

WOODCUT BLOCKS OF THE “SCUOLA DEL LIBRO” OF URBINO: A SCIENTIFIC APPROACH FOR CONSERVATION

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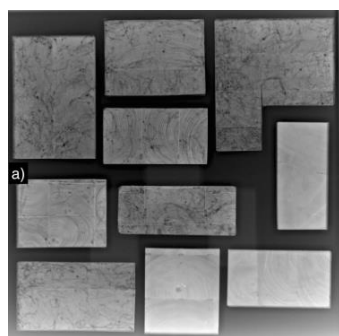
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The woodcut blocks studied, despite being created by mostly unknown authors, are the testimony of a great activity that in the first half of the 20th century has characterized the Institute of Fine Arts for the Decoration and Drawing of the Book of Urbino. The institute soon called "Scuola del Libro" has allowed the formation of significant personalities in the field of illustration, artistic engraving and graphic.

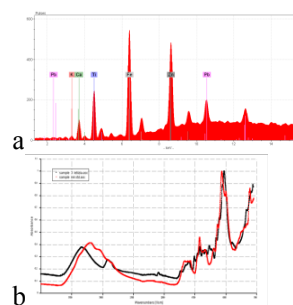
An interesting woodcut blocks fund consisting of just over one hundred pieces is preserved in a deposit of the Institute. Preliminary scientific analyses were carried out to characterize the constitutive materials and the executive technique and to evaluate the conservation status, both non-invasive and micro invasive, according to a modality frequently used on panels and prints but rarely carried out on this type of objects.

The aim of this research is the knowledge and the valorisation of a category of untrained artistic artefacts, taking as a case study the matrices of Urbino. Specifically, the following diagnostic methods were performed: X-ray on a plate (45KeV); scanning electron microscopy (SEM); environmental scanning electron microscopy (ESEM) with EDX microprobe; energy dispersive X-ray microfluorescence spectrometry (ED- μ XRF); infrared spectrophotometry in total attenuated reflectance (FTIR-ATR); Raman spectroscopy; microbiological investigations. The use of boxwood (*Buxus sempervirens* L.) and sorb (*Sorbus* spp.), both characterized by very fine texture and high surface hardness, allowed both obtaining a very precise engraving and making the printing without spoiling the block itself.

The presence of iron gallate, due to the ink, and of coal has emerged. The high content of zinc and lead could be referred to aqueous-based modern ferrogallic ink used for prints until the early decades of the twentieth century. The investigations allowed to highlight the presence of tunnels and exit holes made by xylophage insects, as well as the presence of fungal spores on the matrices.



a) Radiography of the matrices showing the tunnels and the exit holes of the xylophagous insects; b) References to the matrices



Ink sample: a) Spectrum ED- μ XRF; b) Spectrum FTIR-ATR

References

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