

‘Jesuit Science’ and Cultural Hegemony: A Political-Historiographical Critique

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The Counter-reformation sterilized this swarm of popular forces: The Society of Jesus is the last great religious order – reactionary in its origin and authoritarian, with a repressive and ‘diplomatic’ character – that marked with its birth the hardening of the Catholic organism. [...] Catholicism has become ‘Jesuitism’.

Antonio Gramsci, Q. 11, 1384¹

‘Jesuit Science’ is a bizarre plant flourishing in the field of historical studies in the early modern period. While other historiographical species such as ‘German Physics’ or ‘Proletarian Science’ have been equated and banned for their impure *ideological* pedigrees,² religiously tinged con-species, such as ‘Islamic Science’, have been replaced by more nuanced ones such as science in Islamicate societies.³ As for the sub-species of Christian Science, ‘Jesuit Science’, it is propagating at an extraordinary pace. First articles, and then edited volumes and monographs on the subject have appeared and multiplied, so that it has become fairly common to encounter this keyword in the titles of scholarly works.⁴

The claim and concern of this article is that today ‘Jesuit Science’ only *prima facie* refers to a historical problem, that is, the investigation and comprehension of scientific debates involving scholars belonging to the Jesuit Order during early Modernity.⁵ By taking a

¹ ‘Ma la Controriforma ha isterilito questo pullulare di forze popolari: la Compagnia di Gesù è l’ultimo grande ordine religioso, di origine reazionario e autoritario, con carattere repressivo e “diplomatico”, che ha segnato, con la sua nascita, l’irrigidimento dell’organismo cattolico. [...] Il cattolicesimo è diventato “gesuitismo”’. Own translation. I quote from Antonio Gramsci, *Quaderni del carcere*, ed. by Valentino Gerratana (Gramsci 2007), which I abbreviated as Q. followed by the number of the notebook and the page of the critical edition.

² See, among others, Eckert 2012. On ideological problems linked to Marxist approaches to science see, among others, Young 1977/1978.

³ For a critical assessment of the applications of the qualification ‘Islamicate’ coined by Marshal Hodgson in order to refer to nonreligious phenomena within cultures made of predominantly Muslim communities, see Brentjes et al. 2016, especially 135.

⁴ In a recent essay, Nick Wilding has argued: ‘Catholic science [...] has become an important object of exploration for the historians of science over the last generations. [...] The emergence of Jesuit science studies as a valid subject within the history of science has, though, deracinated it from the broader and changing field of Counter-Reformation history; a reintegration would be beneficial for both fields’ (Wilding ‘2013, 319).

⁵ Although the expression commonly used in historiography is ‘Early Modern Period’, I will alternatively employ the expression ‘Early Modernity’ to stress the seminal relevance of the sixteenth and the seventeenth centuries for the ‘Project of Modernity’ and avoid obliterating the prescriptive meaning of historiographical

closer look at the ongoing discourse one realizes that this category has gradually become a euphemism; indeed, it has become a camouflage that conceals a historiographical and epistemological commitment in favour of theology-led revisionisms in the history and philosophy of science. The most recent approaches to Jesuit Science are marked by an enthusiastic defence of *Jesuit spirituality* and *missionary apostolate* as key elements of the progress of early modern science. Such claims, as I will argue, are consistent with cultural hegemonic programs of the Church and its institutions, especially the teaching and scientific ones. Such revisionism directly implies a reassessment of the relation between science and religion, but also has implications for our overall understanding of modernity and post-modernity. A correct understanding of the issue at stake requires a clarification of the ideological drive behind recent developments in historiography and of its political meaning in present-day cultural and political struggles.

In the following I first introduce the new body of scholarly work on Jesuit Science. While the authors in this expanding field present their studies as objective and post-ideological, I stress the limits of these claims, which are both methodological and institutional. Authors' claims to disinterest and objectivity are too often in contrast with the support this cultural production receives from wealthy Catholic institutions. Catholic universities and publishers, on their part, are quite explicit about their mission and aims.

Secondly, I take a step back to consider past controversies over Catholic cultural hegemony, as they cast light on Gramsci's perspective and contemporary developments. Echoing the views of Risorgimento authors such as Francesco De Sanctis, Gramsci pointed out the lasting effects of post-Tridentine Church politics over Italian culture, in a context in which Inquisitorial coercion constituted the violent side of the Counter-reformation while Jesuit cultural activities constituted the educational and propagandistic side of hegemony. His analysis is particularly useful to reflect on the interconnection between cultural production and intellectual history, on the one side, and Catholic politics and struggles for hegemony, on the other.

These historical-methodological considerations lay the groundwork for my discussion of Catholic appropriations of science. I begin with epistemology, focusing on the French conservative historian of science Pierre Duhem and his rehabilitation of Inquisitor Bellarmine's epistemology vis-à-vis that of Copernicus and Galileo. Just as Duhem's apologetic efforts were based on decontextualized reductionism isolating certain theoretical

categories such as *Rinascimento*, *Renaissance* and *Neuzeit*. I derive the concept of 'Project of Modernity' from Heller 1999. For a discussion of the *ideological* risks entailed in the *naturalization* of 'Modernity' as a descriptive but not prescriptive category, see Habermas 1983, Chap. 1.

claims, more recent forms of reductionism isolate technical issues, as can be illustrated on the basis of studies on the calendar reform implemented by the Jesuit mathematician Clavius in the late sixteenth century. I moreover discuss the appearance of apologetic readings of the Copernican issue and of the Galileo Affair.

Subsequently, I deal with more general cultural issues: terminological shifts evinced by revisionist Jesuit Studies and their opportunistic use of postmodernity. Finally, I tackle a crucial aspect of Catholic struggles for hegemony: education. This leads to concluding remarks about present-day educational and cultural Catholic politics. Their concentration in the United States of America, owing to the hegemonic positioning of this country, assumes global relevance after religion has come back as a crucial factor in society and national and international politics since the end of the Cold War era.

A New Corpus Jesuiticum

Today historians of science are witnessing an increasing number of Jesuit Studies publications. The experts in the field can boast that a new body of studies has been established:

When I look at all the new articles and books that the *Jesuitica* Project [of the Catholic University of Leuven] lists every week, I suspect that there is enough scholarship and interest in the history of the Society of Jesus and individual Jesuits to fill a new journal. I am particularly impressed with the amount of new scholarship appearing in English. There is a climate of interest and acceptance for scholarship on the Jesuits in the English-speaking world that did not exist thirty to fifty years ago. When I obtained my Ph.D. in 1964 studying the Jesuits, or the Catholic Church generally, in the sixteenth and seventeenth centuries was not the path to rising in the historical profession in the USA and Canada.⁶

Robert A. Maryks and Jonathan Wright, the editors of a new journal entirely devoted to Jesuit Studies, launched it in 2014 with this quotation taken from the historian of the university, Paul F. Grendler. They added: ‘Because scholarship on Jesuit history has recently become so abundant, the *Journal of Jesuit Studies* aims at helping scholars to find their bearings in this rapidly growing field of studies’.⁷

⁶ Maryks and Wright 2014, 1.

⁷ *Ibid.*, 2.

Even if we restrict our consideration to the subcategory of Jesuit *Science*, the growing number of publications appearing under this label is remarkable.⁸ Actually, the first uses of the expression ‘Jesuit Science’ were rather timid. Donald L. Baker, in ‘Jesuit Science through Korean Eyes’ (1982-1983), mainly used the expression to refer to an instrumental use of scientific knowledge by Jesuit missionaries in their attempt to evangelize China. At the same time, his use of the term hinted at the embedment of the Jesuits’ natural and technical knowledge in a specific system of values. It specifically referred to their strategies to transfer to other cultures natural and technical knowledge together with their beliefs and religion.⁹ In the early 1990s the expression ‘Jesuit Science’ still sounded vaguely provocative and ironical, for instance in Mario Biagioli’s use in ‘Jesuit Science Between Texts and Contexts’, an essay review of Ugo Baldini’s and of Father William A. Wallace’s reappraisals of Jesuits as partners or perhaps even as teachers (!) of Galileo Galilei.¹⁰

Steven J. Harris, one of the scholars who contributed the most to launching and establishing ‘Jesuit Science’ as a label, admitted that the expression is perhaps ‘too crude’.¹¹ Yet, instead of renouncing it, he invited historians to make sense of this reified construct:

The juxtaposition of ‘Jesuit’ and ‘science’ is neither inexplicable nor self-contradictory; rather, it presents us with the challenge of trying to discern underlying patterns of coherence in the hope of finding how the pieces fit together.¹²

⁸ Among the most significant publications in which the label ‘Jesuit Science’ explicitly appears in the title: ‘Jesuit Science through Korean Eyes’ (Baker 1982/83); ‘Jesuit mathematical science and the reconstitution of experience in the early seventeenth century’ (Dear 1987); *Jesuit Ideology & Jesuit Science: Scientific Activity in the Society of Jesus, 1540-1773* (Harris 1988); ‘Boscovich, the Boscovich Circle and the Revival of the Jesuit Science’ (Harris 1993); ‘Jesuit Science Between Texts and Contexts’ (Biagioli 1994); ‘Confession-building, Long-distance Networks, and the Organization of Jesuit Science’ (Harris 1996); ‘From “The Eyes of All” to “Useful Quarries in Philosophy and Good Literature”: Consuming Jesuit Science, 1600-1650’ (Gorman 1999); ‘The Cultural Field of Jesuit Science’ (Feldhay 1999); ‘Mapping Jesuit Science: The Role of Travel in the Geography of Knowledge’ (Harris 1999); *The New Science and Jesuit Science. Seventeenth Century Perspectives* (Feingold 2003); ‘Jesuit Science in the Spanish Netherlands’ (Vanpaemel 2003); *Jesuit Science and the Republic of Letters* (Feingold 2003); ‘The trading zone communication of scientific knowledge: An examination of Jesuit science in China (1582-1773)’ (Huang 2005); ‘Benedictus Pereirus: Renaissance Culture at the Origin of Jesuit Science’, (Blum 2006); ‘Jesuit *scientia* and Natural Studies in Late Imperial China, 1600-1800’ (Elman 2006); ‘Jesuit Science after Galileo: The Cosmology of Gabriele Beati’ (Magruder 2009); *Ferdinand Verbiest and Jesuit Science in 17th Century China: An Annotated Edition and Translation of the Constantinople Manuscript (1676)* (Golvers and Nicolaidis 2009); *Missionary Scientists: Jesuit Science in Spanish South America, 1570-1810* (Prieto 2011); ‘Maximilianus Hell (1720 - 1792) and the eighteenth-century transits of Venus: A study of Jesuit science in Nordic and Central European contexts’ (Aspaas 2012); ‘Early Modern Jesuit Science. A Historiographical Essay’ (Rabin 2014).

⁹ Baker 1982/83, e.g. 207 (referring to ‘[Ricci’s] borrowing of European advances in science and technology to promote Western religion’) and 230: ‘He [the Korean scholar Yi] could not be convinced that he should worship a foreign God by men he viewed as mere technicians – talented technicians, it was true, but technicians nonetheless. He was susceptible to no Copernican revolution in values through the influence of *Jesuit science*’ (emphasis added).

¹⁰ Biagioli 1994.

¹¹ Harris 1996, 287. The entire volume 3/1 of the journal, in which this essay appeared, was dedicated to the topic ‘Jesuits and the Knowledge of Nature’.

In his Ph.D. dissertation *Jesuit Ideology & Jesuit Science* (1988), Harris was the first to make a systematic use of the expression ‘Jesuit Science’. Therefore, he felt the necessity to define, justify and explain it. He closely connected it with ‘ideology’, because he saw Jesuit Science as an approach to science (that of the Jesuits in early modernity) informed by a specific set of values, especially obedience and discipline. These values were encompassed under the category of ‘apostolic spirituality’ and referred to the dissemination of the Catholic creed through education, political connections and missions.¹³ As to the concept of ideology – which has disappeared from subsequent studies in Jesuit Science – Harris presented it as a neutral heuristic instrument, assuming that the historian can observe the past from an extra-ideological position.¹⁴ In other words, his reflection on *past* ideology did not go so far as to include a self-reflection on the historian’s own positioning and the set of assumptions underlying his approach. Harris regarded the history of science as a de-ideologized discipline, in which ‘a refreshing independence from the polemics and apology of the older literature’ could be achieved.¹⁵ In one place, Harris even used the expression ‘cultural hegemony’ with reference to what he called ‘Jesuit apostolate’,¹⁶ but attributed to this Gramscian concept the vague meaning of ‘predominance in cultural matters’ ignoring its original socio-political and critical meaning.

