Photo by Federico Di Iorio

170 species of fruits and flowers

COLOURS OF PROSPERITY FRUITS

FROM THE OLD AND NEW WORLD

Rome | April 20th | July 20th 2017

Curated by
Antonio Sgamellotti and Giulia Caneva

ACCADEMIA NAZIONALE DEI LINCEI

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VILLA FARNESINA • ROME

THE LOGGIA OF CUPID AND PSYCHE

RAFFAELLO and Giovanni da Udine

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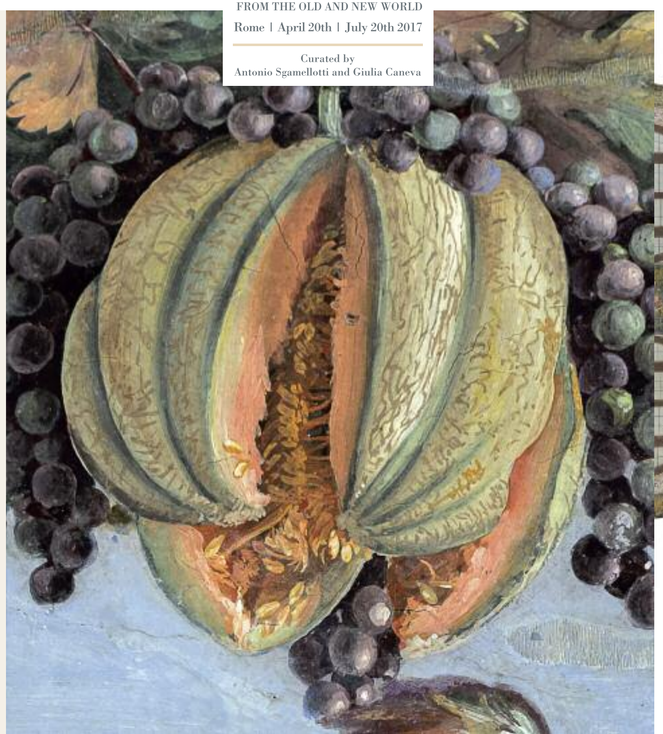


ACCADEMIA NAZIONALE DEI LINCEI

Wonder
Power
Love

Red | Orange | Yellow
Green | Blue | Violet
Pink | Brown | White and Black

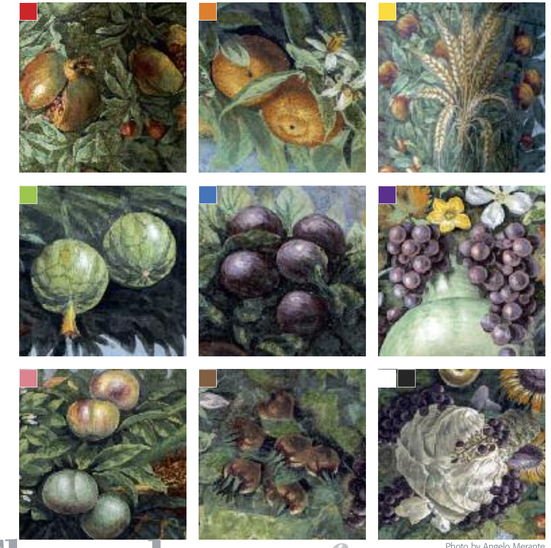


Photo by Angelo Merante

The colours of Prosperity

The scientific exceptionality of the festoons in the Loggia of Cupid and Psyche

The garlands designed by Raffaello and painted by Giovanni da Udine for the Loggia of Cupid and Psyche in Agostino Chigi's residence on the suburban side of the Tiber constitute a unique document of the extraordinary botanical biodiversity that had reached Rome from across the world. They also represent a powerful expression of wonder and an unmistakable symbol of prosperity, being the earliest documentation of American plant species that had recently arrived in Europe shortly after the continent's discovery.

This exhibition aims to promote this immense scientific and cultural masterpiece through the study of its rich color palette associated to selected fruits from the known continents, presenting them as 'the colours of prosperity'.

The colours as the symbols of prosperity and richness, the festoons as the most representative greetings elements and the extraordinary botanic diversity are the components of this magnificent arbour, the entrance to a place of wonder.

The exhibition itinerary articulates into the once private rooms of this magnificent building and includes a video room introducing the gardens of Villa Farnesina whose festoons constitute the perspective illusion thereof. Some exemplars of 16th editions texts from the Biblioteca Nazionale dell'Accademia dei Lincei e Corsiniana, delineate the artistic and scientific context from which originates the masterpiece of Villa Farnesina.

The 'festoon' denote the festive nature of these floral arrangements and connects them to the classical tradition whereby fruits, flowers and leaves where bound together with ribbons and hung around altars and on the walls of temples and arches as a sign of religious devotion and as a symbol of prosperity and abundance.
During the Renaissance this pictorial theme was used by several prominent artists like Andrea Mantegna and Carlo Crivelli. Giovanni da Udine made particular use of them reinterpreting the classical model according to the rigorous scientific approach of the modern era which started in the Renaissance.
The structure of the festoon within Raffaello's project was intended to create the illusion of continuity between the gardens and the villa, as well as being endowed with a complex symbolic significance. Giorgio Vasari shows his admiration for the originality of this work, describing it as: *"a border of large festoons right round the edges and squares of the vaulting, making there all the kinds of fruits, flowers, and leaves, season by season, and fashioning them with such artistry, that everything may be seen there living and standing out from the wall, and as natural as reality […]. I dare to assert that Giovanni in this kind of paintings did better than those who, within the same subject, reproduced the nature at its best; since even elder and fennel flower, similarly to many other minor details are really wonderful"*.

