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## JOURNEY OF A PAINTING



As Williams has stated: the incense billowing, the banners floating, the flaring of fires in portable braziers, the musical instruments playing, the crowd peering and pointing — all these add to the vigour of celebration central to Muslim life. This intuitive perception of how Islam can be felt, as well as seen, was one of the reasons that this singular art work was selected to be part of the exhibition project 'Conservation: Craft or Science'. (IAMM, .24. June — 04. Nov. 2019) To accomplish this display, work was needed on some of the standard degradations to a painting from more than a century ago.

Darkened varnish (see above) and lack of tension in the canvas were the two most serious issues. The painting was obviously intended for display in a large room with a tall ceiling, suggested by its format and dimensions as well as by the viewpoint from which it was painted. To enhance the feeling of 'moment and occasion', the artist selected a perspective that compels the viewer to gaze upwards at the work. Only at a hanging height of 4 to 5 metres – as tested with a smaller print – do the proportions of the protagonists in the painting become fully appreciable; the viewer can then make eye contact with the principal individuals in the foreground.

It is known and commonly agreed that the scene pictured is not pure imagination, but based on the observation and feelings of the artist. Often unnoticed is the fact that the artist lived for two

<sup>1</sup> Lynne Thornton, Du Maroc aux Indes: Voyages en Orient, Paris, 1998, p. 148, illustrated Olga Nefedova, A Journey into the World of the Ottomans: The Art of Jean-Baptiste Vanmour (1671-1737), Milan, 2009, p. 70, fig. 53, illustrated; p. 63, discussed Sotheby's — "The Orientalist Sale", Auction Catalogue. London 25 April 2017



years in Cairo, in the neighbourhood that he documented in his painting. He was also well informed about the different groups of people, representing paths of spiritual learning or schools of thought, within Islam. Among them are representatives of Sufi tariqas. The insignia and ceremonial staffs and clothing, inclusive of head covers, of the painting's central figures are evidence that he was what we might term a well-informed observer, perhaps even an insider.

The composition of the painting shows as central elements the Mahmal and a man in green clothing. The persons arranged around these focal points are members of Cairo's Sufi tariqas and, as described by Caroline Williams: "... members of the religious community, identified by the colour of their turbans dark green for the Rifa'iya order, red for the Ahmadiya order, and white for the followers of 'Abd al-Qadir al-Jilani,\* with staves in their hands they fan in an arc towards the figure in green, probably a Sufi shaykh and presumably a Sharif, a descendant of the Prophet.This central figure is positioned directly below the Mahmal, the focus of the festive occasion, and a central part in the annual departure and return of the pilgrimage caravan."

[\* This is further evidence of the deep understanding of and insight into the religious, social and cultural milieu of Cairo at the time of the artist's presence in Cairo. The painting is imbued with an undoubted documentary character.]

A brief overview of the historical religious context of this time is to be found in *Country Studies, Egypt Contemporary Islam* [http://countrystudies.us/egypt/68.htm]:

"In the early 20th century, Egyptian Islam was a complex and diverse religion. Although Muslims agreed on the faith's basic tenets, the country's various social groups and classes applied Islam differently in their daily lives. The literate theologians of Al-Azhar University generally rejected the version of Islam practiced by illiterate religious preachers and peasants in the countryside. Most upper- and upper-middle-class Muslims believed either that religious expression was a private matter for each individual or that Islam should play a more dominant role in public life. Islamic religious revival movements, whose appeal cut across class lines, were present in most cities and in many villages." The painting has changed owners, locations and environmental conditions several times since Deutsch worked on it in his Paris studio. After a long odyssey, it has now found a new home in Malaysia. Before being put on display, the painting was subjected to a careful examination and documentation of its condition at the IAMM's Conservation Centre. Based on this assessment, it was decided to initiate a full restoration, to bring back the original beauty of this painting and to protect it from deterioration. Here we have detailed the sometimes complicated process that is required to ensure a long-term future for a work of art of such historical and aesthetic importance.

