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Assessment of the Conservation Status of the Selected Manuscripts in the Archive of the Resurrectionist Fathers in Rome

VALUTAZIONE DELLO STATO DI CONSERVAZIONE DEI MANOSCRITTI SELEZIONATI
NELL'ARCHIVIO DEI PADRI RESURREZIONISTI A ROMA

Summary

The paper addresses changes in the state of preservation of a selected collection of manuscript materials belonging to the Archive of the Resurrectionist Fathers in Rome. The damage caused by the aging of paper, moisture, insects and mold processes has been shown. The attention was also paid to other factors related to the use of documents during the period of their origin: adverse physical events and storage in inappropriate conditions. The handwritten record of the message on paper is an indispensable source of information for historians and researchers of the past, therefore, measures were taken to try to diagnose the negative changes in the state of preservation and eliminate the visible threats, as well as to select those elements of the resource that require professional conservation work.

Keywords: Archive of the Resurrection Priests in Rome; microorganisms; paper acidification; foxing; iron-gallus ink; Japanese tissue paper

Sommario

Il documento affronta i cambiamenti nello stato di conservazione di una raccolta selettiva di materiali manoscritti appartenenti all'Archivio dei Padri Resurrezionisti di Roma. Vengono mostrati i danni causati dall'invecchiamento della carta, dall'umidità, dagli insetti e dai processi di ammuffimento. L'attenzione è stata rivolta anche ad altri fattori legati all'uso dei documenti durante il periodo di provenienza: eventi fisici avversi e conservazione in condizioni inadeguate. La registrazione manoscritta del messaggio su carta è una fonte di informazione indispensabile per gli storici e i ricercatori del passato, pertanto sono state adottate misure per cercare di diagnosticare i cambia-

menti negativi nello stato di conservazione ed eliminare le minacce visibili, oltre a selezionare gli elementi della fonte che richiedono un lavoro di conservazione professionale.

Parole chiave Archivio dei Sacerdoti della Resurrezione a Roma; microrganismi; acidificazione della carta; fioritura; inchiostro ferro-galluso; carta velina giapponese

Within the scope of the project *Valorization and Access to Collections from the Times of the Great Emigration and the Establishment of the Congregation of the Resurrectionists* [*Waloryzacja i udostępnianie zbiorów z czasów Wielkiej Emigracji oraz powstania Zgromadzenia Zmartwychwstańców*], a collection of archival materials consisting of about 2000 records, which included Bogdan Jański's extensive correspondence from the years 1830 to 1840, part of the collection of the correspondence of Priests Hieronim Kajsiewicz and Walerian Kalinka, and several old prints intended for display purposes, were evaluated for conservation purposes. The selected archival materials are handwritten records on a paper substrate, mostly in the form of loose sheets of varying format. The main medium used as a carrier of content was characteristic-looking iron-gallus inks, in the case of books – printing with monochrome engravings. There were occasional seals and presses.

The impressions, thoughts, mental states, manifestations of concern for the Homeland and reports on the activities of the congregation's founders, when transferred to paper, became in conservation terms a material entity, being a combination of cooperating factors of various kinds and of the material, which in this case are the paper substrate and inks. Broadly speaking, there is a very complex micro-environment enclosed in each sheet of letters or old prints with occurring interdependencies, a system diverse in its activity and which is subject to constant fluctuations based on the type of external conditions.¹ The important factor for the condition of paper substrates that should also be mentioned is the harmful chemical compounds incorporated into the structure of the paper during the production process, which usually act as a catalyst for negative internal processes.²

Over the years of use and storage, the reviewed archives have been exposed to a number of environmental factors, the most noticeable of which are dust, temperature fluctuations, the presence and type of light, and the moisture content absorbed by the paper and available to microorganisms.

1 B. Zyska, *Ochrona zbiorów bibliotecznych przed zniszczeniem*, in: idem, *Czynniki niszczące materiały w zbiorach bibliotecznych*, vol. 2, Katowice 1993, pp. 33-110.

