



RESEARCH ARTICLE

Cesare Cremonini's non-theological cosmology: a contribution to Padua's secular culture in times of wars of religion

Pietro Daniel Omodeo

Department of Philosophy and Cultural Heritage, Ca' Foscari University of Venice, Italy Corresponding author: Pietro Daniel Omodeo, Email: pietrodaniel.omodeo@unive.it

Abstract

This essay deals with the cultural-political motivations behind the cosmological conceptions of the Padua Aristotelian Cesare Cremonini (1550–1631). A defender of the interests of the university against Jesuit teachings, and one of the philosophers who was most frequently scrutinized by the Inquisition, he was an important actor in Venetian cultural politics during the years of European religious conflict that culminated in the Thirty Years War. In those years, he was officially titled 'protector' of the multi-confessional German Nation of Artists, one of the largest groups of foreign students at the University of Padua, and had to act as mediator in cases of conflict. His efforts to keep teaching free from religious concerns is reflected by his commitment to pursue philosophical and cosmological inquiries without engaging in revealed theology. In particular, his strict adherence to Aristotelian cosmology proved to be at odds with central Christian dogmas as it relinquished, among other concepts, the ideas of Creation and divine Providence. I argue that this position of Cremonini's fostered a tolerant and universalistic attitude in line with a secular programme that could enable cross-confessional coexistence in a cosmopolitan institution like Padua.

Confessional tensions very much affected the astronomical and cosmological debates of the sixteenth and seventeenth centuries.¹ The Catholic censorship of Nicolaus Copernicus's planetary theory in 1616 and the condemnation of Galileo Galilei in 1633 marked a climax in the cultural struggles over the relation between science and religion.² These dramatic cases of censorship were part of broader strategies of propaganda fidei in

¹ While in the past the so-called Merton thesis motivated many studies in Protestant settings, we are now in a better position to appreciate a more varied early modern confessional landscape and to relativize the function of religious ethos. To be sure, the cometary discourse constitutes an important case study for a nuanced investigation of confessional approaches to the heavens, as has been brilliantly showed by Anna Jerratsch, *Der frühneuzeitliche Kometendiskurs im Spiegel deutschsprachiger Flugschriften*, Stuttgart: Steiner Verlag, 2020. The present essay explores a less widely investigated rationalistic approach to cosmological questions in a crossconfessional setting, that of the University of Padua.

² The literature on the Galileo case is overwhelmingly extensive. I would limit myself to mentioning two Italian publications which offer helpful contextual elements for a better understanding of these dramatic events: Massimo Bucciantini, Contro Galileo: Alle origini dell'affaire, Florence: Olschki, 1995; and Luigi Guerrini, Cosmologie in lotta: Le origini del processo di Galileo, Florence: Polistampa, 2010. For a more recent contribution see Natacha Fabbri

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the context of religious clashes. They occurred after more than a century of attempts to establish new scientific hegemonies in line with religious reforms and counterreforms.³ The realignment of astronomical and cosmological discourses along religious lines is a much-studied phenomenon in intellectual history, especially in connection with teaching and university curricula. The Jesuits' pedagogic concern about theological conformity in matters of science is richly documented.⁴ After 1616, geocentricism and its geoheliocentric articulations became mandatory for Catholic astronomers, although this constraint was subject to interpretation: scholars from the Parisian circle of Marin Mersenne and Pierre Gassendi, for example, adopted a different approach to that of Jesuit scientists. On the other side of the confessional divide, Wittenberg's role in the early spread of the Lutheran Reformation and of new academic models directly contributed to the emergence of a well-established mathematical and astronomical culture.⁶ Among other things, it fostered a specific reception of Copernican astronomy, marked by a focus on calculation and modelling at the expense of physical questions about celestial causality, motion and heavenly matter. In the case of both Jesuit education and Lutheran academic networks, cosmological concerns (issues such as planetary theory, heavenly matter and the causes of celestial motions) significantly affected astronomy. Indeed, these concerns were considered in conjunction with theological requirements when it came to considering the transformation of the science of the heavens. Moreover, early modern confessional landscapes are highly varied and cannot be reduced to a simplistic opposition between two allegedly monolithic blocks of Catholicism and the Reformation.8

and Federica Favino (eds), Copernicus Banned: The Entangled Matter of the Anti-Copernican Decree of 1616, Florence: Olschki. 2018.

³ Pedagogy and censorship cannot be sharply separated in this context because they constituted two sides of the same religious politics, namely consensus shaping and the exercising of control, as Andrea Del Col has aptly showed in *L'inquisizione in Italia dal XII al XXI secolo*, Milan: Mondadori, 2006.

⁴ The literature on this topic is immense, too. Here I will limit myself to a few references: Ugo Baldini, Legem impone subactis: Studi su filosofia e scienza dei gesuiti in Italia, 1540-1632, Rome: Bulzoni, 1992; Antonella Romano, La contre-réforme mathématique: Constitution et diffusion d'une culure mathématique jésuite à la Renaissance, Rome: Ecole française de Rome, 1999; Mordechai Feingold (ed.), The New Science and Jesuit Science: Seventeenth Century Perspectives, Dordrecht: Kluwer Academic Publishers, 2003; and Luís Miguel Carolino and Carlos Ziller Camenietzki (eds.), Jesuítas, ensino e ciência, sec. XVI-XVIII, Casal de Cambra: Caleidoscópio, 2005.

⁵ See, among others, Paolo Galluzzi, 'Gassendi and l'Affaire Galilée of the laws of motion', Science in Context (2001) 14(1), pp. 239–75; and Carla-Rita Palmerino, 'Galileo's theories of free fall and projectile motion as interpreted by Pierre Gassendi', in Carla-Rita Palmerino and J.M.M.H. Thijssen (eds.), The Reception of the Galilean Science of Motion in Seventeenth-Century Europe, Dordrecht: Kluver, 2014, pp. 137–64. On the Jesuits' dealing with planetary theory see Ivana Gambaro, 'Geo-heliocentric models and the Society of Jesus: from Clavius's Resistance to Dechales's Mathesis Regia', Annals of Science (2021) 78(3), pp. 265–94. See also Flavia Marcacci, Cieli in contraddizione: Giovanni Battista Riccioli e il terzo sistema del mondo, Perugia: Aguaplano, 2018.

⁶ Sachiko Kusukawa, The Transformation of Natural Philosophy: The Case of Philip Melanchthon, Cambridge: Cambridge University Press, 1995; and Dino Bellucci, Science de la nature et Réformation: La physique au service de la Réforme dans l'enseignement de Philipps Mélanchthon, Rome: Vivere, 1998.

⁷ Robert S. Westman, 'The Melanchthon circle, Rheticus and the Wittenberg interpretation of the Copernican Theory', *Isis* (1975) 66, pp. 163–93, Owen Gingerich and Robert S. Westman, 'The Wittich connection: conflict and priority in late sixteenth-century cosmology', *Transactions of the American Philosophical Society* (1988) 78(7), pp. 1–148; and Peter Barker and Bernard R. Goldstein, 'Realism and instrumentalism in sixteenth-century astronomy: a reappraisal', *Perspectives on Science* (1998) 6(3), pp. 232–58.

⁸ For a reflection on the new wave of culturalist approaches to early modern science and religion see Rienk Vermij, *The Calvinist Copernicans: The Reception of the New Astronomy in the Dutch Republic, 1575–1750,* Amsterdam: Koninklijke Nederlandse Akad. van Wetenschappen, 2002. An important window onto the confessional pluralism of the astronomical debate of the seventeenth century is Stanisław Lubieniecki's *Theatrum cometicum,* Amsterdam: Baccamude, 1668. See Pietro Daniel Omodeo, 'Asymmetries of symbolic capital in 17th-century scientific transactions: Placentinus's cometary correspondence with Hevelius and Lubieniecki', in Giulia Giannini

