In the years following the invention of photography in 1839, a rich dialogue began between painters and practitioners of this new technology. Some dismissed photography as mere mechanical reproduction, while others recognized its artistic potential. Many who took up photography in its infancy had trained as painters and saw the medium as a logical extension of the visual arts. Aspiring to raise photography to the level of a fine art, early photographers manipulated their images to create painterly effects. Likewise, painters were attracted to the camera’s ability to capture characteristics of light and movement within a limited tonal range. In France, as elsewhere, the two mediums informed each other both in terms of subject matter and aesthetics.

**Visual Aid and Inspiration**

Sometimes a photograph might serve a painter simply as a convenient labor-saving tool, capturing a scene, a pose, or a detail that previously had to be recorded by hand. Or, the photograph could be useful as the painting progressed, providing visual information no longer in front of the artist. But photographs could also suggest interesting ways to frame or compose a painting. The high vantage point required for photographic panoramas could establish interesting spatial relationships by flattening forms and skewing perspective—visual elements found in Japanese woodblock prints.

Jean-Baptiste-Armand Guillaumin may not consciously have drawn on a photograph for this 1875 view of the river Seine, but the subject and general composition have strong parallels in contemporary photographs of urban vistas, including stereoscopic views produced for tourists as souvenirs of their travels.¹

There are striking similarities to Gustave Le Gray’s earlier photograph of roughly the same view taken from a similar vantage point. The visual sophistication of Le Gray’s image with its rhythmic repetition

¹ Gustave Le Gray, The Bridge of Louis Philippe, 1875, oil on canvas, National Gallery of Art, Chester Dale Collection

Porte Saint-Martin, from 1860s series “Paris Instantané,” stereoscopic photograph

Gustave Le Gray, The Pont du Carrousel, Paris: View to the West from the Pont des Arts, 1856–1858, albumen print from collodion negative, National Gallery of Art, Patrons’ Permanent Fund
of lines, rich tonal range, and nuanced gradations of light emanating from sky and water attest to his training as a painter and his mastery of photography.

No doubt both painter and photographer were drawn to this vista on the Seine for similar artistic reasons. A setting where sky and water meet and mirror each other would appeal to artists fascinated with light. The subject had a distinctly modern appeal as well, with rough-timbered laundry boats of working-class Paris set against a more enduring backdrop of architectural landmarks. The bridge of Louis Philippe, bisecting the canvas, was rebuilt between 1860 and 1862 as part of the vast renovation of Paris by the French civic planner Baron Haussmann. This painting typifies Guillaumin’s subject matter and conjures up the everyday reality of his own working life as a civil servant in the department of bridges and roads.

Capturing the Moment

The camera’s ability to arrest a moment in time has its conceptual and aesthetic parallel in the plein air approach to painting directly from nature. Both painters and photographers took advantage of working outdoors, seeking an immediacy of effect, and later reviewed or finished their work in the studio or darkroom. Landscape painters had to carry an easel, canvas, and paint box out into nature, while photographers had to transport fragile cameras, chemicals, metal or glass plates for negatives, and some type of portable darkroom. After 1847, when the paper-negative process was introduced, making photographs outdoors became easier. Following this development a photographer needed only a camera, a folding tripod, and sheets of light-sensitized paper that served as negatives. The availability of paint in squeezable or collapsible tubes after 1841 made plein air work more convenient, and the burden much lighter for landscape painters who ventured out into nature with their equipment.

Eugène Cuvelier made many of his early photographic studies in the Forest of Fontainebleau, sometimes in the company of his friend and mentor Jean-Baptiste-Camille Corot, whose atmospheric landscape paintings he admired. Corot’s influence is evident in Cuvelier’s photograph, which evokes the sensory experience of damp, vaporous air and ice-encrusted scrub vegetation. Corot, in turn, was inspired by Cuvelier to experiment with photographic techniques. In the 1860s Corot began making quick outdoor sketches scratched onto glass plates that later could be printed on light-sensitive paper. Some of these clichés-verre (glass pictures) were atmospheric landscapes in their own right.
These plein air practices set the stage for younger artists such as Claude Monet, whose Woman Seated under the Willows (1880) recalls the transient aspects of nature: dappled light blurs detail and makes forms appear to dissolve, or causes a woman’s white dress to reflect the colors of the surrounding landscape. Technical analysis of Monet’s picture indicates that it was painted in stages. Areas of the underlying paint were allowed to dry before subsequent applications. Thin washes of paint in the lower layers give a soft, diaphanous quality to the landscape’s atmosphere, while thicker applications on the surface, applied with flickering brushwork, give the image texture, contrast, and the suggestion of movement. Areas of blended paint suggest motion of a different kind. The muted blues of the tree shadows and the fuzzy definition of the woman’s form are evocative of the blurring that occurred in period photographs when movement was registered during the exposure. Camille Pissarro’s Boulevard des Italiens, Morning, Sunlight (1897) shows similar signs of the influence of photography.

