Exhibition work has certainly become an increasingly dominant aspect of paper conservators’ jobs in Berlin (and elsewhere). Beyond the classical hands-on treatments in the conservation lab, we are facing the challenges that arise during both installation and dismantling periods which are intensive processes of the handling of artefacts and preparing their mounts for display.

Generally, object mounts for exhibitions should meet many different requirements simultaneously, which are mostly compiled by the curator, the designer, and the conservator. Beside the main purpose of holding and securing the artefact, the requirements for object mounts range from material and economical to esthetical and last but not least practical criteria. The list is long: every mount should be stable, yet light, emission-free, and low-cost. Of course it must also be accurate, unobtrusive and aesthetically consistent with the overall exhibition design. Furthermore, the ability to reuse and store mounts efficiently can be desirable.

Exhibition work requires a high degree of cautiousness, efficiency, and sound manual skills. Qualities such as experience, coolness and creativity will prove beneficial in unexpected situations — often being typical for exhibition installations with tight schedules. A wide range of intricacies such as deviant measurements of items, or of provided frames or show-cases, or the delayed delivery of loans can cause strains in the planned routine.

The conservator with his/her professional expertise and sound knowledge of the object should supervise the general set-up including climate, lighting, pollutants, transportation, duration, etc. He/she should be alert to identify risks, and should take the responsibility — in some cases perhaps versus curator and/or designer — to preserve all artefacts in their given condition during the exhibition, and to avoid any damage.

Usually, the concept for preparing both flat and three-dimensional paper works for display is well planned and scheduled in advance. But again, deviant dimensions of exhibits or their delayed delivery might call for spontaneous, inventive, and individual supports.

Looking for a representative element which reflects the daily practice of many Berlinian paper conservators in 2015 and earlier, a joining topic for a shared IADA presentation, we decided on:

Invariably careful, amazingly clever, impressively aesthetic, and enchantingly elegant mounting solutions!

Please share our ‘Potpourri’ on some scheduled and planned mounts, and on some ad-hoc, on-site and in-situ mounts in exhibitions!

Case studies

Myriam Krutzsch from the ‘Ägyptisches Museum und Papyrussammlung’ (Egyptian Museum and Papyrus collection) will start the round introducing the old material papyrus being secured between two sheets of glass...
describe an example of the situation — objects will be visualised by freelance more inventive solutions for oversize accordion works in free space. Three having to expose large format artists’ was faced with the challenge of Museum (German Historical Museum) has developed ‘Melinex Shirts’ to allow hanging very fragile magazines in frames. Barbara Korbel from the Stiftung Deutsches Historisches Museum (German Historical Museum) has the characteristics of gloss and transparency of glass. PET foil (Melinex/Mylar), which also has the qualities of glossy and transparent glass. Ira Glasa from the Staatsbibliothek (Berlin State Library) has developed ‘Melinex Shirts’ to allow hanging very fragile magazines in frames.

Barbara Korbel from the Stiftung Deutsches Historisches Museum (German Historical Museum) has the characteristics of gloss and transparency of glass. PET foil (Melinex/Mylar), which also has the qualities of glossy and transparent glass. Ira Glasa from the Staatsbibliothek (Berlin State Library) has developed ‘Melinex Shirts’ to allow hanging very fragile magazines in frames.

Moving on from huge sizes and singular artefacts to small size objects in great numbers, Halina Fischer from the Kunstbibliothek (Library of Art History) will talk about their way of using magnets for mounting (Fig 3). In addition, she will introduce a method which they developed to solve a problem that a lot of colleagues face: How to store hundreds of magnets safe and effectively? Katharina Plate from the Stiftung Stadtmuseum (City Museum Berlin) will focus on her technique for attaching drawings in a mat (Fig 4).

