revelation from God.”

Blackwell’s discussion of the Council’s decrees contributes to historiography an important distinction between the *contents* of interpretation — especially whether it is considered true or false — on the one hand, and the act of *authorization* of a reading by the tradition on the other hand. He shows that an interpretation may be authorized in virtue of the status of its carriers even without a serious consideration of its contents. But Blackwell does not pursue the consequences of his own distinction. He forgets that the sheer confirmation of the place of tradition and the equalization of its status to that of the canonic text meant a recognition that the Holy Scripture is in need of interpretation in principle although it is conceived as the “voice of God.” Therefore, the construction of the concept of tradition as “dictated either orally by Christ or by the Holy Spirit” does not erase interpretive

pluralism in principle. Such pluralism is a necessary corollary of the recognition of the status of the tradition as equal to the canonic text that was re-established in Trent. True, the decree also testifies to the deep need of the Catholic Church for legitimization of its own position as mediating the holy message to the believers. In addition, it shows the Church representatives' striving to present a common, united front and uniformity of opinion vis-à-vis the challenge to Church authority presented by the Protestants, who denied that true believers needed Holy Scriptures to be interpreted for them. But ignoring the actual polyphony of voices in matters of interpretation, while over-emphasizing coercive means of control tends to occlude the dialectic tension between these two poles that has always characterized Catholic policy and practice of biblical interpretation. The decrees of the Council of Trent may have modified Catholic sensibilities in its quest for re-affirming institutional authority vis-à-vis the reformers, but it has not ultimately changed the basic cultural patterns that have characterized Catholicism for ages. The tension between interpretive pluralism on the one hand, and the need for control on the other is the most characteristic feature of the Catholic notion of authority. Any attempt to reduce it to "the logic of centralized authority," claiming with Blackwell that "the Catholic conception of the nature of religious faith and the logic of centralized authority related to it seem to remain untouched" (*ibid.*, 179) distorts its true meaning and misconstrues its inner delicate fabric.

To my critique of Blackwell's understanding of the Tridentine notion of tradition, which is a matter of principle, I would like to add a historical argument. It is well known that on all major issues raised by the Council, no uniformity of opinion has prevailed in practice, although the quest for uniformity was stated again and again in many Church documents. In his monumental *History of the Council of Trent* (Jedin 1961), H. Jedin exposed opposing approaches taken by participants to the problem of biblical interpretation as well as to that of original sin, justification, and the sacraments. The careful wording of the decrees, he insists, was usually a compromise between conflicting views that left many vague areas and unclear lacunae, themselves in need of interpretation. No amount of silencing, then, was enough to suppress the plurality of voices that prevailed in practice. The most outstanding example for this state of affairs concerns the theological controversy over the interpretation of the Council's decrees on grace and free will — the controversy *de Auxiliis* which scandalized the Catholic world for almost twenty years between 1588–1607 (Feldhay 1995). During these years, in spite of the authoritarian formulations of the decrees, the Catholic elite was divided between two theological orientations. The Jesuits tended to emphasize the role of free will together with grace in the act of salvation. The Dominicans wholly rejected such an interpretation, and condemned it as heretical and opposing Catholic tradition. Nonetheless, the controversy continued to rage until Pope Paul V decided to suspend it, allowing, in fact, each order to hold to its opinions, even though public attacks on each other were prohibited. Tridentine theology thus re-assumed a monolithic front that did not, however, bring about uniformity of

opinions. The controversy broke out again in the seventeenth century as the acrimonious debate between the Jansenists and the Jesuits.

