




Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, front, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

 TECHNICAL EXAMINATION REPORT

Landscape with Hermit

early 1500s

Circle of Jan Wellens de Cock

Netherlandish, 1450–1527

oil on oak panel

19-1/4 × 10-1/2 in.

(49 × 26.6 cm)

The Clowes Collection

2017.84

Overview

Identification number: 2017.84

Artist: Circle of Jan Wellens de Cock

Title: *Landscape with Hermit*

Materials: Oil (untested) on Baltic oak panel

Date of creation: Early 1500s

Previous number/accession number: C10013

Dimensions: 49 × 26.6 cm

Conservator/examiner: [Roxane Sperber](#)

Examination completed: 2021

DISTINGUISHING MARKS

Front:

None

Back:

None

SUMMARY OF TREATMENT HISTORY

Physical evidence suggests the painting has been significantly altered from its original construction. An engaged frame was removed, and the original support has been thinned and marouflaged to a secondary panel support. Additionally, a cradle was applied to the back. The painted area does not appear to have been trimmed, although the original panel may have been larger. The painting has significant passages of old retouching and has certainly undergone aesthetic interventions, such as varnish removal, likely numerous times. No documentation of such interventions has been retained.

Records from the Clowes Registration Archive record a minor conservation treatment to lay down blisters done in June of 1966 at the Newhouse Galleries in New York. ¹ A technical examination and X-radiograph of the painting were also carried out at the Fogg Museum in September 1966. In that report, the panel was described as having an oak support with a second layer of Masonite and a walnut veneer backing. Losses and repaint were also noted. ²

There are no records for conservation treatment of the painting after it entered the IMA on long-term loan in 1971; however, documentation suggests a series of condition assessments and treatments were carried out on the collection around the time the works were moved from the Clowes' residence to the IMA. A condition report by Paul Spheeris in October of that year, likely carried out before the paintings were relocated, described the painting as "O.K.," and no treatment was recommended. ³ A second condition assessment was carried out upon arrival of the paintings at the IMA. This assessment describes the work as in good condition, and no work was deemed necessary. ⁴

In 1974, a condition assessment, treatment, and investigation of the collection was carried out by the Intermuseum Conservation Association at Oberlin College. This document describes the painting in its current construction and noted that it was in stable condition. No treatment or further examination was recommended. ⁵

The condition of the painting was recorded in the Clowes Collection annual survey from 2011 to 2020.

CURRENT CONDITION SUMMARY

The painting is in generally good condition but would greatly benefit from conservation treatment. The structure of the painting is sound, but the aesthetics are suffering from a severely darkened and desaturated varnish layer that is obscuring the surface detail in the painting. There are significant passages of old retouching visible when viewed under ultraviolet-induced visible fluorescence.

METHODS OF EXAMINATION, IMAGING, AND ANALYSIS

Examination/Imaging	Analysis (no sample required)	Analysis (sample required)
<input checked="" type="checkbox"/> Unaided eye	<input checked="" type="checkbox"/> Dendrochronology	<input type="checkbox"/> Microchemical analysis
<input checked="" type="checkbox"/> Optical microscopy	<input checked="" type="checkbox"/> Wood identification	<input type="checkbox"/> Fiber ID
<input checked="" type="checkbox"/> Incident light	<input type="checkbox"/> Microchemical analysis	<input type="checkbox"/> Cross-section sampling
<input checked="" type="checkbox"/> Raking light	<input type="checkbox"/> Thread count analysis	<input type="checkbox"/> Dispersed pigment sample
<input type="checkbox"/> Reflected/specular light	<input checked="" type="checkbox"/> X-ray fluorescence spectroscopy (XRF)	<input checked="" type="checkbox"/> Fourier-transform infrared spectroscopy (FTIR)
<input type="checkbox"/> Transmitted light	<input type="checkbox"/> Macro X-ray fluorescence scanning (MA-XRF)	<input type="checkbox"/> Raman microspectroscopy
<input checked="" type="checkbox"/> Ultraviolet-induced visible fluorescence (UV)		
<input checked="" type="checkbox"/> Infrared reflectography (IRR)		<input type="checkbox"/> Gas chromatography—mass spectrometry (GC-MS)
<input type="checkbox"/> Infrared transmittography (IRT)		<input type="checkbox"/> Scanning electron microscope -energy dispersive X-ray spectroscopy (SEM-EDS)
<input type="checkbox"/> Infrared luminescence		<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> X-radiography		

