THE ART INSTITUTE OF CHICAGO

CONSERVATION DEPARTMENT

19th Century Catalogue Examination Report

Artist:	Museum Number:
MONET, Claude	1922.427
Title (Date):	Structure:
On the Bank of the Seine, Bennecourt (1868)	Oil on canvas
Owner/Dept:	Size:
MMEPS	81.5 x 100.7 cm (32 1/16 x 39 5/8 in)KM:81.5x100.9cm
Conservator:	Date Examined:
Kim Muir	2009/2012

Technical Summary:

On the Bank of the Seine, Bennecourt was painted on a pre-primed no. 40 portrait (figure) standard format linen canvas. A stamp from the color merchant Deforge[-Carpentier]¹ was documented on the back of the original canvas before lining. The ground layer ... A few charcoal particles were observed microscopically in the water on the right side of the painting, which could be related to underdrawing; however, insufficient material was observed to draw any conclusions about its nature or extent. The painting was carried out in several sessions and includes some major revisions to the composition, most significantly the painting out of a figure to the immediate right of the female figure. What is perhaps the face of the painted-out figure remains partially visible through the artist's "overpaint" that was roughly applied on top. The two figures appear to have been painted within a relatively short time span, and may even have co-existed within the composition at some point. Both figures were added to the work later in the painting stage; they were both painted on top of the landscape, after it was well established. The tiny figures and animals on the other side of the river were also added later, on top of the landscape. Other changes were made to the landscape, including some forms on the hilltop on the right side, which were subsequently covered by the sky, and possible alterations to the foreground riverbank in the area of the female. It seems that the reflection in the river, in some areas, captures the landscape and sky at earlier painting stages, resulting in some apparent discrepancies between what is depicted in the actual landscape and what is reflected in the water. There are several old damages to the canvas and paint layers, and repairs and retouching in these areas also appear to be of significant age.

Signature

¹ The stamp is only partially legible and the right side of the line containing the supplier's name cannot be made out; however, the stamp is probably that of "Deforge-Carpentier," the name under which the company operated between 1866-1869. See Stéphanie Constantin, "The Barbizon Painters: A Guide to their Suppliers," *Studies in Conservation* 46/1 (2001), pp. 52-53, 62-63.

Signature/Stamp:

Signed and dated in dark reddish-brown paint at lower left: *Cl Monet 1868* (Detail).² The signature and date contain similar pigments³ but mixed in different proportions, as evidenced by their slightly different hues when viewed under magnification; they also exhibit a slightly different fluorescence from one another under ultraviolet light (MAC 1). Both were applied when the underlying paint was dry.

Structure and Technique

Support

Canvas: Flax, commonly known as linen.⁴

Standard Format:

The original dimensions were closer to $81 \times 100 \text{ cm.}^5$ This corresponds to a no. 40 portrait (*figure*) standard format canvas ($81 \times 100 \text{ cm}$), turned horizontally.

Weave:

Plain weave. Thread count average (standard deviation): $28.7V(1.3) \ge 30.3H(0.8)$ threads/cm. It was determined that the horizontal threads correspond to the warp and the vertical threads correspond to the weft.⁶ No weave matches were found with other Monet paintings analyzed.

Canvas characteristics:

There is mild cusping on the left and right sides, with more pronounced cusping along the top and especially the bottom edge.

Stretching:

Current stretching: dates to 1973 conservation treatment (see Conservation History). It appears that the canvas was stretched slightly larger than its original dimensions, with approximately 0.5 cm of unpainted tacking margin visible on the left, right and top edges. Copper tacks spaced approximately 6-7 cm apart.

² Jeanne-Marie David, "Une étude de la signature de Claude Monet," ZKK 22, no. 2 (2008), 300-307 (paraphrase from French): work most representative of importance M accorded to placement of signature is perhaps *Bennecourt*, inscribed in usual way, not parallel to lower frame but diagonally, from LLC following diagonal that divides work in two; depth of space evoked but horizontal and vertical elements dominate: first plane summarily worked but animated by some yellow flowers, then second plane representing Seine (represented by large horizontal fields of blue, green and brown; calm surface animated by reflections from opposite bank), then village and sky. These 3 planes are secured(?) in depth by foliage of tree. M uses signature for 2 ends. "Cl. Monet" on one line, "1868" on second line. The fact that M did not affix a complete signature indicates that he knowingly left picture in state of an "esquisse", and that he succeeded in rendering what he hoped to convey to spectator – underlining that work was left at this level of finish – that he had achieved effect sought; in suggesting diagonal division of work, M reinforces contrast of materials between leaves and water, but also contrasts of value and light, between dark, shadowy aspect of trees and Seine full of light – placement of signature also allows him to reinforce depth of work – in effect, imaginary line created, when extended, follows gaze of Camille – knowingly enriching composition and rendering it clearer still in eyes of spectator - allowing us to better enter painting and contribute to structure of work. M has rarely used this process. Jill: I don't think I would discuss this here, but you guys may want to reference it in your essay?

