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Copernicus's Publication Strategy in the Contexts of Imperial and Papal Censorship and of Warmian Diplomatic Precedents

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Argument

The main thesis of this paper is that Copernicus's avoidance of all admission that scripture was contravened in *De revolutionibus* and his composition of its new Preface in 1542, as well as the non-publication of Rheticus's *Treatise on Holy Scripture and the Motion of the Earth*, were influenced by the early information they received on the failure of the 1541 Regensburg Protestant-Catholic colloquy, among the major consequences of which were significant increases in the problems concerning publishing works which contravened scripture. This is supported by examining Rheticus's first letter to Paul Eber in conjunction with the documents on the Regensburg colloquy and on censorship in Nuremberg, as well as with the existing literature on Copernicus and his context. In view of the main thesis, Copernicus's apparent dedication of the work to the Pope merits additional explanation, and the second thesis is that components of explanations for several aspects of those parts of the Preface that relate to the Papacy and to theologians can be provided via comparisons with previous diplomacy between Warmia and the Papacy which occurred or was being referred to during Copernicus's time. This is supported by examining these parts of the Preface in the light of a selection of the relevant documents.

Introduction and Summary

Copernicus's *De revolutionibus* centered on the heliocentric theory, which eventually became of such central importance in early modern science that the exact nature and degree of that importance has continued to be a subject of debate.[1] The theory was also of wider cultural significance in that it posed a potentially significant threat to the dominant cultural system of the time.[2]

In the final version of *De revolutionibus*, the Preface included the statements which showed how Copernicus eventually wished to present the interface between the science and its wider implications. However, the Preface was the last stage in a complicated process of development that had involved the consideration of drastically different options.

Copernicus had written to a contact made by his pupil Rheticus in Nuremberg, Andreas Osiander, on 1 July 1540 to ask his advice on how to publish *De revolutionibus* without arousing the opposition of philosophers and believers (Biskup 1973, doc. 440). Osiander's advice in his reply of 20 April 1541 (ibid., doc. 453) was to treat astronomy in general as merely capable of "saving the appearances." This was not adoptable by Copernicus since this would leave the work at a disadvantage to Ptolemy's *Almagest* which also saved the appearances and was not contrary to scripture. Rheticus had written a *Treatise on Holy Scripture and the Motion of the Earth*, which attempted to defend the view that *De revolutionibus* did not contravene scripture, but this was not published. The publication manuscript of *De revolutionibus* (which is now lost) was taken by Rheticus to Wittenberg in early October 1541, and may have contained the original introduction to Book 1 of *De revolutionibus* that is present in the extant manuscript but was omitted from the published version, and which carefully avoided any reference to the implications of the work for Christianity. Rheticus delivered the publication manuscript to Nuremberg after the end of the winter semester, apparently on 11 May 1542 (Burmeister 1968, 1:77; Copernicus [1543] 1978, 338). According to a manuscript note by Rheticus's contact Achilles Gasser on his copy of the first edition, Copernicus wrote the new front matter in June 1542 (Biskup 1973, doc. 481), which was nine months after the rest of the book was finished.

The Preface itself was an extraordinary document which dealt with several major themes very concisely. It provided a brief statement of the heliocentric theory[3] together with effectively the only

direct information that we have concerning Copernicus's thought processes related to his development of the heliocentric theory[4] and a brief outline of his justification of the theory. It attempted to show that Copernicus's theory was superior to the theory promoted by Fracastoro's *Homocentrica* (Granada and Tessicini, 2005), and it demonstrated the use of rhetorical techniques including irony, confession and antithesis, and some points taken from Horace's *Ars Poetica* (Westman 1990) as well as the call for protection that was a common rhetorical device in dedicatory prefaces (Granada and Tessicini 2005, 438). Many important additional points have been made by Lerner, Segonds and Verdet (2015).

However, there are some contextual questions concerning the Preface which have not yet been fully explored in the existing secondary literature. These include, why was Rheticus's *Treatise* not published? Why did Copernicus write the new Preface in June 1542? Why did he completely avoid the technique of "accommodation," which had been the way of adjusting the relatively inflexible structure of the Christian religion and of its combination with Aristotle's works? Why did Copernicus apparently dedicate the book to Pope Paul III when the book contained ideas which contravened the literal meaning of scripture? Why did Copernicus emphasise a relationship with the deceased Cardinal Nicolaus von Schönberg? Why did he estimate that he could deal with the risks involved? Why did Copernicus emphasize physical points concerning the heliocentric theory, and why did he deal with the scriptural issues only obliquely and towards the end of the Preface? Why did he credit the Pope with mathematical abilities? Why did he only mention Lactantius among previous Christian figures, and why did he stress that "mathematics is for mathematicians"? Why did he suddenly use pejorative language – "babblers" – about clerics who did not understand mathematics, and why did he suggest that they would distort scripture in order to object to his work, when there were real scriptural objections to the work? Why did Petreius and Osiander add the *Ad lectorem* in late 1542? How did the Preface affect reactions to *De revolutionibus*, both by contemporaries and by later historians? Some of these questions are explored in the next section and most of these questions are explored in the last section of this paper.

When Rheticus's first letter to Paul Eber is examined in the light of documentation about the Regensburg colloquy in 1541 between Protestants and Catholics under the aegis of the Emperor, it

becomes clear that Rheticus and Copernicus were informed at a very early stage of the prospective failure of the colloquy and of some implications of that failure. During this colloquy the fate of Protestantism and the influence of Catholicism, the future politics of Germany and the Papacy, and the future of individual German territories that disobeyed the Emperor, hung on the minutely detailed interpretation of theological doctrines that were being debated by many of the leading German theologians in the presence of the Papal legate. The refusal of the two sides to relax their views on crucial issues led to the following consequences: to the recognition that any such compromise was now effectively impracticable, to the increased probability that the Emperor would take military action against Protestant territories within the Empire including Nuremberg where *De revolutionibus* was to be printed, to the consequent tightening of censorship arrangements including the setting up of the Roman Inquisition in 1542 by the Papacy, and to Papal restrictions concerning who was empowered to "accommodate" scripture to natural knowledge.[5] This paper proposes that this context influenced the non-publication of Rheticus's *Treatise*, the writing of the new Preface for *De revolutionibus,* and Copernicus's avoidance of the technique of "accommodation" in *De revolutionibus*.

This paper then looks at a selection of the existing documents that exhibit some general experience concerning diplomacy with the Papacy that was available to Copernicus, and very briefly examines their documentary context.[6] There are several reasons why these documents relate to the time when Copernicus was beginning to become involved with the political dealings of his uncle. In the 1490s, Lucas Watzenrode was involved in wider political issues than his predecessors or successors. The documents concerned were vital to the political future of Warmia and were therefore preserved. After his uncle's death, Copernicus was not personally involved in *political* diplomacy with the Papacy. Very few of the letters which are known to have been sent to Copernicus in later life have been preserved, since most of them were lost after they were taken from Frauenburg (Frombork) by Johannes Broscius. While Copernicus usually had at least one contact in Rome, especially from 1535 onwards, either nearly all the information that he gained from these contacts was verbal, or written documents have generally not survived. Accordingly the documents that are discussed in this

paper are from the early period of Copernicus's life, but the documents have been selected on the basis that they illuminate some general features of Papal policies and tactics. The second section centers on the 1489 report by Cardinal Marko Barbo on the dispute between Copernicus's uncle and the Polish King over the possession of the Prince-Bishopric of Warmia. The third section centers on three supplications to the Papacy in 1494-96 concerning Lucas Watzenrode's dispute with the Teutonic Order.

Many details of Papal personnel, and of their specific policies and interests, were relatively volatile due to the relatively short tenures of many Popes and to their individual personal interests and entourages. This was a potential problem for any institution or individual that dealt with the Papacy, and the fourth section of this paper briefly summarizes existing information which indicates that the Warmian Chapter managed the problem by deputing canons to reside in Rome or to stay in Rome for substantial periods, representing the Chapter's interests and passing updates back to Warmia.[7] Two of these canons are known to have acted as intermediaries between Copernicus and high-ranking prelates who were interested in astronomical topics.

The fifth section examines the contextual questions that have been already identified, in the light of the implications of the selected diplomatic documents. This section offers some components of explanations for aspects of the Preface which have so far been less fully explained. However, some caveats are noted. Additionally, as usual, the information in this paper is presented in the expectation that scholars will form their own interpretations.

