



STATO DELLA CITTÀ DEL VATICANO

GOVERNATORATO  
DIREZIONE DEI MUSEI

*Rapporti con i «Patrons  
of the Arts» dei Musei Vaticani*  
17209/2012-22

Mr. John Hale  
632 S. Claremont  
Dearborn  
MI 48124

Vatican City, November 30<sup>th</sup> 2012

Dear John,

It is with great joy that I am finally sending you the final report on the restoration of the Fountain of Saint Damaso.

Thanks to your chapter's generosity, these special pieces have been brought back to life, paying homage to their beauty. Your chapter's help has been crucial in enabling our expert conservationists to restore and maintain the precious artistic heritage preserved in the Vatican Museums Collection.

During the general audience on the August 31, 2011, Pope Benedict XVI stated:

*«May our visits to places of art be not only an occasion for cultural enrichment—also this—but may they become, above all, a moment of grace that moves us to strengthen our bond and our conversation with the Lord, [that moves us] to stop and contemplate—in passing from the simple external reality to the deeper reality expressed—the ray of beauty that strikes us, that "wounds" us in the intimate recesses of our heart and invite us to ascend to God»*

Thanks to your chapter's help, this will be possible.

Along with this letter, a final report on the restoration process and several pictures of the work are enclosed.

Thank you once again for all you do!

Sincerely yours,

Dr. Romina Cometti  
Patrons of the Arts in the Vatican Museums

## *Historical Note*

One of the many things that sets this fountain apart is its outstanding location. The fountain resides in the prominent Apostolic Courtyard created by Alessandro Algardi in 1649, commissioned by Pope Innocent X Pamphili to celebrate this saint. The Courtyard is enclosed by the arcades of Bramante, Raphael and the building was constructed by Domenico Fontana for Sixtus V. This fountain is seen by the Pope everyday and every time he travels in and out of the Papal Apartments.

Not only is this fountain appreciated by the Holy Father, but also many of his various guests and visitors. It is right here, in fact, that leads to the apartment of His Holiness, to the Halls of Audience, and to the Secretary of State. It is in the San Damaso Courtyard that heads of state and public figures visiting the Holy Father are welcomed and where the Swiss Guard ceremoniously swear their allegiance until death to the Supreme Pontiff.

The white veined marble fountain is placed between the middle arches and columns on the north side of the lodges, where the entrance to the Palace of Gregory XVI is situated. The octagonal basin rests on two marble steps which perfectly echo its shape. The front of the basin is a bas-relief portrait depicting Pope Damasus baptizing a group of Neophytes. The characters in the foreground of the panel are symmetrically distributed on the plate into two groups, all directed towards the saint. Pope Damasus is represented on the right side, with the miter. On the left is a woman tenderly holding a child, preceded by a man who comes close to the Pope to receive the sacrament. Pope Damasus is depicted in the act of baptizing a believer while another man takes his robe as a sign of devotion. In the background, six people patiently await the Pope.

The water springs from a decorative central font in the basin and on the sides of the vase, two pairs of dolphins that rest on cones festooned with shells, and masks of leaves and branches.

The fountain is flanked by two tall columns of gray marble with volute capitals, decorated with festoons and eggs while the columns are travertine pilasters. The arch that encloses the basin is characterized by geometric decorations and the heraldic symbols of Innocent X enhance this piece: the olive branches and the lily in the cornerstone. The arch is surmounted by a plaque that recalls the works of Pope Innocent X and Damasus. The entire composition is dominated by a ledge featuring the coat of arms of Pope Innocent X.

## *Restoration Report*

The St. Damaso fountain was in a very poor state of preservation. The consistent presence of deposits, especially layers of calcium, scale, and cracks gave it a very impoverished look which did not allow for a correct reading of the beautiful surfaces and different materials.

The marble surfaces of the tank showed different degradation phenomena that significantly altered the material.

Deposits were visible in those areas affected by consistent, diffuse stains caused by iron oxidation, nicks and multiple residues of previous inappropriate cleanings.

The calcareous sediments were particularly evident especially on the dolphins, on the edge of the basin and at the base of the fountain, while the phenomena of flaking and erosion were present mainly on the spirals and close to the mouths of the dolphins. Many small portions of the dolphins were lost and the largest missing portion was that of the tail of the dolphin on the right.

On the front of the fountain were several cracks and fractures, especially on the bas-relief. In fact, during a previous maintenance operation, the inside of the fountain had been fully covered with sheets of lead, probably to contain the water and avoid harmful losses, as well as for preventing the aggravation of the lesions already present.

The restoration was completed with the help of technical-scientific data from the Scientific Restoration Laboratory which were acquired prior to the beginning of the restoration. The cleaning has been one of the most complex and delicate process completed in the Vatican and led to the adoption of alternative cleaning methods, which allowed the correct removal of materials based on the characteristics of thickness and solubility.

