



PDHonline Course C634 (8 PDH)

Grand Central: Grand by Design

Instructor: Jeffrey Syken

2020

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Part 7

79 Acres

1

A Proposition Alive with Problems

2

"...In the history of railroad building there is nothing to compare with the works at the Grand Central. It is a comparatively easy matter to dig a hole, lay tracks and put up a building, but to rebuild a station under traffic, change the entire plant so that not a vestige of the old remained, keep 800 trains running and handle from 75,000 to 100,000 passengers a day, was a proposition alive with engineering and operating problems. To do this, the first thing required was more room..."
Scientific American Supplement, December 7th 1912
 Above: diagram by William J. Wilgus showing the first stage of construction of GCT (1903)

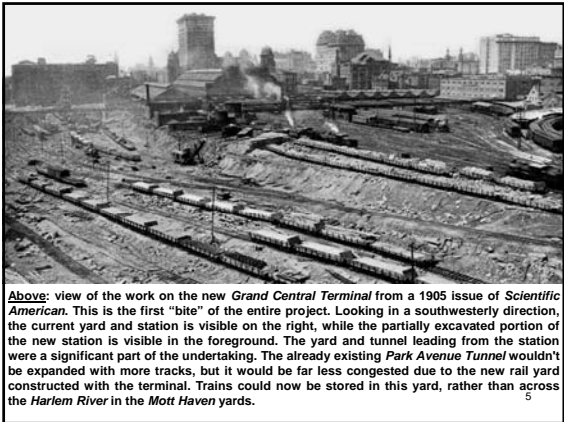
3

The City of New York granted the sub-surface rights of the area bounded by E. 42nd / 47th Street/s and Lexington / Madison Avenue/s to the NYCRR in perpetuity for a \$25K annual payment. Work on the new terminal began on August 17th 1903. On seventeen acres of the newly purchased plots, stables, warehouses, an orphanage and other structures required demolition including;

- 120 houses
- 3 churches
- 2 hospitals

Some station functions were temporarily relocated to the nearby *Grand Central Palace* hotel (an exhibition hall converted to a temporary terminal). For the utilities and two-level track scheme, excavation through solid rock ninety-feet deep was called for. Proceeding from east-to-west, Wilgus' well thought out construction plan would proceed in longitudinal "bites." Even with an efficient and workable plan, construction would take ten full years to complete. Steam shovels excavated rock and earth to an average depth of forty-five feet to accommodate the underground facilities/infrastructure of the terminal (the suburban/lower level tracks were forty-feet below 42nd Street). In the 770-foot wide valley created by the excavation, work went on around the clock with 10K men employed at the peak of construction. To provide proper drainage, a six-foot diameter sewer pipe was run at a depth of sixty-five feet to the *East River*.

4





One of the biggest challenges during construction was keeping track of previous structures uncovered during the excavation. A special note on this map (dated June 1904) of existing conditions makes no claim that sub-surface features depicted are "even approximately correct." ⁷

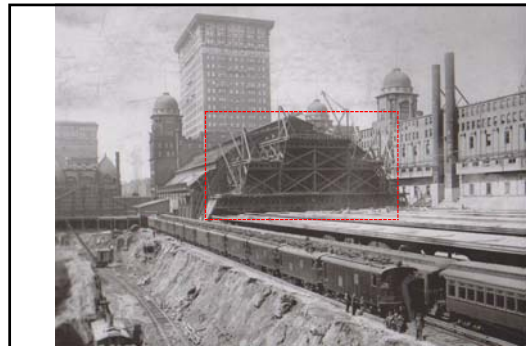
Out of Sight and Out of Mind

8

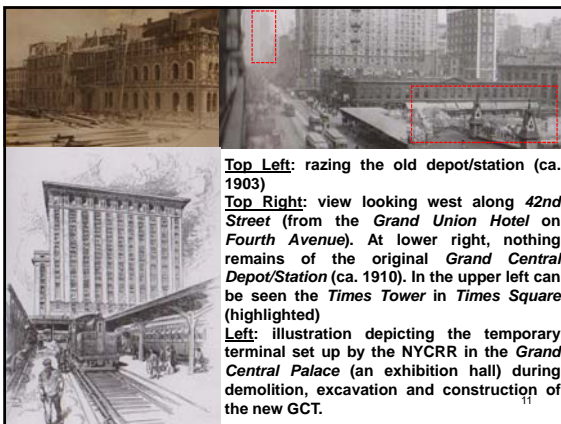
"...The removal of the old train shed alone was one of the most difficult and daring things in the history of building. It was 600 feet long and had a 200 foot span, a huge thing of steel and iron and brick and glass. It was torn down, but the traffic beneath it was not halted for so much as an hour. In the busy hours of the day an enormous moving traveler, sliding along rails built on high platforms, attended to the work of demolishing the old shed, section by section. In the slack hours of the night the debris was lowered to the work trains and hauled out of sight and out of mind. Some notion of the scope of this single task may be gathered from the fact that it meant the removal of 1,550 tons of wrought iron, 350 tons of cast iron, 90,000 square feet of corrugated iron and 60,000 square feet of glass..."

The New York Times, February 2nd 1913

RE: on June 5th 1910, *The Owl* (midnight train to Boston) left Grand Central Station. It was the last train to leave the old depot. The old station had a capacity of 366 railway cars on its twenty-three acres. The new terminal would have a capacity of 1,053 railway cars on its seventy-nine acres. ⁹



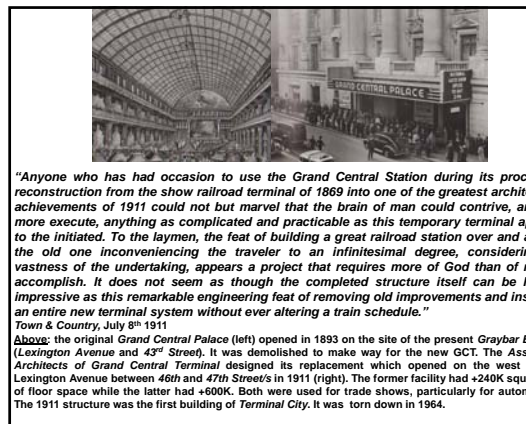
Above: demolition of the train shed (May 1908). The shed was removed in sections of twenty and/or forty-feet via the traveling scaffold (outlined) which conformed to the inner profile of the shed. ¹⁰



Top Left: razing the old depot/station (ca. 1903)

Top Right: view looking west along 42nd Street (from the Grand Union Hotel on Fourth Avenue). At lower right, nothing remains of the original Grand Central Depot/Station (ca. 1910). In the upper left can be seen the Times Tower in Times Square (highlighted)

Left: illustration depicting the temporary terminal set up by the NYCRR in the Grand Central Palace (an exhibition hall) during demolition, excavation and construction of the new GCT. ¹¹



"Anyone who has had occasion to use the Grand Central Station during its process of reconstruction from the show railroad terminal of 1869 into one of the greatest architectural achievements of 1911 could not but marvel that the brain of man could contrive, and still more execute, anything as complicated and practicable as this temporary terminal appears to the initiated. To the laymen, the feat of building a great railroad station over and around the old one inconveniencing the traveler to an infinitesimal degree, considering the vastness of the undertaking, appears a project that requires more of God than of man to accomplish. It does not seem as though the completed structure itself can be half as impressive as this remarkable engineering feat of removing old improvements and installing an entire new terminal system without ever altering a train schedule."

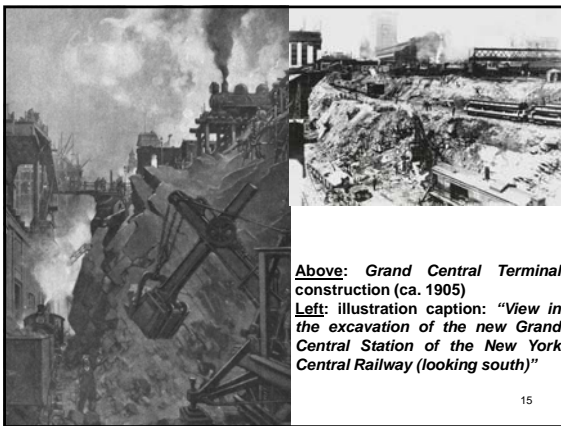
Town & Country, July 8th 1911
Above: the original Grand Central Palace (left) opened in 1893 on the site of the present Graybar Building (Lexington Avenue and 43rd Street). It was demolished to make way for the new GCT. The Associated Architects of Grand Central Terminal designed its replacement which opened on the west side of Lexington Avenue between 46th and 47th Street's in 1911 (right). The former facility had +240K square-feet of floor space while the latter had +600K. Both were used for trade shows, particularly for automobiles. The 1911 structure was the first building of Terminal City. It was torn down in 1964. ¹²



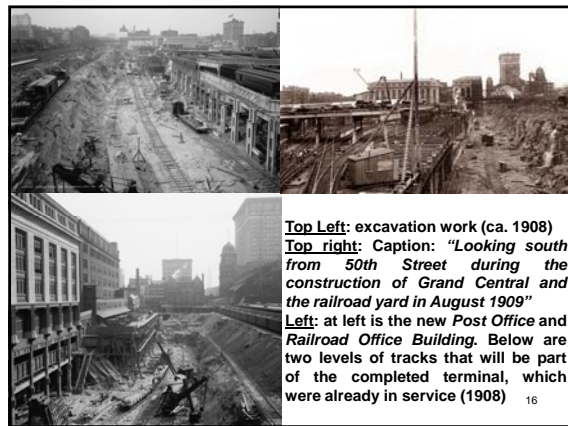
“...The purchases of land made, abutting Lexington, Park and Madison avenues, increased the area from twenty-three acres in the old terminal to seventy-nine acres in the new, including both levels of tracks. As each new track or group of tracks was finished a corresponding number of old ones was abandoned, and traffic went on without interruption...”
Scientific American Supplement, December 7th 1912 13



“One of the features that render the construction of the new Grand Central terminal station a work of unprecedented and monumental proportions, is the vast amount of preliminary excavation that has to be carried out before a single track of the station yard, or a single brick or stone of the station building can be laid. This excavation amounts to a total of over 2,000,000 cubic yards, a large part of which is rock. The blasting out and digging of this material in the heart of a great city, and its removal and disposal many miles from the point of excavation, is in itself a task of huge proportions.”
Scientific American, September 16th 1905
Above: view looking south (from 49th Street) of train yard excavation 14

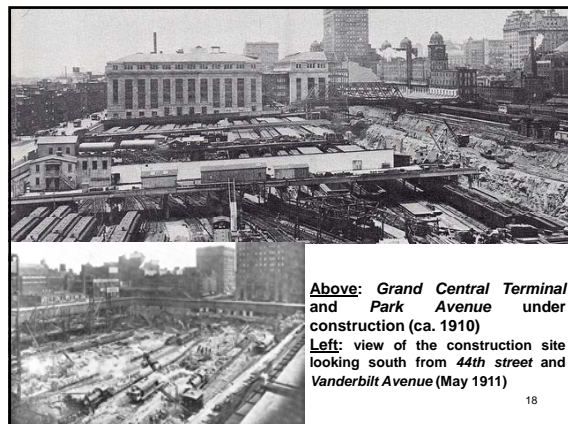


Above: Grand Central Terminal construction (ca. 1905)
Left: illustration caption: “View in the excavation of the new Grand Central Station of the New York Central Railway (looking south)” 15



Top Left: excavation work (ca. 1908)
Top right: Caption: “Looking south from 50th Street during the construction of Grand Central and the railroad yard in August 1909”
Left: at left is the new Post Office and Railroad Office Building. Below are two levels of tracks that will be part of the completed terminal, which were already in service (1908) 16

“...One of the things that will always be remembered about the new Grand Central is that it was built amid the wreckage of the old. The never-ending business of the terminal had to go on uninterrupted. The very depression of the tracks beneath the level of the city streets involved a huge amount of labor. It meant the excavation of 8,800,000 cubic yards, about 2,000,000 of them solid rock. The earth and stone dug and blasted there in the train yard had to be carted away in dirt cars which added a long string to the already heavy and complicated traffic of the terminal...”
The New York Times, February 2nd 1913 17



Above: Grand Central Terminal and Park Avenue under construction (ca. 1910)
Left: view of the construction site looking south from 44th street and Vanderbilt Avenue (May 1911) 18

The Limit of Human Achievement

19

“Three million cubic yards of excavating have been or are being done, and two-thirds of this has been through solid rock, necessitating blasting, so that the engineers have had constantly to provide against the danger of destroying tracks, crowded trains and buildings. They have had to solve a succession of appalling problems, and their triumph comes near to marking the limit of human achievement.”
The Independent, March 14th 1912

20

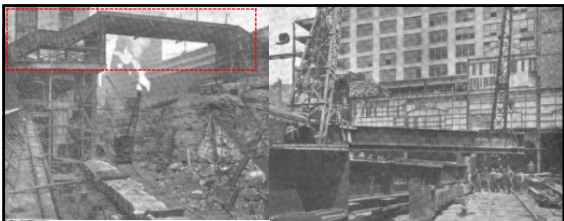


Above: view looking south along Park Avenue towards the terminal building (ca. 1912)

21

“...So in the wrecking of the station itself the work had to proceed while hundreds of thousands passed to and from the trains every week. This involved an immense amount of temporary building, temporary train sheds, temporary walks, temporary trestles. This extra cost alone was in the neighborhood of \$2,000,000. Besides being costly, it was extremely difficult and intricate work...”
The New York Times, February 2nd 1913

22



Top Left: temporary overhead footway
Top Right: Express (upper) Level construction underway
Left: track level/s construction (ca. 1910)

23

New York Central & Hudson River R. R. Co.