³ See Kim Muir, "Mon_Bennecourt_22_427_XRF_Results," Feb. 3, 2012. Conservation Object File, Art Institute of Chicago.

⁴ Fibers identified by microscopic cross-sectional fiber identification. See Inge Fiedler, "Analytical report," date. Conservation Object File, Art Institute of Chicago.

⁵ The original dimensions of the painting are based on a visual estimate of the original foldovers.

⁶ Thread count and weave information determined by Thread Count Automation Software; see C.Richard Johnson, Jr, Don H. Johnson and Robert G. Erdmann, "Thread Count Report: *On the Bank of the Seine, Bennecourt* (W110/1922.427)," Aug. 2011. Conservation Object File, Art Institute of Chicago.

Original stretching: original tack holes are spaced approximately 5-7 cm apart.

Stretcher/strainer:

Current: 4-membered ICA spring stretcher; current stretcher depth: 2.5 cm

Original: discarded; an undated pre-1973-treatment report indicates that the previous stretcher consisted of 6 members, including horizontal and vertical crossbars, with mortise and tenon joints and keys, and dimensions as follows: overall, 82×100 cm; outside depth, 2 cm; inside depth, 2 cm; width, 6.5 cm.⁷

Manufacturer's/supplier's marks:

There is a supplier's stamp on the back of the original canvas, which was photographed before the painting was lined in 1973 (see Conservation History): "DEFORGE... / COULEURS FINES / ET TOILES à PEINDRE / ... Montmartre, 8 / PARIS / Atelier Rue Legendre ... Batignolles" (Mon Bennecourt 22.427 canvstamp + zoom out to VRS 1973 for placement).⁸

Preparatory Layers

Sizing:

Not determined (probably glue).⁹

Ground Application/Texture:

There is a relatively thin layer of ground. It extends to the edges of all four tacking margins, indicating that the canvas was cut from a larger piece of primed fabric, which was probably commercially prepared.¹⁰

Color:

The ground layer is off-white. Relatively large white "clumps" are visible under magnification and -impart a "bumpy" surface to the ground layer (MIC 9-10). [After closer examination, I think these clumps may be in the paint layer, i.e. a chunky white paint admixed with other colors; observed throughout painting in different color areas (MIC 9, 10). Revise after info from XS]

Materials/ Composition:

Analysis indicates that the ground contains lead white with traces of iron oxides.¹¹ Add EDX/PLM analysis

⁷ See "Examination Record of Auxiliary Support," n.d. Conservation Object File, Art Institute of Chicago. It was also noted that there was no visible manufacturer's information on the stretcher. A second report (undated but predating the 1973 treatment) describes a similar "Buck type #2," mortise and tenon, keyed stretcher with vertical and horizontal crossbars, but gives the following dimensions: overall, 79 x 92 cm; outside depth, 1.8 cm; inside depth, 1.6 cm; width, 7.6 cm. The large discrepancy in the overall dimensions suggests that the second set of measurements is probably erroneous. See "Examination Record of Auxiliary Support," n.d. Conservation Object File, Art Institute of Chicago.

⁸ This is probably the color merchant Deforge-Carpentier. The original canvas back is covered by the lining fabric. The canvas stamp was not visible when the painting was viewed with transmitted light.

⁹ The presence of a sizing layer is difficult to determine from cross sections due to previous conservation treatments, including wax-resin lining.

¹⁰ There is a significant amount of abrasion and loss of the ground layer on the tacking margins, particularly along the bottom edge; however, remnants of ground were observed in a couple of places at the extreme edge of the bottom tacking margin.

¹¹ The ground composition was analyzed using scanning electron microscopy coupled with energy dispersive X-ray spectroscopy (SEM-EDX), polarized light microscopy (PLM), and X-ray fluorescence spectroscopy (XRF). For more detailed results and conditions used, see Inge Fiedler, "1922_427_Monet_analytical_report," date; and Kim Muir, "Mon_Bennecourt_22_427_XRF_Results," Feb. 3, 2012. Conservation Object File, Art Institute of Chicago.