Although painters had always used visual techniques to suggest motion, the camera offered possibilities that seemed distinctly modern and emblematic of changing perceptions of time. As Carole McNamara has noted:

Philosophically, this concern with instantaneity and the passage of time (and the allied concept of freezing motion) merged scientific examination of increasingly smaller intervals of time with societal shifts resulting from the Industrial Revolution. Several innovations of the first half of the nineteenth century transformed everyday life, including the telegraph and train travel — technologies that hastened a collapse of traditional perceptions of time and distance.²

Photography also inspired the impressionists’ practice of cropping their compositions — showing forms and figures cut off at the edges of the canvas in ways that appear random or accidental. Cropping an image could evoke a fleeting moment in time, as if the subject were unfolding before the viewer’s eyes and continuing beyond the picture’s borders. Pissarro’s painting is composed as if he were looking through a camera lens from a high vantage point, cutting off figures as they move in or out of the viewfinder at the moment of exposure. Compare the high point-of-view, plunging perspective, and cropping of forms of his painting with similar visual characteristics in the 1860s stereoscopic street scene Porte Sainte Martin.
Gustave Caillebotte’s painting *Skiffs* (1877) calls photography to mind as well: Note that only a fragment of a third boat and paddle appear on the right edge of the canvas, and that the skiff in the foreground has begun to nose its way outside the viewer’s field of vision. The diagonal lines of the paddles and the active brushwork of the water strengthen the impression of movement. Caillebotte’s methods of composing his paintings may have been influenced by photographs taken by his brother, Martial. The brothers sometimes produced images of the same subjects and from similar points of view.

Edgar Degas was fascinated by movement, as indicated by his many images of dancers and racing horses. By the time he had begun experimenting with photography in 1895, the medium was well integrated into the leisure activities of the upper middle class. Portable handheld cameras were available and eliminated the need for a tripod. Commercially prepared glass negatives, in use after 1880, removed other technical barriers that had previously restricted photography to professionals and serious camera enthusiasts.

Several of Degas’s paintings, drawings, and pastels of the late 1890s relate directly to three photographic negatives showing a ballerina from different vantage points (these negatives were later given to the Bibliothèque nationale by Degas’s brother, René). Each offers a different view of the same dancer, who was photographed from the front, back, and side. Two of these images inform the poses of the ballerinas in Degas’s ambitiously large *Four Dancers* (c. 1899). While the model in each photograph seems to be stationary, holding a pose for the camera, in the painting the dancers are highly animated. Their figures overlap, and their poses seem to unfold sequentially, as if the viewer were looking at one figure turning in space rather than four different women standing side by side. The impression of movement is further heightened by their outstretched arms, placement in the composition along an upward sweeping diagonal, and Degas’s visible brushwork.

When he painted *Four Dancers*, Degas was well aware of the motion studies of Eadweard Muybridge, and had even made drawings after some of the human and equine subjects in the American photographer’s eleven-volume publication *Animal Locomotion* (1887). Degas would quite likely have known of the chronophotographs of French scientist Étienne-Jules Marey, which captured multiple images of a moving figure on a single glass plate, instead of the sequential plates used by Muybridge.
Light and Atmosphere as Subject Matter

Light is fundamental to sight, and therefore a critical factor in any act of visual representation. Painters have always had to concern themselves with gradations of light and dark if they wished to suggest three-dimensional forms on a flat surface. Technologically and aesthetically, light is the essence of photography—a word that means “writing with light.”

Earlier landscape painters such as John Constable often made outdoor sketches of sky and clouds as preliminary studies for pictures that would later be finished in the studio. *Cloud Study: Stormy Sunset* (1821–1822) is one of these. In his quest for convincingly accurate light and atmospheric conditions, he can be considered a precursor of the impressionists. But after midcentury, and coinciding with the emergence of photography, some landscape artists began to paint light and atmosphere as the predominant subject of more highly finished canvases, sometimes to the exclusion of narrative and human activity. Gustave Courbet’s *Black Rocks at Trouville* (1865/1866), and *Calm Sea* (1866) are two of a series of marine subjects painted at various locations along the coast of France. Capturing different moods of a vast, unpopulated shoreline, both have their roots in earlier, romantic landscape imagery. But both are assertively modern as well, especially in their spare compositions suggesting the limitless expanse of sand, sea, and sky, and their depiction of nature’s infinite capacity for change.

*Calm Sea* is a particularly abstract image, and its restricted palette calls to mind contemporary sepia-toned photographs—particularly those of Gustave Le Gray, whose virtuoso studies of light created a stir when they were exhibited in Paris in the late 1850s. (See his *Solar Effect in the Clouds—Ocean*, c. 1856.) Le Gray’s innovations were prompted, in part, by the challenge of shooting directly into the sun as it was reflecting over the water. The greater luminosity of the sky meant that photographs often came out overexposed. Le Gray therefore developed a technique of using separate negatives for sky and water that resulted in images with richer detail and tonal variation. The flat horizon line made it easier to merge the two negatives successfully. Le Gray’s technical inventiveness and artistic ambition also led him to develop a process of printing his seascapes much larger than had previously been possible, giving them the more imposing presence of small landscape paintings.