The Contexts of the Regensburg Colloquy and of Imperial and Papal Censorship, and the Preparations for the Publication of *De revolutionibus*

The best clue that we have concerning the context in which Copernicus finalized *De revolutionibus* is given in the earliest letter by Rheticus to Paul Eber. A translation of Burmeister's transcription of this letter states: "the book that has been put forward as a model by the Emperor's delegates, and which contains sophistical reconciliations [σοφιστικὰς διαλλαγάς], has been studied and returned by the

Emperor's delegates who have added censuring comments in the margins. What the Emperor shall now undertake we do not know. The *praeceptor* is doing well enough and writes a lot."[8] The letter is dated 2 June, and Rheticus says that he will write again after Pentecost.

Burmeister identified that the only year that was near the time that Rheticus was dealing with book production and during which Pentecost was later than 2 June was 1541 (Burmeister 1968, 3:27-8). In addition, at that time Rheticus had only ever referred to Copernicus as his *praeceptor.* Burmeister therefore concluded that the letter was written in 1541. Burmeister also attempted to identify *De revolutionibus* as "the book" involved (ibid., 3:28).

Subsequently a draft paper was issued by Edward Rosen which reasonably objected to the idea that the book was *De revolutionibus*, for example because "sophistical exchanges" did not fit *De revolutionibus*. Rosen then attempted to identify 1538 as the year and Melanchthon as the *praeceptor*. An edited version of the discussion was later published in *Isis* (Rosen 1970). Rosen's article concentrated on dismissing the idea that the book was *De revolutionibus,* and did not propose a different date. Rosen's most telling objection was that "the book" occurred in the phrase *librum propositum ab imperatoris delectis*, which meant that the book had been proposed, or held up as a model, by the Emperor's delegates. Rosen also noted that σοφιστικὰς connoted dishonestly specious reasoning, and διαλλαγάς implied alterations, and that Rheticus would not have described *De revolutionibus* in this fashion.

Kraai knew of Rosen's draft paper but did not take into account the 1970 *Isis* papers. He provided more reasons why 1538 was not the date,[9] and additional reasons are available.[10] Kraai attempted to identify "the book" as Rheticus's *Treatise on Holy Scripture and the Motion of the Earth* (Kraai 2003, 120), taking into account Hooykaas's view that a work that he had found was the *Treatise* (Hooykaas 1984). Kraai noted that "sophistical exchanges" fitted the *Treatise* well. The problem with this attribution was that it did not take into account Rosen's clarification that the book had been proposed, or put forward as a model, by the Emperor's delegates. There is now the additional difficulty that Hookaas's attribution of the work that he found as Rheticus's *Treatise* is apparently about to be questioned, but the relevant paper has not yet been published.

However after Rosen's comments, Burmeister had proposed that "the book" must be the Regensburg book (Hergang 1858; Ganzer et al. 2007), which corresponded entirely with Rosen's analysis (Burmeister 1970b). He also identified the middleman who informed Rheticus about the proceedings in Regensburg: it was Christoph Prusius, who was mentioned in Rheticus's letter, and who had accompanied Melanchthon to Regensburg. Burmeister then clarified that the *praeceptor* could not be Melanchthon, since Rheticus was in Frauenburg where Copernicus was writing.

The admirable study of *De revolutionibus* by Lerner and colleagues includes a suggestion for the alteration of Burmeister's transcription . Instead of giving *ab imperatoris delectis* and then *a delectis* i*mperatoris* (Burmeister 1968, 3:28), they give *ab Imp(eratore) delectis* and then *a delectis Imp(eratori*) (Lerner, Segonds, and Verdet 2015, 1: 179, note 2), and they then translate the passage as "le livre soumis par l'Empereur à des censeurs et qui contient une série d'arguments sophistiques, a été parcouru et rendu par eux à l'Empereur" (ibid., 1:180). This translation suffers from two problems: first, that there was no Imperial procedure under which the Emperor would ever need to submit a book to censors, who were appointed by the local territorial rulers to apply the Emperor's edicts, and second, that the Emperor did not submit a book to censors in the Colloquy. However, if the transcription by Lerner and colleagues is used and *delectis* is translated as (to or by) the delegates, then the result becomes "the book submitted (or put forward as a model) by the Emperor to the delegates and which contained sophistical reconciliations (or a series of sophistical arguments), has been read and returned by the delegates to the Emperor."

The correctness of Burmeister's attribution becomes clearer when the meaning of the letter is fleshed out with regard to known facts about the Regensburg colloquy. This was the third of the three Protestant-Catholic colloquies in 1540-1541. The colloquies at Hagenau in 1540 (Ganzer and zur Mühlen 2000) and at Worms in 1540-1541 (Ganzer and zur Mühlen 2002) ended by illuminating that such a colloquy could not succeed on the basis of a document produced only by the Protestants – Melanchthon's *Augsburg confession*. The Emperor's representative, Granvelle, now arranged for a compromise document, the Regensburg book, to be produced secretly by a carefully selected group of the Emperor's delegates of whom the most prominent were the Protestant Martin Bucer and the

Catholic Johann Gropper. The only Protestant ruler to be told about the book in advance was Joachim II Hector of Brandenburg, although he sent a copy of the work on to Wittenberg (Melanchthon 1837, 253). In a final bid to obtain agreement, the third colloquy was held in Regensburg in the presence of the Emperor. The book was sprung on the remainder of the delegates to the colloquy in late April 1541, and it was entirely understandable that some would regard the "reconciliations" in the book as "sophistical." It can now be seen that Burmeister's transcription is reasonable in context, since the Regensburg book was prepared by a selected group of the Emperor's delegates, and Lerner et al.'s transcription is also reasonable, since the Regensburg book was advanced on behalf of the Emperor.

The most difficult parts of the colloquy centered on a small number of issues. On justification, the selected Catholic theologians allowed the Protestants to alter the Catholic draft so radically that nothing remained in it that the Protestants found incompatible with Melanchthon's *Augsburg Confession* and *Augsburg Apology*. The papal nuncio Morone who had been pessimistic about the prospects for the colloquy now "suffered a temporary relapse into optimism" (Matheson 1972, 110). However on 3 May 1541 the draft article on the issue of the authority of the Church in regard to scripture was fiercely rejected by Melanchthon, who already foresaw that this rejection would mean the end of the prospects for compromise (Melanchthon 1837, col. 414), and Granvelle postponed discussion on it until the end of the colloquy. On the Eucharist, the proposed article referred to the "true and substantial" presence of the body and blood of Christ after the consecration, which neither explicitly affirmed nor denied transubstantiation. After nine days of discussion, on 13 May 1541 the Papal legate Cardinal Contarini refused to accept the omission of the word "transubstantiation" (Matheson 1972, 134; Jedin 1957, 383-384). This was the "death-blow" to the colloquy (e.g. Matheson 1972, 122). In due course both Luther and the Pope wrote indicating that they did not support even the articles to which the Colloquy had agreed.

Relatively gentle attempts to mediate between the differing religious positions, as had been proposed by Erasmus, had been shown during the four months of the colloquy and the Diet to have been a comprehensive waste of the time of the leading politicians and theologians of the Empire.[11] Action by Charles against the Protestants at some stage was now far more likely. The Pope began the

process of setting up the Roman Inquisition in 1542 and a more rigorous structure for the suppression of heretical literature (c.f. Blumenthal 2013).[12] This was the start of a period which was much more unpropitious for the issue of any work which contravened or attempted to "accommodate" Scripture.

It is not clear at what point during the colloquy Christoph Prusius departed from Regensburg. If it was after 4 May, then Rheticus may have been economical in the details that he relayed to Paul Eber in this particular letter, saving the remainder for his later letter. However before Christoph Prusius's departure, Melanchthon clearly already foresaw that the colloquy would be a failure and that there would likely be major consequences, not least involving the inappropriateness of attempts by those other than the Protestant and Catholic hierarchies to accommodate scripture to natural knowledge. This then offers an explanation why Rheticus's *Treatise* was not issued, and why Copernicus took care to avoid any reference to the divergence of the heliocentric theory from scripture in the publication manuscript of *De revolutionibus*.

To explain why Copernicus added the new Preface in June 1542, it is useful to explore how the Regensburg colloquy and its political aftermath affected the conditions governing the censorship of books in Nuremberg.

