

MECHANICAL AESTHETICS: PICTURESQUE  
TOURISM AND THE TRANSPORTATION  
REVOLUTION IN PENNSYLVANIA

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*Abstract:* In the 1830s, Pennsylvania's Main Line of Public Works was at the cutting edge of the transportation revolution. Travelers embraced the speed and convenience of the line, but struggled to articulate the aesthetic experience of new forms of travel. This article uses the narratives of John Alonzo Clark, a Philadelphia minister, to explore the ways in which Pennsylvania travelers applied existing categories of the beautiful, the sublime, and the picturesque to innovative technological experiences. Clark and travelers like him found that mechanized transportation on the Main Line of Public Works heightened their experience of the landscape and distilled the older categories to their essence. Far from perceiving a tension between modern technology and landscape appreciation, these travelers found that together the two created novel and pleasurable aesthetic experiences.

Two familiar quotations about transportation technology in the United States in the first half of the nineteenth century beautifully represent the positive and negative responses to these momentous developments. In 1808 Secretary of the Treasury Albert Gallatin sent a report to Congress laying out plans for a federally funded system of national internal improvements. Gallatin made the case that "the inconveniencies, complaints, and perhaps dangers,

which may result from a vast extent of territory, can no otherwise be radically removed, or prevented, than by opening speedy and easy communications through all its parts. Good roads and canals, will shorten distances, facilitate commercial and personal intercourse, and unite by a still more intimate community of interests, the most remote quarters of the United States." The second quotation derives from Nathaniel Hawthorne's notebooks for July of 1844. Hawthorne was tarrying in a small valley near Concord, Massachusetts, which he called Sleepy Hollow, musing on ability of the peaceful scene and distant sounds of agricultural labor "metaphorically to convey something about a human situation." All of a sudden, though, his reverie was broken:

But, hark! there is the whistle of the locomotive—the long shriek, harsh, above all other harshness, for the space of a mile cannot mollify it into harmony. It tells a story of busy men, citizens, from the hot street, who have come to spend a day in a country village, men of business; in short of all unquietness; and no wonder that it gives such a startling shriek, since it brings the noisy world into the midst of our slumberous peace. As our thoughts repose again, after this interruption, we find ourselves gazing up at the leaves, and comparing their different aspect, the beautiful diversity of green.<sup>1</sup>

The developments that Gallatin promoted and Hawthorne mourned have been described by early American historians as the "transportation revolution." As identified by George Rogers Taylor in 1951, the transportation revolution involved a series of technological innovations, including turnpikes, steamboats, canals, railroads, and improved oceangoing ships. Since Taylor, historians have identified a range of economic, social, and cultural effects that emerged from new modes of transportation that were faster, cheaper, and more reliable than their late eighteenth-century predecessors. They have also traced a range of contemporary reactions to the transportation revolution, the poles of which are framed by Gallatin's and Hawthorne's positions. On the one hand, boosters like Gallatin, Mathew Carey, John C. Calhoun, and Henry Clay proclaimed the economic and political benefits that improved transportation would bring. Like them, historians have focused on the transportation revolution's structural effects. On the other hand, cultural critics like Hawthorne, Herman Melville, Walt Whitman, and even Mark Twain pointed out the social and aesthetic harm done by fire-eating iron beasts charging through the American landscape, as have historians who noted nineteenth-century American culture's

ambivalence about technology. The transportation revolution may have been economically beneficial, but it could be cruel and just plain ugly.<sup>2</sup>

However, these poles of opinion do not exhaust the range of contemporary reactions to the transportation revolution, because some nineteenth-century travelers and observers of travel declined this dichotomous formulation. For some passengers, the new transportation technologies of the nineteenth century did not just destroy cherished aesthetic experiences. They also created novel ones. For travelers who were less hostile to technology than Hawthorne and more concerned with sensory experience than Gallatin, the transportation revolution was a time of aesthetic possibility.

Analyzing the changing aesthetic reactions of early nineteenth-century travelers requires understanding the categories that they used to describe the landscapes they experienced. Beginning in the 1820s, and increasingly in the 1830s and 1840s, well-read Americans used the language of the picturesque to evaluate the aesthetic quality of their travel. They borrowed this concept from Britain, where, beginning in the late eighteenth century, a growing number of travelers had begun canvassing highways and byways in search of picturesque scenery. These largely middle-class travelers, who were increasingly labeled “tourists,” were constructing a cultural form that reflected their growing social refinement and powerful sense of British nationalism, particularly in opposition of the aristocratic practice of Grand Tour on the Continent. They produced countless “delineations in pen and pencil”—meaning written narratives of travel, and sketches and paintings of scenery—as part of a craze that lasted through the early decades of the nineteenth century. American readers were introduced to the hunt for the picturesque by the historical romances of Walter Scott, particularly *Waverly*, first published in the United States in 1815, and by Washington Irving, who integrated picturesque tropes into American stories in his *Sketch-Book of Geoffrey Crayon*, in 1819. They similarly received a visual education in picturesque scenery from the paintings of Thomas Cole and his followers in the Hudson River School, who, beginning in the 1820s, applied the rules of British picturesque landscape painting, practiced by painters like J. M. W. Turner, to American landscapes, particularly in upstate New York and New England. By the 1830s, culturally literate Americans had fully embraced the picturesque as a refined form of landscape appreciation.<sup>3</sup>

