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Stanisław Lubieniecki and Johannes Hevelius: (Extra)ordinary "Men of Letters"

The correspondence with Stanisław Lubieniecki (1623–1675) is the fourth most voluminous in the corpus of letters of Johannes Hevelius (1611–1687) – there are over ninety letters they wrote to each other between 1664 and 1673. Their positions in the learned world, however, were very unequal. Hevelius was a reputed astronomer and a fellow of the Royal Society, while Lubieniecki was an amateur interested in comets and astronomy. In this paper, I present the goals they have in this correspondence and the ways in which they tried to achieve them, and I try to explain why their correspondence was so numerous and long-lasting.

Keywords: Johannes Hevelius (1611–1687), Stanisław Lubieniecki (1623–1675), scholarly correspondence, history of astronomy, comets

Słowa kluczowe: Jan Heweliusz (1611–1687), Stanisław Lubieniecki (1623–1675), korespondencja naukowa, historia astronomii, komety

Introduction

In the corpus of the letters of Johannes Hevelius, there is a significant number he exchanged with Stanisław Lubieniecki (1623–1675). Even though Lubieniecki is not a very recognizable person and was not a crucial member of the 17th-century Republic of Letters, the volume of his correspondence with Hevelius makes those letters worth a closer analysis. In this paper, I will present an overview of the Hevelius-Lubieniecki correspondence and its main features, and I will try to establish how important and useful their letters were to each other and what they wanted to accomplish in this correspondence.

Lubieniecki was a historian and polemist of the Polish Brethren Church, a Unitarian sect in 16th- and 17th-century Poland and Lithuania. Their dogmas and beliefs – initially very radical – in time became less controversial. But, due to the negation of the Holy Trinity,

they remained the most abhorred religious group of that time. Because the leaders of the Polish Brethren Church – including Lubieniecki – sided with the Swedes during the Polish-Swedish war (1655–1660), in 1658 all their fellow believers were ordered to abandon their religion or to leave the country. Lubieniecki moved to Swedish Pomerania, later to Denmark and finally he settled in Hamburg and in the neighbouring town of Altona. As a religious refugee, he continued his efforts to nullify the law of the expulsion of the Polish Brethren. He also prepared books and published pamphlets about his religion and engaged in theological discussions with Protestant and Catholic clergy. These activities caused him a lot of trouble and made him a suspicious and controversial person. When Lubieniecki died suddenly in 1675 it was even speculated that he was poisoned by his enemies.¹

Lubieniecki's efforts for the sake of his religion were seemingly not related to his activities in the field of astronomy. There is, however, a connection between his astronomical interests and how he mainly earned a living. Lubieniecki provided reports about the political situation in Poland and Lithuania for some monarchs and other people of importance.² In late 1664, when a comet (C/1664 W1) appeared in the sky, he added new subjects and new correspondents to his letters. He began to ask various learned men about their observations of the recent comet and their opinions about cometary phenomena in general. He intensified his efforts after another comet (C/1665 F1) was observed the following year.

The exact scope of Lubieniecki's political correspondence has not yet been thoroughly investigated but we have a great source for studying his astronomical activities, i.e. his enormous book Theatrum Cometicum (Cometary Theatre), published in three volumes in Amsterdam between 1666 and 1668. The main subject of the book are the comets of 1664 and 1665 but it also touches upon other cometary and astronomical phenomena.3 Its first volume - Theatri Cometici Pars Prior, published in 1668 - presents the author's astronomical correspondence. Lubieniecki wrote letters to about forty scholars of various fields of expertise. Among them, except for Hevelius, there were such notable people as, for example, Athanasius Kircher (1601/1602–1680) and Christiaan Huygens (1629–1695). In the first volume of the *Theatrum Cometicum*, there are over 800 letters sent by and to Lubieniecki. The second volume of the book, Theatri Cometici Pars Posterior, published in 1666, presents a catalogue of comets from the times of Noah until the author's age. Descriptions of cometary phenomena were accompanied by information about contemporary historical events. Lubieniecki even remarked that his book was devoted to history as well as to astronomy.4 The third volume, Theatri Cometici Exitus, published in 1668, is a short supplement to the author's correspondence in which he focuses on elucida-

¹ The most comprehensive biography of Lubieniecki was published by Janusz Tazbir, *Stanisław Lubieniecki. Przy-wódca ariańskiej emigracji*, Warszawa 1961; 2nd edition: *Stando lubentius moriar. Biografia Stanisława Lubienieckiego*, Warszawa 2003.

² J. Tazbir. Stanto lubentius moriar, p. 144–153; Janina Kowalik, Stanisław Lubieniecki: företrädare för socinianerna och svensk korrespondent, "Karolinska förbundets årsbok" 1981/2, p. 148–173; eadem, Szwedzka korespondencja Stanisława Lubienieckiego, "Odrodzenie i Reformacja w Polsce" vol. 47, 2003, p. 177–190.

³ I made an attempt to discuss Lubieniecki's main astronomical activities and opinions, basing chiefly on his Theatrum Cometicum – in: Stanisław Lubieniecki i astronomia kometarna XVII stulecia, Warszawa, Gdańsk 2017.