New York, June 11, 1911.

Mr. N. F. Wilson,
 2170 Broadway.

Dear Sir:

I wish to acknowledge receipt of your extensive copy of the 1911 program, regarding the construction work to be done in 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 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Signal Corps

25

The SIGNAL CORPS in action!

Show the Men of Tower X Speed Wartime Trains on the Water Level Route

“...Seventy-nine acres of tracks over which come and go almost a thousand trains a day, all controlled from one central signal and switch tower!

The New York Times, February 2nd 1913

Left: WWII-era New York Central ad explaining the wartime operations of “Tower X”

26

In Olden Days

27

“...In the old days, when the tracks were open to the sky, it took an army of men to throw the switches by hand in the terminal yards. Later, with the coming of the control of switches from the towers, it took a smaller army to throw the long levers back and forth. That was called the manual system. Then came the automatic system that was worked by compressed air, then the combination of air and electricity. Now it is electricity alone that does the work...”

The New York Times, February 2nd 1913

28

Nerve Center

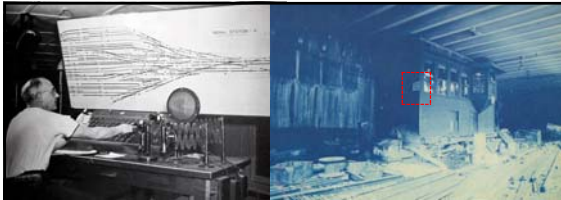
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“Seventy-nine acres of tracks over which come and go almost a thousand trains a day, all controlled from one central signal and switch tower! To the railroad man that is one of the greatest of the mechanical triumphs that the completion of the New York Grand Central Terminal typifies. This tower is the central nerve point, the brain of the terminal. It gathers under one masterful control the bewildering train movements over the intricate web of tracks that lead into that great station. Not a wheel can start to turn without the consent of that centre. Not an incoming train, with its precious human load, can enter on its final approach to the platform until the terminal brain has signified its permission.”

The New York Times, February 2nd 1913

RE: before GCT, one dispatcher coordinated all train traffic into and out of the depot. The train yard for the new GCT was two city blocks wide, stretching from Lexington to Madison Avenue/s as far north as 48th Street.

30



This 1943 photo (left) shows Tower A; one of GCT's "nerve centers." GCT had several towers within its confines and those working in the tower were responsible for routing trains through the terminal. Dispatchers kept in contact with other towers and the chief dispatcher, and a *Leverman* controlled the switches. The original GCT used five signal towers which were labeled: A, B, C, F and U. Several of these five "main stations" used sub-stations labeled: N, P, R, S, V, W, X, Y and Z. Tower U (right) was located underneath *Park Avenue* at 59th Street and controlled train traffic moving between the four-track section north of 58th Street (*Park Avenue Tunnel*) and the ten-track section to its south (to 49th Street where the ten-track section fans out into the full train shed). Strategically located, its purpose was to guide trains into and out of the train shed. 31

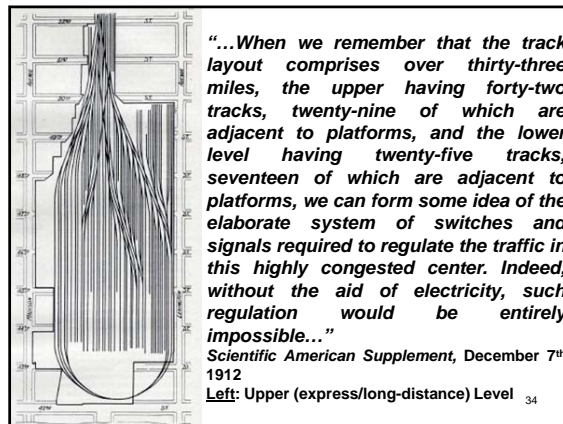


"The buildings which house main signal stations, A and B, are used not only for the control of the switches and signals but for other purposes also...namely, trainmaster's office; yardmaster's office; office of the foreman of car cleaning and car repairs; foreman of electrical equipment; rest room for enginemen and their assistants; rest room for conductors and trainmen; rooms for track repair men." *Railway Age Gazette*, October 7th 1910

RE: Tower A (left) and Tower B were housed in a four-story underground structure (*East Elevation* at right) which controlled train movement within the train shed. The upper two stories (Tower A) handled express trains and the lower two stories (Tower B) handled suburban trains. Tower C controlled traffic in the yard's storage area and Tower F controlled traffic on the loop tracks. 32

Command and Control

33



"As trains pass each tower in turn, the towermen report their direction, time-table number, engine number, track and exact moment of passing, and these data are recorded on special forms known as 'train-sheets' and collected by the dispatchers. The net result is a complete, up-to-the-minute list of all trains on the track and their locations. The dispatchers, completely aware of all the factors involved, plot the schedules and order the movements of trains. The towermen, by operating levers controlling the switches, and thereby the tracks, supply the routes. The signals, interlocked with the position of the switches, guide the engine drivers." *The New York Times*, September 10th 1939

Above: Tower A's interlocking machine (left) and close-up of its "model board" (right). The highly complex interlocking machine connected directly to the train shed's switches (there was one in both Tower's A and B). In 1986, a fire destroyed Tower B and by 1993, the entire system was computerized. Signaling and switching is now controlled from the *Operations Control Center* on the upper levels of GCT. The only signaling structure still in use is for *Track 25* whose superintendent can override the yardmaster's track assignment if/when necessary. 35

Maddening Vulnerability

36



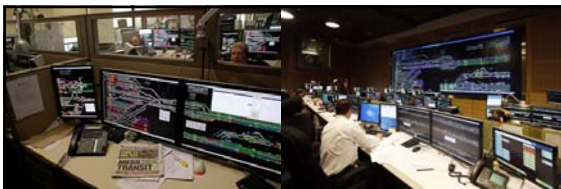
"The smoky fire that destroyed Tower B on Sunday Evening September 21, seriously wounded operations of Metro-North trains at Grand Central Terminal, threw time schedules and track assignments into disarray, disrupted the commuting plans of most of the railroad's 90,000 customers, and shocked the smoothly running rail system into an awareness of its maddening vulnerability."

On Track (Metro-North's monthly employees' publication), February 1992
Above: destruction of Tower B due to a fire on September 21st 1986. The fire led to the complete replacement of the interlocking machines and five control towers with a centrally controlled computer system.

37

Super Tower

38



"From deep in the heart of Texas – home of the Cowboys and the first computer chip – comes the soul of what will be a new era in train control at Metro-North. General Railway Signal of Dallas manufactured the majority of the computer equipment that will operate the railroad's new 'super tower.' When the facility is completed and 'cut in' to control traffic flow in Grand Central, such old soldiers as Towers A, B, C, NICK, and the infamous MO will be laid to rest. The changeover will see the railroad go from one of the oldest – albeit tried and true – signal control systems using levers to a state-of-the-art system relying on microprocessors using computer chips."

On Track (Metro-North's monthly employees' publication), February 1992
Above: Track 25 train shed control center (left) and the "Super Tower" (right)

39

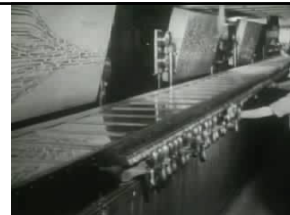
Fail-Safe

40

"...The working of switches and signals is effected entirely by electricity, one motor being provided at each signal and at each switch. There are some 230 switch-boxes in the yards, representing an outlay of about \$260 apiece. A highly perfected mechanical interlocking device absolutely precludes any possibility of conflicting signal and switch setting, thus ensuring the safety of the passengers. There is also a separate electric-locking device which prevents a switch being set in such manner as to split a train, or to send one on to a track occupied by other cars. This mechanism is operated by the short-circuiting of an alternating current track-circuit by the axles of cars standing upon a given rail section..."

Scientific American Supplement, December 7th 1912

41



"...The main signal tower is located at Forty-ninth Street. This tower is a four-story building below the street level, and houses the interlocking machines by which the switches and signals are operated. The machine for the suburban level is the largest ever constructed, and has four-hundred levers, each of which operates a switch or signal. On the floor above is a machine with three-hundred and sixty-two levers, operating the switches and signals on the express level. To each forty levers a man is assigned who works under the direction of a train director, who decides upon the track that each train is to be placed..."

Scientific American Supplement, December 7th 1912
Above: GCT's Tower A switch/signal control room

42



“...In front, breast high, is a double row of metal handles, each with a straight grip a hand’s breadth long, one up and one down alternately. Over at one side of the room, about halfway down its length, a man sits at a desk on which a telegraph instrument chatters intermittently. On a frame of ground glass beside him is etched a map of the tracks in the terminal, spreading out fanwise from the mouth of the tunnel under Park Avenue. A little circle about half the diameter of a dime marks the point where each track branches off...”
 The New York Times, February 2nd 1913 43

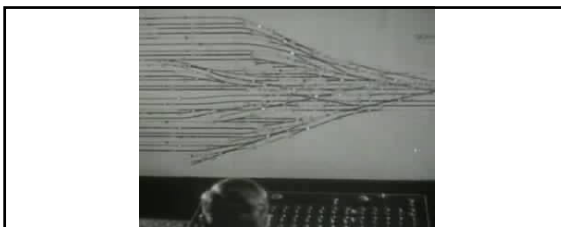


“To operate the complicated network of trackage it was necessary to devise a signaling system for each level that could be operated by a director who could not possibly see the train movements...Each level is controlled by a director who has before him a facsimile diagram of the track layout on which movement of trains between switches and fouling points is indicated by a small electric lights. The signal machine for the suburban level is the largest ever constructed and has 400 levers, each of which operates a switch or signal, and on the floor above, the machine for the upper level has 362 levers.”
 Engineering News-Record, September 9th 1920 44
 Above: Tower (“Signal Station”) A director at control/model board (ca. 1939)

Hitting the Hill

45

“...As soon as the train ‘hits the hill’ – as they call emerging from the tunnel mouth – the first bulb lights behind the first of these little circles. The tower director – the man at the telegraph key – knows that the train is coming, for he has been advised of its progress ever since it reached High Bridge or Mott Haven Junction and knows just what he is going to do with it, just where he is going to place it, as soon as it gets within his reach...”
 The New York Times, February 2nd 1913 46



“...The movement of the trains is indicated by little electric lights on a chart which is a facsimile of the track layout of the yards. As the trains pass over the switches the lights on the chart are extinguished and not relighted until the train has passed over the switch onto the next one. The switches and signals are interlocked so that no error on the part of the operator can set a signal one way and a switch the other. Both must agree and the safety of the train is thereby assured. The directors in these two towers control the movement of eight-hundred trains in and out of the terminal each day...”
 Scientific American Supplement, December 7th 1912 47



“...The tower director looks over to the men standing before the long row of handles and says, ‘124’ or ‘58.’ Each handle has a number above it. The man who has the number called within his division of the long box pulls the corresponding handle. As he does so he feels a tiny thrill that is the indication that the ‘high field’ motor that controls the switch is doing the work. Then there is a gentle click, which is the second ‘indication’ telling of the release of the armature magnet. A little square of round glass above the handle is illuminated and shows that the switch and signal are set. Another little circle lights up on the tower director’s map, another number is called, and so on until the train or the engine is at the end of the journey...”
 The New York Times, February 2nd 1913 48

At a Glance

49


"...Should the tower director call a wrong number or should one of the trainmen misunderstand him and pull the wrong lever the electric indicators would show the error at once. Not only that, but the particular section of the interlocking system of switches and signals on the tracks outside would show it to the eye of the engineer. Even if the engineer did not see it the train would be 'tripped' automatically and brought to a stop until the error was rectified. So accurately is the movement of the trains indicated by the little electric lights on the chart...the exact position of every train at every moment is known, even to the point of the last car's location and that of the electric motor...'At a glance' is the only word for it..."

