

OBJECT RESEARCH



Paul Strand (American, 1890–1976)

Porch Shadows

1916

Silver-platinum print

Alfred Stieglitz Collection

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AIC accession number: 1949.885

Stieglitz Estate number:

Inscriptions: Signed and inscribed recto, on hinged paper, lower left, below image, in graphite: "Paul Strand 1916"; inscribed verso of print, lower left, in graphite: "7-1944-369"; signed and inscribed verso of print, lower right, in graphite: "-Paul Strand- / -1916-"; inscribed verso, on hinged paper, lower center, in graphite: "Shadows"; verso, on hinged paper, lower right, in graphite: "7-1944-369"

Dimensions: 33.1 x 22.9 cm (image); 33.7 x 23.4 cm (paper); 43.7 x 32.2 cm (hinged paper)

Print thickness: 0.243 mm

Surface sheen: Low gloss (3.6 GU @ 85°)

Paper tone: L*91.27, a*-0.28, b*8.54

Mount: Original

Mount tone: L*84.39, a*3.77, b*16.99

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

X-ray fluorescence (XRF) spectrometry:
See below

Fourier transform infrared (FTIR) spectrometry:
N/A

CONTEXT

Paul Strand spent the summer of 1916 at his family's cottage in Twin Lakes, Connecticut, attempting to give his understanding of Cubist painting—achieving abstraction through fragmentation, presenting multiple points of view, and reducing people and objects to basic geometry—a photographic form. A photogravure reproduction of *Porch Shadows* appeared in the final issue of *Camera Work*, clearly signaling the new straight aesthetic favored by Strand, Stieglitz, and other modernist photographers.

TECHNICAL SUMMARY

This photograph is a silver platinum print and is adhered at the top edge to a larger sheet of paper. Silver platinum photographic paper was a product commercially marketed as Satista and is known to have been used by Strand.¹ The original mount, a soft and thick handmade paper, has numerous large dark fiber inclusions. The print was adhered to the mount asymmetrically, resulting in uneven margins. The artist signed both the verso of the print and the mount recto in graphite. Also inscribed in graphite on the mount verso are the title and a registration number from the Philadelphia Museum of Art, presumably added when the print was included in the 1944 exhibition *History of an American: Alfred Stieglitz: "291" and After*. When the surface of the print is viewed under high magnification, multiple areas of retouching and fibers from the paper are visible; 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, silver, lead, and trace amounts of mercury were detected using XRF spectrometry. In silver platinum printing, as in standard platinum printing, image formation relies on the light sensitivity of iron salts. Commonly found in prints containing platinum, the residual presence of light-sensitive iron ions could be due to improper washing of the paper after processing. The residual iron elements have also caused accelerated degradation in the paper, resulting in many small orange stains. The presence of lead could have two sources: while lead could have been used during fabrication of the photographic paper itself, it was also commonly used during the processing of prints containing platinum, to increase uniform development. The presence of mercury could be the result of the artist's use of mercuric chloride during processing, to create the print's warm tone.

¹ Refer to the glossary for a full description of the platinum-silver photographic process.

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, Ag, Pt**, Hg, Pb

Mount: K, Ca, Mn, Fe, Zn, Sr

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 ARTAX air-path portable micro-XRF system equipped with a laser pointer, an integrated camera system, a Mo 12.5 μ m filter, and a Mo tube. Measurements were taken for 250 LT at 50 kV and 800 μ A. The spectrum below illustrates the significant peaks for this print in the energy range from 3 to 15 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.