Technical Examination

DESCRIPTION OF SUPPORT

Analyzed Observed



Technical Figure 1: X-radiograph. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Material Type (fabric, wood, metal, dendrochronology results, fiber ID information, etc.):

The original support is a single oak panel with vertically oriented grain. [Dendrochronology](#) of the support by Peter Klein determined the last [heartwood](#) ring to date to 1478. Klein suggests the earliest possible date for the painting is 1489, but likely after 1503.⁶ The question of how long planks were seasoned in the fifteenth and sixteenth centuries is a topic of some debate. Current research into this area may suggest an even earlier terminus post quem of 1484.⁷

Characteristics of Construction/Fabrication (cupping, beveled edges of panels, seams or joins, battens):

The original oak support was subsequently thinned and marouflaged to another panel (5 mm thick), leaving only 1 mm of the original support. There is a [barb](#) present along the edges of the paint layer suggesting the work originally had an engaged frame and may have been part of a larger altarpiece. Wood from the original panel extends beyond the margins of the painted surface on all edges. The distinctive wood grain is visible along these exposed edges.

In the X-radiograph, two horizontally positioned nails are visible toward the center of the panel in the lower half of the composition (tech. fig. 1). Given that the nails appear relatively modern, and the original support is only 1 mm thick, it is quite certain that they do not relate to the original construction of the panel. Close examination suggests these nails are not present in the cradle. It is therefore likely that the nails are present in the 5-mm-thick panel to which the original support was marouflaged.

Thickness (for panels or boards):

The full construction is 29 mm thick. The original panel is 1 mm thick. The panel has been marouflaged to a 6-mm-thick panel and the veneer that supports the cradle is 1 mm thick. The cradle adds an additional 21 mm of thickness.

Production/Dealer's marks:

None

Auxiliary Support:

Original Not original Not able to discern None



Technical Figure 2: Back. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

The auxiliary support consists of a secondary panel into which the original panel was marouflaged. This panel has been backed with a wood veneer to which a cradle has been glued.

The cradle is robust and well-constructed (tech. fig. 2). It is composed of six vertical members. The central four members are 1 cm wide and have rounded edges. The two outer members are 3 cm wide with beveled and rounded edges. There are five horizontal members that were designed to be movable but all of which have seized. The horizontal bars have squared corners and are 1.5 cm wide.

Glue residues are present along the bottom edge of the back.

Weave (structure, weight, thread thickness, etc):

N/A

CONDITION OF SUPPORT

The painting has been significantly altered from its original construction. The engaged frame was removed, and the original support thinned and marouflaged to a secondary panel support. Additionally, a cradle was applied to the back. The composition does not appear to have been trimmed, although the original panel may have been larger. In its current configuration, the support is stable and in good condition. There are no major losses or cracks.

DESCRIPTION OF GROUND

Analyzed Observed

Materials/Binding Medium:

XRF analysis detected calcium in the ground layer. FTIR analysis confirmed that the ground was composed of calcium carbonate (chalk). Lead was also detected in the ground using XRF (see table 1, sample 1). It is possible that the calcium ground was covered with a lead-white-containing imprimatura.

Color:

The ground is a buff color.

Application:

A raised barb is present around the edge of the composition indicating that the ground was applied after the panel was fitted to an engaged frame. The ground is generally even and was likely applied with a brush and later sanded smooth.

Thickness:

The ground is thinly applied in a single layer.

Sizing:

Microscopic analysis suggests a sizing layer was applied to the panel before the application of the ground.

Character and Appearance (Does texture of support remain detectable/prominent?):

The thin application of the ground has left the texture of the wood support partially visible when the painting is viewed under raking light.

CONDITION OF GROUND

The ground is in generally good condition. The adhesion is strong between the panel and the ground despite previous interventions to the structure of the painting. There is a triangular area in the center of the painting that is less dense in the X-radiograph and may correspond to a loss in the ground and paint layers.

DESCRIPTION OF COMPOSITION PLANNING

Methods of Analysis:

- Surface observation (unaided or with magnification)
- Infrared reflectography (IRR)
- X-radiography⁸

Analysis Parameters:

X-Ray equipment	GE Inspection Technologies Type: ERESKO 200MFR 3.1, Tube S/N: MIR 201E 58-2812, EN 12543: 1.0mm, Filter: 0.8mm Be + 2mm Al
KV:	26
mA:	3.0
Exposure time (s)	90
Distance from x-ray tube:	36"
IRR equipment and wavelength	Opus Instruments Osiris AI infrared camera with InGaAs array detector operating at a wavelength of 0.9-1.7 μ m.