This course of events exemplifies my contention that it was not possible to uproot the traditional pluralism that characterized Catholic culture *de facto* by an attempt to implement the decrees of the Council of Trent. True, during the Counter-Reformation era the Church developed new and more severe means of control than the ones known until then: the Congregation of the Inquisition and that of the Index are the most obvious examples coming to mind. But to reduce the whole cultural dynamics of the Counter-Reformation to the coercive power of these institutions is to occlude the much more complicated task of the Council of Trent in the context of which these institutions were established. In fact, the enormous work of the Council that had lasted for almost twenty years was directed towards no less than a general re-conceptualization of the relation between the realms of the transcendental and the mundane, in the context of which the problem of Church authority should be understood. This authority was not simply or even primarily invested in the exclusive right to interpret the Holy Scriptures, but actually touched upon the attempt of the Church to re-shape the relation between sacred and profane knowledge. Therefore, in trying to understand the condemnation of the Copernican books in 1616 and Galileo's trial in 1633, it is not enough to point at the Inquisition as the source of evil that embodied the whole question of Church power, as Fantoli does. Likewise, it is not enough to mark the qualifiers' error as determining the whole course of events that followed as Fantoli, Blackwell, and McMullin (McMullin 1998) do in their various accounts of the Galileo affair. Rather, a deeper and more historical account of the complex concept of Church authority during the Counter-Reformation has yet to be developed. A history of the concept of Church authority would have to take into consideration long term patterns that have shaped the Catholic notion of tradition beyond a reading of two Tridentine decrees. It will have to consider the dialectic between the plurality of interpretive strategies that have constituted the tradition on the one hand, and the means of control over them on the other. And it will have to relate consensual attitudes towards the Holy Scripture to new forms of knowledge that emerged in early modernity. Only then a realistic account of Church authoritarianism will be feasible. Only then we will be able to move beyond hasty generalizations such as: "the contemporary sense of religious authority at least in the Catholic tradition, is monolithic, centralized, esoteric, resistant to change, and self protective" (Blackwell 1998, 359). Only then we will be in a position to build our stories on less essentialist notions than the all encompassing "logic of centralized authority."

Counter-Reformation Literalism: A Form of Fundamentalism?

Within the framework of “neo conflictualism,” the condemnation of Copernicanism by the theologians of the Inquisition in 1616 — which led to the trial of Galileo in 1633 — is seen as a direct and necessary outcome of the Church authoritarianism first shaped in the policies of the Council of Trent. This authoritarianism gave birth to a kind of fundamentalism which did not leave room for suspending judgment over scientific theories that did not conform to biblical stances. No serious debate over the correct meaning of biblical verses preceded this decision, which was rather dictated by a “logic of centralized authority.” Such logic did not leave open the possibility of modifying the traditional reading of biblical verses. Needless to say, the theologians of the Inquisition, concerned with the monopoly over the authority to interpret did not even consider the Copernican system as a candidate for a true description of the structure of the world. No theory that contradicted the literal meaning of many passages in the Bible had a chance of ever being accepted, in their mind. Therefore, when the Copernican theory was brought to the Inquisition, the theologians condemned it without much hesitation.

Both Blackwell and McMullin (McMullin 1998) are convinced that in its dealings with Copernicanism and with Galileo’s discoveries the church authorities had no real interest in scientific theories, which were much lower in status than theology in the context of seventeenth century culture. Therefore, when a clash occurred, scientific claims could not but lose. Thus, McMullin, in the opening pages of his essay, frames his story by stating:

What these consultors showed themselves committed to defend was not primarily a cosmology. In their own eyes, they were vindicating the authority of Scripture in regard to the truth of its literal content. The Copernican theses about the Earth’s motion and the Sun’s stability were, in their view, clearly at odds with specific passages in the Bible. To affirm such theses, therefore, was equivalent to calling the authority of Scripture into question. It was that, and not a presumed link between Aristotelian cosmology and the content of Christian doctrine, that led them to condemn the Copernican claim about the Sun as “formally heretical. (Ibid., 273)

And he continues:

The Galileo affair ought not then be construed, as it so often has been, as primarily a clash between rival cosmologies. ... What called them [the theologians] into action was a perceived threat to the authority of Scripture as well as to their own authority as its licensed interpreters. ... Once *they* entered the lists, the ground of battle shifted, as Galileo very quickly saw. He realized that if he were ever to get a hearing for the new cosmology on its philosophic (scientific) merits, he would have to defend himself on an entirely different front first. And it was on *this* front that the battle was lost

before it was ever really joined on the side of cosmology. (Ibid., 275; emphasis in original)

In a similar vein, Blackwell concludes his investigation with the following sentences:

