
Hilandar Monastery: Care for endangered collections

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Summary:

The medieval Hilandar Monastery, within the monastic state of Agion Oros (or Holy Mountain), is one of the five most important monasteries of Holy Mountain. The National Library of Serbia (NLS) has occupied the Hilandar Monastery since 1971 and serves as one of the first cultural institutions of the Republic of Serbia to collect, process, protect, and present the monastery's treasures including 507 medieval charters, 56 medieval manuscripts on parchment, 1048 manuscripts on paper (815 in Cyrillic), 83 incunabula, and numerous other archival materials. The general state of these collections, however, is poor and is plagued by bad storage techniques. This article discusses the conservation efforts launched between 1990 and 2004 by the NLS as well as a recent initiative to highlight the preservation that has been accomplished and also the work left to do to ensure these vital artefacts of Serbian cultural history are preserved.

Key words: monastery Hilandar, mount Athos, Serbian medieval heritage, conservation of manuscripts

A Brief History of Hilandar Monastery

Hilandar Monastery, located in the north-eastern part of the Greek Athos Peninsula, is one of the five most important monasteries of Mount Athos (or Holy Mountain). No written sources mention the founding of the Hilandar Monastery, however, surviving documents from as early as the 10th and 11th centuries that can be linked to activities at the site. For example, its first appearance in preserved writings is from early 11th century, when Hilandar was mentioned as a Greek monastery dedicated to the Presentation of the Blessed Virgin. Between the 11th and 12th centuries, this monastery took on various names, such as Helandarios, Helandaris, and Chilandar. Written sources also document the fall of the monastery in 1076, when, according to an act, the monastery was “completely deserted and extinguished” by the Greek monks. During the 12th century it appears that the Hilandar Monastery had collapsed into total decay.¹



Fot. 1.
Monastery
Hilandar on Mount
Athos²

¹ History of Hilandar Monastery (taken from http://www.hilandar.info/strana.php?strana_id=62).

² All pictures in the article came from NLS Conservation Department's own documentation.

Then, in 1196, the Serbian great mayor Stefan Nemanja stepped down from the throne and retired as a Simeon monk. His youngest son, Rastko, was a monk on Mount Athos known as Father Sava, and he persuaded his father to come to the Vatoped monastery of Holy Mountain. Both men asked Byzantine Emperor Alexius to assign them to a small abandoned Hilandar monastery, which was on Vatoped land, so they could settle there as dependent monks. After granting their plea, Hilandar was completely rebuilt. Simeon and Sava continued their strict monastic life in the newly revived monastery and also invited more Serbian monks to join them. Thus the first Serbian monastery on Mount Athos was established, and, from that time it became not only religious but also an educational and cultural centre of the Serbs. One of the monastery's most significant assets was its substantial and valuable collection of Serbian cultural heritage kept in its walls.

Monastery Collections

The gathering and making of valuables in the monastery has endured over eight centuries and has survived despite looting, mutilation, and major events in world history (like flooding, earthquakes, wars) thanks to the monastery's geographical position. Most of the treasures in the collection, which include everything from charters and textiles to saintly relics and gold objects, are preserved today in the building known as the Treasury, which comprises the eastern part of the monastery complex. Along with the collections of the monasteries of Vatoped and Lavra of St. Athanasius, it is one of the most valuable treasuries in the Holy Mountain.

The Treasury visible today is actually one the most modern buildings in the monastery complex, built in the 1970s to preserve all of Hilandar's important cultural heritage across several depots. The first floor is adapted to accommodate paper and parchment materials, while the collections of valuable wood, metal, or stone objects are placed in the Monastery Treasury in depots on the second floor.

Hilandar's priceless collection of Serbian medieval manuscripts, incunabula and charters are also preserved today across the site's four libraries that were organized in 20th century and specialize in, respectively: archival materials, manuscripts, printed books, and modern books. While the libraries of printed books and modern books are found in southern part of the monastery complex, both the library of archival materials and the library of manuscripts are placed in the previously-mentioned Treasury.

The library of archival materials, placed at the first floor of the Treasury, is further divided into two collections: the collection of 507 medieval charters (from 1198 to 1685) and the collection of modern archival materials (various documents related to the monastery from the 18th to 20th century). The collection of charters is divided, according to its provenance, into Serbian, Greek, Vlach, Russian, and Bulgarian documents. There is a large collection of other archival materials as well: archival economic books (1770–1930), Serbian (1702–1930), Greek (1615–1930) and Turkish writings (1464–1912), old photos and boxes with various documents (mostly from 20th century).