The specific qualities of a picturesque landscape remained murky even at the height of its popularity. William Gilpin, the most popular theorist of

the picturesque, argued that ideal scenery combined beautiful and sublime elements into a compositional whole as if framed in a painting. “The beautiful” and “the sublime” were categories that had been rigorously distinguished in 1757 by Edmund Burke, who analyzed them as opposing aesthetic experiences rooted in the emotions of love and fear. Burke’s philosophy was centrally concerned with the relationship between perception and emotion, and as a result, it was too sophisticated to be accessible to casual scenery hunters on either side of the Atlantic. But Gilpin, a committed popularizer, leached much of the complexity out of Burke’s thought. For Gilpin, the beautiful described that which was well formed and human-scale; the contemplation of the beautiful was essentially a humanizing and pleasurable experience. By contrast, the sublime was characterized by a combination of astonishment and terror, and necessarily turned the viewer’s thoughts to the almighty and the eternal. And the picturesque balanced the two in pleasing harmony. Gilpin’s definitions were profoundly vague and contextual, especially compared to the philosophical rigor of Burke. But the vagueness of the picturesque was precisely its power; in its popular usage, it could be applied to any appealing landscape and was a sufficiently capacious concept to describe the cultural ambitions of many and diverse travelers on both sides of the Atlantic.<sup>4</sup>

The picturesque was also a concept that Americans could and did apply to the experience of traveling using the latest modern technologies. To be clear, I am not describing travelers’ use of new technologies like canals, steamboats, and railroads merely to *access* the landscape. Plenty of observers celebrated these technologies as tools that brought ever-larger numbers of Americans into contact with the broad sweep of the continent; in “The Young American,” Emerson celebrated the railroad for “the increased acquaintance it has given the American people with the boundless resources of their own soil,” including aesthetic resources, leading to an increase in “American sentiment.” Neither am I describing Americans’ increasing tendency to integrate transportation technologies into their conceptions of picturesque landscapes. In the same 1844 essay, Emerson argued that the railroad “has introduced a multitude of picturesque traits into our pastoral scenery,” including grand infrastructure, the modest dwellings and bodies of railroad laborers, and the sense of “indefinite promise” that came with the railroad’s progress. Similarly, the prominent Hudson River School painter Thomas Cole began to integrate the railroad into images of his beloved Catskills in the 1840s, and even Thoreau integrated the sights and sounds of the Fitchburg Railroad into the landscape of Walden Pond in the 1850s. Instead, this essay analyzes travelers

like John Alonzo Clark, for whom riding on mechanized transportation was *in itself* an immersive aesthetic experience of landscape. Clark was an evangelical Episcopalian minister in Philadelphia who published a series of travel narratives in the early 1840s that mixed geographical observation, landscape description, and Christian moralization for his genteel urban audience. In these accounts, Clark fully embraced new transportation technologies for their ability to heighten his experience of the sublime, the beautiful, and the picturesque in previously unimaginable ways.<sup>5</sup>

In many ways, Clark was a man profoundly typical of his time and place. He was born in western Massachusetts in 1801 and his family moved to the booming frontier of Onondaga County, New York, in 1813. Clark was educated in several of the new private academies and colleges that were springing up to serve the upwardly mobile new population of upstate New York, including Fairfield Academy, Union College, and a branch of the Episcopal Theological Seminary in Geneva, which later became Hobart College. He was ordained in 1826, and like other evangelically inspired young ministers of his day he plunged into the work of conversion and church creation in the “burned-over district” of western New York. His success on the frontiers of the new evangelical religion led to a series of increasingly prominent positions in the pulpits of churches in New York, Providence, and Philadelphia in the late 1820s and early 1830s. He approached these positions with characteristic evangelical fervor, supporting Sunday schools, creating domestic missions, and aggressively expanding both the congregations and budgets of his churches. His professional ambition, combined with “his delicate and fragile appearance” and a personality that a later hagiographer described as “gentle, respectful, and manly,” led to a health crisis that would have appeared all but inevitable to any health practitioner versed in the ailments of northern professional men in the nineteenth century: he collapsed from nervous exhaustion in 1837.<sup>6</sup>

Clark’s doctors recommended what was a standard course of treatment for men suffering from exhaustion: an extended series of journeys that would allow Clark to rest and gather his strength. Nineteenth-century medical science emphasized the importance of salubrious climate, fresh air, clean mineral-rich water, and plentiful good food to overall health. Clark traveled in search of all of those things but, more specifically, because travel itself was thought to offer a peculiar combination of rest and stimulation that would relieve patients of the symptoms of exhaustion. Popular destinations for recuperative travel included the West and Europe; as befitted his social prominence, Clark chose both. In the summer of 1837 Clark made his way

westward through Pennsylvania and the Ohio River Valley as far as the Mississippi, but this trip did not rejuvenate him as his doctors had hoped. In November of that year, he sailed for Gibraltar for a year on the Continent and Great Britain. He returned reenergized in August of 1838 and continued his diverse ministerial labors until he fell sick again in 1842, leading to his death in 1843 at the age of forty-three. Regardless of the health value of these trips—and Clark's contemporaries clearly judged the European trip a success, if only temporarily—they were productive experiences for Clark's career as an author. In 1840 he published *Glimpses of the Old World* about his European travels, and in 1842 *Gleanings by the Way*, about his various domestic journeys. Although these narratives were unexceptional in content and style, they were successful enough to be published in Philadelphia, New York, and even London.<sup>7</sup>

