

Sotto il blu. Sotto le vesti di Giotto, calligrafie, trasparenze e maestri

## Reflecting colorimetry: a numerical code for memorising colours as a technical aid for restorers and conservators

Francesca Capanna, Antonio Guglielmi

In the numerous projects to restore Giotto's works, the perfect harmony of the skilled painters working under his direction frequently leads to discussions about his autograph works; but if the touch of the maestro can be seen in one and not in another of the precious wall paintings where he was active, it would be a serious mistake to delete some parts of those pictorial cycles from his catalogue. In spite of this, it is still necessary to pursue constantly new paths, in order to identify the differences and similarities visible within the same cycle and across several pictorial cycles, thus adding elements to the chronology and stylistic progress of the maestro and his pupils. This study aims to identify such differences and similarities not only by examining the different types of preparatory design, but also by taking a new path involving the numerous inscriptions on the walls and on the vaulting. In these varied calligraphies, several different hands have been identified with certainty, as suggested to us by Giulia Ammannati, an expert on Latin palaeography.

Studio della composizione chimica di vetri provenienti da una officina secondaria di Ostia antica (fine IV-inizio V sec. d.C.)

## A late 4th early 5th c. AD secondary glass workshop in Ostia. An elemental composition study

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The discovery of the remains of a furnace and a refuse deposit at Ostia, the harbour of ancient Rome, rich in debris, was an opportunity to study a Roman glass workshop for the production of transparent blown vessels, dating to the late 4th-first half of the 5th century AD. About thirty samples of glass vessels, chunks and glassmaking debris were analysed by X-ray electron microprobe. The glass used in the workshop came from different primary production centres: a HIMT glass from Egypt and Levantine glasses made with two different recipes, with high and low natron amounts. The results testify that raw glass from different sources was being used in this workshop. It appears that the types of glass were kept separate, probably to manufacture high quality items. It was observed that the primary glass was worked as received and glassblowers were able to work glasses with different viscosity curves.



La conservazione preventiva: dalla teoria alla pratica

## Preventive conservation: from theory to practice

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Preventive conservation and ordinary maintenance are expressions that are now part of the vocabulary of anyone involved in safeguarding cultural assets. The themes dealt with by Cesare Brandi first come to mind, subsequently placed at the centre of conservation politics by Giovanni urbani; in recent decades, numerous conferences and debates have been held among specialists in the sector without being able to produce a full and effective practical application. In Italian museums but also outside Italy, it seems that preventive conservation takes place at most with de-dusting and/or environmental control often lacking in continuity and organisational coherence. This article describes the experience in progress at the vatican museums where a preventive conservation office was set up in 2008, incorporating management requirements and collaborating with scientific departments, diagnostic and restoration laboratories, offices and services, coordinating the ordinary maintenance of collections entrusted to external collaborators. These are professionals often coming from schools of advanced training, gathered in consortia or work groups that provide the meticulous control of the state of conservation found during the operations of dedusting or repairing minor damage due to strong anthropogenic pressure. The qualifying point of the program is the accurate documentation on a computer archiving platform that can be consulted by all the museum structures, which ensures the traceability of the interventions and the programming of further levels of intervention.

L'applicazione di soluzioni sature di sali alla disidratazione controllata di frammenti di cuoio archeologico saturo d'acqua

## The use of saturated salt solutions for controlled dehydration of waterlogged leather fragments

Irene Cristofari

This article is based on the thesis work (2014-2015) which focused on the conservation of fifteen water-logged leather finds recovered from the excavations in Piazza Municipio, Naples. The research provided an opportunity to test a controlled dehydration method based on the use of satured salt solutions as a cheaper alterative to freeze-drying which is considered as the most suitable dehydration techincque for water-logged organic materials. Saturated salt solutions are able to stabilize relative humidity within an isolated environment depending on temperature values. This property can be applied to dehydration of water-logged organic artefacts reducing costs of the process and also ensuring more control than air-drying. The test consisted in the gradual dehydration of two waste leather samples using differt saturated salt solutions. Once the method has prooved to be effective, it has been used to dehydrate three of the Roman leather finds, which were smaller in size and in good conditions.