The Potpourri will then cover books and other three-dimensional exhibts. Hanka Gerhold from the Kupferstichkabinett (Museum of Prints, Drawings and fine Manuscripts) will show the accentuated and singular entry of a book, using a transparent support where not only the opened page, but also the book cover can be viewed (Fig 5). In contrast, Michaela Brand from the Stiftung Deutsches Historisches Museum (German Historical Museum) will explain the implementation of an exhibition designer’s staging layout for plenty of books. Secondly, she will mention an unconventional in-situ upright remedy with an encapsulated wooden bar for a damaged, extra heavy book with no willingness to open at all. Stephan Lohrenge from the Jüdisches Museum (Jewish Museum Berlin) will talk about the construction he developed for the hanging presentation of large format rolled Judaica objects.

Barbara Korbel from the Stiftung Deutsches Historisches Museum (German Historical Museum) will highlight movable toy figures accommodated to museum board, or attached to a rod. She will also share her different ideas on displaying fans. Her last focus is on a stage model being housed in a museum board construction, or between Plexiglas rods, or in a frame (Fig 6).

A conservator from the IADA conference’s host, the Staatsbibliothek, (Berlin State Library) will complete the Berlinian Potpourri. Katarzyna Schirmacher will introduce the eye candy of a unique example of Berlin’s printing history, an astrolabe with delicate thinly cut out paper layers. She named the Plexiglas solution ‘Wedding Cake’.

Enjoy it!

Michaella Brand, Stiftung Deutsches Historisches Museum, Unter den Linden 2, 10117 Berlin, DE.
Email: mbrand@dhm.de
Stephan Böhmer, Kaiserdamm 5, 14057 Berlin, DE.
Email: stephan.boehmer@t-online.de
Vendulka Cejchan, Köpenicker Straße 175, 10997 Berlin, DE.
Email: cejchan.sauter@t-online.de
Halina Fischer, SMB Kunstbibliothek, Matthäikirchplatz 6, 10785 Berlin, DE.
Email: h.fischer@smb.spk-berlin.de
Hanka Gerhold, SMB Kupferstichkabinett, Matthäikirchplatz 8, 10785 Berlin, DE.
Email: H.Gerhold@smb.spk-berlin.de
Ira Glasa, Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, Unter den Linden, 10117 Berlin, DE.
Email: ira.glasa@sbb.spk-berlin.de
Barbara Korbel, Stiftung Deutsches Historisches Museum, Unter den Linden 2, 10117 Berlin, DE.
Email: korbel@dhm.de
Myriam Krutzsch, SMB / SPK Ägyptisches Museum und Papyrussammlung, Geschwister-Scholl-Straße 6, 10117 Berlin, DE.
Email: m.krutzsch@smb.spk-berlin.de
Stephan Lohrenge, Stiftung Jüdisches Museum Berlin, Lindenstraße 9-14, 10999 Berlin, DE.
Email: s.lohrenge@mberlin.de
Katharina Plate, Stiftung Stadtmuseum Berlin, Poststraße 13-14, 10178 Berlin, DE.
Email: plate@stadtmuseum.de
Katarzyna Schirmacher, Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, Unter den Linden, 10117 Berlin, DE.
Email: katarzyna.schirmacher@sbb.spk-berlin.de
Gesine Siedler, Köpenicker Straße 175, 10997 Berlin, DE.
Email: papieratelier@web.de

Katharina Plate, Stiftung Stadtmuseum Berlin (© Stiftung Stadtmuseum Berlin)
Fig 4: Katharina Plate – Matted drawing
Fig 5: Hanka Gerhold – Single book presentation (© SMB Kupferstichkabinett)
Fig 6: Barbara Korbel – Displaying fans (© Stiftung Deutsches Historisches Museum)
Can we as conservators use the learnings of ‘Experience Economy’? What are the benefits?

As conservators we have knowledge of crafts in order to perform conservation treatments as authentically and true to the original techniques as possible. We learned about pigments, parchment, paper, bookbinding, decorative techniques, etc. In our professional world we tend to look for preventive measures in order to preserve collections on the long term. Does this mean that our knowledge of the physical object and the crafts behind it becomes irrelevant?

