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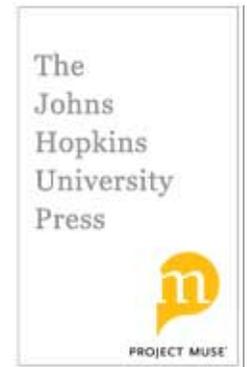
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Machine, Monument, and Metropolis: New York's Pennsylvania Station

At the Hagley Museum and Library

ALBERT J. CHURELLA

New York's Pennsylvania Station constituted one of the great architectural and engineering milestones of the twentieth century; its destruction was an irreparable loss, albeit one that gave momentum to the emerging historic preservation movement. *Machine, Monument, and Metropolis: New York's Pennsylvania Station*, appearing at the Hagley Museum and Library in Wilmington, Delaware, from October 2003 to January 2005, echoes Penn Station's grandeur while rewarding the studious visitor with an appreciation for the station's broader technological, political, and social significance.

Unlike the New York Central, with its water-level route into the heart of Manhattan, the Pennsylvania Railroad stopped on the New Jersey side of the Hudson River, obliging passengers to transfer to ferries for the remainder of their journey. The PRR's president, Alexander J. Cassatt, whose penchant for grandiose engineering projects led to the quadruple-tracking of the railroad's main line between Philadelphia and Pittsburgh, gave his assent to the construction of an all-rail "Manhattan Gateway" into the heart of New York City. The project, announced in 1901 and completed in 1910, included a new rail line across the New Jersey Meadows, tunnels under the Hudson and East Rivers, a coach yard for PRR and Long Island Railroad commuter trains at Sunnyside in Queens, the Hell Gate Bridge over the East River (a massive project in its own right, and one that was not completed until 1917), and, of course, Penn Station itself. That the project was a tech-

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FIG. 1 Visitors admire the intricately detailed HO-scale model of Penn Station, circa 1929. (All photos courtesy of the Hagley Museum and Library.)

nological marvel is beyond dispute; less clear is whether there was any convincing economic justification for this hundred-million-dollar expenditure. Though far more than a mere publicity stunt, the station embodied managerial efforts to convince the public that railroads were modern, progressive, and hardly in need of additional government regulation.

Visitors approach the exhibit in a nostalgic frame of mind, as the hallway leading to the single gallery is lined with advertising posters from the golden age of postwar rail travel. They enter the exhibit gallery through a set of reproduction Penn Station platform gates, an electric eye triggering departure announcements for crack streamliners. Once inside, they can scarcely miss an enormous (approximately seven feet by thirty feet) HO-scale (1:87) model of the station (fig. 1). Amateur PRR enthusiasts and modelers devoted countless hours of research and craftsmanship to this model. Throngs of commuters, travelers, and railroad workers buy tickets, board trains, hail cabs, and surge through the cavernous, vaulted galleries. Automatically controlled Long Island Railroad commuter trains and long-distance PRR limiteds arrive and depart from the station's underground platforms. Miniature reproductions of the murals in the general waiting room attest to the artistry of the station's construction and to the vast reach of the Pennsylvania Railroad network. Cutaways allow visitors to see the complexity of the substreet support columns and the distinctive steel arches and skylights over the concourse (fig. 2). Greatly simplified models of the adjoining Post Office Building and Hotel Pennsylvania reinforce the imposing size of the station and show how railroads transported the mail and provided first-class hotel accommodations for travelers. In an age



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FIG. 2 Penn Station's Seventh Avenue and Thirty-Third Street façade reflected president Alexander Cassatt's vision for a grand public space and concealed vice president Samuel Rea's efficient underground transportation machine.

when fewer and fewer people have clear recollections of the actual Penn Station, this impressive model goes a long way toward evoking the majesty and complexity of a now vanished architectural treasure.

It is perhaps appropriate that this one display dominates the entire exhibit. After all, contemporary accounts and nostalgic remembrances have often lavished attention and praise on Penn Station itself, while largely ignoring the technological, political, and social forces that made that building possible. Fortunately, the Hagley staff has augmented the volunteers' model with eight maps, six plans, twenty-three pieces of ephemera (chiefly posters and timetables), and 117 photographs, mostly from the Hagley's superb collection, thus providing a broader context for the model. Most of the early photographs are staged publicity shots, since, despite Penn Station's iconic status, few images of everyday station scenes exist. Similarly, most three-dimensional artifacts were destroyed along with the station, or are too large to display, or are in the hands of private collectors; aside from the station model, only one small model electric locomotive and a few reproduction gates grace the exhibit.

