Wskazał w niej na 3 tomy z serii *Dzieł wszystkich* Edyty Stein, na pozycje książkowe dotyczące życia, filozofii i duchowości, oraz na artykuły i publikacje w dziełach zbiorowych. Bibliografię w języku włoskim za lata 2002-2004 przedstawił M. Caprioli; liczy ona prawie 100 pozycji.

Dział ósmy zawiera recenzje, a dział dziewiąty ogłoszenia. Rocznik kończy się krótkimi danymi o autorach.

Po wprowadzeniu w sytuację, z jaką mamy do czynienia w przypadku życia i twórczości Edyty Stein i po dosyć szczegółowym omówieniu zawartości omawianego *Rocznika*, trzeba powiedzieć, że *Rocznik* staje się urzędowym pismem Niemieckiego Towarzystwa Edyty Stein. Wcześniejsze roczniki (nr 1-9), które redagował J. Sanchez de Murillo, szły – że tak powiem – w "szerokość"; udział procentowy publikacji odnoszących się do życia i twórczości Edyty Stein był znikomy lub bardzo mały. Dwa ostatnie numery, redagowane przez Ul. Dobhana, idą w "głębię". Niektóre z publikacji odnoszą się tylko do jednej sentencji, kwestii czy wydarzenia, a tym samym rzucają światło na nieznane bliżej strony jej życia i twórczości. Są również prace zwracające uwagę na zależność, wpływy, jakim ulegała, ale i na odmienność myśli Stein względem innych myślicieli. Metodologicznie takie podejście jest bardzo wskazane: pozwala – z jednej strony – poznać głębiej i pełniej życie Edyty Stein, a z drugiej strony – poznać i zrozumieć jej twórczość filozoficzną.

Sięgając po *Rocznik Edyty Stein 2005*, wiemy, czego się spodziewać. A że zainteresowanie życiem i twórczością Współpatronki Europy stale rośnie, dowodzi pokaźna w ostatnich latach liczba publikacji. Zmiana profilu *Rocznika* odpowiada zatem społecznym zainteresowaniom i potrzebom.

Jerzy MACHNACZ

Bogdan LISIAK SJ, Adam Adamandy Kochański (1631-1700). Studium z dziejów filozofii i nauki w Polsce w XVII wieku [... From the history of philosophy and science in Poland in the 17th century], Kraków 2005, Ignatianum-WAM, pp. 525.

Adam Adamandus Kochański (1631-1700) was known in the past as a mathematician, astronomer, philosopher, philologist, and constructor of clocks and other machines. Just like his contemporary, Gottfried Wilhelm Leibniz, Kochański had wide-ranging philosophical interests. Although he published only a few and not too voluminous works, he inspired with his ideas, engendered and supported innovative initiatives in many scientific circles. His intellect was aroused by various subjects, which was reflected both in Kochański's published works as well as in his prolific correspondence with many representatives of European science in the seventeenth century.

In 1655, when the Muscovite forces invaded Vilnius, he left Vilnius University, where he had studied philosophy, and moved to stay in Würzburg. There he got acquainted with Gaspar Schott and began to co-operate with him in the field of science. Subsequently, he graduated in philosophy from Molsheim (1655-1657)

and began to lecture at the university in Mainz (1657-1664), while studying theology (1660-1664). Later on he became a lecturer in mathematics in Bamberg (1665-1666) and in Florence (1666-1670), where he joined the academic circles at the court of Prince Ferdinand II and of Cardinal de Medici. From 1670 he taught mathematics in the Jesuit province of Bohemia, first at Prague University (1670-1672), then in Olomouc (1672-1675), and later at the college in Wrocław (1675-1679). As requested by King Jan III Sobieski, towards the end of 1679 he arrived in Warsaw, where he continued to lecture on mathematics and educated Sobieski's son, Jakub. He also worked on the artistic decor of the royal residence in Wilanów. From 1683 to 1690 he was employed in Gdańsk as a mathematician and royal librarian, and on his return to Warsaw in 1690 he took over the supervision over the royal library. In 1695 he went to the spa of Teplice in Bohemia and he died there in May 1700.

Kochański's early works were published thanks to Gaspar Schott, who included them in his work Cursus mathematicus (Herbipoli 1661) and enthusiastically recommended them in the introduction. Schott presented Kochański as a genius of a mathematician and physicist. Several minor dissertations by Kochański were printed in "Miscellanea Curiosa Medico-Physica Academiae Naturae Curiosorum" (1671-1679) and subsequently included in Collection Académique de l'Académie des Sciences (1755). Between 1682 and 1696 Kochański had his innovative works published by "Acta Eruditorum", a scientific journal. The reasons why he published so little were multifarious. First of all, just like Leibniz, Kochański did not strive to have his works printed, but constantly attempted to improve them. He awaited fuller or even comprehensive answers to many problems which, however, proved rather difficult and sometimes even impossible to solve. Moreover, he never really settled down and frequently changed his place of residence, and did not enjoy good health. Neither was he encouraged to publish more by his patrons. Those few manuscripts by Kochański that had survived until the twentieth century were burned during the 1944 uprising against the Nazis in Warsaw.

