East of the Mississippi:
Nineteenth Century American Landscape Photography

Organized by the National Gallery of Art and
the New Orleans Museum of Art

On view at NOMA October 6, 2017 – January 7, 2018

Professional Development for Educators | Tuesday, October 17, 2017

Introduction

Photography was introduced to the world in 1839 and arrived in the United States within the year. Photographers in the young country turned their lenses on the natural and built environment, documenting the American wilderness and man’s imprint on it. The beginnings of photography coincided with the transformation of the American landscape through cultural, commercial, and transportation projects. Photographers documented scenic vistas of tourist destinations and captured changes wrought by industrialization. This landmark exhibition explores the eastern American landscape of the nineteenth century in a variety of photographic processes, spanning from 1839 – 1899.

Platt D. Babbitt (American, 1822–1879), Niagara Falls c. 1855, Daguerreotype, National Gallery of Art, Washington Robinson Family Fund in memory of C. David Robinson and Clinton and Jean Wright Fund

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Landscapes and Photography

From the might of Niagara Falls to the grandeur of the Mississippi River, the landscape of the eastern United States served as a powerful source of mythmaking for a nation finding its identity in the nineteenth century. This search for identity coincided with the invention of photography, which was quickly conscripted as an accomplice in the exploration, documentation, and development of the eastern American landscape. The exhibition East of the Mississippi: Nineteenth Century American Landscape Photography includes 175 photographs in a variety of media and formats over a sixty years period—from the earliest known landscape daguerreotypes taken in the United States in 1839 to the artistic, meditative prints made at the close of the century. These photographs constitute a rich chapter of America’s visual culture, revealing much about the preoccupations of a young and growing country.

Photographers sought out scenes of unaltered beauty in the eastern half of the country, but were equally fascinated by the built environment in and around cities, from Boston and Philadelphia to New Orleans. Coupling the documentary with the aesthetic, they trained their cameras on the transformations wrought by the Civil War and by new enterprises including tourism and industrialization, particularly the advent of the railroad. Initially celebrating the march of progress, eastern photographers later addressed the destruction of the wilderness and the need for its preservation. Balancing nature and culture, the photographs present a vision of a nation filled with natural wonders, brimming with innovation, and undergoing rapid yet unstoppable change.

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The exhibition is accompanied by a scholarly catalogue co-published by Yale University Press with essays by Diane Waggoner, Curator of Nineteenth-Century Photographs, National Gallery of Art, Washington, Russell Lord, Freeman Family Curator of Photographs, NOMA, and Jennifer Raab, assistant professor of the history of art, Yale University. Featuring 220 color illustrations, the 288-page hardcover catalog will be available by calling (504) 658-4133 or e-mailing museumshop@noma.org.
In 1839, the daguerreotype became the first photographic process introduced to the world. Comprising a highly detailed image on a polished and sensitized copper plate, each daguerreotype is a unique object. Like many of the early American photographers, Henry Coit Perkins was a scientist. Perkins was a medical doctor with interests that included a variety of scientific pursuits, including meteorology, astronomy, and optics. In 1839, he asked a local manufacturer to build a camera for him so that he could experiment with the new medium. He was among the earliest photographers to make daguerreotypes from a bird’s-eye perspective. This view of his hometown of Newburyport, Massachusetts, is from the high vantage point of a church and was one of the first photographic town views made in the United States.
Hawes operated a flourishing daguerreotype studio in Boston with his partner Albert Sands Southworth. Though primarily known for their portraits, they also sold views of landscapes, buildings, and monuments. Hawes began using paper processes in the 1850s, making city views such as this one of Boston’s central public park, the Common. To capture this lyrical scene, Hawes placed his camera behind the snow-laden branches of a tree, offering the viewer a wintery retreat.

The wintery scene is printed on paper using the salted paper print method by which writing paper is soaked in a sodium chloride (table salt) solution and then coated with a solution of silver nitrate to produce light-sensitive silver chloride.
The 1850s marked a period of transition. Processes that used paper or glass negatives to make positive prints began to be adopted more broadly. Although they lacked the crystalline precision of daguerreotypes, paper prints made from negatives were reproducible, a characteristic that encouraged the commercial potential of photography and the marketing of American scenes. By the end of the decade, paper prints had largely replaced the daguerreotype.