# Assessment of the painting's condition on arrival:

## Support (canvas)

The painting is attached to a relatively new wooden stretcher with two horizontal and two vertical cross bars, and 14 unsecured keys (fig.1). The tension and tacking were enhanced by a strip-lining with what seems to be a cotton fabric. In addition, pieces of gummed-paper tape were stuck between the cotton-strip lining and the frame battens (see fig.9).

The structural condition is fair and stable, besides the lack of tension, mainly on the bottom quadrant. It is safe to say that the tension generated by the weight of the canvas itself is not excessive despite its large size. The vertical tension seems to be less where fewer cracks have occurred. The extra weight from the glue paste (fig.3) on the reverse and the heavy impasto, mainly on the bottom, might be the main reason for the increased horizontal physical strain and contractions, resulting in the more severe cupping cracks with a horizontal line pattern.

The colour of the canvas is dark brown, due the increased degradation processes of hydrolysis and oxidation. This is the outcome of acid-catalysed hydrolysis, breaking up the cellulose chains, lowering the density and flexibility of the fibres and consequently their mechanical strength.



According to the longitudinal view under microscope analysis, conducted by the analytical lab team, the fibre samples showed striations and nodes that are spaced irregularly along the length of the fibre. This confirms that the canvas is composed of a natural fibre extracted from the living phloem tissue. A previous Lugol test, done in 2017, was also positive for amylose, a carbohydrate starch widely used in the 19th century on canvas sizing and commonly found in conservation natural adhesives.

The canvas is unlined, with an uneven layer of adhesive overall on the reverse, which indicates a previous lining. Judging by the colour and the optical properties, it seems that the lining adhesive is a natural glue paste (probably animal based). This assumption is additionally sustained by means of the Lugol test done to the canvas threads holding adhesive remains, confirming amylose.

#### Ground and paint layers

Ludwig Deutsch seems to have applied the oil paint in broad opaque layers as well as in thicker impasto layers. He probably modelled the impasto paint while wet and might have added some of the detail in the turbans and ceremonial items after the paint layers had dried. The brushwork is varied: some areas, such as the faces of the figures, are smooth and have been modelled very carefully and with detail; other areas, such as the background characters, have been modelled more freely and show only visibly outlined compositional brushstrokes. Light and perspective are a principal focus in this painting, which is simultaneously characterised by symmetry and proportion, using the golden ratio. Deutsch has employed colour composition and spectrum arrangement concurrently using a cultural colour symbolism contrast. Furthermore, there is no evidence of preparation layers (fig. 2-8).

The painting's different layers on first observation seem to be stable although there is a visible pattern of slightly raised craquelure (figs 5 and 6) throughout the composition, as well as minor paint losses (up to 0.3 cm). These are under the layers of varnish. Some of the losses have not been filled or retouched (fig.7), some are only filled or retouched, and some are both filled and retouched (figs 2 and 4).

With raked light it is apparent that there are scattered fillings and retouchings throughout the composition, mainly from the centre towards the bottom. These seem to be concentrated on the clothing of the figures in the lower left and right quadrant. Some retouching can also be identified around the flags in the upper part of the composition. Magnified observation indicates that some ares of retouching are bigger than the paint losses and cover the surrounding 'original' paint layers. In addition there are a few, dislocated paint flakes (fig.5) and a small dent on the lower side. It appears to be stable and is not visually distracting.

The surface is covered with a thin layer of dust, bristles from a brush, cotton fibres and traces of tissue paper (probably from a former facing). The varnish has been applied on top of dust and debris. The painting appears to be in good and stable condition but would benefit from a surface cleaning and/or varnish removal to reduce these excessive in-paintings and improve the visual colour aesthetics overall.

### Varnish/coating layers

The painting is varnished, with layers applied evenly to the entire surface of a yellow-brownish colour. Under ultraviolet light, the varnish has a strong, slightly opaque, greenish fluorescence, which is characteristic of natural resins (fig. 1-2). Different densities of the resin are visible unevenly throughout the surface, indicating that some areas have different concentrations of varnish layers, mainly at the bottom of the composition.

