From Darkness to Light
Writers in Museums 1798-1898

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From Darkness to Light explores from a variety of angles the subject of museum lighting in exhibition spaces in America, Japan, and Western Europe throughout the nineteenth and twentieth centuries. Written by an array of international experts, these collected essays gather perspectives from a diverse range of cultural sensibilities. From sensitive discussions of Tintoretto's unique approach to the play of light and darkness as exhibited in the Scuola Grande di San Rocco in Venice, to the development of museum lighting as part of Japanese art's self-fashioning, via the story of an epic American painting on tour, museum illumination in the work of Henry James, and lighting alterations at Chatsworth, this book is a treasure trove of illuminating contributions.

The collection is at once a refreshing insight for the enthusiastic museum-goer, who is brought to an awareness of the exhibit in its immediate environment, and a wide-ranging scholarly compendium for the professional who seeks to proceed in their academic or curatorial work with a more enlightened sense of the lighted space.

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Cover image: Jacopo Tintoretto, The Adoration of the Magi, Scuola Grande di San Rocco, Venice (graphic elaboration by Pier Giovanni Possamai, The University of Venice, Ca' Foscari)
9. One Hundred Gems of Light: The Peale Family Introduces Gaslight to America

Burton K. Kummerow

In the spring of 1816, Rembrandt Peale was worried about the future of his new Baltimore Museum. He had come to town during the War of 1812 with big plans, determined to build an even better version of his father’s museum in Philadelphia. It was to be the first of its kind, a structure devoted entirely to fine arts and natural history. Peale wanted the bustling Baltimore seaport to enjoy ‘an elegant rendezvous for taste, curiosity and leisure.’¹

With miles of potential harbour and 50,000 souls, Baltimore, the third largest city in America, was sending its trading ships around the world. It was both an influential American centre for arts and culture and a tough, gritty seaport already known as ‘Mobtown.’ Rembrandt Peale’s building, designed by a Baltimore-born, self-trained architect Robert Carey Long, was the first in the western hemisphere built specifically as a museum. Unfortunately, finances were an issue from the start. The Peale Museum, still standing today near the City Hall with its neoclassical frieze and portico, was over budget. And there was another problem.

Peale opened his museum only two months before a large British army and fleet attacked Baltimore. The War of 1812, often called the

¹ Rembrandt Peale advertised his museum in local newspapers throughout 1816 and 1817. Peale’s Baltimore Museum and Gallery of Paintings is first advertised in the Baltimore Patriot, Volume 4, Issue 37, page 3, Tuesday, August 16, 1814.
‘Second American Revolution’ and fought between 1812 and 1815, featured the burning of Washington, D.C., in August of 1814. A few weeks later, there was an assault on Baltimore’s Fort McHenry with the intent of burning the city, and punishing the ‘nest of pirates’ that had been preying on British merchant shipping. Baltimore leaders assembled 10,000 American militiamen from Maryland and surrounding states to dig trenches and keep the British from getting into the inner harbour. In September, 1814, Baltimore volunteers, who had run from the British just weeks before, stood and bravely defended the city. They killed the British general, kept the British fleet out of the harbour, and created a song that became the National Anthem.

Rembrandt Peale, however, was a dedicated pacifist. He refused to volunteer for the 1814 defense of Baltimore and won few friends as a result. Two years later in 1816, he was still searching for ways to find customers for his museum and to pay his debts. Museums were still a new concept in America and the Peale family over three generations had not been noted for their business acumen. However, they were to become a major force in the creation of American arts and culture.

Rembrandt Peale’s father, Charles Willson Peale, was a humble saddle maker and self-taught painter from Annapolis, Maryland who discovered he had talent and convinced wealthy sponsors to send him to London in 1767. The young, homespun colonial was taught but also intimidated by a giant, cosmopolitan city and a successful American artist, Benjamin West, who had settled in England. After two years studying in London, twenty-seven-year-old Charles Willson tried unsuccessfully to sell prints of a clumsy portrait he painted of the famous Prime Minister William Pitt. He dressed Pitt as a Roman senator, and surrounded him with symbols that were designed to draw attention to a budding colonial rebellion in America that Peale supported. He also briefly decided he could best sell his talents in colonial America as a painter of miniatures.