Compositional planning/underdrawing/painted sketch

Extent/character:

No evidence of underdrawing was detected with infrared reflectography; however, a few localized areas of black particulate matter were observed microscopically in the water, on the right side of the painting (s9_bef_a, s9_bef_c). It is uncertain whether this material could be related to preparatory drawing. In some areas, the black particles seem to lie on top of the paint layer (MIC 66).

Medium/technique: Add PLM results.

Revisions:

If the material is related to preparatory drawing, the amount observed on the surface of the painting is insufficient to draw any conclusions about the extent of the underdrawing or any revisions to the original compositional plan.

Paint Layer

Application/technique and artist's revisions:

Most of the landscape was built up in broad, relatively flat planes of color. In some areas, the paint was quite thinly applied, especially at the junctures of forms, where the ground layer remains partially exposed (TRANS, MAC: LRC). It appears that the composition was laid in with thin layers of more subdued tones than those used in the final painting; for example, dull greens and earth tones are observed throughout the landscape (MIC 44, MIC 27). The sky was underpainted with a variable warm cream/pinkish-gray layer, which continues underneath the foliage to the left edge of the painting. The brush-marked texture of this underlayer remains visible at breaks in the brushwork and through some of the thin layers of paint applied on top (area around MAC 22). The streaky, more radio-opaque forms visible in the upper left corner seem to correspond to this underlayer (XR/NRM detail).¹² Most of the foreground bank was quickly brushed in using dilute green paint which was not much further built up except for the touches of white and yellow flowers applied on top (MAC 5). The painting was carried out in several sessions and includes both wet-over-dry and wet-in-wet paint application at various stages. The landscape was well established before any of the figures or animals were added. The female figure in the foreground, as well as the figures and animals on the other side of the river, were painted on top of the landscape, in some cases, when the brushstrokes from the landscape were already surface dry (MAC: Camille head/torso, MAC 13, MIC 65).

Several compositional changes have been made to the painting and some areas were never fully resolved by the artist. This makes it somewhat challenging to reconstruct the evolution of the work. However, it is clear, even to the unaided eye, that another figure was originally included in the composition immediately to the right of the female figure. This figure was subsequently painted out but elements of what may be the head and face remain partially visible on the surface (NRM/RKG detail). The brushwork outlining the head, which is rather thick and suggestive of a hat or a bonnet, and the flesh-toned paint of the face can be seen through the thin layers of artist's "overpaint" applied on top (MAC 2 [include to B edge of painting]). One interpretation of this pentiment is that the figure is a child who stands on the female figure's lap, facing out towards the viewer.¹³ There are two other localized areas of flesh-colored paint, partially visible underneath the gray "overpaint" further down in the

¹² These forms could be indications of clouds at an earlier stage in the painting process.

¹³ See, for example, Mary Matthews Gedo in collaboration with William Conger, "Ariadne on the Grand Île," chapter 5 in *Monet and his Muse* (University of Chicago Press, 2010), p. 79; see also figs. 5.3 and 5.5 for the authors' proposed reconstruction of the earlier composition. [CUR: to add other references] [From CUR file: Monet's letter to Bazille provides terminal date for painting, which must have been completed – at least in large part – before last week of June 1868 (foliage and light summer dress suggest late in stay at Bennecourt). Jean was born Aug. 8, 1867, which would make him somewhere less than 11 months, depending on when figures were started. Delete later.]

composition (MAC11, MIC 13, 14). These areas have sometimes been interpreted as the right hand of the woman grasping the right hand of the child (left area) and the outstretched left hand of the child (right area).¹⁴ In the recent technical examination, this reading of the earlier composition was challenged and an alternative interpretation was suggested, namely, that the painted-out figure is an adult female. who faces the viewer (XR/NRM detail). The scale of the head, in comparison with that of the female in the final composition, including the placement of the facial features which seem to be indicated by localized areas of deep red paint partially visible on the surface (MIC 12/detail of face from high res), may be more in keeping with an adult figure than a child. The radio-opaque, lead-white-rich strokes, which are visible in the X-radiograph below the head and continue down to the edge of the grassy bank, seem to be related to the body of the painted-out figure (XR/NRM detail). The upper area of white brushwork was obscured by the artist's "overpaint", while the lower area was incorporated into the final painting and has sometimes been interpreted as a dog perched on the female figure's lap.¹⁵ Further examination of the X-radiograph reveals another form just below the painted-out head. It is tempting to read this as the head of an infant child wearing a bonnet (possibly cradled by the painted out woman) – and, in fact, one of the small areas of flesh-toned paint corresponds to where the face of this infant would be located (MIC47) – but this is more speculative (XR detail + annotation). [Update if new info provided by Joris Dik's XRF scanning.]