Some areas are of light bluish fluorescence (mainly at the left centre and bottom towards the tack edge), which is characteristic of certain mineral resins as well as synthetic pigments and dyes. This indicates some areas of in-painting and glazes in between the varnish and the paint layers. Several areas are of black (null) fluorescence, indicate relatively more recent retouching.

#### Frame

The frame is in fair but stable condition. Structurally, the mitre corners are open (fig.9) and there are scratches and abrasions across the wooden surface. With the left batten composed of two wooden pieces and all four battens being directly and independently attached with nails to the tacking edges, the structure is not suitable to safely hold the painting. The disparate physical movements of the wooden bars, together with strain on the stretcher, will probably increase in different environmental conditions, expanding degradations on the canvas and paint layers.

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As an additional note, any frame should be directly attached to a painting (or vice versa). This will affect adversely the angles of physical stresses upon the stretcher and canvas to support the overall weight and induce structural damage.

The nails attaching the wooden frame battens directly to the tack edges of the painting are not a suitable mounting. They do not

allow independent movement in either the wood of the frame or the stretcher resulting from changes of temperature and relative humidity. This exacerbates unnecessary and harmful stresses and induces lack of tension in the canvas and paint layers. As a coup de grace, there is no padding on the rebate to the painting.

#### Hanging system

The D-ring hangers, despite being sturdy enough to support the weight of the painting and the frame, were not placed properly to ensure a good distribution of forces exerted upon the stretcher.

Fig. 1: overall of the painting with natural and UV light



Ludwig Deutsch, The Procession of the Mahmal through the Streets of Cairo, (front, normal light)



Overview of damages, UV light



Cotton bits Facing paper Bristle brush hairs Paint loss Dislocated paint flake



Besides this, we found the improvised, inappropriate, frame screwed direct on to the stretcher of the canvas. A new frame had to be designed and made. Furthermore, the lining material used on the back of the canvas, for repair had to be professionally replaced. After careful examination and analysis, it was decided that the painting has to undergo a full and professional conservation treatment. Overall, the varnish had extreme darkened and overshadowed the original colours of the painting, as well as overpainting as result of a non-professional "repair" of damage on canvas and paint layer.

Fig. 2: The painting's under the UV light







Fig. 3 Paint loss: filled and retouched



Fig. 5 Paint loss: filled and retouched



Fig. 7 Bits of old cotton swabs (grey spots)



Fig. 4 Paint loss: retouched, but not filled



Fig. 6 Dislocated paint layers



Fig. 8 Old facing paper (brown spots)





Fig. 9: Ludwig Deutsch, The Procession of the Mahmal through the streets of Cairo, back



Fig. 10: Strip-lining, tacking margins)



*Fig. 11: The lining canvas has left an impression in the lining adhesive* 

## Treatment steps (in chronological order)

- 1. Removal of dust from the back vacuum cleaner and brush
- 2. Hanging the painting on the wall for storage (fig.12)
- 3. Putting the painting on the floor
- 4. Removal from stretcher
- 5. Removal of lining adhesive on the back scalpel
- 6. Repair of the dent patch
- 7. Remounting the painting on the stretcher
- 8. Hanging the painting on the wall
- 9. Removal of dust from the front brush and vacuum cleaner or soft cloth
- 10. Removal of varnish, cotton fibres and paper residues free solvents
- 11. Removal of old, discoloured retouching gelled solvents
- 12. Filling of paint losses
- 13. Application of intermediate varnish brush





The potential risks inherent in the environment of any painting include many factors that are concurrent with the natural ageing of materials. These include: exposure to extremes and/or rapid fluctuations in temperature and relative humidity; mechanical damage; biological and chemical damage.