⁴ S. Lubieniecki, Theatri Cometici Pars Posterior, Amstelodami 1666, f. *3r.

tion and clarification of his views on the meaning and influence of comets.⁵ A significant part of this book is also devoted to the memory of late Johann Ernst von Rautenstein (ca. 1622–1666), a diplomat in the service of the Duke of Neuburg and a patron, correspondent and friend of Lubieniecki.

Lubieniecki's astronomical interests were rather ephemeral and amateurish. In his letters, he mentioned that he had not learned much about astronomy at school. There are also no traces of any of his astronomical activities before the comet of 1664 appeared. Moreover, apart from the *Theatrum Cometicum*, he published nothing related to astronomy. His correspondence with Hevelius may be the only testimony that he had any contacts with astronomy after 1668. But even these letters in time became less frequent, were shorter, and they often did not discuss astronomical subjects.

The correspondence

There are 92 letters in the Hevelius-Lubieniecki correspondence – 31 by Hevelius and 61 by Lubieniecki. It makes this correspondence the fourth most voluminous in the corpus of Hevelius's letters. Only his correspondences with Pierre des Noyers (1606–1963, 256 letters), Ismaël Boulliau (1605–1694, 204 letters) and Henry Oldenburg (ca. 1618–1677, 118 letters) were more voluminous.⁶ As far as Lubieniecki's correspondence is concerned, we do not have the data about its full corpus, but we can make a similar comparison on the basis of his astronomical letters from the *Theatrum Cometicum*. In this book, the author's correspondence with Hevelius contains 67 letters and is the third most voluminous.⁷ More numerous are collections of Lubieniecki's letters exchanged with Rautenstein (172 letters)⁸ and with Nicolaus Heinsius (1620–1681, 125 letters), ⁹ the Dutch ambassador in Stockholm.

The first letter of the Hevelius-Lubieniecki correspondence was sent by Lubieniecki on 19 December 1664.¹⁰ The last letter was sent by Lubieniecki on 22 December 1673.¹¹ The chronological distribution of the letters within these nine years, however, is very unequal. There are 73 letters before the publication of the *Theatrum Cometicum*.¹² The last printed

- On Lubieniecki's attitude to astrology see: M. Jasiński, Pochodnie komet a pochodnie wojny. Stanisław Lubieniecki (1623–1675) i astrologia kometarna, [in:] Żywioły. Motyw ognia w literaturze, kulturze i sztuce, ed. by K. Arciszewska, U. Patocka-Sigłowy, Gdańsk 2018, p. 59–71; idem, Stanisław Lubieniecki i astronomia kometarna, p. 245–316.
- 6 K.-D. Herbst, Alphabetical list of the correspondents, [in:] Correspondance de Johannes Hevelius. Tome 1: Prolégomènes critiques, ed. by Ch. Grell, Turnhout 2014, p. 254–275. The number of letters in the Hevelius-Lubieniecki correspondence given there is 95. This number was decreased after a detailed analysis was conducted of that part of the corpus.
- 7 S. Lubieniecki, Theatri Cometici Pars Prior, Amstelodami 1668, p. 361-414, 947-955.
- 8 Ibid., p. 39-208.
- 9 Ibid., p. 253–345; idem, Theatri Cometici Exitus, Amstelodami 1668, p. 53–57, 75–77.
- 10 Bibliothèque d'Observatoire de Paris, Correspondance de Johannes Hevelius [BO], C1, v. 6, not numbered (second one after 907); S. Lubieniecki, Theatri Cometici Pars Prior, p. 361. For the sake of brevity, I omit here detailed references to other sources of the letters (the main one is the manuscript copy in the National Library in Paris, see: S. Keyes, Description of the manuscripts, [in:] Correspondance de Johannes Hevelius. Tome I, p. 232–238).
- 11 BO, C1, v. 11, 1623/141.
- 12 For various reasons not all of them were published in Lubieniecki's book, e.g. his letter to Hevelius from 22 May 1665 (BO, C1, v. 7, 998) is just a brief correction of a mistake he made in his preceding letter.

letter is dated 16 August 1667.¹³ Then epistolary contact became rather occasional (see: Table 1). Moreover, the early correspondence between Lubieniecki and Hevelius was more voluminous than their later letters. Fewer than forty letters with enclosures from the beginning of the correspondence cover more than a half of the whole manuscript corpus.

Table 1. Yearly distribution of the letters in the Hevelius-Lubieniecki correspondence.