Peale soon realized, however, that the English love of ‘conversation pieces,’ successful families painted at their leisure, would work in America. He painted a prototype, an iconic portrait of his family over several generations. The canvas includes a self-portrait with palette in

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2 This quote about Baltimore in the War of 1812 is well known and has been published in a variety of sources. There is some controversy if it is a contemporary term or was invented later.
hand overlooking his talented brother James, other family members, his first wife Rachel, his mother, the favorite family dog and some busts of worthies overlooking the proceedings. However, Charles Willson Peale’s career as an itinerant portrait artist blossomed only after he painted George Washington for the first time at age forty in his uniform from an earlier British imperial war. His friendship with Washington continued for more than three decades and he chronicled the American hero’s career as he became internationally famous. As his personal friend, Peale painted General Washington, a reluctant sitter, from life sixteen times, helping to make him the first great American hero. Peale was endlessly prolific and left behind a large body of work as one of the first truly American painters.

When Charles Willson Peale last painted the aging first president from life in 1795, he brought in several members of his family; the artist Gilbert Stuart commented that General Washington was being ‘pealed all around.’ Among the throng who captured the president’s image that day was seventeen-year-old Rembrandt Peale. He produced a brutally realistic painting, revealing the emerging skill that made Rembrandt perhaps the most talented portraitist in the family. Rembrandt’s ability is also demonstrated in his early portrait of his bespectacled brother Rubens, soon to be another player in the story of gaslight.

Charles Willson Peale and his sons were much more than painters. The endlessly curious Charles Willson was a pioneer in natural history. His experiments with the toxic chemicals of taxidermy almost killed him. His interest in horticulture consumed him. But it was in paleontology that he made his greatest contribution. A timeless record of his work, a painting portraying the exhumation of three mastodon skeletons in the Hudson River Valley in 1802, is one of the masterpieces of early American art now exhibited at the Maryland Historical Society in Baltimore. His large family is present to observe the bones emerging from a flooded pit, while an elaborate construction invented by Peale bails water from the pit with limited success.

As early as 1784, Charles Willson was also immersed in creating a museum to bring art and natural history collections to the public, as

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3 Richardson, Hindle and Miller, *Charles Willson Peale and His World*, p. 190
4 See https://en.wikipedia.org/wiki/Rubens_Peale#/media/File:Rembrandt_Peale_-_Rubens_Peale_with_a_Geranium_-_Google_Art_Project.jpg
5 Ibid., p. 85. See http://www.mdhs.org/digitalimage/exhumation-mastodon
well as to generate revenue for his perpetually cash-starved family. His first rented space was in the Pennsylvania State House, known to us today as Independence Hall, in the center of old Philadelphia. In one self-portrait late in life, known as *The Artist in His Museum*, the master showman seductively reveals his museum gallery, lifting the curtain on portraits of Revolutionary War heroes, stuffed animals and old bones. In the painting, one flabbergasted female guest is confronted with the centerpiece of the collection, a fully reconstructed Mastodon skeleton just visible under the curtain.

Lighting, however, was an issue both in the museums and on the streets of Philadelphia. *The Artist in His Museum* depicts the fashionable Swiss Argand lamp hanging from the ceiling of Peale’s museum, but another of his paintings, known as *The Lamplight Portrait*, depicts his brother James peering at one of his miniatures by the inadequate light of an Argand lamp. The inventive Benjamin Franklin had addressed ways to make eighteenth-century Philadelphia street lights more practical with a design including four flat glass panes and a long funnel to draw out the smoke; this kept the lights cleaner and brighter for longer and became adopted as standard. Tallow, pitch and oil, however, which were the main fuels, were smelly, smoked, flamed out too quickly and never adequately conquered the dark. Coal had provided heat for centuries but miners also recognized the dangers of burning coal gas, dangers that they described as choke and fire damp.

In England, William Murdoch had been experimenting with coal gas to light houses in Cornwall as early as the 1790s. Europeans continued these experiments and an 1808 public demonstration of gas street lights in Pall Mall, London, caused quite a stir. Politicians in England soon saw the value of gas lighting on dangerous and dark streets at night, although there were, of course, those who doubted this new technology. One contemporary English cartoon of a gas explosion blowing men into the air includes the comments, ‘We shall all be poisoned’ and ‘What a stink!’

The research and the progress, however, continued. Baltimore had its own pioneer in Benjamin Henfrey, a self-styled ‘philosophical exhibitor,’

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7 Ibid., p. 213. See https://www.the-athenaeum.org/art/full.php?ID=45597
8 Pennsylvanian Benjamin Henfrey is discussed in https://eh.net/encyclopedia/manufactured-and-natural-gas-industry/
who recommended gas-lit lighthouses to illuminate neighborhoods. But a daunting challenge remained: how could a company reliably generate enough energy to light a city?