The New York Times, February 2nd 1913

50

Solemn Duty

51




"...The room is perhaps not solemn to the men, but it seems so to you. The air is heavy with duty. You do not speak. You would shrink back at the very touch of those great levers...Should one of the operators turn to address you for a moment, you instinctively ask him not to take his eyes off his work...In a signal tower the emergency is not the exception; it is the whole thing. Every moment is emergency, either actual or possible..."

The New York Times, February 2nd 1913

52

Always Cool

53



"I hear people talk about emergency brakes. I see emergency wagons about the streets. The emergency hospital is down the avenue below my house. I smile. Why. I eat, drink and breathe emergency in my work. It is funny, but you cannot surprise me with anything. My wife knows that. If the baby fell out of the window my nerves would not jump. I really don't like it, for I can have no thrills. I am always cool. That is what my job has done for me."

RE: comments from a GCT signal tower switchgear operator, 1913

Left: Tower A's *Interlocking Machine* (ca. 1939). All levers physically interlock to prevent unsafe track/switching configurations, thus its name

Right: interior of Signal Station "F" in GCT

54

Organized Chaos

55

"The traffic-control room is home to roughly two dozen controllers who watch every move and hear every sound along the routes serving Grand Central, represented by colorful schematics on computer screens. Training alone takes about five years, and most controllers have three decades of experience..."

The New York Times, November 26th 2009

56



Above: Metro North's state of the art Operations Control Center. Metro-North has eliminated all signal towers and movement on the entire system is controlled remotely from GCT's control center.

Left: view of the old Metro North Control Center

57

"The packed train raced toward its final stop in Midtown, a thousand weary commuters aboard. Thirty seconds down the track, a train running in the opposite direction seemed to be heading straight toward it. High above Grand Central Terminal, in the station's secluded rail-traffic control office, the disquieting scene unfolded on a monitor watched by a team of focused controllers. A call was made, a track was switched, and the trains shot by each other with time to spare... 'It's organized chaos,' said Tom Hennessy, the station's yardmaster for two decades, who dealt with several similar situations on Wednesday. 'You don't exactly know how you'll do it, but you know you'll get it done.'"

The New York Times, November 26th 2009

58



Top Left: many Metro-North RR operations occur on the seventh floor of GCT. This elevator indicator is one of the few indications of this otherwise inconspicuous level

Top Right: GCT's Situation Room overlooks the Operations Control Center where all trains and tracks are monitored 24/7/365

Left: unlike the highly ornate public spaces, corridors in many of the restricted access areas of GCT are narrow and utilitarian

59

Thoroughly Modern

60

"...Another entirely new feature is the system of advising the gatemen on the concourse when to open the gates and admit passengers to the trains. An electric lamp is sunk in the hand-rail in front of each gate and when the train is ready to receive passengers the conductor presses a button, illuminating this lamp, thereby notifying the gateman that all is ready. At the moment the train is due to leave the gateman will close the gate and press a button located on the same hand-rail, which will illuminate the lamp on the platform near where the conductor will stand, thereby notifying him that the gate is closed and he may proceed."

Scientific American Supplement, December 7th 1912

61

Heart of the Nation's Greatest City

62

"As a bullet seeks its target, shining rails in every part of our great country are aimed at Grand Central Station, heart of the nation's greatest city. Drawn by the magnetic force of the fantastic metropolis, day and night great trains rush toward the Hudson River, sweep down its eastern bank for 140 miles, flash briefly by the long red row of tenement houses south of 125th Street, dive with a roar into the two-and-one-half-mile tunnel which burrows beneath the glitter and swank of Park Avenue, and then Grand Central..."

*RE: excerpt from the prologue of NBC's dramatic radio anthology *Grand Central Station* (1937-1953)*

63

Part 8

Temple of Transportation

64

What Might Have Been

65

In 1903, Chief Engineer Wigus invited four prominent architectural firms to participate in a design competition for the new GCT:

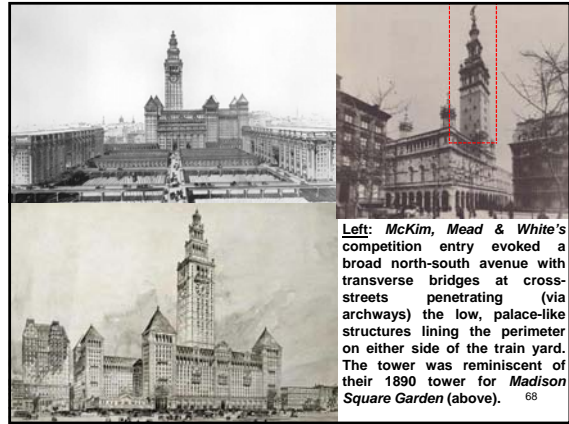
- McKim, Mead and White (New York, NY)
- Samuel Huckle, Jr. (Philadelphia, PA)
- Reed & Stem (St. Paul, MN)
- Daniel H. Burnham (Chicago, IL)

The firms were from all around the country and had conflicting opinions in terms of how the new terminal should be designed. Huckle opted for a baroque turreted building with *Park Avenue* running right through it. *McKim, Mead & White* developed plans for a sixty-story skyscraper, which would have been the tallest in the world and was surmounted by a 300-foot jet of steam illuminated in red (as a beacon for ships and an advertisement for the company). *Reed & Stem* envisioned a multi-tiered, elevated roadway that circumnavigated the building (connecting to its various levels) and a "Court of Honor" (to the north of the terminal) which would house the *National Academy of Design* and the *Metropolitan Opera*. *Daniel Burnham* was a prominent Chicago-based architect who had won accolades for his role in designing the neo-classical "White City" of the 1893 Chicago *Columbian Exposition* and NYC's famous *Flatiron Building* (a.k.a. "Fuller Building") at the intersection of 23rd Street, *Broadway* and *Seventh Avenue*. Unfortunately, no record remains of Burnham's design. Reed & Stem had an advantage going into the competition given the fact that a partner in the firm - *Allen H. Stem*, was *William Wilgus'* brother-in-law.

66

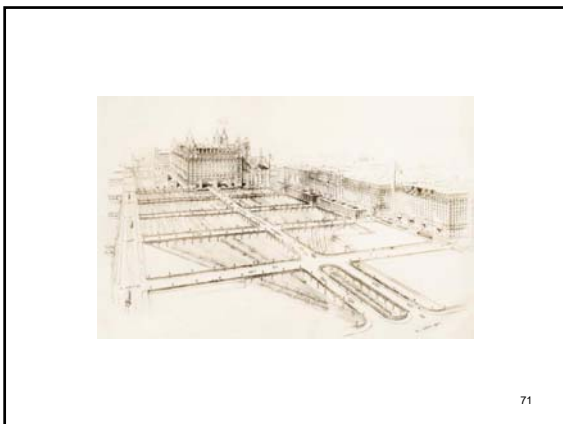
McKim, Mead & White

67



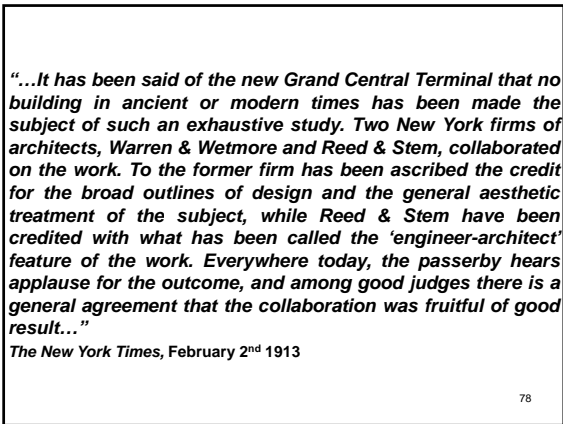
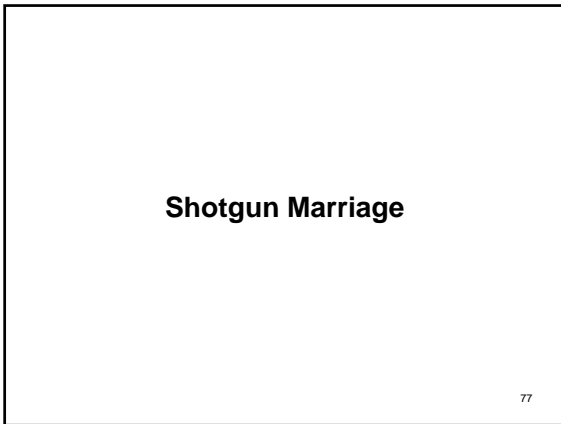
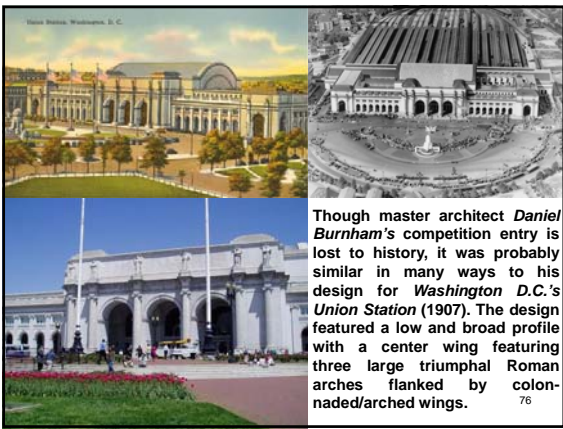
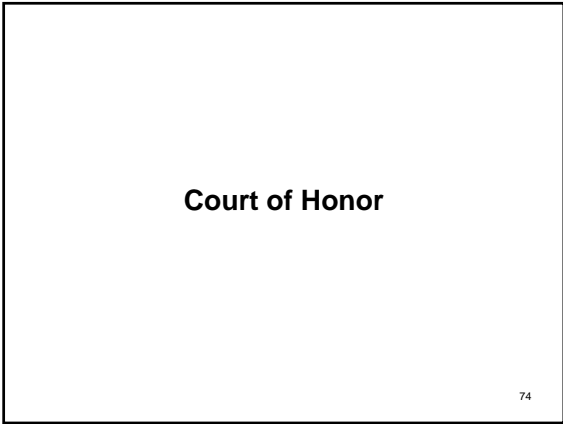
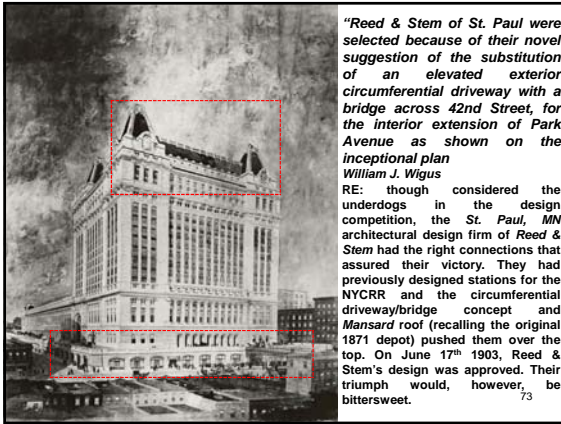
Samuel Huckle, Jr.

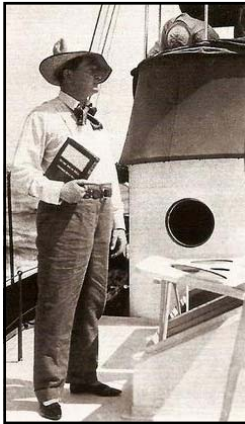
70



Reed & Stem

72





The architectural firm of *Warren & Wetmore*, who had not even officially been invited to enter the competition, submitted their own design for the proposed station post-award. Their alternative design, and the fact that *Whitney Warren* (left) was *William Vanderbilt's* cousin, ensured their entry would be paid attention to. By January 1904, the NYCCR's chairman had determined it would be in their best interests to use a "team" approach to the terminals architectural design. Thus, *Warren & Wetmore* were to be associate architects of *Reed & Stem* on a design team named: "Associated Architects of Grand Central Terminal." The team of *Reed & Stem* and *Warren & Whitmore* would also design Detroit's *Grand Central Station* (a.k.a. *Michigan Central Station*). *Warren & Wetmore* were first among equals given their family and society connections (they were the architects for the *New York Yacht Club*). Large parts of *Reed & Stem's* design were eliminated, including the revenue-generating office and hotel tower atop the terminal and the vehicular viaducts, to the dismay of Chief Engineer *Wilgus*, though many aspects of the vehicular viaduct would later be retained in the final design.