In writing these books, Clark continued to adhere to the mainstream of contemporary refined culture. Given his vocation and his intended middle-class evangelical audience, he included more religious content than many travelers of his generation, but his books were nevertheless dominated by a typical combination of personal narration, social commentary, and picturesque description. Indeed, Clark may have felt some special claim to this formula, or at least the picturesque part of it, because, as his biographer later observed: "His childhood was passed on his father's farm, located upon the banks of the Housatonic River, in full view of most picturesque mountain scenery. He thus acquired, even in his boyhood, a love for the beautiful in nature, which distinguished his more mature years and added elegance and lustre to his discourses and written works." Thus, Clark set out on his travels in 1837 well prepared to deploy the language of the picturesque, and he proved remarkably willing to apply the picturesque formula widely, even to the cutting-edge transportation technologies that eased his journey.<sup>8</sup>

For a traveler open to novel aesthetic experiences, the Pennsylvania Main Line of Public Works offered the ideal route to the west. The Main Line was something of a Frankenstein's monster of internal improvements, in that it deployed a varied and idiosyncratic collection of transportation technologies in order to solve the geographical and fiscal challenges of connecting Philadelphia and Pittsburgh and thereby uniting the state's economy between east and west. It was born in haste in 1825, driven by a group of business and political leaders who were organized by Philadelphia publisher Mathew Carey into the Pennsylvania Society for the Promotion of Internal Improvements in the Commonwealth. These leaders were concerned that the imminent

opening of New York's Erie Canal would permanently realign western trade away from entrepôts of Pittsburgh and Philadelphia, and they argued that the only way to head off this threat was to immediately begin construction on a competing line of internal improvements designed to funnel trade between the Ohio Valley and the Atlantic seaboard through Pennsylvania. Unfortunately, Pennsylvania had the benefit neither of New York's geography nor of its extended planning process, so the resulting Main Line of Public Works, on which construction started in 1826, was an overly complicated and crushingly expensive alternative to the Erie Canal. The Main Line inaugurated an important link across Pennsylvania's mountainous interior, but it never effectively competed with the Erie Canal for the western trade.<sup>9</sup>

Even though it did not live up to the economic hopes of its promoters, the Main Line was a technological marvel when its full length was opened in 1834. The constraints of time and geography had forced the Main Line's engineers to adopt a number of novel solutions to the problem of modern transportation. The bulk of the route was covered by canal construction, built to the same general specifications as the Erie Canal. The Eastern Division Canal followed the Susquehanna from Middletown to the mouth of the Juniata River; the Juniata Division Canal followed that river west to Hollidaysburg; the Western Division Canal linked Pittsburgh and Johnstown via the valleys of the Allegheny, Kiskiminetas, and Conemaugh rivers. However, all this canal mileage left two critical gaps in the route: the connection between Philadelphia and the Susquehanna, and the connection between the Western Division Canal at Johnstown and the Juniata Division Canal at Hollidaysburg. Both remaining gaps posed enormous technical challenges, the former due to insufficient water resources for a full-scale canal, and the latter because the Allegheny Mountain loomed in between the two watersheds. Because the leaders of the canal effort felt intense pressure to complete the Main Line to compete with the already open Erie Canal, they did not want to take the time to reengineer the watersheds of the east or bore a heroic canal tunnel through the mountains of the west.<sup>10</sup>

Instead, the engineers of the Main Line turned to what was a novel technology in the early 1830s: railroads. The eastern connection, between Philadelphia and Columbia on the Susquehanna, was a fairly standard piece of early railroad engineering, with track laid on a graded right-of-way, traversed by carriages pulled by horses and small steam engines. The most innovative piece of engineering on the Philadelphia and Columbia Railroad

was the Belmont Plane, a half-mile incline that lifted the tracks up out of the valley of the Schuylkill River just west of Philadelphia. The grade was too steep for early railroad locomotive technology, so the railroad's engineers installed a stationary steam engine at the top of the slope that hauled the cars upwards by means of a cable. This same concept was applied on a much larger scale to the western problem of crossing the Allegheny Mountain. Engineers laid thirty-six miles of track over the mountain between Hollidaysburg and Johnstown, graded into ten separate incline planes that raised and lowered the cars more than a thousand feet over the pass. Each plane had two stationary steam engines to power the cables that lifted and lowered the cars, making the Main Line the largest American application of steam power to the problem of land transportation to date. The canals and the railroads were merged into one continuous route through the use of canal boats that could be taken apart into sections and loaded onto cars for the overland portions of the journey. Altogether, when the Main Line opened in 1834, it was a cutting-edge technological solution to the problem of bulk transportation, but its complexity meant that it was never profitable, and it fundamentally failed in its goal of competing with the Erie Canal. It did, however, give travelers between Philadelphia and Pittsburgh the opportunity to sample all the latest transportation advances along one route.<sup>11</sup>