Any work published in the Empire was subject to the Imperial Edicts on censorship, which commenced in 1521 with the Edict of Worms aimed at curbing publication of Luther's works as well as any work that criticized Catholic clergy or beliefs (e.g. Müller 1959, 74-75; Putnam 1906, 105-6). These Edicts were to be implemented by local officials in each territory, although after 1530 there was legal provision for central investigation and punishment of territories which were judged to be negligent with regard to this duty, under the control of the two Imperial central bodies which were moved to Nuremberg in 1522.[13]

There were several factors which conditioned the varying difficulties that a censor faced in an Imperial Free City such as Nuremberg. A continuing potential problem for these cities was maintaining their independence from control by the local territorial princes,[14] whose main issue in turn was maintaining their degree of independence from control by the Emperor. Partly as a result Nuremberg, like several other Imperial free cities, had a tradition of strong links with the Emperors,

who had granted the city's vital trading powers and rights.[15] New problems as well as opportunities for the cities were introduced by the Reformation, which involved religious and social ideas which had drastic advantages for lay people and for some secular authorities,[16] and which rapidly became very popular in many areas of Germany including Nuremberg.[17] The promotion of the Reformation involved a revolution in the production of printed pamphlets, of which the average number produced per year from 1520 to 1526 was 55 times greater than during 1517 (Köhler 1986, 155; Edwards 2005, 21), with a consequent financial bonanza for printers in Protestant towns and major losses for printers in any Catholic town where the production of Protestant literature was forbidden.[18] It was important that the censors disrupted this trade as little as possible (Creasman 2012, 35), not least because printers under pressure from censors in one territory could easily move their operations to a more hospitable territory (Kapp 1886). One problem for censors was that they were usually unpaid for the task and had other occupations, and there was a large volume of work to be assessed, so their assessments could be cursory.[19]

However, the major problems and uncertainties for the censors, and also for the city councils and the territorial princes, were caused by the Emperor. Charles V had a greater income but more widely spread territories and more diverse political issues than any other European monarch and than previous Emperors, and his potential power and actions were therefore unusually difficult to predict. Charles took his supposed duty as protector of the Catholic Church seriously, but there were long periods when Charles was not in Germany. Nuremberg made a show of responding to the Edict of Worms for a few years, but despite the presence in the town of the two Imperial central bodies the city council actually disobeyed the Edict by appointing Protestant officials who would selectively ignore the Edict in the confessional and trading interests of the city's population.[20] Censorship in the city after 1521 was initially undertaken by one of the Nuremberg's leading Protestants, the secretary to the city council, Lazarus Spengler (Grimm 1978), and it was during Charles's absence from Germany 1521-1530 that Nuremberg disobeyed the Emperor further by becoming Lutheran. However the city's strategy would become doubly risky if the Emperor was in Germany and was able to crush any Protestant opposition with military force. The city's anxiety when Charles was in Germany between

May and December 1530, presiding over the Diet of Augsburg which was intended to deal with the Protestant issues, is shown in that the city established an ad-hoc postal system between Augsburg and Nuremberg with relays of horses, so that news from the Diet could be brought to the city in two days (ibid., 145). However, the Turks attacked Vienna in 1532 and Charles was helped by the Protestants, who were then left free to order religious affairs on their own territories while Charles was again absent from Germany. After 1532 the task of dealing with the Imperial edicts on censorship was easier for a time. After Spengler's death there were several persons in Nuremberg who could be asked to censor books, but in practice by 1541 one person was always mentioned as performing this task, the former Abbott of St. Egidius who had become a leading Protestant, Friedrich Pistorius (Müller 1959).

All these uncertainties produced risks for the printers. Some of the most attractive and saleable works were those against the Papal and Imperial authorities, but printers generally operated under debt in order to fund the printing of works (Creasman 2012, 36-37) and the prohibition of a work was financially distressing if not disastrous. So the punishments meted out by the city authorities did not need to be severe in themselves – they might simply involve a caution, or in bad cases a few weeks in the city prison (ibid., 66) – the real punishment was financial. Additionally, it proved to be impossible to predict the city's attitude in advance. For example, in 1523 before the city had become officially Lutheran, Hans Sachs published his poem *The Wittenberg Nightingale*, which involved unrestrained and acid invective against the Pope and Catholic clergy, without official complaint (Strauss 1966, 166-168). However in 1527 when Nuremberg was Lutheran, Sachs produced rhymes for the publication of a medieval prophecy foretelling the doom of the Papacy, with an introduction by Andreas Osiander, and the pamphlet was confiscated by the city council, who scolded Osiander and forbade Sachs from publishing any rhymes in the future, because the city council feared antagonizing the Emperor (Creasman 2012, 76-78).

The risk to Protestant German cities, censors, and printers increased as a result of the Emperor's truce with France in 1538, the setting up of the Catholic league of German princes at a meeting in Nuremberg in 1538, and the failed Protestant-Catholic colloquies in 1540-1541. After the Regensburg colloquy and Diet, Nuremberg was apprehensive and ready to make further concessions

to the Emperor.[21] No-one now knew what the Emperor would decide to do, so Friedrich Pistorius and the Nuremberg authorities had reason to be unusually sensitive to works that could be construed as contravening the Emperor's Edicts by contravening scripture.

Equally in the continuing situation of uncertainty, Copernicus and Rheticus had no way of knowing in advance what problems there would be with the censor regarding *De revolutionibus*, and what solutions would be acceptable. Would a version of the book without any reference to Scripture be acceptable? If the letter from Cardinal Nikolaus von Schönberg were used, or if *De revolutionibus* were apparently dedicated to the Pope, would these matters be acceptable in Nuremberg or would they tend to alienate the potential Protestant readership?

When Rheticus arrived in Nuremberg on 11 May 1542, the printer Petreius was ready to start, and apparently Rheticus was making his first corrections to the printer's proof sheets at the end of May (Burmeister 1968, 1:77). The book must have gone to the Nuremberg censor in the usual fashion, and the majority of the book must therefore have been accepted by him for printing very quickly. Nevertheless the Preface was composed, according to Gasser's note, in June 1542. This time-scale would allow for negotiations between Rheticus and the censor and the journey of a messenger from Nuremberg to Frauenburg, although this is not the only possible inference.

In the aftermath of the Regensburg colloquy, Copernicus faced a more difficult task than has been assumed in some of the literature. It was simply not possible that the new theory which contravened some verses of scripture, literally understood, would be fully acceptable within either the Catholic or Protestant churches. What was he actually aiming to achieve? One formulation would be that Copernicus's needs were to get his theory and its accompanying models widely known by people who would use at least parts of them and take them into account. On that basis, he needed to provide some reassurance for the Nuremberg censor, for Petrieus and for prospective purchasers, all of which would involve countering or at least deflecting the objections that could be expected from theologians, without "accommodation."

This paper investigates whether additional extant documents can provide some components of explanations concerning the material in the Preface that specifically relates to the Papacy and to the

issues with scripture. Copernicus's suggestion that Warmia was "at the remotest corner of the earth" was a rhetorical phrase that could give a misleading impression, in that there had been frequent contacts between Warmia and the Papacy, and the Papacy's influence on Warmia had been crucial on many occasions. We have some detailed records which are relevant to Warmian diplomacy with the Papacy that was vital to the future of the Prince-Bishopric, dating from the period when Copernicus was assistant to his uncle Lucas Watzenrode. After an investigation into these documents, a small number have been selected which illuminate some general ways in which the Papacy operated. The next two sections set out short summaries of these selected records, of their documentary contexts, and of their implications.

Warmian Diplomatic Precedents: Cardinal Marko Barbo's 1489 Report

The 1489 report by Cardinal Marko Barbo[22] on the dispute between Copernicus's uncle and the Polish King over Lucas's election to the Prince-Bishopric was illuminating concerning how the Papacy proceeded, in several general ways.[23]

Although the Papacy was an ecclesio-political organization, the concerns at the highest levels in the hierarchy tended to be predominantly political. In the Cardinal's report, the prime consideration for the Papacy was its own interests, and religion was used as no more than a fund of useful pejorative phrases –it would be a "sin against God and man" to judge in favor of the supplicant whose proposal happened to be less in the Papacy's political interests (Lewicki, 1891, 354).