Both the painted-out figure and the final female figure were painted on top of the landscape, the water, and the reflections of the buildings. In some places, the paint from the landscape was still wet. For example, the stroke of the left edge of the painted-out head was dragged through the still-soft paint of the corner of the reflected building and the foliage from the layers underneath (MIC 61). Similarly, the edge of the final female figure's right shoulder appears to be wet-in-wet with the pale blue-gray paint laver of the water (MIC 68). The buildings and foliage reflected in the water can be seen to continue underneath the edge of this figure's head (MAC 3 - head only), and are visible microscopically through drying cracks and tiny gaps in her hair (MIC 69); the hair appears to have been painted wet-in-wet with the thick white strokes of the building's reflection at the upper front and back of the head (top of head from hi res image). It is evident, through the open brushwork of the blue-striped dress, which becomes increasingly sketchy below the figure's waist, that her body was also painted over the water and the grass/foliage. In areas to the left of the female, dark green paint can be seen, sandwiched between layers of blue from the water. This seems to indicate that the grassy bank, at one point, was extended further out over the water on the left half of the painting; however, since the handling and the dark (almost blackish-) green color of the paint seems more similar to the tree foliage than to the brighter, yellowishgreen of the grass, another possibility is that the artist was actually depicting the reflection of the overhanging foliage in the water, which he subsequently painted over with the bright blue patches of water on either side of the second tree (MAC 4). In the area between the two tree trunks, the grass itself, including one of the vellow flowers can be seen to continue underneath the upper blue layer from the water. Some of the dark green paint from the foliage can still be seen through the upper paint layers of the woman's dress (MIC 70). Here, the green paint appears to have been applied wet-in-wet over a pale blue layer, presumably the first painting of the river. The brighter blue upper layer of the water to the left of her back was applied when the underlying greenery was dry. The blue paint from the water continues under her back, where it stands in for the blue stripes of the dress in places (detail of back from hi res). The blue paint looks like it was still slightly wet in places when the dress was painted. The skirt was painted on top of the grass and some of the vellow flowers (i.e. the two at waist level), while the two lower flowers were added on top of the skirt (MAC 8). The pale green patch of grass and yellow flowers left of the figure were also added later; there is some wet-in-wet mixing with the pale gray of the edge of the skirt. The bright white strokes to the right of the woman (sometimes interpreted as a dog),¹⁶ which, as mentioned above, appear to have originally been part of the painted-out figure were also applied over the brighter blue of the water, as well as some dark green and brown paint (applied

¹⁴ See Gedo and Conger, p. 79. [CUR to add any other references]

¹⁵ See Gedo and Conger, p. 79. [CUR to add any other references] If the painted-out figure was an adult female, it is conceivable that the white brushwork represented her dress, although, in such case, it was not developed very far (possibly similar to the skirt of the final figure). ¹⁶ See Gedo and Conger, p. 79. [CUR to add any other references]

wet-in-wet on top of the water) which appears to be related to the branch or vine (or reflection of such) that continues on either side of the white form (MAC 10). The small flesh-toned area just above the white strokes appears to lie on top of this white paint (MIC 48 or crop at 100%). The other flesh-colored paint stroke, further to the left, seems to have been picked up by the edge of the striped dress, suggesting that it was still wet when the dress was painted (MIC 42). All of these observations seem to indicate that both the final female figure and the painted-out figure were painted on top of the landscape, after some changes to the shoreline had been made. Furthermore, since both figures show evidence of some wet-in-wet mixing with the landscape, they were probably painted within a short time span of one another, if not contemporaneously, suggesting that they may have coexisted in the composition at some point. It seems that the rowboat in the foreground also may not have been included in the composition from the beginning. The back half of the boat was painted on top of the earlier layers of the water, and the front half was added over a thin green wash which may represent the original lay-in of the riverbank (crop MAC of boat from hi res). The grass where it overlaps the boat and the bright blue paint to the right were added last in this area.

