



METHOD STATEMENT

**FOR THE IMPORTANT PAINTINGS AND FRAMES DEPICTING
THE VIA SAGRA LOCATED INSIDE THE BASILICA OF MOSTA
DEDICATED TO THE ASSUMPTION OF THE VIRGIN MARY**

10th January 2025

ATELIER DEL RESTAURO
CONSERVATION & SCIENTIFIC ANALYSIS OF WORKS OF ART

METHOD STATEMENT FOR THE CONSERVATION AND RESTORATION OF THE 'VIA SAGRA' - MOSTA BASILICA

The conservation and restoration project will involve the treatment of each individual canvas painting and frame comprising the 'Via Sagra' pertaining to the Basilica of Mosta dedicated to the Assumption of the Virgin Mary. Closer investigation of each painting will allow for a better understanding of the paintings' state of conservation and therefore a treatment plan can be devised specifically for each individual painting and frame.

METHOD STATEMENT

The aims and objectives for the conservation and restoration project will include:

- Providing an accurate record of the present condition of the painting
- Developing a methodology, following standard conservation and restoration practices to conserve the painting by:

-Documenting the painting before, during and after conservation and by providing photographs of the entire conservation process.

-Understanding the causes and nature of the mechanisms of deterioration through research and investigation

- To implement preventive conservation measures to inhibit further deterioration
- To make available a detailed report of all the restoration and conservation interventions carried out.

The conservation and restoration program will consist of interventions according to current conservation ethics and principles which include recognizability, reversibility, compatibility and minimal intervention.

PAINTINGS

1. PHOTOGRAPHIC AND GRAPHIC DOCUMENTATION

1.1 Photographic documentation

Before, during and after, general and detailed shots will be taken in diffused and raking light using an SLR digital camera. The photos will be taken both in RAW and JPEG format.

1.1.1 Optical investigations of portions of surfaces

1. Shots in raking light chosen on the basis of representativeness.
2. Non-invasive optical investigations - photographic shots in UV-Fluorescence

2. HUMIDITY TESTS

Tests will be carried out to understand whether the canvas support is sensitive to heat and water based substances, so as to identify the appropriate procedures for the treatments.

3. CLEANING

Different cleaning tests will be carried out to devise an appropriate cleaning methodology for each painting:

Mechanical methods – will be effective to remove surface deposits such as dust, grime, fly specks and wax from candles

Chemical methods – which involve the dissolution of chemical mechanisms for the removal of oxidized varnish from painted surface - The removal of overpainting where present will be preceded by tests to determine the overpainting resistance to the cleaning solution and the response of the original painted surface. Once the identification of the materials to be cleaned is made, it will be possible to formulate a cleaning method which is tailor-made to a particular problem. Both water based methods and solvent-based cleaning will be tested. The approach will be carried out using the WALBERS AND OR CREMONESI CLEANING methods through different tests by respecting the pH of the pictorial surface using different organic solvents (ACETONE, ETHANOL, LIGROIN®), water based solutions with different concentrations of acids (CITRIC ACID salts) and bases (TRIETANOLAMINE®) will also be tested.

Following the above preliminary tests it will also be identified the supporting agents and/or thickeners that will help to create the solvent or reactant system. An organic solvent gel system intended to have a very specific solvency parameter will be preferred as the rate of evaporation is reduced and the flow is restricted. This has the advantage that less polar solvents can be applied to the surface. The risk of swelling a vulnerable oil paint is reduced and health and safety aspects for the conservator are considerably improved. A high molecular weight polyacrylic acid CARBOPOL ® can be used as a gelling agent.

4. REMOVAL OF OLD INFILLS

In the case that old infills are present, mechanical cleaning of the infills will be carried out using a surgical blade, following the softening of the infills using distilled water.

5. CONSOLIDATION OF THE PICTORIAL LAYERS AND CANVAS SUPPORT

For the adhesion of the detachments between the painted surface and the canvas a conservation standard adhesive will be selected after different tests will be carried out.

The adhesive will be applied to the back of the painting. The consolidation treatment will be carried out under vacuum. *Adhesive test will be carried out with the possible use of the following: Beva 371 or Plexisol*

6. FACING

Facing will be applied to to the painting in-situ, in order to protect the painting during transportation. Additionally, facing will also be applied to protect the pictorial layer from any flaking or lifting of paint during handling and the conservation treatments on the verso. The facing will be applied in large pieces of square shaped Japanese paper slightly overlapping each other. A cellulosic adhesive will be used due to its easy reversibility.