2 P. Wojciechowski, *Ochrona i konserwacja zasobów w archiwach państwowych w Polsce*, doctoral dissertation prepared under the supervision of prof. UAM dr hab. I. Mameczak-Gadkowska, Adam Mickiewicz University Poznań, p. 162, <https://docplayer.pl/2789874-Ochrona-i-konserwacja-zasobu-w-archiwach-panstwowych-w-polsce.html> [access: 5.12.2023]; H. Jędrzejewska, *Zagadnienia techniczne w muzealnictwie*, Warszawa 1972 (Biblioteka Muzealnictwa i Ochrony Zabytków, series B, vol. 32), pp. 31-77.

Paper, just like other materials, is slowly undergoing natural aging processes that cannot be stopped, although they can be significantly delayed by reducing the destructive conditions. Within such a sensitive material as paper, deterioration occurs both on the surface and in its delicate structure.³ Examples of these damages from the discussed collection include relatively frequent yellowing throughout the surface of the sheets, typical of papers of increased acidity, or localized grime and stains.

These seemingly invisible stains, in turn, developed in the period contemporary to the authors of the correspondence, as a result of physical and chemical changes, have been fixed in the paper substrate. The intensity of the staining has deepened over time, significantly changing the strength parameters, as well as the aesthetics and legibility of the document (fig. 1).

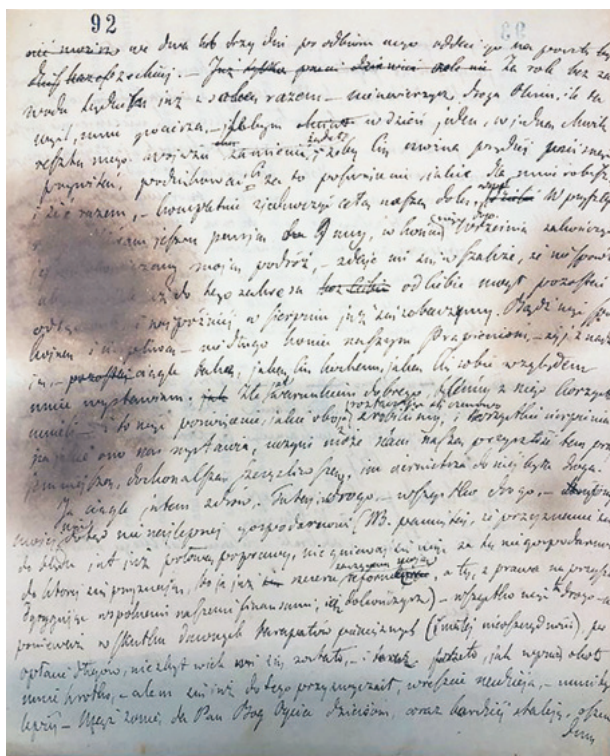


Fig. 1. Colored stains on paper, fixed to a dark brown color over time. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

3 A.B. Strzelczyk, *Charakterystyka zniszczeń bibliotecznych w zabytkowych książkach*, "Notes Konserwatorski", 1998, no. 1, pp. 36-50.

Part of the selected collection was not free from the presence of microorganisms. This applies to both individual letters and old prints selected for display. The most serious changes in the condition were observed in the book entitled “Bibliotheca Chemica Curiosa” by J. O. Jacobi, where the presence of spore forms of a white-colored fungus was observed, as well as numerous spotted colonies of brown and black microbes located at the edges of the pages, the spine, the inner linings, i.e., places where moisture freely reached.

Microorganisms capable of digesting the materials present in the paper substrate, with a convenient level of surface moisture (9-10%) colonize the paper and can cause damage that is difficult to predict. They typically produce uncountable numbers of spores, each potentially capable of creating colonies and subsequent progeny cells.⁴ The danger is great, since a selected document colonized by microorganisms is at the same time a source of infection for other records stored in the same place⁵ (fig. 2-3).