Claude Monet and the American expatriate artist James McNeill Whistler were similarly drawn to the elusive properties of light. Whistler, however, painted mostly in the studio. As poetic distillations of nature’s moods at different times of day, his paintings did not attempt to depict a
particular place or moment. Monet and Whistler were on friendly terms and had mutual acquaintances among the most avant-garde artists of the day. They also shared an admiration for the work of the English painter J. M. W. Turner, whose radically atmospheric landscapes influenced their own thinking about light effects.

Beginning in the late 1880s, Monet began to study light systematically, painting the same motif at different times of day and in varying weather conditions. He would ultimately paint more than ninety views along London’s river Thames, including the Houses of Parliament and Waterloo Bridge. When painting the latter series, Monet’s vantage point was from his sixth-floor room in the Savoy Hotel looking across the river at the industrialized south bank. In *Waterloo Bridge, London, at Sunset* (1904), he used a restricted palette, dominated by cool blues, violets, and grays to convey the damp chill of an evening fog, dense with coal smoke from factories barely discernible on the horizon. Touches of mauve and gold suggest the setting sun as it reflects off the bridge and is mirrored in the rippling waters below. Monet’s simple composition and bold brushwork help focus attention on the foggy atmosphere enveloping the Thames.

Whistler’s so-called nocturnes, which emphasize the poetic, moody qualities of twilight, were another likely inspiration for Monet. *Grey and Silver: Chelsea Wharf* (c. 1864/1868) depicts a view across the Thames toward the industrial landscape of Battersea. Like Monet, Whistler transformed a commonplace subject into a poetic evocation of waning light, endowing forms and figures with mystery as they disappear into a ghostly ether of paint. The warehouses opposite, he wrote, become “palaces in the night. The whole city hangs in the heavens and fairyland is before us.”

The subdued palette of Whistler’s nocturnes, along with their sketchy compositions and exquisite design qualities, would have a profound and lasting influence upon future generations of artists. Georges Seurat and Pablo Picasso both experimented with creating works in a Whistlerian manner. American photographers Alfred Stieglitz and Edward Steichen were admirers of Whistler’s nocturnes, as were many Europeans who favored an artistically soft-focus mode of representation. For these artists, as for Whistler, the aesthetics and emotional power of an image were much more important than its motif. (See Steichen’s *Landscape — Evening*, c. 1901.)
Whistler and Monet traveled parallel paths much of the time, working on related themes and exploring similar visual effects. They inspired each other, and their working methods and ideas would exert influence on the development of abstract art. Monet’s serial paintings are a case in point. Whether he depicted cathedrals, grain stacks, or structures along the Thames, the true subjects of his serial paintings are light and atmosphere. The act of painting the same motif, under the same conditions or time of day, implies that it has become largely a vehicle for the artist’s aesthetic concerns and formal orderings—an approach that foreshadows modernist theory and practice. Monet’s monumental Water Lilies (1914–1926), now in the collection of the Museum of Modern Art, New York, liberates color and brushwork from recognizable subject matter to an even greater extent.

Whistler was instrumental in taking the first steps to divorce subject matter from the artist’s manipulation of media. In the titles of his paintings he emphasized their design elements, calling attention to their color orchestrations, as in Grey and Silver: Chelsea Wharf. He referred to other paintings as harmonies or arrangements, drawing parallels to music, an art form that is inherently abstract and not dependent on themes, motifs, or any form of direct representation. Whistler embraced the bohemian credo of “art for art’s sake”—the belief that the intrinsic value of art was its own beauty. Art was not a mere representation of something; it was an autonomous creation to be valued only for the success with which it organized color, line, and shape into a visually pleasing whole.

The same idea would be restated by Whistler’s younger contemporary Maurice Denis, who famously said: “It is well to remember that a picture—before being a battle horse, a nude woman, or some anecdote—is essentially a flat surface covered with colors assembled in a certain order.” Ideas like these laid the groundwork for the formal explorations and abstract painting styles of artists for generations to come.

Notes
1. Nineteenth-century stereoscopy emulated binocular vision and created the illusion of depth when paired photographic images, slightly offset, were viewed through a glass prism.
2. Carole McNamara et al., The Lens of Impressionism: Photography and Painting along the Normandy Coast, 1850–1874 (University of Michigan, 2009), 20.

Suggested Reading
Or view web feature: www.nga.gov/exhibitions/fontainebleauinfo.shtm.
McNamara, Carole, et. al. The Lens of Impressionism: Photography and Painting along the Normandy Coast, 1850–1874 (University of Michigan, 2009).