

## The Twins before the Twin Towers: the Hudson Terminals and their Bifurcated Form

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When completed in 1908, these twins were as well known in their day as their successors would be. The terminals were the flagship structures for the Hudson & Manhattan Railroad (H&M), which had completed the first tunnels below the Hudson River. The H&M also overcame fierce resistance from rivals to pioneer a customer-focused attitude toward the public, a management practice rooted in Progressivism. The railroad adopted this practice to distance itself from its rival railroads that the public perceived to be corrupt, greedy and arrogant. The facilities the H&M built reflected its idealism, shunning the monumentality typified by Pennsylvania and Grand Central Stations, the other sta-

tions built in New York in the first decade of the twentieth century. The H&M also resisted the urge to build a skyscraper. Instead, the H&M's architects designed the terminals for comfort and convenience, without ostentation, hierarchy or grandiosity. Their twinning embodied pluralism instead of singular monumentality.

After their sheer size, the most distinguishing feature of the World Trade Towers was that there were two, that they were twins. Yet, in the chronology of their design, the rationale for why their planners and designers made this choice remains tantalizingly vague.<sup>1</sup> In the media blizzard that followed their destruction, it is often cited that the structures they replaced, the Hudson Terminals, were also twins. While the reasoning for the twinning of the Trade Towers remains limited, this paper explores how the earlier twins are the direct outcome of remarkable technological achievement, surpassed only by how their built form reflected the Progressive management practices of the company that built them. These forces made them what they were: bifurcated buildings.

When completed in 1908, these twins were as well known in their day as their successors would be. The terminals were the flagship buildings for the Hudson & Manhattan Railroad (H&M), which had completed the first tunnels below the Hudson River. The H&M overcame fierce resistance from rivals to pioneer a customer-focused attitude toward the public, a management practice rooted in progressivism. The railroad adopted this practice to distance itself from its rival railroads that the public perceived to be corrupt, greedy and arrogant. The facilities the H&M built reflected its idealism, shunning the monumentality of the other stations built in New York in the first decade of the twentieth

century. The H&M's architects designed the terminals for comfort and convenience, without ostentation, hierarchy or grandiosity. Their twinning embodied pluralism instead of singular monumentality.

To comprehend why the Hudson Terminals were twins, one must first trace what brought them about, as their physical form directly reflected the engineering innovation and management practices of the organization that built them. The completion of the H&M's sub-aqueous tunnels that the Terminals were the principal portals for took more than forty years to complete. When finished, the *New York Times* described the tunnels as: "one of the greatest engineering feats ever accomplished, greater perhaps than the Panama Canal will be when opened, considering the obstacles which had to be overcome."<sup>2</sup> The tunnel project was first envisioned in the spirit of pervasive technological optimism after the Civil War, a period that saw the transcontinental railroad completed in 1867, the same year construction of the Brooklyn Bridge began. An individual who had worked on the Transcontinental Railroad, Dewitt Haskin formed a company that started digging in 1874. Almost immediately, a court injunction initiated by a competing railroad stopped his work, the first in a pattern of corporate obstructionism that would plague the project for its duration. Five years passed before construction resumed.

When the Brooklyn Bridge opened to a starburst of fireworks in 1883, work was again halted beneath the Hudson as intractable difficulties, horrific accidents called blowouts, caused when the compressed air failed to prevent river water from entering the tunnel, plagued the project. One of these entombed twenty-one workers in 1880. A mysterious crippling disease called the Benz (air bubbles in the blood) affected twenty five percent of tunnel workers until project engineers discovered a remedy in 1889. The project developed a dark aura about it, which in part led to Haskin's inability to procure financing after his primary backer died in 1882. His efforts eventually ceased in 1887. A well-capitalized British engineering company that employed improved technology took over in 1889 and made significant progress, but the worldwide financial depression of the early 1890's caused work to cease yet again.<sup>3</sup>

The project remained stalled until 1902 when Williams Gibbs McAdoo took over. McAdoo not only finished one pair of tunnels, initiating train service in 1908, he began the second pair that terminated in the Hudson Terminals on Church Street in lower Manhattan. The Terminals became the railroad's primary station and corporate headquarters and the H&M would grow to become a seventeen-mile urban mass transit network. The H&M became a paragon of rail operation and made McAdoo a nationally recognized figure. Because of his management success and critical involvement in Woodrow Wilson's 1912 presidential campaign, he left the H&M and accepted the post of Secretary of the Treasury in Wilson's cabinet. There he initiated the Federal Reserve and became wartime Director of Railroads during World War One. McAdoo later campaigned vigorously but unsuccessfully for the Democratic Presidential Nomination in 1920 and 1924. He became a senator from California in 1930 at the age of 70, serving until he died in Washington in 1941.<sup>4</sup>

McAdoo's politics were those of the Progressive reform era. Progressivism was not a single coherent movement but an issue-oriented effort born at the local level. Generally, it sought government and electoral reform, fair business practices and social equity. While essentially a practical man, McAdoo's Progressivism inflected towards its social aspects, but in ways that complemented the practicality of business. The principles of Progressivism that McAdoo brought to bear most on building and managing the railroad were a general distrust of corporate monopolies, a similar distrust of the cronyism of municipal governments, faith in new ideas, science, engineering and the power of experts, and an extremely high regard for the common man.<sup>5</sup>

Born in Georgia in 1863, McAdoo rose from post civil war southern poverty and trained as a lawyer in Chattanooga. In 1889, he raised money from northern financiers to buy the Knoxville street railway in order to use then cutting-edge technology and electrify it, but McAdoo miscalculated and eventually lost control of the railroad, losing his personal savings as well. Then 29, McAdoo moved his family to New York City, deciding that it was the only place where he could recoup his loss. Arriving in 1892, in the midst of a financial depression, he and his family struggled. Without work, McAdoo

used the time to reflect, read and scheme. Eventually, he sold bonds, mostly for railroads. All the while, knowledgeable about electrification from his experience in Knoxville, McAdoo daydreamed about a tunnel under the Hudson, unaware of the dark history of the failed project now dormant. McAdoo knew electrification could solve the problem of evacuating smoke from the tunnels, a problem Haskin never fully resolved. While casually describing his tunnel daydream to a business associate in 1901, he was astonished to find that a partial tunnel already existed. McAdoo decided to purchase the tunnel and in a remarkable campaign of fundraising successfully solicited aid from J.P. Morgan and other financiers to resume construction in 1902.<sup>6</sup>

When completed, the tunnels Haskins began and McAdoo finished provided the critical link for rail passengers traveling between Manhattan and the mainland, providing a much faster alternative to the slow ferries, which were often impeded by fog or ice. The H&M trains connected the large railroad termini along the Hoboken and Jersey City shoreline with the elevated rail network in New York and continued underground beneath the shopping district along Sixth Avenue to Nineteenth Street. But plans to continue tunneling to Astor Place and Grand Central Station at 42<sup>nd</sup> street and Park Avenue were never realized. Instead, the H&M commencing an entirely new pair of tunnels connecting New Jersey to a new terminal in lower Manhattan. By the time McAdoo left for Washington in 1912, the H&M had extended further into Jersey City and to Newark. The total cost incurred by the H&M by 1912 exceeded \$70 million, over one billion in today's dollars, all with privately raised capital.<sup>7</sup>