After Harris’ seminal treatment of Jesuit Science in its connection with values and ideology, Mordechai Feingold made the effort, going in a different direction, to separate science and religion in the treatment of the scientific achievements of early modern Jesuits. In *Jesuit Science and the Republic of Letters* (2003), Feingold maintained that Jesuit scientists pursued their scientific interests often independently of their religious mission or, at least, that one can evaluate the scientific dimension independently of the religious one. The latter claim implied that the worth and influence of their scientific endeavour could be separated from the apostolic mission:

¹² *Ibid.*, 289.

¹³ Harris 1988, 25: ‘The Ignatian strategy was to conquer the world through the world; that is, to conquer the world for Christ by using worldly tactics’. Cf. 241: ‘The ultimate goals of [these apostolates] were, of course, salvation of souls and preservation of Roman Catholic Church’.

¹⁴ *Ibid.*, 24: ‘The model of ideology I adopt is intended as a *nonevaluative explanatory-descriptive model* applicable to the Society as an organized social movement. It therefore abandons many of the pejorative connotations associated with historical and colloquial usages. In this model, an ideology is seen as a distinctive configuration of ideas and values, which serves to direct and coordinate the thoughts and actions of its adherents. [...] Just as an ideology entails a scale of social values that act as a guide to behavior, so it also possesses a scale of cognitive values that act as a guide to thought’ (emphasis added).

¹⁵ *Ibid.*, 6.

¹⁶ *Ibid.*, 28.

The aim [...] [of this reconstruction] is to get past the stereotypes that surrounded the Society of Jesus during the first 200 years of its existence and evaluate the scientific dimension of its intellectual contribution, independent of its religious mission.¹⁷

Furthermore, whereas Harris argued from a systemic perspective for the interdependency between Jesuit values and scientific practices, that is, for the interdependency between ideology and knowledge,¹⁸ Feingold embraced an individual-oriented perspective. From the latter viewpoint, the scientific efforts of Jesuit scientists can be appreciated precisely as achievements often conducted *in spite of the constraints of their Order* (e.g., hierarchy, obedience and censorship). By shifting the angle from institutions to individuals, and from systemic functions to subjective intentions, Feingold focused on a series of cases of censorship and self-censorship, and of limitations and ‘tribulations’, suggesting that one can see many Jesuit scientists as the victims rather than the protagonists of the scientific and cultural policy of their own Order.

Feingold explicitly aimed to open up a space for a de-ideologized treatment of Jesuit participants in the early scientific debates. For this purpose, he isolated their scientific contributions from larger patterns of cultural politics as well as individual actors from their institutional settings. However, the cost of such a treatment is to push the political side to the margins as irrelevant for the understanding of the Jesuits’ cultural production. ‘The contests that embroiled the Jesuits during the early modern period [...] were as much over *cultural hegemony* as over religion – though one should not assume, as historians often do, that the former was merely an extension of the latter’.¹⁹ Despite appearances, it should be clear that this reference to ‘cultural hegemony’ departs from the Gramscian meaning, according to which confessional and religious matters *are* questions of cultural hegemony since they imply strategies of social control through the construction of consensus. In the passage quoted, it simply means ‘scientific leadership’ or ‘excellence’. In Feingold’s eyes, this de-politicization and insulation from institutional and ideological considerations had the ostensible advantage of undermining apologetic attempts to reassess the religious dimension of science (past and present).

¹⁷ *Ibid.*

¹⁸ See e.g. Harris 1988, xxiii-xxiv: ‘Such shifts [the growth of Jesuit interest in the mathematical and natural sciences] cannot be easily attributed to the initiative of a single person, either within or outside the Society. They are more readily explained in terms of broad social or socio-cultural forces. That is, such a large-scale shift in interest is essentially a phenomenon of the collectivity, and thus its explanation must also be collective in nature’.

¹⁹ Feingold, *Jesuit Science and the Republic of Letters*, 2 (emphasis added).

Harris and Feingold represent two different perspectives on the study of past contributions to science by Jesuit scholars. The former emphasizes the scientific production of early Jesuits *within* and *owing to* the ‘long-distance networks, and the organization’ of their Society.²⁰ The latter points rather to the individuals who were capable of great achievements *in spite of* the context and therefore ‘the conditions under which Jesuit publications saw light obliges us to give them the same *charitable reading* they were given by some contemporaries’.²¹ In both cases the reassessment is supported by the consideration that today’s historiography should supersede the polemics and apologies of the past. As we have seen, Harris initially pinpointed the ideological dimension of Jesuit Science as the indispensable hermeneutic framework to address the topic. Programmatically, he confined this *difficulty* to the historiography of the past, and called for a de-ideologized inquiry of early Jesuits and their scientific activities:

The generally hostile conditions threatening the Society at the end of the nineteenth century, help explain one of the great frustrations encountered by students of Jesuit history; namely, the seemingly ubiquitous polemical and apologetic uses Jesuits and non-Jesuits alike have made of the historical record. The provocative decrees of the first Vatican Council, the severe reaction to them in Bismarckian Germany known as the ‘Kulturkampf’, and the rhetorical extremes of the heated debates on the relationship between ‘science and religion’ were all ominous preludes to the Society’s burst of historiographical activity.²²

Limits of the Post-Ideological Neutrality of Jesuit Studies

Among the representatives of the new trend toward an allegedly impartial scholarship John W. O’Malley stands out as the author of several meticulous works on the history of the Jesuit Order, among them *The First Jesuits* (Cambridge, Mass., 1993).²³ He was one of the organizers of the huge international conference ‘The Jesuits: Culture, Learning, and the Arts, 1540-1773’ held at Boston College in May 1997. The proceedings of this conference can be

²⁰ Harris, ‘Confession-Building, Long-distance Networks, and the Organization of Jesuit Science’.

²¹ Feingold 2003, ‘Preface’, 25 (emphasis added).

²² Harris 1988, xxv.

²³ For instance, by Feingold 2003, vii: ‘[The] overall [negative] perception of the Order and the cultural production of its members was perpetuated by generations of historians, whose interpretative framework has tended to swing between the polemical and the apologetic. Only recently have scholars begun *seriously to transcend* centuries of preconceived belief by granting the Jesuit experience *rigorous* and *disinterested* scrutiny’. Emphasis added.

seen as a turning point in the affirmation of Jesuit Science Studies.²⁴ O'Malley and his collaborators were very satisfied with their success, as attested by the numbers: 'Some hundred and twenty-five scholars from around the world participated, and about fifty formal papers were delivered'.²⁵ However, it can be argued that this new impetus did not originate from neutral terrain. Two out of four organizers were themselves Jesuit Fathers while another one (the aforementioned Harris) was (or was to soon become) professor at the Jesuit Institute, Boston College. O'Malley is himself a Roman Catholic priest and a member of the Society of Jesus.²⁶

A conflict between intended historical and critical disinterest and institutional frameworks thus emerges if one considers the declared *mission* of the organizations and institutions scholars work for. O'Malley, for instance, is a professor of the Department of Theology in the 'oldest Catholic and Jesuit university' in the United States of America, Georgetown (Washington, DC). It was established in 1789 by the Jesuits and proudly advertises its loyalty to 'our Jesuit values' on the web.²⁷ Hence, the question that arises is whether loyalty to these values can also allow for a critical assessment of Jesuit history or whether it creates a climate of celebration *a priori* excluding any negative judgment.

As to Boston College hosting the conference 'The Jesuits: Culture, Learning, and the Arts', it is presented on its official web site as 'committed to maintaining and strengthening the Jesuit, Catholic mission of the University'.²⁸ In fact, the Society of Jesus founded this university in 1863. The official *Mission Statement* of the Jesuit Institute is explicit about its normative role:

[It] exists to aid Boston College in its endeavors to attain this coherence, in its identity and growth as a Catholic Jesuit university. The purpose of the Institute is to foster the Jesuit, Catholic character of Boston College precisely as a university. The university should be more a university because it is Catholic and Jesuit. Founded in 1988 through an initial gift of the Boston College Jesuit Community and a matching gift from the University, the Institute

²⁴ Among other contributions, it includes Feldhay 1999, 107-130, and Harris 1999.

²⁵ O'Malley et al. 2000, xiii.

²⁶ <http://explore.georgetown.edu/people/jwo9/> (27 Sept. 2014).

²⁷ As one reads on the official web page, <http://www.georgetown.edu/about/> (27 Sept. 2014). Cf. the page 'Jesuit & Catholic Identity' (<http://www.georgetown.edu/about/jesuit-and-catholic-heritage/index.html>) (27 Sept. 2014): 'The ideals and principles that have characterized Jesuit education for over 450 years are central to Georgetown's mission and character'.

²⁸ The web page itself is entitled 'Jesuit, Catholic Tradition: Finding God in all things'. <http://www.bc.edu/content/bc/about/tradition.html> (26 Sept. 2014).

sponsors personal research, academic exchange and collective inquiry about the issues that emerge at the intersection of faith and culture.²⁹

The conflict of interest is evident. ‘Nemo iudex in causa sua’, as the adage goes (None should be a judge in his own cause). Can critical approaches to the history of the Jesuit Order emerge from this environment? Can self-legitimation on the part of Jesuit institutions be excluded from scholarly publications stemming from this institutional context? In what way does this embedment of Jesuit scholarship within Jesuit institutions affect scholarly research and results?

In a recent monograph, the *post-apologetic* historian O’Malley makes ironic comments about the contrasting past views of the Jesuits, using a captivating title: *Saints or Devils Incarnate? Studies on Jesuit History* (2013). At first sight, one could think that the title is a double hyperbole. Jesuits, one might assume, were *normal* people. Hence, they were neither devils incarnate nor saints. The last chapter of the book refutes this impression. The title goes: ‘The Many Lives of Ignatius of Loyola: Future Saint’. O’Malley the scholar can joke about the holiness of Ignatius. O’Malley the Jesuit cannot.

Most importantly for our present concern with disinterested research and the dismissal of apology in the study of the Jesuit past, the volume *Saints or Devils Incarnate?* inaugurates a new series: *Jesuit Studies: Modernity through the Prism of Jesuit Science*. Its editor, Maryks, is associate professor at Boston College and editor-in-chief of the peer-reviewed quarterly *Journal of Jesuit Studies* issued since 2014. The journal surprisingly does not experience the financial constraints so common in the humanities, judging by the following announcement on the publisher’s official web page: ‘This is a fully Open Access journal, which means that all articles are freely available online, ensuring maximum, worldwide dissemination of content. Thanks to generous support of the Boston College Institute for Advanced Jesuit Studies, all article publication fees are waived’.³⁰ The editorial board of the *Jesuit Studies* series is not of the kind one would call impartial and detached: out of 14 scholars, four are members of the Society of Jesus, and six (including the aforementioned four) plus the editor are appointed by Jesuit institutions (Boston College, Heythrop College, Fordham University, and the Jesuit School of Theology, Santa Clara University) or by Catholic universities (De Paul University and Pontificia Universidad Católica del Perú). The apologetic mission is however not explicit, as this might disqualify the endeavour presented as purely scientific and motivated by a historiographical interest aimed at addressing thus-far

²⁹ <http://www.bc.edu/content/bc/centers/jesinst/mission.html> (27 Sept. 2014).

