

SISTEMI DI MONITORAGGIO E CONTROLLO, APPROFONDIMENTI DIAGNOSTICI E INTERVENTI DI MANUTENZIONE PER LA CONSERVAZIONE PREVENTIVA DELLE SUPERFICI DECORATE DELLA CAPPELLA DI SANT'UBERTO A VENARIA REALE.

LORENZO APPOLONIA¹, MARIE-CLAIRE CANEPA¹, MICHELA CARDINALI¹, MARIO GIROTTO², ANNA PICCIRILLO¹, VINCENZO SCARANO³, VALENTINA TASSO¹ E MONICA VOLINIA².

¹Fondazione Centro Conservazione e Restauro dei Beni Culturali La Venaria Reale, Via XX settembre, 18, Venaria Reale, Italy, marie-claire.canepa@centrorestaurovenaria.it

² Politecnico di Torino, D.AD, Turin, Italy, monica.volinia@polito.it

³ Consorzio delle Residenze Reali, Venaria Reale, Italy, vincenzo.scarano@lavenariareale.it

ABSTRACT Restoration works and diagnostic CCR laboratories have been involved since 2014 in monitoring and studying the conservation status, as well as the ordinary and extraordinary maintenance of decorations on the architectonic surfaces of refined areas along the visitors' itinerary at the Palace of Venaria (Reggia di Venaria Reale).

This paper discusses the extraordinary maintenance works implemented on the central tambour of Juvarra's Chapel dedicated to Sant'Uberto. The intervention was required due to aggravation of the critical conditions of conservation observed during ordinary maintenance activities.

Work on decorated surfaces and on stuccos was preceded by a detailed analysis of the actual conditions by the study of the previous interventions and diagnostic activity, observations on the building structure with special focus on the degradation phenomena, on their evolution, development and extension.

Early observations revealed the heterogeneous nature of the materials and their behaviour resulting from the building's history of conservative interventions, which were not always documented.

The diagnostic analysis was supported by the Non-Destructive Diagnostic Laboratory of the Turin Polytechnic, which performed active infrared thermography on the tambour's surfaces.

Environmental monitoring and a microanalysis were carried out to characterise construction and intervention materials.

Investigations confirmed the heterogeneous nature of materials and the complex stratigraphy. They helped to understand the interaction between materials and the surrounding context.

Critical comparative data processing implemented with the various techniques of study provided methodologic indications for the work and guided the choice of appropriate materials for preservation. Moreover, the opportunity to conduct comparative studies and checks in other areas of the *Reggia* will make it possible to define a procedure to improve management and scheduling of future maintenance activities and of preventive conservation works in the *Savoy* Residence.

Key-words: planned conservation, preventive conservation, Sant'Uberto Chapel, Reggia di Venaria, Cultural Heritage.