The present essay deals with a different cultural-political context, one that was not strictly determined by confessional conformity but rather by a high degree of cosmopolitanism and religious tolerance: Padua and its university, which was subject to the Republic of Venice. Here, I will especially deal with the philosophy professor Cesare Cremonini (1550-1631), who sought a rationalistic foundation for the science of the heavens. He attempted to free it from all religious considerations, according to the principle of 'double truth'. Cremonini searched for the foundations of the science of the heavens in Aristotle's philosophy, which he interpreted in a decidedly non-religious manner, as the product of pure reason that was justified on the basis of the separation between the truths of philosophy and those of revelation. While he did not oppose the civil function of religion, he also defended the independence of philosophical reasoning and teaching from faith. As Charles Schmitt once wrote, Cremonini's radical Aristotelianism was at once his strength and his weakness. It was 'a challenge in the name of freedom against theological and ecclesiastical domination, but also an act of faith in conventional responses to conventional problems'. 10 In the name of Aristotelian literalism, he argued for the eternity of the cosmos against creationism, dismissed divine will, excluded the idea of God's providential intervention in the world and rejected teleology in natural accounts - stances that are all in conflict with Christian dogmas. I consider Cremonini's rationalistic cosmology to be consonant with his institutional role as the 'protector' of the German Nation of liberal arts students, within which religious tensions could break out at any moment. His commitment to a philosophy that was completely separate from theological concerns and that neglected issues of faith reflected his cultural programme of keeping religion out of university politics. In this respect, Cremonini's conservative Aristotelianism served as a means for him to pursue a progressive cultural agenda and indirectly boosted intellectual efforts to promote free philosophical inquiry. This occurred in spite of the distance between his philosophy and the most innovative scientists among his Padua colleagues, starting from Galileo Galilei. Indeed, he scorned telescopic astronomy and the Copernican system as well as anatomical evidence that might contradict Aristotle's thought.¹¹ Cremonini did not even embrace the original Aristotelianism of those physicians who ranked among his students, such as William Harvey. 12

The paradox of Cremonini's progressive conservatism ought to be explained in contextual terms as the effect of – and a factor contributing to – the cultural dynamics of Padua in the early modern period. Therefore, after a brief presentation of Cremonini's historiographic image, I will delve into the institutional, cultural and cross-confessional context of his intellectual activity in an effort to reconstruct the cultural-political background

and Mordechai Feingold (eds.), The Institutionalization of Science in Early Modern Europe, Leiden: Brill, 2020, pp. 52–80; and Maciej Jesiński, The Correspondence of Johannes Hevelius, vol. 4: The Correspondence with Stanisław Lubieniecki, Turnhout: Brepols, 2021.

⁹ On the problem of double truth see Luca Bianchi, *Pour une histoire de la 'double vérité*, Paris: Vrin, 2008. More specifically, on Cremonini's double truth see Edward Muir, *The Culture Wars of the Late Renaissance: Skeptics, Libertines and Opera*, Cambridge, MA: Harvard University Press, 2007, p. 56.

¹⁰ Charles B. Schmitt, Cesare Cremonini: Un aristotelico al tempo di Galilei, Quaderni del Centro tedesco di studi veneziani (1980), p. 15.

¹¹ Cremonini's Aristotelianism was thus irreconcilable with heavenly observations that disproved the quint-essential incorruptibility of the heavens, which he defended. The fluidification of the heavens was an important step towards the establishment of a principle of cosmological homogeneity, as Miguel Ángel Granada, among others, has demonstrated in his studies. See, for instance, his *Sfere solide e cielo fluido: Momenti del dibattito cosmologico nella seconda metá del Cinquecento*, Milan: Guerini, 2022; and Miguel Ángel Granada, Adam Mosley and Nicholas Jardine, *Christoph Rothmann's Discourse on the Comet of 1585*, Leiden: Brill, 2014.

¹² Cremonini was on the examination committee for William Harvey's doctoral degree. See Muir, op. cit. (9), p. 48.

to his philosophical and cosmological views. I will especially deal with the intellectual dynamics of the German Nation of Artists – which was the college in which German arts students enrolled in Padua – as these dynamics are particularly revealing of religious tensions, their mitigation and Cremonini's role in finding a balance between Catholic and Protestant components in order to ensure their coexistence in times of terrible wars of religion.

Cremonini's reputation

In intellectual history, Cremonini is generally referred to as a Renaissance Aristotelian of the so-called school of Padua, which counted among its exponents internationally renowned professors such as Giacomo Zabarella and Francesco Piccolomini.¹³ He was a colleague of Galileo, with whom he was on very friendly terms, although he did not embrace the latter's astronomical conceptions. As for Cremonini's views on science and nature, they have been variously evaluated. ¹⁴ In general, he has been considered distant from the main tendencies of the 'Scientific Revolution', owing to his literal Aristotelianism, but this evaluation is rooted in out-of-date historiographies of the origins of modern scientific culture. ¹⁵ In Cremonini's own life time, his reputation was closely linked to his polemics against the Jesuits. He was the author of one of the most widely circulated pamphlets against their teachings, which he attacked as an instrument of Roman propaganda. The Order of the Jesuits had developed a very effective European web of learning institutions, which was to become the first truly global network of this kind. The Jesuits continued to occupy a leading position as teachers throughout early modernity. Yet we are reminded that 'as historians we should resist favouring the winners, and rather pay attention to the motives and processes of conflict'. 16 In this respect, even a local cultural struggle in the territories of Venice can prove significant within a broader global scenario. As a matter of fact, Cremonini's Oratione ... in favore di esso Studio contro li Padri Gesuiti (Oration in Favour of This University against the Jesuit Fathers) was instrumental in banning Jesuit teaching at Padua, and it was broadly circulated in Europe as a polemical reference text in conflicts raging in other localities, both in the Italian states and abroad.¹⁷ For this reason, Cremonini is known to historians of

¹³ The relevance of Padua for modern scientific culture has been stressed in many scholarly works, among them John Herman Randall, *The School of Padua and the Emergence of Modern Science*, Padua: Antenore, 1961; and Bruno Nardi, *Saggi sulla cultura veneta del Quattro e Cinquecento*, Padua: Antenore, 1971. More specifically on the history of astronomy and cosmological conceptions see Carlo Maccagni, 'L'astronomia a Padova e Nicolò Copernico', in *Copernico a Padova*, Padua: Cleup, 1995, pp. 149–50; and Mario Di Bono, *Le sfere omocentriche di Giovan Battista Amico nell'astronomia del Cinquecento*, Genoa: Consiglio Nazionale delle Ricerche. Centro di Studio sulla storia della tecnica, 1991.

¹⁴ On Cremoninini's life and work see especially Ezio Riondato and Antonino Poppi (eds.), Cesare Cremonini: Aspetti del pensiero e scritti, 2 vols., Padua: Accademia Galileiana di Scienze, Lettere ed Arti, 2000. On the complex intellectual and political relationship between Cremonini and Galileo see Antonino Poppi, Cremonini e Galilei inquisiti a Padova nel 1604: nuovi documenti d'archivio, Padua: Antenore, 1992; and Muir, op. cit. (9), Chapter 1, 'Galileo's telescope and Cremonini's headache'. On his cosmology see Maria A. Del Torre, 'La cosmologia di Cremonini e l'inedito De coeli efficentia', Rivista Critica di Storia della Filosofia (1966) 4, pp. 373–97.

¹⁵ On the historiographic problems surrounding the Scientific Revolution see Floris Cohen, *The Scientific Revolution: A Historiographical Inquiry*, Chicago: The University of Chicago Press, 1994. See also my entry 'Scientific Revolution, ideologies of the', in Dana Jalobeanu and Charles T. Wolfe (eds.), *Encyclopedia of Early Modern Philosophy and the Sciences*, Springer Online, 2020, pp. 1–10.

¹⁶ Nick Wilding, Galileo's Idol: Gianfrancesco Sagredo and the Politics of Knowledge, Chicago: The University of Chicago Press, 2014, p. 22.

¹⁷ See Paul F. Grendler, 'I tentativi dei gesuiti d'entrare nelle università italiane tra '500 e '600', in Gian Paolo Brizzi and Roberto Greci (eds.), Gesuiti e università in Europa (secoli XVI–XVIII), Bologna: CLUEB, 2002, pp. 37–51; and

education and religion as a champion of the University of Padua against Jesuit influence, and as one of the philosophers whom the Inquisition most assiduously interrogated. ¹⁸ He has rightly been regarded as one of the leading figures in Venetian cultural politics in the years of ideological struggles that culminated with the Interdict of 1606, the excommunication of the doge and the Roman prohibition of the celebration of religious rites in the republic. ¹⁹ In the wake of these polemics, Cremonini's impiety became legendary. For instance, at the moment of his death, rumours spread that he had composed the funerary epitaph for himself – 'totus Cremoninus hic jacet' (All of Cremonini rests here) – in accordance with an allegedly materialistic conception of the soul that continued Pietro Pomponazzi's philosophical heresy. ²⁰ His detractors as well as his admirers, like Gabriel Naudé, regarded him as a libertine. In his memoirs, Naudé, who had visited Cremonini in Padua for three months, described his attitude as follows: 'Cremonini hid his game in Italy well: he had no piety, nonetheless he wanted to be considered a pious person. One of his maxims was the following: on the inside be as you like but on the outside [appear] in accordance with expectations.'²¹

Today we are in a better position to understand his fame in the light of the cultural struggles of the time, as they have been reconstructed by, among others, Grendler. Moreover, the political background of the suzerainty conflicts with Rome and their relevance to early modern scientific culture have been emphasized by Rivka Feldhay in the wake of Paolo Prodi's considerations on the princely transformation of the Papal States. For a nuanced and well-documented reconstruction of the conflicts between science and religion in Counter-Reformation Italy, we can also rely on excellent scholarly works, including those by Massimo Bucciantini, Ugo Baldini and Leen Spruit. While I have already outlined elsewhere the general relevance of confessional struggles for scientific hegemony in early modern intellectual history, in this essay I embrace a microhistorical approach that privileges local political settings rather than geopolitical and ideological coordinates. For this purpose, I will here address an aspect of Cremonini's cultural activity that has been neglected by historians of science: his institutional role as a protector of the German Nation of Artists. In order to understand the background of Cremonini's non-religious rationalism, it is expedient to consider a number of instances

my essay 'Torino, 1593: Motivi dell'opposizione universitaria ai gesuiti nel contesto degli antagonismi europei del tempo', Rivista di Storia dell'Università di Torino 3(1) (2014), pp. 1–18.

