



BETWEEN HEAVEN AND EARTH: VINCENZO PAGANI'S MADONNA DELLA CINTOLA

DIAGNOSTIC LABORATORY FOR CONSERVATION AND RESTORATION

The work underwent numerous diagnostic analyses for the purpose of understanding the execution technique, the identification of the original materials and those used in previous restorations.

The diagnostic plan provided first for the use of imaging and XRF analyses for the study of the pigments. The poor state of conservation of the paint film is evident; it is very fine with a very dense series of cracks that vary in dimensions in relation to the different colour fields. For example, the *craquelure* of the complexion of Saint Roch is far finer compared to the visible cracks on the cloak near the shoulder. Also the preparation of the painting is very fine, to the extent that in some gaps the underlying wood is visible. The state of conservation of the support is also interesting, as it reveals no sign of warping despite the evident damage to the pictorial film due to the percolation of water.



Fig. 1, 2

WOODEN SUPPORT

The wooden support was studied by RX analysis.

Unusually, the planks are positioned horizontally and assembled with a series of butterfly dowels inserted on the *recto* of the panel and therefore very visible below the painting.

Two vertical planks are positioned on the *verso*, structurally joining the horizontal planks. Under the preparation and along the horizontal line of juncture of the planks there are strips of canvas, clearly shown by the infrared analysis (**figs. 1-2**).

PAINT SURFACE

An acrylic resin is present above the paint film. On the areas distinguished by a UV fluorescence (**fig. 3**), yellow in colour, a varnish based on mastic resin has been applied. On the surface of the bluest band of the sky

there is animal glue, walnut oil and a polysaccharide (molasses). The work is realised on a preparation of plaster and animal glue (collagen), applied directly onto the wooden support. It is differentiated according to the zones with one or more coats of plaster and glue (**figs. 4a-b**), with the purpose of levelling the uneven parts of the support.

The paint film was realised using a mixture of animal glue tempera (collagen). The identification of the pigments was carried out via a comparative study of the results of the false-colour infrared (**fig. 5**), XRF and SEM-EDS analyses. The red pigments are ochre, minium and cinnabar, used for the flesh tones, and realgar, used for Catherine's robe. For the blue tones, azzurrite and smalt was used, and for the greens, malachite and copper. The yellows used were ochre and massicot, again applied below the resin of the light green fields. The white pigment used was lead carbonate, marked by zinc tenors. The metal leaf was applied using the "mission" technique, using minium, massicot, and a proteic binder mixed with oil (oil tempera). These are based on gold (chalice, border of the robes, Saint Bartholomew's book) and silver (blade of the dagger and decoration of Saint Thomas' damask robes).

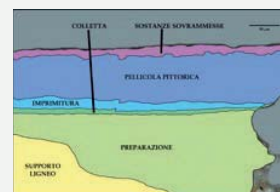


Fig. 3; 4a, 4b



Fig. 5