## POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 2 Degree in Architecture Honors theses

The portals to plaster in the apartments of the seventeenth century to the Valentino castle to Turin: campaign of photogrammetric survey and analogical and analytical restitution. macroscopic reading of the stratigraphies

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The study is set within the knowledge for the maintenance of the apparatuses to plaster in the rooms of the Valentino Castle to Turin, historical patrimony from which part and it develops to him "history" of the decoration to plaster of the Savoy residences, that has been submitted to loss of functional meaning in the time, to factors of degrade and restorations, together to the architecture that contains it.



Figure 1 - Analytical stereo restitution observed on the workstation Leica SD2000

The campaign of photogrammetric survey, direct to the relief of the portals to plaster of the rooms, it has had the purpose to furnish an answer to the historians and the conservatories to the application usual greater faithfulness in the representation both metric and qualitative. The photogrammetric relief has the peculiarity to allow a relief of tall precision and without any direct contact with the object, constituting a overall memory, in the computer sense of the term, to which can be applied in the moment of the sketch or to back as document of file. The discipline of the photogrammetry founds him on the knowledge of the rules of the perspective and the projective transformation and uses as you orchestrate for acquiring the data the rules of the geometric optics and the photographic chemistry, while for the graphic restitution it uses of the fine mechanics and of the numerical calculation.

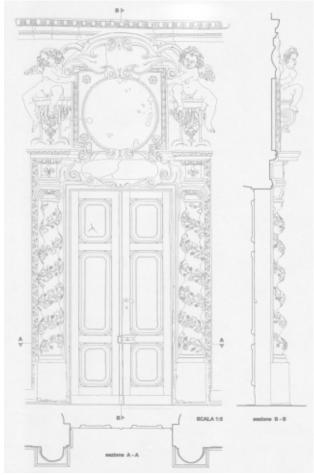


Figure 2 - Analytical restitution of the west portal in the Room of the Magnificenze

The knowledge of the decorative apparatuses has concerned a first phase of search through the reading of the sources, pointing out the documents that informed the phases of the yard, and framing the main figures of the plasterers from lake of Lugano, recognized school-founders of this artistic expression. To the light of the rediscovery that the stuccos it had, beginning from the seventeenth century in Turin, in the realization of complex plastic decorations (primarily to chalk base and dust of marble), the mixtures and the techniques have been sought after described by the handbook sources. The architectural literature of the manuals of the epoch returns a composite assortment of technical shrewdness that the families, real dynasties of artist-plasterers, as secret of the work were handed down. The second phase has circumscribed a more narrow number of models of reference, for which the Soprintendenza per i Beni Artistici e Storici of the Piedmont has allowed the execution of stratigraphical sections on some portals. The stratigraphical section is a partial collecting in comparison to the surface and to the thickness that is wanted to investigate, and it allows to individualize the materials, the number and the succession of the layers of finish. In our case a macroscopic reading of the stratigraphies has been effected, composing

a documentation of reference graphics and photographic complete of explanations and of labels of filing.



Figure 3 - Room of the Magnificenze, west portal. Stratigraphical section on the column

On the base of the returned sketches both for by analogical that analytical is been compiled some thematic tables of relief of the degrade and of the alterations of the materials. Through the macroscopic reading of the stratigraphies, an operation of individualization and distinction of the recognizable layers of finish it is conducted, below to the layers of dust and the contemporary ridipintures that have homogenized the subject and the transparency of the underlying finishes.

Every interdisciplinary consideration acquires a particular importance when it is necessary to operated on the manufactured article, understood as produced complex of repeated operations in the time and only in itself, and to inform every conservative intervention is the primary action to favour a correct reading of the work to plaster.

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