The engineering required to complete parts of the railroad was the stuff of heroic modern engineering bravura,<sup>8</sup> equaled only by McAdoo's skill at outflanking the robber baron corporate rail and utility monopolies whose treacheries repeatedly tried to thwart his efforts. The better financed, long haul railroads, most of which were monopolies, perceived the H&M as a threat. These corporations owned the ferries and did not want to lose passengers, even if the tunnels saved their rail passengers considerable time. Profit, not the customer, was their primary motive.<sup>9</sup> When railroads used court injunctions to block the H&M, McAdoo counterattacked by threatening to build new parallel

service to undermine their monopolies. Powerful real estate figures in Manhattan, allied with Manhattan's surface railroads, tried to influence New York's Rapid Transit Commission in denying the H&M a permit to operate. The real estate magnates feared easy access to New Jersey would depreciate Manhattan property values. The surface railroads, which would later merge with the subways, feared the H&M's competition. But McAdoo carefully courted public opinion and prevailed in a series of public meetings.<sup>10</sup>

Hardened by this assault, McAdoo publicly vilified his tormentors as a strategy to build ridership. He cast the H&M as different from these monopolies, which subordinated passenger needs to profit because other viable transportation alternatives seldom existed and passengers simply accepted abuse. "The public be damned", the notorious adage of the time made by William H. Vanderbilt of the New York Central family, stood for this prevalent attitude. McAdoo's marketing strategy exploited this arrogant quip by announcing, "Let the Public Be Pleased", as the H&M's official policy.<sup>11</sup> Customer satisfaction would be the H&M's measure of service, as McAdoo became a hands-on manager who spent hours touring the system, keeping watch and talking to employees.<sup>12</sup> The H&M also had the luxury to learn from the mistakes of New York's first subway, the Interborough Rapid Transit (IRT) system, which opened in 1904. As the H&M would become, the IRT was a new and evolving system that was electric, high speed and based on generally short trips. But like the horse drawn trolleys and elevated railroads that preceded it, the IRT became infected by the notoriously corruption of Tammany Hall, corrupting influences that thoroughly pervaded the running of the subways. Surliness amongst its staff and inefficiencies that led to chronic overcrowding and breakdowns were the accepted norm. McAdoo mandated politeness and forbade surliness. In his opening day speech to H&M employees, he announced that he would summarily fire any who used the phrase "step lively", well known from the surface railroads and IRT. Cleanliness and safety were also important concerns as employees cleaned cars and stations daily. When the H&M experienced its first breakdown, McAdoo established a new standard for honesty. The H&M's reputation for engineering excellence became synonymous with safety and comfort, using innovative technologies in every-

thing from its switching to its automatic doors to its cars. The steel cars of the H&M offered a quiet, smooth ride, starkly different from the noisy, rough journey on the IRT's wooden cars.<sup>13</sup>

As a provider of transportation services to the masses, McAdoo recognized that the H&M must take every measure to be inclusive and advertising in all foreign language newspapers, including German and Yiddish.<sup>14</sup> The H&M's openness continued the company's overture to the public but it also made business sense. McAdoo needed to repay \$70 million in debt and needed to maximize ridership. The H&M's policy may have been consistent with McAdoo's progressive ideals, but to assure conservative shareholders like Morgan, it also had to rank as solid business practice. McAdoo's insistence on customer service paid off. When the H&M had to raise fares in 1911, it encountered scant resistance. Many wrote that the increase was worth it, a comment that any other railroad in New York at the time could never garner.<sup>15</sup> The H&M's most pioneering inclusivity extended toward women, as both patrons and employees. In doing so, the H&M was setting the bar of customer service by effectively saying to a late-Victorian populace that if women would ride the H&M alone, then it must be safe and the experience must be without discomfort. In addition to overall courtesy, the company provided amenities specifically directed at women. The H&M installed a large powder room in the Hudson Terminal Station supplied with free powder and hairpins and for five cents, any rest room patron, man or woman, was supplied with a towel and a bar of soap. It initiated a system in which a wife could leave packages purchased in the city at the H&M baggage office for her husband to pick up later in the day.<sup>16</sup> The overture toward women was an aspect of Progressivism which showed a willingness to try new ideas. When a New York women's organization suggested a special subway car for women riding H&M and IRT trains, only McAdoo was willing to try.<sup>17</sup> At the Hudson Terminals, the H&M hired only women to sell tickets, a practice brought from Chicago by the H&M's general superintendent.<sup>18</sup> It was when McAdoo decided to pay female employees the same wage as men that the same superintendent criticized him. "Why should you pay more for your labor than is necessary when you want the road [railroad] run with economy?" His superintendent knew, as McAdoo

did, how critical operating costs were to a company with such a massive debt burden. McAdoo was firm. "I want the road [railroad] run with economy, but not at the expense of justice."<sup>19</sup> McAdoo later cited a second motive that inequity in pay would harm morale. If employees were treated inequitably how could they be asked to treat patrons with decency?<sup>20</sup>

As McAdoo became well known for the engineering and management success of the H&M and his own sense of social justice, he lectured extensively. In his lectures, McAdoo used his own experience with the H&M as he continued his attack on big business. "The hostility of the public to corporations, especially transportation corporations, so much in evidence during the past few years, is the cumulative effect of years of indifference, oftentimes contemptuous, on the part of corporate managers to the interests and just grievances of the public."<sup>21</sup> As an antidote, he argued that corporations should be accountable to the public. Individual executives could not escape guilt behind a corporate shield. "I assert that no corporation is soulless..." he lectured, "...the management of the corporation is the soul of its dominant individual - usually the president; if that soul be selfish, little, and narrow, the policy of the corporation will be selfish, little, and narrow."<sup>22</sup> If, as McAdoo argued, the organization reflected the nature of its leader, then McAdoo put himself under considerable scrutiny as president of the H&M. He rose to his own challenge through expressions of humility. He later dispelled notions that the tunnels made him a wealthy man by announcing what he made, which was modest when compared to what corporate figures of the age earned.<sup>23</sup> When the tunnels were first finished, the press began calling them 'The McAdoo Tunnels'. McAdoo wrote to each newspaper and asked that they stop this practice. "I do not like to be praised for other people's work," he wrote.<sup>24</sup> For McAdoo to accept that the tunnels be named for him, his achievements would be monumentalized at the expense of others. In his view, this would be "selfish, little and narrow" and would ultimately hurt the company.