The manuscript library is a separate room, next to the archival materials depot. It houses the collection of medieval manuscripts on paper or parchment



Fot. 2.
Medieval
manuscript
from the
Treasury

(56 on parchment, 1048 on paper), along with the collection of incunabula (83 books). Most books are Slavic Cyrillic manuscripts (815 books) ranging from liturgical books, theological texts, and monastic-ascetic literature made in monastery, however, some originated elsewhere and may their way to Hilandar as gifts. The collection contains works of original literature made in honour of the saints and crafted by some of Serbia's most distinguished scribes and illuminators (for example, The Four Gospels of King Milutin from 1316, The Electoral Gospel of Nikola Stanjević from the Mid-14th century, The Four Gospels of Patriarch Sava from 1354–1375, Six Days of John Chrysostom from 1447). In the field of law, this collection contains transcripts of the Emperor Dusan Code (the first third of the 15th century) and the Agricultural Code (the 15th century). There are also significant medical texts – a volume containing Iyatrosophia (1390/1400), for example, and the famous Hilandar Medical Code (1550/60).³

To the south of the monastery complex exists the old printed book library, which preserves more than 5,000 texts of Greek, Russian, Ukrainian, Romanian, Serbian and Bulgarian origin created between the 17th to the 19th century. Most of the books in this collection are Russian and Ukrainian liturgical books came to Hilandar as imperial gifts (brought by the Serbian monks upon their return from Russia, where they collected alms for the monastery). There are books from the printing offices of the Moscow Seal, the Kiev-Pechersk Lavra, Vilnov, Vilensky and Lviv Brotherhoods, Chernihiv Trotsky-Ilyinsky, Iversky, Unevsky Monasteries, the Trade Printing House, and others.

Nearby is the modern book library, which holds a large collection of Serbian books from 19th to 21st century. This collection has more than 40,000 volumes (mostly contemporary editions), and it is constantly expanding thanks to gifts from institutions and individuals from home and abroad. The most significant part of this collection is made of rare editions of Serbian books printed

³ D. Bogdanovic, *Katalog cirilskih rukopisa manastira Hilandara*, SANU, National Library of Serbia, Belgrade 1978.

in Vienna, Budapest, Venice, Leipzig, Novi Sad, Belgrade, Zemun, Kragujevac, Kotor, Sarajevo, Zadar, and Zagreb.

National Library of Serbia (NLS) Initiatives at Hilandar

From the point of their installation in the monastery complex in 1971, the National Library of Serbia (NLS) has been active in collecting, processing, protecting, and presenting its treasures of the Hilandar Monastery. The tasks performed by the NLS in the Hilandar Monastery can be divided into several segments and programs: Scientific research (archaeographic and philigranological); formation and maintenance of library database; bibliographic description of the printed book collection making phototype editions of most the valuable manuscripts and charters; and, finally, the conservation of manuscripts and other library materials.

We can also divide the activities of the NLS according to the period when the activities took place. The first phase are those activities in the period from 1971 to 2004; the second phase includes those endeavours after the large fire that damaged the monastery in 2004.



Fot. 3.
Hilandar Monastery
after the 2004 fire

During that disaster, two-thirds of the site were burned. Luckily, no collection was harmed in the fire, because only northern and western parts of complex were burned. This meant that conservation efforts could continue, however, the NLS project was nevertheless suspended so that the reconstruction of the monastery could begin. These rebuilding efforts are still ongoing, with almost 75 percent of the monastery having been restored thus far.



Fot. 4.

Zone completely destroyed by fire

Before the great fire, NLS initiatives included: researching and cataloguing the manuscript collection; publishing both the Catalogue of Cyrillic Manuscripts and the Catalogue of the Old Printed Book in 1978; relocating collections from old depots to the new Treasury building in 1973; and creating the database (for bibliographic entries in the form of contemporary monographs and serials). Most of the scientific work has been devoted to archeographic research, photo documentation, describing Cyrillic manuscripts, researching watermarks, and investigating old printed books. A special part of the activity was related to the

printing of graphic plates discovered on the monastery property and subsequently printed by conservators and graphic artists during the 1980s (together with the printing of graphic plates of the Vatoped, Simonopetra, and St. Elijah monasteries on Mount Athos).⁴

Conservation Initiatives

The NLS aimed to conserve and document the written heritage in the Hilandar Monastery, as summarized in their project document entitled “Conservation of handwritten, old printed books, incunabula and charters of the Hilandar Monastery” that was adopted in 1989 by the Republican Community of Culture. It was also adopted by the National Council of Hilandar, which was formed at the Institute for the Protection of Cultural Monuments of the Republic of Serbia. Finally, the project was endorsed by the monastic Council of the Elders of Hilandar Monastery. Care for manuscripts and charters, under this program, was continuously carried out from 1990 until the great fire in 2004.

The first task of NLS conservators was to determine the conditions in the Treasury and other libraries in the monastery. In the first decade of NLS project, several teams evaluated the state of collections and determined the factors that influenced damage to those materials. Here are some of their conclusions:

Library Collections: The general condition of all four library collections (archival, manuscript, old printed books and modern book units) was poor. Conservators found biological, chemical, and mechanical damage throughout, and the paper/parchment of these texts had been stored in such inadequate and unstable conditions that the books suffered from extensive damage caused by insects moisture, mold, rodents, and weather. Moreover, this was damage accrued over the centuries, as even 19th-century monastery librarian Father Sava (known as Sava the Czech) noted that the books and their bindings were damaged by moisture, marred by moths.⁵

⁴ V. Goranovic, *Biblioteka manastira Hilandara*, “Glasnik NBS”, No. 1 (2003), 135.

⁵ Z. Pekic, *Čuvanje biblioteke manastira Hilandara*, Prosveta, Belgrade 1999, s. 291.



Fot. 5.