³⁰ <http://www.brill.com/products/journal/journal-jesuit-studies> (8 Oct. 2014).

neglected topics in an even-handed manner: ‘Associated with the *Journal of Jesuit Studies*, the *Jesuit Studies* book series will target those areas of scholarship on Jesuit history in its broader context *that have been lamentably neglected* but it will also invite contributions of important but hard to find monographs in other languages, which shall be encouraged to be translated’.³¹ It is to be expected that new studies on Jesuit Science will be published, as contributions to fill the gap of *lamentably neglected* historical inquiry.

The change in Harris’ perspective through the years is telling evidence of a shift from a revaluation of Jesuits’ contributions in the history of science to the celebration of their *special way to science*. The caution that Harris showed in his early work, and the link he established between Jesuit Science and ideology, dissolved in subsequent publications on the same topic, especially after he became an employee of a Jesuit institution. In the academic year 1999-2000, he benefited from a visiting fellowship grant of the Jesuit Institute at Boston College, with the project ‘Jesuit Science, 1540-1773: Representing Nature in the Age of Confession’. In the description of the project, the critical tone of the dissertation has been substituted by a very rosy picture, in which ‘ideology’ has disappeared, ‘obedience’ has been replaced with ‘instruction’, ‘apostolate’ with ‘information-disseminating resources’ and, so to speak, the maxim ‘*ad maiorem Dei gloriam*’ with ‘*ad maiorem Scientiae gloriam*’:

His [Harris’] premise is that the ability and incentive of early Jesuits to pursue the natural sciences stemmed from a combination of their overseas missions’ information-gathering capabilities with information-disseminating resources of Jesuit colleges and universities.

Harris says the success of the Jesuits’ foreign missions depended on their ability to train and assign trustworthy confreres who would be willing to work under instruction, and provide reliable reports of new lands, peoples and other phenomena. These in turn were utilized by Jesuit faculty teaching and writing on astronomy, geography, natural history, botany and other scientific areas.³²

Moving from these premises, Harris reassessed the so-called ‘Merton thesis’, according to which Puritan ethics was a decisive factor in English science in the century of Robert Boyle, Isaac Newton and the Royal Society.³³ Harris reversed this thesis, or at least expanded it, in order to value ‘Jesuit spirituality’ as a decisive factor in the scientific activity and teaching during early Modernity. The active engagement in the world in the name of

³¹ <http://www.brill.com/publications/jesuit-studies> (27 Sept. 2014) (emphasis added).

³² http://www.bc.edu/bc_org/rvp/pubaf/chronicle/v7/my28/grants.html (8 Oct. 2014).

³³ Harris 1989. Merton presented his theses concerning the relation between science and religion in seventeenth-century England in his classic of Weberian sociology of science, *Science, Technology and Society in Seventeenth Century England* (1938).

‘Christian service’ and as part of their ‘apostolic mission’ as well as the ‘sanctification of learning’ are elements that should account for Jesuits’ scientific successes. Note that, in this perspective, the context loses its *neutrality* or its *externality* relative to Jesuit Science. It becomes an integral and *positive* part of the scientific endeavour.

Such a perspective is openly embraced by the author of the most important and up-to-date history of the Jesuits’ science, Augustín Udías Vallina, S.J. In the concluding, historiographical chapter of his *Jesuit Contribution to Science: A History* (2015), Udías acknowledges Harris as the *first* to aptly address the question about the specificity of Jesuits’ engagement with science.³⁴ By contrast, he dismisses Feingold’s perspective for his assumption that belonging to the Jesuit Order was, more often than not, an obstacle to the activity of Jesuit scientists, due to doctrinarian enforcement, interior control within the Order and even preventive forms of self-censorship. Himself a Jesuit and a geophysicist, Udías defends the *apostolic* and *symbolic* significance of priest-scientists who embody the ‘unification of Catholic wisdom and secular learning’.³⁵ He evidently sees himself as the epigone of a long tradition marked by a *special way* to science. In this optic, he strengthens the Mertonian argument further, stressing that such specificity has its core in ‘Ignatian spirituality’.³⁶ At the centre of the Jesuits’ scientific endeavour is the *service* to God which, Udías confesses *en passant*, ‘for St. Ignatius [...] is understood as a service to the Church’.³⁷ Thus, in his eyes, a science *in the service of the Church* and an education system that is instrumental to its hegemonic strategies are no shortcomings at all, but rather a plus-value that deserves to be admired and extolled. Certainly, the language he uses is deceiving: *spirituality* is the substitute for *ideology*; *apostolic work* would be better understood, in Gramscian terms, as a cultural-hegemonic project.³⁸

Old Ideologies? A Retrospective

³⁴ Augustín Udías, *Jesuit Contribution to Science: A History* (Dordrecht: Springer, 2015), 235.

³⁵ *Ibid.*, 240.

³⁶ Its four tenets are the idea of finding God in all things, the union of prayer and work, the search for the greater glory of God and the work on the ‘frontiers’ (the apostolic work brought to ‘places and situations where the Christian message is not yet known’). *Ibid.*, 237-239.

³⁷ *Ibid.*, 237.

³⁸ Cf. *ibid.*, vi: ‘A few years after its founding in 1540 by Saint Ignatius of Loyola, the Society of Jesus undertook its educational endeavor as a key instrument of its apostolic work’. And vi: ‘Moreover, I try to find a relation between the scientific work of the Jesuits and their spirituality’.

Recent Jesuit studies have a tendency to dismiss past criticism by simply claiming that it was always inspired by malice. In these studies, it is often claimed that historians neglected Jesuits for too long due to prejudice:

Almost from the moment of its founding in 1540 by Ignatius of Loyola and his companions, the Society of Jesus suffered from misunderstanding, some positive, much of it negative. Myth and misinformation abounded [...]. Not until the mid-twentieth century did historians begin to dispel some of the myths of early modern Catholicism, but only with John O'Malley's *The First Jesuits* (Harvard University Press, 1993), which has been translated into ten languages, did a new era open in the study of the Society of Jesus.³⁹

In recent secondary literature, it is often maintained that negative judgments on the Order and its history were owing especially to the defamation of hostile critics and of their *uncritical* followers. In the best cases, it was the result of misunderstandings. This might be true for English-speaking scholarship but it can hardly be accepted as generally valid for those Catholic countries and cultures where a thorough reflection on the lasting impact of the Jesuits and the post-Tridentine Church has been carried out from the sixteenth century onwards.

However, the prejudices denounced by Jesuit historians mostly refer to nineteenth-century historiography. And indeed, scholars who welcomed Italy's unification and the constitution of the new State especially reflected on the cultural implications of post-Tridentine Catholicism and its institutions for the intellectual development of the *popolazione*.⁴⁰ In particular, the conflict between the Church and the *nuova scienza* (the 'new science' that, according to a shared understanding, included the natural sciences as well as post-Aristotelian Renaissance philosophies) was central to the reflection on the past and future of the country. Episodes of intolerance and persecution directed towards dissidents (above all the execution of Bruno, the ban of the Copernican theory and the trial and condemnation of Galileo) were seen as political crimes with long-lasting consequences for Italian culture. Looking back at this tragic past, the leading historian of Italian culture of the Risorgimento, Francesco De Sanctis, in his *Storia della letteratura italiana* – which, in many ways, is a political-intellectual history of Italian culture in general – pointed to the interconnection of Counter-reformist forms of control, on the one hand, and the propagandistic and educational methods employed by the Jesuits, on the other. They

³⁹ Markys, 'Foreword' to O'Malley 2013, xi.

⁴⁰ Cf. Durante 2004.

concluded to shape culture and society according to the religious-political line emerging from the Council of Trent.⁴¹ His perspective – the roots of which can be traced back to the polemics of the Enlightenment – informed later generations of Italian scholars, including Gramsci.⁴²

On the opposite front, after the unification of the Italian Peninsula (1861) at the expense of the papal monarchy (20 September 1870), Jesuits engaged through their journal *Civiltà Cattolica* in an ideological struggle against the liberal intellectuals who supported the new State. Within these polemics, the history of the Jesuit Order and of the achievements of its exponents was hotly debated.⁴³ The contrast between the new Italian State, ruled by liberal elites, and the Vatican created a *de facto* separation of the political apparatus and large sectors of civil society, largely dominated by the Church. The tension between a lay State and a Catholic-permeated civil society, which informs Gramsci's analyses, lasted up to Mussolini's time and anticipated later scenarios such as Solidarność Poland and perhaps today's Cuba. In the developments of the post-Risorgimento political-religious confrontation in Italy, Inquisitor Bellarmine was beatified (1923), sanctified (1930) and eventually elevated to the dignity of a Doctor of the Church (1931). In this manner Pius XI realized and even exceeded the original project of sanctification conceived by Urban VIII as early as 1634.⁴⁴

The process of sanctification of Bellarmine took place in a particularly dark period of European history, marked by the rise and establishment of Fascisms. As Gramsci remarked in his *Prison Notebooks*, this apotheosis can be understood only against the background of the evolving relations between the Church and the State, of the expansion of the Jesuits' influence within the Catholic Church and within society and of the eventual collaboration between the Fascist State and the Vatican.⁴⁵ In those years, the *Patti Lateranensi* (Lateran Accords, 1929) secured Benito Mussolini the support of Pius XI at the cost of a series of economic and civil concessions to the Church, including the teaching of religion in public schools. The new political liaison eased the transfer of the editorial project of the *Monumenta Historica Societatis Jesu* from Madrid to Rome. This was a vast operation aimed at presenting archival documents relative to the early years of the Jesuit Society to learned scholars and thus to induce a reappraisal of its history.⁴⁶

The reasons for Bellarmine's sanctification should not be searched for far from these events. According to the entry in the *Dictionnaire de théologie catholique* (1932) by the Jesuit

⁴¹ Cf. De Sanctis 1996, Chap. 19, 'La nuova scienza'.

⁴² Cf. Saitta 1911, 62-63. For a judgment on historiographical positions on the Renaissance and the Counter-reformation during the Risorgimento, cf. Croce 1929, esp. 3-19, Chap. 1, 'Controriforma'.

⁴³ Spaventa 1911, e.g., 10.

⁴⁴ Cf. Koch 1934, 185.

⁴⁵ Omodeo 2011, 41-48.

⁴⁶ See Koch 1934.

Xavier-Marie Le Bachelet, the major theological merits of Bellarmine were genuinely political.⁴⁷ As one reads there, the significance of his strenuous opposition to the Reformation and to *all heresies* should not be restricted to his polemics against doctrines such as the Lutheran *servum arbitrium*. Rather, Bellarmine's doctrine included issues such as the affirmation of the primacy of the Roman pontiff, his *indirect* power over the worldly sphere, and the superiority of his *divine* monarchy over *human* civil powers. In other words, its actual significance rested in the possibility to translate his political-theological theories in terms of an indirect control of civil society by means of education and propaganda. Borrowing from Gramsci, we can say that Bellarmine was sanctified as a representative and theoretician of Catholic hegemony in modern societies.

Gramsci's Analysis of Jesuit Politics and the Catholic Positioning within Modern Society

Gramsci reflected on the cultural-political dimension of the *Concordato* of 1929 in a long note on the *Rapporti tra Stato e Chiesa* (Relations between State and Church). The agreement between Italy and the Vatican created 'an interference of sovereignty in the territory of one State' (Q. 16, 1866) in spite of the fact that, from a legal viewpoint, 'concordats were verbally presented as international treaties' (Q. 16, 1866). Indeed, the concordat conferred a privileged position on the Church within the State. The economic agreements included in the concordat were the price Fascist Italy had to pay for the Church's commitment 'not to hinder the exercise of power but rather to favour and support it' (Q. 16, 1867). In other words, the Church was entering the political arena by supporting the party and government that signed the concordat, not the State tout court. Concretely, this meant 'the public recognition of special political privileges to a cast of citizens within the State' (Q. 16, 1867) in virtue of their controlling function in culture and education.