All these dangers are present and sometimes magnified when a painting is loaned or displayed under inappropriate climatic conditions. With abrupt environmental fluctuations at the place of hanging, some dimensional changes can be observed. Thse increase the instability of the structural geometry of the canvas, ground and paint layers, due to a large amount of glue paste remaining on the reverse of the canvas - the result of previous lining treatments. The adhesive is of animal base, i.e. a natural glue made from organic sources, which is more reactive to atmosphere conditions, namely moisture. Constant exposure to high moisture content and high temperature increases the water content ratio absorbed, which decreases the stability and mechanical physical integrity of both animal glue and textile (canvas) materials. Significant weight problems increased in the past with the lack of tension. This led to large undulations, mainly at the bottom of the painting. With the brittleness of the paint medium and the varnish, this could lead to a large detachment and flaking of paint.

For these reasons a conservation and restoration project was undertaken. In terms of the complexity of the treatment and the sheer scale of the artwork, this turned out to be a stimulating challenge for the Paintings Conservation team.

The removal of the improvised, inappropriate frame and stretcher (fig.12) and a closer look into the painting and its structure allowed for the possibility of removing 1) the old strip-lining on the tack edges (fig.13), the glue paste that was covering the back of the canvas. This complex and extremely delicate treatment consisted in scraping the glue residues without disturbing or inducing any holes on the canvas and painting (fig.14). The greatest technical obstacle was in applying small amounts of pressure without breaking or detaching the already fragile and cracked paint layers. To return cohesion to these layers, which had lost their ability to stay together, a consolidation (figs 15 and 16) was performed to the paint surface, following surface cleaning and varnishing (fig. 17). The adhesive assists in softening the paint and reducing the planar distortions and its overall cohesion and the surface coating layer (varnish) protecting the painting from dust and immediate environmental deterioration.

The damage that had occurred to the pictorial layers was visually compensated to reduce the optical disruption of the overall aesthetics and compositional reading. The specific components of filling of losses, without overlapping, were executed to match in texture the 'original', allowing for an auxiliary build-up to receive the commonly called 'retouching'. The retouching reestablished the visual balance between the loss areas and the original, using a variation of colour and shape (filling) (fig.19). This allows the viewer to have an overall image, as coherent as possible, by achieving the forms without speculation (fig.20).

The visual impact and cultural importance of a successful retouching are intimately tied to both the condition and the picture represented. The aims of the Paintings Conservation team was to help the painting appear to its best advantage, without falsification, while providing a strong foundation for excellence in the art of retouching.





*Fig. 12: Removal the painting from the stretcher* 











Fig. 14: Left picture, scrapping the glue ; Right picture: before and after scrapping the glue



Fig. 15 & 16: Consolidation of the paint layers from the reverse (canvas).





Fig. 17: Varnish application





Before retouching Fig. 18: Three stages of the retouching treatment



During (filling)



After retouching



Fig. 19 : After treatment



## CASE STUDIES FROM THE CONSERVATION DEPARTMENT OF IAMM Vellum: why the loss of writing on one side?



Kufic Qur'an section, North Africa/Middle East, circa 9th century (18.9 cm x 26.6 cm x 5.2 cm)



This Arabic manuscript on vellum (calf skin), in a fitted box, has suffered major ink loss on the 'flesh side' surface while on the other side the ink has adhered well. The surface that originally had animal hair is rougher, denser and more compact. It seems more effective than the flesh side, which may contain residual fats that were not fully removed during the manufacturing process. This is just one factor that may have contributed to the loss of ink adhesion; the composition of the ink and microbiological activity are other possible culprits.





*Fig. 1: 'Flesh side' of the vellum, at 35x magnification, with a letter showing the loss of almost all of its black ink, leaving an etched impression* 



Fig. 2: Black ink from the 'hair side' adhered well to the surface

Several pages were observed to have ink loss on the flesh side surface, unlike the reverse side. The differences between both surfaces were documented in figs 3 and 4



Fig. 3: Hair side of vellum with black ink adhering well to the surface



*Fig. 4: Flesh side vellum surface with black ink had partial or entirely loss on the surface* 



## MAPPING AND DOCUMENTATION SYSTEM

CONTRACTOR DE LA CONTRACT

Bidriware basin, India, 19th century (Height 17 cm; diameter 38.5 cm)

Bidriware is a metal-inlay technique, developed around six centuries ago in the town of Bidar, in the Indian Subcontinent. Due to its complexity and striking designs, bidriware has been prized ever since as a symbol of wealth. The metal used is a blackened alloy of zinc and copper – or sometimes lead and tin – inlaid with thin sheets of pure silver.