Technical Figure 3: Infrared reflectogram. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Medium/Technique:

There is no evidence of underdrawing visible in infrared reflectography (tech. fig. 3). The quick, brushy application of a wash layer (see **Description of Paint**) may suggest that the composition was not carefully planned before the painting stage but rather was blocked out in paint. It is also possible that the composition was outlined using a medium that does not strongly absorb in infrared.

DESCRIPTION OF PAINT

- Analyzed
- Observed

Application and Technique:

The composition was blocked in first with a dilute, washy application of paint using a wide, coarse brush. This is visible in the rock, sky, and water. The lines created from the coarse brush hairs are visible through the painting, especially in the sky. Technical figure 4 shows the hatched application of the thin, blue paint in the sky.



Technical Figure 4: Photomicrograph showing the brushy application of the paint in the sky. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Over the quickly applied blocking-in layer, smaller brushes were used to create minute scenes with a higher level of detail. Technical figure 5 shows the careful depiction of a ship using tiny brushes applied over the thin, brushy application of the water. It is possible that the blocking in of the composition was carried out by one member of the workshop, and the finer details were applied by another hand entirely. The tree in the foreground extends over the mountainous rock suggesting the tree may have been added later by a different member of the workshop, perhaps the person responsible for painting the scene with the hermit.



Technical Figure 5: Photomicrograph of the ship. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

The figures are applied in thick dabs of paint in a loose, expressive style using small brushes (tech. fig. 6).



Technical Figure 6: Photomicrograph of the figure. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

In some areas, such as the clouds and landscape, more texture is added by dragging the paint, possibly with a finger or another blunt instrument (tech. figs. 7, 8).



Technical Figure 7: Photomicrograph of clouds in the sky. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Technical Figure 8: Photomicrograph of the paint application using a blunt instrument. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Painting Tools:

Numerous tools were used to create this small painting, including large coarse brushes, small detail brushes, and fingers or another blunt instrument for dabbing and scratching into the paint (tech. figs. 7, 8).

Binding Media:

The binding medium has not been tested, but it is likely drying oil.

Color Palette:

The painting has a generally dark, limited palette composed of browns, grays, and blues punctuated with dabs of red, yellow, and orange. XRF analysis of the paint layer detected elements that were indicative of a palette composed of copper-containing green and blue pigments (likely azurite), iron oxide earth pigments including umber, vermilion, lead white, and lead-tin yellow.

XRF Analysis:



Technical Figure 9: XRF sample locations. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Sample	Location	Elements	Possible Pigments
1	Ground	Major: Ca, Pb Minor: Trace: Fe	Calcium-containing ground, lead white, trace of iron oxide (earth pigments)
2	Blue sky	Major: Cu Minor: Pb Trace: Ca, Fe	Copper-containing blue pigment (azurite), lead white, trace of calcium-containing ground layer, trace of iron oxide (earth pigments)
3	Red fire	Major: Hg, Pb Minor: Cu Trace: Ca, Fe	Vermilion, copper-containing blue pigment (azurite), lead white, calcium-containing ground layer, trace of iron oxide (earth pigments including umber)
4	Yellow fire	Major: Pb, Hg Minor: Sn Trace: Ca, Cu	Lead white, vermilion, lead-tin yellow, trace of copper-containing green and/or blue pigment, trace of calcium from ground layer,
5	Green grass in the midground	Major: Pb, Cu Minor: Cu Trace: Hg, Fe, Sn	Lead white, copper-containing green and/or blue pigment, calcium from ground layer, trace of iron oxide (earth pigments), trace of vermilion, trace of lead-tin yellow.
6	Yellow lamp	Major: Pb Minor: Cu, Ca, Sn Trace: Hg, Fe	Lead white, lead-tin yellow, copper-containing green and/or blue pigment, trace of calcium from ground layer, trace of vermilion, trace of iron oxide (earth pigments)
7	Gray rock	Major: Pb, Ca Minor: Hg, Fe, Cu Trace:	Lead white, carbon black (not confirmed with XRF), calcium from ground layer, copper-containing green and/or blue pigment (likely azurite), iron oxide (earth pigments), vermilion.
8	Brown foreground	Major: Pb, Ca, Cu Minor: Hg, Fe Trace: Mn, K	Lead white, copper-containing green and/or blue pigment (likely azurite), vermilion, iron oxide (earth pigments including umber), calcium from ground layer.