Gramsci was convinced that the Church would not limit itself to the 'intellectual and moral formation of the youngest' but 'would try to implement its full program' (Q. 16, 1872). University education was a target, too. Since the university is the 'mechanism selecting individuals of other classes that will become part of the personnel in the government, administration and direction' (Q. 16, 1868), the levelling of Catholic and public universities would make the formation of public personnel inhomogeneous and undo one of the main achievements of the Risorgimento, that is, the independence of the Italian State from the Church. A new 'lay-religious amalgamation' was emerging (Q. 16, 1869). Gramsci wrote that

⁴⁷ Le Bachelet 1932.

‘the Church [...] cannot be satisfied with the sole formation of priests. It aims to permeate the State (following Bellarmine’s theory of the indirect government)’ (Q. 16, 1871).

The sanctification of Bellarmine also sanctioned the triumph of the Jesuit faction within the Catholic Church. According to Gramsci, the Jesuits (or ‘Jesuitism’) constituted one of the ‘parties’ in competition for the control of the Church. It was opposed by the ‘Modernists’ on its left and the ‘Integralists’ on its right (Q. 14, 1712). In the past, as he remarked, the factions of the Church took the shape of religious orders. Such groups were usually reabsorbed and disciplined within the ecclesiastical hierarchy in order to soften the heretical tendencies that were implicit ‘in any innovations in the womb of the Church if they are not promoted by its centre’ (Q. 6, 833).

Gramsci saw the ecclesiastical factions of his time as akin to political parties giving different responses to the emergence of mass society. The Integralists constitute ‘a European tendency of Catholicism that is politically positioned at the extreme right’ (Q. 20, 2088). They are traditionally linked ‘to the reactionary classes and especially to the land-owning aristocracy and big land-owners’. On the opposite side, the Modernists are closest to the popular classes, ‘hence, [they are] favourable to reformist socialism and democracy’. From the viewpoint of dogma, the latter fostered ‘an intellectual reform of the Church’ (Q. 14, 1711). However, as a matter of fact the two extremes, Integralists and Modernists, are on the same front in their opposition to the most fierce and influential party, that of the Jesuits (Q. 20, 2088). The latter are the party of ‘opportunism’ and ‘centrism’ (Q. 20, 2088). Its main goal is to arrest and reabsorb the so-called ‘apostasy of the masses’ – the emergence of the popular classes as a political subject in the aftermath of the French Revolution. Jesuit activities, reinforced by the lay association *Azione Cattolica* (Catholic Action) and centrist Catholic parties, aimed to guarantee a large popular basis in support of Catholic-democratic movements (Q. 20, 2101). Such a program and these manoeuvres seemed to Gramsci to be the most lucid and effective program of appropriation, discipline and centralization of the most dangerous of ‘modern heresies’, mass movements. The constitution of Catholic parties appeared to him a realistic and up-to-date measure. It took into account the decline of the Church due to its transformation from a total institution encompassing the entire society (in the Middle Ages) to ‘one party among others’.⁴⁸

⁴⁸ Cf. Q 14, 1714: ‘[Il Cattolicesimo], è passato dal godimento incontrastato di certi diritti, alla difesa di essi e alla rivendicazione di essi in quanto perduti. Che sotto certi aspetti la Chiesa abbia rinforzato certe sue organizzazioni è certo incontestabile, che sia più concentrata, che abbia stretto le file, che abbia fissato meglio certi principi e certe direttive, ma questo significa appunto un suo minore influsso nella società e quindi la necessità della lotta e di una più strenua milizia’.

However, these measures and the democratic program of the centrists were contingent and precarious. In fact, according to the Bellarminian principle of indirect control of politics, all cultural and political strategic efforts were subordinated to the interests and prerogatives of ecclesiastical power. Recent events showed that the Church rapidly abandons its ‘party’ as well as its ‘social doctrine’ as soon as ‘men of the Providence’ enter the political arena as savers of the Fatherland, especially in moments of deep political and social crisis (Q. 9 and Q. 13, 1194-1195 and 1619-1622). This happened already with the Church’s support of the clerical-reactionary politics of Napoleon III (Q. 1, 119) and, more recently, with Mussolini (Q. 5, 546) and ‘Hitlerism’ (Q. 20, 2103).⁴⁹

How the History of Science Can Serve Catholic Revisionism: Pierre Duhem and His Epigones

In the *Prison Notebooks* Gramsci regarded Bellarmine as the historical and symbolic point of reference for Catholic agendas of hegemony. He also shared the widespread image of him as an inquisitor responsible for the clash between the Church and ‘modern culture’ – whether the clash with the philosophy of immanence symbolized by Bruno or with (positivist) science symbolized by Galileo.⁵⁰ Indeed, this role as a persecutor of scientific and philosophical innovators was one of the major shadows obscuring the bright image of the *political* Saint and Doctor of the Church in the eyes of cultivated people at the beginning of the twentieth century: Was Bellarmine not the inquisitor who persecuted many intellectuals, philosophical and theological dissidents? Was he not the person who most directly contributed to Bruno’s death sentence and who communicated to Galileo the prohibition to disseminate the Copernican *heresy*? Did he not play a role in the condemnation of the heliocentric theory of 1616? It was of course the task of a historian of science to disperse these clouds. The

⁴⁹ On several occasions, Gramsci looks at Napoleon III’s seizure of power after the revolution of 1848. He conquered the ‘popular dregs’ by means of a nationalist demagoguery (Q 19, 2054) that shows profound similarities with the advent of Fascism in Italy. In both cases the ‘historical events culminated with a great heroic personality’ (Q 13, 1619). The analogy between Napoleon III and Mussolini also applies to their religious politics and the collusion with the Vatican. Gramsci speaks of ‘Bonapartism’ or ‘regressive Caesarism’ to ‘express the situation, in which the struggling forces are balanced in a catastrophic manner, that is, their balance is such that continuing the struggle cannot end except with reciprocal destruction’ (Q 13, 1619).

⁵⁰ Q 6, 809: ‘Il Bellarmino condusse il processo contro Galileo e redasse gli otto motivi che portarono Giordano Bruno al rogo. [...] Il processo di Galileo, di Giordano Bruno, ecc. e l’efficacia della Controriforma nell’impedire lo sviluppo scientifico in Italia. Sviluppo delle scienze nei paesi protestanti o dove la Chiesa <era> meno immediatamente forte che in Italia. La Chiesa avrebbe contribuito alla snazionalizzazione degli intellettuali italiani in due modi: positivamente, come organismo universale che preparava personale a tutto il mondo cattolico, e negativamente, costringendo ad emigrare quegli intellettuali che non volevano sottomettersi alla disciplina controriformistica’.

chauvinist physicist and historian of science Pierre Duhem had already undertaken this assignment in the first decade of the twentieth century.⁵¹

In a classic-to-be of the history of science, *ΣΩΖΕΙΝ ΤΑ ΦΑΙΝΟΜΕΝΑ: Essai sur la notion de théorie physique de Platon à Galilée* (1908, *To Save the Phenomena: An Essay on the Idea of Physical Theory from Plato to Galileo*), Duhem offered a reassessment of the *epistemological* positions of the Church in the sixteenth and seventeenth centuries based on the anachronistic projection of later philosophical categories onto the past. In particular, Duhem reinterpreted Henri Poincaré's conventionalism as a modern form of Pauline scepticism, which he used to retrospectively blame Copernicus and Galileo for their *realism* and, on the opposite front, to commend 'cautious' theologians such as Andreas Osiander, Bellarmine and Urban VIII for their attempts to preserve those scientists from epistemological errors. In other words, Duhem rehabilitated the Renaissance Jesuit and inquisitor Bellarmine as a *pure* philosopher of science, as the one who tried to teach to the *stubborn* Galileo the philosophical lesson that science, in particular astronomy, is only *fictionalist*.

It should be noted that such treatment dismissed as irrelevant all juridical and political aspects of the events that led to Galileo's condemnation and abjuration of heliocentrism, as well as the cultural line imposed onto Catholics by Counter-reformist Rome, and the asymmetry in the power relations between the inquisitors and the people they tried, not to mention the relations of force between Rome and other powers in Italy and beyond.⁵² In Duhem's narrative these aspects became invisible. Accordingly, the Copernican issue was reduced to a dialogue about the epistemological status of hypotheses and the empirical demonstrability of the heliocentric planetary theory. In the long run, the success of Duhem's revisionism rested on isolating epistemology and science from wider cultural contexts. In its main points, this approach anticipated later *internalist* accounts of the Scientific Revolution; thus the Cold War historian of science *par excellence*, Alexandre Koyré, would present the rise of modern science in the sixteenth century as a 'spiritual revolution'.⁵³

A curious complementary tendency to Duhem's implicit distinction between Bellarmine the scientist and Bellarmine the inquisitor is witnessed by recent interpretations of Galileo, evident in the division between his intellectual and experimental activity on the one hand and his faith on the other: 'Galileo was both a scientist and a believer; it was Galileo the

⁵¹ Note that the image of the Jesuits in France was marred, in the nineteenth century, by their support of the monarchy and Napoleon III and their direct or indirect role in the affaire Dreyfus. Their order was banished from France from 1901 to 1923 as a result of quarrels concerning education and the separation between the Church and the State. Cf. Woodrow 1984, 114-115.

⁵² On the functions and functioning of the Inquisition in the Italian peninsula, a reference work is Prosperi 1996.

⁵³ Koyré 1943. I discuss this in Omodeo 2016, esp. 73-76.

scientist who wrote, Galileo the believer who recanted'.⁵⁴ No doubt Galileo was a believer. However, what would have been the consequences for his life, if he did not recant?

Arguably, after Galileo's (partial) rehabilitation under Karol Wojtyła, more efforts were undertaken for a double rehabilitation, of Galileo as a Catholic who supported the reconciliation of Scripture with science, and of Bellarmine as a far-seeing philosopher of science.⁵⁵ According to this line of thought, both *discussants* were correct 'in their own right' in their 'exchanges' over the Copernican system and natural science. The methodological limitation of this interpretation consists in isolating two actors from their historical framework. It neglects the real and symbolic meaning of Galileo's condemnation and the asymmetrical relationship between an inquisitor and his interlocutor at a social, political and cultural level.⁵⁶ Such fragmentary treatment downgrades the condemnations of the Copernican planetary theory and of Galileo to the rank of mere episodes (later 'enlarged' by 'hostile' historians). Since the Copernican issue, as Rabin complains in crude terms, 'has *traditionally* been used as the *proof* that the Catholic Church and the Jesuits were anti-science',⁵⁷ an exculpation of the inquisitor requires that the events be presented either as historically insignificant or as a misunderstanding. At the same time, Galileo could be enrolled in support of the Jesuits' cause by arguing, along with father Wallace, for his Jesuit legacy as far as *methodology* and *logical reasoning* are concerned.⁵⁸

As to Bellarmine's celebrated 'philosophy of science', it is opportune to stress that his rejection of the Copernican planetary theory was not based on scientific conventionalism in the modern sense but rather on considerations about the hierarchy of various forms of knowledge: theological, natural and mathematical. In accordance with a *typically Jesuit* Scholastic approach, he assigned to theology and biblical exegesis precedence over natural inquiry and mathematical astronomy. On this account, biblical passages and the Church tradition could and should decide natural issues such as terrestrial motion.

These theoretical positions are not as completely outdated as one would hope. Politically influential theo-conservative philosophers revive them in publications with scholarly impact. For instance, the former Berlusconi Senator Marcello Pera penned an 'Apology of Bellarmine' that has appeared in the *Cambridge Companion to Galileo*. In this apology, he reappraised Bellarmine's theological position relative to science:

⁵⁴ Langford 1966, 180.

⁵⁵ Representative of this trend is Fantoli 2003.

⁵⁶ Luigi Firpo's scholarly work is a standard reference for issues of Inquisitorial persecution of intellectuals. Carlo Ginzburg, especially in *Il formaggio e i vermi* (1976), has initiated a strand of studies on the persecution of the popular classes.

⁵⁷ Rabin, 2014, 96 (emphasis added).

⁵⁸ Wallace 1991.