Usual condition of manuscripts
in the Treasury

Since the beginning of a more concerted effort to preserve these texts at the beginning of the 20th century, wooden crates of these books were stored in the so-called “old Treasury”, on the west side of the large church and above the corridors of the grand Old Dining Room. After World War II, the library was moved to the immediate vicinity of today’s newly built library space, and they stayed there lining the wooden shelves until 1971. Conservators found traces of wormholes in the wooden crates but found none on the wooden shelves, which led them to conclude that the collection of manuscripts and old printed books were infested in time before they were moved to their new location.

In addition to these various forms of degradation, there were also occasional, unpredictable effects. For example, in the 20th century, improper disinfection



Fot. 6.

Example of copper corrosion
on medieval charters

attempts using chemical agents, specifically phosphine gas, caused visible damage to certain materials in the Treasury. Conservators noted that phosphine reacted with oxygen during the treatment, and copper (from gold seals) was a catalyst for this reaction. It caused corrosion of copper traces on paper or parchment of medieval charters. Copper was alloyed with gold in golden seals of imperial charters, and due to phosphine treatment, its reaction led to forming corroded zones (made of copper salts) on surface, leaving holes and stains in charters near the golden seals.

Finally, it should be noted that paper and parchment have a limited life span, and its further degradation is inexhaustible, so lots of material aged and became brittle over time. All these factors have caused a great deal of damage to the written cultural monuments kept in the Hilandar Monastery.

Initial reports on this state of conservation of these heritage materials were made in the 60s, long before official conservation activities took place in the 90s. Thanks to these reports some changes were made to monastery depots in the 70s, but, while these changes meant better conditions, they were not enough to protect the materials inside.



Fot. 7.

Library stacks at Hilandar Monastery
(Old printed books and manuscripts)

The Treasury's construction in 1973 in a part of the monastery complex east of King Milutin's Catholicos, between the St. Sava Pier and the bell tower meant that there was a new space to safely house icons, handwritten books, chrysalis, and other valuables (textiles, metals, etc.). At the same time, though, it was built to 1964 specifications meaning it lacked appropriate air conditioning.

Between 2000 and 2001, the Treasury was notably adapted. First, the walls of the Treasury were insulated (from the inside, since the exterior wall was made with a stone façade). Second, interior windows were added. Third, internal surveillance cameras and fire protection (fire extinguishers) were installed. Finally, an air humidity lowering apparatus was installed, so the Treasury currently operates a system that provides room humidity control regardless of external conditions (combining an automatic dehumidification system and mechanical, portable low power humidifiers).⁶ This system is not complete, because it does not provide the possibility of cooling or heating the air. According to the measurements, the interior temperature can range from 8 to 34 degrees of Celsius during the year.

Since Hilandar is located in an area with both high moisture and temperatures, especially in the summer months, the Treasury is exposed to frequent fluctuations of temperature and relative humidity regardless of the built-in air conditioning system. The parchment and paper material stored in the Treasury is particularly vulnerable to microclimate changes. At low relative humidity values (below 40%), parchment becomes dry and brittle. At high relative humidity values (above 65%), harmful microorganisms can develop on the material, resulting in the parchment sheets sticking together. High temperatures also affected paper and parchment, as the paper aged rapidly at elevated temperatures. The activity of the insects was increased. Manuscripts, charters, incunabula, and other valuable material suffered permanent damage, exposed to large changes in humidity and temperature among the monastery walls.⁷

6 Z. Nikolic, Z. Perisic, *Nova tehnička rešenja u manastiru Hilandaru*, "KGH", No. 2 (2002):39.

7 V. Radosavljevic, R. Petrovic, *Konzervacija i restauracija arhivske i bibliotecke gradje*, Arhiv Srbije, Belgrade; Arhiv Vojvodine, Novi Sad 2000, s. 130.

Thus, the NLS faced a herculean challenge when it came to establishing a protocol to prioritize conservation. Adding further complication was the fact that they were at first not awarded proper equipment, so conservators worked on less damaged materials only. Conservation was carried out until the fire of 2004, by which point the team had successfully completed the:

- Conservation of 241 manuscripts (from the lower priority group)
- Conservation of 65 charters
- Conservation of 42 printed gospels (mostly from 18th and 19th century)
- Stabilization of iron gall ink for 106 manuscripts
- Binding of 144 books from Library of modern books.

These efforts, carried out between 1990 and 2004, reflected roughly 20% of the collection.

New Preservation Project

The NLS stopped sending conservators to Holy Mountain after the fire as the workshop had been destroyed and, more importantly, the monastery had new priorities, such as the reconstruction of its walls.

At the start of the 2010s, I united a team of NLS experts behind one goal: to continue protecting Hilandar collections. Our team began drafting a new project for the preservation and conservation of written cultural heritage at the Hilandar Monastery. A project contained the following elements:

1. Risk assessment, along with determination of the current condition of collections to prioritize conservation.
2. Establishing a project with an appropriate budget and forming of new workshop at the monastery.
3. Preventive care activities in all four library units at the monastery.
4. Conservation of most endangered books and charters in a new workshop.

The first part of the project was related to collecting data on the current state of all written material housed at the monastery. We had previous reports from

the 20th century, but we lacked information about current condition of collections, especially after the fire.