The Cardinal's report favored the supplicants that had made the best case to be Papal clients and to be acting in the Papacy's overall interests. Lucas Watzenrode had gone to Rome in 1488 (Schmauch 1933b, 69), specifically in order to be able to influence the judgment on his case, and he was supported by the Teutonic Order, who kept a permanent general procurator in Rome in order to report on and to influence Papal policy (Urban 1978). Warmia had originally (under the name Ermland) been part of the state of the Teutonic Order in Prussia, which was taken under Papal protection almost at its inception.[24] The Bishopric of Ermland had been demarcated by one Papal

legate,[25] the semi-independence of the Bishopric was initiated by the next Papal legate,[26] and the existence of Ermland was saved during the Thirteen Year's War (Röhrich 1897) with the aid of Pius II[27] who confirmed that Ermland was subject only to the Pope,[28] so that the Prince-Bishopric was clearly a Papal client. Although Poland was also a client state of the Papacy and had begun paying "Peter's pence" to the Papacy around 990 (Maschke 1979), Poland had to some extent supplanted Papal influence in Prussia in 1466[29] by taking over the western part of the Order's state and Ermland (which was renamed Warmia). This was the start of a long struggle over the appointment of the Warmian Prince-Bishops (Sikorski 1978, 186) during which the Chapter's nominees were generally supported by the Papacy against the Polish King's nominees,[30] and the Cardinal's report continued this process.

The report spent as much time as possible on considerations that were favorable to Warmia. It started by swamping the case with a preliminary listing of virtually all the major instances of Papal involvement in Warmia (and Prussia), emphasizing Papal favor for Warmia, and disregarding the complete irrelevance of many of these events[31] to the case that was now at issue.

Marko Barbo referred only late on to the King's case, and as minimally as possible to its strong points. He argued that the Peace of 1466 did not apply to Warmia which was *sedi apostolice subiecta,* and referred only implicitly to the 1479 Treaty of Piotrków[32] as an agreement made under duress by the Bishop and Chapter which he viewed as null and void (Lewicki 1891, 354).

The wording of the judgment was unequivocal: the Cardinal judged that the King's proposal for the Bishopric to be given to his son Fryderyk

> would confirm and continue the oppression of the church of Warmia and of its towns, and is contrary to its granted immunities and to the peaceful conservation of law; it appears to be contrary to divine and human justice. What could be said in favor of the King, is contrary to the liberties of the church and contrary to the Teutonic Order, would add to all oppressions with new iniquities, as the detestable Peace [of 1466], and would reduce to poverty the Bishop and Chapter and their subjects ... If we grant the King's request, we will sin in the sight of God and

> man, ... and we will canonize the detestable Peace to the lasting prejudice of the clergy and the Order, and so on. (Ibid., 354)

Both these Papal tactics and the nature and tone of the overall judgment were noteworthy, and they were only one part of the information about diplomacy with the Papacy that was available to Copernicus. He was at one stage a direct participant in a later conflict in which the Papacy was involved at several stages.

Warmian Diplomatic Precedents: The Supplications in the "Privileges Dispute"

Three very noteworthy supplications to the Papacy were made during the "privileges conflict" which was started by Lucas Watzenrode against the Teutonic Order in 1493. Unusually, we know that Copernicus was involved at a crucial stage in the 'privileges conflict' because he co-signed one of the documents during the dispute in February 1496, in which Lucas's secretary Georg Prange was authorized "for leading the [legal] process with [Johann von Tiefen] the Grand Master of the Teutonic Order, before Georg Tapiau, the Dean of Sambia" (Biskup 1973, doc. 25). The privileges conflict was recorded in the *Memoriale* for Lucas Watzenrode which was being written up progressively during his lifetime, and was a succinct source on the conflict that was available[33] when Copernicus returned to Heilsberg (Lidzbark Warmiński) after his period at the Jagiellonian University in Kraków (Blumenthal 2014). In March 1496, Lucas sent Prange to Rome with his appeal against the Order (Deusterwald et al. 1889, 45) and it has been proposed that Copernicus traveled with Prange as far as Bologna.[34]

In spring 1494 the Grand Master of the Order made a supplication to the Pope in the matter (ibid., 36-39). The Order's supplication relied almost entirely on Papal Bulls from the thirteenth century which gave the Order privileges which the Order had taken exceptional care to preserve and have renewed (Urban 1978). The case started with Alexander IV's Bull *Cum vos tanquam*,[35] which specifically forbade excommunication of Order personnel "in consideration of the assiduous service which [the Knights] devote fervently to God in overseas lands in defense of the good name of

Christians." The case continued with Honorius III's version of the other type of Papal Bull that forbade excommunication of the Order, *Cum dilecti filii*.[36] This ordered Bishops that, since the Knights "have no Bishop nor prelate except the Roman Pontiff and they enjoy the special prerogative of freedom, it is not right for you without our command to promulgate the sentence of interdict or excommunication against them." This Bull pre-dated the foundation of the separate Prussian Bishoprics, so the case also included the re-issue of *Cum dilecti filii* by Clement IV, dated 8 June 1265.[37]

In the *Memoriale,* the Order's supplication was followed by Lucas's own supplication to the Pope (Deusterwald et al. 1889, 39-41). This is particularly noteworthy for two reasons, the first being that Lucas's case was constructed without the aid of any documents to oppose those produced by the Order. Lucas firstly stated that the privilege had never been in use in the documents of the Diocese in living memory, and then that under it the Knights

> presume to perpetrate many unlawful things, … judging matrimonial cases at any time, committing manual violence against clergy, … obstructing and bringing to nothing the paying of tithes to the same priests and other ecclesiastical causes and personnel, … summoning priests and laymen … and judging the cases and injuries … and … ordering the same priests and laymen, that they do not obey the summons of their said Bishop.[38]

In addition, after the death of rectors of parochial churches the Knights removed the valuables, thus reducing the revenues to such an extent that it was difficult to find new clergy, even if the revenues of two churches were combined. "However, Holy Father, the said privilege has been granted in the most ancient times, and it appears from its tenor, while the aforesaid brethren were fighting in the defence of the faith in overseas lands, whereas some time ago the said brethren apparently have ceased to fight in all lands." The *Memoriale* suggests that so far, Watzenrode was judged by the Curia to have won the argument.[39]

The second main reason why this supplication was noteworthy is that the explicit argument was minor compared to the unstated implications. It appears to have been in September 1494[40] that the Knights became aware that Lucas's pressure concerning their current lack of fulfilment of their

original crusading function was associated with a plan that they should be transferred to Podolia to crusade against the Turks.[41] In the aftermath, in late 1495 the Grand Master bribed the Curia[42] and obtained a mandate[43] requiring Lucas to present his case against the Order before a tribunal adjudicated by a prelate in the Order's territory.[44]

This was a crisis and Copernicus's documented involvement at this stage has already been noted. Lucas's 1496 appeal to the Papacy (Arbusow 1900, doc. 422) argued that the Order made it impossible for the Bishop to exercise his jurisdiction in the greater part of the Diocese, on the grounds of their privileges. Lucas quoted the section of *Cum vos tanquam* that forbade excommunication of the Order's members and lay personnel. Lucas claimed that the Order had completely altered its conduct since the time that the privileges were granted, and knightly virtues, spiritual life and medical expertise had long since ceased to be found among its members. He alleged that the Order's oratories were deserted, and the Order rotted in idleness and served only vanity. It no longer had the slightest reverence for the Catholic Church, but turned its weapons against prelates, in order to overpower and rob them. It handled the Bishops of its own territory with the greatest contempt, as base drudges. In 1470 the Order imprisoned Bishop Dietrich von Cuba of Samland and cruelly beat him to death. They then took Archbishop Sylvester Stodewäscher of Riga and held him captive, which led to his death (in 1479). They also cruelly thrust the Provost of Riga in captivity, where he died. They imprisoned many other canons, and some had died. The Order had robbed the Riga Diocese of many territories, goods and entitlements. They had usurped the Cathedral church of Kulm (Chelmno) and robbed it of the greatest part of its goods (and so on). Lucas now humbly begged the Holy Father, that the Warmian church, which was directly subject to the Apostolic See, could be freed from the dreadful power of the Teutonic Order. Towards this end Lucas begged the Pope to put all pending matters between Warmia and the Order to the Papal arbitrator Antonio Flores. Lucas claimed that the Brothers of the Order were the most biting calumniators and the bitterest plotters (ibid.), which was no doubt exactly what they would have claimed about him. However, this appeal seems to have been effective in turning round the effect of the Grand Master's 1495 initiative, and in maintaining a stalemate in the process at Rome.