79



80

Bearing Fruit

81



"...The object of the French training is to render the student receptive; to make him fruitful in design, and imagination. By making the training very general in character, it hopes to foster that gift with which all artists should be born, namely, the gift of having ideas."

The British Architect, March 8th 1907
 RE: *Whitney Warren* attended the *Ecole Nationale des Beaux-Arts* in Paris, having graduated in 1894. He embraced the *American Beaux-Arts* style which was based on classical and/or *Renaissance* influences (i.e. oversize columns/arches, ornate detailing). In *New York*, along with other *Ecole* alumni he founded the *Society of Beaux-Arts Architects* and later served as director of the *Beaux-Arts Institute of Design*. His *Paris* training steeped in the *Beaux-Arts* was put to good use on his first major commission: *New York Yacht Club* (*W. 44th Street*) of 1899 (left)

82

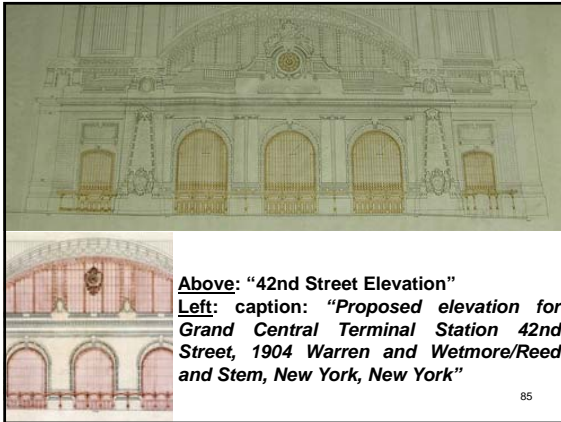


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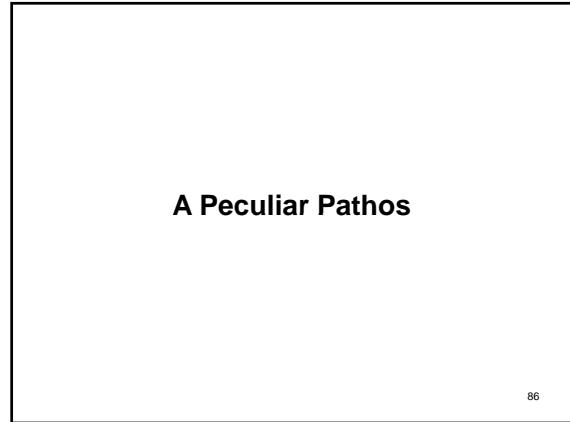


Above: an almost realized design of GCT by *Warren & Wetmore* and *Reed & Stem* (1905). The caption reads: "The New Station As It Will Appear From The Corner Of Forty-Second Street And Vanderbilt Avenue – *Warren & Whitmore* and *Reed & Stem*, Architects"

84



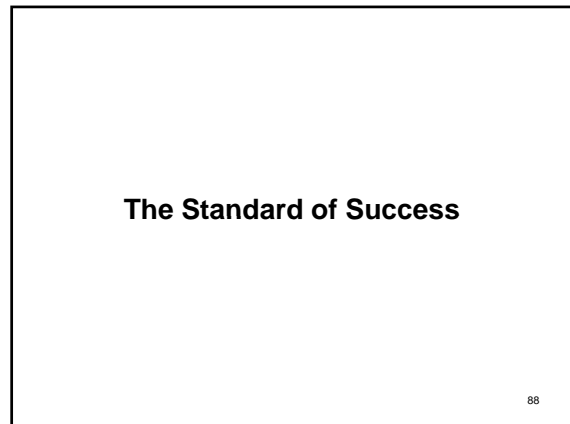
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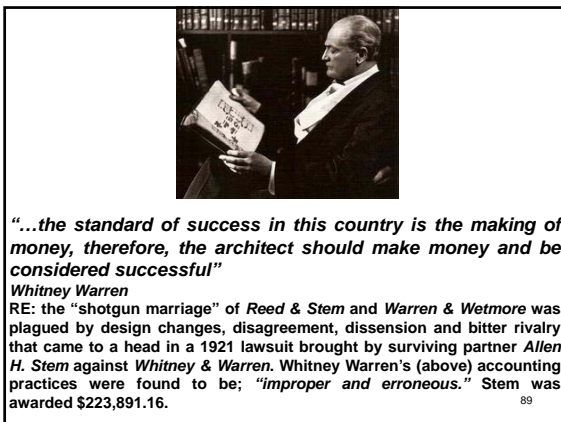
86

"...At the outset and until little more than a year ago, Charles A. Reed, head of the Reed & Stem firm, was at the head of the board of architects, but Mr. Reed died on Nov. 12, 1911, and since then the firm of Warren & Wetmore has brought the work to the conclusion signalized by today's opening. Throughout the architectural world it was recognized as a thing of peculiar pathos that, just on the eve of the emergence into visible result of this, the largest and most ambitious work of his long career, he should have had to leave it. By official title Mr. Reed was executive head of the New York Central & Hudson River Railroad Company architects. He was graduate from the Massachusetts Institute of Technology, and the last thirty years of his life were devoted to railroad station building..."
The New York Times, February 2nd 1913

87



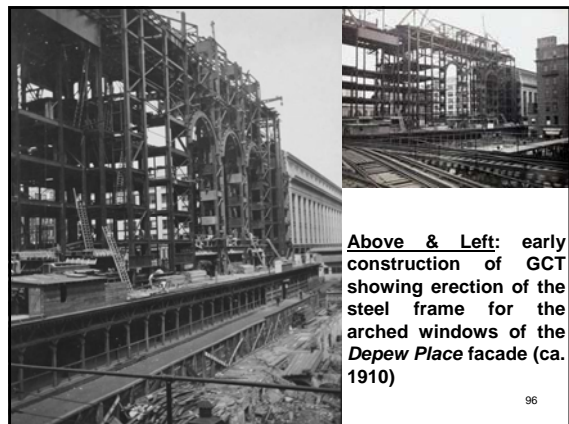
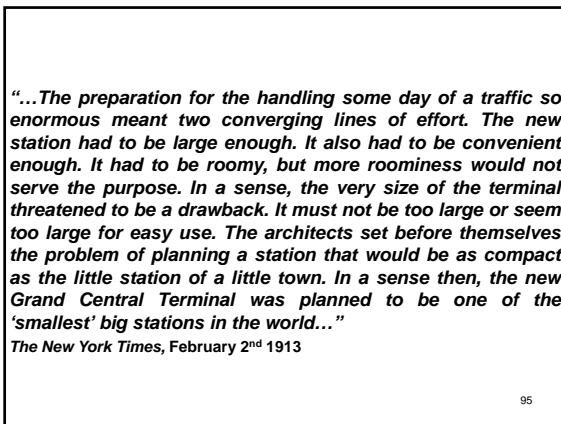
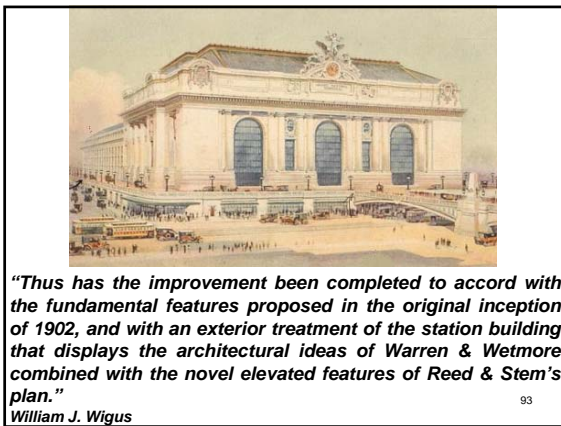
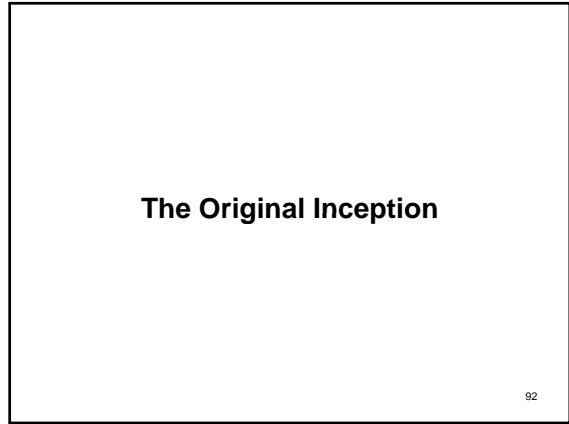
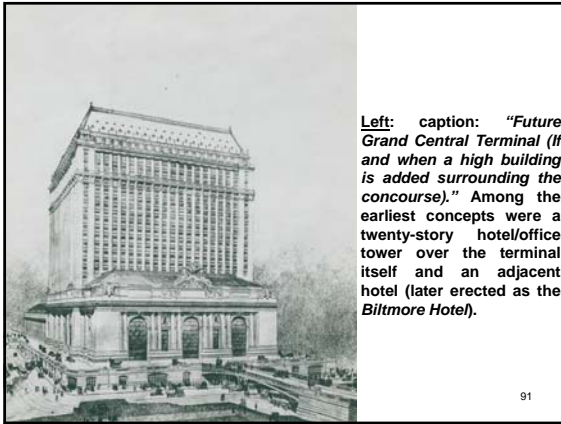
88

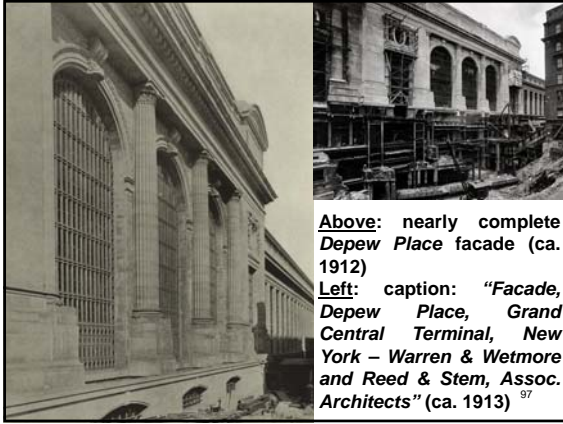


89



90





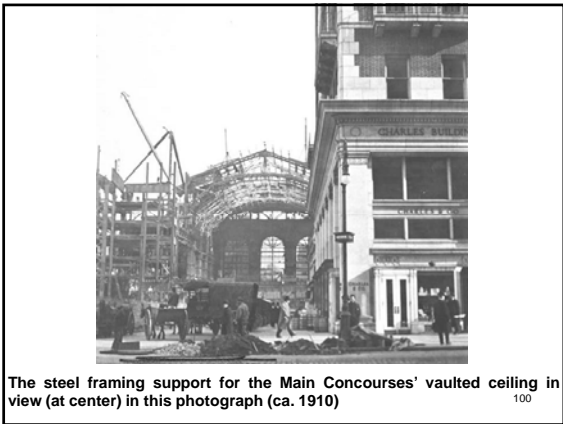
Above: nearly complete Depew Place facade (ca. 1912)
Left: caption: "Facade, Depew Place, Grand Central Terminal, New York – Warren & Wetmore and Reed & Stem, Assoc. Architects" (ca. 1913)⁹⁷

The Old Conflicts and Friction

98

"...To put it another way, the builders of the terminal expended every energy in their effort to make it a thing of convenience as well as of size and beauty. They foresaw that they simply had to eliminate, as far as it was humanly possible, the old conflicts and friction of the old railway stations. They foresaw that it would be preposterous to expend scores of millions in an enterprise that would prove cumbersome in the using..."
The New York Times, February 2nd 1913

99



The steel framing support for the Main Concourses' vaulted ceiling in view (at center) in this photograph (ca. 1910)¹⁰⁰