Year	Letters from Hevelius	Letters from Lubieniecki
1664 (December)	1	3
1665	11	22
1666	7	10
1667	5	12
1668	1	1
1669	1	3
1670	0	0
1671	2	2
1672	2	3
1673	1	5

As members of the learned world Hevelius and Lubieniecki were by no means equal. Hevelius was a reputed astronomer and Lubieniecki was a dilettante superficially interested in astronomy. And it was rather Lubieniecki who wanted to maintain contact and their correspondence. It is visible from the number of their letters, as there are almost twice as many letters from Lubieniecki than from Hevelius. Moreover, it was Lubieniecki who usually wrote a letter after a prolonged time of silence from both sides. ¹⁴ Hevelius initiated the exchange of letters only when he wanted to communicate a new discovery or announce a publication. ¹⁵

The purpose of Lubieniecki's letters

The analysis of the chronological distribution of letters suggests what the purpose of Lubieniecki's correspondence was – he wanted to amass materials for his planned book. He tried to gather as much information from as many correspondents as possible and his plan was not limited to cometary and astronomical subjects. And this is not only the conclusion drawn from an analysis of his letters but it was declared by himself, both in the preface to the first volume of *Theatrum Cometicum*¹⁶ and in a number of his letters,¹⁷

¹³ BO, C1, v. 9, 1275; S. Lubieniecki, Theatri Cometici Pars Prior, p. 955.

¹⁴ For example Lubieniecki wrote to Hevelius on 2 May 1671 after almost two years of silence, see: BO, C1, v. 10, 1447/81.

¹⁵ After almost ten months of silence, on 6 June 1668 Hevelius informed Lubieniecki that his *Cometographia* (Gedani 1668) has been finally published, see: BO, C1, v. 8, 1233; BO, C1, v. 9, 1278. On 11 March 1672, Hevelius answered to Lubieniecki's letter from January of that year in order to inform him about the new comet, see: BO, C1, v. 11, 1494/20.

¹⁶ S. Lubieniecki, Theatri Cometici Pars Prior, f. *4r-[*5v].

¹⁷ E.g. in his letter to Huygens sent on 30 October 1665, see: Leiden University Library [LUL], ms. HUG 45; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 93.

where he wrote that his book would be very useful for the reader who could find lots of information there about astronomy, mathematics, physics, chronology, history, ethics and economy. And a source for a significant part of this knowledge was his correspondence with learned men. He described this intention to Hevelius in the following words:

As far as my plan is concerned, I want to publish various observations, descriptions and opinions made by some famous men about the last comet because my friends encourage me to do so. They think that the work would be useful to the public. It will be of some use for mathematics, since it will be adorned with elaborate writings by the most talented men. You will be placed there above others, great Hevelius, from whose inimitable hand – which has learned to write what will be drawn and carved in brass and to draw and carve what will be written – and also from your unique knowledge of astronomy and the advantage of your printing press, perfect and incredibly precise – which you have in your house and which surpasses what a private man can wish for – they expect something extraordinary. But there will also be much about politics, history and ethics, which my friends find interesting and useful for the public. I obey their encouragement and directions so that I would not only seem to oppose my friends – more than decently and modestly – but I would also seem to be jealous and to disregard the public advantage as well.¹⁸

Lubieniecki sometimes tried to encourage his correspondents to give him more information. He asked them many detailed questions concerning comets. He passed to his correspondents what he had learned from others and enquired about their opinions in the discussed matter. As was accurately remarked by Tadeusz Przypkowski, to some of his correspondents Lubieniecki sent opinions he hoped they would disagree with and would elaborate on their opposing views. ¹⁹ This was the case of Giovanni Battista Riccioli to whom Lubieniecki sent a number of opinions in favour of the Copernican system. ²⁰ An opposite situation can be encountered in Lubieniecki's letter to Johann a Leunenschloss, in which Lubieniecki wrote about the opposition to Copernicus's model of the Universe. ²¹

Among Lubieniecki's letters to Hevelius, there are numerous enclosures which mainly contain information about cometary phenomena. The first two letters Lubieniecki sent

[&]quot;Quod ad institutum meum attinet, ita est velle me varias Virorum Praeclarorum Observationes, narrationes et judicia de nupero Cometa edere in publicum, cum Amici ad id faciendum me hortentur, utile quoque opus hoc publice fore judicantes. Mathematicae quidem rei parum utilitatis adferet, cum tot Viri Ingeniosissimi eam scriptis doctissimis illustrent. Tu vero prae caeteris, Magne Heveli, a cuius manu inimitabili, utpote et pingenda et fingenda aere scribere, et scribenda pingere et fingere docta et singulari rerum Astronomicarum scientia, tum instrumentorum artificiosissimorum et assiduae diligentiae, sed et quam sub tecto Tuo politissimam et accuratissimam ac supra hominis privati fortunam assurgentem habes typographiae praestantia nonnisi singulare aliquid expectant. Sed aderunt Politica multa, Historica ac Moralia, quae Amici publice grata et utilia fore judicant. Quorum hortatibus et monitis obedio, ne non tantum plusquam verecunde et modeste Amicis repugnans, sed et invidus ac publici emolumenti negligens videar," BO, C1, v. 7, 972; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 372.

¹⁹ T. Przypkowski, Zainteresowania matematyczno-przyrodnicze Braci Polskich, [in:] Studia nad arianizmem, ed. by L. Chmaj, Warszawa 1959, p. 414–415.

²⁰ S. Lubieniecki, Theatri Cometici Pars Prior, s. 701.