This is not the experience of the Preservation Department of The Royal Library in Denmark. The department has throughout the last 12 years been a part of Copenhagen’s Culture Night – a yearly event where 250 institutions, museums etc. open the doors for the public.

We have learned, in alignment with the evidence of experience economy, that the public attending this event wants to discover, touch, and understand the physical object and the techniques behind it, just as much as to know the written texts inside.

This has given us a unique opportunity to present our skills as conservators and bookbinders (Figs 1 and 2). Knowing the materials and the crafts behind the objects adds another dimension to the way the Royal Library presents its collections at such events, and also in how we interpret our collections and their value.

Is the interest of the physical object a result of the world of digital media? – Maybe!

It appears that a computer screen does not have the appeal of a bound book, the scent of fresh leather, the esthetics of marbled paper, or the ability to satisfy our desire to find the secrets of the physical object.

*I. Bak Christensen*1, M. Vest1

‘Experience Economy’
Does it apply to the world of conservation?

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1 Contacting author: The Royal Library, Copenhagen, DK.
Tel: +45.9132 4675, Email: ibc@kb.dk

Fig 1: Culture Night 2011 (© The Royal Library, 2011)

Fig 2: Culture Night 2014 (© The Royal Library, 2014)
Bleaching requires many decisions (selection of a chemical, concentration, application method, duration) to keep the object within a corridor of desired progress. Each decision aims at minimizing a risk and maximizing a benefit associated with a material or procedure.

Options take into account the factors given at the respective treatment stage, including vital new information about the object materials and their treatment responsiveness. The sequence washing-bleaching-washing can assume a repeat function with variations concerning the area treated (small to large), the treatment duration (short to long), and bleach concentration (low to high) (Fig 1). Each option carries a risk-benefit ratio in relation to the object.

A decision-support system can make conservation choices more efficient that require access to current scientific and evidential knowledge. Options can be value-classified according to whether they are

- required
- recommended
- of neutral value
- discouraged
- or prohibited.

For instance, aqueous deacidification is required to diminish the risk of cellulose degradation; bleaching in stages is recommended to avoid overbleaching (Fig 2); bleach application by misting or brushing is possibly an equal value choice; exposing non-discoloured paper areas to bleaching is discouraged; bleaching ligneous paper with chlorine-based bleaches is prohibited because chlorine remains in the paper.

Making the ramifications of interconnected choices within the treatment network explicit does not turn treatment into a rote exercise. It serves to highlight the fact that the expert practitioner must handle a complex set of choices while taking into account those aspects of the object and its treatment that cannot be fully known in advance.

1 Contacting author: Studiengang Konservierung und Restaurierung von Kunstwerken auf Papier, Archiv- und Bibliotheksgut, Staatliche Akademie der Bildenden Künste Stuttgart, DE. Tel: +49.711.6646 3811, Email: irene.brueckle@abk-stuttgart.de

2 BOKU University of Natural Resources and Life Sciences Vienna, AT

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Fig 1: Object (grey) and state of damage removal (discolouration) considered at each stage of bleaching treatment (purple to blue) (© Brückle/Henniges)

Fig 2: Object in preparation for light bleaching on a slant washer in the process of being masked in areas to be protected from light exposure (© Brückle/Henniges)
Gelatine and iron gall ink corrosion
Evidence of a ‘stabilizing’ effect

In Northern European countries, gelatin has numerous applications in the conservation of iron gall ink manuscripts (tears mending, re-sizing agent, etc.). It is often put forward that gelatin has a ‘stabilizing’ effect on iron gall ink corrosion. Yet this point has never been experimentally evidenced. Gelatin denaturates over 50-60°C, thus impeding artificial ageing experiments.

This work reports experiments performed on Whatman n°1 papers impregnated with iron gall inks and sized with four types of gelatine of different origins and different Bloom values (Fig 1). The ability of gelatine to size the paper was estimated by measuring the time necessary for a drop of water to be absorbed (Fig 2). The cellulose depolymerisation at ambient temperature was monitored by viscosimetry throughout one year. The Fe(II)/Fe(III) ratio was measured by Fe K-Edge Xanes analysis.

