

Report on the ICOM-CC Graphic Documents Interim Meeting

29th of January to 1st of February 2019 in Basel, Switzerland

We are happy to provide a short overview of our Interim Meeting to all who were not able to attend. On the following pages, you will find contributions about the general Interim Meeting 2-days at Schaulager and summaries on the soft-particle blasting and on the MFT workshops that were held at Kunstmuseum Basel. Thank you to our colleagues who volunteered to share their experiences - enjoy reading!

Summary on the 2-day general interim

by Maike Linden and Andrea Pataki-Hundt (Technische Hochschule Köln, CICS)

Eleven bachelor students (first and third year) from the programme conservation of written documents, works of art on paper and book illuminations at the Technical University of Applied Sciences, Cologne Institute of Conservation Sciences (CICS), attended the Graphic Documents Working Group and agreed to report about the meeting.

The talks took place at the Schaulager, Basel, Switzerland, on 30th and 31st of January. The auditorium was well visited. During the first day, among others, technical studies about a sketch book from Cézanne and a purple parchment from the Vienna Genesis were presented. During lunch break the participants had extensive opportunity for networking and to introduce themselves. Additionally, several tours through the storage area of the Schaulager were offered. The concept of the Schaulager with its artworks stored openly instead of being packed away is impressing and interesting. In the evening, a get-together was organised and again, people met and exchanged. It was a friendly and open atmosphere.

The second day focused on the topic of Micro Fading Tester as well as the history of paper conservation in Austria and the technical aspects of ink-jet papers. One Bachelor student, Helen Peters, from the CICS gave a talk and it was very interesting to find out about the necessary workload to prepare a talk on an international conference.

Between the lecture sessions and during the coffee and meal breaks there were many occasions to reflect the contents of the talks and to exchange among colleagues. Especially interesting were the student colleagues from other paper conservation programmes in Stuttgart, Vienna and Bern.

All talks were given in English. This was very important for native German speakers to get introduced to the specific English conservation terms and to increase the language skills for further international meetings. The attendance of the meeting encouraged us to learn even more about paper conservation, to learn about the diversity of the topics and new aspects of research fields. The internationality was inspiring as well as the exchange with student colleagues and professionals.

Summary on the soft-particle blasting workshop
by Maïke Schmidt (Stabsstelle Erhaltung und Restaurierung,
Herzog August Bibliothek Wolfenbüttel)

and

Rebecca Honold (Papierrestaurierung, Staatliche Kunsthalle Karlsruhe)

During the ICOM-CC Graphic Documents Working Group Interim Meeting in Basel, we were able to take part in the soft particle blasting-workshop led by Bert Jaček. Not having used such a device before, we were curious about the handling of the device, the cleaning possibilities and the potential risks.

At the beginning, Bert Jaček gave us a quick introduction about the components and the functionality of the device, the different kinds of particles as well as the various materials suitable to be surface cleaned. Then we had the opportunity to try it ourselves. We worked with two different particles: wheat starch and Arbocel®. The Arbocel® particles are of a more fibrous shape and suitable for a gentler cleaning than the round shaped wheat starch particles. Bert provided us with a variety of testing materials and we chose a heavily degraded, creased, dusty paper manuscript and a discoloured, soiled parchment book cover.

The degraded paper was cleaned with Arbocel® and low pressure. The particle jet was much softer than we expected and it took a little while to find the right pressure and distance to the object. After that we were able to remove most of the dust without further visual paper damage, even in the folded and very weak areas.

On the parchment binding we used wheat starch particles combined with higher pressure and compared the achieved result to cleaning the same binding with a latex sponge. The wheat starch particles removed much more surface grime with no visible surface damages. The challenge with the higher pressure and wheat starch was to create an even overall result without producing unintentional patterns and without cleaning the surface of the parchment binding too much.

Overall the technique seemed to be a good cleaning possibility for soft and damaged surfaces that cannot be cleaned with conventional materials such as latex sponges and rubbers. Ethical considerations and the potential risk of particle residues in the cleaned object should be considered before a treatment. The many variables like the jet pressure, the working distance, the nozzle and particles chosen allow to adjust the process to a variety of objects selectively removing as much dirt as intended.

Summary on the MFT workshop
by Yuhui Liu (Institut für Bestandserhaltung und Restaurierung (IBR), Bayerische
Staatsbibliothek)

On 1st February a MFT-workshop with hands-on training was held at Kunstmuseum Basel, which was lectured by Tomasz Lojewski. During the workshop, the general working principle of MFT was firstly introduced: It is an accelerated light-aging technique con

ducted by a micro fading tester, which focuses on a tiny spot (ca 0.5mm) on a heritage artefact with very intense white LED light while continuously recording the colour difference of the spot over the measurement. The outcome of the measurement is then recalculated and compared to the Blue Wool standards, through which the colourant can be categorised into different light-sensitive sections. Tomasz then spoke of the theoretical knowledge related to MFT such as light theory, different colour correction models, the calculation of colour change into light-dose and how museums make their decisions utilizing MFT data.

In the second part of the workshop we got opportunities to try on the MFT-instrument by ourselves, which works relatively simple:

1. Calibrate the white balance.
2. Place the Blue Wool samples under the camera; calibrate background light; conduct auto-focus, by which half-powered light instead of full-powered should be used to avoid colour-fading before the measurement; measure the Blue Wool samples with full-powered light (standard data).
3. Place your sample under the camera; calibrate background light and conduct auto-focus with half-powered light again; start light aging your sample with full-powered light.

Although the instrument seems easy to operate, it is rather challenging to interpret the measurement's outcome to meet a decision in real conservation and preservation praxis. Some tough topics were therefore brought up in our discussion, including:

1. There is more than one colour correction model involved in MFT: ΔE_{76} and ΔE_{2000} . Since the Blue Wool samples were made before 2000, their ΔE changes during light-aging only present perfect curves when colour correction model ΔE_{76} is applied. With ΔE_{2000} the curves will not look as perfect as with ΔE_{76} .
2. Three different trends of ΔE -curve may occur during MFT measurement. To categorise the tested colourant into an appropriate light-sensitive section, the measurement normally takes 5, 10 or 15 minutes.
3. In real praxis, what we deal with is always a complex system rather than a single homogeneous colourant. Unexpected outcomes may occur during MFT measurement.
4. Some objects, such as cyanotype photographs, fade extremely fast during MFT measurement. But this colour-fading is partly reversible due to the different oxidation states of the iron complex molecule. – How should we categorise this kind of materials?

In summary, what we learned from this workshop was not only the working principle and the operation sequence of MFT, but also to stay open-minded and view results from multiple perspectives. Meanwhile, gaining practical experience and sharing opinions with other conservators are essential as well.

The workshop ended with a brief introduction and demonstration of the new illumination dome for PTM/RTI imaging.