¹⁸ See Del Col, op. cit. (3), pp. 551-3.

¹⁹ See Pietro Pirri, *L'interdetto di Venezia del 1606 e i Gesuiti: silloge di documenti con introduzione*, Rome: Institutum historicum, 1959. On the European dimension of Paul V's excommunication and the interdict against the republic, which led to Sarpi's affirmation as a political-religious leader, see (among others) Gregorio Baldin, 'Filosofie della sovranità: Sarpi e Hobbes eredi di Bodin', *Giornale critico della filosofia italiana* (2019) 15(1), pp. 55–74.

²⁰ Maria Assunta Del Torre, Studi su Cesare Cremonini: Cosmologia e logica nel tardo Aristotelismo padovano, Padua: Antenore, 1968, p. 35.

²¹ Gabriel Naudé, Naudeana et Patiniana: Ou singularitez remarquables, prises des conversations, Amsterdam: vander Plaats, 1703, p. 56: 'Cremonini cachait finement son jeu, en Italie: nihil habebat pietatis et tamen pius haberi volebat. Une de ses maxims c'était: intus ut libet, foris ut moris est'.

²² Paul F. Grendler, *The University of Mantua, the Gonzaga and the Jesuits, 1584–1630*, Baltimore: Johns Hopkins University Press, 2009.

²³ Rivka Feldhay, 'Preclassical mechanics in context: practical and theoretical knowledge between sovereignty, religion, and science', in Rivka Feldhay, Jürgen Renn, Matthias Schemmel and Matteo Valleriani (eds.), Emergence and Expansion of Preclassical Mechanics, Cham: Springer, 2018, pp. 29–54. Cf. Paolo Prodi, Il sovrano pontefice, Bologna: Il Mulino, 1982; Engl. tr. The Papal Prince, One Body and Two Souls: The Papal Monarchy in Early Modern Europe, Cambridge: Cambridge University Press, 1987.

²⁴ Bucciantini, op. cit. (2); Baldini, op. cit. (4); Ugo Baldini and Leen Spruit (eds.), Catholic Church and Modern Science: Documents from the Archives of the Roman Congregations of the Holy Office and the Index, Rome: Libreria Editrice Vaticana, 2009. On censorship see also Hannah Marcus, Forbidden Knowledge: Medicine, Science, and Censorship in Early Modern Italy, Chicago: The University of Chicago Press, 2020.

which bear witness to the fact that confessional conflicts emerged in Padua from time to time and affected the institutional life of the German Nation of Artists. For the history of science, this college is much more relevant than the parallel one of German Law Students, because it was in the former that students were trained in natural philosophy and medicine.

Confessional matters and the institutional life of the German Nation of Artists at Padua

Padua, the university centre of the Republic of Venice, was one of the main teaching centres in Europe. It attracted students from all over the continent and could boast a wellestablished tradition of philosophical, medical and juridical studies.²⁵ Among the various nations of students and their specific colleges, the German one represents a particularly suitable case study for investigating the impact of the religious climate of those days, as this nation sheltered students of different religious confessions.²⁶ Reformed Germans were not the only non-Catholics at Padua, although their presence was particularly weighty in terms of matriculation numbers. Other students who did not conform to the official Catholic religion of the Italian state included the English, Orthodox students from the East, and Jews. In the second half of the sixteenth century and in the first three decades of the seventeenth, conflicts arising from inter-confessional coexistence are documented by occasional frictions between the religious authorities of Padua and Protestant representatives of the two German colleges. Particularly visible conflicts arose from the establishment of a Jesuit college in Padua, which aimed to ensure religious conformity, and from the enmity between German students belonging to different faiths. Unlike the German imperial provinces, which followed the 1555 Augsburg principle of cuius regio eius religio (whose realm, their religion), in Italian territories Catholicism remained the only official religion.²⁷ The presence of Protestant students created concerns among the religious authorities. The papal bull In Sacrosancta of 1564 forced Venice to admit to graduate examination only those students who had made an oath of Catholic faith.²⁸ Such an injunction worried many German, English and Greek students, to name the largest groups of students directly affected by this measure.²⁹ A definitive solution to the problem would only be found later, in the course of the seventeenth century. In order to comply with the papal requirement without compromising the enrolment of so many foreign students, Venice eventually claimed for its university the right to bestow university titles auctoritate Veneta (i.e. by Venetian authority) to 'poor students and others'. This right secured the freedom of 'ultramontane' students (i.e. students coming from countries north of the Alps) and 'ultramarine' students (i.e. those coming

²⁵ For an introduction to the long history of the University of Padua see Piero Del Negro (ed.), The University of Padua: Eight Centuries of History, Padua: Signumpadova, 2003. Much has been written on the Padua school in the late Middle Ages and the Renaissance. Among the many studies on the intellectual history of Padua in early modernity see especially Bruno Nardi, Saggi sull'aristotelismo padovano dal secolo XIV al XVI, Florence: Sansoni, 1958; Charles Schmitt, Studies in Renaissance Philosophy and Science, London: Variorum Reprints, 1981; Luigi Olivieri (ed.), Aristotelismo Veneto e scienza moderna, Padua: Antenore, 1983; Antonino Poppi, Introduzione all'aristotelismo padovano, Padua: Antenore, 1991.

²⁶ The most important primary sources on the German Nation in relation to the topics addressed in this essay are the following proceedings: Antonio Favaro (ed.), *Atti della nazione germanica artista dello Studio di Padova*, 2 vols, Venice: Tipografia Emiliana, 1911–12; and Lucia Rossetti (ed.), *Acta nationis Germanicae Artistarum* (1616–1636), Padua: Antenore, 1967.

²⁷ Adriano Prosperi, Tribunali della coscienza: inquisitori, confessori, missionari (Turin: Einaudi, 2009).

²⁸ See Piero Del Negro and Francesco Piovan (eds.), *L'Università di Padova nei secoli (1222-1600*), Padua: Università degli Studi di Padova, 2017, 'Bolla di Pio IV *In sacrosanta* (1564)', pp. 474-6 n. 49.

²⁹ Del Negro and Piovan, op. cit. (28), 'Relazione di Giovanni Battista Contarini, podestà (1566), p. 478 n. 51'.

from distant Mediterranean shores), such as Germans and Greeks respectively.³⁰ As for the Jewish students, they could attend the university and receive an academic title even if they could not officially matriculate; theological and juridical advisers reassured them in the name of the university that they were exempted from the papal bull, which only applied to Christian students.³¹ The provenance of the German students varied greatly. It also included lands beyond the borders of the empire. Indeed, the statutes of 1593 lay out the criteria for inclusion in or exclusion from the nation as follows:

All Germans who stem from either the upper or lower part of Germany and study the arts, medicine and theology should enrol in our community; the other nations are excluded, for otherwise the difference and disharmony of habits could hamper our harmony of wills and common tranquillity. However, we admit into our society Bohemians, Tridentines and those coming from the vicinities of the borders of upper Germany, owing to their proximity to their fatherland, as long as they are familiar with the German language and are accepted with the nation's general consent.³²

As the matriculation records show, students of the German Nation of Artists came from all over the empire (from Augsburg to Hamburg, from Berlin to Helmstedt, to name only some places), as well as from Switzerland, Flanders, Denmark, Bohemia and sometimes the Kingdom of Poland (despite the existence of an influential College of the Polish Nation). They came from Catholic as well as Protestant territories. This variety is also reflected in the chancellors' origins. Consider, for example, the first years of the Acts, published by Favaro in 1911: Michael Aurifaber of Kaaden (Bohemia) was followed by Michael Böck of Überlingen (Lake Constance) in 1553, Ioannes Prazak of Prague in 1554, Georgius Cellarius of Zurich in 1555, Ioannes Willebrochius of Danzig (Poland) in 1556, Johannes Hagius of Würtzburg (1557) and Adam Zwickerus of Memmingen (1558). Some of the Protestants who enrolled in the Nation of Artists had prominent academic careers back home. Johann Heinrich Meibom, who came from a Helmstedt family that gave his home town university many professors, was the chancellor of the German Nation in Padua until September 1618, when 'he resigned his office due to the decision to return to his fatherland'. In 1619, he was appointed professor of medicine at Helmstedt. His successor in Padua was Joachim Jungius of Lübeck, former professor of mathematics at Giessen, professor-to-be at influential Protestant humanistic universities such as Helmstedt and Rostock, and eventually rector of the Hamburg Gymnasium.³⁶ In the sixteenth century, elite Protestant humanists would send their children to Padua:

³⁰ See Del Negro, 'The early modern period', in Del Negro, op. cit. (25), pp. 35-72, 51-3, emphasis added.