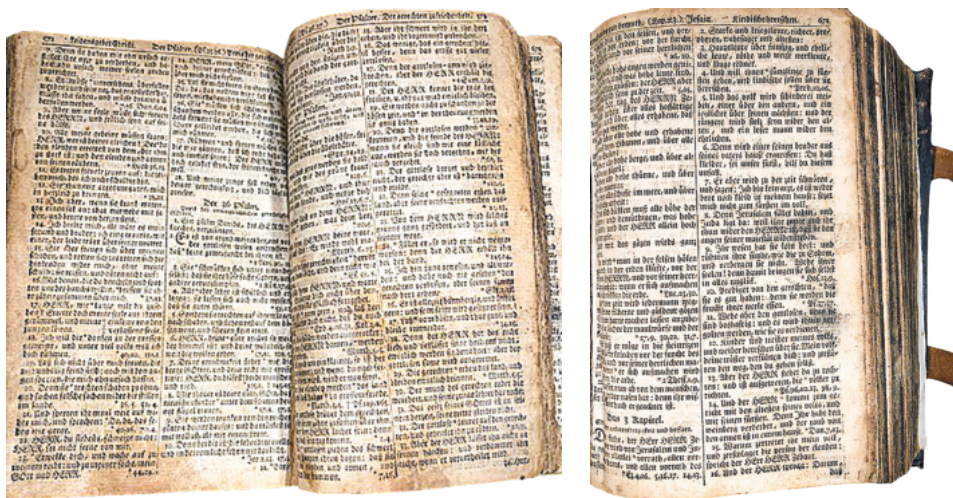


Fig. 2-3. Colored stains and black residue on paper sheets caused by the development of microorganisms. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

The manuscript collections also suffer from significant damage caused by insect larvae, the growth substrate for which is provided by paper and associated binding materials. The aforementioned types of damage were observed in the bindings and blocks of the old print discussed above and a copy of the *Old Testament* belonging to Father Kajsiewicz

4 T. Maciąg, *Mikrobiologiczna ocena stanu zachowania kolekcji Paulinów na Skalce*, “Bibliotheca Nostra. Śląski Kwartalnik Naukowy”, 2 (2009), no. 2, pp. 80-91.

5 A. Strzelczyk, J. Karbowska-Berent, *Drobnoustroje i owady niszczące zabytki i ich zwalczanie*, Toruń 2004, p. 107.

with numerous cavities, holes and feeding corridors passing through several consecutive pages causing the severe deterioration of the binding. The scope and multitude of damage to the material indicate that the destructive action was the result of the long-term habitation of generations of insect larvae in the artifact and the damage may have been done in an earlier period⁶ (fig. 4-6).



Fig. 4-6. Paper loss and cover damage alongside leather binding due to long-term insect infestation. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

From the visual analysis of changes in the state of preservation of each document, there were similarities and recurrences of damage characteristic of the entire collection. The symptoms identified as typical included: surface grime, stains of various origins, including the foxing type, mechanical damage to the surface, tears, deformations, losses of varying sizes, water stains, paper acidification and the presence of microorganisms. Additionally, in a small part of the collection of correspondence, there were signs of weakening of the paper's strength parameters in the form of brittleness and significant fragility, especially along the folding edges and on the borders of the sheets. It is noteworthy that the edges, as the element most exposed to mechanical factors, are most often damaged, mainly as a result of acidity, touch, unfavorable past events and storage in unsuitable conditions.

Among the particularly frequent damages occurring in the book collections undergoing evaluation are the foxing stains. The phenomenon of foxing is quite common in archival collections and is associated with the occurrence of actinomycetes and microorganisms, manifesting itself in the form of small rust-colored spots densely scattered on sheets of paper. They take various shapes, which are referred to in Polish literature as

6 A. Krajewski, *Owady niszczące zabytkowe książki. Chrząszcze drążące starodruki i dawne rękopisy*, "Ochrona Zabytków", 53 (2000), no. 3, pp. 182-190; J. Karbowska-Berent, *Zabytki na podłożu papierowym jako środowisko życia owadów*, "Przegląd Papierniczy", 72 (2016), no. 2, pp. 126-130.

freckles, buffalo eyes, snow stars, clouds of regular lines and a distinctly darker border, but also bright ones with jagged edges.⁷

Publications from the 19th century were found to have particularly high numbers of stains of this type, a clear example being a copy of Adam Mickiewicz's "Dziady" published in Lviv by the H. Altenberg bookstore (fig. 7).