²¹ Ibid., p. 629.

contained voluminous collections of observations of the comet in late 1664 and early 1665 – they are much longer than the letter themselves²² – and in the following months and years he sent him more opinions, views and remarks. Lubieniecki, however, did not send Hevelius many materials which could cause the addressee's disagreement and make him answer. A rare example can be found at the beginning of the correspondence when Lubieniecki sent information about some efforts made to predict a comet.²³ Hevelius answered briefly that in his opinion such predictions were futile and impossible.²⁴

Another way used by Lubieniecki to rouse his addressees was to ask them for permission to publish their correspondence – at the same time, he asked if they wanted to add or change anything in their letters. Hevelius was one of those he asked.²⁵ He answered that Lubieniecki could publish his letters in their entirety and that he did not want to change anything in them. He added that publishing unchanged letters was the best way to present the studies and ideas of their sender.²⁶

This opinion expressed by Hevelius did not apply, however, to all of Lubieniecki's correspondents. The case of a letter from Johann Müller (1611–1671), an astronomer from Hamburg, is very interesting here. In his letters in the *Theatrum Cometicum*, he wrote that he had initially believed there were two comets in December 1664 and later he changed his opinion and acknowledged that there was only one comet seen at different times and in different constellations.²⁷ In the remainder of his published correspondence, he opted for only one comet seen in 1664. Some of his letters, however, were sent by Lubieniecki to Hevelius in early January 1665 and they allow us to see how Müller's opinion changed.²⁸ In fact, there is a series of corrections which removed Müller's earlier view from Lubieniecki's book. For example, while discussing the tail of the comet, Müller initially wrote: "This comet has a tail like the former one in Corvus, but the tail cannot be seen."²⁹ Later, when he changed his mind, these words turned into: "This comet now has a tail like before when it was in Corvus, but it cannot be seen."³⁰ And in both versions of his letters, he equally defended opposing opinions about the number of comets.

Hevelius's motives

Hevelius was initially rather reluctant to answer Lubieniecki's requests. He did not want to discuss in detail all the views, opinions and observations Lubieniecki sent to him. Instead, he replied that he was working on his own book about comets, the *Cometogra-*

- 22 BO, C1, v. 6, 898, 899, 911.
- 23 BO, C1, v. 6, 913; S. Lubieniecki, Theatri Cometici Pars Prior, p. 363.
- 24 BO, C1, v. 6, 915; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 364. As a footnote, it can be remarked that only one of Hevelius's letters to Lubieniecki contains a separate enclosures. His letter with the first information about the comet of 1672 was accompanied by a copy of his letter to Ismaël Boulliau (BO, C1, v. 11, 1490/17) and by a first draft of the observations of the comet (BO, C1, v. 11, 1491).
- 25 BO, C1, v. 7, 999; S. Lubieniecki, Theatri Cometici Pars Prior, p. 386.
- 26 BO, C1, v. 7, 991; S. Lubieniecki, Theatri Cometici Pars Prior, p. 394.
- 27 S. Lubieniecki, Theatri Cometici Pars Prior, p. 847.
- 28 BO, C1, v. 6, 912.
- 29 "Non minus enim hic Cometes est caudatus ac prior ille Corvi, quamvis cauda huius non conspiciatur," ibid.
- 30 "Non minus enim hic Cometes nunc est caudatus ac antea, cum in Corvo haereret, quamvis ea non conspiciatur," S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 846.

phia, finally published in 1668, where he would discuss in detail his views on comets.³¹ It seems that Hevelius did not want to announce the results of his studies before he finished his book, or at least before he decided they were ready to be announced. Despite his reluctance, Hevelius answered Lubieniecki's letters and, in time, their correspondence became quite regular. But while Lubieniecki's motivation was obvious and it was declared by himself, the reasons why Hevelius entered into this correspondence and kept answering Lubieniecki's letters are less obvious and need some discussion.

In his correspondence with Lubieniecki, there is one statement by Hevelius which seems to be meaningful here. When Oldenburg asked Lubieniecki about interesting scholars from Poland and Lithuania and Lubieniecki passed this question on to Hevelius he answered that he did not know such people.32 And it was not the only time he expressed such an opinion. Almost twenty years earlier, in his letter sent on 15 November 1646 to Marin Mersenne (1588-1648), Hevelius noted that except for his Selenographia (Gedani 1647) he did not know anything about other mathematical books written by anybody from Prussia.³³ And the list of his correspondents confirms that his main scholarly contacts were abroad. Despite the fact that there was a number of correspondents from Poland, Lithuania and their fiefs, there were very few with whom he made contact on a regular basis. Hevelius's main Polish correspondent was Adam Adamandy Kochański (1631–1700, 38 letters) but their correspondence began in 1677.34 Therefore, in his scholarly activities he had to be in touch with his peers who lived in distant countries. It seems that Hevelius realized that Lubieniecki could help him to circulate his works and discoveries. Even though Hevelius had his own contacts in France and England, he did not want to reject Lubieniecki's offer of help. When Hevelius wanted to communicate a new discovery, Lubieniecki was one of his correspondents who received his first reports. This was the case of the 1665 and 1672 comets. Hevelius spotted them, Lubieniecki was among the addressees of brief letters with short descriptions of those phenomena.³⁵