These experiments showed that the ability of gelatine to make the paper less permeable to water strongly depends on its type and concentration. However most gelatines have a great ability to limit cellulose depolymerisation, giving experimental evidence that gelatine has a ‘stabilizing’ impact on iron gall ink corrosion. It additionally favours oxidation of Fe(II) to Fe(III). These two points are probably correlated.

*1 Contacting author: CRC (CNRS, MNHN, MCC) USR 3224, 36 rue Saint Hilaire, 75 005 Paris, FR. Tel: +33.1.4079 5303, Email: rouchon@mnhn.fr
2 Department of Chemistry, University of Antwerp, Antwerp, BE
Examination of letters often reveals remnants of the techniques by which these documents were prepared for transport. Although usually stored in stretched-out form, the folds applied to close a letter and secure its written content are often still discernible. Before the envelope became available, a series of letterfolds was used in such a sequence that an unwritten part of the paper was at the exterior, providing space for the name of the addressee (Fig 1). Besides crease patterns, also other material features disclose distinctive ‘letterlocking’ methods. Some letters show, for instance, several specific incisions, additional strips of paper that sometimes appear to be cut-off from the margin of the letter itself, and traces of sealing-wax.

Despite the obviously rich variation in letter folding and closing methods, it is remarkable that the subject has not yet received much scholarly attention. In the past decades the significance of letter folding has been recognized by the Envelope and Letter Folds Association (ELFA), erected in 1988, and by Jana Dambrogio from the Massachusetts Institute of Technology (MIT) in Boston, who has done pioneering research in letterlocking techniques and traditions.

The importance of letter folding and closing has been highlighted in preserving the so-called Prize Papers, letters captured by English privateers from Dutch ships in the 17th and 18th centuries. These letters are still mainly kept in their folded state at the National Archives in London. Awareness of the potential risks of losing significant letterlocking-markers as a consequence of conservation and digitization treatments deserves to be recommended (Fig 2).

* Contacting author: Koninklijke Bibliotheek, National Library of the Netherlands, The Hague, NL.
Tel: +31.70.3140 911, Email: henk.porck@kb.nl
The exhibition ‘Druckfrisch’ / ‘Hot Off The Press’ which ran in the Tyrolean State Museum from June to October 2014 focused on the ‘black art’, the art of printing (Fig 1).

In our fast moving time, how can appreciation for the manufacturing and the end-product made of paper, leather and printing ink be evoked, conveyed and communicated?

The exhibition intended to bring to life the beauty of books, to point out that each book carries its own history and has its own aura, which touches people and moves them emotionally.

During the planning phase of the exhibition the cross-departmental coordination and preparation of ideas, contents and their presentation were therefore crucial.

During the exhibition, a book-workshop was installed in the Atelier of the Ferdinandeum (Fig 2).

Students from school level 9 upwards were instructed by a professional book-conservator to test and experience the typical hand movements of a printer and bookbinder. Finally, the students were asked to take over their active part.

The young Tyrolean visitors were not only invited to learn more about the craft of making books, but were also asked to answer some questions, e.g.: What do you think — are books ready for the museum? Will they survive as a communication medium? What’s about your own readings? Would an exhibition without originals still be interesting? And many more. After the exhibition the questionnaires were evaluated revealing some surprising and partly stunning new findings.

* Contacting author: Tiroler Landesmuseen, Innsbruck, AT. Tel: +43.512.5948 9319, Email: a.fohs@tiroler-landesmuseen.at
Running cultural heritage institutions has become an increasingly complex matter. Collection development and collection care are nowadays very often determined by financial and economic parameters and regulations.

On the other hand, growing scientific knowledge and insight have made clear that for cultural heritage to survive very high standards of preventive conservation will have to be maintained. Many threats, including climate change, will become more and more important in the future.

Whereas preventive conservation consultants were until now mostly involved in a limited institutional context, the growing complexity of collection care is leading to the emergence of a new type of such consultants.