Table 1: Results of X-ray fluorescence analysis conducted with a Bruker Artax microfocus XRF with rhodium tube, silicon-drift detector, and polycapillary focusing lens (~100µm spot).

*Major, minor, trace quantities are based on XRF signal strength not quantitative analysis

Surface Appearance:

Although the ground is smooth, brushwork and impasto are visible on the surface of the painting giving it a dynamic appearance.

CONDITION OF PAINT

The paint layer is in generally good condition. There is a large loss at the center of the image and localized losses across the surface. There is minimal abrasion to the paint layer in some localized areas.

DESCRIPTION OF VARNISH/SURFACE COATING

Analyzed Observed Documented

Type of Varnish	Application
<input checked="" type="checkbox"/> Natural resin	<input type="checkbox"/> Spray applied
<input type="checkbox"/> Synthetic resin/other	<input type="checkbox"/> Brush applied
<input type="checkbox"/> Multiple Layers observed	<input checked="" type="checkbox"/> Undetermined
<input type="checkbox"/> No coating detected	



Technical Figure 10: Ultraviolet-induced visible fluorescence. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

There is a thick, evenly applied layer of varnish that luminesces in ultraviolet-induced visible fluorescence (tech. fig. 10). The fluorescence is greenish-blue, suggesting it may be a natural resin varnish.

CONDITION OF VARNISH/SURFACE COATING

The varnish coating has darkened, obscuring the surface detail in the painting. Further, the coating has become desaturated making it difficult to appreciate details in the dark areas. Areas of retouching are visible in the ultraviolet-induced visible fluorescence image. Because the painting is very dark, it is, in some cases, difficult to spot these areas on the painting even when using microscopy.

DESCRIPTION OF FRAME

Original/first frame
 Period frame
 Authenticity cannot be determined at this time/ further art historical research necessary

- Reproduction frame (fabricated in the style of)
- Replica frame (copy of an existing period frame)
- Modern frame



Technical Figure 11: Frame, front. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Technical Figure 12: Frame, back. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Frame Dimensions:

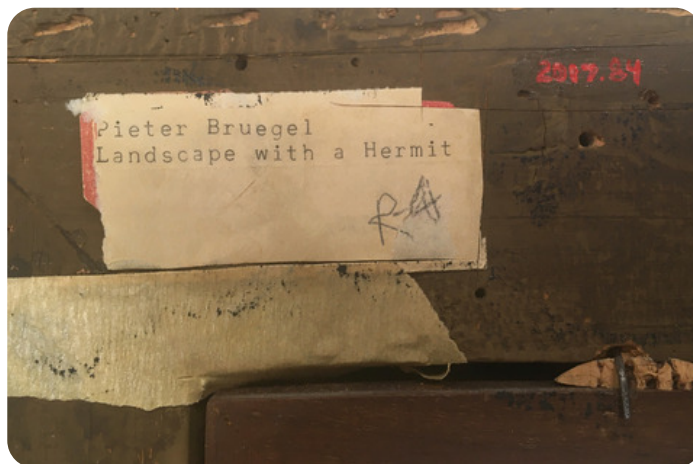
Outside frame dimensions: 65.6 × 43 × 5 cm

Sight size: 47.9 × 24.9 cm

Distinguishing Marks:

Item 1. Paper label, upper-left corner of frame, typed "Pieter Bruegel/ Landscape with a Hermit," handwritten "R4" (tech. fig. 13).

Item 2. Painted inscription, upper-left corner of frame, red paint "2017.84" (tech. fig. 13).



Technical Figure 13: Details of label and inscription on frame. Circle of Jan Wellens de Cock, *Landscape with Hermit*, early 1500s, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Description of Molding/Profile:

The frame is a cassetta-style frame (tech. fig. 11) that is constructed from wood with mitered corner joins (tech. fig. 12). The molding profile is carved from wood and covered with a dark red bole and a water-gilt surface. Over the gilding, a floral motif is painted on the flat central frieze. Nude figures holding up vases are present in the center of the right and left sides.