³¹ Del Negro and Piovan, op. cit. (28), p. 479 n. 52, 'Parere di G. Ambrogio Barbavara [teologo] e Giacomo Menochio [giurista] sul conferimento della laurea agli ebrei'. It has been estimated that about eighty Jewish students completed their studies at Padua during the sixteenth century and 325 between 1616 and 1816. Galileo Galilei was among the promoters of David a Portaleonis hebreus Mantuanus in 1597. See Emilia Veronese Ceseracciu, 'Ebrei laureate a Padova nel Cinquecento', Quaderni per la storia dell'Università di Padova (1980) 13, pp. 151–68, esp. 163 n. 15.

³² Favaro, op. cit. (26), p. xxvii.

³³ Henryk Barycz and Karolina Targosz (eds.), *Archiwum Nacji Polskiej w Uniwersytecie Padewskim*, 2 vols., Wrocław: Zakład Narodowy imienia Ossolińskich, Wydawnnictwo Polskiej Akademii Nauk, 1971.

³⁴ Matricula Nationis Germanicae Artistarum in Gymnasio Patavino (1553–1721) (ed. Lucia Rossetti), Padua: Antenore: 1986.

³⁵ Rossetti, op. cit. (26), p. 60. Meibom matriculated in 1617. *Matricula Nationis Germanicae Artistarum*, op. cit. (34), p. 176 n. 1448: 'ob voluntatem patriam hinc decessurus suo se officio abdicabat'.

³⁶ Magister Ioachimus Iungius Lubecensis matriculed 1618. Matricula Nationis Germanicae Artistarum, op. cit. (34), p. 180 n. 1479.

in 1559, both Joachim Camerarius the Younger (*filius*) and Erasmus Reinhold the Younger, son of the author of the first Copernican tables, enrolled in the German Nation.³⁷ In the seventeenth century, their example was followed by Daniel Sennert the Younger, son of the famous Wittenberg professor of medicine of the same name.³⁸

These examples show that students from the epicentre of Lutheran education came to Padua; one's religious confession did not constitute a hindrance to studying there. The establishment of a Jesuit College in Padua in 1542, in open competition with the university (and particularly the students of arts), raised the question of religious conformity in university teaching. The enrolment of many students in the Jesuit college, including aristocrats, led to tensions between those affiliated with the two educational institutions. The newly appointed professor of philosophy at Padua, Cremonini (1590), was personally involved in the polemic and became the most prominent representative of the corporate interests of the university against the Jesuits. Delivered in 1591 in Venice, his oration on the subject became very well known. Cremonini gained the support of the senators by stressing the political and cultural connections between the republic and its school, and the loyalty of the latter to the former. He presented the Jesuit College as an 'antiuniversity' (anti-studio), the very existence of which, he claimed, questioned the suzerainty of the state, as it derived its legitimacy from external powers, namely a papal bull that had not been sanctioned by Venice.³⁹ Cremonini argued that the simultaneous presence of a religious institution and a secular one diminished the university's assolutezza; that is to say, its autonomy and freedom. Furthermore, public disorders arose from the opposing parties of the Gesuiti (the Jesuits' students) and the Bovisti (that is, the students of the university of 'Bò', who were named after its main public building). The two parties fought each other with such hatred that they reminded Cremonini of medieval struggles between the two factions of imperial supporters and those who defended the Pope's interests.

Cremonini's successful peroration of the university's cause resulted in the Venetian Senate's injunction, on 23 December 1591, that the Jesuits should exclusively teach their own novices. The Jesuits formally consented to this rule but at the same time vehemently opposed it, arguing that they were the only ones who could ensure the students' religious conformity. They particularly attacked the 'liberal' attitude of the University of Padua on matters of faith. Venetian (and Paduan) pragmatism on matters of faith met with other ecclesiastical discontents as well. The issues arising from the actions of the Bishop of Padua are a case in point. In 1566, he did not allow the representative of the Jurists, a German Protestant, to enter the cathedral. The bishop also did not receive him in the official room for the conferral of academic degrees, which was in the bishop's building, and he also refused to sign diplomas that had already been signed by the Protestant. This created much trouble and concern on the part of the university, the civic authorities of Padua and Venice, and also Protestant students, who threatened to

³⁷ Matricula Nationis Germanicae Artistarum, op. cit. (34), pp. 13-14 nn. 105, 107.

³⁸ Daniel Sennert the Younger became the chancellor of the German Nation in 1630 and died of plague during his mandate. Cf. Rossetti, op. cit. (26), pp. 310–16. See also *Matricula Nationis Germanicae Artistarum*, op. cit. (34), p. 227 n. 1855.

³⁹ Cesare Cremonini, Oratione ... in favore di esso Studio contro li Padri Gesuiti, in Antonio Favaro, 'Lo Studio di Padova e la Compagnia di Gesù sul finire del secolo decimosesto', Atti del Reale Istituto Veneto di Scienze Lettere ed Arti (1878) 4(5), dispensa 3, pp. 401–536, 409–14, doc. XV, pp. 489–96. For a more recent edition see Cremonini, Le orazioni (ed. Antonino Poppi), Padova: Antenore, 1998, pp. 53–70.

⁴⁰ For an overview of the educational and cultural-political conflicts that opposed traditional universities and Jesuit colleges see Brizzi and Greci, op. cit. (17). and Grendler, op. cit. (22). See also Antonio Favaro, 'Lo Studio di Padova e la Compagnia di Gesù sul finire del secolo decimosesto', Atti del Reale Istituto Veneto di Scienze Lettere ed Arti (1878) 4(5), dispense 3, pp. 401–536.

⁴¹ Cf. Emilia Veronese, 'Dal 1509 al 1600: Introduzione', in Del Negro and Piovan, op. cit. (28), pp. 343-64, 353.

leave the city. Constant negotiations were needed until the law involving the recognition of degrees by the political authorities (the aforementioned formula *auctoritate Veneta*) was able to solve such impasses. Thus tensions on matters of faith affected the external relations of the German Nation (and other non-Catholic students) with the ecclesiastical authorities, and were closely linked to the cultural politics of Venice (and Padua) in relation to Rome. Problems of inter-confessional coexistence also emerged within the German Nation, especially after the outburst of war in the empire in 1618 – the Thirty Years War that ended with the establishment of the 'Westphalian suzerainty system'.

In 1621, at the end of his mandate as chancellor (conciliarius) of the German Nation of Artists, Bernardus Langwel of Hamburg designated two candidates as his successors. The election of the Protestant Dane Nicolaus Fossius met with the angry reaction of the Catholic faction, which was led by the medicine student Johannes Sebastian Zoltin. They denounced formal errors in the election and demanded that the nomination be invalidated. According to Fossius's report on these events (included in the proceedings of the nation for the period from 13 April to 2 November 1621), initially he neither accepted nor rejected the office. Yet the polemic escalated, going so far as to involve the university and eventually the Venetian authorities. The dispute reached its culmination in June 1621, and only de-escalated when a Catholic student, Georgius Spadonius from Carinthia, proposed suitable terms for a truce. He invited both parties to rest their claims and to accept the election of Fossius, while also promoting his main adversary, Zoltin, to the post of syndacus. Spadonius also demanded that, at the end of Fossius's term as chancellor, he name two Catholic candidates as his successors. The two factions agreed on this and pushed forward a reform of the statutes. In particular, they agreed that, beginning that very year, the chancellor should be accompanied by six advisers (adsessores), equally divided between Catholics and Protestants:

Three of them belonged to the Catholic religion and three to the Reformed. I wanted to maintain this [proportion] in our council, as well, in order to guarantee a balance between the two parties everywhere. The whole assembly appreciated this and the decision was taken that the Nation's council should always continue having this composition.⁴²

Thus the unity of the nation was salvaged through an institutional mechanism involving a balance between the representatives of its two main confessions.