As a reflection of its customer-oriented philosophy, the H&M's built its facilities to be inclusive, comfortable, clean and safe. The H&M made an important station planning decision at the three stations on Manhattan's Sixth Avenue in 1908. The

H&M learned from the experience of the IRT, whose narrow station entrances located within the space of the sidewalk immediately drew public criticism because of overcrowding. This furthered the IRT's reputation for having a general disregard for riders.<sup>25</sup> Instead, the H&M stations opened directly to the basement concourses of what were then New York's most desirable department stores, with additional stairways leading to storefront passages at street level used when stores were closed. Passengers would emerge from trains into a bustling commercial environment rather than the dank, crowded and potentially sinister stations of the IRT. The merchandisers welcomed these entrances as their sales boomed and responded in kind by lining station platforms with display windows, recognizing as the H&M did the emerging and newly mobile female market.<sup>26</sup> When the H&M extended the line to 33rd street, it took an even more direct approach by constructing the Gimbels department store for the merchandiser above its terminals.<sup>27</sup>

Accommodation of passengers was the H&M's paramount functional concern; facilities were designed from the inside out, or better put, from the tracks up. Despite their neo-renaissance garb, The Hudson Terminals were proto-modern buildings with innovative ideas that focused on function, safety, comfort and ease of circulation. Inside the three level station, the H&M's customer focus was most evident in its circulation. Ingress and egress were via opposing platforms, thereby avoiding conflict among passengers. Someone trying to board a train would never collide with an onslaught of rush-hour commuters disembarking.<sup>28</sup> Learning from the IRT's cramped stairways, the Terminals featured broad ramps and elevators that eased circulation and created a more gracious environment. The station had four entrances marked by glass marquees on the side streets off Church, one each from Cortland and Fulton and two from Dey. The station concourse was replete with retail establishments, with everything from butchers to barbers, similar to the department stores at H&M stations uptown.<sup>29</sup>

Completed in 1908, the twin, twenty-two story buildings above the station, housing mostly office space, would be the most prominent structures the H&M would build, and for a time, the largest buildings in the world. Because of the difference in size of the two blocks upon which they stood, the Terminals were not identical, as their successors would

be, but as the difference was made up in the spacing between windows, it was not immediately apparent; contemporary descriptions refer to them as twins. High land cost prompted the H&M to build speculative office space atop the rail terminal in order to gain the highest possible return, the first hybrid of this type to be built in New York (*fig. 1 & 2*). The venture paid off. The Terminals were financially successful, housing a who's who of prominent corporations. Tenants entered both buildings through identical lobbies from Church Street on opposite elevations from the station portals, continuing the Terminal's discrete circulation systems. Thirty-nine elevators served both buildings with a combination of express and local service, with three elevators descended directly to concourse level. Two bridges connected the buildings at the third and seventeenth floors. Street level retail, occupying available street frontages, continued the commercial focus of the station below. Two professional clubs, the Mechanics Club and the Railroad Club (chartered by McAdoo) occupied the top floors of each building. Each featured extensive dining facilities and garden terraces with views of the Hudson. In keeping with the pro-female overtures of the H&M, the Railroad Club had its own Women's Dining Room.

The architectural firm of Clinton and Russell designed the Terminals. Before working for the H&M, they had produced many large office and residential structures, many features from which appeared in the Terminals. Although they competed with the more prominent New York firms of Carrere & Hastings and McKim, Mead and White for important civic projects, such as the New York Municipal Building, these had eluded the firm. Instead, they succeeded at producing many of the infill commercial buildings that were beginning to fill out the Manhattan grid. These buildings shouldered in among their neighbors, despite their sometimes-massive bulk, taking on an almost demure quality. The twenty-seven story 60-62 Wall Street was the most significant of their mid-block infill office building, blending in with its adjoining street wall instead of striving for singularity. The contemporary architectural press described it as "at best a pilaster, without the force or sculptural presence of a column." Commentary regarding their Mercantile Building, that it "attracts but little interest from the public eye unless its plainness is noted in contrast to the magnificent façade of the Metropolitan

Life Building,"<sup>30</sup> aptly characterized the firm's commercial work, as Clinton & Russell's infill buildings generally acted more in a supporting than leading role. At the Mercantile Building, the firm was content to express their design ingenuity below ground where an arcade connected the building elevators with the IRT. One side of the arcade's entire length included shop windows of the first large basement store in New York.<sup>31</sup> This connectivity, the first of its kind in New York, foreshadowed the H&M's embrasure of retail along 6<sup>th</sup> Avenue and the underground concourse at the Terminals.

Many of Clinton & Russell's uptown hotel and residential designs drew critical acclaim and were widely copied. In their Astor Hotel (1904), they deftly incorporated many different programs into a massive single block, creating a new type of hotel that was a tremendously successful.<sup>32</sup> The Astor featured a highly developed rooftop with winter gardens and outdoor planting which connected to ballrooms directly below, versions of this arrangement, complete with similar twin-pavilions, graced the Terminals. Clinton & Russell also designed apartment buildings for the Astor Family and others on Manhattan's upper west side. Most, occupied full block frontages along the city's wide avenues. Two of these, Graham Court and the Apthorp, were modeled after the Italian Renaissance Palazzo, built around large courtyards and occupying an entire block. From the exterior, they appeared as a single solid mass, rising in one continuous wall from base to cornice. Like the Terminals, the Apthorp was reputed to be the largest building of its type in the world when built. Despite their mass and separation from other structures, Clinton & Russell designed these in keeping with their downtown infill strategy. Rather than becoming the monumental urban palaces they were based on, they played an ensemble role, integrating with the surrounding residential neighborhoods, generally respecting nearby building heights and following the proscribed neo-classical canon of turn of the century New York, with clearly defined bases, middles and tops, and with symmetrical, highly articulated entryways. Where budgets limited, Clinton & Russell typically substituted brick and terra cotta for stone. The Hudson Terminals would be an amalgam of many of these Clinton & Russell buildings. Both in their basements and on their roofs, they included the programmatic features that the firm had pioneered. Like the Astor Hotel, they

were hybrids of complex programs rendered as solid blocks and like the Apthorp, these blocks would seek to blend rather than stand out, clad like their neighbors with stone base, brick shaft and terra cotta top.. Despite their mass and huge size, they were supporting infill rather than singular monuments.

The Terminals, located at the edge of Manhattan's historic center in an area that was experiencing profound change, would soon find themselves waist deep amongst towers. Pioneering among these developments was Ernest Flagg's Singer Building, diagonally across Church Street from the Terminals, which opened in 1908 as the tallest building in the world, a title it soon lost.<sup>33</sup> The Singer Corporation, fearing the literal and figurative shadow cast by the massive City Investing Building (Francis H. Kimball 1908) being planned next door, turned to Flagg to add a tower to the headquarters he himself had designed in 1898 (*Fig. 3*). The result established a type that was widely copied and codified by the city in its landmark Planning Resolution of 1916. Blending practicality with the capacity for corporate self-promotion, the Singer Building would become the corporate typology of choice for rivalrous companies such as Woolworth (whose tower would supplant Singer's within 5 years), Chrysler and City Services. This corporate rivalry would fuel a building war that lasted for decades.

Development was not limited to downtown Manhattan. Dynamic change was evident citywide. The Terminals were one of three important multi-block rail facilities under construction in New York in the first decade of the twentieth century. The other two stations, Pennsylvania (Penn) and Grand Central, were tactical campaigns in built form, architectural volleys in an intense war between competing railroads. These were major monumental facilities built by the kinds of corporations that McAdoo normally castigated and had carefully crafted his own company's public image to oppose. The New York Central was, after all, the origin of "public be damned" quip that McAdoo so carefully manipulated. Since the H&M's management philosophy directly opposed these corporations, its buildings were the opposite of those the larger railroads built, almost by default, the H&M had to take a different form, a response that ultimately rendered them as two, twin towers.