These consultants will work nationally and internationally and are involved in risk assessment, conservation policy development, initiating new sustainable building concepts, implementing disaster plans and organizing emergency preparedness. They work as a team with experts from different fields, sometimes developing preventive conservation programs, but possibly also managing projects, often acting as coach or mediating between cultural heritage clients and construction/technical parties.

Preventive conservation consultants are well placed to act in this capacity because of their extensive background in cultural heritage, knowledge of materials and deterioration factors, scientific and technical insights, analytic and educational skills (Figs 1 and 2).

In this presentation we will illustrate some new opportunities by presenting two cases: the development and implementation of a project including collection condition assessment, cleaning, removal and re-housing of 4,000 old printed books, and a collection-need assessment and new storage building proposition for archaeological and museum collections, archive and library materials.

* Contacting author: De Zilveren Passer, Ghent, BE. Tel: +32 9 2259 058, Email: guydewitte@telenet.be, Website: www.dezilverenpasser.be
For several years the Museon Arlaten, a museum in Arles dedicated to the ethnography of Provence has been carrying out a conservation programme of its collection of devotional objects dating from the 18th and 19th centuries. A set of approximately 150 items has already been treated. It includes nativity scenes, child Jesus, representations of heaven, convent cells, reliquaries, paper quillings, paper cuts, etc. Most of these objects, the fruit of an ancient tradition spread all over Europe, were made in convents by cloistered nuns. The nuns used various materials, but principally paper and cardboard as these were less expensive and easy to use.

Even if it serves as a basis for these three-dimensional objects, paper is often combined with other materials (textiles, ceramics, glass, breadcrumbs, wood, ...) which require the skillful intervention of different specialists (Fig 1). Paper conservation techniques have remained predominant however and have guided the main conservation procedures. It has been necessary though to harmonize the levels of intervention, to choose adhesives and pasting methods which are compatible with the other materials, sufficiently resistant while meeting requirements for reversibility.

Our objective was to respect the traces of manufacturing and usage present, while ensuring the readability of works and restoring their cohesion and their stability.

The conservation work undertaken has revealed an astonishing collection of papers and cardboards used at the time (Fig 2). Some are recycled materials (wall paper, manuscripts, prints, ...), others are the result of a specific production (gilt edged strips of paper for quillings, small engravings, embossed or perforated papers).

Documenting them is all the more interesting since they are a testimony of a knowledge which has otherwise disappeared for a lack of interest in these modest objects.

L. Caylux*1, E. Menei², I. Drieu la Rochelle³

Papers for Prayers
The use and conservation of paper and cardboard in the production of devotional objects in Provence

Fig 1: Conservation work on a cloister cell (© Laurence Caylux)

Fig 2: Sample of papers used for devotional objects (© Laurence Caylux)

*1 Contacting author: Free lance paper conservator, Paris, FR. Tel: +33 6 84 11 87 66, Email: laurence.caylux@free.fr
² Free lance paper conservator, Paris, FR
³ Free lance paper conservator, Paris, FR
The filling of losses in old master prints is a continuous task in paper conservation. In some cases, it seems necessary to go beyond an infill with minimal or neutral retouching, especially when losses are eye-catching. Instead of using the traditional retracing of missing parts by hand, a modern technique making use of digital photography and laser printing was developed. For the reconstruction a digital photograph is taken of either another intact copy of the same print or a repeating pattern within the artwork (Fig 1).

The photo is digitally processed and printed true to scale with a monochrome laser printer on a paper chosen and toned to match the paper of the historic print (i.e. Japanese paper). The printout is then fitted into the loss and attached either to the original print or onto the supporting mounting board.

With the aid of digital reconstructions, convincing visual results can be achieved especially for black-and-white prints (Fig 2). The digital printing grain helps to distinguish the added parts from the original print and is clearly visible on closer inspection. The technique is time saving compared to traditional methods and is reversible, particularly when the infill is mounted on the backboard rather than to the print itself. The long term stability of laser printouts on Japanese or other infill papers is arguable. However, under application of a high quality toner it can be considered to be appropriate. The technique is suitable for an effective completion and can be adapted to varying requirements.