The aim of this essay is to maintain that the independence principle [science and religion belong to, and are competent on, two different domains: nature and faith] cannot be accepted by a Catholic believer, because although it favors science it may damage faith.⁵⁹

In order to reinforce his thesis, Pera eventually quoted the views of Pope Pius XII.⁶⁰ He presented the anti-modernist encyclical *Humani generis* (1950) as an epistemological reference for believers also leading to the reappraisal of Bellarmine's 'limitation principle'. According to it, science should be controlled by faith. The latter sets the boundaries of the former. Pius XII's encyclical attacked, among other things, Darwin's evolutionism. Pera's reappraisal goes far beyond old defensive strategies: it is in fact a commitment to a *different* modernity and to cultural politics which rally the *spirit* that animated inquisitorial practices, trials and condemnations during the sixteenth and seventeenth centuries.⁶¹

Technical Reductionism as a Means of Historical Revisionism: the Case of the Gregorian Calendar Reform

Reductionist tendencies in the history of science have re-emerged in more recent Jesuit historiography. For instance, they are particularly evident in the treatment of the Gregorian calendar reform accomplished in 1582 by the Jesuit mathematician and astronomer Christopher Clavius, often presented as the founder of the Jesuit way to science.⁶² Most historians of science have restricted their judgment on that reform to its technical aspects, such as its accuracy, the employment of Alfonsine and Copernican astronomical tables, discussion of the expediency of subtracting a leap day from the Julian calendar every 100 years with the exception of years divisible by 400, and the like.⁶³ From a technical viewpoint this reform was a success. Still, this should not induce historians to reduce any objection or resistance against it in early Modernity to a mark of backwardness, as Sheila J. Rabin did in her essay 'Early Modern Jesuit Science: A Historiographical Essay' in the first issue of the new *Journal of Jesuit Studies*:

⁵⁹ Pera 1998, 368.

⁶⁰ *Ibid.*, 382-385. For the context of Pius XII, it might be expedient to mention the Vatican collusion with Fascism, as reconstructed by Finchelstein 2010, esp. Chap. 4 'A "Christianized" Fascism'.

⁶¹ The theological-political agenda of Pera is no mystery. It is a call for the rediscovery and recovery of the Christian roots of the *Occident*, particularly of Europe, as presented in his and Cardinal Joseph Ratzinger's (later pope Benedict XVI) *Without Roots: The West, Relativism, Christianity, Islam* (2005, English translation from the Italian, 2006).

⁶² Cf. Romano 1999. Cf. Feldhay 1999, 109: 'No study about Jesuit science, the variety of subjects comprising it, and its capacity for production, reproduction, and transmission can be told without mentioning Christoph Clavius, the figure most responsible for promoting it and fashioning its basic physiognomy'.

⁶³ See for instance Casanovas 1996.

[Clavius'] most famous accomplishment [was] the reform of the calendar. And for those who think that Protestantism was *per se* more amenable to reform of astronomical sciences than Catholicism, it is worth noting that the reform of the calendar, also a major accomplishment in astronomy, was not adopted in England because it was considered Catholic until the mid-eighteenth century.⁶⁴

It can be doubted that Clavius' reform was a *major accomplishment in astronomy* which can stand up to comparison with achievements such as Reinhold's astronomical tables, Brahe's cometary theory, or Kepler's laws of planetary motions.⁶⁵ But this is not the main point here. The issue is the political dimension of science as an instrument of hegemony, that is to say, of direction and consensus within society. As a matter of fact, Clavius' contemporaries, especially in Protestant countries but also in the Orthodox countries and even in Catholic Europe, were astonished that the pope arrogated the right to impose a reform that concerned at once the civil, the political and the religious spheres. Adoption of the calendar reform was not perceived as a technicality. In the context of the confessional conflicts of the time, accepting this measure meant acknowledging the authority and superiority of Rome not only in matters of faith but also in politics and society. On what basis could the pope expect that civil authorities throughout Europe would embrace the *Catholic* calendar? The calendar controversy between Protestants and Catholics famously opposed scholars such as Kepler's mentor, the Tübingen mathematician Michael Mästlin, against Jesuits such as Clavius and Antonio Possevino. This was by no means a quarrel about the possible solutions of a technical problem – which would also admit other possibilities – but a confessional and political conflict.⁶⁶

The proceedings of the Vatican conference on the *Gregorian Reform of the Calendar* celebrating its 400th anniversary (1582-1982) offer an example of technical reductionism. While the volume deals extensively with the technical problems of the calendar and their treatment from the Council of Nicaea up to the sixteenth century, only one chapter is

⁶⁴ Rabin 2014, 95.

⁶⁵ Cf. Pantin 1996.

⁶⁶ The nineteenth-century historian of the calendar reform Ferdinand Kaltenbrunner distinctly perceived the divisive character of the papal imposition of the new calendar. Kaltenbrunner 1876, 410-411: 'Nun aber war es zu spät. Einst hatten die Väter des Basler Concils die Kalenderreform verschoben, um nicht neuen Grund zur Zwietracht zu geben. Zur Zeit, als Gregor XIII die Bulle "Inter gravissimas" in die Welt sandte, befand sich die Christenheit wieder in zwei Lager gespalten, und was damals zu Basel vermieden worden war, trat jetzt ein. Auch in der Zeitrechnung standen sich nun die Parteien gegenüber, wieder um das Osterfest geführt, wie einst, als der nun vom Pabstthum verbesserte Kalender noch keine festen Formen angenommen gehabt hatte'. For a recent overview of the large number of Renaissance publications pro and contra the calendar, see Steinmetz 2010.

dedicated to the inter-confessional tensions that followed the promulgation of the calendar in 1582. In one of the contributions to the volume, August Ziggelaar, S.J., first acknowledges the confessional character of the measure but then makes a claim for its universality, thus incurring a *non sequitur*: ‘The Pope presented his bull in 1582 as an implementation of the decrees of the Council of Trent and thus as an act of the Counter-Reformation, but [...] the decree of 1582 is an ecumenical act’.⁶⁷ In the brief conclusive chapter, ‘The Reaction of Astronomers to the Gregorian Calendar’, Heribert M. Nobis includes the objections of Protestants but always tempers them with a refutation of some sort and a hint at Protestants’ tendentiousness. Yet Nobis also remarks: ‘For Rome the reform was primarily [...] a religious concern’.⁶⁸ Indeed, it was as religious as it was political since it concerned issues of authority, sovereignty and cultural hegemony.

To sum up, the clarification of technical aspects involved in reforms and activities based on scientific knowledge, no matter how useful and interesting it might be, should not lead to oversimplifications concerning the political and religious meaning and impact of those reforms. Technical appreciation should not coincide with appreciation *tout court*. Such a transgression into another genus from technical reconstruction to cultural-political reassessment, should be considered illegitimate.

Bias toward Historical Revisionism: The Copernican Question Revised

According to the new spokesmen for the Jesuit cause, *traditional* historiography put too much emphasis on the Copernican issue, which, in the end, should be regarded as a marginal topic in the broad context of modern science. It has even been argued that the 1616 prohibition of the Copernican system had a positive effect since it ‘*allowed for its study as hypothesis*’ and ‘the Jesuits *took full advantage of this*’.⁶⁹

Against such provocative statements, it is expedient to simply recount the central meaning that the Copernican system acquired in the scientific developments of the late sixteenth and early seventeenth centuries, at a time when Galileo undertook to bring mechanics and astronomy together, Kepler envisaged the possibility of implementing a celestial physics and Descartes opened up a novel methodological and natural perspective in support of his post-Copernican cosmology. The impact of the condemnation of 1616 and of

⁶⁷ Ziggelaar 1983, 227. Cf. *ibid.*, 201-202: ‘The decree of 1582 was issued with papal authority. It is written in the form of an apostolic letter or papal bull. [...] From the very start of the apostolic letter Pope Gregory appeals to the authority of the Council of Trent’.

⁶⁸ Nobis 1983, 245.

⁶⁹ Rabin 2014, 98.

Galileo's trial in 1633, and the long-lasting consequences these events had on the developments of modern European culture, can hardly be underestimated. While Galileo, confined to house arrest, could have his late works published only outside Italy, and Descartes renounced the publication of *Le Monde* to avoid persecution, 'the Jesuits *took full advantage*' of the situation, indeed.

The case in point is the most celebrated seventeenth-century Jesuit astronomer Giovanni Battista Riccioli. He was the author of a huge astronomical work, in folio, programmatically entitled *Almagestum novum* (*The New Almagest*, 1651). This Ptolemaic restoration contains, among other things, the most remarkable effort to affirm geocentrism after Galileo and Kepler. The fourth section of the second volume, 'De systemate Terrae motae' (On the System with the Earth in Motion), is a 200-page rejection of geo-kinetic planetary models. Here, Riccioli passed in review all arguments he could gather and conceive against heliocentrism. His motivations are revealed by the conclusion of the section, which contains a reprint of the Inquisition decree of 5 March 1616 prohibiting the Copernican system, a list of passages of Copernicus' *De revolutionibus* censored by the Index, and the 1633 condemnation of Galileo and his abjuration. Riccioli regarded these documents as the final word in the controversy over Copernicus' system.

Power is not merely accidental or external to Riccioli's astronomical work and epistemology. Rather, obedience to Rome and Catholic dogma is crucial to his refutation of heliocentrism. The censorial note in the *Almagestum novum* appears as the premise rather than the conclusion of his reasoning. Copernican contemporaries were inclined to connect such confessional *petitiones principii* to Loyola's *spiritual* precept concerning intellectual submission: 'To maintain a right mind in all things we must always maintain that the white I see, I shall believe to be black, if the hierarchical Church so stipulates'.⁷⁰ For instance, the German physicist and politician Otto von Guericke, in his famous *Experimenta nova* (*New Experiments*, Amsterdam, 1672), questioned whether, after the Inquisition decree of 1616, obedient Catholics should be able to undertake an investigation of astronomy independent of dogmatic concerns, that is, based on reason and experience instead of faith: 'Those who follow either the peripatetic school or the papal decree of 1616, which was carried out by the Congregation of the Cardinals [...], are forced to accept no other system but that [revolving] around the immobile Earth. Yet, they could devise nothing else but the Tychonic [geo-heliocentric system] [...]. They have to embrace and advocate it, no matter whether it is true or false. A question [hence] arises: in this manner, is a true astronomy (or a correct and just

⁷⁰ Saint Ignatius of Loyola 1996, 'Rules to follow in view of the true attitude of mind that we ought to maintain [as members] within the Church militant', rule 13, 358.

coordination and disposition of worldly bodies) possible?’⁷¹ The problem of the ‘scientific ethos’ is not to be confused with claims about being ‘good Catholics’, sometimes advanced as an excuse for Jesuits’ dogmatism.⁷²

The most grotesque attempt at historical revisionism in this matter is a recent apologetic book by Christopher M. Graney, *Setting Aside All Authority: Giovanni Battista Riccioli and the Science against Copernicus in the Age of Galileo*. The main thesis lies in the subtitle and is repeated many times throughout the book: in the seventeenth century science was ‘against the Copernican system’.⁷³

Graney contends that ‘pure reason’ and ‘independence from all authority’ characterized Riccioli’s adherence to geocentrism (in the geo-heliocentric variant), while the supporters of the Copernican system were motivated by religious fervour.⁷⁴ As far as Riccioli’s disinterest is concerned, he limits himself to quoting a few bland passages in which the Jesuit astronomer asserted the independence of his judgment. Graney seems to believe that the issue of authority can be simply elucidated by discussing a few arguments brought forward against Copernicus. He selects the ‘strongest’ and assesses their coherence and tenability. Out of the 77 anti-Copernican arguments presented in *New Almagest* II 9, they only amount to a few objections.⁷⁵ As to religiously-tinged Copernicanism, Graney’s discussion of the relationship between science and religion in the cosmological debates of early modernity is remarkably superficial. He isolates a particular figure, the Dutch astronomer Philips Lansbergen, and frames his stances as representative of the attitude toward religion of *all* those who embraced the Copernican system. Lansbergen argued that the enormous dimensions of the stars bear witness to God’s omnipotence and Graney uses this to demonstrate the ‘anti-Copernican reliance on “scientific” arguments to support their views, and Copernican reliance on “religious” arguments to support theirs’.⁷⁶ In support of this surprising claim, Graney quotes passages by Copernicans emphasizing the role of God as the Creator of the universe. He fails to notice that these commonplace statements are almost as ancient as astronomy and that in early modernity they were used to support the arguments of heliocentric astronomers as well as of their opponents.