Fig. 7. Various types of foxing spots. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

When assessing the condition of the paper substrates, special attention was paid to the iron-gallus inks. In the majority of the correspondence, the writing has retained its original black color. There are changes in some of the letters, the sign of which is discoloration in the areas of the lettering related to the displacement of the ink.⁸ This issue

7 J. Karbowska-Berent, *Dezynfekcja chemiczna zabytków na podłożu papierowym – skuteczność i zagrożenia*, Toruń 2014, pp. 107, 113, 118, 123.

8 W. Sobucki, A. Czajka, J. Kotala et al., *Wzory atramentowe w kolekcjach archiwalnych – badania zasobów Archiwum Głównego Akt Dawnych w Warszawie*, "Notes Konserwatorski", 2008, no. 12, p. 80.

became apparent in some of the correspondence as gradual penetration of the letters to the other side of the substrate, as well as ink indentations, resulting in paper loss within the letters and ink stains formed at an earlier period (fig. 8).

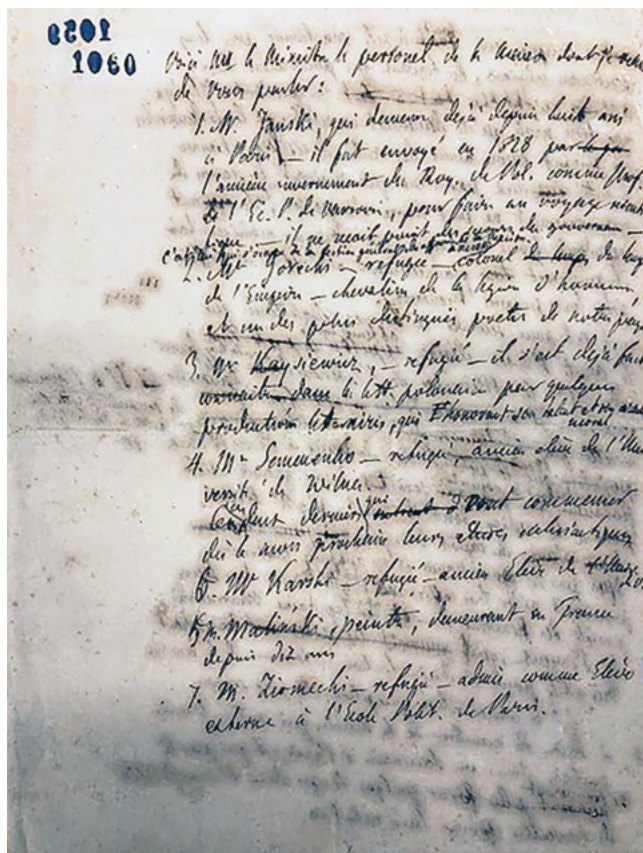


Fig. 8. Penetration of the lettering to the other side of the substrate due to displacement of ink. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

Another damage generating factor that was observed involved the lack of separation between papers of different quality composition, format, and acidity. Clustered together in individual folders due to cataloging purposes, they were in physical contact with each other, potentially causing mutual undesirable interactions among different types of papers, inks, and stamps. The consequences of this storage method were clearly observed in wax seals and in the dents and permanent deformation of the paper substrate, as well as in the loss of paper along with the seal. For this reason, in order to ensure the best possible

protection of the materials from destructive interactions, individual documents were separated by dividers made of paper with alkaline reserve, and inserts made of acid-free cardboard with cut-out holes for convex seals were introduced.