The following general aspects of the conflict and the documents in the conflict were noteworthy: it was entirely possible to win a case, or at least to stalemate a case, when the documentation was in favor of an opponent, provided that the argument could be successfully presented that the documentation was out of date and/or no longer applied in a new situation. If the documentation favored the Papacy or a Papal client, it was necessary to show that the ways in which the documentation was out of date or did not apply in a new situation were against the interests of the Papacy or of a Papal client. Where the most general aims that were behind a specific argument were even more controversial than the actual argument, it made sense to leave the general aims unstated. A straightforward presentation of a case could be more effective than a case which was loaded down with pejorative language throughout. Lucas's 1494 supplication was more straightforward and more specific than his 1496 supplication. The 1496 supplication had worse initial conditions to deal with, in that it needed to secure the reversal of an existing Curia decision which had been obtained through bribery, and so perhaps attaining a stalemate was a big success in the circumstances, but in retrospect the 1494 supplication seems the more convincing of the two.

These general points about diplomacy with the Papacy add to those that have been presented in the previous section. However, the interests, policies, and capabilities of the Pope and the Curia varied over time, and so the canons of the Warmian Chapter including Copernicus needed to keep themselves updated, and how they did this will now be briefly explored.

Copernicus's Contacts in Rome

There is considerable information in the existing literature concerning contacts between Rome and Copernicus, but it is scattered among several documents. This section very briefly summarizes this existing information. Several people with whom Copernicus was friendly and who knew of his astronomical interests and expertise were residents in Rome for long periods.[45]

During Copernicus's time in Bologna in 1499 he is known to have made contact with Bernard Sculteti, the newly-appointed Warmian Dean.[46] It has been inferred that he met Copernicus in early

April 1500 when Copernicus travelled to Rome, and that it was he who arranged the lecture that Copernicus is said to have given on astronomy in Rome (Borawska 1972).

Copernicus was apparently contacted in 1505-6 by his friend Bernard Wapowski had who become *cubicularius* to Julius II (Birkenmajer 1901, 160-2, and Szujski 1874, ix-x). Wapowski visited Poland in 1509-10, and it has been inferred that he received a copy of the *Commentariolus* from Copernicus during this visit (Birkenmajer [1953b] 1972, 587). After Wapowski's return to Rome, Julius II decided to set up the Fifth Lateran Council. Paul of Middelburg now made his first approach concerning the inclusion on the Council's agenda of the matter of calendar reform, and Wapowski was in a position in which he could give Copernicus early news of this.

In 1513 Bernard Sculteti became chaplain, chamberlain, and secretary to Leo X (Jänig 1875, 87; Freytag 1900, 78),[47] and managed to be appointed as secretary to Paul of Middelburg's committee on calendar reform.[48] Bernard Sculteti's involvement in Paul's invitation to Copernicus is known in that Paul's letter to Copernicus stated that it included a letter from Bernard Sculteti (Prowe 1883, 1:2:69-70; Biskup 1973, doc. 86; Kühne 1994, 10-11). He was in a position to send detailed news of the committee and of the Council's deliberations to Copernicus, including that calendar reform was not dealt with at the final session of the Fifth Lateran Council, because there was still insufficient agreement about how to amend the calendar.

In the 1520s the most noteworthy Warmian canon who was at some points in Rome was Alexander Sculteti,[49] who became another of Copernicus's friends, but during this period the Papal agendas were dominated by the conflict between Francis I of France and Emperor Charles V, leading up to the coronation of Charles V in Bologna in 1530. Alexander returned to Frauenburg to act as Chancellor of the Chapter in 1530.

Papal interest in astronomy and in the calendar issue revived in the 1530s. The link between Alexander Sculteti and Johann Albrecht Widmanstetter, who gave the lecture on Copernicus's theory to Clement VII in 1533, was Nikolaus von Schönberg.[50] All of these also had links to Dietrich von Reden, who was mentioned in von Schönberg's 1536 letter to Copernicus as the proposed intermediary. Von Reden had been employed since 1525 as Ducal Prussia's representative in Rome,[51]

and after his appointment as a canon of Warmia in 1532 he also became the main Warmian contact in Rome and the provider of information on the Papacy to Warmia, and continued in this role during the remainder of Copernicus's life.[52] Von Reden spent much of 1534 in Warmia. Copernicus's will appointed von Reden as one of his executors. Von Reden was in a position to give Copernicus news on Widmanstetter's lecture, on the current degree of interest in the calendar reform issue, on the renewed rivalry between Bishop Giberti and Cardinal von Schönberg, and on the revival of interest in the homocentric view, especially via Fracastoro's *Homocentrica* (cf. Granada and Tessicini 2005).

All this brings out a pattern of a continuing if sometimes intermittent Warmian presence in Rome, and a flow of information about the Papacy to Warmia. There was a particularly noteworthy presence of (at least one of) Copernicus's friends in Rome during 1505-17 and during most of 1532-43. The existing documents give glimpses of the contacts between Bernard Sculteti and Copernicus, and between Dietrich von Reden and Copernicus, on astronomical matters.

Copernicus's Eventual Publication Strategy in the Contexts of Imperial and Papal Censorship and of Warmian Diplomatic Precedents

As already noted, the questions that are being investigated in this paper do not deal directly with the scientific content of the Preface, nor in most cases with matters where some additional clarity has already been provided by previous studies (Westman 1990; Granada and Tessicini 2005; Lerner, Segonds and Verdet 2015), but relate to additional aspects of the context of Copernicus's science. Some explanations have already been proposed for the following questions: why Rheticus's *Treatise* was not published, why Copernicus wrote the new Preface in June 1542, and why he completely avoided the technique of "accommodation," in the introduction and the second section. Later events showed that it had been prudent to avoid "accommodation."[53] This section will propose some components of explanations concerning the remaining questions that were posed in the introduction, explanations that draw on the documents discussed in the previous sections.[54]

Why did Copernicus apparently dedicate the book to Pope Paul III when the central theme of the book contravened the literal meaning of some verses of scripture? Copernicus's own first

explanation was that this was "in order that the unlearned as well as the learned might see that I was not seeking to flee from the judgement of any man" (Copernicus 1543, 7). However, as has already been seen, the Preface was only adopted by Copernicus as a last resort, and drawing attention to a work which contradicted scripture was inevitably dangerous. Copernicus's second suggestion was that the Pope could "provide a guard against the bites of slanderers" (ibid.), but Granada and Tessicini have already identified that the request for protection was a standard rhetorical device in dedicatory prefaces, and the same applies to supplications (Granada and Tessicini 2005, 438). In view of the scriptural issues with his book, Copernicus's suggestion could reasonably have been regarded by specialist theologians as outrageous.[55] One explanation for why the request for protection was actually included in the Preface is that in the rhetoric of supplication an overt request could differ radically from the supplicant's actual aims. For example, Lucas Watzenrode's 1496 request to be "freed from the dreadful power of the Teutonic Order" differed from his actual aim which was much more limited and was explicitly stated – to have his case put to a specific Curia arbitrator. Lucas's real aim in the 1494 supplication was not explicitly stated, and it is proposed that this was the case with the Preface. One component of the explanation is that in order to reassure the Nuremberg authorities and prospective purchasers such as the abbots of provincial monasteries, a dedication to the Pope had become effectively necessary, even though this effectively involved a gamble. Another component is given in the explanation relating to the next question.

Why did Copernicus include the letter from the deceased Cardinal Nicolaus von Schönberg (Copernicus [1543] 1978, xvii)? The explanation was that in any supplication, or proposal for reform, to the Papacy, it was highly desirable to be or to appear to be a Papal client and acting in conjunction with or on behalf of Papal personnel or of persons who were in good favor with the Papacy. This was a very general lesson that could have been derived from a variety of experiences of dealing with the Papacy, but it was derivable from Marko Barbo's report. In the event of any question, the intermediary between Copernicus and Nicolaus von Schönberg, Dietrich von Reden, was still in Rome and might be relied on to support Copernicus.