In general, his modest knowledge of the context of early modern science leads him to frame science and religion in terms of hypostases, or universal categories transcending

⁷¹ Omodeo 2014, 320-321.

⁷² Rabin 2014, 96.

⁷³ Graney 2015. See e.g., 75.

⁷⁴ *Ibid.*, 8.

⁷⁵ I discuss the details in my review (Omodeo 2017).

⁷⁶ Graney 2015, 63.

history, and to neglect their concrete historical conformations. His suggestion to reassess the ‘scientific’ basis of the condemnation of the Copernican system in 1616 is outrageous;⁷⁷ it neglects the history of the Inquisition and censorship and softens the gravity of the persecution that many faced simply because of their ideas. The historically relevant question is not just whether the supporters of geocentrism associated with the Catholic establishment had tenable physical or mathematical arguments, but by what means the Copernican controversy (like other scientific controversies of the time in Italy) was dispelled. Unfortunately, by the time Riccioli decided to publish his 77 arguments against Copernicus together with a copy of the official documents condemning the Copernican system and Galileo, no supporter of the Copernican system could publically address his arguments in Italy. ‘History has not been kind to the anti-Copernicans’ – Graney asserts in his conclusion.⁷⁸ This is easily said. One ought to remind Graney that no anti-Copernican was ever tried, persecuted, censored, prohibited or sentenced to jail or to death because of his cosmological and philosophical views. Thus, his claim that ‘science was against Copernicus’ appears as a misleading euphemism in which ‘science’ is a substitute for ‘the Inquisition’. This rewording does not help us understand the cultural tensions of early modern scientific culture, nor does it do Riccioli’s scientific merits justice to use him in a revisionist attempt to downplay responsibility in some of the worst cases of intolerance in early modern intellectual history.

Graney’s apologetic book perhaps does not seem to merit much scholarly attention. However, it was by no means a marginal publication. On the contrary, its publisher is a major academic press, which advertises on the web as follows:

Established in 1949, the University of Notre Dame Press is the largest Catholic university press in the world, and a scholarly publisher of distinguished books in a number of academic disciplines [...]

Located on the University of Notre Dame campus, the Press is a publishing partner with several university departments, programs, and institutes. Through those efforts, it extends the reach and reputation of the University while fulfilling its charge to advance intellectual exploration and knowledge.⁷⁹

⁷⁷ *Ibid.*, 68.

⁷⁸ *Ibid.*, 141.

⁷⁹ <http://undpress.nd.edu/about> (13 May 2016). Although the University of Notre Dame (ranked among the top 20 American universities) is no Jesuit foundation, it is committed to a religious mission (‘the formation of an authentic human community graced by the Spirit of Christ’) within a Catholic framework: ‘[Mission:] The Catholic identity of the University depends upon, and is nurtured by, the continuing presence of a predominant number of Catholic intellectuals. This ideal has been consistently maintained by the University leadership throughout its history. What the University asks of all its scholars and students, however, is not a particular

The high visibility of such a publisher lends credibility to Graney's work, which has already received the approval of reputed scholars in the history of science and several positive reviews.⁸⁰ At the same time, its publication venue suggests that this apologetic book is a contribution to a broader revisionist strand, supported by American Catholic institutions, bearing witness to the fact that the deprecated ideological disputes of the past are not over.

Reversing Roles: Portraying the Jesuits as Victims

One remarkable aspect of revisionist historiography is its strong bias toward terminological reversals, in which the roles of victim and perpetrator become confused, alongside the meaning of dichotomies such as 'critique' versus 'tradition', 'argumentation' versus 'authority', and 'reason' versus 'prejudice'. In other words, we face a reversal of values that I would synthesize as 'anti-Enlightenment'. According to this reversed perspective, *traditional* (to wit *negative*) historiography is that stressing the intrinsic limits of the Jesuit cultural enterprise which *intentionally* perpetuated the cult of *tradition*, acquiescence in *violent means* to impose cultural uniformity, and submission to the principle of *authority* in society as well as in science. Jesuits can appear as the victims of *traditionalists*, that is, those following the *tradition* linking Galileo to Descartes and the French Enlightenment of Voltaire, Jean-Baptiste D'Alembert and Denis Diderot. Moreover, historical revisionism is connected with attempts to discredit not only the critics but also the victims. Galileo *stubbornly* infringed a veto to teach the Copernican system; hence, he *had to* be punished according to the laws of his time.⁸¹ Bruno should be thankful to his executioners because his 'vain' speculations would

creedal affiliation, but a respect for the objectives of Notre Dame and a willingness to enter into the conversation that gives it life and character'. <https://www.nd.edu/about/mission-statement/> (13 May 2016).

⁸⁰ <http://undpress.nd.edu/books/P03169?keywords=setting+aside#reviews> and <http://undpress.nd.edu/books/P03169?keywords=setting+aside#description> (13 May 2016).

⁸¹ Fantoli, in his conciliatory monograph on Galileo, Copernicanism and the Church, remarks (Fantoli 2013, 194): 'That Galileo's responsibility for the prohibition of the Copernican system was also an important one has been maintained [...] in "apologetic" writings by Catholics. According to these authors it was, as a matter of fact, Galileo's imprudence and his misplaced zeal in insisting on the Church's acceptance of Copernicanism, but without his supplying sufficient proofs for it, together with his intrusion into the field of Biblical exegesis that caused the Church to take an abrupt position which, otherwise, it would have been able to avoid'. Fantoli, however, is not dismissive of the Church's responsibilities in the anti-Copernican decree of 1616 and the condemnation of Galileo, in 1633. See 339: 'Galileo, with his tactical errors, must undoubtedly bear a weighty part of the responsibility for the *fact* of the condemnation. But the responsibility for the *way* in which the condemnation occurred, and especially for the abjuration, falls without a doubt on the shoulders of the Church of those times and specifically on the organs and on the methods which were used in the exercise of the Church's authority'.

not have been acknowledged otherwise.⁸² Along the same lines, it might be argued that the Inquisition ‘was progress from the viewpoint of jurisprudence’.⁸³

According to his biographers, Bellarmine was once deeply upset by the execution of a heretic. Historians have speculated whether this was Bruno or somebody else.⁸⁴ To be sure, it is likely that some Jesuit scientists suffered for the constraints and censorship of their Order and the Catholic Church. Such inner conflicts emerge from the biographies of Jesuits confronting the limits that their superiors or their organization imposed upon them. Nonetheless, we should not forget that the members of an institution share responsibility for decisions and actions contributing to the efficiency, reinforcement and expansion of their own institution and to the fulfilment of its strategies and aims. These degrees of responsibility are certainly different and can be indirect but cannot be obliterated. In our case, as Mario Biagioli has remarked, it would be wrong to begin a ‘contextualizing analysis of the Jesuit mathematicians only after they had already become mathematicians of the Society of Jesus and were faced with a range of constraints and resources which framed their later decisions and claims. By doing so, [...] [one] gets close to *naturalizing the context of Jesuit science* as if this was the only world in which these practitioners could operate – a methodological move which then tends to present their cosmological and methodological choices as the ‘natural’ result of such a context’.⁸⁵ In general, the impersonal treatment of cultural and political decisions and actions as descending from institutional or historical mechanisms is ethically disputable. At the very least such explanations cannot replace reflection on the responsibilities of historical actors.

In fact, the image of the Jesuits as victims contrasts with the *quantitative data* relative to their expansion and success. These figures concern the incredibly large number of their scientific or pedagogical publications during early Modernity: ‘A religious corporation, consisting largely of university-trained theologians and ordained priests formally committed to the “care of souls”, was able to produce a corpus of some 5,000 published titles touching

⁸² Feldhay 2000, 332-333: ‘Bruno’s vulnerability [...] was not simply a historically contingent fact that casually brought upon him a tragic end. It was a structural feature of his position in a cultural field that rejected him, but that, in other ways, was manipulated by him in a paradoxical attempt [in his Italian philosophical work] to invent, ex nihilo, a whole discourse, including a completely new set of discursive rules and the concept of an omniscient author. [...]. The circumstances of his imprisonment by the Venetian and Roman Inquisition dramatized his loneliness and provided the occasion for turning a life story into a powerful cultural icon. [...]. What could not be gained in his real life was achieved through death: what seemed ridiculous in his own discourse was transformed by culture into a universal moral value’.

⁸³ A recent popularizing article on the origins of the Inquisition by the medieval historian Lothar Kolmer entitled ‘Hast du niedergekniet?’ was accompanied by the subtitle: ‘Trots Folterqualen und Todesurteilen: Die Inquisition war rechtshistorisch ein Fortschritt’ (Kolmer 2014).

⁸⁴ Cf. Firpo 200, CLIX-CLX.

⁸⁵ Biagioli 1994, 645 (emphasis added).

on virtually every branch of the natural and mathematical sciences and a corps of priest-mathematicians, priest-astronomers, priest-philosophers, and priest-naturalists continuously active for nearly two hundred years'.⁸⁶ Furthermore, the Jesuits' success can be *quantified* by counting the number of colleges and universities belonging to their educational network. They amounted to 'about 700 schools of all kinds in Europe in 1749 and another 100 in the rest of the world'.⁸⁷ These are indicators of an international organization controlling the most extended network of teaching institutions in early modernity.

In the face of this data, it is hardly conceivable that the stability of the Jesuit organization could suffer from *prejudices* expressed by some intellectuals, however influential, such as their former pupils Descartes, Voltaire and Diderot. According to conspiracy theories, the *philosophes* were able to spread rumours that eventually led to the suppression of the Order in the eighteenth century. Most likely, this was the result of political clashes between the Church and the rulers of Catholic States, beginning with Spain and Portugal, that is to say, countries that were not historically home to the Enlightenment movement. As has recently been stressed in a study on the suppression of the Jesuit Order, 'the Jesuits were neither the victims nor the targets of anybody. Rather, they were one of the great forces in the [political and cultural] battlefield which advanced its program in a harsh conflict against other [forces]. In the end they were defeated, not because they succumbed to extraneous circumstances, but because, after they fought and won many other dramatic battles, they incurred their Waterloo'.⁸⁸

Rewriting Modernity: Postmodern Opportunities for Conservative Agendas

While an inquiry into the history of science in all its facets, including all actors and contextual factors, has to be welcome as an improvement relative to earlier crypto-positivist assessments of science and its history, revisionist narratives jeopardize this project at its roots and undermine the possibility of critical historiography. Recent attempts to revise Jesuit Science *in its specificity*, thus including its connection *with values*, should be seen as a part of new reactionary tendencies. The rehabilitation of the 'Jesuit experience' *as such* is mirrored by scholars' celebration of and support for *a different way to modernity*, namely that embodied by the Jesuit project.

⁸⁶ Harris 1996, 288.

⁸⁷ Grendler 2014, 7-25.

⁸⁸ Renda, 1993, 16: 'I gesuiti non furono né la vittima né il bersaglio di alcuno, ma una delle grandi forze in campo, che sostenne le proprie ragioni in aspro conflitto con altre. Alla fine essi furono sconfitti, ma non perché succubi di circostanze a loro estranee, bensì perché, dopo aver combattuto e vinto tante altre clamorose battaglie, finirono per incappare nella loro Waterloo'. Own translation.

In its *radical version*, the Jesuit Science thesis can be formulated as follows: there are both an *alternative science* and an *alternative modernity* exemplified by Jesuit Science that have been thus far neglected but need to be reassessed. The cultural presupposition for such claims, it seems to me, has been the extreme relativization of science and historiography. In fact, the sceptical, postmodern turn toward narrativization in history opened up a space of legitimacy for Jesuit Science *as such*. If ‘reason’ is just a fetish of the Enlightenment, theo-conservatives can claim, why could we not base our knowledge on a principle of authority? If ‘science’ is a historical product, why should we not put all alternatives at the same level? For instance, why should the geocentrism of Riccioli not be (at least) considered on the same plane with Galileo’s heliocentrism? Why should Descartes’ natural philosophy be considered less bizarre than the Aristotelianism of his Jesuit adversaries? Why could we not treat the Jesuits as victims of their intellectual opponents? Why can we not treat those condemned by the Inquisition or marginalized by exponents of the official cultural line as arrogant provocateurs?