The extant statutes of 1675 (the earliest to have been preserved in their entirety) show traces of these arrangements. Their first section, pertaining to the most general rules for the German Nation of Artists, recommends religious decorum for everybody (I 6): 'Everybody should behave piously and decently in all circumstances.'⁴³ All Germans were expected to respect and attend the local ecclesiastical ceremonies, and to refrain from entering theological disputes, even in private, in order to avoid any scandals and personal risks (I 11):

He who attends ecclesiastical ceremonies should avoid behaviour that does not conform to the local rites and even more so do anything inconvenient. In private, too, one should behave in a moderate manner and abstain from theological disputes. He who, acting to the contrary, finds himself in peril will not receive any support from the Nation.⁴⁴

⁴² Rossetti, op. cit. (26), p. 116.

⁴³ Favaro, op. cit. (26), p. xxxiii.

⁴⁴ Favaro, op. cit. (26), p. xxxiv.

Confessional tolerance became a rule within the German Nation. Nobody should dare threaten students' peaceful coexistence by attacking somebody else's faith or create factions based on religious matters (I 12): 'Nonetheless, everybody should be allowed to follow his own rites and should not criticize those of others. Anyone who creates factions on this basis or creates disorder in the Nation for any reason will be guilty of infamy.'⁴⁵

The library of the German Students of Arts as evidence of intellectual freedom in times of religious censorship

Having discussed several examples of religious frictions affecting the life of the students in Padua in Cremonini's years, I would now like to consider the extent to which these tensions affected their intellectual opportunities to read and circulate works from Protestant provinces and authors. We are in the fortunate position of being able to address this theme by considering their readings thanks to the fact that the librarians of the German Nation recorded all books that students and other donors gave to their college. This list offers some insight into the students' reading materials. The most striking feature is that the provenance of the books from Protestant contexts did not hinder their acquisition by the library, despite the fact that the prohibition of books by Protestant authors and printers listed in the *Index* 'ought' to have been respected in an officially Catholic country such as the Republic of Venice.

Medical books from Protestant provinces and authors figure prominently in the collection. Alongside Hippocrates' *Aphorisms* and Galenic works, many iatro-chemical books are listed, for instance Henning Sheunemann's *Paracelsia ... de morbo Mercuriali contagioso* (Bamberg, 1608), Philipp Müller's *Miracula chymica* (Wittenberg, 1611), and Johann Hartmann's *Disputationes chymico-medicae* (Marburg, 1611), all of which were acquired around 1616 or 1617. Judging from the number of copies donated to the library, the standard reference books included Jean Fernel's medical work, the *Ars medica* (Medical Art) by the Scottish mathematician and physician Duncan Liddel and the *Institutiones medicae* (Medical Institutions) by the Wittenberg professor Daniel Sennert. The fact that Liddel had been a renowned professor at the Lutheran universities of Rostock and Helmstedt, as well as at the Calvinist University of Aberdeen in Scotland, did not constitute a sufficient reason to prevent students from reading his introduction to Galenic medicine, nor did the fact that the *Ars medica* was dedicated to the Protestant king of Scotland and England, James VI and I.

As for Daniel Sennert, his work was constantly read, notwithstanding the fact that he was a professor at the University of Wittenberg which, historically and symbolically, represented the centre of Protestant culture, including in the sphere of higher education. On the (significantly chosen?) day of Saint Martin, 11 November 1620, the chancellor of the German Nation delivered a eulogy for Sennert in front of its representatives. He extolled Sennert's show of favour towards the Padua students, namely his donating a copy of his revised *Institutiones medicae*:

⁴⁵ Favaro, op. cit. (26), p. xxxiv.

⁴⁶ Rossetti, op. cit. (26), p. 32. The places and dates of publication are not indicated in the *Acta* and have been inferred, probably with some approximation in case of works with more than one edition.

⁴⁷ See Laura Di Giammatteo, 'Liddel's Ars Medica (1607): the effective method as foundation of medical knowledge and of ethics', in Pietro Daniel Omodeo and Karin Friedrich (eds.), Duncan Liddel (1561–1613): Networks of Polymathy and the Northern European Renaissance, Leiden: Brill, 2016, pp. 130–50.

⁴⁸ On Sennert see Hiro Hirai, Medical Humanism and Natural Philosophy: Renaissance Debates on Matter, Life and the Soul, Leiden: Brill, 2011, pp. 151–72.

Moreover, I extolled the great humanity and benevolence of the very illustrious Mr. Daniel Sennert, the Wittenberg professor of medicine, towards our reputed college. For in order to leave a public testimony to his affection towards us, he decided to endow and adorn our library with a literary gift; that is, his own book *Medical Institutions*, recently re-edited and improved, which he donated to us.⁴⁹

Sennert's gift is also recorded as the first entry in the list of the books that entered the library's collection that year:

Names of those who donated books in order to increase and embellish our library's treasure:

The very illustrious Daniel Sennert, primary professor at Wittenberg, *Book of Medical Institutions Recently Re-edited and Improved*, quarto, [donated] by [the author] himself.⁵⁰

Moreover, the university archives at Padua preserve an exchange of letters between Sennert and the German Nation, which so far have escaped the attention of historians of medicine and is the subject of another essay.⁵¹

In general, medical books figure most prominently among those donated to the library of the German Nation, especially recent ones. Another large corpus is literary works, either by Latin writers (e.g. Ovid) or Italian authors (e.g. Boccaccio, Petrarch and Tasso). Italian grammar books and dictionaries are common too. Among them, one finds a Dictionario toscano, the Regualae grammaticales italice Fortunii, and a Grammatica Italica teutsch. Travel books are also included. Many concern Venice and Italy (e.g. Le cose notabili di Venetia and Delitiae Italiae). Works by Aristotle are surprisingly rare for an early modern community of students of philosophy. Logical and metaphysical works often come from Protestant authors, for instance Bartholomäus Keckerman's Systema logicum (Hannover, 1611), Rudolph Goclenius's Controversiae logicae et philosophicae (Marburg, 1604) and Johann Heinrich Alsted's Metaphysica. Mathematical works are rare and often come from north of the Alps, for instance Erasmus Reinhold's edition of Johannes Regiomontanus's Tabulae directionum (Wittenberg, 1584) and Bartholin's Exercitatio de stellarum natura (Wittenberg, 1612). Although an in-depth analysis of these lists of books is still a desideratum, this brief overview is already sufficient to ascertain the existence of a free space for the circulation of scientific ideas at Padua in the sixteenth and seventeenth centuries.

Cremonini, protector of the German Nation

Beginning in 1593, the German students of liberal arts chose Cremonini as their 'protector', only two years after the Jesuit affair. Later, about twenty years after this first investiture, they granted him the honorific title of 'perpetual advocate of the German Nation' (perpetuus promotor nationis Germanicae) on 22 April 1626.⁵² Altogether, he

⁴⁹ Rossetti, op. cit. (26), p. 101.

⁵⁰ Rossetti, op. cit. (26), p. 107.

⁵¹ Pietro Daniel Omodeo, 'Daniel Sennert and the University of Padua: circulation of medical knowledge and scholars across the confessional divide in the seventeenth century', in Gideon Manning and Anna Marie Roos (eds.), *Collected Wisdom of the Early Modern Scholar: Essays in Honor of Mordechai Feingold*, Cham, Springer, 2023, pp. 61–78.