Why did Copernicus estimate that he could deal with the risks involved in a dedication to the Pope when his work contravened some items of scripture? The scriptural documentation was explicit and Copernicus had no equivalent opposing documentation. More usual estimations of the case would suggest that Copernicus had no hope of achieving a way of presenting his case in such a fashion as to deal with the scriptural documentation while at the same time suggesting that he was acting in the interests of the Papacy. So Copernicus's actual procedure ran counter to usual common sense in this respect. However, one part of an explanation is that he had already had experience of a precedent in a case constructed without the aid of any documents that had been successful against an opponent's documented case, that is, Lucas's 1494 supplication against the Order.

Why did he emphasize the apparent physical issues concerning the heliocentric theory? Copernicus started the Preface by recognizing that his theory would be considered absurd "by those who know that the opinion that the earth rests immovable in the middle of the heavens as if their center had been confirmed by the judgements of many ages" (Copernicus 1543, 4), but he then demonstrated that any alternative available theories had great disadvantages, including that of incoherence, and he went on to set out the relative advantages of his own theory. The physical issues had the advantage, in a document addressed to the Pope, that they were not explicitly scriptural issues. Swamping a case with relatively favorable points was a standard rhetorical technique and could also have been due to common sense, but Marko Barbo's report was a particularly noteworthy example.

Why did Copernicus credit the Pope with mathematical abilities? He said that the Pope was "held to be most eminent both in the dignity of your order and in your love of letters and even of mathematics" (Copernicus 1543, 7).[56] Some important points on this matter have been made by Lerner, Segonds and Verdet (2015). In addition in this way, Copernicus explicitly excluded the Pope from the category of persons who would not understand his work, and included him among those who would understand that Copernicus's labors "will be seen to contribute" to the reform of the Ecclesiastical Calendar, concerning which no decision had been reached under Leo X. This item promoted Copernicus's case to be seen as working with the Papacy and in its best interests, which was a tactical lesson that could have been derived from Marko Barbo's report, or from other experience of

dealing with the Papacy. Praise of the Pope coupled with criticism of the views of lower-ranked clerics was a normal technique in proposals for reform. However, it is noteworthy that explicitly praising the Pope's abilities and excluding him from those who were criticized, is a feature that distinguished Copernicus's Preface from Galileo's *Dialogue Concerning the Two Chief World Systems*, in which Galileo put Pope Urban VIII's argument into the mouth of his character Simplicio.

Why did Copernicus deal with the scriptural issues only obliquely and towards the end of the Preface? He completely avoided admitting that the heliocentric theory was contrary to the literal meaning of some verses of scripture. At the start of the last paragraph he suddenly changed the tone by talking of "babblers" who might attack his work by "shamelessly distorting the sense of some passage in Holy Writ" (Copernicus 1543, 7). One possible beneficial result was that casual readers might stop attending to the Preface before reaching the last paragraph, or might suppose that the first half of the last paragraph was a small anomaly within a document that was benign in Papal terms, rather than a crucial anomaly. Also, while concealing difficult issues as far as possible would not have been a good technique in a dedicatory letter to a patron, it was relatively usual practice in a supplication. Nevertheless, identifying the problem obliquely with the suggestion about shameless distortion was unusual. One noteworthy precedent that had some general similarities to this tactic, was that Cardinal Marko Barbo had avoided directly referring to the Treaty of Piotrków, which was the strongest matter in the opposing case, but near the end of his report had castigated arrangements made under duress.

Why did Copernicus only mention Lactantius among previous Christian figures and why did he stress that non-mathematicians would not understand the work? "For it is not unknown that Lactantius, otherwise a distinguished writer but hardly a mathematician, speaks in an utterly childish fashion concerning the shape of the earth, when he laughs at those who have affirmed that the earth has the shape of a globe. ... Mathematics is written for mathematicians" (ibid.). This would have been out of place in a dedicatory preface to the Pope, and was questionable in a supplication. This was the actual core of Copernicus's case – and it was nothing like Erasmian gentle persuasion or usual emollient diplomacy, it was hard-nosed diplomatic bargaining of a sort to which Copernicus had been

accustomed during his experience with Lucas Watzenrode and his participation in sessions of the Royal Prussian Estates. As a piece of bargaining, it relied on a lesson that could have been taken from Cardinal Marko Barbo's report or from other aspects of Papal history, which was that the prime consideration for the Papacy was its own interests, which had the consequence that some religious details could be of secondary importance, while it was potentially of greater importance that the Papacy avoided looking clearly ridiculous due to failing to appreciate natural knowledge. The tactic also relied on the theologians in the Curia lacking sufficient mathematical ability and technical knowledge about astronomy[57] to assess fully whether or not the Papacy would be made to look ridiculous if it banned Copernicus's book, and this would have been a significant gamble if Copernicus had not been updated by Dietrich von Reden concerning the current capabilities of the Curia and of the experts on which the Curia could call. This was a tactic that would not have been suggested by ordinary common sense.

Why did Copernicus suddenly, and only towards the end of the Preface, use pejorative language – "babblers" – about clerics who did not understand mathematics? He stated that "they worry me so little that I shall even scorn their judgements as foolhardy" (ibid.). One parallel is that towards the end of Marko Barbo's report he described the 1466 Peace as "detestable." Copernicus avoided the more pejorative approach of the ending of Marko Barbo's report and of Lucas Watzenrode's 1496 supplication.

Why did Petreius and Osiander add the *Ad lectorem* after Rheticus left Nuremberg in late 1542? One possibility is that the tactic of putting all the favorable material at the beginning, including Nicolaus von Schönberg's letter and the dedication to the Pope, and putting the contentious material in the last paragraph, which resembled the structure of Marko Barbo's report, had been sufficient to reassure the censor which in turn had reassured Petreius, but did not reassure Osiander when he took over the supervision of the work.

How did the Preface affect contemporary and later reactions to *De revolutionibus*? This is now generally well documented in the secondary literature. The only set of documents that illustrates this in some detail is the set concerning Francesco Ingoli's involvement with *De revolutionibus*. His

initial adverse reaction was given in his *De situ et quiete terrae contra systema copernicanum disputatio*, in view of which he was then appointed by the Congregation of the Index, probably soon after 1 March 1616, to prepare the report on matters which should be corrected in *De revolutionibus*. However, he then took two years to prepare the report, which was issued on 2 April 1618. The most likely inference is that, once the reputation of the Papacy was in his hands and he took full account of the last paragraph of the Preface, he began to realize that his understanding of the mathematics was insufficient[58] to determine to what extent the banning of Copernicus's theory could make the Papacy, and himself, look ridiculous. His report[59] involved what can be called weak excuses[60] and generally minor corrections, although he recommended that the first half of the last paragraph of the Preface concerning "babblers," Lactantius, and the warning that "mathematics is written for mathematicians" was to be eliminated. The prohibition of the book pending correction effectively resulted in good publicity for the book and in the printing in Amsterdam in 1617 of the third edition, while it has been identified that only twelve percent of the currently known copies of *De revolutionibus* had been censored, all of which had been in Italy (Gingerich 1993, 282-4). However, the considerations in the current paper give some explanation for how Copernicus influenced this process.

How has the Preface affected historians' reactions to *De revolutionibus*? The reactions to the Preface, and to the general lack of information about its context, have been extraordinarily various, and the following examples are only a tiny sample. In 1588, Bernardino Baldi wrongly claimed that "Schönberg had Copernicus's work ... [and] showed it to the Pope, by whose judgement it was approved" (Biliński 1973, 21; Rosen 1975, 535; Kühne and Kirschner 2004, 19). When Beckmann responded to Apelt,[61] he echoed Baldi by stating that "the Pope personally sanctioned the work's dedication to himself" and also exaggeratedly claimed that "cardinals, bishops and canons forwarded the work" (Beckmann 1861-3, 354). It was Rosen (1975) who gave the death-blow to the inaccurate view that the Pope had sanctioned the work. More accurately, Kuhn noted that "the resulting clamor [against Copernicus's theory] was widespread, vocal and bitter. But the clamor was slow in starting" (Kuhn 1957, 188). Kuhn rightly noted that "before the middle of the sixteenth century the history of Christianity offers few precedents for the rigidity with which the official leaders of major religious

groups applied the literal text of scripture to suppress a scientific and cosmological theory," but did not identify why that happened when it did (ibid., 195). Kuhn rightly noted that "it was impossible to suppress the work completely, particularly because it was in a printed book" (ibid., 185), but did not note that the Preface had been a late addition which correlated with the aim of securing the publication and sale of the book.