Tests on a sample taken by the analytical team were positive for the presence of zinc in this object. Unidentified corrosion has leached from the basin over the years. Most of the white decomposition has caused the silver inlays to fall away from the surface. Bidri is well known as a non-corroding alloy, although in this case the basin is showing a reaction with the environment. The white decomposition is especially prominent in the inlayed area; galvanic corrosion may be heavier around this area with the presence of humidity and oxygen.

Thorough documentation of an object is a compulsory first step for all conservators. Observation, inspection and detailed documentation are the foundations of conservation work. Examining 3D objects is awkward without proper documentation; in this case the mapping and visualisation of images are the best methods. This basin has reached a phase where the base metal has started to react with a harsh environment. Proper documentation with a mapping system is essential to help the conservator in placing back inlays to their original position (fig. 1).

All the detached inlays have been labelled according to the top division guide. The grid line guides the conservator to the inlay's position while the removal of white deposits is in progress.



Fig. 1: White deposits leaching from the base metal



*Fig. 2: Detached silver is labelled, according to the guide line from the image* 

Detached inlays will be labelled according to this guide and kept in the sample bag. Images and labelled detached silver inlays will be the guide for later reattachment (fig.2).





Fig. 3: View from above the basin with division line and label

Images above showing the object has been divided into four parts for sampling, the removal of corrosion will be done with this grid system. This division is a guide and reference for the



*Fig. 4: View from below with division line and label* 

conservator to labelled detached inlays and it has been marked accordingly with the alphabet and number as images below.







Fig. 5: Grid and guide line from the divided side of the object



## BRINGING BACK THE ORIGINAL BEAUTY

Safavid Cuerda Seca pottery tile, Isfahan, Iran, 17th century (28 cm x 27.4 cm x 4 cm)



Before restoration, the deterioration on the surface was clearly visible

The tile is of square form, decorated with a man holding a cockerel in his arms accompanied by a companion. The lower right-hand corner was previously restored; the material used is deteriorating, with discolouration and a major crack between the tile and the filling material.

The old repair on the tile surface was mechanically removed with



The missing area was replaced with the new filler

#### Gap filling as restoration

Normally gap filling involves filling gaps or completing missing areas. In some cases, it may strengthen the reassembled ceramic. Gap filling as restoration may be necessary in order



The old filler was easily detached from the tile body

a scalpel after some drops of ethanol were used to soften the old filler. The tile was then cleaned with ethanol and consolidation was applied to the surface before filling. The filler was applied and the surface made smooth. Acrylic paint was used for repainting the surface of the filler. Varnish was applied to the repainted surface after it had dried completely.



*The tile after retouching with paint and matching the surrounding to international conservation standards* 

to make an object understandable when it is displayed in the museum, but it is very important that the restoration does not become a fake. The gap-filling material should not stray over the surface of the ceramic itself, which means that the filler must be handled neatly and accurately.



## **REVELATIONS: SEEING THE UNSEEN**

Comprising two tiles, decorated in cobalt blue, turquoise, green and black on a white ground with entwining split-palmettes and floral vines. There are traces of machine cutting on the edges, minor chipping at the corner area and manufacturing defects on the glazed surface. The tiles were broken, and have been repaired by a previous owner.

## Making the invisible visible with ultraviolet light analysis

Before the practical conservation on the tiles could begin, conservators had to first determine its materials and the extent of any damage or deterioration. Information gained naturally assists the conservators in their choice of treatment. As is common in examining ceramics, the first step was to inspect the tiles under ultraviolet (UV) light. In darkened conditions, UV light reveals aspects of an artefact's surface that are otherwise invisible to the naked eye. In the case of the tiles, the UV light exposed areas of restoration where materials such as synthetic resins were used to fill or retouch the objects. Once the problem has been detected, the process is as described above for the Safavid Cuerda Seca tiles.