John Alonzo Clark proved to be an enthusiastic user of the Main Line's technologies as he traveled west for his health in June of 1837. He appreciated the speed and comfort that they made possible but, more significantly, Clark subjected them to the same picturesque analysis that he had been trained to apply to scenery more generally, and by that measure he found them profoundly satisfying. The experience of riding on mechanized transportation repeatedly served to heighten and dramatize the beautiful and sublime aspects of the landscapes Clark traveled through. Perhaps the most commonplace of Clark's Main Line observations came while sliding slowly through the pastoral beauty of central Pennsylvania on the Eastern Division Canal, up the Susquehanna from Harrisburg to the mouth of the Juniata, on the packet boat *Swatara*. Canal travel was extremely slow, smooth, and almost silent, which Clark found to be an experience "of calm—quiet beauty" that "awakened somewhat of a romantic feeling as we sat down to our tea, borne quietly along." He described a sense that "the rural beauties . . . clustered thick around us," surrounding the boat in a cloud of immediate and direct aesthetic experience transmitted as sight, sound, and smell. The cool evening



air came in through the *Swatara*'s open windows, and out one window, Clark observed, "almost within reaching distance, the road passed along just under the brow of a very precipitous hill, whose top peered up amid the clouds." Out the opposite side of the boat lay "the expanded Susquehanna: and beyond this beautiful stream one bluff and lofty range of hills rising up after another, [which] gave to that side of the river the aspect of continuous mountain scenery." The boat itself receded from Clark's awareness as he was drawn from his tea table out into the Gilpinesque picturesque landscape. The leisurely pace and quiet movement of canal travel heightened, distilled, and made more immediate the aesthetic experience of the picturesque as embodied by the pastoral farmland and mountain ridges of central Pennsylvania—at least as long as the canal was functioning properly.<sup>12</sup>

As day drew to a close, the *Swatara* arrived at the terminus of the Eastern Division Canal opposite Duncan's Island. At this point, canal boats entered the waters of the Susquehanna itself, in a large, relatively calm pool created by the construction of a long dam. They used this still water to cross to



**FIGURE 1:** A picturesque rendition of the Pennsylvania Canal. Russell Smith (1812–96), *Aqueduct of the Pennsylvania Canal below Harrisburg, PA* (1868). *Source:* Oil on canvas; 23 × 35.5 inches. Collection of the Westmoreland Museum of American Art, Gift of the William A. Coulter Fund.

the western shore of the river, where they entered the mouth of the Juniata Division Canal to continue their journey westward. Boats usually made the crossing by being drawn from a towpath that spanned the river on the first Clark's Ferry Bridge, but during that June the bridge was in disrepair, forcing canal boats to attach themselves to a cable strung across the river and cross by means of the current. The *Swatara* reached this difficult passage just as a storm poured down through a gap in the mountains. The storm itself, with sudden thunder, lightning, and torrential rain, was startling enough. "The transition from the quiet scene through which we had been passing, to one of storm and tempest, was sudden and unexpected," Clark recorded, and as a result there "was a sublimity and awful grandeur that gathered around that hour and spot, which I shall not soon forget." The effect of the sudden shift from the beautiful to the sublime was heightened by its timing, since it arrived at precisely the moment that the canal's technology failed. Once out in the stream, the "waters seemed rough and threatening, and many of the passengers felt a sense of great insecurity. To many on board, though I presume there was no danger, it was a moment of deep and awful suspense." Clark's thoughts turned immediately to the Almighty and to death, as he teased out the metaphorical implications of a long, leisurely, pleasurable day ended by a moment of terror, destruction, and overwhelming power—a sublime moment indeed. The immediacy of aesthetic experience on board the *Swatara*, which delivered its passengers from an immersive experience of the beautiful to one of the sublime in just a few moments, heightened Clark's appreciation of central Pennsylvania's picturesque qualities to an exquisite pitch.<sup>13</sup>

If canal packets like the *Swatara* fostered an immediate, direct, and multi-sensory encounter with the picturesque by gliding their passengers through the landscape, then steamboats enhanced the passing riverbanks by insulating their passengers and heightening the contrast between indoors and out. Leaving Pittsburgh on board the *Elk*, Clark anticipated the trip down the "*the beautiful river*, as the name Ohio denotes." The river did not disappoint; Clark was fully engaged with the scenery along the banks of the Ohio. He liked how the river's winding course cut the scenery "in distinct sections, each section resembling a beautiful little lake, surrounded by its own sweet and peculiar scenery—shut in by its verdant and variegated banks and wood-covered hills, and ornamented by one or two, and often several little green islets, around which the parted waters wind romantically." But unlike on the canal boat, the scenery did not pour in around Clark; instead, it passed before him like a panorama while he relaxed in the boat's comfortable cabin. Clark associated

this experience with “luxury,” and he mused that, “I know of nothing more delightful than to sit at one’s ease, and be wafted down such a beautiful stream as this, winding its graceful and circuitous way through groves and grass-covered fields, and beauteous woodland scenes.” From “a sheltered nook in the cabin,” Clark watched the river unfold before his eyes, which “made [his heart] throb with gratitude to the glorious Framer of this garnished and goodly scene!” The scale of the river, the size and speed of the boat, and particularly the accommodations that it offered to prosperous passengers like Clark, all served to isolate him from the landscape, an effect that he associated with luxurious contemplation. Although riding on a steamboat created a very different sensory environment from riding on a canal boat, in both cases the technology served to heighten the aesthetic experience.<sup>14</sup>