The second part was to establish a self-sustaining project with a budget sufficient to make an adequately well-equipped conservation workshop. This would involve adaptation of one of the monastery premises in the Treasury building, along with permissions of the competent authorities.

The third part of the project concerned the development of a preventive care plan that involved the identification of all potential biological and microbiological hazards in the collections. This part of the plan includes the formation of a group of experts (architects, curators, librarians, conservators) tasked with proposing renovations to the Treasury building (mainly because of poor microclimatic conditions). The fourth and final part of the plan concerned the remedial care of collections in a newly formed workshop, with emphasis placed on conservation of most endangered and most significant manuscripts and charters.

The NLS supported this new project, and shortly thereafter the brotherhood of Hilandar Monastery approved our plan and made promises to help establish a budget for some phases of our future work. The first phase of new this new conservation project began in 2011 by sending conservators and librarians to the monastery to report on condition of the collections.

Collection Condition Report

A team of conservators and archaeographers, led by Dr. Vladan Trijic (archeographer and NLS deputy director at the time) and myself (as Head of Conservation within NLS), collected data on all four libraries during our stay at Hilandar Monastery in 2011. We produced a *Report on the Condition of the Collections of Charters, Manuscripts and Old Printed Books of the Hilandar Monastery*, based on collected data.

According to our report, we noted that all four libraries had numerous damaged materials. We measured microclimate conditions in depots and calculated all the other risks and checking the state of every single library unit (manuscript,

incunabula and charter) in the Treasury. We also checked the general condition of modern libraries, with a focus on the most damaged books only (according to previous reports from 20th century). It wasn't possible to check every single unit from these modern collections because they keep more than 40,000 volumes.

We paid special attention to biological control, trying to investigate traces of insect activity in the Treasury. Our insights were limited as we did not have a biologist on our initial team (and have committed to hiring a team of professors from the Faculty of Biology from Belgrade for a precise analysis of the biological hazard during a future visit).

Our team classified all observed damages on library units, placing them into four categories, keeping in mind the possibility that many units would be on the border of two categories, or would have multiple damages of various types, so they wouldn't fit in our pre-made criteria:

- First Category: units that need urgent intervention (active biological hazards like live insects; mould infection; iron gall ink corrosion destroying text or illumination; dry and brittle parchment, etc.)
- Second Category: units that do need intervention is needed but not urgently (mechanical damages of sheets, multiple binding damages, damaged seals, damaged books spine, etc.)
- Third Category: units with minor damages that do not compromise the stability of units (stains of various origin, dirt on paper, small damages on leather bindings, damaged clasps, etc.)
- Fourth Category: units in good condition (already conserved or not needing conservation).

Condition of Charters

Data collecting started in the library of archival materials, specifically among the charters.

The charters are stored in a metal cabinet with drawers designed for safe-keeping of this type of material. When it comes to microclimatic conditions, the humidity is controlled by an automatic humidity lowering system, showing



Fot. 8.
Examples
of usual
damages
on medieval
charters

the appropriate range (45 to 55 percent) of relative humidity in each depot. The lighting is adequate (there is no direct influx of daylight into the depot), while the temperature varies depending on the external conditions, or the season, as noted earlier.

Recall that NLS Experts first organized this collection in the late 90s. At that time, the charters were classified, listed, overprinted, and housed in specially made albums, with cardboard and paper folders for safekeeping (acid-free materials). Charters, along with the younger transcripts, were contained in albums, housed individually or in pairs, in these metal cabinet drawers. The original charter of the Kareyes Typicon (the oldest work in the Treasury



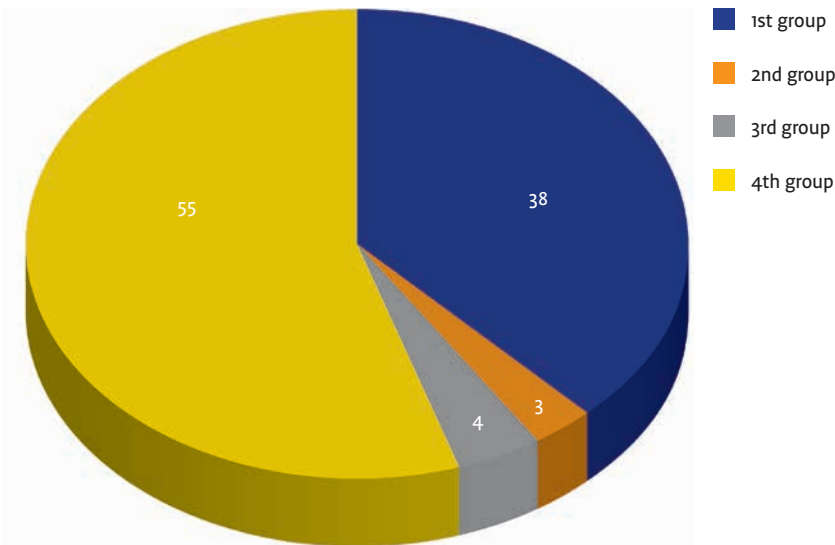
Fot. 9.
Library for archival
materials

from the 12th century by Serbian monk/founder of the monastery) and its transcript were kept separately, in a separate drawer. The charters in the form of scrolls were contained in round cardboard boxes, housed on metal bookshelves.