100

Separate and Distinct

101

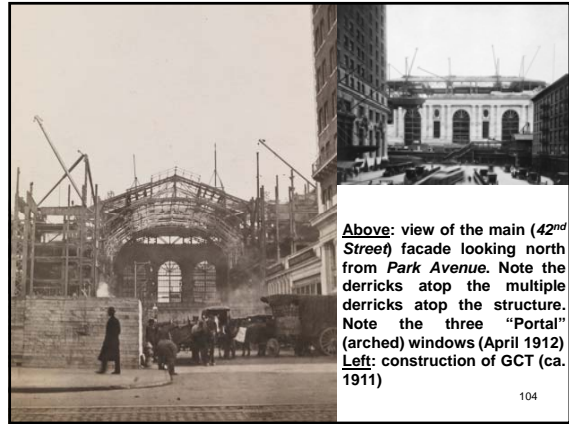
"...One of the most conspicuous features of the terminal plans was the obvious effort to systematize every activity with which henceforth it will be astir. Everything is segregated. When the thing is all done there will be a separate and distinct station for the incoming and outgoing passengers. These stations will all be part of one structure, of course, and it will be the simplest thing in the world to get from one to the other. But they will be distinct. The incoming folk will not meet the outgoing. More important than that, they will not run into one another..."
The New York Times, February 2nd 1913

102



Top Left: steel framework complete and stone facade rising on the main (42nd Street) elevation (January 1912)
Top Right: view of the southern facade (Vanderbilt Avenue) steel framework (January 1912)
Left: view of southwest corner: Vanderbilt Avenue (left) and 42nd Street (right, March 1912)

103



Above: view of the main (42nd Street) facade looking north from Park Avenue. Note the multiple derricks atop the structure. Note the three "Portal" (arched) windows (April 1912)
Left: construction of GCT (ca. 1911)

104

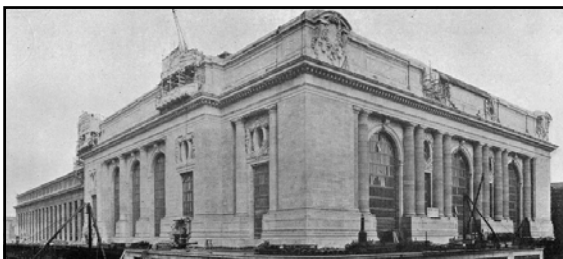


Above: May 1912. Scaffolding still surrounds the building as construction continues. The photograph was taken from a building on the south-side of 42nd Street. The east-side (Depew Place) facade (at right) as well as the south/main (42nd Street) facade (at left) are in view.

105

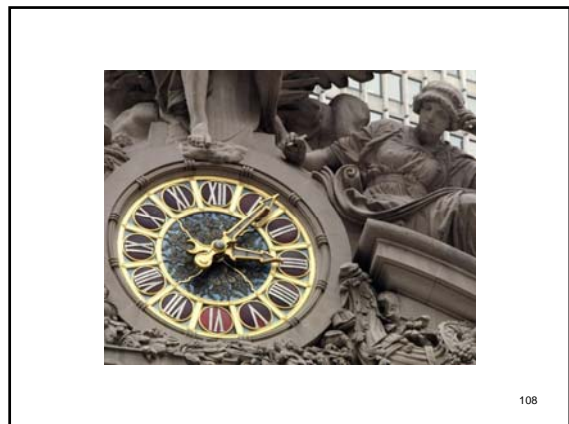
Beaux Arts Eclectic

106



"...to a point on the southern sidewalk, where the vastness of the terminal building, seen on two sides, properly smites you. There is the facade in gray limestone, with its pillars and triumphal arch windows in triple rows, a group of sculptured figures at the highest centre, and at the extreme corners the stone carved coats-of-arms of New York City and State. There is detailed ornamentation in wreath, oak leaf and other patterns, but all sparingly applied. The style is a modified French Renaissance; the effect is monumental."
 New York Tribune, December 15th 1912
Above: the neoclassical "Beaux Arts Eclectic" style of GCT featured three arched windows each sixty-feet high flanked by engaged Doric columns with a granite and limestone facing supported by structural steel (ca. 1912)

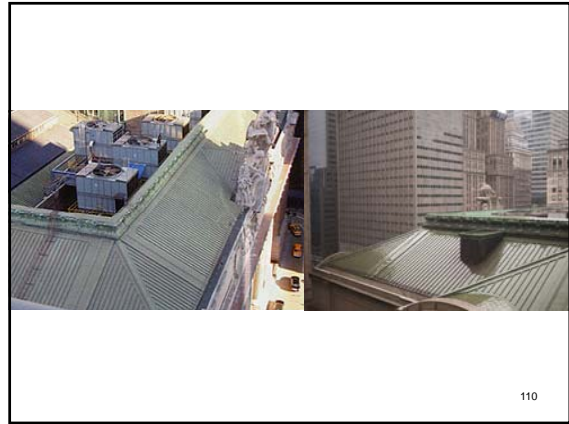
107



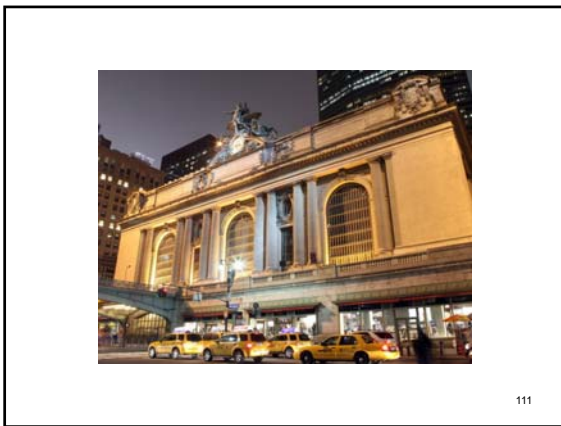
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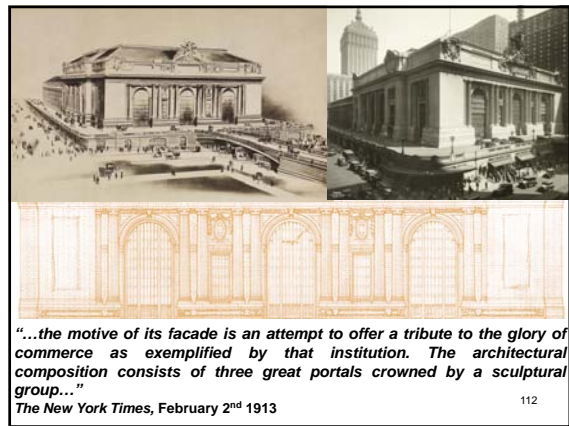
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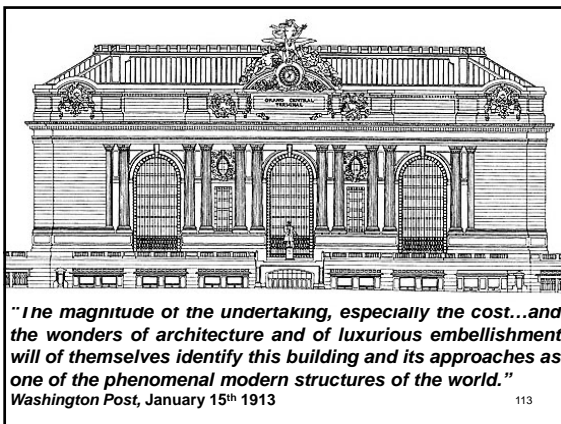
110



111



112



113



114



"...One important part of the exterior will not be in place for months to come. That is the sculptured group which is to stand, forty feet in width, above the central portal of the Forty-second Street facade and will, in the words of the Grand Central's own literature of the new terminal represent 'Progress, Mental and Physical Force.' It is to embrace the clock..."
The New York Times, February 2nd 1913
 Above: missing still on the main facade (above the center portal window) after the opening of GCT on February 2nd 1913 was the sculptural group of Mercury, Hercules, and Minerva representing "Progress, Mental and Physical Force" 115

Brains and Brawn

116



"...All to attest that this great enterprise has grown and exists, not merely from the wealth expended, nor by the revenue derived, but by the brain and brawn constantly concentrated upon its development for nearly a century..."
 Whitney Warren, Architect
 Left: GCT was completed in 1919, when the Park Avenue Viaduct was opened. The only missing feature in the photo is the statue of "The Commodore" - Cornelius Vanderbilt, which was installed in 1929 at the base of the center portal window on the 42nd Street facade (outlined). 117

GRAND CENTRAL TERMINAL
 Keeping Pace with the Unprecedented Traffic Demand of New York City
 To be Opened Sunday, February 2nd

NEW YORK CENTRAL LINES

When all was said and done, the terminal alone cost \$43 million (the entire project cost \$80 million). An additional \$800K was spent to reinforce the terminal's structural steel frame if/when a skyscraper was placed atop it, conceivably sometime in the near future. The whole project consumed a total of 118,597-tons of steel. To support the street level deck and future buildings of Terminal City, 1500 steel columns were set in-place.
 Left: poster advertising GCT's formal opening on Sunday, February 2nd 1913 118

The Greatest Station

119

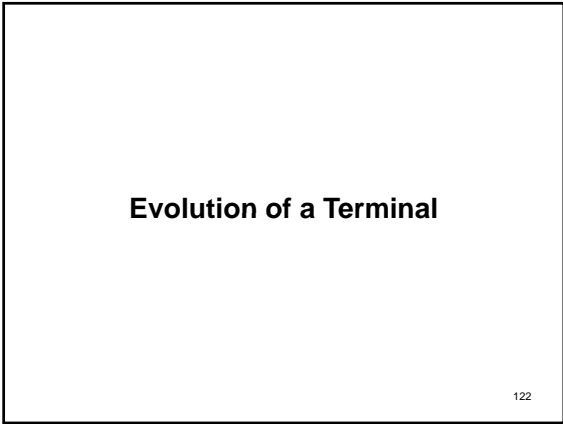
New Grand Central Terminal
 The Heart of New York

GRAND CENTRAL TERMINAL

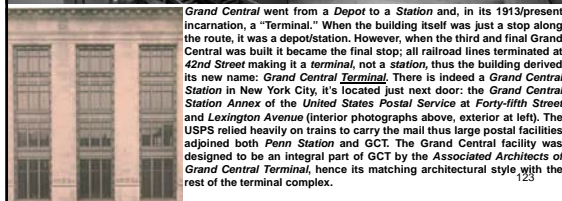
"...a monument, a civic center...it is not only the greatest station in the United States, but the greatest station of any type, in the world..."
The New York Times, February 2nd 1913 120



121

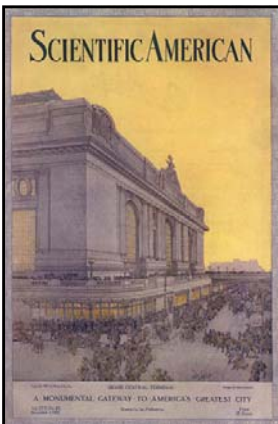


122



Grand Central went from a Depot to a Station and, in its 1913/present incarnation, a "Terminal." When the building itself was just a stop along the route, it was a depot/station. However, when the third and final Grand Central was built it became the final stop; all railroad lines terminated at 42nd Street making it a terminal, not a station, thus the building derived its new name: Grand Central Terminal. There is indeed a Grand Central Station in New York City, it's located just next door: the Grand Central Station Annex of the United States Postal Service at Forty-fifth Street and Lexington Avenue (interior photographs above, exterior at left). The USPS relied heavily on trains to carry the mail thus large postal facilities adjoined both Penn Station and GCT. The Grand Central facility was designed to be an integral part of GCT by the Associated Architects of Grand Central Terminal, hence its matching architectural style with the rest of the terminal complex.

123

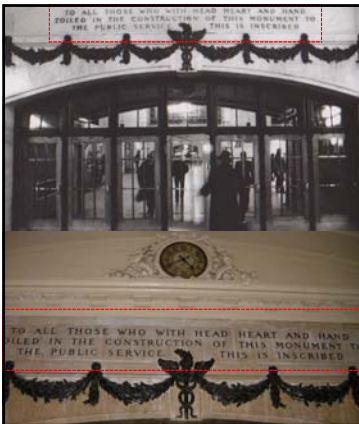


Left: color rendering on an in-depth article concerning GCT published December 7th 1912. It was entitled "A Monumental Gateway to America's Greatest City" and depicted how the new terminal would look when it opened two months later. Scientific American (and other prominent publications of the era) took great interest in GCT and ran several articles about its design and construction in the intervening years from conception to completion. The new station took ten years to build and when it opened on February 2nd 1913, it was the largest railroad terminal in the world and still retains that distinction.