⁵² Rossetti, 'Cesare Cremonini e la *Natio Germanica Artistarum*', in Riondato and Poppi, op. cit. (14), vol. 1, pp. 131-4, 133. See also Charles Schmitt, 'Cremonini, Cesare', in *Dizionario Biografico degli Italiani* (1984) 30, sub voce, pp. 618-21, 619.

maintained this role for about forty years. One can assume that Cremonini was initially chosen because he had shown himself willing to challenge Jesuitical power and proved supportive of German students on many occasions. When he died of plague on 18 August 1631, the loss was registered in the acts of the nation.⁵³ On that occasion, the students also expressed their concern about the difficulty of choosing a suitable successor.⁵⁴

The office of 'protector' was not purely honorific and was well defined. The statutes of 1675 specify that this person should be chosen from among the professors of medicine or philosophy, and he should have strong ties with the city and the Venetian authorities in order to promote the German Nation and protect it, in the event of any offences. The protector was also expected to support the chancellor, at the beginning of his mandate or in difficult circumstances. 55

Cremonini performed the role of mediator on many occasions. Once, he was involved in a trial over a fight between German and Italian students. In March 1618, Zuane Chiappin of Vicenza slapped the head of the German chancellor, Marco Huebherr, in a public university hall; the latter drew his sword but another eight or ten armed Italians intervened and forced him to back down. Huebherr denounced the offence and initiated a trial. He claimed that the offence was by no means personal but concerned the German Nation in its entirety (negotium hoc privatum non esse, sed concernere totam nationem nostram ... laesam et violatam).⁵⁶ In the documents, Cremonini appears as advocatus. The case was brought to Venice and debated on 24 May 1618. Since Chiappin's position looked weak and his condemnation likely, his own nation, the Natio Trevisana, interceded. They sent a letter to the German Nation, in which they unanimously condemned Chiappin's offence, and asked for a reconciliation in order to avoid blame falling upon their college. Cremonini advised the Germans to accept the offer of peace because it came from an entire college and not from an individual.⁵⁷ The document of appeasement was then signed, on 14 June, in Cremonini's house in the presence of the representatives of the nations and other witnesses. In the document, signed by all attendants, one reads that 'Chiappino confesses that he was wrong ... He asks Mr Marco Huebherr for forgiveness ... He promises not to enter the university in the future, and to abstain from all its activities.'58 With Chiappin's expulsion from the university, the issue was settled.

Cremonini also served as mediator in the polemic of 1621, which divided German Catholics and Protestants. When the clash broke out, he immediately intervened and tried to mitigate the quarrel, but the Catholic party rejected his attempts. They even accused his appeal for appeasement of actually supporting the Protestants. Offended by their tone, Cremonini resigned as protector of the German Nation, but the students rejected his resignations. Later, when a settlement was reached and a reform of the statutes was agreed upon, Cremonini helped to formalize the new rules. 60

The Catholic authorities' suspicions about Cremonini

After Cremonini successfully pleaded for the republican authorities to ban the Jesuit college, several Jesuits organized a defence by means of a series of apologetic writings that targeted Cremonini as their main adversary. These are preserved in the Roman Archives

⁵³ Rossetti, op. cit. (26), p. 312.

⁵⁴ Rossetti, op. cit. (26), pp. 317-18.

⁵⁵ Favaro, op. cit. (26), p. l-li.

⁵⁶ Rossetti, op. cit. (26), p. 45.

⁵⁷ Rossetti, op. cit. (26), pp. 47-8.

⁵⁸ Rossetti, op. cit. (26), pp. 48-9.

⁵⁹ Rossetti, op. cit. (26), p. 114.

⁶⁰ Rossetti, op. cit. (26), p. 117.

of the Jesuit Order and have been published in recent years for the first time.⁶¹ The anonymous author of an Apologia contra Cremoninum (Apology against Cremonini) - most likely Antonio Possevino - repeated an argument against Cremonini that Possevino had already brought forward in Bibliotheca selecta (Selected Library), according to which one should follow Charlemagne's example and entrust the teaching of philosophy to clerics, 'for the teaching of philosophy by somebody who has not studied theology is very dangerous for Christianity'. 62 Another Jesuit father, Ludovico Gagliardi of Padua, objected that the professors of the Jesuit College did not 'subvert' the teachings of Aristotle, as Cremonini contended, but rather followed Leo X's decree of 1513, which prescribed 'all teachers of philosophy to refute those doctrines of the philosophers that are contrary to the truth that the Catholic Church teaches'. 63 In line with this appeal to the teaching of a theologically conforming philosophy, the rector of the Jesuit College in Verona, Father Giovan Domenico Bonaccorsi, accused Cremonini of spreading heretical doctrines on the soul and thereby of reviving Pomponazzi's anti-Christian attitude.⁶⁴ Furthermore, Possevino denounced the laxity of the cultural politics of the University of Padua and of Venice. Instead of securing religious conformity on the students' part, professors taught and gave academic titles to 'men to whom religion is alien' (huomini alieni dalla Religione). 65

Given these allegations and conflicts, it is not surprising that Cremonini was under constant surveillance by the Inquisition. As has been pointed out by Leen Spruit, Cremonini was among the most closely controlled men of science of his time, despite being relatively neglected by historians of intellectual censorship, who have instead investigated the famous trials against Giordano Bruno, Tommaso Campanella, Galileo and, more recently, Girolamo Cardano. Cremonini's acquaintance with Galileo brought the latter to the Inquisition's attention before the famous affair in 1616 and his condemnation in 1633 for Copernican convictions. In fact, the Inquisition investigated the two professors together in 1604. Moreover, in the year of the Roman excommunication and the Interdict against the Republic of Venice (1606), Cremonini had another visible cultural-political role. That same year, the university assigned him the task of representing the teaching institution in Venice and of delivering a welcoming address to the newly appointed Doge, Leonardo Donà. Later, on 17 May 1611 (i.e. a few days after Galileo's telescopic discoveries were discussed at the Roman College), the Holy Office undertook

⁶¹ Maurizio Sangalli (ed.), Apologie dei Padri Gesuiti contro Cesare Cremonini (1592), Padua: La Garangola, 1998.

⁶² Sangalli, op. cit. (61), p. 345: 'perché il legger la filosofia da chi non ha studiato teologia è cosa pericolosissima al christianesimo'.

⁶³ Sangalli, op. cit. (61), pp. 258–9: 'tutti i lettori di filosofia, che debbano confutar le dottrine dei filosofi che sono contraria alla verità che si insegna nella Chiesa Cattolica'.

⁶⁴ Sangalli, op. cit. (61), p. 299.

⁶⁵ Sangalli, op. cit. (61), p. 341.

⁶⁶ See, among others, Luigi Firpo, *Il processo di Giordano Bruno*, Rome: Salerno Editrice, 1993; Firpo, 'Filosofia italiana e controriforma: III. La proibizione delle opere di Campanella', *Rivista di filosofia* (1950) 41, pp. 390–401; Massimo Bucciantini, Michele Camerota and Franco Giudice (eds.), *Il caso Galileo: Una rilettura storica, filosofica, teologica*, Florence: Olschki, 2011; Massimo Bucciantini, *Contro Galileo: Alle origini dell'affaire*, Florence: Olschki, 1995. For an insightful discussion of Cardano's problems with the Inquisition see Jonathan Regier, 'Reading Cardano with the Roman Inquisition: astrology, celestial physics, and the force of heresy', *Isis* (2019) 110(4), pp. 661–79. A useful study to address these topics is also Baldini and Spruit, op. cit. (24).

⁶⁷ Poppi, op. cit. (14). Galileo was accused of practising a deterministic form of astrology. For more on this see H. Darrel Rutkin, 'Galileo Astrologer: astrology and mathematical practice in the late-sixteenth and early-seventeenth centuries', *Galilaeana: Journal of Galilean Studies* (2005) 2, pp. 107–43, 126–28.

⁶⁸ Cesare Cremonini, Oratione habita in creatione Serenissimi Venetiarum Principis Leonardi Donati, Venice and Padua: ex typographia Laurentij Pasquati, 1606.

another investigation of Galileo, which began with an assessment of whether Galileo's name appeared in the documents pertaining to Cremonini's trials.⁶⁹

A recurring allegation against Cremonini concerns his teaching on the soul. According to detractors, he picked up Pomponazzi's Alexandrist thesis that the soul must die together with the body according to Aristotelian principles, as it cannot be separated or act in separation from its organic support. Cremonini lectured on this topic several times, beginning in 1592, and some manuscripts stemming from these classes are still extant. His lecture notes from the years 1605, 1610 and 1615 are preserved in Paris: two were owned by no less a figure than Cardinal Richelieu. The Roman Inquisition came to the conclusion that his views on the soul were heretical. For his part, Cremonini repeatedly argued that the incongruence between Aristotle and the Christian faith ought not to be deemed heretical, because Aristotle was a pagan philosopher who had lived before Christ, and rational conclusions relate to a form of truth that is not dependent on faith. For Cremonini, the rational task of the philosopher and the moral duties of Christian believers were not one and the same.

Cremonini's views on the cosmos

Cremonini also attracted much attention from ecclesiastical authorities for his cosmology. He wrote three books in this field: *Disputatio de coelo in tres partes divisa* (Disputation on the Heavens Divided into Three Parts) (Venice, 1613), *Apologia dictorum Aristotelis de quinta coeli substantia* (Defense of Aristotle's Statements on the Fifth Substance of the Heavens) (1616) and the unpublished *De coeli efficientia* (On the Efficiency of the Heavens).⁷² The *Disputatio de coelo* of 1613 is the most systematic work, while the other two writings are reactions to the objections raised by theological censors.