The fact that the gray "overpaint" used to cover the figure does not disturb the ridges of the underlying brushmarks, as well as the presence of several small areas of interlayer cleavage between the two painting campaigns (MIC 22 or 100% crop w arrows), suggests that the earlier composition was at least surface dry when the figure was painted out. Although the gray "overpaint" only passes over the final female figure at the edge of her right arm, it seems that the paint from her dress was also dry at this point (MIC 67). The gray "overpaint" also overlaps wet-in-wet with the thick, grayish-white stroke that obliterates the lower right flesh-colored area (MIC 47). [Just thinking aloud here: Why would artist have applied the gray "overpaint" up to and around the flesh-toned area, and then applied separate stroke to cover just the "flesh"? To me, this suggests that – if painted-out figure was woman holding an infant – woman, and not baby, was painted out. This could have left child in arms of final female before child's face was covered] Although it cannot be ruled out that the artist's "overpaint" has been thinned or compromised in previous cleanings, it does seem that Monet was not overly concerned with completely concealing all traces of the earlier figure, and that its presence was always visible to some extent.¹⁷

A few other more minor changes to the composition were observed. It appears that early on in the painting, forms related to the sky, the tree foliage, and the river were laid in underneath the two tree trunks (i.e. the sky, tree foliage, and river may have originally been laid in all the way to the left edge). However, the painting could not have been very far developed when the trunks were incorporated, as they remain relatively radio-transparent and the river and village were largely built up around them (XR/NRM detail). In front of the houses near the right edge, a few other painted-out forms are visible in the transmitted IR and X-ray images. These may be related to additional windows and foliage that were later painted out (TR IR/XR/NRM detail + annotations); for example, a painted-out area of green can be seen, microscopically, to the left of the shrub that is in front of the white house at the far right, perhaps suggesting that more shrubbery was planned there (MIC 71 or hi res crop). Further revisions appear to have been made in the sky area of the upper right corner of the painting. Brushwork unrelated to the final composition is revealed with the aid of infrared and transmitted infrared imaging (IRR/TRANS IR/NRM detail). It is unclear what this earlier brushwork depicted [in TRANS IR, it looks almost like a screen of trees KM to delete, but it seems like the warm, terracotta color of the underlayer of the hill continues up underneath the blue paint of the sky. In the upper right corner, this warm-toned layer continues in a broad band all the way to the top of the canvas (MAC 17), and, interestingly, in the final painting, the reflection of the sky in the river seems disrupted in this area, as though a form was being reflected there. The pale, brush-marked underpainting that initially covered most of the sky (discussed above) also seems to stop when it reaches this area in the upper right corner, suggesting that some form was blocked into the corner early on (XR/NRM detail). The warm-toned paint of the pentiment is also visible in a small area further to the left where there is a gap in the blue paint of the sky (MIC 19, hi res

¹⁷ No difference was seen in this area in the 1973 pre-treatment photographs (73 NRM). Do we have earlier photographs?

crop). This small peak also seems to have been incorporated into the reflection, which would mean that blue paint from the sky and some of the foliage from the foreground trees was added after the reflection was painted. In fact, there seem to be several discrepancies between the village and its reflection; for example, more of the green hillside is reflected in the water but fewer of the buildings. Furthermore, the hillside seems out of scale with the large white building reflected to the left. These observations suggest that the reflection may represent an earlier stage of the composition.

Several damages appear to have occurred early in the painting's history. There is a large, L-shaped tear, which was repaired and filled early on using a lead-white-rich paint or similar material. This shows up as a radio-opaque area in the X-radiograph (VRS 1973, XR). Another damage, possibly a puncture in the canvas, just to the right of the painted out figure, was treated in a similar way and probably at the same time as the larger damage. The repair creates a roughly circular form on the surface of the painting and is also visible in the archival photograph of the original canvas back (VRS 1973). (XR/NRM detail; MAC 2/MIC 59/60).¹⁸ It is unclear when or by whom the repairs were carried out, however, it cannot be ruled out, that Monet himself may have had a hand in them. In any case, the nature of the retouching in the larger tear area, which is more dense and solid than the rest of the foliage, raises the question of whether the foliage was originally painted this densely. The X-radiograph indicates that the buildings on the far shore were painted in some detail right up to the tree trunk (XR/NRM detail). It seems questionable that Monet would have developed the buildings to this degree, only to obscure them with the dense foliage. In fact, this runs counter to the technique he used to depict glimpses of sky peeking through the foliage further above in the composition: rather than painting a continuous layer of blue sky, then adding the foliage on top, localized touches of blue were applied over the initial lay-in of the foliage, with additional leaves built up over that (MIC 64). Other signs of damage include gouges in the soft paint, particularly in the lower center area (MIC 50, MIC 51/52).

Painting tools:

Brushes, including flat, 1-2 cm (based on width of brushstrokes).

Palette:

Analysis indicates the presence of the following pigments: lead white, bone/ivory black, yellow ochre, chrome yellow, vermilion, cobalt blue, viridian, and emerald green.¹⁹ Relatively large white clumps are visible microscopically throughout the paint surface, imparting a distinct bumpy surface (MIC 9, 10). This may be associated with the lead white paint used by the artist. The presence of a bright salmon-pink UV fluorescence in the signature and date suggests that the artist used madder lake in those paint mixtures.²⁰ Update after PLM/EDX and revised XRF.

