

*Model of the Head of Saint Athanasius before restoration*

The peculiarity of the material used to create the model of the head of St. Athanasius, and the lack of records about previous restorations carried out on similar material (raw clay mixed with straw), made it necessary to undertake in-depth research, so as to establish the appropriate intervention to be used during the restoration process.

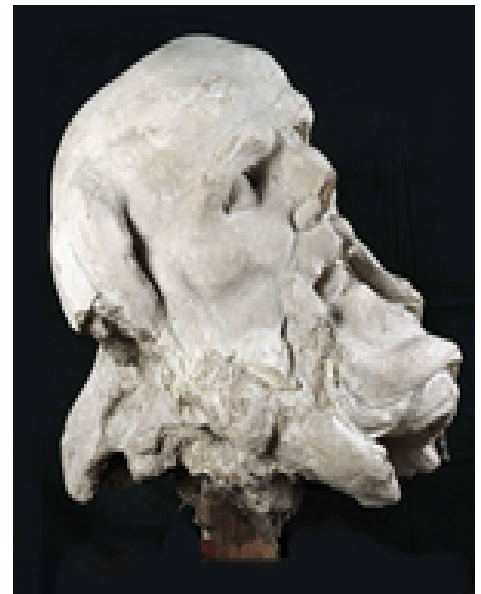
During the preparatory stage, the restorers, in collaboration with the Scientific Research Laboratory of the Vatican Museums, studied and analysed the effects of the different substances to be used during the restoration on analogous material (clay and organic components).

The restoration process undergoes continuous adaptation according to the different surfaces, enhanced by the fact that clay is extremely fragile and is partially deteriorated in certain areas.

Before the restoration could be initiated, the entire surface was closely examined through a magnifying glass, while being cleaned via micro-suction so as to remove the film of dust that had accumulated over the surface. During the cleaning process, large amounts of substances and material used during previous restorations came to light, revealing methods considered inappropriate and invasive nowadays.

Particularly noticeable was the use of a coloured adhesive substance, covering the original surface of white plaster, used to render the entire model more compact, as well as the insertion of metal nails to reinforce the different parts.

The adhesive substance was removed via chemical and mechanical cleaning processes. Pure ethyl alcohol and acetone were applied, as they neither remove nor leave marks on the original material. The solvents were applied by using a paper pulp compress, enclosed in Japanese paper used as a filter because of its pH neutral property. The very fragile surfaces were cleaned instead with a very soft latex rubber sponge which does not leave any residues or unctuousness.



*Model of the Head of Saint Athanasius after restoration*