*1 Contacting author: Kupferstichkabinett – Staatliche Museen zu Berlin, Berlin, DE. Tel: +49.30.2664 24230, Email: g.dietz@smb.spk-berlin.de

2 Atelier Carta – Martina Noehles, Mülheim / Main
Numerous collections with paper-based objects in museums, archives and libraries are housed or exhibited in wood-based furniture. These can act as emission sources for volatile organic compounds (VOC’s). The collection of drawings and prints of Karl Friedrich Schinkel (1781-1841) at the Kupferstichkabinett was investigated regarding the VOC concentration in its existing storage situation (Fig 1). The emission potential of current and future storage materials was also tested, as well as the effect of the identified VOC’s on artworks on paper. It was shown that, while acetic acid was present in the highest concentration, the risk formic acid poses for paper-based objects is more severe. It was further demonstrated that different papers adsorb different levels of volatile organic acids; their alkalinity is of special influence. In-situ analysis of original artworks on paper and additionally of samples charged with acetic acid showed that the accumulation of VOC’s is hardly avoidable when storing the papers stacked and inside folders either of archival cardboard or of polyester film. In any stacked storage situation, the limitation of air exchange between the folder interior and the surrounding air has a greater effect on the VOC concentration in the object’s environment than the permeability and alkalinity of the folder materials.

The Schinkel collection was transferred into a new storage system involving adapted furniture and new housing (Fig 2) that reduces the VOC concentration in the artworks surroundings, protects them from further mechanical damage, and facilitates the handling and viewing especially of objects that are large in format.

1 Contacting author: Kupferstichkabinett, Staatliche Museen zu Berlin, Berlin, DE. Tel: +49.30.2664 24231, Email: f.meyer@smb.spk-berlin.de
2 Universität für Bodenkultur Wien, Abteilung für Chemie nachwachsender Rohstoffe, Wien, AT
3 Materialprüfungsanstalt der Universität Stuttgart, Otto-Graf-Institut, Stuttgart, DE
Hugh Douglas Hamilton (c. 1740-1808) is one of Ireland’s most prolific portrait artists. He established a busy practice studio, specialized in small ovals in pastel with a characteristic use of graphite, first in Dublin and later in London, and became known as ‘pastel Hamilton’. In Italy during the 1780’s, he created larger pastel portraits for wealthy Grand Tour patrons. Over 20 large rectangular pastel works are now attributed to the artist, in public and private collections scattered across the globe.

Close examination of Hamilton’s two large pastels in the National Gallery of Ireland revealed that he created these portraits using an interesting technique (Fig 1). The sitter’s face is on a separate circular or oblong piece that is adhered to the larger sheet (Fig 2).

The ‘cut-out’ or ‘insert’ may have links to the preparation technique used in oil painting and was used by De la Tour at the Parisian Court. In Rome, Hamilton may have learned the technique from fellow European artists.

In lieu of surviving primary written evidence, this paper explores Hamilton’s materials and techniques and recounts research into identifying the technique in Hamilton works in public collections. It will discuss how Hamilton’s methods were influenced by both the established European tradition of pastel portraiture and the desires of the art market in 18th century.

* Contacting author: National Library of Ireland, Dublin, IE. Mobile: +353.87.2484 244, Email: loconnor@nli.ie / laobhaise7@gmail.com
During the conservation of an 18th century, hand-coloured engraving by Joannes Volpato, part of the Belmonte Collection at the Galleria Interdisciplinare Regionale della Sicilia ‘Palazzo Abatellis’ (Inv.No.G23), a deacidification and reduction with borane tert-butylamine was performed. The subject of the engraving represents the frescoes of the Raphael Sanzio Loggias at the Vatican. On the verso of the artwork, corresponding to the green painted surface, copper corrosion was observed (Fig 1). This degradation phenomena is caused by oxidation and hydrolysis, and results in browning and severe brittleness of paper. Scientific surveys were carried out to investigate such phenomena.