As far as Lubieniecki's requests for answers and opinions are concerned, Hevelius was not willing to answer all of them in detail. To many of them, in fact, he did not answer at all and he rejected some others with a brief comment only. For example, his response to collections of early observations communicated to him by Lubieniecki in his first few letters was some brief information about cometary observations in Gdańsk.³⁶

Hevelius only paid a little more attention to some detailed questions from materials sent to him by Lubieniecki. One of them was already present in their early correspondence, it being the number of comets seen in December 1664. Initially, the comet was seen in the morning in the constellation of Corvus, then it disappeared and sometime later appeared again in the evening in the Lepus. This led some of the observers to a mistaken

³¹ BO, C1, v. 6, 900; S. Lubieniecki, Theatri Cometici Pars Prior, p. 363.

³² BO, C1, v. 8, 1209; S. Lubieniecki, Theatri Cometici Pars Priori, p. 954.

³³ Correspondance du p. Marin Mersenne, religieux minime, ed. by C. de Waard, A. Beaulieu, vol. 14, Paris 1980, p. 606.

³⁴ By "Polish correspondent" I mean a scholar of Polish origin who worked in Poland. Kochański's correspondence was published in: Korespondencja Adama Adamandego Kochańskiego SJ (1657–1699), ed. by B. Lisiak, L. Grzebień, Kraków 2005.

³⁵ Comet of 1665: BO, C1, v. 7, 960; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 371. Comet of 1672: BO, C1, v. 11, 1494/20.

³⁶ BO, C1, v. 6, 900, 915; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 362–363, 364.

conclusion that there were two comets. Hevelius's opinion was quite the opposite and he argued that there was only one comet. He already expressed his view in his second letter to Lubieniecki,³⁷ replying to his information that Boulliau and German mathematician Michael Kirsten (1620–1678) believed that there were two comets.³⁸

Another question from Lubieniecki's letters which caught Hevelius's attention was the phenomenon seen in the constellation of Andromeda. The routes of both the comet of 1664 and the one of 1665 led next to this constellation and, therefore, it was the subject of more diligent observations. Some of Lubieniecki's correspondents spotted a comet-like object near the belt of Andromeda and hypothesized that it was a new tailed star. Lubieniecki received such notion from Dutch theologian Abraham de Grau (1632–1683),³⁹ from Jesuit mathematician Albert Curtz (1600–1671) who sent him some observations made by Jesuits in Rome,⁴⁰ from Nicolaus Heinsius who was passing on the opinions of Olof Rudbeck (1630–1702), a scholar from Uppsala,⁴¹ and from Kiel mathematician Samuel Reyher (1635–1714).⁴² Their opinions were among different views which Lubieniecki sent to Gdańsk.⁴³ Hevelius answered that the phenomenon in question was not a comet.⁴⁴ He also added that i this was not a new discovery because it had been already described in 1614 by Simon Mayr (Marius, 1573–1624).⁴⁵ Later, Hevelius specified that the discussed object was a "nebulous star" (stella nebulosa).⁴⁶ The phenomenon in question is known today as the Andromeda Galaxy (M31).

Lubieniecki had a high opinion of Hevelius's answers and views. When he discussed the number of comets in December 1664 with his other correspondents, he referred only to Hevelius's opinion. He wrote about this to Rautenstein⁴⁷ and to German naturalist Adam Olearius (*ca.* 1599–1671)⁴⁸ who supported the opposite view. Lubieniecki did so even though his other correspondents, for example mathematician Heinrich Sivers (1626–1691),⁴⁹ were also proponents of the opinion about only one comet. In this way, Lubieniecki helped Hevelius to promote his opinions and to strengthen his reputation in the learned world.

Apart from enquiring for the addressee's astronomical opinions, Lubieniecki asked Hevelius if he could publish summaries of his two booklets about the comets of 1664 and 1665, the *Prodromus Cometicus* (Gedani 1665)⁵⁰ and the *Descriptio Cometae Anno Aerae Christi*

³⁷ BO, C1, v. 6, 915; S. Lubieniecki, Theatri Cometici Pars Prior, p. 364.

³⁸ BO, C1, v. 6, 913; S. Lubieniecki, Theatri Cometici Pars Prior, p. 363.

³⁹ LUL, ms. PAP 15; S. Lubieniecki, Theatri Cometici Pars Prior, p. 490.

⁴⁰ S. Lubieniecki, Theatri Cometici Pars Prior, p. 214–215.

⁴¹ Ibid., p. 321.

⁴² Ibid., p. 885.

⁴³ BO, C1, v. 6, 998; v. 7, 1071; v. 8, 1186; S. Lubieniecki, Theatri Cometici Pars Prior, p. 408, 951.

⁴⁴ BO, C1, v. 7, 992, 1015; S. Lubieniecki, Theatri Cometici Pars Prior, p. 393–394, 400.