The Pennsylvania and the New York Central Railroads built these stations as monuments of corporate prestige. The intense competition escalated in 1903 when the Pennsylvania Railroad hired McKim, Mead and White, with Charles Follen McKim as partner in charge, to build its new station. McKim's architectural expression reflected the ambitions of his client; the station was to be monumental, based on European imperial structures. Its scale borrowed from ancient Rome's Baths of Caracalla, and its imperial iconography from Langhans's Brandenburg Gate in Berlin. McKim based all his work on the low-slung classical monuments that he was exposed to in his training at the Ecole des Beaux Artes in Paris. At Penn Station,

McKim argued strongly for horizontal monumentality despite objections from his client, who wanted to build a hotel atop the structure to maximize investment. McKim argued against the hotel for two reasons: the first, his horizontal conviction; and second, that adding program, whether it be a hotel or office, would debase the station and dilute its singular monumentality. Fortunately that a faction at the railroad supported him, McKim prevailed and the station was built as a single, massive, multi-block structure.<sup>34</sup>

In response, the New York Central resolved that it would amend modernizing renovations already underway and build an entirely new station. In 1903, the railroad announced a closed competi-

Figure 1. Ground floor plan of Terminals showing Dey Street passing through.

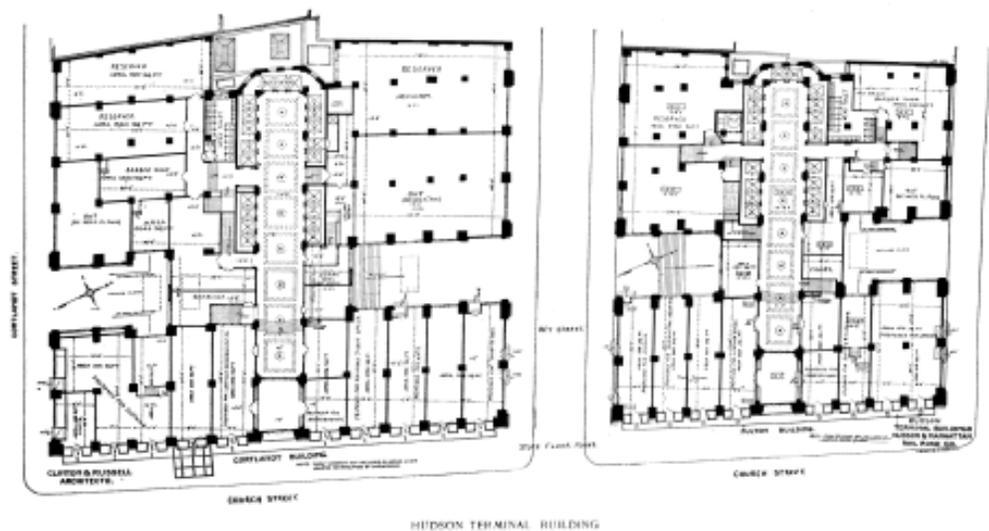


Figure 2. Section showing Station below the Terminals.

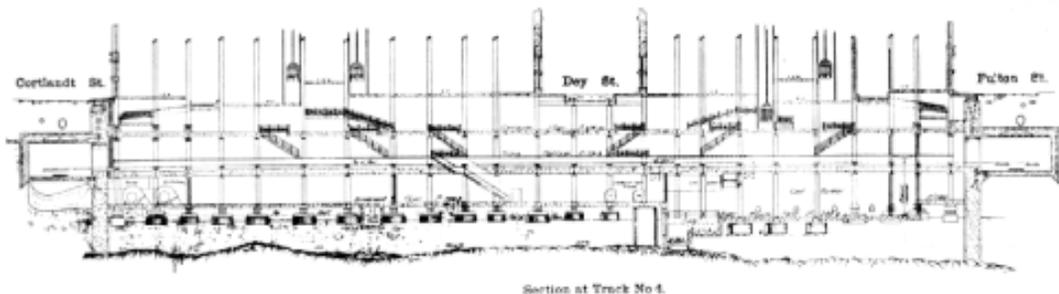


Figure 3. The skyline of lower Manhattan: Hudson Terminals at center, Singer Building tallest at right.



tion<sup>35</sup> won by Reed & Stem whose design featured a twenty-story hotel atop the station, the revenue-producing capabilities of which William H. Newman, the railroad's president, especially favored. But while "Newman was looking at the bottom line", William K. Vanderbilt (the Chairman of the Railroad), "had his eye on Penn Station."<sup>36</sup> When the Penn Station design was published in 1904, he intervened and instructed the architects to remove the hotel. "Vanderbilt had no intention of allowing a crosstown rival to eclipse the grandeur of Grand Central."<sup>37</sup> Vanderbilt's demand for a freestanding monument seconded McKim's belief that the inclusion of any other program would violate the station's singular presence, resulting in loss of corporate prestige. Vanderbilt also forced Reed & Stem to collaborate with the firm of Warren and Wetmore.<sup>38</sup>

While the competing railroads carefully planned their respective stations to be corporate symbols, their ambitions extended to the station's surroundings. While McKim looked to Rome and Berlin, Whitney Warren, the partner in charge at Grand Central, preferred Paris.<sup>39</sup> From the south on Park Avenue, the new Grand Central would rise like a grand Parisian Palais at the end of one of Baron Hausman's *alles*.<sup>40</sup> From the opposite side the railroad created an entire new neighborhood of full-block office and apartment buildings rising to a consistent cornice height to dignify this approach.<sup>41</sup> Carefully framed by these surroundings, the station sat as an imperial palace with every measure

taken to underscore its importance. Across town, the Pennsylvania strove for similar ends.<sup>42</sup> The railroad absorbed 32<sup>nd</sup> street, buying the property from the city and placing its primary entry on the street's axis facing Seventh Avenue and the most developed areas of the city to the east. The original plans called for massive urban reconfiguration that was never realized. These included widening Seventh Avenue to form an urban square that McKim's copy of the Brandenburg gate would dominate; widening and building arcades on 32<sup>nd</sup> Street; cutting new avenues north to 42<sup>nd</sup> Street and south to 23<sup>th</sup> on the centerline of the monumental waiting hall; and building a diagonal boulevard and underground trolley to connect with its rival station across town.<sup>43</sup>