Binding Media:

Oil (estimated).²¹

¹⁸ Gedo has interpreted this circular form as a toy or some other circular object held by the child in the earlier composition, see Gedo and Conger, p. 79. As discussed earlier in this section, our interpretation of this passage in the painting challenges that of Gedo. Gedo further describes the object as "trimmed with ribbon." If she is referring to the lightly applied dark green and brown strokes just below the damage, it seems more likely that these strokes represent foliage, or possibly the reflection of the tree's branches in the water.

¹⁹ The pigments were identified by the following methods: lead white, bone/ivory black, vermilion, cobalt blue, yellow ochre, chrome yellow, viridian, and emerald green (XRF). Analysis was carried out on selected areas and may not include all pigments present in the painting. For more detailed results and conditions used, see Kim Muir, "Mon_Bennecourt_22_427_XRF_Results," 2012; and Inge Fiedler, "1922_427_Monet_analytical_report," date. Conservation Object File, Art Institute of Chicago.

²⁰ The characteristics of madder lake, including its fluorescence under ultraviolet lighting, are discussed in Helmut Schweppe and John Winter, "Madder and Alizarin," *Artists' Pigments: A Handbook of Their History and Characteristics*, ed. Elisabeth West Fitzhugh, vol. 3 (National Gallery of Art, 1997), pp. 124–26. See also Ruth Johnston-Feller, *Color Science in the Examination of the Museum Objects: Nondestructive Procedures* (Getty Conservation Institute, 2001), p. 207.

²¹ The binding medium was not analyzed. The estimation of an oil medium is based on visual examination, as well as knowledge of Monet's technique and published analyses of other Monet paintings.

Other materials: N/A

Surface Finish

Varnish layer/media:

The painting has a relatively matte, synthetic varnish, which was applied in 1973. In the 1973 treatment, a vellowed natural resin varnish was removed. The application of the natural resin varnish is not documented but probably post-dates the 1959 varnish removal (see Conservation History).

Conservation History

Undocumented restorations associated with damages in the canvas (an L-shaped tear in the upper left quadrant and a possible puncture at lower center; see Condition Summary) appear to be quite old. These areas were repaired using a lead-white-containing material, probably applied from the front and the back of the canvas, to act as a consolidant for the tear and serve as a fill material for the retouching (VRS 1973). The repairs may have been carried out in association with the glue-paste lining that was removed in the 1973 treatment (see below).

A 1957 examination report in the conservation file indicates that the painting was already glue-paste lined by that date.²²

In 1959, discolored (extremely yellowish-gray) varnish was removed.²³

In 1973, discolored surface films and overpaint were removed (DT1973, DT73 clean). The glue-paste lining was removed, along with excess lead white paint on both sides of the tear (VRS 1973). The painting was wax-resin lined and stretched on to a new ICA spring stretcher. A coating of polyvinyl acetate (PVA) AYAA was applied and inpainting was carried out. A coating of methacrylate resin L46 was applied, followed by a final coating of PVA AYAA.²⁴

Condition Summary:

The painting is in good condition overall, but suffers from some old damages and restorations. The canvas is wax-resin lined and stretched on an ICA spring stretcher. The spring stretcher is slightly larger than the original stretcher, resulting in a border of unpainted ground from the tacking margins on the edges. There is an L-shaped tear in the canvas, in the upper left quadrant, in the area of dense foliage above the figure's head. It measures approximately 19 cm in the horizontal direction and 4 cm in the vertical direction. There is another damage in the foreground, just to the left of the back end of the rowboat, which appears to be a puncture in the canvas. Both areas of damage were somewhat crudely repaired with a lead-white-containing material. The repairs appear to be quite old and were carried out at least before the glue-paste lining, which was first documented in 1957. Other small damages/gouges in the paint were observed in the area of the painted-out figure and appear to have occurred when the artist's "overpaint" was still soft. Retouching associated with these damages is slightly mismatched. There is extensive retouching around all of the edges associated with the border of exposed ground mentioned above. Other localized areas of retouching are scattered throughout the painting. There is a concentrated area of retouching in the upper right corner; its purpose may have been to conceal the warm brown underlayer in that area, which may have become more noticeable with time. There are a few tiny, localized areas of interlayer cleavage between the gray "overpaint" and the painted-out figure. These

 ²² Louis Pomerantz, "Examination Report," June 20, 1957. Conservation Object File, Art Institute of Chicago.
²³ Louis Pomerantz, "Examination Report [annotated with treatment notes]," Nov. 5, 1959. Conservation Object File, Art Institute of Chicago.