The most important part of Kochański's output, which throws light on his personality, academic interests and the problems that intrigued him, is his most prolific correspondence, extant only in fragments. Kochański's interests were so varied that for a historian of sciences his letters contain abundant material to study the whole era. It must be noted that at that time correspondence was one of the predominant means of contact between researchers, it testified to their involvement in the activities of the academic world and in the solving of current problems in different branches of knowledge. Therefore so much attention should be paid to Kochański's correspondence as letters enabled the researchers to pose new problems and try to address them, while the solutions were published later on in the form of separate articles.

The collected correspondence of Kochański includes now 163 letters, either written or received by him. From the period of his youth, ten letters have been preserved, sent to Athanasius Kircher in *Collegium Romanum* (1657-1675). From the later years, both original and hand-copied letters, exchanged between Kochański and Heweliusz, are preserved in the number of 34, and they still re-

main in the manuscript form. As early as in the seventeenth century, some of Kochański's relatively unknown letters to Andreas Müller (1630-1694), a German linguist, were published. Recent years have seen the publication of Kochański's letters to the German astronomer Gottfried Kirch (1639-1710). Over ten individual letters in manuscript were traced in libraries and archives both in Poland and abroad. Of much value are 32 letters by various scientists, sent to Kochański in the years 1669-1690. They are preserved in the National Library in Warsaw (MS no 4829).

In present-day research, the most precious is Kochański's correspondence with Leibniz. It includes 24 letters by Kochański and 15 abstracts of letters by Leibniz, and comes from the years 1670-1671, 1680 and 1691-1698. In his first letters (1670-1671), Kochański was chiefly interested in physical and astronomical topics: rectilinear motion, geomagnetism and magnetic declination, the impact of the forces that operate during the Earth's revolution around its axis, an attempt to calculate the distance between the Earth and the Sun. The later letters that the Polish Jesuit sent to Leibniz testify mainly to his mathematical interests: the construction of an arithmetic machine, the preparation of mathematical tables, the calculation of the length of the side of a polygon that is inscribed into a circle of a given radius, or Leibniz's analytical calculus. Throughout his life, Kochański was preoccupied with the idea of the construction of perpetuum mobile. Thus Kochański's letters comprise in their subject matter a great deal of the problems that the then scientists were engaged in. Both Kochański and Leibniz seemed often to trespass the limits of sciences: they devote some space to history, philosophy, astronomy, linguistics, ethnography and alchemy.

This work, for the first time in the relevant literature, presents an extensive and comprehensive biography of Kochański. Moreover, it describes his interests and output systematically, in chapters pertaining to particular areas: Kochański's broad perspective on philosophy; his work and achievement in the sciences: physics, mathematics and astronomy; his vivid interest in alchemy and lastly his humanist interest in the world, and especially in the European and Asian languages. The last chapter, by way of résumé, is an attempt to provide an answer whether Kochański was a researcher of considerable attainment or whether he remained a visionary in the field of science and philosophy.

An indispensable publication to supplement this one is a separate reprinted edition of the rare and unavailable works by Kochański and a volume of the extant correspondence, both sent by and received by him. Kochański's letters, even those that were published at some point, have not been easily accessed and much researched by scholars so far. Moreover, it is only in its entirety that his correspondence, with some letters complementing each other, can reflect to a satisfactory degree the personality of the Polish mathematician and prove that he was acquainted with practically every scientific issue and every domain of science, and with its progress.

The book depicts Adam Kochański as a very complex personality, a man and a scientist, the most eminent Polish representative of natural philosophy or *philosophia curiosa*, and an extremely versatile one. He appears almost as a genius

and as an autodidact who began his studies by reading the available sources, e.g. the works of Galileo, Descartes, Heweliusz and others. Following that, he turned to everything that could be an object of observation and experiment, everything that could be investigated with the eye and had any connection with science and philosophical thought. His lists of inventions and announcements of future inventions, as embraced by the extant correspondence, contain so many subjects of interest and so many problems on which he worked (even expecting their prompt publication) that apparently he could be ranked among the most prolific writers of the seventeenth century. Some of his works were groundbreaking, and almost all of them were innovative. At the same time, the whole published output of this scholar of many talents amounts to 250 printed pages and an indefinite number of manuscripts, the majority of them were anyway lost after Kochański's death.