The monumental ambitions of both railroads were best exemplified in their respective cavernous interiors. The Pennsylvania's promotional literature described its Waiting Hall as the "the largest room of its kind in existence,"<sup>44</sup> but while its spaces may have been dimensionally generous, Penn Station's outward expression of power and highly disciplined interior procession was intentionally uninviting. "Pennsylvania Station did not aim to please. It aimed to impress, to overwhelm, and to dignify the visitor through the grandeur of its architectural forms and the ceremonial quality of its plan. Penn Station did not make you feel comfortable, it made you feel important."<sup>45</sup> From the street to the platform, the marshaled effect of its spatial sequence was meant to express the railroad's might

and an overriding sense of control to dissolve any of the chaos common to train stations, "One does not rush to catch a Pennsylvania train"—one proceeds to it in orderly but expeditious fashion."<sup>46</sup> Counter to its name, its Waiting Hall had no seats in which to sit and wait. Shortly before the building opened, its superintendent recommended adding seats to the waiting hall, citing that passengers sat on the floor in its Jersey City Terminal and might do the same in New York. But the railroad, clearly following McKim in lockstep, did not comply, responding that the seats would dilute the hall's monumentality. Instead, seats were crowded into other waiting spaces nearby. The station was not designed for the people who would think to sit on the floor, but for the elite; it was a place where one contemporary critic described: "well gowned women... would sweep up and down his broad staircases."<sup>47</sup> Grand Central Station's spaces matched Penn Station in scale. While the Pennsylvania boasted that New York's City Hall could fit inside "the largest room of its kind", the New York Central claimed that its concourse was larger than the nave of St. John the Divine, New York's recently begun massive cathedral. In this skirmish, metaphysics trumped political power.<sup>48</sup>

McAdoo watched quietly from the sidelines and was conscious not only of both corporate giant's practices, but how both station designs reflected those policies.<sup>49</sup><sup>50</sup> As such, the Terminals would shape the Terminals as the opposite of the uptown stations in almost all regards, as if they sought to reform those structures by example. At the Hudson Terminals, the needs of the customer subordinated any corporate symbolism, monumentality or sense of grandeur. The H&M professed no designs on its surroundings. Instead, its buildings blended with the urban fabric as infill, they were more background than foreground, playing supporting instead of lead roles. Moreover, despite their immense bulk, any notion of monumentality -whether as a slender tower, or as a sprawling granite or marble monolith, set back from and framed by its surroundings – was avoided. It would have been hypocritical of McAdoo, given his public pronouncements, to build a monument either to the corporate prestige of the H&M, or to himself.

While the wealthier railroads went to great lengths to make their buildings visible, locating them along visual corridors, proposing to increase exposure

by widening or creating new streets, and by reshaping the immediate surroundings to frame views, the H&M resisted almost all opportunities for increased exposure, no small feat for the largest buildings in the world. The H&M opted not to develop adjacent real estate. To be perceived as a speculator would have tarnished his image. McAdoo would later write that others would make millions from investments around H&M stations, something he could have done but did not.<sup>51</sup> The H&M also shied away from any axial visibility for the Terminals, whose conditions were similar to those at Penn Station, straddling two city blocks. Rather than place an eye-catching Beaux Art architectural feature where Dey Street passed through, the H&M elected to keep it as a thoroughfare, even though the entire two-block site had been excavated four stories below grade to accommodate the station. They rejected the ornate bridge that Clinton & Russell designed for them, which bore a resemblance to the sculpture that would sit atop Grand Central (*Fig. 4*). The H&M deliberately avoided the edifice on which to ascribe monumentality. Most other railroads of the time would have filled the space of Dey Street with a tall, light filled hall through which passengers would pass. However parsimonious, McAdoo's creditors would have certainly considered this a fitting and necessary amenity.<sup>52</sup>

McAdoo also resisted Flagg's example - a justifiable precedent that could have actually increased the H&M's income - to build a tower. While McAdoo was unafraid to build the largest building in the world at the time, concern about his image and by extension the image of the company left him with no desire to build the tallest. In his memoirs, McAdoo considered the tall building as unnecessary and generally disparages the American tendency towards bigness.<sup>53</sup> He was especially sensitive to how the American public regarded big business, concerned "that they look upon high finance, and the concentration of authority in the hands of wealthy men and powerful corporations, as a public menace."<sup>54</sup> McAdoo recognized that in the public's mind big buildings stood for big business. McAdoo must also have recognized from his neighbor across the street the connection between skyscrapers and the capitalists that built them, a Singer, Woolworth, or later, a Chrysler. His experience with "McAdoo's Tubes", of having the press name the tunnels after him without his prompting, showed him how a singular achievement, whether

an engineering or architectural one, could be connected with his name. That he had to campaign to have the practice stopped proved how indelible it could be. As a tall tower next to Singer's, a "McAdoo Building" might be impossible to play down. Even worse, a skyscraper might suggest that his embrace of the public was insincere that, in the end, he was just another corporate villain, that his was a "selfish, little, and narrow" company.

McAdoo wanted to avoid at all cost the monumentality tendencies that the railroads of the day shared. Despite the Terminal's massive bulk, the station was as invisible a public piece of infrastructure could be and still signify as a station. In the hierarchical grain of streets in Manhattan, entry to the station was from the secondary street while the office lobbies were given the preferred entry from the wider north-south streets. The Terminals were deliberately anti-hierarchical and anti-monumental. Even if the financial necessity of including offices were not an issue, it would be difficult to imagine McAdoo arguing, as McKim and Vanderbilt did, for singular, monumental purity. All H&M facilities in Manhattan were hybridized, integrating with either offices or department stores. The H&M even considered a hotel for the Gimbel's and possibly other sites. Their interweaving with other building types diluted the essential singularity McKim's definition of monumentality required.<sup>55</sup>

While Dey Street split the site of the station, the anti-monumental concerns of McAdoo and the H&M contributed to the twin bifurcation of the Terminals. With customer needs subordinating any displays of corporate symbolism, monumentality or grandiosity, and with no designs on surrounding real estate, the buildings blended, even receded, as infill into the urban fabric. Dividing the buildings helped them blend. But in their dual nature, any difference, one being taller than the other, a larger entry, might be perceived as giving greater hierarchy to one, construed as the singularity that McKim and Vanderbilt sought. One could enter the station from four equivalent entries: two pairs of mirror images in plan and cross section. Architectural treatment of both office blocks was identical so as not to prioritize entry to the H&M's corporate offices. Since McAdoo's own club was in one of the towers, care had to be taken to occupy its twin with the Mechanics Club, a club of equal stature. In speaking engagements, McAdoo used the mul-

multiple unit train, an innovation of electric railroads, as a metaphor. The traditional steam train consisted of a locomotive capable of propulsion, pulling many motor-less, passive cars. In contrast, the multiple unit train, common to today's subways, is a joining of many identical cars that all propel themselves. Any car is capable of leading the train, whether there be two or ten. McAdoo used this metaphor to describe the make-up of the H&M and saw himself as only the motorman of the corporation, steering from one of the cars.<sup>56</sup>

The theme of democratic equivalence and suppression of any hierarchy was an underlying principle of the H&M and clearly one transmitted in the form of the Terminals, which like the multiple unit cars, are equivalent, identical.

By using metaphors to describe the H&M, McAdoo understood the power of symbols. From the time the decision was made to build the sub-aqueous tunnels in pairs of inbound and outbound tubes, they were referred to as twins. When McAdoo petitioned the press to stop using his name, the tunnels were subsequently called the Hudson Tubes

Figure 4. Unbuilt bridge across Dey Street.