If we can assume that the Church officials clearly perceived the alternatives sketched above, then one main factor may have been that they were convinced that heliocentrism is a Category III claim, that is, impossible to prove! The reason simply is that what is false cannot be proven to be true. And they were convinced that Copernicanism is false because the Bible, and therefore God, asserts the opposite. (Blackwell 1991, 172)

Such claims are supported by two kinds of evidence. The first relates to the well-known tendency of Counter-Reformation theologians to prefer a literal interpretation of the holy text over an allegorical one. Blackwell thinks that this tendency conformed to the concept of tradition constructed by the Council of Trent and designed to present it as monological. Both the adherence to a literal interpretation and the construction of tradition as monolithic were meant to erase a variety of interpretive voices in order to support the exclusive authority of the Church institutional elite. Blackwell concludes that no matter how ingenious an interpretation, an individual who suggested it “was always in jeopardy ... if he undertook an actual reinterpretation of the Church’s traditional reading of a particular problematic text” (ibid., 37).

The second kind of evidence relates to the positions of Cardinal Bellarmine. In Blackwell’s and McMullin’s studies the figure of Cardinal Bellarmine looms much larger than that of one human agent, one protagonist, one actor in an extremely complex historical drama. For them — as for many other writers on the Galileo affair — the Cardinal’s personality and opinions somehow encapsulated the official position of the Counter-Reformation church on matters of biblical interpretation and its relation to profane knowledge. Bellarmine’s views in these matters had been formed through long years of polemics with Protestants and crystallized in the three monumental volumes *Disputationes de controversiis christianae fidei adversus hujus temporis haereticos* (1586–93). Blackwell points out that this work contained Bellarmine’s reflections on the work of the Council of Trent. The structure of the work is compared to the sequence of sessions of the Council, a comparison that supports the claim that the work represents the reception of the Decrees and their application in practice. Blackwell cites passages from the *Controversies* that point out that for Bellarmine “everything in the Scriptures is true ... this truth guarantee *applies not only to matters of faith and morals...but to both general and even specific claims made in the Scriptures*” (ibid., 31; emphasis added). This truth condition, Blackwell continues, “was clearly destined to clash with Galileo’s scientific standard of truth” (ibid., 32). Adopting an even narrower approach to the biblical text than the Council itself, Bellarmine prepared the structural conditions for the following course of events —

the condemnation of the Copernican books, and the trial of 1633. Moreover, in his eyes, the authority of the interpreter was more important than the meaning of the interpretation. Thus Blackwell insists that “issues relating to the meaning of Scripture are subordinated to the question of *who* is to judge what the true meaning is” (ibid. 36; emphasis in original).

The understanding of Bellarmine’s views as fundamentalist is strengthened by a reading of his famous letter to the Carmelite Antonio Foscarini where he had warned both Foscarini and Galileo not to hold Copernican views as absolutely true in nature. In that letter Bellarmine invoked his exegetical principle according to which anything concerning the empirical world which was stated in the bible should be considered a “matter of faith,” if not in relation to the subject discussed, then in relation the speaker. Blackwell and McMullin believe that the statement of this principle in itself meant that there was no way to re-interpret the Scriptures in order to accommodate their meaning. No theory could be taught and defended, let alone developed and finally demonstrated if it contradicted the meaning of the Holy Scriptures as commonly and unanimously understood by the tradition. “Foscarini and Galileo had no possibility of a reply to this pronouncement from the most powerful cardinal of the day. Checkmate!” writes Blackwell (ibid., 106).

This interpretation, however, seems to me to be a retrospective reading of the consequences of the trial of 1633. Much of its conviction lies in the coherence of the story that is told by constructing a necessary causal chain from the authoritative Tridentine decrees of 1546, through Bellarmine’s letter to Foscarini of 1616 and up to the sentence of the trial in 1633. However, in reality Bellarmine’s letter cannot be deduced from the Tridentine decrees, nor is the sentence deducible from Bellarmine’s letter. This presumably inevitable chain of events is at the heart of the “neo-conflictualist” interpretive strategy. I shall hence sketch three arguments against it, although their full development requires more research than has yet been done on the Counter-Reformation background of the affair. First I shall show that the Tridentine decrees of scriptural interpretation are far less “fundamentalist” than presumed by the “neo conflictualists.” Second, I shall use some of the materials brought by Blackwell himself concerning principles of interpretations developed by Catholic theologians after Trent. These testify to the persistence of traditional broad approaches to scripture interpretation that can hardly confirm the impression of a growing fundamentalism among Catholic interpreters. Last, I shall suggest an alternative reading to Bellarmine’s letter to Foscarini, a reading that would point out the limits of Bellarmine’s fundamentalism, in spite of his preference for literal interpretations and his insistence on the exclusive authority of the consensus of the Fathers in exposing the tradition.