The *Disputatio* especially deals with three topics, which correspond to its three main partitions; that is to say, the 'nature' of the heavens, their motions and their 'abstract' or 'separate' mover. There is also, in the form an appendix, a defence of Aristotle's conception of the Milky Way. It comprises considerations on the 'face' of the moon, which is in fact an indirect refutation of Galileo's telescopic observations on the basis of Aristotle's authority. Cremonini's Aristotelian orthodoxy on geocentrism and the immobility of the Earth is further witnessed by two sections of the second part of his *Disputatio*, Chapter III 1, 'Terra sita in medio' (That the Earth is located at the centre), and Chapter III 2, 'Terra immobilis' (The immobile Earth).

The most original and controversial part of Cremonini's Aristotelian cosmology concerns its foundations and, as it were, its metaphysical and theological consequences. He considered the eternity of the world to be the main pillar of Aristotle's conception and, accordingly, dedicated the very beginning of his *Disputatio* (I 1) to this crucial

⁶⁹ Massimo Bucciantini, Michele Camerota and Franco Giudice, *Galileo's Telescope: A European Story*, Cambridge, MA: Harvard University Press, 2015, pp. 217–18.

⁷⁰ Decree of the Congregation of the Holy Office (Rome, 25 June 1598), in Baldini and Spruit, op. cit. (24), p. 1487: 'Caesaris Cremonini lectoris publici Paduae, qui legit de Anima ad mentem Alexandri Afrodisei lectis literis Inq<uisito>ris Veneti datis 12 superioris mensis Ill. ^{mi} etc. decreverunt et ordinaverunt quod scribatur episcopo et Inquisitori Paduae, ut se informent, et provideant.'

⁷¹ Paul Oskar Kristeller pointed to the ambivalence of appeals to a double truth. See his *La tradizione aristotelica nel Rinascimento*, Padua: Antenore, 1962, p. 21.

⁷² Two copies of this manuscript work are preserved, one in the University Library of Padua, coll. Ms. 200/1, and one in the Marciana National Library in Venice, coll. Mss. latini VI 176. For a general overview of Cremonini's manuscripts see Riondato and Poppi, op. cit. (14), vol. 2, *Fondi manoscritti e opere a stampa*. On Cremonini's cosmological writings and conceptions see Del Torre, op. cit. (14); and Pietro Daniel Omodeo, 'A cosmos without a creator: Cesare Cremonini's interpretation of Aristotle's heaven', *Journal of Early Modern Studies* (2019) 8, pp. 9–42.

issue: 'Proponitur Arist[otelis] sententia de coeli aeternitate' (Discussion of Aristotle's doctrine of the eternity of the heavens). The first chapter is devoted to discussing the difficulties, objections against, and arguments in favour of cosmological eternity.⁷³

Cremonini cast doubt on the function of the transcendent intelligences – the separate entities that account for heavenly motions in Scholastic philosophy. According to Averroes' followers, the intelligences were the final causes of heavenly motions, but Cremonini rejected teleological accounts of the spheres' motions by arguing that there is only one source of motion according to Aristotle; that is, efficient causes. Transcendent intelligences cannot act as efficient causes; therefore he renounced them altogether. Moreover, he wrote that they should not be confused with angelic entities as some theologizing philosophers did. He went so far as to state that not even God can act as an efficient cause within the cosmos because He is the highest goal of all beings and, as such, He is fundamentally Other with respect to the world.

The heavens are made of material spheres, which are composed of both matter and form. Cremonini conceived of the celestial bodies' forms as souls which cannot be separated from their bodies: 'All of the above sufficiently indicates that the Philosopher does not acknowledge any natural forms that are not in matter. Hence, if the heavens are a form ... this [form] is certainly a natural form; such a form ... is always [connected] with matter'. Since the separability of the heavens' souls and intelligences counted as an argument for the immortality of the soul in the context of the Alexandrist polemics of the early sixteenth century, Cremonini's view on the impossible separation of the forms of the heavens could be suspected of reviving the thesis of the soul's mortality in general.

Indeed, Cremonini's understanding of celestial motions was derived from considerations about living beings, therefore the doctrine of the soul played a role in their explanation. In accordance with many Aristotelian commentators, from Alexander of Aphrodisias to Averroes, the latter's followers, and most Paduan Aristotelians of the Renaissance, 78 he thought that the heavens are moved by their souls. Cremonini defined them in accordance with Aristotelian psychology as the actualization of organic bodies:

Every organic body is animated by the soul, which is its essence [quod quid erat esse illius]. The heavens are an organic body. Hence, the heavens are animated by the soul which is the essence. The soul, which is the essence of the natural body, is that nature and form which cannot be separated [from the body] (except through an act of reason). It is one with its matter, since potency and act are one (De anima II 7). Therefore, the heavens' soul is not intelligence but [the heavens'] nature and natural form ... Just as all that is animated is organic, in the same manner all that is organic is animated ... That which moves itself, has in itself the active principle of its own motion.⁷⁹

⁷³ Cesare Cremonini, Disputatio de coelo in tres partes divisa, Venice: Apud Thomam Balionum, 1613, p. 6.

⁷⁴ On Scholastic accounts of celestial motion see Edward Grant, Planets, Stars and Orbs: The Medieval Cosmos, 1200-1687, Cambridge: Cambridge University Press, 1994).

⁷⁵ Cremonini, op. cit. (73), pp. 13-14.

⁷⁶ Cremonini, op. cit. (73), p. 46: 'Haec omnia satis indicant Philosophum non agnoscere formam naturalem, quae non sit in materia. Si igitur coelum est forma ... est certe forma naturalis, talis forma ... est semper cum materia'.

⁷⁷ Omodeo, 'Presence/absence of Alexander of Aphrodisias in Renaissance cosmo-psychology', in Pietro B. Rossi, Matteo Di Giovanni and Andrea A. Robiglio (eds.), Alexander of Aphrodisias in the Middle Ages and the Renaissance, Turnhout: Brepols, 2020, pp. 175–93.

⁷⁸ See Herbert Alan Davidson, Alfarabi, Avicenna and Averroes: Their Cosmologies, Theories of Active Intellect, and Theories of the Human Intellect, New York: Oxford University Press, 1992.

⁷⁹ Cremonini, op. cit. (73), p. 100.

Because souls animate the heavens and set them in motion, celestial spheres and the world as a whole are akin to other organic bodies. ⁸⁰ Cremonini assumed the primacy of the first heaven as the source of all motions in the world and concluded that this animated first heaven is the most excellent of all worldly beings. He allotted the heavens divine attributes in implicit consonance with pagan forms of astral worship: 'In *Physics* VIII, the heavens are called God. In *On the Heavens* II it is said that God's action is immortality and eternal life, with specific reference to the heavens.'⁸¹

In the third and last part of the *Disputatio de Coelo*, Cremonini tackled the problem of celestial causation. He minimized the role of the 'abstract motors' of the heavens, which were the intelligences of the Scholastic tradition, on the ground that 'Aristotle barely dealt with separate beings'.⁸² The most daring section of the book was the concluding one in which he addressed the question of God's causation in the world and implicitly excluded any reconciliation between the biblical account of Creation and Aristotelian cosmology. Indeed, Cremonini gave a negative answer to the question 'whether it is suitable for the first being to act as an efficient cause'.⁸³

In his discussion of the positions of the main interpreters of Aristotle on this issue, Cremonini remarked that Alexander limited God's function in the world to transcendent finalism and summarized his doctrine with the expression 'God is only the end' of the world (*Deus esse finem tantum*).⁸⁴ Moreover, because Averroes' position had been interpreted in diverse manners, it looked debatable to Cremonini. As one reads, some of Averroes' interpreters thought he shared Alexander's views, while others ascribed to him the conviction that God is the efficient cause of the world. Cremonini excluded this second option, because for him Aristotle's cosmological eternity was at odds with the idea of the creation; that is, with the idea that an efficient cause of the existence of the world can subsist: 'As ... the Philosopher deems that the world is eternal, he avoids claiming that God is the efficient cause, because an efficient cause makes that which becomes.'⁸⁵

This affirmation has disruptive consequences for the doctrine of divine freedom. Cremonini even stated in the most provocative manner that Aristotle did not posit God's will. According to him, God produced the immaterial species by necessity, but not concrete individual entities. Hence necessity and contingency can coexist at different levels of reality, for God is the first intelligence (*prima intelligentia*) which is eternally productive of 'immobile' intelligences, while the world is subject to the constant change resulting from chains of efficient causes. Todd does not act; rather, He is the *summum bonum* (supreme goodness) towards which the heavens strive.