⁴⁵ BO, C1, v. 7, 1034; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 403. Mayr described it in his *Mundus Jovialis* ([Nuremberg] 1614), f. [)()(3r]. See also: A.O. Pickard, *Note on "Simon Marius" and the "Mundus Jovialis"*, "The Observatory" vol. 40, 1917, p. 119–122; D. Schultz, *The Andromeda Galaxy and the Rise of Modern Astronomy*, New York 2012, p. 39–43.

⁴⁶ BO, C1, v. 7, 1073; v. 8, 1162; S. Lubieniecki, Theatri Cometici Pars Prior, p. 409, 951.

⁴⁷ S. Lubieniecki, Theatri Cometici Pars Prior, p. 43.

⁴⁸ Ibid., p. 636-637.

⁴⁹ Ibid., p. 916.

⁵⁰ BO, C1, v. 7, 1008; S. Lubieniecki, Theatri Cometici Pars Prior, p. 388.

MDCLXV Exorti (Gedani 1666).⁵¹ Hevelius duly gave permission to publish those summaries. He rejected, however, Lubieniecki's request to lend him the printing plates of his cometary observations from the *Prodromus Cometicus* and emphasized that Lubieniecki should pay attention to the exactness of the numbers he copied.⁵² He repeated this remark when he agreed to the publication of the extract from the *Descriptio Cometae*.⁵³

Hevelius used Lubieniecki's help not only in announcing his discoveries but also in selling his books. As Lubieniecki lived in a big port city, his service in that matter could be very substantial. When Hevelius published his booklets about the comets of 1664 and 1665, he sent Lubieniecki a number of copies. Some were meant to be given to his friends and correspondents, but most of them were intended for booksellers in Hamburg.⁵⁴ Moreover, Lubieniecki tried to find buyers for his correspondent's other books, e.g. he informed him about a man who was interested in buying Hevelius's earlier book, *Selenographia*.⁵⁵ On the other hand, Hevelius did not ask Lubieniecki to help him sell his *Cometographia* although he did offer his services.⁵⁶ Also in 1673, when Hevelius published the first part of his *Machina Coelestis*, he did not send Lubieniecki any copies for booksellers.⁵⁷ It may suggest that in time Hevelius became less confident about Lubieniecki's help.

Except for the dissemination of Hevelius's views, discoveries and books, Lubieniecki also tried to help protect his correspondent's business and reputation whenever it was necessary. When he learned about a supposed unauthorized edition of Hevelius's *Prodromus Cometicus* he immediately passed this information on to Gdańsk but he failed to find out more about it.⁵⁸ Lubieniecki also offered his help to Hevelius when his observations and conclusions from the *Prodromus Cometicus* were called in question by French astronomer Adrien Auzout (1622–1691).⁵⁹ Lubieniecki suggested that the conflict could be appeased by the help of mediators – learned men who were friends to both Hevelius and Auzout – who could assess all the arguments and decide who was right. For those mediators, he proposed Boulliau and Huygens and he offered himself as a middleman between all the sides.⁶⁰ Hevelius, however, was not interested in Lubieniecki's help in this matter and decided to handle the situation on his own.⁶¹

There was also one more way in which Hevelius somehow benefited from his correspondence with Lubieniecki. His secretary and kinsman, Johann Erich Olhoff (1650–1710)

⁵¹ BO, C1, v. 8, 1152; S. Lubieniecki, Theatri Cometici Pars Prior, p. 948–949.

⁵² BO, C1, v. 7, 1004; S. Lubieniecki, Theatri Cometici Pars Prior, p. 397.

⁵³ BO, C1, v. 8, 1153; S. Lubieniecki, Theatri Cometici Pars Prior, p. 951.

⁵⁴ Distribution of the *Prodromus Cometicus*: BO, C1, v. 7, 999; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 385. Distribution of the *Descriptio Cometae*: BO, C1, v. 8, 1140; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 948.

⁵⁵ BO, C1, v. 7, 1002; BO, C1, v. 11, 1518/46.

⁵⁶ BO, C1, v. 9, 1360, 1358.

⁵⁷ BO, C1, v. 11, 1596/111.

⁵⁸ BO, C1, v. 7, 1071, 1109; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 408, 413. I could not establish any details of that supposed publication and I presume that Lubieniecki's information was mistaken.

⁵⁹ On Hevelius's discussion with Auzout see: N.S. Hetherington, *The Hevelius-Auzout Controversy*, "Notes and Records of the Royal Society of London" vol. 27, 1972, no 1, p. 103–106; S. Shapin, *A Social History of Truth, Civility and Science in Seventeenth-Century England*, Chicago, London 1994, p. 266–291; N.E. Milani, *The Prodromus Cometicus in the Académie des Sciences and the Royal Society: the Hevelius-Auzout Controversy*, [in:] *Johannes Hevelius and his Gdańsk*, ed. by M. Turek, Gdańsk 2013, p. 195–208; Ch. Grell, *Hevelius en son temps*, [in:] *Correspondance de Johannes Hevelius. Tome I*, p. 99–107 (Polish translation: Ch. Grell, *Jan Heweliusz i jego czasy*, transl. by I. Kraszewski, Warszawa, Gdańsk 2016, p. 151–164).