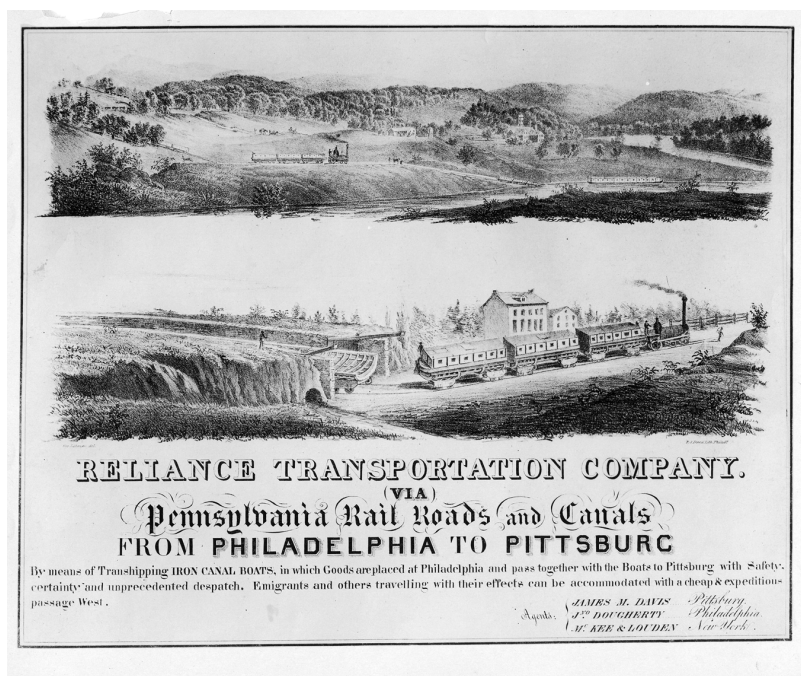


FIGURE 2: Transporting canal boats by train on the hybrid system of the Pennsylvania Main Line of Public Works. George Lehman (d. 1870), *A Reliance Portable Boat Company's Line of Portable Iron Boats for the Transportation of Goods between Philadelphia and Pittsburgh* (ca. 1840). Lithograph; 11 × 17.5 inches. P. S. Duval, printer. Image courtesy of the Historical Society of Pennsylvania, call# Bb 67 L 528.

By 1837, observing the scenery passing the window of a boat was not a particularly novel experience on the inland waterways of North America. But the more technologically advanced links of the Main Line gave Clark opportunities for a broader range of immersive sensory experiences of landscape. Once the *Swatara* had ascended to the head of the Juniata Division Canal, Clark boarded the cars of the Allegheny Portage Railroad for his journey over the pass to Johnstown. On the Allegheny Mountain he “found the scenery altogether of a new, wild, and more rugged cast.” As he left behind the bucolic river valleys traced by the canals, the Pennsylvania picturesque became more thoroughly sublime. This experience of sublimity was made more vivid and immediate by the rapid vertical motion of the incline railroad. “Our ascent amid these vast summits,—the wonderful velocity with which we were borne—the ease with which we seemed to move through the gaps of the mountains, and over the tops of these everlasting hills—surrounded at every step by the most picturesque and gigantic elevations, appeared like the effect of enchantment,” he exulted. As his “train of cars still flew upward till we reached the very tops of the mountains of wilds and fastnesses that stood in such majestic grandeur around us,” he felt the “invigorating and exhilarating influence” of the mountain atmosphere and a “new buoyancy” of the spirit in response to “the majestic scene that stretched around us.”<sup>15</sup> At its most developed, Pennsylvania’s advanced transportation technology could flood all of Clark’s senses with sublimity. Mountain vastnesses were a common sublime sight for seasoned travelers like Clark, but soaring upwards through these vastnesses, pulled by the power of steam, brought the sublime to the point of spiritual ecstasy.