In individual pieces of letters, adhesive tape was found, which had been used years ago to protect paper tears. The glue that had been acting as a tape binder had significantly degraded over the years, leaving brown discolorations in the structure of the paper substrate. In the course of conducted conservation works, the tape and glue residues were removed with varying results in neutralizing the discoloration, the tears were secured using conservation glue and Japanese tissue paper (fig. 9-10).

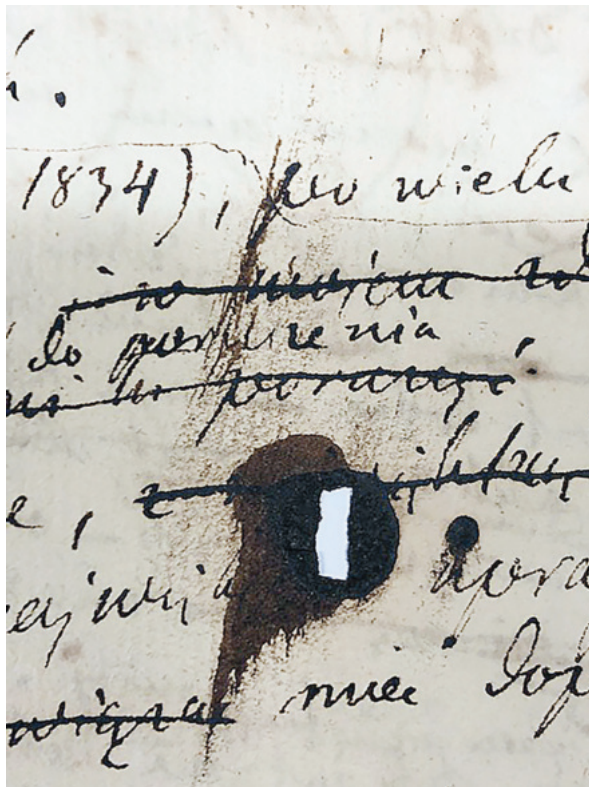


Fig. 9. Paper loss also known as „ink indentation”. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

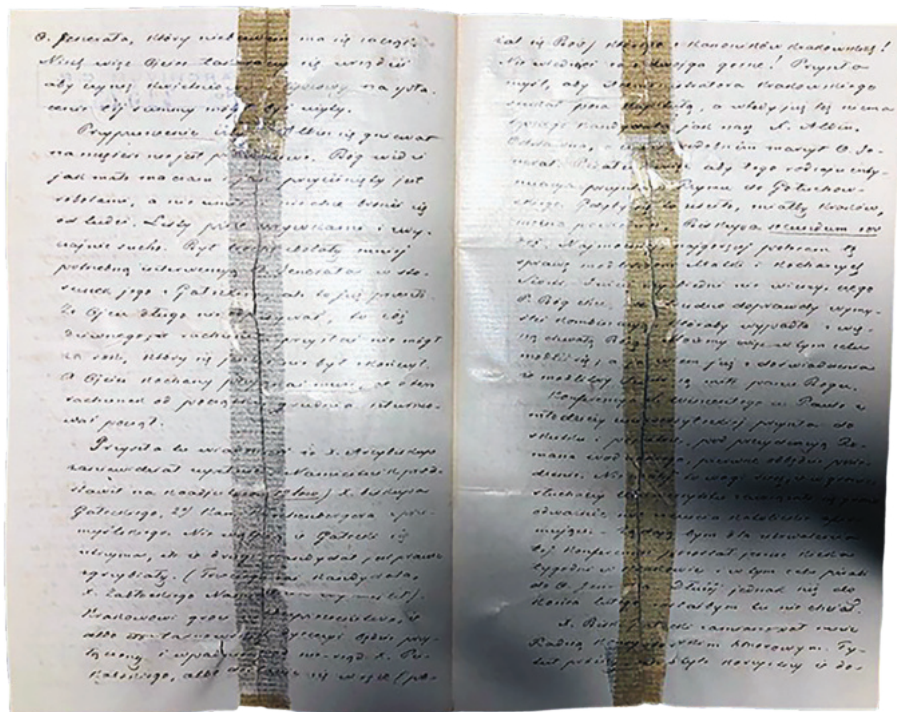


Fig. 10. Adhesive tape and visible paper destruction within the glued tears. Document from the Archives of the Resurrectionist Fathers in Rome.