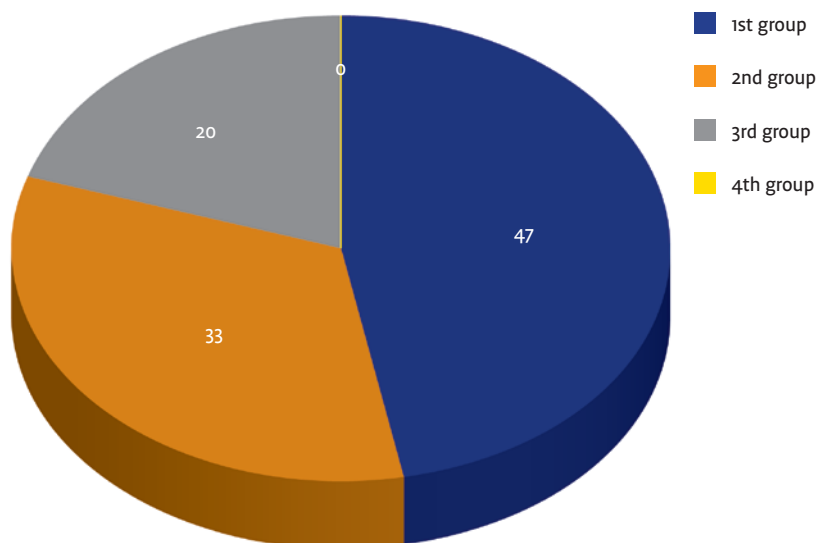
Each charter was reviewed by conservators during our stay in 2011 to determine the condition of the paper, parchment, inks, illuminations, and seals. The information was compiled electronically and was accompanied by photo documentation. We concluded that the material was in poor condition and that numerous charters required intervention. Younger paper charters, primarily from the 19th century, were not damaged, and some of them have been already preserved to prevent further deterioration. The charters made on parchment, though, including the Kareyes Typicon, required conservation intervention.

All the documents were separated in different categories, from First (most damaged units) to Fourth group (good condition).

Paper charters



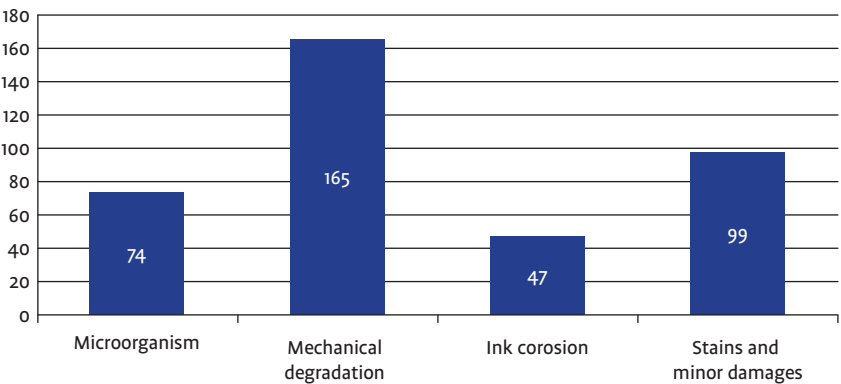
Parchment charters



There are 47% of parchment charters and about 40% percent of paper charters that were in very bad condition, needing our treatment. Parchment charters are generally in worse condition than paper ones, with only a small percent of preserved units.

Most of the charters had multiple damages, either the presence of colonies of microorganisms, iron gall ink corrosion, stains of various origin, or a great deal of mechanical damage (some documents are decayed, damp, or damaged by rodents and insects). Before the fire, the conservation team conserved many paper charters, while the parchment charters and rolls have not been conserved. Even knowing that many charters had multiple damages of various types, we tried to sort out the units by the type of damage that was dominant on them. This sort of information was needed to determine priorities in our work (disinfection as the first step; stabilization of iron gall ink as second; and restoring, mending, and sizing of charters as a next intervention, along with a stain removal).

Dominant type of damage on Charters



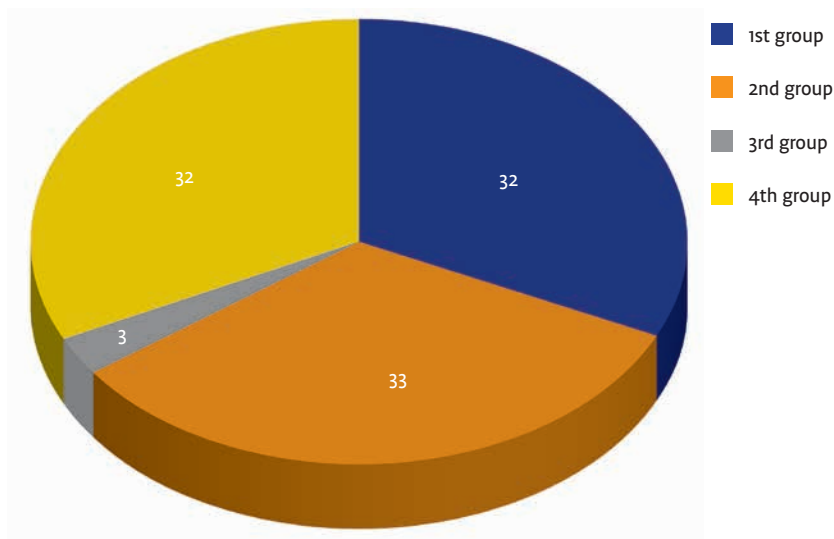
Condition of Manuscripts and Incunabula

The next step was to examine the state of the manuscript collection stored in a depot next to archival material. Microclimatic conditions were the same: manuscripts are stored in metal shelves, together with the incunabula