Platt D. Babbitt was born in Massachusetts in 1822 and was visiting Niagara Falls catering to tourists as an itinerant photographer by 1850. Niagara was the most photographed natural site in the eastern United States in the nineteenth century. Even before the photographers came, the falls were celebrated through paintings, drawings, and prints. Babbit first set up shop on the Canadian side of the falls, but by 1853, he constructed a pavilion on the American side with a view of both falls. Located in what was later called Prospect Point, the location had the added advantage of being near the dock of the popular steamboat Maid of the Mist. He made a name for himself as the first resident tourist photographer and produced daguerreotypes, ambrotypes, and glass stereographs, which he continued to sell in the 1870s. His compositions capture visitors as they gaze upon the vista, underscoring their pure communion with the falls by eliminating any signs of the commercial development that marred the site.
Exchanges between landscape painters and photographers in the mid-nineteenth century moved the new medium toward more aesthetic concerns. A number of photographers—including John Moran and Charles and Edward Bierstadt—had close ties to the art world and worked side by side in nature with painters, while others often chose the same picturesque sites beloved by artists. Photographers sometimes sought to adapt traditional ways of presenting landscape, and they explored new modes of composition associated with photography, such as a cropped field of vision or flattened perspective.

John Moran, brother of the landscape painter Thomas Moran, began photographing in the late 1850s and specialized in architecture and landscapes in Pennsylvania and New Hampshire in both stereographic and single formats. He photographed the environs of Philadelphia, the Allegheny Mountains, the Delaware Water Gap and the White Mountains. He was a staunch advocate for photography as a fine art, as an equal to painting. He often worked alongside Thomas and produced images that balance meticulous attention to detail with general atmospheric effects. In this photograph, the gentleman sketching on the rocks is most likely his brother, Thomas.

Like the Moran brothers, Charles and Edward Bierstadt also had family relations interested in capturing the intricacies of nature in both photographs and paint. The Bierstadt brothers operated a flourishing studio in New Bedford, Massachusetts, selling stereographs and landscape views. In 1860 they spent time in the White Mountains photographing with another brother, the painter Albert Bierstadt, who later produced paintings based on the sketches and photographs made on that trip. Through the work of Moran, Bierstadt, and others, eastern landscape photography cohered as an artistic endeavor. In allaying the medium more firmly to contemporary developments in painting, they helped develop a market for landscape photographs.

After establishing a photography studio in New Orleans, Edwards distinguished himself from the daguerreotypists in the region by making salted paper prints from collodion glass plate negatives. Using this method, he produced some of the earliest extant paper prints of the city from 1858–1861, documenting the changing face of the city in cityscapes, construction, and port scenes.

Edwards captured the expansion of New Orleans in the years before the outbreak of the Civil War, photographing newer, tree-lined neighborhoods with wide streets suitable for promenading. He also made pictures of docks and landings, showing goods such as stacked bales of cotton and the steamers that transported them from Louisiana plantations to New Orleans. The steam-powered ships, which had significantly increased the speed of transportation, symbolized technological progress.

**Jay Dearborn Edwards**  
(American, 1831–1900), *View of the New Orleans Cotton Wharves*, 1858–1861, Coated salt print, Museum Purchase, Tina Freeman Fund, 2105.53
Theodore Lilienthal immigrated to New Orleans in 1853 and immediately established himself as a photographer. He made daguerreotypes, glass plate negatives and stereoscopes. In early 1867, he was commissioned by the city council of New Orleans to produce a portfolio of large photographs of New Orleans to be given as a gift to Napoleon III for the occasion of the International Exposition that year. The album he ultimately produced included 150 photographic prints of the city and its outskirts. The portfolio remains largely intact at the Napoleon Museum in Switzerland.