²⁴ See Alfred Jakstas, "Treatment Report," Nov. 11, 1973. Conservation Object File, Art Institute of Chicago.

areas are secure. There are some areas of crushed impasto, likely the result of pressure from the lining treatments. There are some fine age cracks visible throughout the painting and a fairly extensive network of fine drying cracks in the dark green and brown paint of the trees and the sitter's head. The surface is coated with a synthetic varnish which has a relatively matte finish.

Frame

Design/Origin:

Current frame (as of 2008): French 19th century; profile: ogee section; composition ornament: pearl sight moulding/burnished gold hollow/acanthus corner leaves on a matt gilded ogee section/top burnished rail; original water gilding (Imaging frame).

Previous frame (dates?): American (New York) reproduction of an Italian 17th century frame; profile: bolection; carved basswood; silver gilded, distressed (image?).

Labels and inscriptions

Undated

Label

Location: original stretcher (discarded); preserved in Conservation file Method: printed label with handwritten script Content: DURAND-RUEL / PARIS, 16, Rue Laffitte / NEW-YORK, 315, Fifth avenue / <u>Monet</u> N° <u>2127[?] / Argenteuil / tsss[?]</u> (Mon Bennecourt 22.427 Dur Ruel 1)

Label

Location: original stretcher (discarded); preserved in Conservation file Method: printed label with handwritten script Content: PA ... tte / NEW ... avenue / M... N° <u>2127</u> / gsss (Mon Bennecourt 22.427 Dur Ruel 2)

Number Location: backing board Method: handwritten script Content: 115, 5 (Mon Bennecourt 22.427 #)

<u>Pre-1980:</u>

Stamp Location: canvas Method: stamp Content: DEFORGE[...]²⁵ / COULEURS FINES / [...]TOILES à PEINDRE / [...]Montmartre, 8 / PARIS / Atelier Rue Legendre [...] Batignolles (Mon Bennecourt 22.427 canvstamp)

 $^{^{25}}$ The stamp is probably that of "Deforge-Carpentier," the name under which the company operated between 1866-1869. See Stéphanie Constantin, "The Barbizon Painters: A Guide to their Suppliers," *Studies in Conservation* 46/1 (2001), pp. 52-53, 62-63. The original canvas back is covered by the lining fabric. The canvas stamp was not visible when the painting was viewed with transmitted light.

Number

Location: stretcher²⁶ Method: handwritten script Content: 1922.427 (Mon Bennecourt 22.427 acc#)

Label

Location: stretcher²⁷ Method: printed label with handwritten script and green ink inventory stamp Content: THE ART INSTITUTE OF CHICAGO / Chicago, Illinois 60603 / ARTIST <u>Monet, Claude</u> / TITLE <u>The River 1922.427</u> Stamp: <u>Inventory – 1980 - 1981</u> (Mon Bennecourt 22.427 AIC)

Post-1980:

Sticker

Location: previous Masonite-type backing board (discarded); transcribed in Curatorial file Method: unknown; with green ink inventory stamp Content: Réunion des musées nationaux / cat. no. 78 / Hommage à Monet / Galeries nationales du Grand Palais / 8 fevrier – 5 mai 1980 Stamp: Inventory – 1980 – 1981 [No image – should we include scan of the sheet in the curatorial file?]

Label

Location: backing board Method: printed label with handwritten script and traces of ink stamp Content: [logo] *Réunion des musées nationaux Paris* / Au bord de l'eau, Bennecourt / *Titre de l'oeuvre:* / *Propriétaire:* Art Institute of Chicago / *No du Catalogue* 141 Stamp: IMPRESSIONNISME LES ORIGINES, 1859-1869 / Galeries nationales du Grand Palais / 18[?] avril – 8 août 1994 (Mon Bennecourt 22.427 RMN 94)

Label

Location: backing board Method: printed label Content: 141 / Claude Monet / *Au bord de l'eau, Bennecourt (The River at Bennecourt)* / Oil on canvas / The Art Institute of Chicago, Potter Palmer Collection / ORIGINS OF IMPRESSIONISM / The Metropolitan Museum of Art / September 27, 1994-January 8, 1995 (Mon Bennecourt 22.427 Met 94-95)

Label

Location: backing board Method: printed label Content: The Art Institute of Chicago / "Claude Monet: 1840-1926" / July 14, 1995 – November 26, 1995 / Catalog: 15 / <u>On the Bank of the Seine, Bennecourt / Au Bord de l'eau, Bennecourt /</u> The Art Institute of Chicago, Potter Palmer Collection / (1922.427) (Mon Bennecourt 22.427 AIC 95)

Label

²⁶ The stretcher dates to the 1973 conservation treatment (see Conservation History).