Enter the intrepid Peale family, always looking for something new and interesting to support their artistic endeavours. Rubens Peale was the first member of the family to begin experimenting with gaslight, and it was he who had the idea that gas illumination in museum galleries might attract more visitors. His experiments in a Philadelphia neighborhood attracted the attention of the Philadelphia City Council, who threatened to arrest him for generating gas with an obnoxious smell. However, Rubens Peale’s plans received a boost from England in 1816 when Dr. Benjamin Kugler arrived in Philadelphia with a practical treatise on gaslight, describing how to generate carbonetted hydrogen gas from coal tar, an idea that he had patented. The rest of the family saw the potential of Kugler’s ideas, and Charles Willson Peale enthusiastically sketched the process in a letter to his daughter Angelica.9

By May, 1816, the Peales were attracting large, amazed crowds to their gas-illuminated gallery in Philadelphia.

Within a month, the Philadelphia Peales sent Dr. Kugler and his $6,000 patent to brother Rembrandt in Baltimore, where the young man was struggling to establish his Museum. The Baltimore Museum began advertising its own revolutionary illumination ‘without Oil, tallow, Wick or Smoke... every evening until the public curiosity be gratified.’ On June 11, 1816, Rembrandt Peale turned on the ‘carbonetted hydrogen gas’ and sparked the ring of ‘100 gems of light’ into action.10 The assembled guests and dignitaries were amazed. Rembrandt Peale and his history-making illumination attracted the visitors’ interest and curiosity, as he intended. The ring of light, however, probably attracted more attention as a parlor trick than the paintings on the walls, the cases of stuffed animals or even the mastodon skeleton that had been shipped down from his father’s Philadelphia museum.

All of Baltimore was fascinated and throngs showed up each night for months to pay a few pennies and gawk at the seemingly magical sight. As the mayor and other city leaders came and gaped, Rembrandt

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Peale had another idea. Why not light the dark and dangerous nights with gas streetlights? Why not form a new company to generate gas light in the growing city of Baltimore? Everyone would benefit, from the investors, to the citizens looking for a safe passage through the night.

Peale quickly found four other influential citizens of Baltimore and together, on 17 June 1816, they presented a plan to the mayor and city council. With enthusiastic support from all quarters, the Gas Light Company of Baltimore was chartered to ‘provide for the more effectual lighting of the streets, squares, lanes, and alleys of the City of Baltimore.’ By the following summer, the first gas streetlight and the gas-lit Baltimore Theater and Peale’s Museum illuminated Holliday Street as never before. The talented Rembrandt Peale and his family had brought new attention to his struggling museum and made history in the process.

Unfortunately, Rembrandt proved to be vain, self-indulgent and long on ideas but short on follow through. Within a few years, he had enough of Baltimore businessmen, bringing his brother Rubens in to run his museum and traveling to Italy to recover from his bad experience. First and foremost an artist, Rembrandt Peale had enthusiasm and vision but lacked the temperament and experience to create a long-term business. Rembrandt Peale continued pursuing his successful career as a portraitist, leaving his experiments in lighting behind. He dabbled in painting neo-classical subjects popular in the era, but to the end of his long life and into the era of photography, he remembered and marketed his earliest days as an artist, when he painted the first president, George Washington. For decades, he sold his many romantic porthole portraits of Washington, advertising his special honour of being the last surviving artist who had painted the now iconic founding father from life.

Rembrandt Peale had helped to create the first utility company in America with a showpiece designed to attract visitors to his museum. Although he focused on his past achievements as a painter, the Gas Light Company of Baltimore slowly grew and developed with the city where it was chartered. In the 1850s, the Company built Spring Gardens, in its day the largest gas manufacturing plant in America. The facility

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11 Kummerow and Blair, BGE at 200 Years, p. 37.
still operates after a century and a half, storing and distributing liquid natural gas.

The advent of electricity in the 1880s created fierce competition that often led to chaos in city streets. But the Gas Light Company of Baltimore conquered its competition and joined with new electric companies to become the Consolidated Gas Light and Electric Power Company of Baltimore in 1906, a regulated monopoly for most of the twentieth century. Consolidated was the direct ancestor of the present day Baltimore Gas and Electric Company (BGE), which celebrated 200 years in June 2016, America’s oldest utility and one of the country’s oldest companies. An influential early American family of artists brought light not only to their pioneering museums but also to the streets of American cities.