7. REMOVAL OF OLD AUXILIARY FRAME

Following further investigations of the painting' back, a better of understanding of the state of conservation of the painting' support and auxiliary support could be had. This will determine the procedures and treatments to be carried out on the painting's support.

In the case that the painting' auxiliary support (strainer/stretcher frame) is in a poor state of conservation and is no longer adequate to support the canvas painting and/or treatments of the canvas support need to be carried out, the painting will be detached from their current auxiliary frame. Mechanical detachment of the painting will be carried out by carefully removing the nails/tacks from the painting' tacking margins.

8. REMOVAL OF OLD LINING CANVAS

In order to minimize the physical strains on the painting it is suggested that only necessary interventions are carried out, therefore if the lining canvas present is found to be in a stable condition it is suggested that it will be kept. If on the other hand the lining canvas is found to present signs of deterioration it will be replaced.

Any surface dust and deposits will be removed from the surface using low suction. The old lining canvas present on the reverse of the painting will be mechanically and systematically removed. Following this the deformations of the canvas support will then be treated under vacuum. A combination of humidity, heat and pressure will be used as deemed necessary, in order to result in a flat homogenous surface.

9. MENDING OF TEARS AND INLAYS

In the case that tears are present these will be dampened and brought into position under light weights. The tears will then be individually aligned using weights and bridged with threads of a polyamide adhesive. The threads will be fixed by using a heating spatula in order to melt the adhesive by means of a thermoplastic stable polymer with high elasticity (POLYAMIDE®) melted using a heating spatula at the edges of the tear. This will provide strength during the stretching process work as well as long-term stability decreasing the risk of future deformations of the canvas support.

If lacunae of the canvas support are present, **canvas inlays** will be prepared having a compatible material with the original fabric. Canvas inlays will support the in-fills to be executed from the front of the painting. The outline of each lacuna will be drawn on a piece of Melinex following with the weft and warp of the original canvas. The drawing will be then transferred on the new canvas and traced by means of a pencil keeping the warp and weft in line with those of the prepared canvas, the shape will be then cut out. The inlays then will be transferred to their respective lacunae and will be adhered using a synthetic adhesive, *polyamide*, using a heating spatula.

We propose that **patches** made of a very thin and elastic synthetic fibre are adhered to the back of the painting using a conservation standard adhesive, *Beva Film*, to support the infills and tear repairs made.

10. RE-LINING OR STRIP-LINING

If the painting is detached from its strainer frame, a re-lining or strip-lining intervention will be required to re-stretch the painting to its auxiliary frame. The treatment selected will be determined by the state of conservation of the original canvas support.

A **re-lining** intervention is considered necessary to give the painting a stable support in the case the canvas support has become frail and deteriorated with time. Lining a painting refers to applying a new canvas support to the back of a stretched canvas painting. The reasons for this type of treatment mainly included: the weakness of the canvas and the high humidity experienced locally.

A lining canvas, having a similar weave and properties as the original canvas, will be treated by wetting with water and sizing with glue. Once dry it will be stretched and tensed well over the stretcher frame.

The lining canvas will be adhered to the back of the original canvas, using a synthetic adhesive which is of a stable nature and reversible, in the case that in the future a new lining intervention would be required. Synthetic adhesives also avoids the risk of insect infestation and fungal growth. (PLEXISOL B550® or BEVA OF GEL®). The choice of adhesive will be made once the back of the painting will be inspected and also according to the results of the humidity tests.

Alternatively, if the painting' support is found to be in a stable condition, **Strip-lining** will be implemented in order to extend the painting' tacking margins, making the stronger and aiding in the process of re-stretching the painting onto their stretcher frame.

The treatment consists in adhering strips of canvas to the perimeter of the painting from the back. The chosen canvas will be of a similar weave to the original. The treatment will be carried out methodically by means of a synthetic conservation standard adhesive, which will be applied to both the original and to the strips of canvas. The adhesion of the strips of canvas to the painting will be carried out using the *sottovuoto* technique, by placing the painting under light vacuum for a few minutes.

The canvas for either the lining or the strip lining will be chosen out of these high quality linen canvases supplied by CTS: 2297 tela lino, 2297 tela patina, 1111 tela lino, tela lipari.

The Atelier del Restauro team was selected to participate in the first virtual course related to *Structural Treatments of Paintings: Reinforcement with the Mist-lining System*, a course supported by the Getty Foundation's Conserving Canvas Initiative, hosted and organized by SRAL to provide theoretical and practical sessions related to the 'Mist-Lining' technique.