Let me stress, first, that there is good reason to be concerned about the rhetorical possibility of equating victims with executioners, those who make institutional mechanisms work and those who are persecuted by them, those who are in power and those who are not, as well as those who benefit from a hegemonic position and those who struggle to affirm a heterodox viewpoint. One of the historians who contributed most to the study of institutionalized mechanisms of control and persecutions in early modernity, Carlo Ginzburg, cautioned against ‘the sceptical theses based on the reduction of historiography to its narrative or rhetorical dimension’, arguing that the limitation of relativism is ‘at once cognitive, political, and moral’.⁸⁹ In *History, Rhetoric, and Proof*, he insisted that, although interpretations might diverge, a principle of reality will always limit the horizon of possible legitimate interpretations:

[Historical] sources are neither open windows, as the positivists believe, nor fences obstructing vision, as the sceptics hold: if anything, we could compare them to distorting mirrors. The analysis of the specific distortion of construction [interpretation] [...], is not incompatible with the refutations inflicted by the principle of reality. Knowledge (even historical knowledge) is possible.⁹⁰

⁸⁹ Ginzburg 1999, 1 and 20.

⁹⁰ *Ibid.*, 25.

In other words, *historicism* and *historical scepticism* do not coincide. We can add, as a corollary, that *historical epistemology*, while pointing to the historicity of the theoretical basis for scientific concepts, explanations and practices, does not imply that *anything goes*.⁹¹ That rational demonstration and empirical experience evolve historically does not mean that these basic elements of the scientific enterprise can be renounced. By contrast, argumentation by authority and faith are essentially incompatible with modern scientific culture even though they interacted in many ways with its historical development.

Even if one indulges in the narrativization of historiography, one must take note that, while this offers some opportunity for legitimating *other ways* to modernity and to science, nonetheless the instrumental use of this opportunity by conservatives infringes on a basic tenet of postmodern discourse: the call for self-reflection and self-relativization. These, to be sure, are incompatible with neo-Catholic foundationalism. In particular, self-reflection means making the political and cultural agendas underlying specific strands of historical investigation explicit and not disguising them as *objective* and *disinterested*. The missing link in Jesuit revisionism is the explicit connection between historiography and religion-cum-politics or, to put it more succinctly, a treatment of religion *as* politics. Indeed, the political dimension is the missing or marginalized element in most recent accounts of Jesuit Science despite the fact that it is crucial for both an assessment of the history and the historiography of the Jesuits.

Jesuit Education as a Matter of Cultural Hegemony: Past...

I should now address a crucial issue in the history of the Jesuits' cultural activity: education. This has been celebrated in recent studies for its relevance in the dissemination of mathematical and natural knowledge during early modernity.⁹² Undeniably, Jesuit colleges propagated mathematical and empirical knowledge and formed proficient mathematicians and physicists such as Torricelli, Descartes, Mersenne, Fontenelle, Volta and Laplace (all of

⁹¹ It might not be a coincidence that Paul Feyerabend found in Jesuit apologies arguments for his anarchic epistemology. Cf. Feyerabend 1975, 192-193: 'It is interesting to see that Cardinal Bellarmine, though by no means an anarchist, was guided by considerations very similar to those just outlined: he wants social peace. Galileo did not himself show much concern for the common, ignorant people, the 'herd' as he called them, in his rather snobbish attitude to all who were not great mathematicians and experimentalists of his own type. Even if, as he suggested, they should lose their faith through being told that the Earth was speeding round the Sun at a rate of eighteen miles per second, still Copernicanism must be preached in season and out of season. The common man [...] was a person very dear to the heart of Bellarmine and he could not understand Galileo's headlong precipitancy in forcing an issue that might trouble the faith of the simple when he could so easily have kept his intuitions, as scientists do today, for debate and quiet study among his peers'. Feyerabend's took his quotation from Broderick 1961, 366ff.

⁹² The most important study is probably Romano 1999.

whom, however, dissociated themselves from Jesuit pedagogy).⁹³ This should not make us forget, however, that it is not a historiographical projection to say that Jesuit schools were instrumental to the cultural policy of Rome. It was not only the opponents to the expansion of their educational system, but also the early Jesuits themselves, who distinctly saw their political and propagandistic mission as aiming at the establishment of post-Tridentine Catholic consensus. In the seventeenth century, for example, the Jesuit historian Daniello Bartoli boasted about the success of the pedagogy of his Order emphasizing that in their schools the children of Catholics ‘received the milk of pure doctrine’ (*han preso il latte della pura dottrina*) while ‘the children [of heretics] were transformed into Papists’ (*i figliuoli [degli eretici] si trasformavano in Papisti*).⁹⁴

In particular, university professors and civil authorities perceived the Jesuit expansion in the field of education as a clerical and Roman infiltration threatening their political and cultural autonomy as early as the sixteenth century. In Catholic countries, especially in France and Italy, university professors often blocked the Jesuit penetration in order to save their independence. Heated quarrels took place in two of the most prominent medieval universities, namely Paris and Padua.

The Parisian quarrel reached its peak in 1564. In that year the University opposed the Jesuit Order in a trial about the legitimacy of the Jesuits’ teaching in Paris and their ambition to be included in the teaching body of the prestigious institution.⁹⁵ They had established a college in town, the Collège de Clermont, thanks to influential supporters but their practices infringed on the traditional separation between clergy and lay teachers, since they opened their classes to students not belonging to their Order, for free. The University of Paris refused to institutionalize this situation and to receive Jesuit teachers as part of its body. As a response, the Jesuits appealed to the Parliament and went to court to contest the issue.

On that occasion the lawyer and historian Étienne Pasquier defended the university (lay) interests in front of countless people curious about the outcome (*à la veue d’une infinité de personnes, qui attendoient quel seroit l’évenement*). In his speech, he offered a genuinely political viewpoint on the controversy. He claimed that the presence of a militant order professing unconditional loyalty to the papacy threatened the autonomy and the security of France just as it would that of any other State. Moreover, he attacked the tactics of expansion of the Order. That they charged nothing for their classes was especially seen as an illegitimate means to drive students away from the classes held by regular professors, who made a living

⁹³ For a list of Jesuit-educated scientists, see e.g. Feingold 2003, 38.

⁹⁴ Bartoli 1994, 263-264.

⁹⁵ Cf. Trocmé Swany 1985.

from the fees paid by students. Pasquier questioned the disinterest of the Jesuits and observed that only ignorant and naive people (*une peuvre et idiote populace*) could believe in their impartial magnanimity, according to the motto: *nemo suis stipendiis militat* (nobody goes to war at his own expense).⁹⁶ He stressed the Jesuits' ability to amass great riches thanks to 'occult' sponsors. In particular, he suggested that behind their Parisian project one could detect a political agenda connected to the interests of Rome and Madrid.

The Parisian trial ended ambiguously, as Pasquier admitted: '[the Jesuits and the University] both lost and won their cause, since they were not included in the University body but they also were not prevented from continuing their public lectures'.⁹⁷ In later years, as one reads in Pasquier's historical work *Recherches de la France*, the Jesuits revealed their political bias towards the pro-Spanish party during the civil war opposing Catholics, Huguenots and the in-between party of the *politiques*. Among the most terrible actions that were ascribed to Jesuit influence, Pasquier counted the attempt at regicide by a Clermont College pupil, Jean Châtel. In 1594 this young man stabbed Henry IV, unpopular with radical Catholics for his Calvinist past and dubious conversion. After that assassination attempt, the Jesuits were banned from France. They would come back only in 1603 on condition of swearing loyalty to the King. Seen as militant supporters of the papacy, they benefited from circumstances favourable to their party but bore the cost of the tensions between states and the Roman Church not only in France but also in other countries. For instance, in 1606 the Senate of Venice expelled them from the Republic for security reasons at a moment in which its relations with Rome were most strained.

Anti-Jesuit polemics in Padua were even more heated than in Paris. The Jesuits founded there a sort of counter-university that competed with the public one. In 1591, in a famous oration delivered before the Doge and the Venetian Senators, the philosopher Cesare Cremonini denounced the Jesuits' educational project as it was undermining the reputation of the Venetian university as well as the authority of the Republic. As he reported, the Jesuits legitimated their *anti-Studio* (anti-University) on the basis of a Papal bull. Such legitimation was in breach of the teaching statutes promulgated and recognized by Venice. Like Pasquier, Cremonini stressed the historical link between the University and the political authority. The University, with its philosophers and lawyers, had always offered the Republic advisors on legal, political and cultural matters.⁹⁸

⁹⁶ Pasquier 1633, 335.

⁹⁷ *Ibid.*, 312: 'Chacun perdit et gagna sa cause. Car ils ne furent agregez au corps de l'Université, mais aussi ne leur fut il defendu de continuer leurs lectures publiques'. Own translation.

⁹⁸ Cremonini particularly denounced the Jesuit strategies to attract students: 'Do I have to restrict myself to one single point to show that the Jesuit Fathers established an anti-Studio? These Fathers produce their own syllabus

Cremonini presented the conflict between religious and lay institutions as a renewal of the medieval conflict between Guelphs and Ghibellines in the time of the University's founder Emperor Frederick II, renowned for his conflicts with the Pontiff. Students from the *two* Padua universities, respectively called the 'Bovisti' (those attending the public University of Bò) versus the 'Gesuiti' (attending the Jesuit college), had already engaged in excited confrontations that risked escalation. The controversy ended with the Senate of Venice's decision to fully support the requests of the University. Its decree (23 December 1591) prevented Jesuits from teaching public classes, because these were patently in competition with the University supported by the State.

Anti-Jesuit measures at Paris and Padua were particularly visible owing to the prestige of these institutions. However, these were only two of many conflicts in the panorama of Jesuit expansion in the European educational system of early Modernity. Many quarrels, especially in the German territories, ended with the inclusion of the Jesuits or their appropriation of institutions of higher education (e.g., Vienna and Würzburg in the 1590s).⁹⁹ In general, Jesuits benefited from influential political support. They were able to exploit confessional tensions, presenting themselves as defenders of Roman orthodoxy against Protestant heresies. As a matter of fact, their interests were also in competition with those of the exponents of the humanistic culture whose chairs they targeted. In their strategies to penetrate the University they often appropriated first the teaching of Latin and rhetoric and then tried to occupy other chairs in the faculties of philosophy and theology.¹⁰⁰ As has been remarked, the European expansion of the Jesuits led to the constitution of 'two academic cultures',¹⁰¹ opposing Counter-reformist Jesuits to university humanists and professors who had incorporated into their teaching fundamental elements of humanistic culture such as the direct study of sources employing philology. Considering the academic opposition to Jesuit

[*Rottolo*]. They print it under the title of Padua University of the Society of Jesus [*Gymnasio Patavino Societatis Jesu*] as if Padua had another University besides that of the Venetian Republic. They announce it publicly following the University ceremony, that is, through an exhortatory oration directed to all the youth aimed at attracting them at the expense of the others. Moreover, they attach it all over the town, in order to circulate it even more publicly. They also have their schools; they ring the bell; they have an established program for their classes. They make everything public in the same manner as the University of Your Serenity. Please, consider whether this endeavour is just a school for their novices, as they declare, or rather a manifest competition against the University of the Republic. From this competition, the University's dignity is notably diminished since the students' attendance is less than it was in the past'. Own translation from Cremonini 1878, 493. Cremonini's *Oratione* can also be found in Cremonini 1998, 53-70.

⁹⁹ One can still refer to Favaro's reconstruction of the Jesuit expansion in higher education at the end of the sixteenth century and in the early seventeenth century (Favaro 1878), 409-414. Also see Hellyer 2005.