First, it is worth emphasizing that although two of the decrees of the Council of Trent dealt with the re-confirmation of the status of the tradition and the authority to interpret the Holy Scriptures, the decree restricted such authority to matters of faith and morality. It then follows that concerning the interpretation of other facts mentioned in the bible but not specifically related to faith — cosmological facts,

for example, which touch upon the verse in Joshua — the Church does not have such exclusive authority. This formulation testifies to recognition of the autonomy of reason and its judging faculties in the realm of nature, in contradistinction from the duty to fully accept Church interpretation in what concerns the supernatural realm. No doubt the Copernican theses did not touch upon the supernatural realm. Hence, the need to intervene in cosmological matters did not directly follow from the Council's official policy.

Beyond the question of authority, the decrees did not formulate any principles of interpretation. Therefore, the preference for literal interpretation was not part of the Church official position. The most important Catholic theologians of the Tridentine era continued to develop the distinction first formulated in Trent between “matters of faith” on the one hand, and other facts mentioned in the Bible on the other hand. These other facts, they maintained, did not necessarily require adherence to the literal meaning of the text, or to the consensus of the tradition. Blackwell himself quotes two great theologians who explicitly warned against burdening theology with too much authority in things that do not touch upon “matters of faith.” Thus, in his *De locis theologicis* (1563) Melchior Cano, considered among the most illustrious participators of the Council of Trent, argued that in matters concerning the realm of nature, the authority of theologians is not superior to that of the philosophers. Thus he wrote that: “When the authority of the saints, be they few or many, pertains to the faculties contained within the natural light of reason, *it does not provide certain arguments but only arguments as strong as reason itself when in agreement with nature*” (Melchior Cano, O.P., “De locis theologis,” in *Opera*, vol. I, Rome 1890, VII, 3, quoted by Blackwell, 18; emphasis added). Likewise the Jesuit Benedictus Pereyra, one of the giants of biblical interpreters of his time, who had always showed preference for literal reading of the Scriptures also rejected a fundamentalist approach to the text: “in dealing with the teachings of Moses,” he wrote, “do not think or say anything affirmatively and assertively which is contrary to the manifest evidence and arguments of philosophy or the other disciplines,” and more generally he asserted: “Scripture is clearly very broad by its very nature and is open to various readings and interpretations” (Benedictus Pererius Valentini (Pereyra), *Commentariorum et disputationum in Genesim tomi quatuor*, Romae 1591–95, quoted in Blackwell 20).

In the light of these quotations, the identification between literalism and fundamentalism seems doubtful, and probably wrong. Moreover, if one takes into consideration that the very term “literalism” in the sixteenth century excluded allegorical interpretations but not metaphorical ones, there is all the more reason to doubt all approaches which attempt to attach fundamentalism to the great Church interpreters of the period.

Last but not least are Bellarmine's positions. Needless to say, Bellarmine's insistence on the need to interpret the Scriptures literally, and his life-long involvement in buttressing the Church's exclusive authority to interpret vis-à-vis Pro-