⁶⁰ BO, C1, v. 7, 1071; S. Lubieniecki, Theatri Cometici Pars Prior, p. 407–408.

⁶¹ BO, C1, v. 7, 1073, 1094; S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 408, 411.

published selected letters from Hevelius's correspondence, entitled Excerpta ex Literis IIlustrium, et Clarissimorum Virorum, ad Nobilissimum, Amplissimum, et Consultissimum Dominum Johannem Hevelium Consulem Gedanensem Perscriptis, Judicia de Rebus Astronomicis Eiusdemque Scriptis Exhibentia (Excerpts from the Letters Written by the Most Famous and Most Renowned Men to the Most Noble, Greatest and Wisest Master Hevelius, Councillor of Gdańsk, which Present the Opinions on His Astronomical Works, Gedani 1683). In the book, there are 197 letters from the years 1644–1681. It was devised to promote Hevelius and his scholarly activities and, therefore, the selection was made from that point of view and focused on the praises of the astronomer.⁶² Olhoff's publication contains six letters sent by Lubieniecki.⁶³ Moreover, in that book, there are some letters from Lubieniecki's other correspondences from the *Theatrum Cometicum*, among them, e.g. letters to and from Boulliau and Kircher which focus on extolling Hevelius and his works.⁶⁴ An interesting fact is that Olhoff used Lubieniecki's book inconsistently when he compiled a selection of Hevelius's letters. As analysis of textual variants suggests he relied, in most instances, on the text of the Theatrum Cometicum, not on the manuscripts from Hevelius's archive. 65 Only once did he use the manuscript letter when a printed edition was at his disposal.66

A comparison with other correspondence in the Theatrum Cometicum

Hevelius's reluctance to give detailed answers to Lubieniecki's questions about comets seems to be the typical reaction of the latter's other correspondents. They were not eager to discuss every piece of information, observation and notion they received from Lubieniecki. In their answers, they usually touched upon the two comets very generally, for example Athanasius Kircher and Friedrich Büthner (1622–1701), astronomer from Gdańsk, wrote to him that there was only one comet in December 1664,⁶⁷ or they focused on particular questions in which they were interested. For example, Polish Brethren activist and theologian Joachim Stegmann (1618–1678) wrote to Lubieniecki about his considerations on the vacuum.⁶⁸

Some of Lubieniecki's addressees did not answer his letters and questions at all. The best known of them was Huygens who remained silent despite the fact that Lubieniecki wrote him twice, in October 1665⁶⁹ and February 1667.⁷⁰ Setting aside reasons why

⁶² Ch. Grell, *Hevelius en son temps*, p. 131–132 (Polish translation: Ch. Grell, *Jan Heweliusz i jego czasy*, p. 195–197).

⁶³ J.E. Olhoff, Excerpta ex Literis [...] ad Dominum Johannem Hevelium, Gedani 1683, p. 100–103, 113–114, 131–132, 137–138.

⁶⁴ Ibid., p. 103-110.

⁶⁵ Letters sent on 2 December 1664 (S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 362; J.E. Olhoff, op. cit., p. 100), 16 June 1665 (S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 396–397; J.E. Olhoff, op. cit., p. 101; the letter and its postscript were printed separately in the *Theatrum Cometicum* and Olhoff reprinted only the postscript) and 28 August 1665 (S. Lubieniecki, *Theatri Cometici Pars Prior*, p. 401–402; J.E. Olhoff, op. cit., p. 102–103).

⁶⁶ Letter sent on 29 June 1666 (BO, C1, v. 8, 1149; J.E. Olhoff, op. cit., p. 113–114).

⁶⁷ S. Lubieniecki, Theatri Cometici Pars Prior, p. 751, 802.

⁶⁸ S. Lubieniecki, Theatri Cometici Pars Prior, p. 603-604.

⁶⁹ LUL, ms. HUG 45; S. Lubieniecki, Theatri Cometici Pars Prior, p. 931–933.

⁷⁰ S. Lubieniecki, Theatri Cometici Pars Prior, p. 933.

Lubieniecki published his unanswered letters in the *Theatrum Cometicum*, their presence makes the interest which Hevelius had in his correspondence with Lubieniecki all the more evident.

Only a few of Lubieniecki's correspondents sent to Lubieniecki more detailed discussions of their views which he could publish – like the extracts from Hevelius's books – in his *Theatrum Cometicum*. Most of them limited themselves to giving him only some loose opinions and observations. Among those who shared with Lubieniecki some more coherent information we can mention Kircher who sent him a draft of his opinion about comets.⁷¹ There were very few correspondents who were willing to share with Lubieniecki a more substantial number of their unpublished cometary observations. We can list here, for example, Reyher who sent to Lubieniecki his observations of the two comets.⁷² We can also mention here the Jesuit polymath, Gaspar Schott (1608–1666). Material from him covers almost thirty pages in the *Theatrum Cometicum*,⁷³ but actually Schott sent to Lubieniecki not his own observations, but a collection of observations made by others.