A theme in the historiography from which this paper has differed is the idea that the lack of major official Catholic opposition to Copernicus's work for sixty years was not due to *De revolutionibus* and in particular its front matter. This paper has proposed by contrast that the lack of official Catholic opposition for sixty years, together with the tendency of the historiography to assume that there was an enthusiastic Catholic response or at least no serious Catholic opposition, were at least partly due to Copernicus's work. The turning point in Catholic policy on controversial literature happened in 1541-3, not in 1616 or 1633, and this paper proposes that at least some of the reasons for the dissemination of *De revolutionibus* in the Catholic territories count as part of Copernicus's extraordinary achievement.

However, it is proper to note some caveats. As with any work on Copernicus, this paper has been constricted by the small number of contemporary documents that have survived, and we do not know to what extent they were representative. It is always possible that additional documents will be identified or unearthed that will show matters under different lights, and that new work in the field will do the same. The correlations that have been proposed between aspects of the Preface and the diplomatic documents that have been discussed in previous sections are clearly not the only possibilities, and some other possibilities have been discussed. Nevertheless, the correlations that have been proposed in this section and in the second section, offer some additional explanations for aspects of the Preface which have so far been less fully explained. However as usual, the information in this paper is presented in the expectation that scholars will form their own interpretations.

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[1] One central position is noted by Kuhn, who followed several commentators of Copernicus's own time in stating that the book was "the first European astronomical text that could rival the *Almagest* in depth and completeness" (Kuhn 1957, 185).

[2] One expression of this was by Kuhn, who stated that "few aspects of Western thought were long unaffected by the consequences of Copernicus's work" (Kuhn 1957, 143), and also said that "Copernicanism was potentially destructive of an entire fabric of thought ... it required a transformation in man's view of his relation to God and of the bases of his morality" (ibid., 192-9)

[3] One good concise and more detailed account is given in Gingerich and MacLachlan (2004).

[4] This information has been supplemented by additional re-constructions by Swerdlow (1973); Goldstein (2002); Goddu (2006 and 2010); and others.

[5] Kuhn pondered that "before the middle of the sixteenth century the history of Christianity offers few precedents for the rigidity with which the official leaders of major religious groups applied the literal text of scripture to suppress a scientific and cosmological theory" (Kuhn 1957, 195), but did not provide an explanation. Kuhn suggested that the events of 1616 and 1633 marked a turning point for the Catholic church, when accommodation ceased to be applied (ibid., 197) – but as Augustijn (1993), noted, the Regensburg colloquy marked the major turning point, and one of the consequences was that both Catholics and Protestants became more officially rigid in the interpretation of scripture.

[6] The documents referred to in these sections have been listed or transcribed in publications and are based on originals which are now mainly in the Geheimes Staatsarchiv Preussicher Kulturbesitz in Berlin or in the Diocesan Archive in Olsztyn. There are four main storage systems for the archives of the Teutonic Order that were formerly held in Königsberg. The Pergament-Urkunden are catalogued in Joachim and Hubatsch (1948a), and comprehensive transcriptions of the earliest documents of the diplomatic history of the Knights were published in Phillipi (1882) and Seraphim (1909). Transcriptions of many of the relevant Papal Bulls were published in Strehlke (1869). The Ordensbriefarchiv is catalogued in Joachim and Hubatsch (1948b, 1950, and 1973). An overview concerning the archives of the Teutonic Order in Prussia is given in Sarnowsky (2001). Some other important documents have been transcribed in other collections, including Arbusow (1900) and Lewicki (1891). A useful collection including transcriptions of documents in other archives of the Teutonic

Order is Hennes (1845). The earliest diplomatic history of Warmia is catalogued and transcribed in Woelky and Saage (1860) and Woelky (1866). Two volumes of *Scriptores Rerum Warmiensium* were published by Woelky and Saage (1866) and by Woelky (1889). An overview of the publication of source material on the history of Warmia is given in Szorc (2007). Some information concerning Copernicus's experience of diplomacy with the Papacy was previously given in Blumenthal (2013).

[7] There was usually at least one and sometimes several of the sixteen Warmian canons in Rome or north Italy during Copernicus's lifetime. Górski, (1976, 131), noted five canons as being in Rome in 1512; Kolberg, (1903, 290), stated that three or four of the canons were already in Rome at the start of the 1520 war.

[8] The original passage is "librum propositum ab imperatoris delectis et continentem σοφιστικὰς διαλλαγάς percursum ac redditum esse a delectis imperatoris adiectis in margine censuris morum. Quid iam facturus sit imperator nescimus. Praeceptor satis commode valet et multa scribit". (Burmeister 1968, 3:27; c.f. Rosen (1970); Burmeister (1970b); Kraai (2003, 120). In the Oxford Latin Dictionary, translation 5d for proponere is "to hold up as a model or example" which fits better than previous translations, given Burmeister's identification of the book concerned.

[9] He noted that in 1538 Rheticus would have been in Wittenberg and would not have needed to write a letter to a friend in Wittenberg. Rheticus's postscript refers to a greeting to Paul Eber from Andreas, and it is known that Andreas Aurifaber was in Prussia at this time.

[10] For example, on 2 June 1538 the Emperor was in Villefranche-sur-mer; he had been away from Germany since 1532 and would not return until early 1541 (e.g. Tyler 1956, 331-336).

[11] As the Emperor complained to Cardinal Contarini during an icy audience on 10 July 1541; stated in a letter from Contarini to Cardinal Farnese on that date (Pastor 1880, 491-2).

[12] At the Council of Trent which started in 1545, it would became the official Catholic position that only the Pope and senior Catholics could "accommodate" Scripture to new theories in natural knowledge.

[13] Because the Emperor was not generally resident in Germany, the Imperial Governing Council was revived and it and the Imperial Central Court were moved to Nuremberg in 1522 (Strauss 1966). After 1530, the Court could undertake this investigation and punishment on censorship matters and the Council was authorised to direct local officials concerning censorship matters (Eisenhardt 1970).

[14] The Hohenzollern Burgraves of the territory around Nuremberg had become Electors of Brandenburg, and the most severe struggle between Nuremberg and its local territorial prince had been the First Margrave War of 1449-1452 with Elector Albrecht III Achilles.

[15] The city was one of the two main trading centres on the route between northern Germany and Italy, the other being Augsburg. By the beginning of the sixteenth century, the city's revenues were said to be greater than those of the Duchies of Bavaria. The city was one of the small handful of large population centres (that is, towns in the 20,000 – 50,000 region) in the German part of the Empire, the others being Augsburg, Cologne, Frankfurt, Magdeburg and Hamburg.

[16] For example, there was an end to the need to pay for the vast superstructure of non-productive religious functionaries including not only the Papacy and the clergy but also monks and nuns, and no need to pay Rome for the remission of sins nor to pay for prayers for the dead; the towns or territorial princes appropriated the revenues and properties of their local monasteries and nunneries.

[17] The letters of Christoph Scheurl show that he obtained Luther's ninety-five theses on indulgences as soon as they were published and circulated them in the town. Luther's friend Wenceslas Link was preaching at the Augustinian chapel from 1517 (Strauss 1966, 160-162).

[18] In 1524 the city councillors of Leipzig complained to their Duke Georg (of Ducal Saxony) that they were likely to lose their livelihoods because they were not allowed to sell the Protestant pamphlets for which there was great demand, but were condemned by their Duke to print Catholic treatises which were "desired by no-one and cannot even be given away" (Gess 1985, 1:641).

[19] In Strasbourg, officials complained that it would take years for them to read all the theological texts they were asked to censor, and they opted instead to simply read the titles. In Frankfurt the censors were often clergyman and tended to be more diligent, sometimes affirming that they had read the texts from beginning to end (Creasman 2012, 34).

[20] The City Council limited themselves to posting the Edict of Worms on the Town Hall and did nothing about collecting Luther's books, nor about prosecuting Luther's followers. New Lutheran priors and preachers were chosen for the town's two parish churches in 1521, including Andreas Osiander. The city council wrote to the Emperor saying that they had tried to obey the Edict of Worms but could not hold the line indefinitely against public clamour for reform (Strauss 1966, 163-166).

[21] A few years later Nuremberg would accept Charles's Interim after his initial victory over the Schmalkaldic League and would even reintroduce Catholic liturgy for a while (Strauss 1966, 184).

