THE Alfred Stieglitz COLLECTION

OBJECT RESEARCH



F. Holland Day (American, 1864–1933)

Menelek

1896/1902 Platinum print Alfred Stieglitz Collection

AIC accession number: 1949.859

Stieglitz Estate number:

Inscriptions: Blind stamped recto, lower left: "FHD [?/insignia]"; inscribed verso, on second hinged paper, center, in black pencil: "Property - / AS"

Dimensions: 14.7 x 11.5 cm (image/paper); 14.8 x 11.7 cm (first interlayer); 36.2 x 27.4 cm (second hinged paper)

Print thickness: N/A

Surface sheen: Low gloss (5.1 GU @ 85°)

Paper tone: N/A

Mount: Original

Mount tone: L*34.88, a*-1.47, b*3.12

Ultraviolet-induced (UV) visible fluorescence (recto): None

X-ray fluorescence (XRF) spectrometry: See below

Fourier transform infrared (FTIR) spectrometry: N/A

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TECHNICAL SUMMARY

This photograph is a platinum print on trimmed cream paper. It is mounted overall to a bright orange paper that creates a margin, and subsequently to a rectangular dark green board that is similar to other works by Day in the Art Institute's portion of the Stieglitz Collection. While F. Holland Day did not sign this work, he blind-stamped his overlapping monogram ("FHD") at the bottom left corner of the print. Inscriptions on the verso of the mount include "Property A. S.," in Stieglitz's hand. When the surface of the print is viewed under high magnification, the fibers from the paper are visible and the image sits directly on the fibers, with no intermediary binder. This print is extremely matte and does not fluoresce when exposed to long-wave UV radiation. Platinum, iron, chromium, lead, and mercury were detected using XRF spectrometry. Common to platinotypes, the residual presence of light-sensitive iron ions could be due to improper washing of the print after processing. The presence of lead could have multiple sources: while lead could have been used during fabrication of the photographic or mount paper itself, was also commonly used during the processing of platinum prints, to increase uniform development. In this case the likely cause of the lead signal is the orange pigment of the intermediary mount paper. When lead is combined with chromium to form lead chromate, it forms a characteristic orange pigment that was likely used to color the paper. The presence of mercury could be the result of the artist's use of mercuric chloride during processing, to create the print's warm tones.

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X-RAY FLUORESCENCE (XRF) SPECTROMETRY

XRF spectral readings were taken from the recto of the work and from the mount when available. The elements listed below have been positively identified in the work; elements in bold have been attributed to the processing of the print.

Print: Fe, Pt, Hg, Pb

Mount: Cr, Mn, Fe, Cu, Zn, Pb

The graph below shows XRF spectra for three distinct measurement areas on the print: the darkest, maximum-density image area (Dmax, purple); the lightest, minimum-density image area (Dmin, green); and the mount, when available (orange). The background spectrum (gray) represents the characteristic contribution of the instrument itself as measured on a Teflon reference and is included in order to discount irrelevant elements from the print's signature. Elements were identified based on the presence of their characteristic peaks. Analysis was performed with a Bruker/Keymaster Tracer III-V+ energy-dispersive handheld XRF analyzer, equipped with changeable Ti and Al filters and a Rh transmission target. Measurements were taken for 120 or 180 LT at 40 kV and 10 µA. The spectrum below illustrates the significant peaks for this print in the energy range from 3 to 16 keV.

Figure 1. (right) Locations of XRF measurements

Figure 2. (below) XRF spectra from the Dmax, Dmin, mount, and background signal produced by the analyzer.





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