ORIGINAL SUGGESTION FOR BRIDGE OVER DEY ST.  
CONNECTING THE TERMINAL BLDGS., NEW YORK.  
CLINTON & RUBELL, ARCHTS.

or simply, the Twin Tubes. They are still referred to as the Twin Tubes today

(Fig. 5). Whether they were called the Hudson Tubes or the Twin Tubes, like the Hudson Terminals, they were always described in the plural. The use of the plural implies the pluralistic, inclusive and democratic as opposed to the singular the exclusive and monopolistic. A rendering made for the invitation to the celebration marking the opening of the downtown tunnels shows a composition of pairs, the twin tubes, the twin terminal towers, the seals of the two states and two ships, one a steamship and one a ferry. All four pairs are symmetrically placed about a common vertical centerline. A second centerline, suggested by the surface of the Hudson River, creates another pairing between the towers and the tubes, as mirror images of one another.

The underlying theme that the H&M employed in creating a new kind of railroad was one of integration. The railroad stepped in to integrate Manhattan with the continent, New York with New Jersey, different modes: steamships and ferries, subways and transcontinental rail. In this sense, the twins represented joining instead of exclusion; a pluralistic view of Progressive optimism instead of the status quo and isolation of monopolies. In the end, the idealism and the rivalry would be all for naught. Within fifty years, the H&M, the Pennsylvania and the Grand Central would all succumb to bankruptcy. Beginning in the 1960's, Penn Station and the Hudson Terminals were slowly and systematically demolished. Both left the rail that caused them to be in the first place. From the taproot left in lower Manhattan, another set of twins would grow.'

## NOTES

<sup>1</sup> Heyer, Paul. *Architects on Architecture: New Directions in America* (New York: Walker, 1966): 186 Minoru Yamasaki recounted that "given the required program one tower became unreasonable in size" and that "several towers...looked too much like a housing project." Others on the team recall that two simply "felt right". Glanz, James and Lipton, Eric. "Towering Ambition. The Rise of the World Trade Center: A History with Life and Death Implications" *The New York Time Magazine*, Sunday, September 8, 2002 / Section 6: 38

<sup>2</sup> *The New York Times*, February 26, 1908

<sup>3</sup> Cudahy, Brian J.. *Rails Under the Mighty Hudson* (New York: Fordham University Press: 2002) 10-26

<sup>4</sup> Ibid: 14

<sup>5</sup> Broesamle, John J.. *William Gibbs McAdoo; A Passion for Change 1863-1917* (Port Washington, NY/ London: Kennicat Press, 1973); 25-26. McAdoo lionized the common man. In a Speech at the Press Club on January 21, 1911 he stated that "The 'common people' possess in some ways a highly developed instinct or common sense, which enables them to decide rightly...so-called 'complicated' questions. They have, through this instinct or common sense a comprehension second only in its accuracy to mathematics or an exact science."

<sup>6</sup>McAdoo William G.. *Crowded Years: The Reminiscences of William G. McAdoo* (Boston/New York: Houghton Mifflin: 1931): 1-88

<sup>7</sup> The Ravenswood Gas Company completed the first sub-aqueous tunnel in New York beneath the East River in 1894. One of the few benefits of the decade-long delay in construction was that significant advances in tunneling technology gave the H&M and its bondholders the confidence to start a second pair of tunnels even

Figure 5. A contemporary postcard showing the twin Terminals and tubes.



before the first pair were completed.

<sup>8</sup> Watchorn, Robert.

"The Builder of the Hudson Tunnels," *The Outlook*, vol. 90 (December 26, 1908): 913. Workers carefully dynamited a rock reef that blocked the tunnel's path, using kerosene torches to harden a scant fifteen feet of silt holding back millions of gallons of Hudson River water, while engineers dropped sails from the America's Cup yachts, the strongest water-tight fabric known at that time, to strengthen the seal from above. In excavating for the terminals, workers dug out treacherous quicksand to bedrock, a feat that anticipates the Port Authority's innovative, daring excavations years later.

<sup>9</sup> Cudahy: 27-9. One notable exception, the Pennsylvania Railroad, cooperated with the H&M but only because it was simultaneously planning its own tunnels (using the H&M's engineers) to their monumental sta-

Figure 6. Invitation showing the composition of twins.



tion uptown. Cooperating with the H&M and relying on their service to downtown allowed the Pennsylvania to convert its ferries to automobile use.

<sup>10</sup> Fitzherbert, Anthony.

"The Public Be Pleased: William G. McAadoo and the Hudson Tubes," *Headlights* (New York: Electric Railroader's Association, June 1964): 2; Hendrick, Burton J. "McAadoo and the Subways," *McClure's Magazine*, vol. 36 no. 5 March, 1911): 491-4'

<sup>11</sup> McAadoo. *Crowded Years*: 104-5

<sup>12</sup> Hendrick: 495 The railroad encouraged comments but complaints were rare. Of the 49 million passengers in the first year, less than 50 complaints were received, which McAadoo himself investigated and personally responded to.

<sup>13</sup> Hendrick: 496-500

<sup>14</sup> McAadoo. *Crowded Years*: 121-22 McAadoo went so far as to distributed H&M timetables in foreign language timetables on ocean liners. He later successfully championed revoking a treaty with Russia because of its anti-Semitism.

<sup>15</sup> "A Business Man in Politics." *The Outlook*, vol. 102 (September 28, 1912): 227

<sup>16</sup> Fitzherbert: 5

<sup>17</sup> *Ibid*: 6. A car equipped with a specially dressed guard was run on the tube trains for the ladies, but most women wanted to ride with the men. The "old maid's retreat", as the newspapers dubbed the idea, was dropped after a few months, but not after a complete public explanation by the H&M for why it was done

<sup>18</sup> McAadoo. *Crowded Years*: 105-6; Fitzherbert: 5. In Chicago, women were perceived to be friendlier than men and better at handling change. In New York, this became a key element of the H&M's customer-oriented agenda. In order to minimize lines and congestion, these female clerks were deployed in groups of movable ticket booths called "flying squadrons". According to one rail historian, the women were typically attractive, which casts the "let the public be pleased" motto in a different light. Although there is no record of any intentions, this practice of deliberately using attractive women may have had a psychological motive. The dark history of the building of the tunnels was still in many people's minds. Forty five years of horrific stories about blowouts and the mysterious crippling of the Benz had created a collective sense of dread about underwater tunnels. Going below the Hudson in a tunnel could be a source of enormous anxiety. To make the experience as anxiety-free as possible and using women to do so may have been a company strategy. Whether this is true may never be known, but if so, it anticipates the strategic use of women stewardess in the early days of air travel fifty years later.