[22] Lewicki (1891, doc. 339). For a summary, see Sikorski (1978, 104-107). Also see Schmauch (1933a, 71-3) and Górski (1973b, 20). For comments, see Nowakowska (2007, 129 and 141); also Fletcher (1991, 286).

[23] Cardinal Marco Barbo's report involved crucial detailed precedents which were utilised when the Warmian Chapter including Copernicus wished to continue to defend their ability to elect their own Prince-Bishop, in the run-up to the next election, in 1509-1512, especially the argument that the Piotrków Treaty was invalid because it was made under duress (Górski 1973b, 109-112). While the Cardinal's report has been published from a copy that was retained in the Order's capital, Königsberg (Kaliningrad), it is clear that Lucas Watzenrode passed on salient details to members of the Chapter including Copernicus.

[24] Via the Golden Bull of Rieti, *Pietate proximum,* issued by Gregory IX on 3 August 1234 (Phillipi 1882, doc. 108). For Papal protection, see Blumenstok 1890 and Maschke 1979.

[25] The document was by William of Modena (Woelky and Saage 1860, 1: doc. 5), and was authorized by Innocent IV via his Bull *Hiis que per* (Phillipi 1882*,* doc. 142).

[26] Bishop Anselm of Ermland wrote the constitution of the Ermland Chapter (Woelky and Saage 1860, 1:doc. 48) which initiated the Bishopric's semi-independence (Ewald 1872-86, 3:74; Reh 1896, 127).

[27] Cardinal Piccolomini (Urban 1991; Voigt 1856) who was firstly elected as the new Prince-Bishop of Ermland and then elected as Pope. Emperor Karl IV had conferred on the Bishop of Ermland the additional title of Prince in 1357 (Woelky and Saage 1860, 2: docs. 256-7)

[28] "Ex eius fundacione nullius temporalis dominio, sed dumtaxat sedi apostolice subjecta". (Schmauch 1966, 476).

[29] Under the Second Peace of Thorn in 1466.

[30] For example, on 4 November 1468 Paul II confirmed the Chapter's choice of Prince-Bishop against the wishes of King Kazimierz, via the Bull *Hodie electionem*, PU4606 (Joachim and Hubatsch 1948).

[31] The inception of the Teutonic Order in 1190, the donation of Konrad of Masovia to the Order in 1226, the Golden Bull of Rimini given by Emperor Friedrich II to the Order, the legal process between Poland and the Order of 1321, the war of 1410 between Poland and the Order, the revolt of the Prussian League of towns against the Order and the "forcing" of Bishop Franz from his church in 1454. (Lewicki 1891*,* pp. 352-3).

[32] In 1479, Kazimierz had brought an army and required the Prince-Bishop and the Chapter to sign the Treaty of Piotrków, in which they pledged that they and their successors would in future only select candidates who were acceptable to Kazimierz or to his successors (Thunert 1896, doc. 280: treaty provision [6], at 530-1).

[33] Prange's handwriting in the *Memoriale* ceases at the entry for his departure for Rome (Deusterwald et al. 1889, 2), so we know that the work was up to date at this period.

[34] Górski 1973a, 74; Górski 1973b, 56.

[35] Alexander IV's re-issue of *Cum vos tanquam*; June 16, 1257, PU4349.

[36] The original Bull is now held in the Order's Archive in Vienna (Strehlke 1869, doc. 305). A printing of the version issued on September 7, 1257, was given in Hennes (1845, doc. 168).

[37] This is not in the Pergament-Urkunden, but the re-issue by Urban IV on October 1, 1263 is PU4423.

[38] In the Order's area the Bishops administered spiritual matters "which could only be undertaken by Bishops" (Reh 1896, 71; Woelky and Saage 1860, 1: doc.5).

[39] According to the *Memoriale*, the Cardinal-Patriarch of Alexandria ruled that the Knights should cease their action since it could only result in discredit for them (Deusterwald et al. 1889, 34).

[40] Ordensbriefarchiv 17816 and 17817.

[41] There had been several unsuccessful plans to move the Teutonic Order (e.g. Töppen 1870, 271-2). The plan was revived in 1493 by Jan Olbracht's adviser Callimachus, in association with Lucas Watzenrode.

[42] He sold the amber collection from three years, December 12, 1495, OBA17870, and a specific sum was to be sent immediately via Venice to the Order's procurator in Rome.

[43] Mandate from Antonio de Monte, November 4, 1495, OBA17864.

[44] Georg Tapiau the Dean of Samland, letter to Lucas Watzenrode dated 12 February 1496, OBA17883.

[45] Warmian representatives were usually members of Santa Maria dell'Anima, which included the hospice for German speakers in Rome (Jänig 1875; Schmidlin 1906; Maas 1981).

[46] Bernard Sculteti dealt with the Copernicus brothers' money worries in 1499 (Kühne 1994, 3-4). He became a Warmian canon in 1498 (Sikorski 1968, 144), and Dean in 1499 (Eichhorn 1866, 356).

[47] The chamberlains had much more access to Leo than high-ranking prelates who might have to wait six hours for an audience (Pastor 1908, 8:136).

[48] Bernardino Baldi in 1588 suggested that Paul was a friend of Copernicus (Marzi 1896, 248; Biliński 1973, 19; Kühne and Kirschner 2004, 20), but his source is very questionable and there is no (other) written source for this (Kühne and Kirschner 2004, 24).

[49] Alexander had been resident in Rome 1509-1519 (Forstreuter 1973, 246), and in 1519 he was appointed as Warmian canon (Hipler 1873, 272; Prowe 1883, 1:2:32; Sikorski 1968, 144). He was partly in Rome and partly in Frauenburg from 1520 until around 1530. According to Zinner (1943), Alexander was cantor in Rome from 1527, although when appointed as Chancellor this involved generally being resident in Frauenburg.

[50] Nikolaus von Schönberg was a friend of Lucas Watzenrode's successor as Prince-Bishop of Warmia, Fabian von Lossainen, and had family connections in Prussia (Prowe 1883, 275; Forstreuter 1951). He became a principal adviser to Clement VII (Walz 1930, 376), and was named as Cardinal in 1535 by Paul III.

[51] This role had been previously known general procurator. Alexander Sculteti helped von Reden to obtain a position as Warmian canon (Forstreuter 1973, 242-244).

[52] For example, after Nikolaus von Schönberg died on 08 September 1537, Dietrich von Reden wrote of this on 23 September 1537 to Alexander Sculteti in Warmia, and the letter reached him in early November (Forstreuter 1973, 251-2). Von Reden died in 1556.

[53] This was clearly illustrated by the Papal decree of 05 March 1616 absolutely forbidding and condemning Foscarini's letter defending Galileo's stance on the heliocentric theory (Foscarini [1615] 1991).

[54] It seems reasonable to consider whether there were other sources than those directly related to diplomacy with the Papacy which might have been useful to Copernicus when preparing the Preface. For example, there were manuscript copies of Cicero's *De Oratore* and *Orator* in the Prince-Bishops' library in Heilsberg (Lidzbark Warmiński), and the 1598 list of the Chapter's library in Frauenburg (Frombork) included these works and also a Quintillian (Hipler 1874, 339 and 377). However, the kinds of advice which these works offered do not relate well to the questions being currently discussed.

[55] While it has been suggested that Copernicus mistakenly thought that he could actually achieve protection from the Pope, this seems highly improbable in view of the apparently careful construction of the Preface.

[56] This is the phrase used in the Wallis translation; Rosen's phrase is "your love for literature and astronomy too" (Rosen 1978).

[57] Kuhn rightly noted that "Copernicus had constructed an almost ideal weapon. He had made the book unreadable to all but the most erudite astronomers of his day" (Kuhn 1957, 185).

[58] Galileo in his reply to Ingoli, Finocchiaro suggested that the latter had not understood the material he was dealing with (Finocchiaro 1989, 154-197).

[59] English translation given in Gingerich (1993, 275-81).

[60] As identified by Lerner (2004, 32-33) and Lerner and Segonds (2008).

[61] Apelt had claimed that "the new theory developed by a Catholic, a truly German development like Protestantism, was maintained and developed by Protestants," and that "the fate of the new astronomy was from then on ... linked to the fate of Protestantism" (Apelt 1852, 166).