



FABBRICA DI S. PIETRO  
IN VATICANO

## **BALDACHIN ON THE HIGH ALTAR OF ST. PETER'S BASILICA IN THE VATICAN**

### **STATE OF CONSERVATION**

All surfaces of the monument are covered by a dark patina, under which the gilding that embellishes the details is visible but partially obscured. As it is located indoors, the Baldachin is not affected by the common phenomenon of green corrosion is always present in bronze monuments placed outdoors and that are thus exposed to the elements: in the basilica, the monument is neither subjected to acid rain, nor to water percolation, nor to bird droppings, etc., which are all typical factors causing deterioration in polluted urban environments. However, the daily presence of thousands of pilgrims and visitors alters the microclimate in which the work is preserved. Strong humidity flows caused by transpiration during the day and significant temperature fluctuations during the nightly closing hours of the basilica inevitably imply an alteration of microclimatic conditions. These have an impact on the baldachin, which, as mentioned earlier, is made up of multiple materials of a very different nature. Thus, while the wooden parts are subjected to continuous expansion and compression owing to the strong fluctuations in air humidity, the metal parts are subject to repeated surface humidification with the consequent triggering of alteration processes and corrosion of the metal. In particular, the iron components of the work, which play the fundamental role of supporting and joining the decorative bronze and copper parts, show signs of alteration and oxidation, making the restoration of the baldachin particularly urgent.

On all surfaces, there are also dark patinas formed by fatty substances which were used in past maintenance interventions. Due to these protective substances, atmospheric powders of various kinds have settled on the surfaces, creating an incoherent material state that uniformly covers all surfaces, especially in the upper part.

Close-up observations during some inspections in the lower part of the column near the statue of St. Helena have revealed that some durals, resulting from restoration interventions, are affected by tiny but numerous formations of swellings due to phenomena which have caused the alteration of the bronze under the precious metal laminate. More detailed and accurate observations can only be made once the scaffolding has been erected, making access to the higher parts of the baldachin possible, so as to be able to

ascertain the extent of degradation of the wooden parts, and even more so of the iron components.

Observations from the photographic documentation taken before the intervention make it possible to anticipate the conservation problems of some parts of the work, such as the external upper covering. The latter is affected by an extensive disconnection of the padding system of wooden planks that lines the perimeter cornice formed of a mixed-line shelf. The lack of many elements, already uprooted, leaves the supporting structure (carpentry and metal constraints) uncovered, exposing the surfaces to the accumulation of particulate matter and semi-coherent residues. Thanks to the analysis of detailed photographic images, the presence of disconnections and detachments in the vast system of planking to which the bas-relief appliqué decorations are anchored has been evidenced also in connection to the ceiling. The polychrome surfaces and gilding show widespread detachment of layers and probably ongoing lifting of the adhesive materials.

The precious documentary evidence preserved in the *Archive of the Fabric of St. Peter* also makes it possible to affirm that more than one restoration intervention was carried out on the baldachin over the centuries to remedy the inevitable degradation of the constituent materials. The upcoming restoration will also make it possible, through constant recourse to and comparison with archival sources, to study and reconstruct the conservation history of Gianlorenzo Bernini's first masterpiece.