124



125



"No individual could have been or was responsible for this work as a whole. It is the organic combination of the brain and brawn of many men. Those chiefly concerned would be the last to accept any award of sole personal credit. The inscription over the Forty-second Street entrance to the main waiting room...has long been accepted by those associated in the enterprise as most appropriate..."
 Alfred Fellheimer, Nov. 22nd 1926
 RE: excerpt from a NYT Letter to the Editor

126

A Thing of Serene Beauty

127


"...Now that the scaffolding and all the rubbish of construction have been stripped away, the superb front of the building can be viewed from far down Park Avenue, a thing of serene beauty. But the work of the sculptor that is to crown it all is yet to be done. This group will be carved in stone upon the building itself, and the countless thousands who hurry past and around and across that point will watch it emerge in gradual beauty and significance. But the working model from which the group is to be fashioned is still in the Paris atelier of Jules Coutant, the sculptor who won the commission of designing it. One model in plaster rests over the fireplace in the office of Whitney & Warren, the architects of the terminal..."

The New York Times, February 2nd 1913

128

I Do Not Underrate My Task



129



"The group, of course, will be heroic in scale...will stand forth boldly...and combine the classical and symbolical...My general conception is known. The difficulty of the problem which I have before me is to give the vitality of the present to a symbolism that is consecrated by centuries of literature and art and philosophy. I think I shall succeed, but I do not underrate my task."

Jules-Felix Coutan, Sculptor

130

Jules-Felix Coutan – designer of the *France of the Renaissance* sculpture on the *Alexander III Bridge* in Paris (above and left – it also heavily influenced the design of the *Park Avenue Viaduct Bridge* over 42nd Street), was chosen by *Warren & Wetmore* to create the giant sculptural group to crown the center portal of the 42nd Street facade. Coutan made a quarter-size model in his Paris studio, but it was executed in the *William Bradley & Son* yard in *Long Island City* by Irish sculptor *John Donnelly*. The full size version was carved from *Indiana Limestone*.¹³¹




Above: tomb of *Jose C. Paz*, *La Recoleta Cemetery*, *Buenos Aires, Argentina* - by *Jules Coutan*
Left: *The Eagle Hunters* by *Jules Coutan* (for the facade of the *Museum d'Histoire Naturelle, Paris*)¹³²



"...From what I have learned pictorially of the characteristics of your country, especially with reference to the standards of art, I do not think it would interest me. In fact, I should wish rather to avoid it. I fear that the sight of some of your architecture would distress me."

Jules-Felix Coutan, Sculptor

RE: Coutan's response to a reporter's question as to whether or not he planned to visit the United States (Coutan was chosen by Whitney Warren over several American sculptors). Coutan created a quarter-size model of the statuary group but never saw the completed work and/or set foot in the United States since he believed it might be distressing to do so.

Above: model of the sculptural group

133

"New York Central President Newman was in Paris and went to see Jules Coutan...Although this was several years ago, the design closely resembled the group now executed. 'How soon do you think you will have it finished?' asked the railroad official, as he glanced over the drawing. 'About two years.' 'Good heavens!' exclaimed Mr. Newman, 'we've got to have this in four months.' 'I am not a speculator,' responded the sculptor. 'All the pleasure I shall ever get out of this will be in doing it right.' Evidently the sculptor had his way...The physical labor of carving the piece required five months. Begun about December 1 last, it was completed only on May 1...it could hardly have been executed anywhere else in the country in a period much short of two years...There is no sculpture like it in the country."

New York Tribune, May 31st 1914

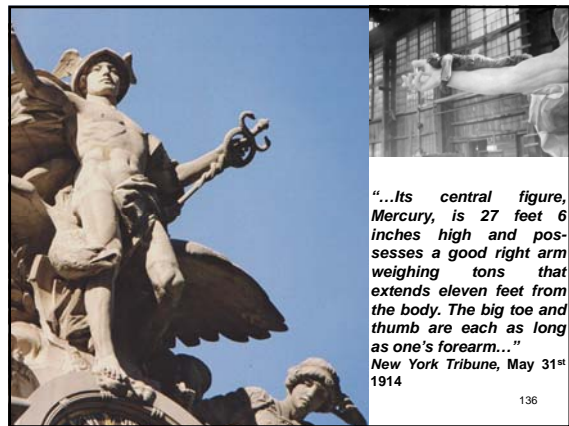
134



"...The group is constructed like the front of a building; that is, it is built up in continuous layers of stone cemented together. The stones are many tons in weight, averaging from 20 to 24 inches in depth. In all, the group weighs approximately 1,000 tons. It measures 60 feet in length, 50 feet in height, and varies in thickness. The material is Bedford (Ind.) limestone..."

The New York Times, June 14th 1914

135



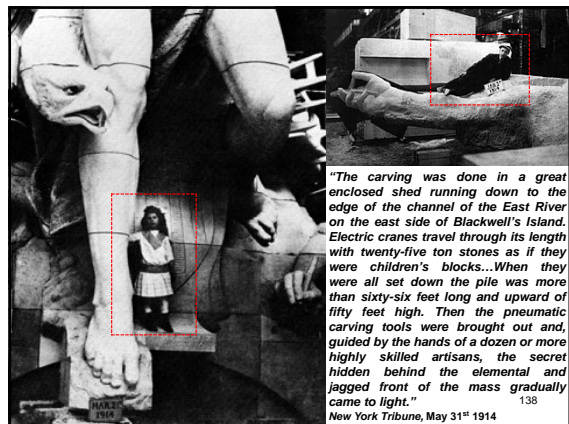
"...Its central figure, Mercury, is 27 feet 6 inches high and possesses a good right arm weighing tons that extends eleven feet from the body. The big toe and thumb are each as long as one's forearm..."

New York Tribune, May 31st 1914

136

The Hidden Secret

137



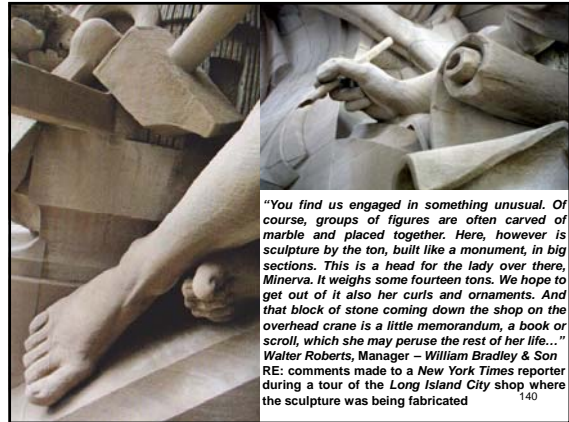
"The carving was done in a great enclosed shed running down to the edge of the channel of the East River on the east side of Blackwell's Island. Electric cranes travel through its length with twenty-five ton stones as if they were children's blocks...When they were all set down the pile was more than sixty-six feet long and upward of fifty feet high. Then the pneumatic carving tools were brought out and, guided by the hands of a dozen or more highly skilled artisans, the secret hidden behind the elemental and jagged front of the mass gradually came to light."

New York Tribune, May 31st 1914

138

Sculpture by the Ton

139



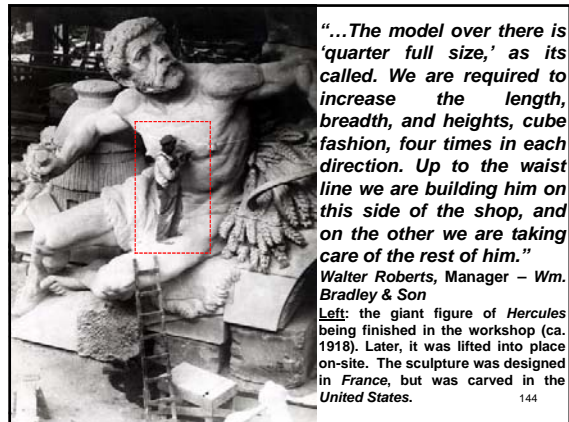
A Reason for Being

141

"...Architecture being a reasoned art, for any specified purpose there should be precedent and tradition - every motive and element should have its reason for being, and in all compositions, no matter how simple, the elements must explain themselves and justify their presence. In ancient times, the entrance to the city was thorough an opening in the walls or fortifications. This portal was usually decorated and celebrated into an Arch of Triumph, erected to some military or naval victory, or to the glory of some great personage. The city of today has no wall surrounding that may serve, by elaboration, as a pretext to such glorification, but none the less the gateway must exist, and in the case of New York and other cities it is through a tunnel which discharges the human flow in the very centre of the town. Such is the Grand Central Terminal...the whole to stand as a monument to the glory of commerce as typified by Mercury, supported by moral and mental energy - Hercules and Minerva..."
 Whitney Warren 142



Above: Arch of Constantine, Rome. The triumphal arch grew out of a tradition originating during the Roman Republic. Victorious generals, known as *Triumphators*, had monumental arches erected to commemorate their victories. Following construction of the arches, the generals were often granted a *Triumph*; a celebratory procession passing beneath the arch. 143

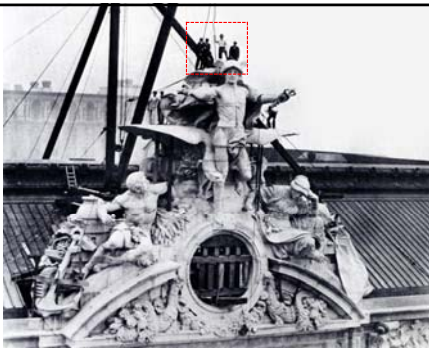


Horn of Plenty

145



Above: sculptor Sylvain Salieres poses in front of an early version of his "Horn of Plenty" sculpture (at the base of Coutan's mythical sculptural group). There would be some minor differences in the final version. ¹⁴⁶



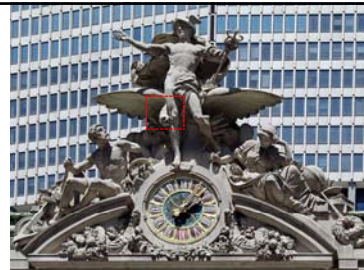
Above: several workmen atop the sculpture (above Mercury's helmet). Note that the Tiffany glass-faced clock has yet to be installed. ¹⁴⁷



"...Mercury will stand with right hand extended and holding in his left the magic wand said to exercise influence over living and dead, and to bestow wealth and prosperity. Hercules, seated to the right of the central figure, is surrounded with objects familiar in daily life. Here are the cogwheel, the anchor, the anvil, and the beehive. Also there are garlands, sheaves of wheat, and branches of oak. If the figure of Hercules is indicative of strength and action, that of Minerva, on the other side of the central figure, typifies thought and study." *The New York Times*, June 14th 1914 ¹⁴⁸

Transportation

149



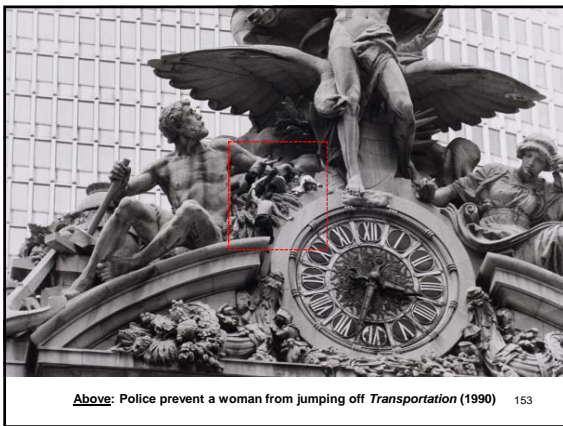
The NYCRR referred to the sculptural group representative of "Progress, Mental and Physical Force" as *Transportation*. Mercury (center) wore a winged helmet and represented speed, science and commerce. Behind, an *American Eagle* spread its wings and its head embraced the standing figure's right knee in a protective gesture. To Mercury's left was a reclining *Hercules* – representing physical strength, and to the right was *Minerva* (also reclining), representing wisdom and the arts. ¹⁵⁰