¹⁰⁰ Cf. Julia 2002, 23.

¹⁰¹ Grendler 2009, 217ff.

education, the Jesuit historian Bartoli listed the *Maestri di scuola* (University professors) among the fiercest adversaries of the Jesuits, together with the ‘heretics’.¹⁰²

... and Present

In matters concerning education the tensions between State and Church were present since the very beginning of the Jesuit project in Paris, Padua and elsewhere. The suppression of the Jesuit Order in the eighteenth century marked the beginning of one of the most important endeavours for many modern States, namely the creation and organization of public educational systems independent of the Church. Actually, education is *the* cultural-political issue *par excellence*. Education is, in fact, the sphere where the struggle for *cultural* hegemony becomes heated and is brought into focus. In modern societies, as Gramsci remarks in the *Prison Notebooks*, intellectuals are formed by a complex educational system (Q. 12, 1517) into those who exert the functions of ‘social hegemony’ (that is, the function of leadership, imparting directions and securing consensus in civil society) and ‘political government’ (Q. 12, 1519). Hence, pedagogy is in itself a matter of leadership and organization, that is, it is a political activity.

The question we have to face in dealing with Jesuit Studies is whether the appraisal of Jesuit teaching, in particular its cultural-political dimension, is merely a hermeneutic problem only referred to past institutions. To dispel this doubt, one can consider the manner in which Jesuit historians working in Jesuit universities intertwine past and present when they write on education. The celebration of past glories resounds well into the present and vice versa:

In 1548, just a little over 450 years ago, ten members of the recently founded Society of Jesus opened the first Jesuit school in Messina in Sicily. [...] It was also a crucial event in the history of schooling within the Catholic Church and in Western civilization. Within a few years, the Jesuits had opened some thirty more primary/secondary schools, but also the so-called Roman College, which would soon develop into the first real Jesuit university (Gregorian University). [...].

By 1773, the year the Society of Jesus was suppressed by papal edict, the Jesuits were in charge of some 800 educational institutions around the globe. The system was almost wiped out by the stroke of a pen, but after the Society was restored in the early nineteenth century, the Jesuits with considerable success especially in North America, revived their tradition.¹⁰³

¹⁰² Bartoli 1994, 256.

¹⁰³ O’Malley, ‘How the First Jesuits Became Involved in Education’, in O’Malley 2013, 198-216, 198.

The fact that Jesuit education is not only a matter of the past for Jesuit institutions such as Georgetown College and Boston College is stated clearly on their official web pages. One could additionally mention the manner in which Saint Peter's University presents itself as part of the network:

Founded as a Jesuit college in 1872 by two Jesuits who rowed from Manhattan across the Hudson River to Jersey City, Saint Peter's is part of perhaps the greatest teaching organization the world has ever known.

For nearly five centuries the Catholic order of priests known as the Jesuits have built a global network of renowned colleges and universities. Saint Peter's University is one of 28 Jesuit institutions in the United States that include Georgetown University and Boston College.¹⁰⁴

Concluding Remarks

O'Malley has pointed out the implicit consequences of terminological choices in history writing. He especially criticizes the category of 'Counter-reformation' alongside that of the 'Catholic Reformation', and urges their dismissal because they appear to be 'inadequate and sometimes misleading as designations for what the early Society of Jesus was about'.¹⁰⁵

What's in a name? I gradually and reluctantly arrived at the conclusion that at least in this instance there was a great deal in a name. Names may be no more than pointers, but this name [Counter-reformation] pointed in certain directions and not in others. This name told us what we were talking about. Conversely, if we did not know what name to use, we to some extent did not know what we were talking about. I came to agree, that is, with Alfred North Whitehead: '[...] definitions – though in form they remain the mere assignment of names – are at once seen to be the most important aspect of the subject. The act of assigning names is in fact the act of choosing the various complex ideas which are to be the special object of study. The whole subject depends on such choice.'¹⁰⁶

Should we not extend this remark to the terminological *choice* of 'Jesuit Science'? If the *choice* of Jesuit Science as a name demarcating the area of study is to truly accord with Whitehead's statement, then this designation must not only include *theoretical* spheres of inquiry, but *cultural* and *political* ones as well.

¹⁰⁴ Quotation from the official web page of this institution, where its Jesuit roots and mission are extolled. <http://www.saintpeters.edu/jesuit-identity/> (5 Oct. 2014).

¹⁰⁵ O'Malley 2000, 2.

¹⁰⁶ *Ibid.*, 4. O'Malley's quotation refers to Whitehead 1906, 2.

The historiographical label ‘Jesuit Science’ can perhaps have a *soft* meaning as a keyword simply referring to studies investigating scientific biographies of scholars who belonged to the Jesuit Order, their special achievements in some scientific field or their perspective on certain cultural debates. However, radicalized and problematic uses have emerged. Accordingly, ‘Jesuit Science’ can designate a special approach to science, typical of those belonging to the Jesuit Order. Its legitimacy, radical neo-apologists claim, should be acknowledged alongside other possible approaches to science on the basis of a historical-relativistic principle. In this case, the claim is that Jesuit Science an equally viable (if not better) *historical alternative* to other scientific developments, for instance, to the classical (anti-Scholastic) line connecting Copernicus to Galileo, Descartes and Newton. Instead of studying historical interactions, contexts and discursive advances, this second, stronger meaning isolates and opposes *traditions* and *modernities*. It conveys the message that the *specifically Jesuit* approach to science should be reappraised. This *ideological* use of Jesuit Science has to be criticized, especially for the historical and historiographical prescriptions that it implies. Positions that fall between these two are more or less openly apologetic. Their political bearing is problematic and revealing of an expansion of Catholic culture, especially in the United States.

According to apologetic tendencies, a *historical imperative* allots to the scientific practices of the Jesuits neutrality and impartiality, which is regarded as a quality of scientific inquiry itself. This claim is indeed *ahistorical in its essence* since it projects an *image* of science derived from contemporary discourse onto a historical context in which it does not fit, as I argued through examples showing the inseparability of theoretical and hegemonic considerations in a series of historical cases.

Moreover, a misguided *historiographical imperative* can be traced in the apologists’ claim that the achievements of the Jesuits in the past should be assessed *objectively* and *impartially*, implying that the agonistic dimension of conflict should be ignored. This means either to isolate theses and positions from their historical-cultural context, especially from the political-ideological sphere, or to reassess the particular path to modernity taken by Jesuits precisely for the insertion of science into a specific system of values (a sort of ‘anti-Enlightenment’). In the first case, *apologetic* historians select a certain set of elements regarded as relevant for the history of science at the expense of others ... and do so in a *partial* and *subjective* way. By contrast, a historically ‘aware’ reconstruction of modern science cannot conceal conflicts where they existed, since those conflicts are constitutive of the

historical reality to be investigated as well as of the historiographical writings concerning this reality.

Besides, the *reassessment* of the so-called ‘Jesuit experience’ or of the ‘Jesuit path to modernity’ implies a favourable positioning relative to the historically given link between science and religion, between public education and private education, as well as between dissent and the legitimation of power and authority, in politics as well as in religion and culture in general. However, as soon as values and ideals are concerned, no neutral historiography becomes possible. In this case, neutrality would mean tendentiousness.

As I pointed out, scholarship in Jesuit Studies has gradually found in US American Catholic institutions valid strongholds and, more in general, it has become established primarily in English-speaking academia, whence it irradiates outward. Moreover, a post-ideological and post-apologetic disinterest is its self-declared approach, but this pious intention is in contrast with the fact that Jesuit institutions largely sponsored the expansion of the field. Many scholars are either linked with these institutions or are themselves members of the Order, as is the case with many of those who have fostered (and financed) novel research on the history of their own tradition. For apologists and exponents of the Jesuit tradition, advancing English scholarship at the international level has the advantage of bypassing the critical debates on the Jesuit legacy developed in Catholic countries that are non-Anglophone. In this case, Anglophone linguistic hegemony can be used to marginalize critical approaches and historiographical traditions that emerged from different contexts while US American struggles for cultural hegemony assume global dimensions. In the face of the expanding scholarship produced by the Anglo-American world, critical viewpoints might appear local, provincial, and old-fashioned – most notably, the criticism resting on the French Enlightenment or on the Italian Risorgimento.

Following Gramsci, we should regard cultural perspectives as revealing of political agendas and intellectuals as organically inserted in collective projects. Accordingly, we ought to raise the question about the political *embedment* of a proliferating Jesuit Science. Its main *locus* is US American Catholic academia, hence the connection between these tendencies and the legitimation of the cultural agenda of these institutions. Pedagogy, as Gramsci said, means leadership and politics.¹⁰⁷ The Church was for him a model of connection between leaders and the masses that, however, he regarded as ‘exterior’ since it did not aim to elevate the masses but, instead, maintained them in their subaltern position (Q. 16, 1862). Following this line of thought, one should further ask about the political impact of Catholic education and

¹⁰⁷ Q 12, 1523: ‘[...] importa la funzione [dei membri di partito] che è direttiva e organizzativa, cioè educativa, cioè intellettuale’.

cultural production. A tentative answer can be given only by taking into account some data. First, the Catholic Church is the largest religious community in the United States. It counts about 68 million people, that is, more than 20% of the population.¹⁰⁸ Catholic voters carry weight in national elections. The United States Council of Catholic Bishops is well aware of the importance of their political commitment, as one can read in an official declaration:

The separation of church and state does not require division between belief and public action, between moral principles and political choices, but protects the right of believers and religious groups to practice their faith and act on their values in public life.¹⁰⁹

This commitment includes ‘counsel[ing] Catholic public officials’. The ‘concern’ brought forward most eminently concerns abortion. Moreover, the stress on marriage and the family clearly excludes liberal politics on gender issues. On these and other matters (‘human life and dignity, marriage and family, war and peace, the needs of the poor and the demands of justice’) Catholics are expected to conform their political action to religious guidelines.

Between the religious leaders and Catholic politicians there supposedly exists a pedagogical relation akin to the pedagogical relation between politicians and the people.¹¹⁰ Is this not a reversed Gramscian principle? The weight of the Catholic religious component in US American politics does not escape the ruling class, at least judging by recent events. On 23 September 2015, President Barack Obama officially received the Jesuit Pope Francis in the White House with a welcome ceremony followed by a private speech. The next day, on 24 September 2015, the Pope visited the Capitol and delivered a speech to the Senate and House of Representatives in a Joint Session of the Congress. This rapprochement of the highest Catholic authority and the US American establishment is reminiscent of the concordat politics discussed by Gramsci in the *Prison Notebooks*. Ultimately, the success of the Church as a ‘party’ in the political arena rests on its capacity to exercise hegemony in society. This hegemony is a political-pedagogical leadership in which education and culture play crucial roles. The expansion of research fields such as Jesuit Studies legitimizes the principles and origins of Catholic institutions of higher education. Their growth is at the same time a product

¹⁰⁸ According to the think tank Pew Research Center, Catholics are 20.8% of the US American population, but the figure varies depending on the state (e.g., in California it is 28%, in Massachusetts 34%). <http://www.pewforum.org/religious-landscape-study/religious-tradition/catholic/> (18 May 2016).

¹⁰⁹ <http://www.usccb.org/issues-and-action/faithful-citizenship/church-teaching/catholics-in-political-life.cfm> (14 May 2014).

¹¹⁰ *Ibid.*: ‘We need to continue to teach clearly and help other Catholic leaders to teach clearly on our unequivocal commitment to the legal protection of human life from the moment of conception until natural death’.

and a factor of the political expansion of the Catholic presence and influence in US American politics. Eventually, given the hegemonic position of the USA in the world, such cultural and political phenomena have a global impact. The disproportional development of Jesuit Science studies in the history of science and early modern philosophy is symptomatic of a time of increasing religious hegemony in academia, in education, in society and politics. Religiously tinged reformism in cultural history is not neutral and disinterested, nor objective and post-ideological. Rather, it is the other face of societies in which theo-political agendas and collusions are becoming more the rule than the exception.

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