Fot. 10.
Example of damaged manuscripts found in the Treasury

Paper manuscripts



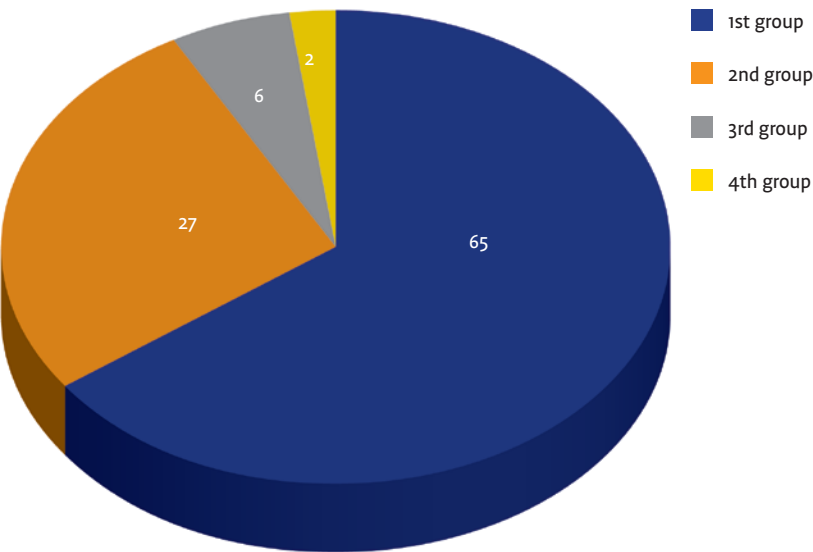
collection. General condition of these collections was bad, as expected according to previous reports. Most of the books had damaged bindings (and almost 80 percent of the collection is bound with the remains of its original Byzantine-era binding). The dominant problems were iron gall ink corrosion and insect damage.

In the collection of 1048 manuscripts written on paper, there are 338 books – in sum, one-third of the collection – that are in very bad condition and thus need urgent intervention. The rest are damaged to a lesser extent. In total, interventions are needed on 68 percent of the collection of paper manuscripts.

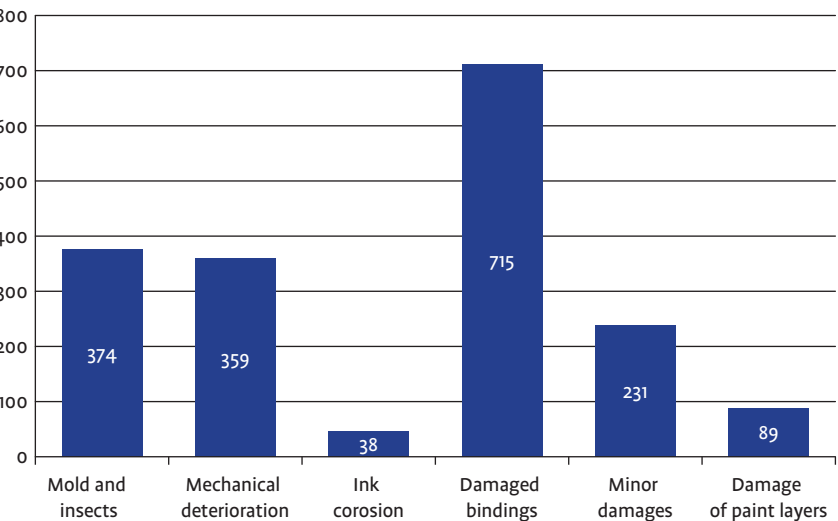
According to our report, in the collection of 56 parchment codices, 36 are in very poor condition, with insect infested boards, dried or sometimes burnt parchment. Almost every single manuscript from this group needed interventions.

We struggled to determine which type of damage was dominant. Most noticed problems with manuscripts are related to their bindings (mechanical