As Clark’s “new buoyancy” of the spirit suggests, his experience on the Allegheny Portage Railroad began to move out of the category of aesthetic enhancement and into the category of aesthetic innovation. Speeding up the incline did not just enhance the sublimity of the Allegheny Mountain, it propelled Clark into a new, “enchanted” realm of existence. Indeed, this was the ultimate power of the new transportation technologies for Clark. Because they moved so quickly and in such novel ways, they had the power to create distilled aesthetic experience, a kind of pure immersion in the sublime or the beautiful, abstracted from a specific landscape. Perhaps the best example of this kind of innovation occurred when Clark rode the Philadelphia and Columbia Railroad, the first leg of his journey. “There is something very exhilarating in the act of being borne through a beautiful country at the rate of fifteen miles an hour,” he recorded. “As we passed along from the city, one varied, and verdant scene of all that is lovely in hill and dale, forest and field, orchard and farm-house,



presented itself in quick succession after another—filling up the whole way with images as beautiful and varied as are brought to the eye by every turn of the kaleidoscope.” The rapidity and smoothness of train travel, which allowed Clark to “skim over the surface of the ground with the fleetness of the wind,” created a fundamentally different aesthetic experience than what he later dismissed as the “common stage coach.”<sup>16</sup> The railroad moved scenery by the window of the coach so quickly that it all began to blur together into a “varied, and verdant scene of all that is lovely in hill and dale,” a distillation of the aesthetic experience of landscape into its component parts. Burke and Gilpin had taught British and American travelers to identify and analyze discrete picturesque scenes, each one of which had a unique combination of beautiful and sublime components, and each of which needed to be “[delineated] in pen and pencil.” But for



FIGURE 3: Incline plane railroad on the Pennsylvania Main Line of Public Works. John Caspar Wild, *View from the Inclined Plane, near Philadelphia* (1840). Lithograph; 6.5 × 7.25 inches. J. T. Bowen, Philadelphia, printer. Image courtesy of the Library Company of Philadelphia.

Clark, travel by railroad distilled the landscape into a pure experience of the picturesque, moving the appreciation of landscape into a new sensory plane.<sup>17</sup>

Such exuberant aesthetic musings from the windowsills of railroad cars beg an important concluding question: how common were travelers like John Alonzo Clark during the early years of the transportation revolution? Comparing Clark's picturesque appreciation to that of his more famous contemporaries reveals that his unequivocal enthusiasm for the aesthetic innovation of mechanized transportation was unusual. When literary figures addressed the subject in print, they often struck a chord of studied ambivalence that sought to acknowledge the picturesque qualities in American scenery while expressing skepticism about the effects of new technology. For example, Nathaniel Hawthorne, who opened this essay bemoaning the disruptive intrusion of a train into a moment of pastoral revelry, dismissed the Erie Canal in 1835 as "an interminable puddle" that "holds its drowsy way through all the dismal swamps and unimpressive scenery, that could be found between the great lakes and the sea-coast." He conceded that there might be "variety enough, both on the surface of the canal and along its banks, to amuse the traveller, if an overpowering tedium did not deaden his perceptions." He gamely attempted a Clark-like description of the view from the boat, before concluding that it "sounds not amiss in description, but was so tiresome in reality, that we were driven to the most childish expedients for amusement." Contrary to Clark's experiences, Hawthorne found that canal boats ruined the picturesque potential of upstate New York.<sup>18</sup>

Harriet Beecher Stowe shared Hawthorne's distaste for canal travel in an essay she wrote for *Godey's Lady's Book* in 1841, although she contrasted "prosaic and inglorious" Pennsylvania canal boats to the "well-built, high-bred steamboat." "There is something mysterious, even awful, in the power of steam," and "there is something picturesque, nay, almost sublime, in the lordly march" of an Ohio or Mississippi river craft. For Stowe, as for Clark, this ominous shiver was enhanced by being on board the steamboat, for "when we are down among the machinery of a steamboat in full play, we conduct ourself [*sic*] very reverently, for we consider it as a very serious neighborhood; and every time the steam whizzes with such red-hot determination from the escape valve, we start as if some of the spirits were after us." But Stowe failed to find a similarly enhanced sense of the picturesque on the Western Division Canal traveling east from Pittsburgh, because "in a canal boat there is no power, no mystery, no danger; one cannot blow up, one cannot be drowned, unless by some special effort: one sees clearly all there is in the case—a horse, a rope, and a muddy strip of water—and that is all." The

sheer human simplicity of a canal packet made it a poor amplifier of aesthetic experience. Unlike Clark, who found sensory stimulation in every mode of transportation, Stowe drew distinctions between those that ennobled the landscape and those that rendered it quotidian.<sup>19</sup>

Perhaps the most famous writer to travel on the Main Line of Public Works was Charles Dickens, who recorded his journey from Baltimore to Pittsburgh via Harrisburg in his *American Notes for General Circulation* in 1842. Like Stowe and Hawthorne, Dickens discriminated between different landscapes and different modes of travel when making aesthetic judgments, but he arrived at different conclusions about their relative values. Throughout his journey, he was unimpressed by the “lordly march” of steamboats, and he did not perceive any sensory enhancement from their progress. Instead, his attention was captured by the mechanics of the boat’s movement and by the appearance and customs of its passengers. But along the Main Line, Dickens was more thoughtful about the relationship between his mode of travel and the landscapes he passed through. Unlike Clark, he was not universally enthusiastic. He found the scenery alternatively “sad and oppressive” and “bold and striking.” The rough newness of Anglo-American settlement in central Pennsylvania offended Dickens’s aesthetic sensibilities and generally depressed him. His “eye was pained to see the stumps of great trees thickly strewn in every field of wheat, and seldom to lose the eternal swamp and dull morass, with hundreds of rotten trunks and twisted branches steeped in its unwholesome water.” His impression of Harrisburg was of “feeble lights, reflected dismally from the wet ground, [which] did not shine out upon a very cheerful city.” The region’s utilitarian transportation technology sometimes heightened this sense of dismal foreboding. Dickens particularly disliked covered bridges; riding into Harrisburg in a covered structure “nearly a mile in length,” he felt like he “was in a painful dream.” The bridge “was profoundly dark; perplexed, with great beams, crossing and recrossing it at every possible angle; and through the broad chinks and crevices in the floor, the rapid river gleamed, far down below, like a legion of eyes. We had no lamps; and as the horses stumbled and floundered through this place, towards a distant speck of dying light, it seemed interminable.” A covered canal aqueduct in Pittsburgh was also “a dreary place,” which “was stranger than the bridge at Harrisburg, being a vast low wooden chamber full of water.” The rawness of the Pennsylvania landscape undermined its picturesque possibilities, and similarly raw transportation technologies only added to Dickens’s sense of oppression.<sup>20</sup>