The mist-lining technique involves:

- The minimal use of adhesive to achieve the required bond and shear strengths
- The regeneration of the adhesive using solvent vapours
- The elimination of moisture through the use of a dry adhesive layer
- The application of low pressure to create the desired bond

When carrying out structural interventions on canvas paintings, we propose the use of the mist-lining methodology, which is the latest methodology in the conservation of canvas paintings applying minimum intervention principles.

11. RE-STRETCHING OF THE PAINTING

Following the treatment of the painting' support, the painting will be re-stretched onto the auxiliary frame using stainless steel staples. An assessment of the current stretcher/strainer frames will determine whether the current frames could be used or whether new auxiliary frames will need to be constructed.

In the case that the original frame is not expandable or its physical structure is not in a good state of conservation to maintain the painting in good tension, it will be advised to change the auxiliary frame to a new one, to ascertain the prolonged conservation of the canvas.

Stretcher frame specifications

Wood: Spruce or Tulipwood (Spruce Picea sp. / (Liriodendron tulipifera)).

Frame section: Approximately 10.0 x 4.5cm (or as requested). The frame is made from 2 - 3 laminations.

Frame joint: Corners - Mitre bridle joint, cross members and circular pieces - mortice and tennon.

Frame front: Bevelled. In the case of circular parts a tapered wood strip will be attached to the front perimeter (1.0 cm width, 0.6 cm thickness)

Expandable system: Stainless steel studs, washers and nuts.

Surface finish: Sanded (abrasive paper grade 220)

Stained: On request

Varnished/waxed: On request

12. INFILLS OF LOSSES

After resolving all the physical issues of the painting, the aesthetic problem resulting from lacunae of the pictorial layers will be treated. Infilling of the losses will be required to obtain a homogenous surface layer.

Primarily the painting will be viewed in raking light and the micro lacunae will be filled with Gesso di Bologna and using a small brush. The lacunae containing the inlays will be stuccoed with gesso di Bologna and animal glue (*rabbit skin glue*) to compensate for the low edge present. When dry, the infills are levelled to the surface of the painting using a fixed blade, the edges and excess of gesso will be then cleaned with a cotton swab dampened in water.

13. RE-INTEGRATION OF LOSSES

The chosen integration method will establish the former unity of the painting, using reversible colours, which will not alter in time preferably using water colours (Windsor & Newton) and completing the work using glazes of Maimeri® varnish colours. A layer of retouching varnish is first applied. Varnishing

will be carried out using conservation retouching Le Franc and Bourgeois Varnish. The varnish will be applied in order to:

- Saturate the colours of the painting before starting the reintegration phase.
- Seal the in-fills in place.
- Create an intermediate layer between the retouching to be carried out and the original paint layer.

RETOUCHING VARNISH - RETOUCHER LE FRANC & BOURGEOIS	
<p>RETOUCHING VARNISH</p> <p>Before starting the retouching with the maimeri varnish colours, the painting must be coated with a retouching varnish. Normally one / two coats are applied with a brush, depending on the absorption. Then, after the retouching phase the final layer of varnish will be applied.</p>	
VERNICE RITOCO SOPRAFFINE ART. 1188	To be applied by brush

14. APPLICATION OF PROTECTIVE COATING / VARNISH

A final reversible and non-yellowing varnish layer will be applied to seal off the retouching, saturate the original colours and to protect the painting's surface from deteriorated agents. The coating applied will be of a stable nature and it will re-establish the richness of the paint layer allowing a proper tone. It will also keep dirt and dust particles including polluting agents off the picture layer. A layer of gloss varnish followed a matt varnish will be applied, a preferred varnish brand will be the high quality varnish brand of Le Franc & Bourgeois®.

CHOSEN FINAL VARNISH - TABLEAUX LE FRANC & BOURGEOIS

FINAL VARNISH

Once the retouching is completed, one will proceed with the final varnishing, which, based on the desired effect, bright or satin or matt, will involve the spray application of one of the following varnish.

THE CHOSEN SURFACE FINISH WILL BE DECIDED AFTER VARNISH TESTS ARE CARRIED OUT.