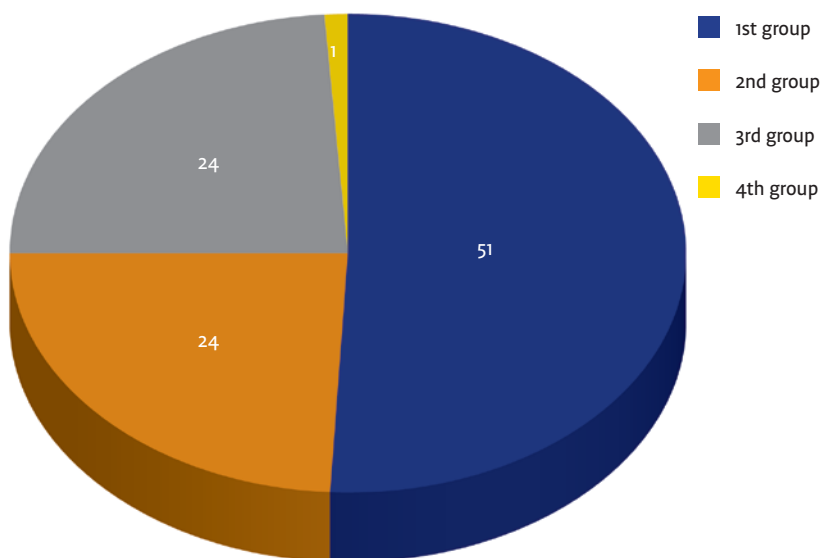
Parchment manuscripts



Dominant types of damages on manuscripts



Incunabula



damages of leather and boards, deterioration caused by insects, damaged clasps). The other problems included mechanical damage of the sheets, increased acidity of the ink, the presence of microorganisms and wormholes, and, in some cases, damage to the paint layer and miniatures. Separation of books by dominant damage helped us in deciding our future conservation methods and their timing (disinfection as a first step, then iron gall ink stabilization, with treating mechanical damages and damages of bindings as a last step).

A similar situation occurred with the incunabula and old printed book collections. Both collections are endangered by the same hazards as manuscripts (biological, chemical, or mechanical damages).

More than 50 percent of incunabula are in poor condition and exhibiting more than one noticed problem (usually damaged bindings and mechanical damages of sheets made by insects).

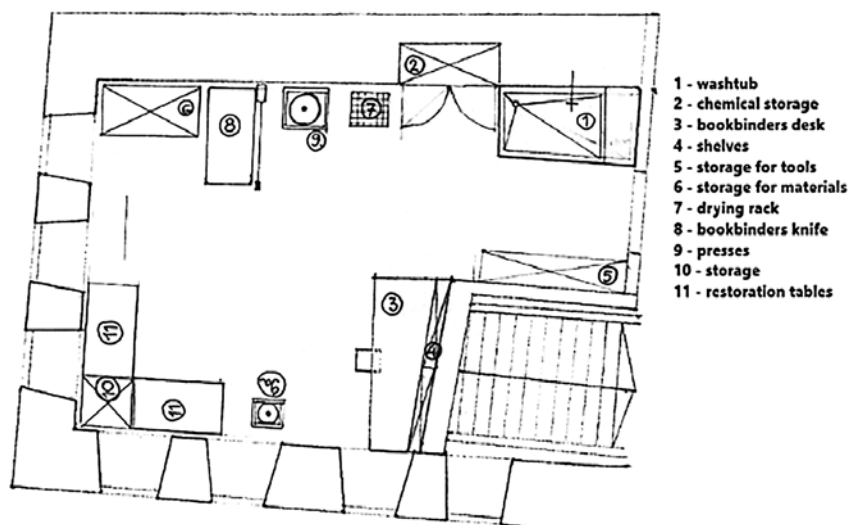
Condition of Old Printed Books

The collection of old printed books is also in need of intervention. About 3,000 units had damaged bindings (mostly hardcovers). We found traces of microorganism damages on some units of the collection. Due to lack of air conditioning in this depot, these books are in greater danger than books from Treasury. Conservators decided that preventive care in this library would be the first step (along with disinfection), but other conservation interventions would have to wait. The Treasury, with its valuable heritage, was our priority.

New Workshop Formation and Other NLS Initiatives

The relevant institutions in the Republic of Serbia used this report to budget for a new conservation workshop, as well as other preservation initiatives, in 2012. Our team's first suggestion was to send experts from the Faculty of Biology (University of Belgrade) to study the biological and microbiological hazards in the depots of the monastery's Treasury. These experts did so in 2013, examining all types of materials in the Treasury (books, charters, archives, icons, metal objects, and fresco parts). Their report revealed no live insects but did cite mould infestations as present in both the charter and manuscript collections, as we feared. Most of the fungi colonies we found in books were not active, but there was nevertheless microbiological activity in almost one-quarter of units that we placed in the first category. This was important information, so we isolated the endangered units from the non-infected ones by putting them in a room next to Treasury depots until the disinfection process to be organized.

Our plan's second step was to develop better environmental controls in the Treasury by adaptation of that building. We collaborated with architects whose idea was to create a completely new, modern, and fully equipped Treasury in the part of the monastery under renovation (on the western side of the complex). We agreed to this plan, and we are still waiting for the budget for this new Treasury building to be established.



Fot. 11.

Early draft for conservation workshop in the Treasury

Our third step was to find a space for a new workshop. With the blessing of the Council of Elders of the Hilandar Monastery, a room on the ground floor of the Treasury previously used as a workshop for woodworking has been designated for a future conservation atelier. In 2014, this woodworking studio was completely redecorated according to a draft made by NLS experts and experts of the Republic Institute for the Protection of Cultural Monuments, in coordination with the architects working on the monastery's reconstruction.

That room was renovated to meet our requirements, including the introduction of wet knot, three-phase electricity, adequate lights, ventilation due to volatile chemicals, as well as procurement of tables, chairs, and tools for work. This space is the only workshop in Treasury, so it had to be shared between NLS paper conservators and icon conservators from the Republic Institute for the Protection of Cultural Monuments (although the two parties work in the space at different times of the year to prevent overlap).