What Lubieniecki did for Hevelius was not exceptional. He seemed to be willing to provide any help in scholarly matters, especially when he was asked by his correspondent. For example, philosopher Jan Placentinus-Kołaczek (1630–1683) asked Lubieniecki to send copies of his book to the Kings of France, Denmark and Sweden. But such requests from the correspondents were neither frequent nor numerous. And it is the extent to which Hevelius used Lubieniecki's help in circulating the results of his studies that makes the correspondence between Hevelius and Lubieniecki extraordinary. Even though we can list other correspondents who were professional astronomers and exchanged a significant number of letters with Lubieniecki, such as Büthner or Erasmus Bartholin (1625–1968) from Denmark, they rather limited themselves to answering his questions about various cometary phenomena and usually did not ask him for favours in publicising their discoveries or in circulating their publications. We do not know much about Lubieniecki's astronomical correspondence after the publication of the *Theatrum Cometicum* but on the basis of the astronomical letters in his book we can infer that Lubieniecki's help – and offers of help – for Hevelius were more frequent than for his other correspondents.

Conclusion

In brief, the motivations of Lubieniecki and Hevelius for entering into correspondence seem to be rather typical – Lubieniecki wanted more material for his book, Hevelius wanted to promote his observations and works. What is extraordinary about their correspondence is its volume, the number of letters they sent and their relatively quite high frequency, especially when we compare them to other collections of letters in the *Theatrum Cometicum*. Moreover, Lubieniecki seemed to think much more of Hevelius's opinions than those of his other correspondents and he wanted to help him in his astronomical

⁷¹ Ibid., p. 757-759.

⁷² Ibid., p. 883-885.

⁷³ Ibid., p. 762-790.

⁷⁴ Ibid., p. 555.

works and efforts for the sake of others. It seems that these two participants of the republic of letters found each other interesting – or at least useful – and they both profited from their exchange of letters.

Bibliography

Manuscript sources

Bibliothèque d'Observatoire de Paris, *Correspondance de Johannes Hevelius*, C1, v. 1–16.

Leiden University Library, ms. PAP 15, ms. HUG 45.

Printed sources

Lubieniecki S., Theatri Cometici Exitus, Amstelodami 1668.

Lubieniecki S., Theatri Cometici Pars Posterior, Amstelodami 1666.

Lubieniecki S., Theatri Cometici Pars Prior, Amstelodami 1668.

Mayr (Marius) S., Mundus Jovialis, [Nuremberg] 1614.

Olhoff J.E., Excerpta ex Literis [...] ad Dominum Johannem Hevelium, Gedani 1683.

Modern editions of sources

Correspondance du p. Marin Mersenne, religieux minime, ed. by C. de Waard, A. Beaulieu, vol. 14, Paris 1980.

Korespondencja Adama Adamandego Kochańskiego SJ (1657–1699), ed. by B. Lisiak, L. Grzebień, Kraków 2005.

Critical literature

Correspondance de Johannes Hevelius. Tome I: Prolégomènes critiques, ed. by Ch. Grell, Turnhout 2014.

Grell Ch., *Jan Heweliusz i jego czasy*, transl. by I. Kraszewski, Warszawa, Gdańsk 2016.

Hetherington N.S., *The Hevelius-Auzout Controversy*, "Notes and Records of the Royal Society of London" vol. 27, 1972, no 1, p. 103–106.

Jasiński M., Pochodnie komet a pochodnie wojny. Stanisław Lubieniecki (1623–1675) i astrologia kometarna, [in:] Żywioły. Motyw ognia w literaturze, kulturze i sztuce, ed. by K. Arciszewska, U. Patocka-Sigłowy, Gdańsk 2018, p. 59–71.

Jasiński M., Stanisław Lubieniecki i astronomia kometarna XVII stulecia, Warszawa, Gdańsk 2017.

Kowalik J., Stanisław Lubieniecki: företrädare för socinianerna och svensk korrespondent, "Karolinska förbundets årsbok" 1981/2, p. 148–173.

Kowalik J., *Szwedzka korespondencja Stanisława Lubienieckiego*, "Odrodzenie i Reformacja w Polsce" vol. 47, 2003, p. 177–190.

Milani N.E., The Prodromus Cometicus in the Académie des Sciences and the Royal Society: the Hevelius-Auzout Controversy, [in:] Johannes Hevelius and his Gdańsk, ed. by M. Turek, Gdańsk 2013, p. 195–208.

Pickard A.O., *Note on "Simon Marius" and the "Mundus Jovialis"*, "The Observatory" vol. 40, 1917, p. 119–122.

Przypkowski T., *Zainteresowania matematyczno-przyrodnicze Braci Polskich*, [in:] *Studia nad arianizmem*, ed. by L. Chmaj, Warszawa 1959, p. 391–424.

Schultz D., The Andromeda Galaxy and the Rise of Modern Astronomy, New York 2012.

Shapin S., A Social History of Truth, Civility and Science in Seventeenth-Century England, Chicago, London 1994.

Tazbir J., Stando lubentius moriar. Biografia Stanisława Lubienieckiego, Warszawa 2003.

Tazbir J., Stanisław Lubieniecki. Przywódca ariańskiej emigracji, Warszawa 1961.

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