This photograph depicts the St. Charles Hotel on St. Charles Avenue, two blocks off Canal Street. Lilienthal’s substantial print (11 x 15 inches) was contact printed from a glass negative of equal size—the largest known to have been produced in New Orleans in the nineteenth century. The incredible detail that these plates afforded in the final print provides a great deal of information about this block of the city and about the making of the picture. The giant pocket watch hanging down from John Lazarus’s Great Southern Watch Depot reveals an informative detail: that this picture was made just a couple of minutes after ten o’clock in the morning.
Thomas H. Johnson worked as a daguerreotypist in Philadelphia, PA and Olean, NY before settling in Scranton, PA in 1863, where he announced a new business that offered “Stereographic and Large Views of Every Point of Interest, in the Lackawanna Valley.” Johnson specialized in the industrial landscape, producing a series of views that included the striking architecture constructed in the area to mine coal and transport it to the market in eastern cities. The Lackawanna Iron and Coal Company and the Delaware and Hudson Railroad and Canal Company were such industries.

Johnson sought out the mining towns that sprang up along the railroad routes and printed sequenced, documentary views of the equipment specific to anthracite coal mining, which is particular in that in order to burn the pieces of coal must be of identical size. In *Inclined Plane G*, Johnson captures the process in which coal is hauled up an incline into the breaker (on the right), where it was tossed through metal bars and grinders, sorted by size, and then transported by rail. Chunks of coal in various sizes can be seen in the rail cars in the foreground of the photograph.
Philadelphia-based photographer William H. Rau had an established reputation as a photographer of the West. He had also travelled to New Zealand and the Near East making photographs. In 1891, he was hired by the Pennsylvania Railroad and Lehigh Valley Railroad. Rau was provided with a passenger coach converted into a photographic car from which he photographed the engineering feats and picturesque scenery along the lines. He produced over four hundred negatives in five months on glass plates and also used a flexible celluloid film in a self-designed cameral to make panoramic prints. Many of his photographs were exhibited in the 1893 World’s Columbian Exhibition in Chicago.

Rau often favored elevated viewpoints, setting his camera on top of his railcar or at times building special platforms. His images were intended to promote the railroad and attract tourists and they often incorporate the tracks into scenic landscapes. In this elevated view of the *Morris Canal from Green’s Bridge, Lehigh Valley Rail Road*, Rau must have situated his camera on top of his railcar on a bridge to capture the river below.

**William H. Rau**
(American, 1855–1920), *Morris Canal from Green’s Bridge, Lehigh Valley Rail Road*, c. 1895, Albumen print, National Gallery of Art, Washington, Pepita Milmore Fund
In the 1870s, Henry Peter Bosse was appointed as a draftsman and cartographer for the Army Corps of Engineers and took part in a survey of the upper Mississippi River, from St. Paul, MN to St. Louis, MO. He produced over 350 negatives and printed blue cyanotypes that reveal both the natural state and human activity along the river, recording its transformation—via dams, dredging, and shoreline protections—into an industrial artery that could more easily transport goods and resources such as timber. Although Bosse’s purpose when making these photographs was documentary, the deep, rich blue of the works—a result of the chemical process used to create the images—suggests that he approached the landscape with an artist’s eye.

*Construction of Rock and Brush Dam, L. W.* depicts workers creating brush mat dams that would be weighted down with stones and placed along the shoreline for protection. Spurred on by the success of the railroad, which had reached across the continent and spanned the Mississippi by bridge in 1856, the Army Corps carried out improvements along the river to facilitate navigation.
William Henry Jackson is better known for his photographs of the western landscape. He served in the Union Army as staff artist and cartographer from 1862 – 1863. In the 1870’s Jackson served as the official photographer for Ferdinand Vandeveer Hayden’s Geological Survey of the Territories taking photographs of Wyoming that would help convince Congress to designate Yellowstone as a national park in 1872. Jackson brought the same eye for grandeur to the eastern landscape. His panoramic prints of sites such as the Mississippi River rival paintings in size and capture the scope of a majestic topography—even as it was being transformed by industrial activity.

