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POSTER ABSTRACTS

Session 1

Tuesday 28th of June 2022

Painting between art and craft: a multi-analytical characterization of 15th-century ceiling panels in Cremona (Italy)

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It is a well-known fact that ancient wooden ceilings often had a decorative function added to their structural role, which led to the practice of covering one or more of their elements with painting layers. Painted wooden ceiling panels, in particular, filled the empty intersections between beams and joists and were a characteristic decorative element in public and private buildings of the Mediterranean area from the late Middle Ages to the Renaissance. In the area of Cremona (Lombardy) they became particularly popular during the second half of the 15th century, to the point that they are nowadays considered a distinctive feature and a “cultural phenomenon” of the territory [1]. In terms of manufacturing, they were produced in series by local workshops: they are therefore unique pictorial objects, on the border between art and handicraft. Despite this, contemporary studies have paid little attention to their investigation, especially from an analytical point of view, and only in recent years some diagnostic analyses have allowed to acquire a better knowledge of some of their materials and manufacturing procedures [2]. Investigating painted ceiling panels nowadays therefore means broadening the fragmented knowledge of these very peculiar objects.

In this work, two painted ceiling panels from Cremona were analysed by means of a multi-analytical approach, in order to characterize the painting components and delve into the painting technique. Analyses were performed on samples, and involved mainly laboratory micro-Raman spectroscopy (473, 532 and 633 nm excitation wavelengths) integrated by micro-FTIR spectroscopy and optical microscopy [3]. The panels, belonging to two different palaces of the city’s historical centre, both date back to the second half of the 15th century and are attributed to workshops connected to the famous painter Bonifacio Bembo. They are part of two sets of ceiling panels which are hereby analysed for the very first time.

The painting layers of the ceiling panels display four most recurrent colours: red and blue above all, followed by white and black. Investigations showed that the prevailing pigments in these layers are, respectively, cinnabar (used also in incarnates), indigo, gypsum/lead white and a carbon black. Despite this rather simple framework, analyses revealed that these layers often conceal minor components that were added to “refine” the colours, such as ochres, orpiment, etc. Preparations of the substrate, on the contrary, are mostly just a protein-based primer with a little gypsum.

The studied ceiling panels therefore display a “borderline” situation between some simple decorative procedures due to serial productions, and the rather elaborate choice of certain painting materials and techniques. Particular insight is given into the use of indigo, since this organic pigment is usually considered to have been quite rare in Lombardy at the time. The integration with historical data suggests that this colour was derived from woad, the “European indigo” plant, and that its adoption in these painting layers was linked to the use of the woad plant in local textile-dyeing industries. The detection of indigo blue mirrors the analytical data available for other painted ceiling panels of the Mediterranean area [2] and provides proof that well-known azurite was not the only blue pigment to be commonly used in wooden ceiling decorations. Overall, the studied objects share several characteristics with other painted ceiling panels in the Mediterranean area, suggesting a common decorative practice. Nevertheless, they also display some distinctive features which allow to get insight into local availability of materials and into the peculiar activity of Cremonese workshops.

[1] Aglio, R. (2020). Funzione propria e significante del colore nelle tavole da soffitto rinascimentali padane. In *Colore e Colorimetria. Contributi multidisciplinari. Vol. XVI A, Atti della XVI Conferenza del Colore, Gruppo del Colore – Associazione Italiana Colore*, Bergamo 3-4 settembre 2020, 321-328. [2] Boularand, S. (2016). Usage des pigments sur les décors polychromes des plafonds peints médiévaux. Un inventaire en zone méditerranéenne. In *Plafonds peints médiévaux en Europe, Actes des 9e Rencontres de la RCCPM, Marseille-Fréjus 29 septembre – 1er octobre 2016*, 140-154. [3] Stanzani, E., Bersani, D., Lottici, P. P., & Colomban, P. (2016). Analysis of artist’s palette on a 16th century wood panel painting by portable and laboratory Raman instruments. *Vibrational Spectroscopy*, 85, 62-70.