testant attacks echo through the formulations of the letter to Foscarini (Finocchiaro 1989, 67–69). In contrast to the Church demand for authority in “matters of faith” alone, Bellarmine invoked the sacredness of the Holy Scriptures, from which he inferred their truth-value not only in theological and moral matters but in all other factual and empirical things. “Nor can one answer that this is not a matter of faith,” he wrote, “since if it is not a matter of faith as regards the topic ... it is a matter of faith as regards the speaker” (Finocchiaro 1989). In this Bellarmine deviated from the decree and broadened its scope of application. He surely wished to suspend any attempt of re-interpreting scriptural verses in accordance with the Copernican theory, as long as this theory has not been proven. However, throughout the letter Bellarmine’s voice is not dogmatic but pragmatic. Thus he appeals to Foscarini’s “practical reason” — not to any exegetical principle — in order to convince him to recognize the difficulty which lies in the attempt to accommodate the literal sense contrary to the opinion of all Church Fathers and traditional Latin and Greek commentators. The crucial evidence, however, lies in Bellarmine’s own words by which he delineates the limits of literalism in Scripture interpretation: “if there were a true demonstration that the sun is at the center of the world and the earth in the third heaven, and that the sun does not circle the earth but the earth circles the sun,” Bellarmine writes, “then one would have to proceed with great care in explaining the Scriptures that appear contrary, and say rather that we do not understand them than that what is demonstrated is false” (ibid.). McMullin thinks that “in context, one can see that he was not conceding this allusion to the traditional Augustinian principle to be a real possibility.” It is his innate courtesy to his correspondent, a respected theologian, that leads him to add the qualified “until it is shown to me” to the assertion: “I will not believe that there is such a demonstration.” He has already indicated that he thinks such a demonstration to be permanently out of reach” (McMullin 1998, 283). Nowhere, however, does Bellarmine make the contention that demonstration should not be sought for since it is unattainable in principle. Denying his actual words with the hypothesis that he did not really mean them seems unconvincing. In fact, Bellarmine here joins the opinion of Melchior Cano, that of Benedictus Pereyra, and the general attitude of Catholics that recognize the inherent opacity of Scripture and the need for interpretation that would not violate the truth of natural reason. He certainly wished to suspend attempts at re-interpretation in a period of great sensitivity to the authority of the tradition, and in a state of uncertainty concerning the validity of Copernicanism as a scientific theory. These pragmatic considerations, rather than any imaginary fundamentalism, however, pushed him to broaden the application of the Tridentine decrees, indicating at the same time their limits as well.

The Scientific Status of Astronomical Theories: A Form of Instrumentalism?

If Copernicanism had been considered a truly demonstrated theory according to scientific canons of proof at the beginning of the seventeenth century, it would have been impossible to judge it as a heresy, in spite of its being contrary to the literal meaning of the Scripture. This conclusion directly stems from the basic principles of interpretation accepted even by a literalist of the stature of Bellarmine, who shunned, as we have seen, any suggestion that “what is demonstrated is false.” Therefore, the Inquisition decree of 1616 that condemned Copernicanism included the implicit assumption that the Copernican statements were meant as mathematical hypotheses, not as absolute truths about the universe. This assumption was supported by Osiander’s preface to the *De Revolutionibus*, even though it did not conform to Copernicus’ own intention. Consequently, the congregation of the Index, in what seemed to be a move in conformity with the decision of the Inquisition, decreed that Copernicus’ book should be *suspended until corrected*. It is important to emphasize that in 1616 only those books that attempted re-interpretation of Scripture in order to facilitate an accommodation of Copernicanism were condemned. Later on — only in 1620 — the congregation also made suggestions for specific corrections. Practically the corrections located places in the book where the Copernican theory was explicitly presented as natural truth, and suggested ways of presenting it as a mathematical hypothesis. This state of affairs presents researchers with an interpretive dilemma concerning the true meaning of the decision and the position of the Church. Was it in fact legitimate to read Copernicus’ book only for its practical uses such as the calendar reform? Was it actually forbidden as a scientific-theoretical text? Or maybe the very decision of the congregation of the Index to suspend — not prohibit — the book actually left the limits of its possible uses opaque, so that in spite of many constraints an attempt to prove the theory was not completely forbidden?

All neo-conflictualists are of the common opinion that in the Catholic world Copernicanism had been buried already in 1616, with the condemnation that the Copernican theses were contrary to Holy Scripture. To the explanation hitherto mentioned for such an ominous decision — the authoritarianism of the Tridentine Church which entailed interpretive fundamentalism — is added another type of argument. This argument touches upon instrumentalism in astronomy, which is inferred mainly from Bellarmine’s letter to Foscarini and from Mosaic astronomy developed in the Louvain lectures which he had given in the 1580s and which he continued to hold throughout his life. And indeed, Bellarmine opened his letter to Foscarini with a distinction, common among contemporary scholars, between two types of scientific proofs — demonstration *ex suppositione* and absolute demonstration. The first, he argued, is well known to mathematicians and satisfies the norms of the profession (“and that is sufficient for the mathematician”). The second kind of demonstration is commonly practiced by natural philosophers and