In line with his 'cosmological immanence', Cremonini defended the irreducible materiality of the cosmos.⁸⁹ He defined matter as a universal substratum from which accidents can arise without losing their subsistence. Forms cannot be separated from matter in

⁸⁰ Cremonini, op. cit. (73), p. 101.

⁸¹ Cremonini, op. cit. (73), p. 107.

⁸² Cremonini, op. cit. (73), p. 290.

⁸³ Cremonini, op. cit. (73), p. 374.

⁸⁴ Cremonini, op. cit. (73), p. 374.

⁸⁵ Cremonini, op. cit. (73), p. 377.

⁸⁶ Cremonini, op. cit. (73), p. 385.

⁸⁷ See Pietro Daniel Omodeo and Rodolfo Garau (eds.), Contingency and Natural Order in Early Modern Science, Cham: Springer, 2019.

⁸⁸ Cremonini, op. cit. (73), p. 392.

⁸⁹ Cremonini does not speak here of a 'created' world but of a 'makable' one, which I translate as 'concrete' as it refers to the existing physical cosmos. In my opinion, the adjective *factibilis* could also be translated as 'existing'.

reality but only in 'abstract' thought, and God directly rules over the realm of abstract entities and goals but has no 'efficiency' in the material world: 'The primacy [principatum] that Aristotle ascribes to the first being consists in the dependency of all other beings upon it, as an aim [towards which they strive]. This is in fact the only and real primacy. Such an aim is the cause of causes.'90 From this summary, a series of daring theses emerge. From the viewpoint of Christian dogma, Cremonini's assertions that the world is eternal, that it needs no Creator, that God has no will and cannot act as efficient cause, and that He necessarily creates universals but not individuals were not acceptable. Consequently, albeit with some delay, Cremonini's theses were attentively inspected by the religious authorities.

The eventual condemnation of Cremonini's cosmological heresy

Cremonini was well aware of the disturbing consequences of his cosmology from the view-point of theology but tried to cut possible polemics short by pointing out that Aristotle was a pre-Christian thinker, who could not be accused of infringing upon the truths of a faith that had not been revealed to him. 'Even though this supposition of the eternity of the heavens is false according to Christian truth, it looks certain and indubitable to Aristotle.'91 Cremonini was explicit about the fact that some of Aristotle's doctrines were in conflict with religion. However, he discharged himself of any responsibilities by posturing as a 'pure commentator':

Reader, be warned that in this work I describe Aristotle's doctrine following his philosophical principles. You should not be surprised if some statements derived from the Philosopher's mind (which is excellent elsewhere) are contrary to the Christian faith and to the truth. 92

The Roman Congregation of the Holy Office scrutinized Cremonini's *Disputatio de coelo*. They suspected that the book, which the Venetian inquisitor had approved for publication, did not correspond to the printed version; therefore, a comparison was ordered, which the subtle-minded Cardinal Bellarmine carried out in person.⁹³

Cremonini responded to the inquisitors' allegations with two further books, the *Apologia dictorum Aristotelis de quinta coeli substantia* (Apology of Aristotel's Statements on the Fifth Substance of the Heaven) (1616) and the *De coeli efficientia* (On the Efficient Causality of the Heavens) (never published). As a defensive strategy, he warned his readers to consider his theses to be surmises (*suppositiones*), as he did not dare to affirm them in absolute terms (*simpliciter*). He again cautioned his readers that those doctrines of Aristotle's that were at odds with religion should not be embraced by any pious person, although they could be discussed in rational terms. ⁹⁴

Cremonini's apologies did not persuade the Roman inquisitors of his innocence. They criticized his *Apologia* for the manner in which it restated the same 'mistakes' as his earlier work. ⁹⁵ In 1623, the Padua inquisitor wrote to the Roman authorities that Cremonini was

⁹⁰ Cremonini, op. cit. (73), p. 394.

⁹¹ Cremonini, op. cit. (73), p. 2.

⁹² Cremonini, op. cit. (73), f. +3v.

⁹³ Leen Spruit, 'Cremonini nelle carte del Santo Uffizio romano', in Riondato and Poppi (eds.), Cesare Cremonini, vol. 1, pp. 193–206, esp. 197–8. Cf. Thomas F. Mayer, The Roman Inquisition on the Stage of Italy, c.1590–1640, Philadelphia: University of Pennsylvania Press, 2014, p. 128.

⁹⁴ Cesare Cremonini, Apologia dictorum Aristotelis de quinta coeli substantia adversus Xenarcum, Ioannem Grammaticum, et alios ..., Venice: apud Rubettum Meiettum, 1616, pp. 4-5.

⁹⁵ Spruit, op. cit. (93), p. 200.

unwilling to change his philosophical position. Instead of recanting his scandalous teachings, he had declared that he was not concerned at all about the possibility of ecclesiastical censure: 'The letter by the Padua Inquisitor of the 26th of May [1623] was read [in Rome]. He reports that Cesare Cremonini does not care whether his books are banned or not. His Holiness decided that they are [to be] prohibited without any limitation.'

Concluding remarks

Ten years after the first publication of Cremonini's controversial theses on the heavens and seven after his Apology for them, the ecclesiastical authorities banned his cosmological works, including the unpublished De coeli efficientia. His views did not support syncretism between the Bible and the Aristotelian conception of the world. On the contrary, they took the form of a rationalistic refutation of (at least) two fundamental dogmas and raised suspicion about their compatibility with another one: the Creation of the world, the role of divine Providence and possibly the immortality of the soul. Cremonini constantly defended the thesis that the world is an eternal reality that needs no creator by arguing that this was Aristotle's original conception. This was a dangerous position because cosmology constituted a field of symbolic struggle that more or less directly concerned the role of religion in teaching and academic life. What is more, Cremonini's unorthodox Aristotelianism could prove more destructive of religious authority than Galileo's empirical-mathematical physics, as it created a gulf between Aristotelian rational philosophy and faith at a time when Aristotelianism, in its Thomist variant, had become the backbone of post-Tridentine theology. It is no surprise that the inquisitors were concerned about his 'subversive' use of Aristotle. 97 As Edward Muir has aptly remarked, Cremonini's 'trend in thought ... was far more subversive of Christian doctrine than Galileo's Copernicanism. The most significant culture wars of the late Renaissance derive from Cremonini's religious scepticism and the libertine legacy passed along to his many students who directly challenged the authority of the post-Tridentine Church'. 98 It is in this light that his cosmology can be seen as a radical position that, in view of its criticism of transcendence, is comparable to Giordano Bruno's and Baruch Spinoza's philosophies.

At an institutional level, the controversy opposing Cremonini and ecclesiastical authorities went beyond a mere battle of ideas about orthodoxy. In this essay, I have offered a contextual reading of Cremonini's cosmos without (or even against) theology. Arguably, the rationalist defence of a natural philosophy free of any concerns about concordance with dogmas and revelation was not an individual whim but rather an intellectual standpoint in favour of secular teaching in a time of confessional conflicts. Cremonini was aware of the advantages of keeping religious struggles far from university life. Indeed, he defended the much-celebrated *libertas Patavina* against Jesuit pedagogists, who were concerned about the students' orthodoxy. Moreover, he had to be especially cautious about religious issues in his role as protector of the multi-confessional German Nation of Artists. Here I offered an outline of the inner and external tensions of this student community, of its statutory solutions to confessional problems, and of the rather unrestricted circulation of people, works and ideas within it. These aspects exemplify a cultural context, Padua, in which philosophical freedom proved 'the only possible solution to the serious business of international education in a world of religious and ideological conflict.'99

⁹⁶ Spruit, op. cit. (93), p. 203.

⁹⁷ The expression comes from Craig Martin, Subverting Aristotle: Religion, History, and Philosophy in Early Modern Science, Baltimore: Johns Hopkins University Press, 2014.

⁹⁸ Muir, op. cit. (9), p. 21.

⁹⁹ Wilding, op. cit. (16), p. 22.

This moral requirement, in my view, accounts for Cremonini's motivations as the champion of a non-confessional approach, according to which the investigation of nature and university teaching should be based on a tolerant and universalistic perspective. In this perspective, one can appreciate his cosmology – despite its objective limitations – as a contribution to the secularization of academia.

The constant protection that he received from the Republic of Venice, the university and the inter-confessional German Nation bears witness to the perceived importance of his political line, despite the theological scandal of his opinions as a professor of philosophy. His stance was well suited to the conditions at his university, which attracted both Catholic and non-Catholic students, including Protestant and Orthodox ones. The encounters between students of different origins and religious affiliations; the circulation of books that were suspicious to the Inquisition, if not entirely prohibited; and the defence of intellectual freedom against theological censure characterized the University of Padua and to some extent made it a haven from the raging wars of religion.

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