By applying X-Ray fluorescence (XRF) and Raman spectroscopy, the green pigment was identified as Verdigris, a basic copper acetate. Spectrophotometric investigations were used to monitor the colour changes during the cleaning treatments and after the restoration works.

The simultaneous treatment of alcoholic deacidification with calcium propionate and reduction with borane tert-butylamine (TBAB) was performed by spray nozzle and brush on the verso of the artwork with the aim of counteracting the degradation induced by oxidative agents (Fig 2). This methodology allowed us to carry out the treatment without any risk to the fiber structure and the pigments.

The paper pH and the chromatic coordinates of pigments were measured before and after treatment, and again two years later, in order to check the state of conservation of both, the paper and the water colour. Starting from an average pH value of 5.46, after treatment the pH increased to an average value of 7.97 and stabilized at pH 7.32 after two years. After the treatment, the paper was lighter (\(\Delta L\) increase of 4 points) and the pigments did not change colour. After two years no significant changes of \(\Delta E\) values occurred. This indicates that the conservation treatment has positively altered the colour of the paper and has no negative effect on the painting surface of the artwork.

*Contacting author: University of Palermo, Palermo, IT. Tel: +39.339.5033 055, Email: ambra.daleo@gmail.com*

**Fig 1:** Condition before treatment recto (left), verso (right). Hand-coloured engraving by J. Volpato, Galleria Interdisciplinare Regionale della Sicilia ‘Palazzo Abatellis’, Inv. No.G23 (© AmbraD’Aleo)

**Fig 2:** Spray- and brush application of the combined deacidifying-reducing solution on the back of the engraving (© AmbraD’Aleo)
In 1988 a disturbing phenomenon of rectangular brown discolourations in stacks of museum board window mounts stored in print boxes was discovered by paper conservators working at the Amsterdam City Archives. When viewed under ultra-violet illumination the peculiar patterns appeared more distinct (Fig 1) and were found to occur widespread in many different boxes of the prints and drawings collection of the Archives. For some unknown reason, the presence of individual air pockets from the window areas of the mounts had induced or ‘radiated’ homogeneous rectangular discolorations up to several layers deep in the stack. In typical stacks of mounts these window areas are of different dimensions, resulting in partially overlapping areas when combined. The resulting patterns consisting of combinations of partly overlapping rectangles in different shades of brown are reminiscent of Mondriaan paintings.

The phenomenon was therefore coined the ‘Mondriaan Effect’. Most disturbingly, these discolorations did not confine themselves to the cardboard, but were found to be present, although less pronounced, in some prints and drawings as well. Inconclusive results after several years of scientific investigation forced Dutch paper conservators to trust their own precautionary intuition which lead them to the recommendation to discontinue the use of window mounts in storage situations.

Now, almost two decades later, we ask if the abandonment of window mounts for storage purposes is a decision we still believe to be best. Which magnitude of fluctuating conditions should be considered dangerous? How does the discoloration risk compare to side risks like abrasion and other costs associated to storage in folders instead of window mounts? To answer these questions we did research applying thermal imaging (Fig 2) combined with heat and moisture transport modelling. We revisited the unaltered stacks of original prints using UV-photography to characterize the phenomenon more carefully. Furthermore we assessed historic environmental conditions and evaluated current storage and exhibition practices.
Digitization has long passed through the doors of the conservator’s workshop. Nowadays documentation in restoration is mainly created digitally. The continuously changing digital world, however, contradicts the sustainability of the conservation of art and cultural assets. To prevent a breakage between these two worlds appropriate measures have to be taken during the creation, processing and storage of digital documents and research data to ensure the continued accessibility of digital assets.

Based on these issues the staff members of the degree course ‘Conservation of Works of Art on Paper, Archives and Library Materials’ at Stuttgart State Academy of Art and Design developed different workflows to address these pressing challenges.