theologians. Then Bellarmine contended that when applied to Copernicanism, the use of the first kind of demonstration presents no danger whatsoever, while the second is indeed dangerous:

to say that the assumption that the earth moves and the sun stands still saves all the appearances better than do eccentrics and epicycles is to speak well, and contains nothing dangerous. But to wish to assert that the sun is really located in the center of the world and revolves only on itself without moving from east to west, and that the earth is located in the third heaven and revolves with great speed around the sun, is a very dangerous thing ... not only because it irritates all the philosophers and scholastic theologians, but also because it is damaging to the Holy Faith by making the Holy Scriptures false. (Finocchiaro 1989, 67–69)

Focusing the gaze on Bellarmine's view of astronomy, and interpreting his distinction between mathematical-hypothetical discourse and a philosophical discourse of truth as expressing an instrumentalist position adds a third layer to the story of an inevitable conflict between Galileo and the Church. "The firm conviction that mathematical astronomy could not *in principle* provide a demonstration of the Earth's motion and without such a demonstration the literal sense of Scripture ... could not be challenged, seems to have been Bellarmine's guiding line throughout," writes McMullin (McMullin 1998, 282; emphasis in original), and even more emphatically he delineates Bellarmine's view by stating: "Bellarmine is not merely pointing to the fact that the Copernicans have not yet come up with a proper demonstration of the Earth's motion. He is, in his own mind, at least, giving reasons to believe that they never *could* (ibid., 283). Such a view of astronomy that denied it any independent claim for truth, adds Blackwell, well suited the logic of "centralized" authority which Blackwell assigns first to the Tridentine church but then to Catholicism at large, and which he sharply contrasts with the structure of authority in modern scientific discourse. On the other hand Galileo made broad use of the principle of accommodation which could not be adopted by the authoritarian Tridentine Church and was explicitly rejected by Bellarmine. In spite of the warning of the Cardinal, he did not discard his attempts to find a physical proof for Copernicanism. Occasionally, he was even tempted to present his arguments in favor of Copernicanism as proofs. In all this he challenged the explicit position of the Church represented by Bellarmine. No wonder, then, that he was eventually tried under the pretext of vehement suspicion of heresy.

A healthy dose of skepticism towards this story is, however, needed. Just as it is necessary to cast doubt upon the totalitarian tendencies of the Tridentine church, and just as attaching fundamentalist stances to Bellarmine is exaggerated, so it is possible to interpret differently the distinction between hypothetical and absolute discussion of cosmological issues. In making the distinction between demonstration *ex suppositione* and true demonstration, and in demanding that Foscarini and Galileo limit their claims to the field of mathematics, Bellarmine shows his

awareness of the major divisions that split the academic world of his period. In order to understand his position in its proper historical context, it is worth quoting at length from N. Jardine's study on the status of astronomical science in the sixteenth century. A great number of astronomers at the time, Jardine argues,

without openly committing themselves to radical skepticism, doubt or deny the capacity of astronomers' planetary models to represent the disposition and motions of the heavenly bodies and insist on a strict distinction between the proper concerns of the mathematical astronomer and those of the natural philosopher. ... Such a combination of doubt or denial of the reality of planetary models with insistence on the strict demarcation of a celestial physics concerned with the nature of the cosmos from a mathematical astronomy concerned only with saving the phenomena, without regard to the truth of the hypotheses employed, becomes increasingly prevalent in the course of the sixteenth century. (Jardine 1984, 237–38).

Jardine deems this position pragmatic and cites various reasons for its popularity. Mainly, however, he stresses the need felt by many scholars to avoid conflict between theologians and philosophers as well as between astronomers and naturalists and to allow the continuation of a working tradition at a transitional stage in its development. Moreover, Jardine is especially concerned to avoid the identification of such a position with any kind of modern fictionalism. "No protagonist of the pragmatic compromise expounded the strict instrumentalist view that truth and falsity are not predicable of astronomical hypotheses. And even the more relaxed instrumentalism which claims only that predictive success rather than truth is the goal of astronomy can rarely be attributed without qualification" (*ibid.*, 239).