Damascus pottery tiles, Syria, late 16th/early 17th century (31.8 cm x 15.2 cm x 3 cm and 31.8 cm x 15.8 cm x 3 cm)









The tile after retouching with paint and matched the surrounding surface area.



# ASSESSMENT OF TEXTILES: A CARE AND PREVENTION PROJECT

Since the outbreak of the pandemic, every aspect of cultural heritage has been impacted – from research to conservation and protection, and from outreach to training and education. While collections are not directly at risk, the health crisis complicates their care, especially with restricted access and limited time. The primary risks to a collection are the 'ten agents of deterioration'. Therefore, it is imperative to ensure that collections are secure, safely cared for and maintained during these unprecedented times.





Fig. 2 (i-ii): Conservators and conservation scientist assessing causative factors and potential risks to the textile collection



*Fig. 1 : Display Manager briefing conservators on display system adopted for 18th century horse saddle and strirrup from Morocco* 

Taking advantage of the museum's closure, the Textile Unit and the Analytical Laboratory of the IAMM's Conservation Research Centre decided to undertake the Textile Gallery Assessment Project in collaboration with the Curatorial Unit and Display Team (fig. 1). It formed part of an on-going effort to reassess potential risks and existing vulnerabilities across the textile collection in the IAMM's Textile Gallery, which took off on 23 November 2020(fig. 2).

The primary objective is to establish a realistic solution to manage the risks and to provide a means of recording and sharing the results of collection checks among relevant colleagues, namely the curators and the collections management team.





Fig. 3: Detailed documentation to provide visual reference and to accurately document any issues that may be have occurred throughout display

The methodology involves measuring the light exposure and conducting detailed condition checks on the textiles on display (fig. 3-4). The data will then be used to extrapolate suitable light levels for the various types of textiles and formulate alternative measures to reduce light exposure on vulnerable textiles (fig. 5). This approach of controlling environmental parameters i.e. light exposure is called preventive conservation. It is a non-invasive approach, with the primary goal being to identify and reduce potential hazards to a collection.

As of 17 December 2020, 60 textile objects in the Textile Gallery have been successfully assessed.

In the long run, it is hoped that the outcome of this project will enable the museum to identify changes in the textile collection and to ensure that resources are always effectively deployed. More importantly, it is hoped that this collaborative effort will create a deeper level of interpretation and understanding of the complex processes involved in preserving shared cultural heritage.

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*Fig. 4: Lux reading taken to monitor the light exposure on each object* 



Fig. 5: Magnified image of previous restoration

The articles have been written by Conservators of the IAMM Conservation and Research Centre. Paintings Unit: Patricia Candelaria, Vanessa Ubaldi, Norizawani Bt Ahmad Tajal, Mohamad Ammar Amirul Mohd Soubri with contributions by F. Farid Zink

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CALENDAR 2021: Calligraphic Batik



Batik, a textile art indigenous to Southeast Asia, traces its history back to Jambi, Sumatra and coastal Java in the 13th century. Each region of the Malay world boasts unique designs, typically of flora and fauna motifs. These symbolic patterns depict and preserve cultural meanings.

The method of producing batik combines wax-resist techniques and dyeing using innovative tools such as a *canting* (drawing tool) and *cop* (stamp). Batik production reached its peak in the late 19th century due to mass production using machinewoven cloth introduced by Europeans. The two main forms of batik in this collection are ceremonial cloths and head cloths, which can be used as *destar* or *blangkon* (men's headcloths), *selendang* (scarf), wall hangings, coffin covers, baby cradles and more. With the introduction of Islam into Southeast Asia, around seven centuries ago, batik design saw the integration of Islamic aesthetics. Calligraphy, a widely applied form of Islamic art that features prominently in the IAMM collection, found its way into the region's textile production through intricate maritime networks. The free-flowing strokes of the canting were used to embellish these fabrics with symbols of faith, for blessings and protection. Attesting to the demand for Islamic motifs on textiles, the use of pseudo-calligraphy achieves comparable renditions without having to use actual sacred verses.

Price : RM19.00

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