But his trip was not entirely an extended nightmare, because he also encountered the picturesque, and technology that heightened aesthetic pleasure. Like Clark, Dickens found that the leisurely pace and relative silence of canal travel enhanced his sense of immersion into the landscape. He found “the lazy motion of the boat, when one lay idly on the deck, looking through, rather than at, the deep blue sky; the gliding on, at night, so noiselessly, past frowning hills, sullen with dark trees, and sometimes angry in one red burning spot high up, where unseen men lay crouching around a fire; the shining out of the bright stars, undisturbed by the noise of wheels or steam, or any other sound than the liquid rippling of the water as the boat went on” to be “pure delights.” And also like Clark, Dickens was impressed by the experience of riding the Allegheny Portage Railroad. “It was very pretty travelling thus,” he recorded, “at a rapid pace along the heights of the mountain in a keen wind, to look down into a valley full of light and softness: catching glimpses, through the tree-tops, of scattered cabins . . . and we riding onward, high above them, like a whirlwind.” Dickens expressed himself more eloquently and at greater length than did Clark, but he arrived at the same essential conclusion, which is that the experience of riding on the technology of the Pennsylvania Main Line could and did enhance the aesthetic experience of landscape.<sup>21</sup>

The main difference between Clark’s account of modern travel and those of his more famous contemporaries was the boundless enthusiasm with which he approached his subject. Ultimately, Clark’s indiscriminate attitude may have had its roots in his relative lack of aesthetic sophistication. As a busy evangelical minister who devoted his time to the salvation of souls and the creation of churches, Clark’s engagement with picturesque landscape was drawn more from his childhood on the banks of the Housatonic than from the rigorous philosophy of Edmund Burke. He was excited to be on the road, away from his daily cares, and, as a result, every experience was fresh and stimulating. Indeed, travelers like Clark found the loose, flexible language of Gilpin’s picturesque so appealing exactly because it allowed them to express the excitement of novel sensations derived from the landscape. On the other hand, travelers like Hawthorne, Stowe, and Dickens, who had much more experience articulating aesthetic ideas, approached mechanized transportation with a more discriminating attitude that led them to distinguish between certain technologies that enhanced the landscape and others that detracted from it. It was precisely this flexibility in the popular language of the picturesque that allowed some travelers to find modern technology aesthetically stimulating. Nineteenth-century Americans were not only pulled between the world of the garden and the world of the machine, as Leo Marx has suggested. Sometimes, the machine made the garden better.



## NOTES

1. Albert Gallatin, *Report of the Secretary of the Treasury on the Subject of Public Roads and Canals* (Washington, DC: William A. Davis, 1816), 19; Hawthorne quoted by Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964), 12–14.
2. For the origins of the transportation revolution paradigm, see George Rogers Taylor, *The Transportation Revolution, 1815–1860* (New York: Holt, Rinehart and Winston, 1951). For an influential modern treatment of the structural effects of the transportation revolution, see Daniel Walker Howe, *What Hath Got Wrought: The Transformation of America, 1815–1848* (New York: Oxford University Press, 2007), 203–42. The theme of American ambivalence about technology finds its roots in Marx's *The Machine in the Garden* and has been developed by John Kasson's *Civilizing the Machine: Technology and Republican Values in America, 1776–1900* (New York: Penguin, 1977), among others.
3. See James Buzard, *The Beaten Track: European Tourism, Literature, and the Ways to "Culture," 1800–1918* (New York: Oxford University Press, 1993); Malcolm Andrews, *The Search for the Picturesque: Landscape Aesthetics and Tourism in Britain, 1760–1800* (Stanford, CA: Stanford University Press, 1989); Beth L. Lueck, *American Writers on the Picturesque Tour* (New York: Garland, 1997), and Richard Gassan, *The Birth of American Tourism: New York, the Hudson Valley, and American Culture, 1790–1830* (Amherst: University of Massachusetts Press, 2008).
4. Burke's concepts of sublime and beautiful were key concepts in bringing the philosophy of aesthetics into the era of the Enlightenment: *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and the Beautiful* (London: J. Dodsley, 1787) and Koen Vermeir and Michael Funk Deckard, eds., *The Science of Sensibility: Reading Burke's Philosophical Enquiry* (New York: Springer, 2012). By contrast, William Gilpin was generally less succinct and less precise in theorizing the picturesque; he defined it in multiple contexts and in various ways. See for example, his *Remarks on Forest Scenery, and Other Woodland Views (Relative Chiefly to Picturesque Beauty)* (London: R. Blamire, 1791) and *Three Essays: on Picturesque Beauty; on Picturesque Travel; and on Sketching Landscape; To Which is Added a Poem, on Landscape Painting* (London: R. Blamire, 1792). For more on the picturesque in the context of eighteenth-century British aesthetic theory, see Walter John Hipple Jr., *The Beautiful, the Sublime, and the Picturesque in Eighteenth-Century British Aesthetic Theory* (Carbondale: Southern Illinois University Press, 1957); Carl Paul Barbier, *William Gilpin, His Drawings, Teaching, and Theory of the Picturesque* (Oxford: Clarendon Press, 1963), chap. 8; and Andrew Ballantyne, *Architecture, Landscape and Liberty: Richard Payne Knight and the Picturesque* (Cambridge: Cambridge University Press, 1997), chaps. 6–7.
5. Ralph Waldo Emerson, *The Young American: A Lecture Read before the Mercantile Library Association in Boston at the Odeon, Wednesday, February 7, 1844* (London: John Chapman, 1844), 4–6; Alan Wallach, "Thomas Cole's 'River in the Catskills' as Antipastoral," *Art Bulletin* 84 (2002): 334–50; and Henry D. Thoreau, *Walden; Or, Life in the Woods* (Boston: Ticknor and Fields, 1854) 121–39. For more on the sublime qualities of technological innovation, see David E. Nye, *American Technological Sublime* (Cambridge, MA: MIT Press, 1994).