Photograph M. Serafinowicz.

With an awareness of all visible and hidden dangers on the one hand, and limited resources and execution capabilities on the other, the primary goal of the measures that were scheduled was their identification and determination of the extent of their occurrence. This type of work is very time-consuming but provides both an understanding of the condition of the entire collection and allows to select those elements that require urgent intervention. In my opinion, based both on conservation expertise, knowledge of the literature on the subject, as well as on several years of experience as a chief museum conservator, the priority for the preservation of the collection is broadly understood as preventive conservation, which in the long term results in slowing down the destructive aging processes by eliminating the identified threats.⁹ Therefore, alongside the evaluation

9 D. Ignatowicz-Woźniakowska, *Realizacja zasad konserwacji zapobiegawczej w Muzeum Narodowym w Lublinie*, in: *Konserwacja zapobiegawcza w muzeach. Materiały z konferencji zorganizowanej przez Polski Komitet Narodowy ICOM oraz Krajowy Ośrodek Badań i Dokumentacji Zabytków przy współpracy Ministerstwa Kultury i Dziedzictwa Narodowego w Muzeum Narodowym w Warszawie 6-7 listopada 2006*, ed. D. Folga-Januszewska, Warszawa 2007, pp. 67-69.

of the condition of the manuscripts, basic treatments were carried out: dusting, straightening dangerous folds and creases in the paper and gluing tears. This was based on the premise of minimal necessary intervention in the original structure of the material. Furthermore, ad hoc disinfection procedures were carried out in biocide vapor using the layering method, taking into account the individual characteristics of the object and signs of active biocorrosion changes.¹⁰

After analyzing the observed changes in the condition of the archival collection in question, despite good storage properties and apparent diligence in the management of the archive, in the next stage of selecting the works for the multi-stage conservation prevention program, it seems necessary to recommend the procedure of deacidification of certain parts of the archival collection and to carry out specialized conservation work on the targeted artifacts. These measures may require a certain amount of patience and consistency in persuading the decision-makers of the crucial importance for this endeavor, but this is the only method of combating the effects of the passage of time and the decay of the material. The statement made by Professor Adam Manikowski in 1997 is symptomatic in the context in question:

For posterity, 'written heritage' is a source of shaping knowledge about one's own ancestry and using the experience of the past. Since the beginning of time, people intuitively believe in a kind of timeless persistence of written heritage, often giving it the value of greater credibility than the spoken word.¹¹

In conclusion, in accordance with the established guidelines, the following activities were carried out within the framework of the project:

- 1) Assessing the state of preservation of selected archival materials and books, considering mechanical, physical-chemical, and microbiological damage.
- 2) Isolating documents with signs of microbiological changes from the collection.
- 3) Conducting a procedure of emergency disinfection of individual objects using the interlayer method with biocide.
- 4) Cleaning paper substrate from surface dirt and dust.
- 5) Straightening of folds that are critical to the durability of the paper, curling of the edges and securing tears.
- 6) Applying insulating dividers with alkaline reserve to minimize acidification of the paper, thereby slowing down the aging processes.
- 7) Securing wax seals with appropriate pads made of acid-free cardboard.

10 J. Karbowska-Berent, *Dezynfekcja chemiczna zabytków na podłożu papierowym – skuteczność i zagrożenia*, p. 5.

11 A. Manikowski, *Przedmowa*, "Notes Konserwatorski", 1998, no. 1, p. 7.

- 8) Purchasing envelopes, protective folders for professional storage of archival materials made of acid-free cardboard adapted to the specified format.

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