This includes, for example, setting up a system that is easy to handle and enables a paper conservator to streamline the process of carrying out the required documentation of objects, including the steps: image capture (Fig 1), choosing file formats, applying colour management, file naming, adding metadata and finally the preservation of the files (Fig 2).

The talk presents examples of the developed strategies and implementations for the authentic long-term preservation of digital assets in conservation and restoration that can be seamlessly incorporated in everyday activities.

* Contacting author: Konservierung und Restaurierung von Kunstwerken auf Papier, Archiv- und Bibliotheksgut / Conservation of Works of Art on Paper, Archives and Library Materials, Stuttgart, DE. Tel: +49.711.6646 3816, Email: mario.roehrle@abk-stuttgart.de
Coated papers are widespread cellulosic materials with special surfaces used for high-quality printing.

A great deal of literature has focused on the technology of coated papers but studies on degradation mechanisms are limited. Besides, the presence of several interacting components makes such evaluation difficult.

Nevertheless, coated papers are a key challenge for forward-looking conservators and understanding their degradation will lead to proper conservation.

For this reason, a kinetic study on coated papers was performed to ascertain processes, rates and effects of ageing. The experimental approach was developed by studying the synergistic effect of different components (AKD sizing, styrene-butadiene latex, two pigments and an optical brightener) and carrying out a thermal oven ageing of 1,400 hours (ventilated oven at 120°C and environmental RH) (Fig 1). Viscometric and colourimetric analyses were exploited to investigate mechanisms and kinetics of degradation, while FT-IR investigations allow the evaluation of chemical changes.

The kinetics of degradation revealed two simultaneous processes that have been modeled to obtain comparable parameters from all the samples: a fast degradation of the surface and a slower progressive oxidation of the bulk (Fig 2).

The polymeric layer increases both the degradation rate and colour variations of cellulose, as yellowing phenomena are the greatest. The addition of pigments slows down the degradation, stabilizing the coating. However, ageing induces a decomposition of the binder thus causing the dusting of pigments and the loss of mechanical and aesthetical performances.

Finally, the presence of a brightener affects optical properties, even compromising the paper stability with an increased degradation rate in the early stages of the ageing.

*1 Contacting author: Dep. of Molecular Sciences and Nanosystems – Università Ca’ Foscari, Venice, IT. Tel: +39.41.2346 724, Mobile: +39.340.2494 870, Email: barbarabusnardo@gmail.com

*2 School of Cultural Production and Conservation of the Cultural Heritage – Università Ca’ Foscari, Venice, IT
Guatemala is located in Central America and once was the centre of the Maya civilization. We hold numerous public records which bear witness to historical events and are a rich resource for scholarly and legal research into our political, religious, economic and cultural heritage.

The country’s geographical location, tropical weather and high mountains, with diversity of microclimates, have caused severe and irreversible damage to the collections housed in inappropriate storage facilities. Furthermore, we face other problems such as: abandonment, unawareness of proper measures, and lack of technical, scientific and economic resources, as well as the absence of professional conservators in order to implement conservation projects.

Many collections are stored in poor housings and often under pestilent and hazardous conditions (Fig 1). The total number of archival collections in Guatemala remains unknown as well as their current condition. Random inspections show the severity of this situation in various repositories (Fig 2). Being located in a tropical region that is disaster prone, Guatemala suffers from constant tremors, earthquakes, tropical storms and possible hurricanes.

The mismanagement and terrible conditions of the collections are the result of the negligence and ignorance. Several Latin-American countries share this situation.

Our country urgently needs professional advise through international expert cooperation in order to formulate an adequate risk management strategy, preventive conservation, temperature and humidity control guidelines, disaster response and recovery plans, and the prevention and reduction of bio-deterioration measures.

Natural disasters are unpredictable and cannot be prevented. However, we need your advise and guide to implement the processes you execute to offer a line of defense for collections in our country. Our objective is to increase the awareness about the risks involved and create collaborations with the worldwide conservation community to rescue Guatemalan documentary collections.