6. Wilbur F. Paddock, *Half-Century of Church Life: Semi-Centennial Commemoration of St. Andrew's Church, Philadelphia. Together with Sketches of the Church and Its Rectors*. (Philadelphia: M'Calla & Staveland, 1873), 84, 67.
7. Ibid., 84–87. See also Cindy S. Aron, *Working at Play: A History of Vacations in the United States* (New York: Oxford University Press, 1999), 16–23. Clark's course of treatment anticipated both the European travel prescribed by doctors like George Mitchell Beard and the "west cure" advocated by S. Weir Mitchell in the late nineteenth century. See George M. Beard, "Cases of Neurasthenia (Nervous Exhaustion), with Remarks on Treatment," *St. Louis Medical and Surgical Journal* 26 (1879): 355–56; Jennifer S. Tuttle, "Rewriting the West Cure: Charlotte Perkins Gilman, Owen Wister, and the Sexual Politics of Neurasthenia," in *The Mixed Legacy of Charlotte Perkins Gilman*, ed. Catherine J. Golden and Joanna Schneider Zangrando (Cranbury, NJ: Associated University Presses, 2000), 103–21; and Barbara Will, "The Nervous Origins of the American Western," *American Literature* 70 (1998): 293–316.
8. Paddock, *Half-Century of Church Life*, 65.
9. For more on Philadelphia's "urban imperialism," see Andrew Heath, "The Public Interest of the Private City: The Pennsylvania Railroad, Urban Space, and Philadelphia's Economic Elite, 1846–1877," *Pennsylvania History* 79 (2012): 177–208.
10. See Julius Rubin, "An Imitative Public Improvement: The Pennsylvania Mainline," in *Canals and American Economic Development*, ed. Carter Goodrich (New York: Columbia University Press, 1961), 67–114.
11. Ronald E. Shaw, *Canals for a Nation: The Canal Era in the United States, 1790–1860* (Lexington: University Press of Kentucky, 1990), 65–75.
12. John Alonzo Clark, *Gleanings by the Way* (Philadelphia: W. J. and J. K. Simon, 1842), 27–28.
13. Ibid., 28–29.
14. Ibid., 50–51, 53–54; emphasis in original.
15. Ibid., 33.
16. Ibid., 26, 202.
17. Clark's description of the distilled picturesque is strikingly similar to the "panoramic" perception that Wolfgang Schivelbusch has identified in the accounts of European railroad passengers in the middle of the nineteenth century. Clark's panoramic language suggests that Schivelbusch's claim that the "history of American transportation . . . can only be understood in terms of an immediate relationship to nature which is not aesthetic but economic" is not borne out by the experiences of actual American travelers. See Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century* (Berkeley: University of California Press, 1986), 52–69, 92.
18. Nathaniel Hawthorne, *Memoir of Nathaniel Hawthorne* (London: H. S. King and Co., 1872), 209, 213.
19. Roger W. Hecht, *The Erie Canal Reader, 1790–1950* (Syracuse, NY: Syracuse University Press, 2003), 96–97.
20. Charles Dickens, *American Notes for General Circulation*, vol. 2 (London: Chapman and Hall, 1842), 35, 36, 48, 63, 66. For more on Dickens in Pennsylvania, see Jane S. Cowden, "Charles Dickens in Pennsylvania in March 1842: Imagining America" in *Pennsylvania History* 81 (2014): 51–87.
21. Dickens, *American Notes*, 62, 65.