VERNICE FINALE BRILLANTE SOPRAFFINE ART. 1186	For slightly shiny effect and spray applications
VERNICE FINALE BRILLANTE J. G. VIBERT ART. 1251	For a brilliant effect and spray applications
VERNICE FINALE OPACA ART. 1188 (SATINE)	For an opaque/matt effect and spray applications
VERNICE FINALE OPACA ART. 828	For an opaque/ matt shiny effect and spray applications
VERNICE FINALE OPACA ART. 159 (SPRAY)	For opaque effect on single portions

TREATMENT OF DECORATIVE FRAMES

The treatment of the decorative frame will include the cleaning of superficial dust which has accumulated on the surface and indentations of the decorative frame. Following a series of cleaning tests the surface of the frame will be cleaned using a low molecular weight solvent applied to the surface using a cotton swab.

This will be followed by the re-adhesion of any cracks or detachments of the gilding from the underlying support using a heat-seal adhesive, applied using a syringe. The adhesive will then be reactivated using a heating spatula, which also pushes any detachments back into place. The losses of the preparatory layer will be infilled using gesso di Bologna and animal glue.

Re-integration of the losses of gilding will be carried out using 23.75kt gold leaf, applied to the losses using modern conservation methods together with the technique originally used on the decorative frame. Glazes of varnish colours will be used to age the newly applied infills and a final protective coating of non-yellowing varnish will be applied to the frame.

1. ADHESION AND CONSOLIDATION OF THE DETACHED GILDED LAYER

The state of conservation of the pictorial layer of the altar is not good due to the large amount of overpainting present. Areas of the painted surface were found to be cracked.

For the adhesion of the detachments between the painted surface and the preparatory layer a conservation standard adhesive will be used. This will involve injecting the adhesive using insulin needles under every detached paint film, a piece of Melinex will be applied over a very small area where by means of a heating spatula the detachment will be lowered and adhered to the plaster support using heat and pressure.

2. CLEANING OF THE GILDING

The gilded layer exhibits deposits of dust and grime all over. Different tests will be carried out for the safe removal of the purpurin and oil gilding.

Mechanical methods – which involve the use of a soft dry brush and a scalpel blade, to remove thick surface deposits of grime.

Chemical methods – which involve chemical gels and solvents, for the removal of surface deposits, dust and grime. The approach will be carried out through different tests by respecting the pH of the pictorial surface using different concentrations of acids and bases using water based solutions, emulsions and solvent gels. For the cleaning of gilded areas a non-aqueous cleaning method will be used because of the water sensitivity of the bolo preparatory layer. Tests will be carried out using dense mixtures.

After the cleaning tests are carried out the most effective and safe cleaning solutions are selected. In each case it is important that the chosen solution provides: controllability, clearance, minimal surface change, minimal effects on original materials and no activation of deterioration mechanisms.

3. WOOD CONSOLIDATION

Preliminary investigation has revealed that the wooden fabric underwent some movement due to the open joints present on both the façade and platform of the altar/

A conservation standard resin will be used to consolidate these areas. The application of the product in different concentrations will ensure a good permeation in the wood fibres.

4. TREATMENT OF METAL ELEMENTS

Where corrosion on the metal elements is present the corrosion will be mechanically removed and the elements treated with corrosion inhibitors.

5. INFILLING

Infilling of missing plaster, cracks and lacunae will be carried out in order to obtain a homogenous surface. A plaster, which is compatible with the supporting materials of the altar, will be devised. The surface will be leveled down to the surface according to the reliefs.

6. GILDING INTEGRATION

Gilding will be carried out using 23.75 carat double gold and silver where appropriate. It will only be carried out in areas where lacunae of the original gilded layer are found. This process requires greater preparation of the surface onto which the gilding is to be applied in order to achieve a superior finish can be produced. Before water gilding is applied a number of coats of gesso need to be built up on the substrate to produce a smooth surface. This is followed by several coats of bole. Bole is coloured clay mixed with size. The surface is then wetted with a mixture of water and alcohol and the gold leaf will be applied instantly. As the water soaks into the gesso it draws the gold firmly onto the surface. The gilded layers are then polished using agate (a form of hard quartz like stone) burnishers. Judging when the surface can be burnished is critical. If the correct degree of dryness has not been achieved the leaf can be easily damaged. The burnished gilded layers can, if required, be toned down using oil based varnishes and pigments in order to match with the surrounding original gilded layer.

5. PICTORIAL INTEGRATION

The chosen integration method will establish the former aesthetical unity of the predella and altar, using an ageing technique where the new reconstructions where done.

6. PROTECTIVE COATING

A final reversible and non-yellowing protective layer will be applied to seal off the retouching, saturate the original colours and to protect the polychrome surface and the paintings from deteriorated agents. The coating applied will be of a stable nature and it will reestablish the richness of the paint layer allowing a proper tone.