As the visitor circles the gallery in a clockwise direction, sections of the exhibit illuminate periodic episodes in the station's construction and destruction. "Rivalry in Red and Green" and "A Grand Project Takes Shape" discuss the rivalry between the PRR and the New York Central as an impetus for construction. There is little mention of the PRR's other massive, simultaneous civil engineering projects, and none at all of local politics,

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FIG. 3 Penn Station's main concourse, which the noted New York architectural firm of McKim, Mead and White intended to resemble a Roman bath and to reflect elements of European railway station design.

regulatory pressures, the PRR's engineering culture, or earlier efforts to establish rail access to Manhattan (such as the fantastically impractical Hudson River Bridge proposals). The exhibit distinguishes between the readily identifiable aboveground structure and the more prosaic, and far more practical, subterranean warrens of tunnels, switches, and signals (fig. 3). That Cassatt was able to so thoroughly imprint his elitist vision on the station's architecture testifies to his dominance over the nation's largest transportation enterprise, just as vice president Samuel Rea's dogged technical expertise typified the PRR's engineering ethos.

Still, the exhibit makes this contrast a little too stark. Cassatt may have been an elitist, and may have shared the artistic sensibilities of his sister Mary, but many railroads in both North America and Europe created impractical monuments to their own grandeur; Cassatt may have simply been more publicly flamboyant in his exuberance. Rea and his colleague George Gibbs were talented engineers, but the PRR and other railroads often groomed future presidents by subjecting them to the acid test of a major construction project. Rather than discuss Cassatt and Rea in oil-and-water terms, the exhibit might have depersonalized this dichotomy and instead emphasized the PRR's overall evolution from an ad hoc, entrepreneurial transportation company to a more efficiently and rationally managed transportation system.

“A New Architecture” ably ties Penn Station’s design to the City Beautiful movement, the 1893 Columbian Exposition, the 1904 St. Louis World’s Fair, and European railway practice. Cassatt’s 1901 visit to the Gare du Quai d’Orsay in Paris influenced the designs of noted architectural firm McKim, Mead and White. The exhibit accurately describes a “return to Classical and Renaissance forms,” but it engages in misleading hyperbole when it suggests that “the station sat aloof in a city based on moneymaking, a magnificent gift to the people.” “Dig We Must” highlights tunnel construction, but could have provided additional material on complimentary advances in tunnel-building technology.

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“Steel and Electricity” demonstrates how technological innovations such as electrification, automatic signals, and steel passenger-car construction enabled the Manhattan Gateway, yet do not indicate how these innovations spread to other parts of the PRR system, or to other railroads. To take steel cars as one example, this innovation is not placed in its appropriate cultural context. Railroads had long understood that the use of iron and steel in railway cars entailed certain economic advantages (principally longevity) and disadvantages (cost of initial construction and weight considerations). Modern-day visitors cannot appreciate the nontechnological forces that led to steel passenger cars unless they understand the pervasive and well-founded public fear, a century ago, of collisions, fires, “telescoping,” and other dreadful calamities. Unfortunately, such public concerns are absent from the exhibit. Nor does it show how public policy increasingly mandated such safety innovations, irrespective of the “progressive” attitudes of PRR executives.

“Organizing Space, Time and Movement” attests to the skill of McKim, Mead and White in efficiently moving passengers through four separate station levels to reach platforms that lay well below the surface of the street. Commendably, “Upstairs, Downstairs” reflects well-known trends in architectural history, showing how the station’s design reflected turn-of-the-century attitudes regarding class and gender. The formal dining room fed the affluent and also contained a “ladies’ café,” while a lunch counter served single, male travelers. And, just as servants’ quarters were in the attic, Penn Station’s support personnel were kept carefully segregated from the traveling public. The arcade shops catered to the elite tastes of a small fraction of the station’s clientele, but left unsatisfied more prosaic commercial requirements. Clearly, Penn Station accommodated the masses, but catered to the elites.

“Riding the Limiteds” is designed to illustrate the extent to which the station’s soaring architecture favored the needs and tastes of a small number of elite patrons. Unfortunately, it also perpetuates for uninformed visitors the romantic notion that every American could afford to travel in luxurious comfort. Even though commuters comprised more than two-thirds of the station’s users (and fifty-four out of sixty-six million in the depres-

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sion year of 1930), “The Nine-to-Five Crowd” occupies far less space. The exhibit does indicate the spartan nature of the Long Island Railroad facilities, showing that the Manhattan Gateway “sparked a suburban building boom” without allowing harried commuters much access to luxurious limiteds. This lopsided coverage is appropriate, in a sense, since the golden age of long-distance rail travel has produced a plethora of images while neither the PRR nor railfans took much interest in lowly commuter runs.