<sup>19</sup> Synon, Mary. *McAadoo the Man and His Times: A Panorama in Democracy* (Indianapolis: Bobbs-Merrill, 1924): 38

<sup>20</sup> Fitzherbert and McAadoo, p. 105. The H&M's gesture won it, and McAadoo, a place in the women's rights movement. The Interborough Teachers Association used the precedent to secure equal pay legislation at the state level, but it quickly earned a governors veto. McAadoo, who claims to only have had passing knowledge of women's rights struggles before his decision, was drafted

as a champion by women's groups. He was asked to address a Carnegie Hall convention, which he declined for medical reasons

<sup>21</sup> McAdoo William G.. *The Relations Between Public Service Corporations and the Public: A Lecture given to the Graduate School of Business Administration, Harvard University, April 6, 1910* (New York: Alexander Hamilton Institute, 1910): 9

<sup>22</sup> McAdoo. *The Relations Between Public Service Corporations and the Public: 7*

<sup>23</sup> McAdoo. *Crowded Years: 101*

<sup>24</sup> Ibid: 98

<sup>25</sup> Stern, Robert A.M., Gilmartin, Gregory and Massengale J. *New York 1900: Metropolitan Architecture and Urbanism 1890-1915* (New York: Rizzoli, 1983): 46; Real Estate Record and Guide 74 (November 5, 1904): 949

<sup>26</sup> Fitzherbert: 5; These stores, Siegel Cooper, Simpson-Crawford Store and James McCreery, all occupied a portion of Sixth Avenue then known as Ladies Mile.

<sup>27</sup> Hilary Ballon. *New York Pennsylvania Stations* (New York: Norton, 2002): 55, Charles Moore, *The Life and Times of Charles Follen McKim* (Boston/New York: Houghton Mifflin Company, 1929): 87.

<sup>28</sup> Watchorn: 914 The three-level station beneath the twin buildings combined the best features of both the new subway station type and the older rail terminals. As at a traditional terminal, tracks split, allowing multiple platforms serving different destinations, but instead of coming to a dead end, the tracks connected in a loop, similar to the design of the IRT at City Hall Station. This combined arrangement allowed for more efficient operation.

<sup>29</sup> Davies, J. Vipond and Wells, J. Hollis. "A Terminal Station" *American Architect and Builder's News* vol. 97 (January 19, 1910): 36 Originally, ramps at the Courtland and Fulton Street portals were solely meant for egress and those at Dey Street for ingress, continuing the segregation of circulation from below. In practice, however, these passages eventually allowed circulation in both directions

<sup>30</sup> Stern, Gilmartin, and Massengale. *New York 1900: 48.*

<sup>31</sup> "New York's First Underground Sidewalk" *Architects' and Builders' Magazine* vol. 6, October 1904: pp 29-36

<sup>32</sup> "The Hotel Astor" *Architects' and Builders' Magazine* vol. 6, November 1904: pp 49-71; Stern, Gilmartin, and Massengale. *New York 1900: 223, 267-9*, Its success led many to believe it to be as a replacement for the legendary Waldorf Astoria. Because of its success, the Astor was immediately expanded and its design influenced the building of other hotels including the Knickerbocker (Trowbridge & Livingston 1906) and the Rector (Daniel Burnham 1910-11)

<sup>33</sup> As ambitious as it was, Flagg's design represented a

complete reversal by the architect. Flagg had once spoken out vehemently against the building of skyscrapers. He wrote in 1896: "If the beauty of the city is a matter worth considering of, it certainly would not be improved by these gigantic monuments to greed rearing their heads at intervals above the other buildings." "As an architect I will never have anything to do with buildings of this kind." (Flagg, Ernest. "Against Tall Buildings", *Architecture and Building*, vol. 24, no. 3 pp 82-3) Flagg was joined in his rebuke by many of his contemporary architects and their patrician New York clients, who found skyscrapers offensive; invading other's airspace and putting the street and immediate neighbors in perpetual shadow. Capitalist greed, especially that of the newly wealthy Wall Street entrepreneurs, was the perceived motive:

"the only advocate of high buildings are those who have a direct pecuniary interest involved." )Flagg, Ernest. "The Danger of High Buildings", *The Cosmopolitan*, vol. 29 (May 1896) no. 3 p 70) Flagg and others rallied civic leaders to restrict height, but they never achieved an outright ban. Over time, Flagg's position softened into a compromise. Flagg's tower had been a long time in coming. Against the tower typology for many years, Flagg eventually developed a hypothetical model that included a base roughly consistent in height with its surroundings, surmounted by a slender tower, no more than one quarter the footprint of the base in proportion. These could rise as high as practical, resulting in a skyline that would be a 'tiara of towers'. (Goldberg, Paul, *The Skyscraper* (New York: Alfred p. Knopf, 1981): 10) Flagg's contribution would become "one of the most important developments in the evolution of the skyscraper. It simultaneously satisfied the need for dense concentrations of office space, the requirements for reasonable light and air inside the offices and on the street and the need for a permanent, visible and memorable icon that would function as a symbol of a corporation." (Stern, Gilmartin, and Massengale. *New York 1900: 170*)

<sup>34</sup> Ballon, *New York Pennsylvania Stations: 42* The columns needed to support the hotel would have decreased the number of tracks from 21 to 19. The railroad saw itself as a transportation provider first and a hotelier second, even though the hotel would offset cost.

<sup>35</sup> Roth, Leland M.. *The Urban Architecture of McKim, Mead and White: 1870-1910* (Unpublished Ph.D Manuscript, Yale University, 1973): 697 The Grand Central invited four firms to participate, including McKim, Mead and White. McKim's more flamboyant partner, Stanford White, designed the entry. Unconcerned with McKim's low-slung monumentality and need for programmatic purity, White's design featured a fourteen-story block mix of hotel and office space surmounted by a sixty-story tower on the axis of Park Avenue that would have been New York's tallest building. The tower would have featured a jet of steam driven three hundred feet into the air and illumi-

nated red at night. But Newman found the McKim, Mead and White design to be “far too expensive and impracticable” and rejected it.

<sup>36</sup> Ballon, *New York Pennsylvania Stations*: 79.

<sup>37</sup> Ibid: 79

<sup>38</sup> This was due in part to the perception that, as a Minnesota-based firm they were too provincial, lacking the ability to match McKim, Mead and White’s monumental standard. Like McKim, Whitney Warren, the firm’s lead partner, had studied at the Beaux Arts. He would use every measure to surpass every quality of McKim’s Penn Station.

<sup>39</sup> The placement of the stations and the manipulation of the surrounding environment followed City Beautiful principles, the urban design practice of those educated at the Beaux Arts. Each railroad sought to create an environment akin to the grandiose drama and forced regularity of Daniel Burnham’s Columbian Exposition of 1893 in Chicago, echoing its master planner’s famous charge to “make no small plans”.

<sup>40</sup> Stern, Gilmartin, and Massengale , p. 37

<sup>41</sup> Ibid., p. 153. The railroad’s squeamishness regarding towers and office space was short lived. In 1929, Warren completed the towering New York Central Building north of station, thus completing the “urban room” that Park Avenue had become. From the south, the tower was set back far enough so as not to detract from the station’s monumental singular presence.

<sup>42</sup> If one of the battles between the railroads was for physical hegemony over the city, the New York Central clearly won it. For while McKim and his client’s ambitions equaled that of their rival, they began at a disadvantage and their achievements fell far short of their goals. They too sought to reconfigure the surrounding streets to provide access and views, and to influence the architectural character along those streets to provide a backdrop to the station, all to underscore the station’s, and by extension the railroad’s importance. But unlike the New York Central, the Pennsylvania did not own property in Manhattan and had to purchase land to build. This proved expensive and the railroad would eventually balk at the cost of expanding around the station. Despite this, the monumental expression of the station was an overarching priority, achieved at any cost.