Undoubtedly, Kochański's assistance was appreciated by such renowned scholars as the linguist Andreas Müller and the philosopher Gottfried Leibniz, and perhaps some others. To say the least, the Polish mathematician definitely was an excellent reviewer of their works in the process of preparation. He similarly collaborated with Jan Heweliusz and Gottfried Kirch. As Kochański lectured in at least six Jesuit colleges, he educated generations of mathematicians, both among the Jesuits and the laymen, who later on published their dissertations. Some of them, residing in Germany, Bohemia and Poland, are mentioned by Kochański himself in his correspondence.

Having only the scraps of his *oeuvre* at one's disposal, and numerous but not absolutely clear letters, it is difficult to assess the whole of Kochański's thought. In Teplice he left his unfinished construction designs and in Warsaw, his unfinished writings. It may, however, be attempted to categorise his efforts, definite achievements and some failures. One of his undeniable inventions is the calculation of the circumference of circle, the most simple and the most accurate one, which is provided in handbooks as a formula, although the name of the inventor is not quoted. Kochański earned pride of place among Huygens, Hook and Hautefeuill, whom historians of technology commonly perceive as the inventors of the hairspring for pocket watches. Kochański also tried to carry out other types of research, e.g. to confirm the validity of the Copernican system, to construct an arithmetic machine or to prepare mathematical tables. As Leibniz, he was of the opinion that the most reliable way of learning about the world is logical reasoning. Empirical tests would then only check the correctness of the process of deduction.

Kochański's failures consisted in that he eagerly, stubbornly and at considerable expense wanted to construct the *perpetuum mobile* and that he vainly sought a panacea for human ailments and illnesses.

Kochański is still an ultimately unsolved enigma. The nooks of the archives may well hide an interesting letter, message or piece of information that can throw more light on his life and activities. Nevertheless, even this sketch is able to show a unique, enthusiastic figure of this thinker and philosopher who was hardly understood by those who surrounded him and later forgotten by his compatriots. It

was not an exaggeration on Leibniz's part to write: "It is basically only you whom I can perceive among your nation as capable of enriching science".

The Polish mathematician has not been counted as one of the most prominent thinkers and inventors of the seventeenth century, much though he deserved it. He contributed to this state of affairs himself, being more of a thinker and philosopher than a writer and editor of his own writings. Had he published these works that he intended to publish, he would have become one of the most famous figures of the time. This lack of recognition of Kochański's achievement can also be ascribed to the attitude of the Polish scientific circles, where Kochański's genius was not appreciated, or perhaps even not realized. Definitely Kochański has always been more highly assessed in Western Europe than in Poland. Even nowadays, in relation to studies on the philosophy of Leibniz, the astronomy of Kirch or the Chinese issues, the name of the Polish scientist continues to be mentioned abroad. We hope that this publication features a balanced assessment of this mathematician and *philosophus curiosus*, and that it will encourage further research.

Red.

Korespondencja Adama Adamandego Kochańskiego SJ (1657-1699). Opracował [Ed.] Bogdan Lisiak SJ przy współpracy Ludwika Grzębienia SJ [Correspondence of Adam Adamandus Kochański], Kraków 2005, Ignatianum-WAM, pp. 475.

The most eminent mathematician of seventeenth-century Poland was a Jesuit, Adam Adamandy Kochański (1631-1700). His philosophical studies at Vilnius University were interrupted by the invasion of the Muscovite army on the town in 1655. Kochański sought shelter in Germany. In Würzburg his extraordinary mathematical talent was noticed by the German erudite Gaspar Schott, who invited Kochański to collaborate on the publication of his works. Having completed his theological studies in Molsheim (1655-1657), the Polish Jesuit became a lecturer in mathematics and at the same time graduated in theology from Mainz (1657-1664). His earnest petitions to the superiors in Rome were granted: after the war he was allowed not to return to Poland, but to remain in Western Europe. He worked as a lecturer in Bamberg (1665-1666) and in Florence (1666-1669), where his knowledge was employed at the court of the Medicis. Since 1670 he lectured in the schools managed by the Czech Jesuits: at Prague University (1670-1672), at the Academy in Olomouc (1672-1675) and at their college in Wrocław (1675-1679). On the invitation of the Polish king Jan III Sobieski, towards the end of 1679 Kochański arrived in Warsaw to become a teacher of mathematics to the king's son, Jakub Sobieski. He also contributed to the decoration projects in the royal residence at Wilanów and taught mathematics in the Jesuit college. Between the years 1683 and 1690 he resided in Gdańsk, working there as a royal mathematician and librarian. In 1690, on his return to Warsaw, he supervised

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