Fot. 12.
New conservation workshop at Hilandar Monastery

In 2015, large conservation equipment – like a vacuum table, book suction system, steam pencil, bookbinding presses, and restoration tables – was acquired to recommence the conservation process for the first time after 2004. Despite this new outfitting, working conditions in the monastery and the general unavailability of common conservation tools and materials still made conservation efforts difficult. The problem can be reduced to two key categories: one is related to specific rules of an orthodox monastery, and the other is related to the budget of the project.

First the presence of women is forbidden on Mount Athos following orthodox monastic regulations, so making the best team of experts is impossible. There is also little internet or cellular connectivity, spotty electricity (only oil generators are present), and a lack of access to resources given the sheer geographical distance from any populated areas. Conservators working at the monastery are also subjected to very modest food and accommodation, sleeping in the old mill one kilometre away from the monastery. This mill is without electricity or heating, so the summer is the only season when our team can work). These parameters mean our team can only work at the monastery between one to two months per year, which is not enough to preserve the large number of books that need attention. Moreover, the budget for the project has plenty of constraints (purchase



Fot. 13.
Team of
conservators
and their
accommodation



of large equipment is made by stages, year by year) and there is small annual budget for procurement of supplies and chemicals for work.

Therefore, conservation processes (such as photo documentation, disinfection, mechanical cleaning, washing, iron gall ink stabilization, sizing, mending, retouching, stain removal, book-binding, or restoring the damaged Byzantine covers, etc.) were a mixture of standard conservation activities with partial or complete improvisation during our stay.

First Conservation Results Post-Fire

According to the collection condition report, we prioritized our conservation efforts and planned our future steps. Our first step was to work on disinfecting

separated units by treatment with thymol fumes. The future plan is to procure an anoxia system for disinfection purposes (mostly for wooden materials like icons but also for treating books).

All the necessary analyses of ink, paint layers, paper or parchment were made with a help of colleagues from the Republic Institute for the Protection of Cultural Monuments, who carried micro samples of damaged materials to their lab in Belgrade and presented results afterward.

Despite the frequent need for improvisation and the incompletely equipped conservation workshop, the team of conservators successfully protected every selected item from the Treasury. One part of our team was working on iron gall ink stabilization of manuscripts and charters from the first group of our priority list ("Calcium phytate" method). Meanwhile, a book-binder was restoring the leather and the boards of damaged Byzantine covers for the manuscripts that most needed binding interventions. Mechanical damages were treated on selected books from Treasury, along with stain removal, sizing, and mending of damaged charters. In each stay at the monastery, our team of five or six conservators worked on several damaged charters and two or three paper and parchment manuscripts (from the first priority group), trying to make a balance between different collections. This is only a brief report on our activities, without full details on a process, because every single item we conserved deserves separate report on conservation.

In the last few years, a great deal of work has been done in protecting the damaged and significant manuscripts and charters at Hilandar Monastery. In the period from 2015 to 2019, our team has done full conservation of:

- 24 manuscripts (paper)
- 7 manuscripts (parchment)
- 15 medieval charters (7 on parchment and 8 on paper)
- 8 graphics.

Among the conserved titles of the manuscript books protected during this period, we can mention some of the most significant: the Electoral Gospel of the Monk Roman (1337), the Electoral Gospel of Nikola Stanjević (mid-14th



Fot. 14.
Example of
conservators work:
The four-gospel
(1550) before and
after treatment

century), the Four-Gospel of Patriarch Sava (1354), and the Four-Gospel of the Monks Dionysius (1335), Parenesis of Jefrem Sirin (17th century), Paterik (1370).

The oldest incunabula in the monastery was preserved – Oktoih prvoglasnik (Cetinje, 1494), as well as the oldest manuscript book in the monastery – Stihirar (parchment, 12th century). Some of the most notable preserved charters are: The will of Teodor Karavas (1314), The charter of Vuk Branković which takes over the payment of the tribute of the Hilandar debts to the Turks (1392), The letter of the Hilandar fraternity to the Russian Tsar Ivan IV Vasilyevich Grozny (1583), The parchment copy of the certificate of all rights to Hilandar by Andronicus II Paleolog (1319), and the act of Vlach duke Vlad (1488).

Conclusion

While this project was paused in 2020 because of the COVID-19 pandemic, the NLS conservators have made significant progress in recent years to protect the valuable Serbian collections of medieval written heritage at Hilandar Monastery. Despite the specific rules and restrictions, many heavily damaged objects were treated, and there is a plan for the next several years with a list of prioritized conservation approved by related institutions.

At the same time, though, there is a need for further reorganization of the depots and for educating the monks who caretake for these libraries. The big task ahead of us is to improve the microclimatic and other environmental conditions in the Treasury.

The NLS is planning to improve these measures in the future by building completely a new Treasury (with an appropriate micro climate system). Pest infestation is considered the biggest threat to the collections, so we will insist on sending more experts from the field of Biology who will continue to monitor collections and disinfect artefacts. We also have to take steps to reinforce the overall organization of the libraries, including implementing data loggers in all depots, acquiring new bookshelves, and utilizing acid-free materials for storage. The heritage of Hilandar Monastery depends on us.