<sup>43</sup> Ballon, *New York Pennsylvania Stations*: 85-92 None of these were ever realized as the railroad was hesitant to invest the necessary capital to spur nearby real estate investment. Pennsylvania Station never really fully integrated into the surrounding city, a fact that contributed to its tragic demolition within sixty years. Instead, the Pennsylvania naively expected its neighbors and the city to follow its intentions under their own volition. Ironically, McKim’s insistence on monumental purity played a role in inhibiting development nearby. The station’s setbacks

from the street and lack of retail on the street facades inhibited the kind of retail development around the station that was natural to New York. Some development did occur however, a U.S. Post Office built across Eighth Avenue and over the tracks, and finally the Pennsylvania Hotel across Seventh Avenue as the railroad finally relented and built a hotel. Both were designed by McKim, Mead and White and possessed the necessary architectural complimentarily, but neither could catalyze the critical mass necessary to match the New York Central’s extraordinary success. Instead, the Pennsylvania naively expected its neighbors and the city to follow its intentions under their own volition. Ironically, McKim’s insistence on monumental purity played a role in inhibiting development nearby. The station’s setbacks from the street and lack of retail on the street facades inhibited the kind of retail development around the station that was natural to New York. Some development did occur however, a U.S. Post Office built across Eighth Avenue and over the tracks, and finally the Pennsylvania Hotel across Seventh Avenue as the railroad finally relented and built a hotel. Both were designed by McKim, Mead and White and possessed the necessary architectural complimentarily, but neither could catalyze the critical mass necessary to match the New York Central’s extraordinary success. Little of this was ever realized as the railroad was hesitant to invest the necessary capital to spur nearby real estate investment. Pennsylvania Station never really fully integrated into the surrounding city, a fact that contributed to its tragic demolition within sixty years.

<sup>44</sup> Ibid: 62

<sup>45</sup> Ibid: 53

<sup>46</sup> Ballon, *New York Pennsylvania Stations*: 55,

<sup>47</sup> Ibid: 54.

<sup>48</sup> Ibid: 81. While Penn Station’s processional excluded seating for those waiting, Grand Central’s waiting room, with a full complement of seats, held a prominent position, the first space one encountered. While Penn Station was intended to have one primary entry with the others treated more as clearly secondary, or as exits, Grand Central was designed as porous, with many entries of equal stature. Where Penn Station did incorporated retail, it was in a very controlled manner. Retail lined many of the processional paths in Grand Central and even lined the street front of the primary elevations, a feature irreconcilable with McKim’s severe colonnade along Seventh Avenue. In the end, Grand Central emerged as a much friendlier station, monumental yet accessible where “ceremony was subordinated to efficiency.”

<sup>49</sup> While Warren, Vanderbilt and the New York Central were extremely conscious of what was built at Penn Station, they were probably equally aware of the Hudson

Terminals downtown. The Vanderbilts were investors in the H&M and among the dignitaries who rode the first train under the Hudson on opening day. Renderings of Grand Central clearly show accommodations of the planned H&M extension as "McAdoo's Tubes." ([www.hudsoncity.net/tubesenglish/index.html](http://www.hudsoncity.net/tubesenglish/index.html)) William K. Vanderbilt certainly must have been aware of both the company's policies and how their facilities embodied them. The friendliness of Grand Central - its efficiency, multiple entries, ramps, embrasure of retail, and overall democracy of its spaces'— is arguably as indebted to the H&M's precedent as it is a response to Penn Station's shortcomings. After all, the Terminals were completed two years before Penn Station and during a period that Grand Central was still being designed. And while Vanderbilt and his architects may have been very much aware of the published designs for Penn Station since 1904, they surely would have been aware, as most New Yorkers were, of the successful operations of the H&M and its functionally innovative terminal well before construction began on Grand Central.

<sup>50</sup> Fitzherbert: 3; Cudahy

<sup>51</sup> McAdoo: 102

<sup>52</sup> That financial concerns prevented the H&M from absorbing Dey Street is improbable. It is true that the H&M would have had to, as the Pennsylvania did, purchase the city land that Dey Street occupied. (Ballou, *New York Pennsylvania Stations*: 38 ) But the city had asked the Pennsylvania to pay a relatively modest amount, since the railroad was providing so significant an urban amenity. The H&M could have made the same argument for a similar discount. The company paid to restore the street, why not put that towards rentable space? The H&M could have been easily offset the cost of Dey Street with the revenue from the added floor area added in the air space. McAdoo clearly wanted the gap to remain and the buildings to remain separate. Clinton & Russell had originally designed an ornate stone bridge at the third floor that was never built. In its stead, two, unadorned utilitarian ones were. This flourish may have either been too expensive or ostentatious, inconsistent with the populist image that McAdoo was projecting for the H&M and its facilities. McAdoo clearly sought to avoid even the slightest suggestion of unnecessary display, especially one seen down Dey Street, which might invite comparisons with his arrogant rivals.

<sup>53</sup> McAdoo. *Crowded Years*: 110

<sup>54</sup> *Ibid*: 111

<sup>55</sup> Collins, Glenn. "Postmodern, In a Manner Of Speaking; A Shape Out of 1908 Is Offered Downtown", *The New York Times*, Tuesday, January 21, 2003: B1 A forgotten account, which resurfaced in the aftermath of 9/11, tells that the Catalan expressionist architect Antonio Gaudi designed a hotel for the Terminal site or in its vicinity. Like his more business-focused and less symbolic minded counterparts at the larger railroads, McAdoo

may have even considered a hotel for the Terminal site. Gaudi was purportedly approached in 1908 by a group of American businessmen, led by McAdoo, to build a hotel. Unfortunately, virtually all records and drawings of this structure were lost in a fire, with only a few sketches that bear some resemblance to Gaudi's Sagrada Familia Church remaining. It is conceivable that this story might be true; McAdoo did travel annually to Europe, usually to spas in Germany to restore his health, but if the 1908 date is correct, the Terminals were already completed. If the date is wrong and the trip had occurred earlier, one can draw several conclusions. It supports McAdoo's disregard for monumental purity that McKim and Vanderbilt required of their stations in rejecting the hotel proposals by others. If intended for a site adjacent to the Terminals, it might show that McAdoo's intentions were, after all, closer to those of his uptown rivals and that like the Pennsylvania and the New York Central, he did make real estate plans around the Terminals. The hotel could have served a higher public purpose than offices, and even produce more revenue. But the scale of the building is entirely inconsistent with McAdoo's stated aversion to big business and big buildings. The renditions of the project produced after the fire by Gaudi devotee Juan Matemala show a massive tower, taller than the Eiffel. These phantasmagoric drawings, which appear in Rem Koolhaas's *Delirious New York* of 1978, depict a building with cavernous interior spaces, with floors so large that it would be difficult to operate as a hotel. Given McAdoo's essentially pragmatic nature, it remains a mystery how this project could have fit with his plans.

<sup>56</sup> McAdoo. *The Relations Between Public Service Corporations and the Public*: 8

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