A reading of the letter to Foscarini in the context of the positions held by the majority of astronomers of his time reveals that Bellarmine's advice to Galileo and Foscarini was not meant to bury the discussion of Copernicanism, as Blackwell and McMullin claim, but rather to enable its continuation.

Epilogue

In this paper I have tried to show that the reconstitution of Galileo's involvement with the Catholic Church as a narrative of *inevitable conflict* is common to many historians writing in the last decade. But whereas many share the concept — and thus structure the story in similar ways — they do not necessarily share the meaning that the story attempts to convey. Thus, it appears to be the case that the concept of the conflict serves many purposes for different people from different cultural and ideological milieus. For Blackwell, casting the story in terms of an inevitable conflict directly leads to a more general statement of the inherent antagonism between Catholic authoritarianism and modern science not only in

the past but also in the present (Blackwell 1998, 359). For Pera (Pera 1998), religion and science are in principle irreconcilable in a transhistorical, transcultural sense. In the context of the Catholic project that encourages a dialogue between religion and science the inevitability of the conflict is very differently understood, however. For Fantoli and Mayaud, for example, shifting the emphasis of the story to the contradiction between Scriptures and the Copernican theses helps to focus the gravity of the historical error committed by the church, but also to limit its boundaries and plea for a historical understanding of its roots. In their view the church was defending Scriptures and the right of their interpretation because it was the core of its collective identity severely challenged by its Protestant enemies. Thus, the philosophical-scientific controversy is re-constructed in terms of identity politics, where criteria of truth and falsehood are less relevant than the quest for coherence. Both groups, however, are stuck with a simplistic story that still fails to provide real historical explanations for the well-known facts.

Indeed, the three dogmas of the Counter-Reformation as defined in this paper are built around three key-concepts that may serve as the nuclei of a revised story, once criticized and thoroughly historicized. Historical research has yet to show how the boundaries of church authority crystallized not simply in the encounter between Bruno, Campanella, Galileo, and the Inquisition. Rather, it crystallized in a series of cultural struggles between Catholics and Protestants on the one hand, but also between traditionalist and more openly modernizing intellectual elites within the Catholic world itself on the other hand. Simultaneously, philosopher-scientists of the type of Bruno, Campanella, and Galileo also strove to break through the traditional position of commentators of great authors such as Aristotle, Plato, or Thomas Aquinas, and build up their voice as speakers in an independent and authoritative discourse on nature. Thus, the force that was indeed brutally exercised on Galileo in the conclusion of the trial of 1633 did not directly and necessarily result from his disobedience to Bellarmine's warning. Neither should Bellarmine's warning be read as a necessary deduction from the Tridentine decrees. Rather, it was force exercised at a moment of loss of control in a long and complex historical process where different notions of authority — religious, scientific, philosophical — competed for cultural hegemony in a field that has not yet been differentiated into clear bounded spheres.

Likewise, the preference for literal interpretation manifested by Bellarmine, should be examined not only in the context of the decrees that directly concerned Holy Scriptures but also in association with the rest of the Tridentine decrees and the doctrinaire developments after Trent. Moreover, practices of interpretation should also be investigated in the wider contexts of contemporary rules of interpreting classical texts, and not least of all the interpretation of nature. Last, it should be remembered that at the time of Galileo, the Church had its own science, developed especially by the Jesuits who tried to implement the Tridentine reform through educating the whole Catholic population and through assimilating new types of knowledge. Investigations of this kind will show that at the time of the

Counter-Reformation the Church itself experienced struggles between different options for the re-organization of culture. The traditionalists tended to adhere to the old boundaries between disciplines and the hierarchy between them and to maintain their authority through traditional means. The modernizers attempted to assimilate new areas of knowledge but were exposed to the danger of losing traditional authority to the new disciplines. Galileo was implicated in this struggle and was not always able to exploit it for his own benefit. This cultural struggle had intellectual and ethical aspects, as well as force-oriented aspects. The only hope to research it historically is by renouncing the anachronistic use of dichotomous, simplistic categories in its representation.

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