Here he captures in panorama the river and shoreline of Natchez, MS in two plates that were nearly seamlessly combined to create one large image. The buildings along the shoreline and the working barge indicate the industrial activity on the river.
By the end of the nineteenth century, the aesthetic properties of photography began to be championed by photographer artists such as Alfred Stieglitz and his protégé Edward Steichen. They championed aesthetic concerns and believed that photographs should express a universal or poetic truth rather than a factual one thus opening the door for new approaches to landscape photography in the twentieth century.

William Henry Dow was a successful painter and art teacher influenced by contemporary French open-air painting and Japanese art. He took up photography in the 1880s and devoted himself to landscape studies, particularly around Ipswich, Massachusetts, where he established a summer art school. The field with balanced composition of a distant tree and haystacks could be anywhere and seems more atmospheric rather than documentary.
PHOTOGRAPHIC PROCESSES

Albumen Silver Print
Egg whites served as a favorite method for adhering silver to paper for photographic purposes in the late 19th century (1855 – 1895).

Ambrotype
Ambrotypes were made on a glass plate coated with a wet, light sensitive substance (collodion). When developed and dried, a negative image remained. The negative was mounted against a dark background or coated with a dark varnish to give the illusion of a positive.

Camera Obscura
The principles of optics that cause light coming into a dark room through a small hole to cast an inverted image on the far wall were recognized by the Chinese philosopher Mo-Ti in the 5th century BCE and by Greek philosopher Aristotle in the 3rd century BCE. Leonardo DiVinci described the camera obscura in his notebooks in 1490 and Renaissance artists made use of a portable box device for a drawing tool. In the 19th century efforts were made by artists and inventors to capture the projected image, leading to the development of photography.

Contact print
A photographic print made by placing a negative directly onto sensitized paper, glass, or film and illuminating it.

Cyanotype
One of the oldest and longest surviving photographic processes, the cyanotype or blue-print was invented by Sir John Herschel in 1840, using a mixture of ferric ammonium citrate and potassium ferricyanide to produce a light sensitive paper. The process required no development or fixing other than washing and was popular throughout the nineteenth century. It has also been widely used by engineers and architects for reproducing technical drawings ('blueprints').
Daguerreotype
In 1839, French chemist and artist Louis Jacques Mandé Daguerre presented the first practical process for permanently capturing the image seen in the camera obscura. Daguerre explained his process in front of a joint session of the Académie des Sciences and the Académie des Beaux-Arts in 1839, demonstrating a highly polished, silver-coated copper plate sensitized with iodine vapors, exposed in a large box camera, developed in mercury fumes, and stabilized (or fixed) with salt water or "hypo" (sodium thiosulphate). Each "Daguerreotype," as Daguerre dubbed his invention, was a unique image. Daguerre made the process available to the public, yet he retained a patent on the equipment needed to practice the new art. Daguerreotypes quickly became popular methods for both portraiture and scientific study.

Salted Paper Print A salted paper print or salt print is a photographic printing paper which is soaked in a salt solution and brushed in subdued light with a silver nitrate solution. The paper is then exposed under UV light. In 1834–1835, William Henry Fox Talbot (British, 1800–77) developed a process that produced a paper negative, from which photographic images on paper were printed. Popular until roughly 1860, early paper prints were made on high-quality writing paper, which gave the prints a matte surface with visible paper texture.

Stereographs
Introduced to the United States in the 1850s, stereography offered the illusion of three-dimensionality by mimicking the depth perception of the human eye: two photographs are made simultaneously side by side from viewpoints separated by a few inches—the approximate distance between two eyes—and then viewed through the lenses of a special device to come together as one image. Comparatively economical to buy, the stereo, more than any other photographic format, created a mass market for photographs of landscape views and allowed an “armchair traveler” to visually explore other parts of the country.

Tintype
The tintype was developed in 1853 using a similar technique to the ambrotype. Called a collodion process, this technique requires the photographic material to be coated, exposed, and developed on site. The tintype image, however, was mounted against a thin sheet of black-enamed iron instead of glass. Unlike earlier photographs, a tintype is unbreakable. It is not, however, printed on tin.

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