151



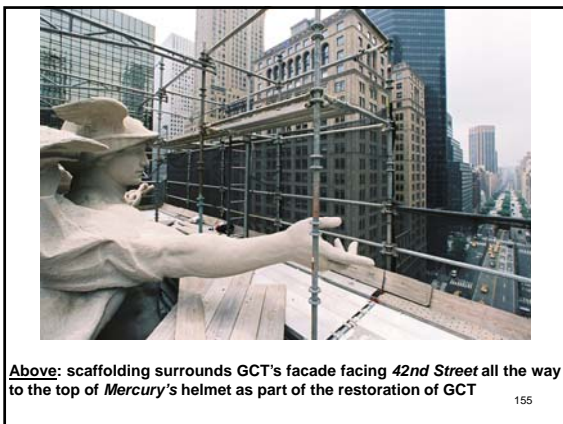
152



Above: Police prevent a woman from jumping off *Transportation* (1990) 153



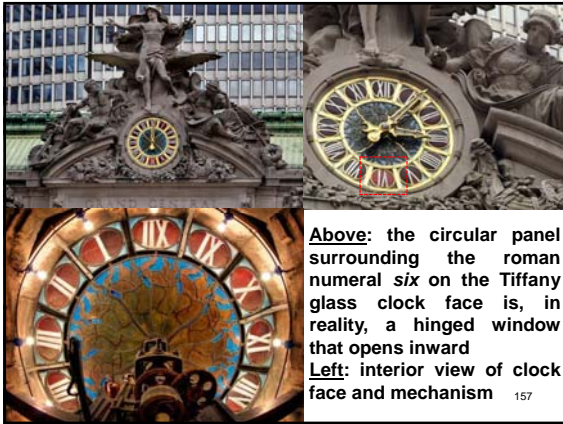
Left: workers using a high-pressure hose to wash Mercury's winged helmet
Right: *Minerva* getting a sprucing up (washing with high-pressure hose). *Minerva's* head alone weighs approximately fourteen-tons (the whole sculpture weighs-in at fifteen-hundred tons). Overall, it measure sixty-feet wide by fifty-feet high 154



Above: scaffolding surrounds GCT's facade facing *42nd Street* all the way to the top of *Mercury's* helmet as part of the restoration of GCT 155

Telling Time

156



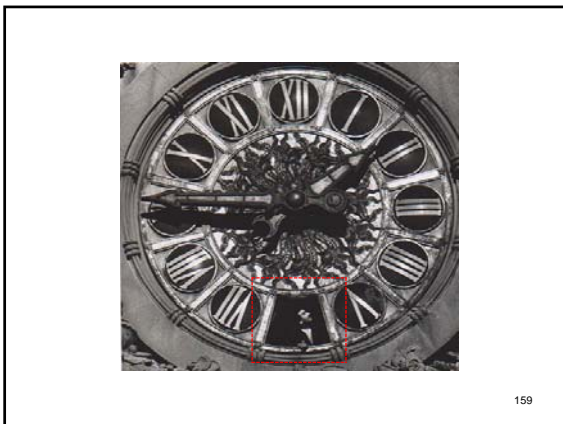
Above: the circular panel surrounding the roman numeral six on the Tiffany glass clock face is, in reality, a hinged window that opens inward
Left: interior view of clock face and mechanism

157

"One of Jake's most important clocks is the one on the south side of Grand Central...its hands weigh over a hundred pounds each, but are so perfectly balanced that they can be moved by a little wheel in the works, which are inside the building. Occasionally, Bachtold has to do something to the face of this clock, in which event he emerges through a door about three feet square at numeral VI and works either sitting on the doorway or standing on the stone coping beneath the clock, in either case appreciably slowing down northbound traffic..."

New Yorker magazine, April 17th 1940

158



159



Above: hatch and access ladder to clock tower
Above Top: door in clock-face (VI)
Left: clock face close-up

160

I'll be Ramping

161

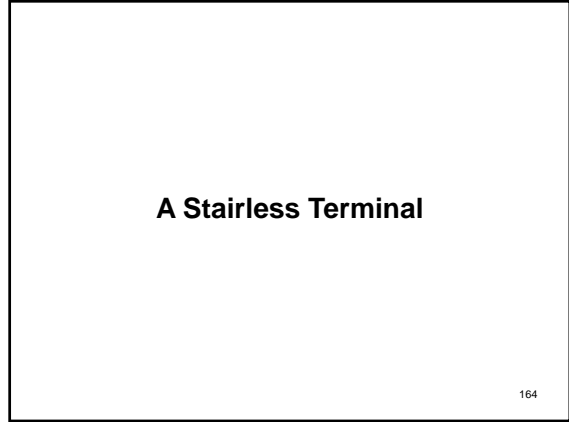
"There is a whole story in the ramps, how the terminal engineers, not satisfied with theoretical calculations, built experimental ramps at various slopes and studied thereon the gait and gasping limit of lean men with heavy suitcases, fat men without other burden than their flesh, women with babies, school children with books, and all other types of travelers. Upon the data thus obtained they were enabled to construct ramps truly scientific and seductively sloped. Their work, it is said, has given rise to a popular expression on Broadway, 'Well, I'll be ramping.'"

New York Tribune, December 15th 1912

162



163



164

"...The new Grand Central Terminal, which threw wide its doors to the traveling public at midnight last night, has been hailed as a stairless station, the first of its kind in the history of terminal building the world over. The first passengers to rush through this new gateway to the St. Louis Express that was scheduled to pull out of the station at 12:25 this morning found not a single stair in their way. They could go from the point where the red cross-town car dropped them in Forty-second Street, straight to their waiting berth in the Pullman, one level below the street, without finding a single step to descend. It was their introduction to a stairless terminal..."
The New York Times, February 2nd 1913

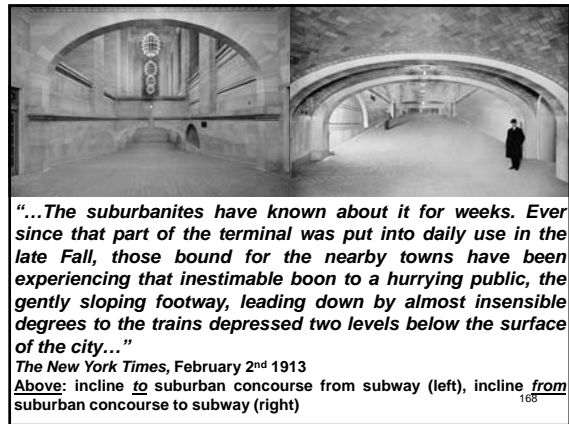
165



166

"The most beautiful and striking feature of the suburban level is the main ramp from the subway to the concourse. It is a marble corridor forty feet wide descending at a gentle slope between the main waiting room and concourse. Its location between these two rooms with their lofty ceiling gives it an impressive height. It is flanked by the great columns of the main concourse through which a glimpse of the beautiful room is had. The sunlight falls softly through windows high above and by night the walk is illuminated by five mammoth bronze electroliers of wondrous beauty and ornate design, suspended by ornamental bronze chains."
Bankers' Magazine, January 1912

167



"...The suburbanites have known about it for weeks. Ever since that part of the terminal was put into daily use in the late Fall, those bound for the nearby towns have been experiencing that inestimable boon to a hurrying public, the gently sloping footway, leading down by almost insensible degrees to the trains depressed two levels below the surface of the city..."
The New York Times, February 2nd 1913

Above: incline to suburban concourse from subway (left), incline from suburban concourse to subway (right)

168

Truth be Known

169

"...The terminal builders were set against stairs. Stairs are always uncomfortable. They are worse than that when a crowd is using them. They are dangerous. A packed stairway is a fine breeding ground for a panic and a disastrous one. The architects of the Grand Central shunned them...The stairs have been banished, to all practical purposes, from the terminal, and banished so effectively that the last annoying and perilous step at the end is gone, for the station platform and the train platforms are built flush...Of course if the exact truth were told, the Grand Central is not a stairless terminal at all. There are flights of stairs, broad, sweeping, handsome stairs, leading from one floor to another. But these are off the direct line of passage between street and train. They are little sideways, short cuts from one part of the station to another. And the essential fact remains that it is quite possible to move from your trolley car to your Pullman car without finding stairs in your way. And that was the end desired..."

The New York Times, February 2nd 1913

170

The Great Question

171

"...When the builders of the new terminal discovered the possibilities of roofing over the terminus to the end that revenue-producing structures might be reared above them, it was as good as settled that the station itself would be an underground station. When it was decided that the new terminal should be under ground, and not merely slightly depressed, but two deep levels beneath the street, there arose the great question of the most desirable means of communication between street and train. The engineers and architects turned the question over in their discussions, and in the end the solution was the ramp. Some of the passengers who have been using the gentle incline that leads to the already populous suburban concourse have been heard exclaiming over the novelty and ingeniousness of this arrangement..."

The New York Times, February 2nd 1913

172



173

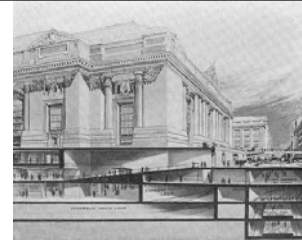
Hail Caesar

174

“...But the idea is not new. The Grand Central builders cannot claim it as their own, although they were the first to see its value for terminals on a large scale. The idea itself is centuries old. It was evolved when a not dissimilar problem confronted the builders of the camps for the old Roman armies, and those whose duty it was to haul the wagons and heavy artillery to ramparts of a Roman city. They built long runways. So did those who built the pyramids. It is this ancient device of the long, gentle slope that has been incorporated as one of the most striking features of the latest word in railway stations...”

The New York Times, February 2nd 1913

175



“...the track layout comprises over thirty-three miles, the upper level having forty-two tracks, twenty-nine of which are adjacent to platforms, and the lower level having twenty-five tracks, seventeen of which are adjacent to platforms...”

Scientific American Supplement, December 7th 1912
Above: illustration caption: “View showing the Suburban Concourse, the Express and Suburban Loops and the Interboro, Hudson and Belmont Subway Tunnels”

176

The New Grand Central Terminal
 is located in the heart of New York, and is the only station on all the lines of local traffic—the subway, the surface and the elevated. More than 2000 cars pass its doors every day, affording every terminal facility in the heart of New York City. Around it, within a half mile radius, are 40 hotels, 18 clubs and 25 theatres. The Gateway of the
New York Central Lines
 to New York City is thus the most accessible station as well as the most wonderful terminal in the world. The position of the new Grand Central Terminal is the finest and most strategic of any major terminal of the world. It is the gateway to the
20th Century Limited
 the most famous train in the world—the material of service and speed—and one of the great institutions in the development of rail and steam.
 The great west side East or West via the New York Central Lines over the Hudson River through the magnificent Hudson River and Palisades, through the Mohawk Valley and along the Lakes. For one that will never diminish, it is a great day's ride.
 “The 20th Century Limited”
 is a permanent institution.”

“...These ramps are the gentlest of slopes. Those which lead down to the suburban concourse are, of course, steeper, but not so steep as to be unpleasant footways. This leading to the express concourse are barely perceptible. The traveler moves from Forty-second Street to the limited train for Chicago without descending a step and without descending a slope as steep, for instance, as that Murray Hill Grade leading south from Forty-second Street...”

The New York Times, February 2nd 1913
Left: advertisement celebrating the new GCT (ca. 1913). The NYCRR had regular train service between New York and Chicago via their famous 20th Century Limited. The ad refers to the pyramids of Egypt - like the new terminal, a symbol of long-lasting grandeur.

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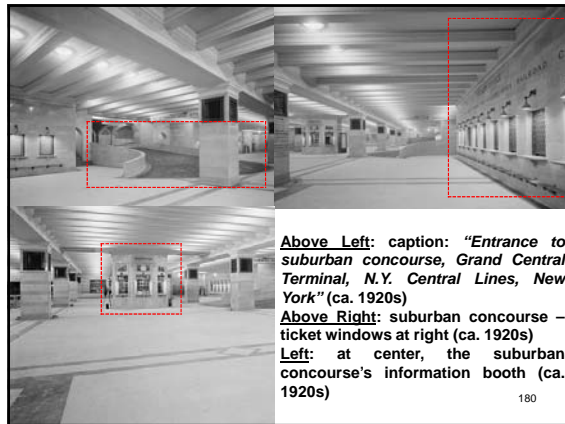
Separate But Equal

178

“Underneath the main concourse is the suburban concourse, which is about the same dimensions excepting as to height of the ceiling. It is laid out in the same convenient manner and provides the same facilities as the main concourse. In planning this great terminal the railroad company has given particular consideration to the comfort and convenience of suburban passengers, affording them the same facilities as the through travelers enjoy.”