While “A City in Itself” provides a rather cursory melange of the personalities, noble and eccentric, who populated the station, “East Side, West Side” provides excellent photos and descriptions of the PRR’s misplaced expectations that Penn Station would transform the Tenderloin District into Manhattan’s new commercial hub. Still, there is a wonderful untold story here. The railroad’s executives understood that the station should be a few blocks further east, but PRR engineers insisted that this was not technologically feasible, and accountants pointed to the high cost of land abutting Broadway. At the same time, new subway construction bypassed the Penn Station site, and both this section of the exhibit and “Dig We Must” would have benefited from a deeper analysis of urban politics and comparisons between railroads and their close cousins, the subways.

“Growing Pains” offers the obligatory statistics regarding swollen World War II traffic levels, then the exhibit shifts rather incongruously into “Wasted Space” and rapidly declining intercity train travel. In an effort to increase patronage during the 1930s, the PRR commissioned the art deco stylings of Raymond Loewy, better known to PRR enthusiasts for his streamlined locomotive designs. A generation later, the railroad commissioned a Loewy protégé, Lester Tichy, to design a functional “clamshell” ticket counter, its monstrous size necessary to accommodate cumbersome computers that cost many ticket clerks their jobs. Like earlier efforts to cut an escalator into the center of the grand staircase or place a subfloor in the soaring concourse, the incongruous ticket counter was an insult to the station’s architectural integrity, but all of these modifications confirm that form did follow function, particularly since the station was so poorly designed.

Refreshingly, this ambivalent attitude toward Penn Station is apparent throughout the exhibit. The station was sited in the wrong part of town; it initially lacked a subway connection; observers thought that the structure resembled a jail; it was crowded and noisy; there weren’t enough seats for waiting passengers; the platforms were dark and drafty, and four long flights of stairs below street level; the building was difficult to heat and cool; the pink granite façade weathered poorly; and the Long Island Railroad’s separate facilities offered little of the soaring grandeur of the upper levels.

“Echoes of Roman Grandeur” summarizes, with tragic inevitability, the three-year (1963–66) dismemberment of Penn Station. Throughout its existence, the station’s owners embraced the latest architectural trends, and

the new Penn Station/Madison Square Garden complex employed “architecture [that] was indistinguishable from any suburban shopping mall.” While one panel indicates that “the loss of Penn Station galvanized the historic preservation movement and shifted its focus to more modern buildings,” further information on this subject is lacking. The exhibit ends on a more hopeful note, showing how Penn Station influenced railroad stations in Chicago and Jacksonville.

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In conjunction with the exhibit, the Hagley Library sponsored a one-day conference for academic and lay audiences, “The Pennsylvania Railroad and Its Archives: Their History and Legacy.” In addition to demonstrating the richness of the Hagley’s holdings and showcasing innovative research grounded in those collections, the conference, like the exhibit, attested to widespread popular interest in railroad history and to the benefits of collaboration between railfans and railroad historians. Volunteer resources contributed greatly to the exhibit’s success. Railroad enthusiasts who might otherwise never have visited the Hagley Museum have come to see the model trains, have been exposed to the larger issues that both figuratively and literally surround the station itself, and have perhaps developed an appreciation for the Hagley Museum and Library as a whole.

Machine, Monument, and Metropolis is somewhat uneven, but it generally succeeds in placing a single, massive artifact in a broader context, showing how this one piece of technology shaped popular perceptions and, to a far larger degree, was influenced by developments in architecture, engineering, business, and politics. There is one important caveat, however. Casual visitors are apt to focus on the model at the center of the display and give short shrift to the more complex story that unfolds on the surrounding walls. Those who can devote an hour or so to careful contemplation are likely to be richly rewarded; those who stop by for a quick look at the trains are likely to learn little, or to have reinforced any simplistic, preconceived nostalgia that they might possess.

Even if it does not match the interpretive sophistication of the outstanding Raymond Loewy exhibit that preceded it, *Machine, Monument, and Metropolis* offers intriguing insights into a well-known architectural and railroad icon. It is certain to quicken the pulse of any railfan, model railroader, or PRR enthusiast, and offers the general public ready access to a classic saga of American railroad technology. The exhibit demonstrates that the considerable merit in linking world-class archival collections and first-rate scholarship with enthusiastic amateur historians and popular, highly visible technological artifacts.