²⁷ The stretcher dates to the 1973 conservation treatment (see Conservation History).

Location: backing board Method: printed label Content: The Phillips Collection / *America's first museum of modern art* / 1600 21st Street NW Washington, D.C. 20009-1090 / Impressionists on the Seine: A Celebration / of Renoir's "Luncheon of the Boating Party" / September 21, 1996 – February 9, 1997 / Artist Monet / Title On the Bank of the Seine, Bennecourt / Date 1868 / Medium oil on canvas / Dimensions 32 x 40 in. (81.5 x 100.7 cm) / Lender Art Institute of Chicago / Reg # 1996.53.1 Plate # 1 (Mon Bennecourt 22.427 Phillips)

Label²⁸

Location: frame Method: printed label Content: Arnold Wiggins & Sons / Limited / 4 Bury Street / St. James's / London SW1 / Picture Frame Makers / Carvers and Gilders Left: BY APPOINTMENT / TO H. M. QUEEN ELIZABETH II / PICTURE FRAME MAKERS Right: BY APPOINTMENT / TO H. M. QUEEN ELIZABETH / THE QUEEN MOTHER / PICTURE FRAME MAKERS (Mon Bennecourt 22.427 Wiggins)

Examination and Analysis Techniques

X-radiography

Westinghouse X-ray unit, scanned on Epson Expressions 10000XL flatbed scanner

Infrared Reflectography

Goodrich/Sensors Unlimited SU640SDV-1.7RT (J filter: $1.5-1.7 \mu m$); Inframetrics Infracam with $1.5 - 1.73 \mu m$ filter; FUJIFILM S5 Pro with X-Nite 1000B - 2mm filter ($1.0-1.1 \mu m$); KM to add specs from John Delaney

Transmitted Infrared

FUJIFILM S5 Pro with X-Nite 1000B – 2mm filter (1.0-1.1µm)

Visible light

Normal-light, raking-light, and transmitted-light overalls and macrophotography: FUJIFILM S5 Pro, with X-NiteCC1 filter

Ultraviolet

FUJIFILM S5 Pro, with X-NiteCC1 filter and Kodak Wratten 2E filter

High-resolution visible light (and UV)

Sinar P3 camera with Sinarback evolution 75H (B+W 486 UV IR cut MRC filter, X-NiteCC1 filter and Kodak Wratten 2E filter)

Microscopy and photomicrographs

Sample and cross section analysis using Zeiss Axioplan2 Research Microscope equipped with reflected light/UV fluorescence and a Zeiss AxioCam MRc5 digital camera. Types of illumination used: darkfield, DIC (Differential Interference Contrast), and UV fluorescence. In situ photomicrographs with Wild Heerbrugg M7A StereoZoom Microscope fitted with Olympus DP71 microscope digital camera

X-ray Fluorescence Spectroscopy (XRF)

²⁸ Label dates to 2008 – JS to write footnote later.

Several spots on the painting were analyzed in situ with a Bruker/Keymaster TRACeR III-V with Rhodium tube.

Polarized Light Microscopy (PLM)

Zeiss Universal Research Microscope

Scanning Electron Microscopy/Energy Dispersive X-ray Spectroscopy (SEM/EDX)

Cross sections analyzed after carbon coating with Hitachi S3400-N-II VPSEM with Oxford EDS and Hitachi solid state BSE. Analysis was performed in the EPIC facility of the NU*ANCE* Center at Northwestern University.

Automated thread counting

Thread count and weave information were determined by Thread Count Automation Software.²⁹

Image Registration Software:

Overlay images registered using a novel image-based algorithm developed by Damon M. Conover (GW), Dr. John K. Delaney (GW, NGA), and Murray H. Loew (GW) of the School of Engineering and Applied Science, The George Washington University, and the National Gallery of Art, Washington, D.C.³⁰

²⁹ See Don Johnson, C. Richard Johnson, et al., "A Thread Counting Algorithm for Art Forensics," *Proceedings of the 13th Annual IEEE Digital Signal Processing Workshop* (Jan. 2009), pp. 679–84, DSP 12.2.
³⁰ See Damon M. Conover, John K. Delaney, Paola Ricciardi, and Murray H. Loew, "Towards Automatic

Registration," Computer Vision and Image Analysis of Art II, Proceedings of SPIE 7869 (2011).