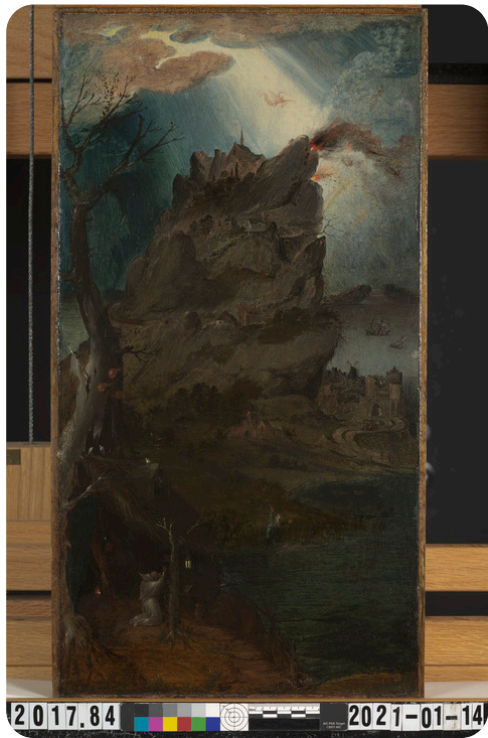
CONDITION OF FRAME

The frame is in acceptable condition. The structure is sound, but there are some losses to the gilding and abrasion to the painted surface.

Notes

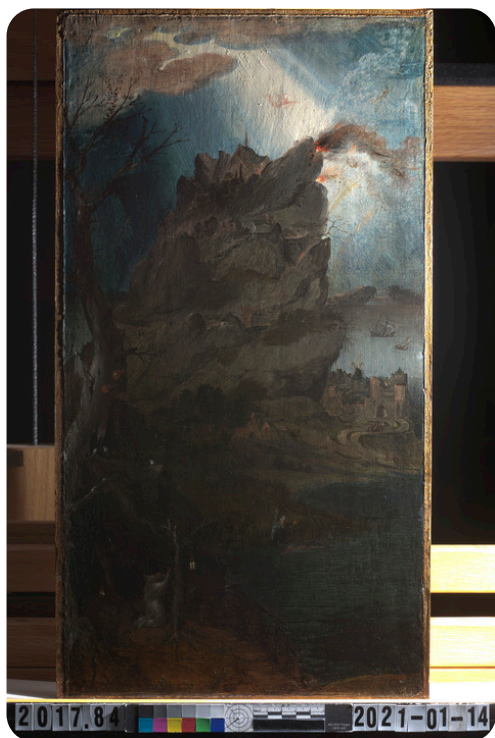
1. See File C10013 (2017.84), Clowes Registration Archive, Indianapolis Museum of Art at Newfields. The "deterioration of the Brueghel 'Landscape with Hermit'" was also noted in a letter from Allen Clowes to Bertram Newhouse dated 15 June 1966, File C10013 (2017.84), Clowes Registration Archive, Indianapolis Museum of Art at Newfields.
2. "Pieter Bruegel the Elder, attrib. to/Landscape with a Hermit," File C10013 (2017.84), Clowes Registration Archive, Indianapolis Museum of Art at Newfields.
3. Paul A.J. Spheeris, "Conservation Report on the Condition of the Clowes Collection," 25 October 1971, Conservation Department Files, Indianapolis Museum of Art at Newfields.
4. Martin Radecki, Clowes Collection condition assessment, undated (after October 1971), Conservation Department Files, Indianapolis Museum of Art at Newfields.
5. Intermuseum Conservation Association, "Clowes Collection Conservation Report," C10013 (2017.84), 8–10 April 1974, Conservation Department Files, Indianapolis Museum of Art at Newfields.
6. Peter Klein, dendrochronological analysis report, C10013 (2017.84), 25 June 1999, Conservation Department Files, Indianapolis Museum of Art at Newfields. It should also be noted that the very thin remaining panel (1 mm) can make error more likely in this form of analysis.
7. Personal communication with Ian Tyers, 5 February 2021.
8. Elvacite 2040 (synthetic resin) was used to fill the cradle so that its appearance would be minimized in the X-radiograph, allowing the composition to be better interpreted.

Additional Images



Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, front, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, back, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, front, raking light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.

Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, front, ultraviolet-induced visible fluoresce, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, front, infrared reflectography, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Circle of Jan Wellens de Cock (Netherlandish, 1450–1527), *Landscape with Hermit*, early 1500s, oil on oak panel, 49 × 26.6 cm, X-radiography, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Frame for *Landscape with Hermit*, 65.6 × 43 cm, front, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.



Frame for *Landscape with Hermit*, 65.6 × 43 cm, back, visible light, Indianapolis Museum of Art at Newfields, The Clowes Collection, 2017.84.