In particular the removal of limestone sediments, which were present on the surface with different thicknesses, was completed with mechanical type (drills and scalpels) and for the removal of more tenacious residues, with precision instruments (drill ultrasonic).

Particularly significant was the removal of the lead inside the tank of the fountain which, after testing and evaluation, has been removed by the plumbers of the Vatican Technical Office, and was replaced by a non-metallic waterproof material. After the removal of the lead inside the tank, it was found a tenacious and thick layer of concrete about 4/5 cm, which was removed mechanically. Probably this layer of concrete was placed under the lead during a previous restoration, possibly when the lead was placed in the fountain tank.

Another complex operation was the reintegration of the tails of the dolphin on the left hand side of the fountain. A cast made on the tail of the dolphin on the right in the Vatican Museums Marble Restoration Laboratory was used to reconstruct the tail of the dolphin on the left which was eventually painted with the same color of the original marble.

## Restoration Process

### Primary Intervention and Documentation

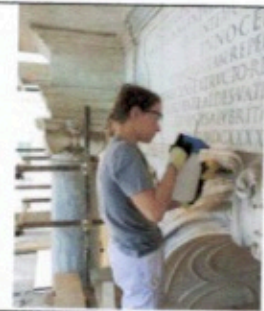
The very first step consisted in a complete study of the fountain and its state of preservation in order to determine the correct methodology of restoration.

#### Documentation of the stages of restoration:

- Technical report of the intervention
- Graphic templates: previous interventions, condition, new interventions
- Photographs: photos before, during and after restoration

#### Preliminary steps:

- All surfaces were completely washed with water and deposits and debris were removed.
- The restoration team identified and classified all unstable pieces of material which were becoming unattached to the fountain. They were then temporarily removed and cleaned prior to being replaced near the end of the restoration.



### Investigations and diagnosis

During the restoration and analysis of the monument, several issues arose concerning the coloring of the plaster on the wall and below the arch surrounding the fountain. Several cracks caused by the corrosion of metal elements were found at the bottom of the fountain.

It was necessary to proceed with stratigraphic and diagnostic investigations in order to define the correct enforcement procedures.

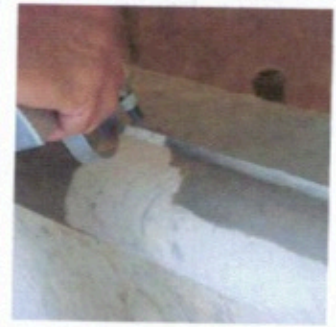
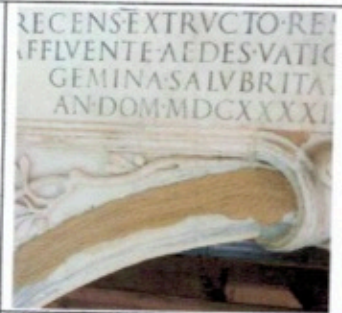


### Disinfection Bioxide Treatments

An overall disinfection of the whole fountain was completed in order to remove lichen, algae and weeds. The operation was performed with an application of spray on the surface requiring treatment. Afterwards the restorers proceeded to the mechanical removal of the residues with nylon brushes and sorghum.

## Cleaning

1. Cleaning of surfaces with water and nylon brushes.
2. Chemical cleaning of encrustations
3. Mechanical cleaning with air abrasives and natural abrasives (Garnet) for removing deposits and crusts of atmospheric particles.
4. Finishing



## Removing discoloration

The discoloration was particularly evident with spots due to metal oxidation. In particular, copper salts had to be removed from the crown on the papal coat of arms. Metal oxidations were removed with the application of poultices comprised of sepiolite and 5% triammonium citrate.



The treatment to stop the continuous corrosion of the iron pieces inserted in the marble was carried out with a chemical converter and with the application of Paraloid B72 5% and acetone.



## Consolidation

The consolidation of the areas affected by cracking, disintegration and degradation was done via applications of calcium hydroxide (CaLoSil) based micro-consolidants.



## Locating detached elements

The decorative elements which had detached and were previously removed during the first steps of the restoration were replaced in their original position thanks to the application of a layer of acrylic resin.



### Waterproofing of the fountain's basin

On the inside of the fountain a thick layer of calcium, approximately 3 to 5 cm thick, which had accumulated was removed. Cracks were fixed with injections of Malta Cembond.



### Finishes and protective treatments

The stone surfaces, at the end of the restoration, were brushed with a protective waterproof-breathable varnish (Rhodorsil 9% w/ white spirits) for the architectural elements. On the outside of the basin, instead, AFW Chem Spec, diluted to 5% in distilled water was applied to protect the surface.

