



# MADONNA AND CHILD WITH THE SAINTS ONUPHRIUS, NICHOLAS OF BARI, BARTHOLOMEW AND JOHN THE EVANGELIST, by Giovanni Bonsi (doc. 1366-1371)

### RESTORATION LABORATORY OF PAINTINGS AND WOODEN MATERIALS

#### **PAINTING TECHNIQUE**

The painting was carried out with egg tempera on a wooden support, composed of several panels and prepared with gesso and glue. The figures stand out against a gold leaf backdrop, applied onto red bolus. Canvas (camottatura) has then been glued onto the support, between the wood and the layers of preparation, in order to reduce movements due to thermo-hygrometrical environmental variations. The outlines of the figures are marked by engravings, while the haloes and the perimeter framing are enriched by punching.

#### STATE OF CONSERVATION

The painting showed significant cracks along the joints of the supporting panels, with misalignments of the surfaces. The phenomenon, already present in the past, was hidden with stucco works and retouches, which are now in a bad state. An old fashioned renovation on the panel of St John the Evangelist, showed considerable detachments of the gilding. Abrasions, yellowed varnish and compacted layers of dust all contributed to rendering an image of the polpytych as disordered and shabby.

## **RESTORATION**

The last restoration occurred under the care of the Vatican Museums (1953) and confined itself to the cleaning of the surfaces, to the retouching of abrasions and the mantle of the Virgin. With the present restoration, the losses of the pictorial layers were healed, and the original colours were recovered, having been previously liberated from superimpositions. The realignment of the deformed panels as well as the pictorial reintegration performed for the recovery of the mantle of the Virgin and the painting flooring were particularly important.

# STUDY AND RESTORATION OF THE WOODEN SUPPORT

The work is made of three panels of poplar wood, with a medium thickness of about 2.4 cm and realised by attaching several panels vertically with a tangential cut. The upper part of the polyptych is characterised by five gables made from the assembly of more wooden elements of triangular shape.

The reverse side presented a system of restraint consisting of three cross bars in spruce, fixed to the support with screws, no longer suitable. After their re-

moval, it was possible to separate the three panels and to treat the cracking, thus restoring flatness to the boards; in particular to the two major cracks (corresponding to Saints Onuphrius and Nicholas) which were causing an accentuated unevenness in the pictorial surface.

The support was consolidated with wooden elements in seasoned poplar in triangular sections (wedges) and glued with the vinyl adhesive Vinavil NPC.

The newly instated restraint system consists of three crossbars, in the shape of crossbows, composed of two aluminium plates held to the support by gattels of beech wood. All points of contact between the various elements have been redressed with Teflon, which reduces attrition during the possible natural movements of the support.



The reverse side of the painting prior to restoration.



Detail of the wooden framework and of the support base after the restoration.



Detail of unevenness along a crack.

At the end of this phase, it was considered fundamental to study a system of support which could aid the operations of moving and exhibiting the work. Such a system provides for a prop base connected to the actual support through three crossbars in steel, which are bound directly to the wooden framework at the back, guaranteeing the possible movements of the board.

At the end of the operations described, the reverse side of the painting was added with virgin bees wax to obtain a protective film.