

When we take books in our hands that were published a couple of years ago, loose pages which once were glued to the spine fall out, and the print on the crinkled pages has become faint and illegible, it is hard to believe that some printed books have survived more than half thousand years. And yet it turns out that approximately 6 million of such works have managed to withstand the turmoil of war, climate catastrophes, or numerous relocations. Incunables (prints from 1455 to 1500) and old prints (in Poland from 1501 to 1800) are extremely precious treasures; vigilantly protected testimonies of our common cultural heritage.

> A team of scientists lead by Prof. Leonard Ogierman from the Faculty of Humanities at the University of Silesia has worked since over a dozen of years in order to bring back to life medieval book treasures.

> - In the past, the preservation of books was the effect of trial and error of the person who decided to perform the task, says Professor Ogierman. - Nowadays, conservationists use a broad range of analyses and measuring instruments.

> The first step is the diagnosis i.e. a careful examination of the paper, parchment, and the skin with which the book was bound. Moreover, the glue, the printing paint, and the pigment are carefully looked at. Interdisciplinary knowledge is the prerequisite for such an analysis.

> Physical chemistry, materials science, microbiology, virology, etymology, mycology as well as history, including the history of art – this is only a selection of scientific disciplines necessary for a conservator's work.

Professor Ogierman is an analytical chemist and microbiologist who possesses extensive knowledge of conservation materials science, the kinetics and the mechanism of the aging process of materials of natural origin, including antique books. The work results of Professor Ogierman's team can be admired, among others, in the invaluable libraries of the Pauline Fathers at the Jasna Góra Monastery and the Skałka Monastery. In the monastic archives in Cracow (Kraków), the scientists were able to restore 4,279 volumes and 680 antique wooden cases of library books, performed conservation works on four priceless incunables: *Rationale divinorum ofiiciorum* by Guillelmus Durant; *Summa theologica* by Antoninus Florentius printed in 1485 in Basel, Switzerland, at Michael Wenssler's publishing house; *Decretales...* of Gregory IX published in 1511 in Paris, France, at Thielmann Kerrver's publishing house; *Missale Romanum* printed in Venice, Italy, at Lucantonio Giunta's publishing house.

The renovation of the incunables took six months, and the most difficult step was the rinsing of the old glue, since after a few baths the pages look like delicate blotting pa-



Photo. Agnieszka Biały

per which can very easily be damaged. Mistakes would have been irreversible. It is therefore often the case that a conservator's work requires the patience of a Benedictine monk and the precision of a watchmaker.

For the purposes of cleaning and conservation, the scientists use, among others, electric erasers, and the disinfection (destruction of fungi and bacteria) is performed in a fumigation chamber by means of concentrated ethylene oxide. Due to the properties of handmade paper, which was used in medieval times, and because of the fact that they have been kept in cases, old prints have managed to withstand the jaws of time quite well. Much younger prints from the end of the 19th and the beginning of the 20th centuries, when so-called acid paper came in use, have to cope with enormous problems, despite the fact that they are slightly more than 100 years old. It is very unlikely for them to live as long as incunables.

In 2008, Professor Ogierman's team performed conservation works on a copy of the oldest Polish printed Bible, the socalled *Biblia Leopolity (Leopolita's Bible)* from 1577. The old print was kept in the Special Collections Laboratory of the Library of the University of Silesia, since the degree of damages did not permit its exhibition or even digitalization. Due to the fragmented spine, loose pages with numerous losses, torn seams, soiling, and traces of incompetent repair work, this highly valuable book was doomed to be forgotten. The specialists, however, were able to bring the old print back from a state of nonexistence. Each of the 600 pages of the Biblia Leopolity underwent conservation work. After a water bath, which permitted to remove the old glue, soiling, and traces of previous repair work, the scientists added the missing paper mass and glued the torn fragments together. After additional gluing and ironing, the pages were transferred to a bookbinder.

Palpable results of work performed by the conservators from the University of Silesia are also present in Lviv, Ukraine, where a group of researchers (in partnership with the Ivan Franko National University of Lviv and the Department of Culture at the Ukrainian Ministry of Education and Science) carried out research projects in the collections of the Library of the Wiktor Baworowski Foundation. During several years of work, the 16th century prints were sorted out from the collection, processed in a complex fashion, rated with regard to their state of preservation, and subsequently the catalog was designed.

Professor Ogierman's team faces enormous challenges. In August 2019, an agreement between the Order of Saint Paul and the University of Silesia was signed. It regulates issues regarding the processing of old prints, their preservation, also in electronic form, and providing access to the research results in form of a printed catalog (in electronic form as well). In the collection of the Jasna Góra Library, 274 incunables were identified. The majority of them originate from German typography centers and from Venice, Italy. At first, the incunables will be processed and digitalized; subsequently, all of the more than 2,500 prints from the 15th and 16th centuries are to follow.

Professor Ogierman held every one of the 13,000 books from the collection at Jasna Góra in his hands; he touched several hundred incunables, is able to correctly identify prints by at least 10 printing persons, and yet, as every true book lover, has to admit the following:

- Every meeting with those who created the book, read it, and held it in their hands, is a profound and unforgettable experience for me.

The durability of computer print is disputable. According to specialists, contemporary books have the chance to survive no longer than 150 years.





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Leopolita's Bible - left: state before the conservation, right: state after the conservation / Photo. Marzena Smyłła