The aim of festoons arrangement is to raise feelings of Wonder, Power and Love by means of the wide variety of botanic species.

Wonder: as the immediate reaction of those who could admire such an unmatchable pergola by entering the residence of the rich Sienese banker.

Power: expressed by the representation of every botanic species known at that time, included those never seen before; furthermore, the prosperity illustrated by fruits and vegetables, underlined the impression of abundance and richness.

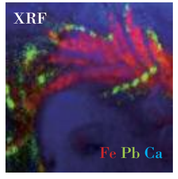
Love: such a suburban residence symbolized a place full of love and delights as testified by the theme of Cupid and Psyche. The chosen plants consecrated to Venus and Juno as well as the pictorial tricks concerning erotic meanings enphasise such intention.

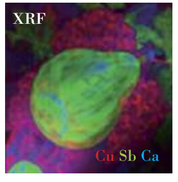
Ornamental aims were achieved by development of precise symmetries and spatial equilibria carried out on shapes, colours and dimensions.
Furthermore it must be noted that the Loggia paintings belong to a period in which both the scientific collecting and the careful examination of natural phenomena start to flourish.
"There are plenty of fruits and vegetables which can be appreciated in this artwork, without discussing them one by one, I will only say that there are all those around us produced by nature"; commented Vasari on the exceptionality of this artwork from a botanical point of view.
The festoons, consisting of about 170 depicted species, show indeed an ever unmatchable painted biodiversity, with not only flowers and fruits being represented but also roots, bulbs, trunks, leaves and even mushrooms, with a plethora of diversification for every species.
Extraordinary is then the presence of rare and uncommon species coming from every continent known at that time, short after the discovery of the New World: the Loggia is the most ancient document concerning their entry in Europe (*Zea mays* L., *Cucurbita pepo* L., *C. maxima* Duchesne, *C. moschata* Duchesne and perhaps *Phaseolus vulgaris* L.). Besides being a masterpiece, the Loggia represents also a wide botanic catalogue, which can be browsed and enjoyed by visitors of every time and place.

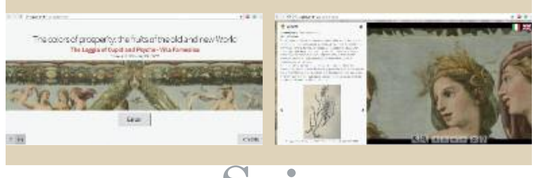
Advances in technologies have made new instrumentations available that are able to operate non-invasively *in situ* allowing a double advantage to be achieved: the non-invasive mode of analysis preserves the artworks integrity and the *in situ* operating ability avoids them having to be transported undergoing further risks. At the same time it permits immovable objects -such as the Loggia of Cupid and Psyche- to be investigated.
The non-invasive analyses campaign conducted *in situ* on the Loggia shed new light on the materials employed to paint these extraordinary botanic representations. Being in close proximity to the festoons with a set of portable instruments made it possible to acquire unprecedented information about the execution technique of Giovanni da Udine and his palette.
On the vegetal festoons, an extensive X-rays fluorescence (XRF) mapping has been conducted in order to individuate the elements which compose the employed pigments. It has been possible to analyse the vegetal frieze decorations by means of a tailor-made XRF scanner apparatus which was adapted at every measurement to fit the Loggia's arching. Furthermore infrared (IR) and infrared false color imaging (IRFC) supported by Vis-NIR reflectance spectroscopy have also been carried out to highlight some peculiarities related to the painting technique.
The use of a yellow pigment rich in lead, tin and antimony borrowed from glassmakers and pottery technology has been ascertained. Such a pigment is quite rare and its presence within the Loggia frescoes documents one of its earliest use in paintings ever. By XRF mapping an evident *pentimento* has been disclosed on Ceres' crown among the wheat ears: in the final version the painter covered with the hair of the goddess, one of the ears which clearly emerges from the XRF map. By means of infrared imaging some technical peculiarities have been unveiled, as for example, in the sky area, the different plaster composition between the *giornate* of the scenes and those belonging to the vegetal frieze. These latter show a darker plaster, due to carbon addition, in order to emphasize the vegetal decorations. The infrared false color imaging aided in underlining the different composition of the leaves on the festoons' edges which are made up of green earth and black pigments differently from those within the inner part which were instead painted by glazing malachite *a secco*, on a fresco's coat layer.

To get closer to such beautiful and extraordinary paintings and to learn more about their meaning, their symbolism and about the results of the diagnostic campaign, an interactive kiosk was designed which allows access to the "digital Loggia". The kiosk permits the visitor to navigate freely through the high resolution view of the painted ceiling and to admire it from a closer point of view. In this way it is easier to appreciate the over 170 different species painted within the festoons and to enjoy all those details barely observable from the floor distance (8 m). Within the kiosk some selected species of the panoramic image are described with detailed reports in which the story, the iconology and the scientific results are explained providing the visitor the chance to deepen his/her knowledge.
Such an interactive kiosk is user-friendly and provides all the instructions needed for the navigation.
It is available on touch screen display in the exhibition or freely accessible on the web at <http://vcg.isti.cnr.it/~palma/farnesina/>.

VIS • Visible
XRF • Mapping XRF
IRFC • Infrared False Colour
IR • Infrared





Science and Art