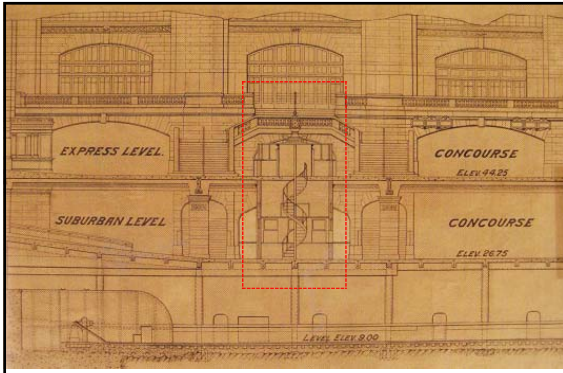
Bankers' Magazine, January 1913

179

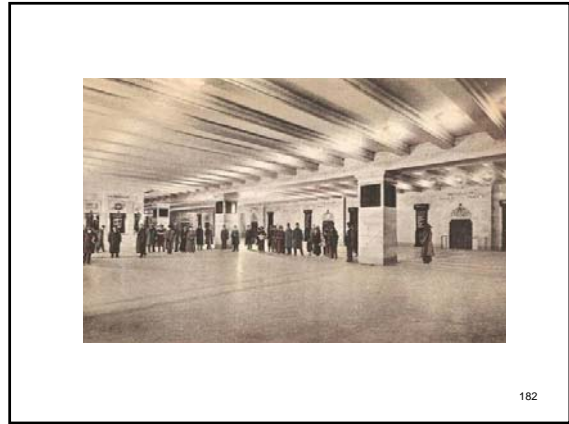


Above Left: caption: “Entrance to suburban concourse, Grand Central Terminal, N.Y. Central Lines, New York” (ca. 1920s)
Above Right: suburban concourse – ticket windows at right (ca. 1920s)
Left: at center, the suburban concourse's information booth (ca. 1920s)

180



Above: cross-section showing the spiral staircase connecting the Information Booth/s at the Upper (Express) Level and Lower (Suburban) Level (ca. 1916)¹⁸¹



182



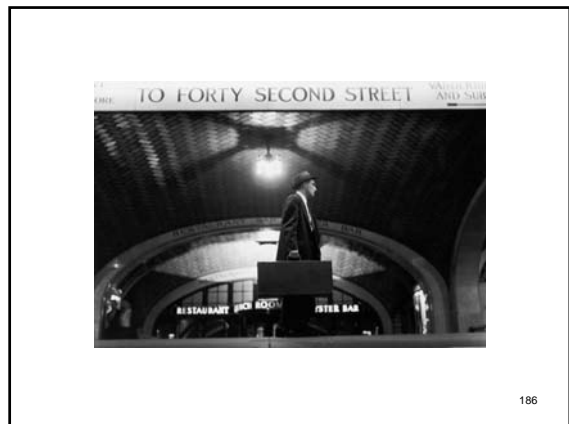
Above: commuters standing in line to purchase tickets for the Harlem, Hudson, and Putnam Division/s ticket windows, suburban concourse (ca. 1940)¹⁸³

The Lame Man Decided

184

"...The old idea would have failed in execution if the ramps had been too steep for comfort. And in this case, it was not the comfort of the hale and hearty that was considered. The builders of the terminal decided that the ramps, if ramps there were to be, must slope so gently from the street to train as to present not the slightest difficulty to the old, infirm traveler, to the little tot toddling along at his mother's side, to the man laden down with baggage which he declines to relinquish to any one of the most cordial attendants, to the woman trailing a long and preposterous train. The ramp must be convenient to these extreme types. They must suit the most halting gait or fail. It has been said of them that 'the lame man decided...'"

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186

Seeing How it Felt

187

"...So a great deal of study was given over to the selection of just the right gradient. At almost every stage of the building of the terminal, the privileged spectator found the builders going to the most elaborate pains to ensure perfection and efficiency. At no point was greater care taken than in this matter of the ramps. Every sort of ramp was tested, both as to angle and material. The tests were impressive in their thoroughness. Temporary ramps were set up in various parts of the station. Over these every employee, high and low, in the great army of terminal service, trudged for the purpose of 'seeing how it felt.' Girls from the telephone booths, men from the baggage room, boy pages and matrons, all these walked up and down the test ramps. Some went empty handed, some went arm in arm, some carried heavy bundles. Some were fat, some were lean, some tall, some short. Even the Directors of the road seized suitcases and trudged up and down in the business of gathering impressions. These were all duly noted down and the results compared. Then too, the unsuspecting public was allowed to help in the work. Ramps were cunningly and unobtrusively put in the way of the regular stream of passengers, and the effect on the stream carefully noted by men stationed close by..."

The New York Times, February 2nd 1913

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Above: commuters experience indoor ski slopes via the ramps at GCT (1967)

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Part 9

Inner Beauty

190

The Exquisiteness of the Detail

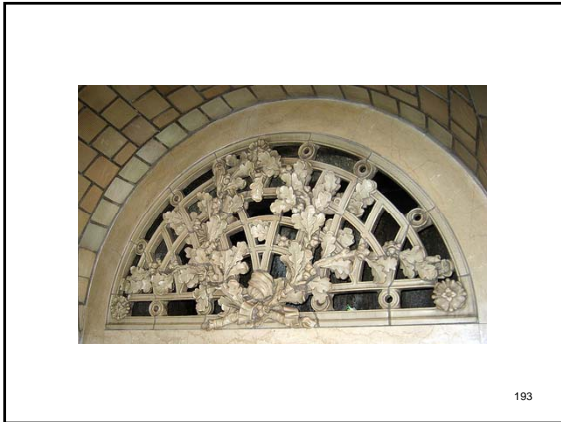
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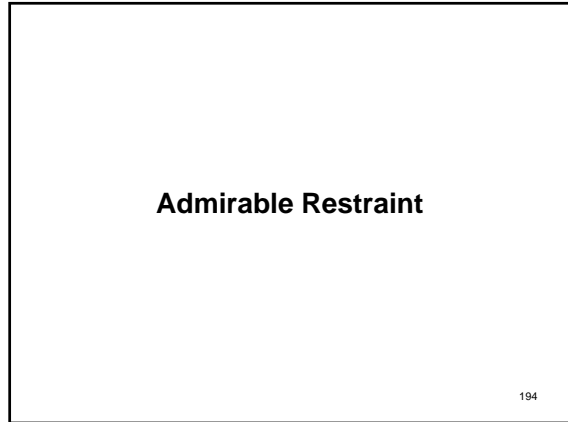
"All through the main rooms and corridors a soft toned Italian marble has been lavishly used and the exquisiteness of the detail may be gathered from the fact that the famous Rookwood pottery of Cincinnati has furnished certain of the ornamental motifs over the doors. Other doorways are surmounted by great bronze clocks set in a frame work of sculptured marble and in the corridors are the enormous bronze electroliers, suspended by bronze chains...The main concourse is a magnificent room, finished in Botticino marble and buff-tinted stone and with a great domed ceiling...Nothing finer has been done in New York."

Town & Country, January 25th 1913

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193



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"Salieres carvings are notable on account of their departure from the conventional ornamentation of buildings and their appropriateness to a railway station. They are handled with admirable restraint and sense of composition, although in places they fairly seem to spill from the stone of the building. In an original way they symbolize commerce and its consequence abundance. The pine, the oak, the olive, corn, the grape, the fruits of the American subtropics, are interwound with the serpent, taken from Mercury's wand and emblematic of commerce, together with the winged wheel, representing speed, the signal flags typifying safety, and the trumpet emblematic of progress, all appear in the carvings. Christian Science Monitor, August 8th 1914

RE: Sylvain Salieres sculptural works at GCT are far ranging and often focus on oak leaves and acorns, symbolic of the Vanderbilt family (they lacked a family coat of arms due to the Commodore's humble origins). Interior works include the winged wheels on the north wall of the *Main Concourse*, ornamental bands on the *Main Waiting Room's* ceiling, intricate metalwork on window grilles/frames, doorways and decorative moldings throughout. Unlike Coutan, Salieres – another notable Parisian artist recruited by *Whitney Warren* for GCT, worked in *New York* for five years (1911-1915). In 1916, he took the position of head of the *School of Sculpture* at the *Carnegie Institute of Technology*. He died in 1920.

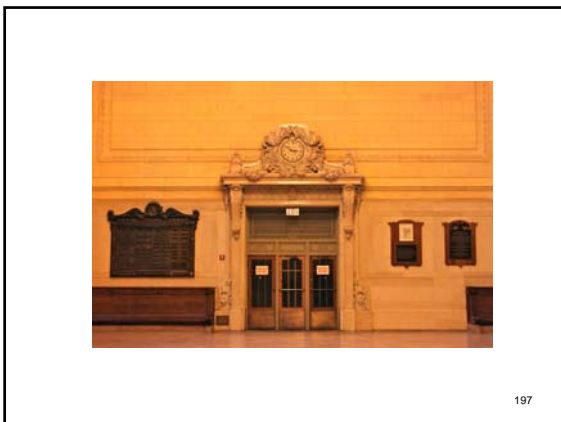
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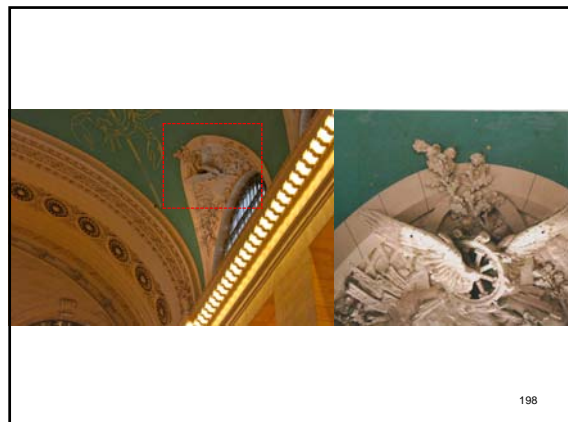
Above: leaf and acorn designs in bronze (top) and wrought iron grille (with clock) above elevator doors

Left: the Vanderbilt acorn and oak leaves

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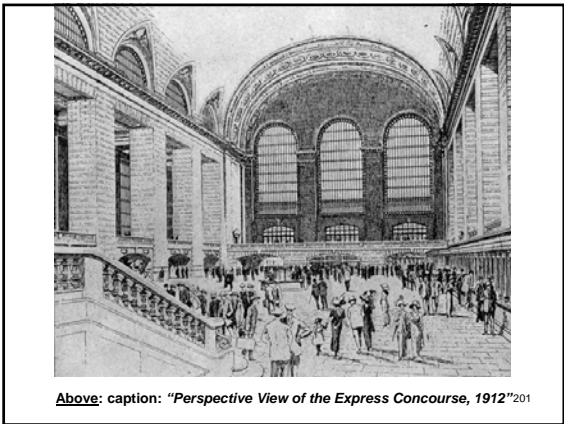
Impressive Proportions

199



"...The outbound concourse, the principal feature of the main building, is a magnificent room 275 feet long, 120 feet wide and 125 feet high. Only when standing under its vaulted ceiling can its impressive proportions be appreciated, and even then one hardly realizes that it could accommodate fifteen regiments of infantry. It is finished in Botticino marble and buff-tinted stone, which, under the light that falls softly through six great dome-shaped windows, gives a most pleasing and cheery effect, nothing austere or cold..."
Scientific American Supplement, December 7th 1912

200



Above: caption: "Perspective View of the Express Concourse, 1912"²⁰¹



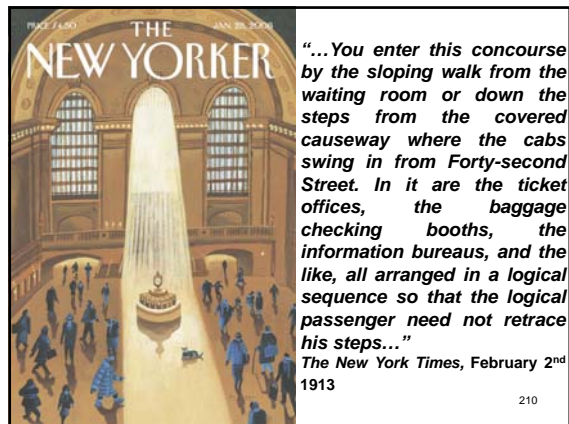
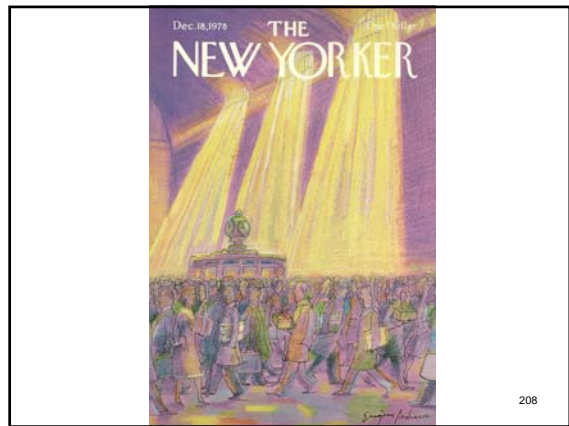
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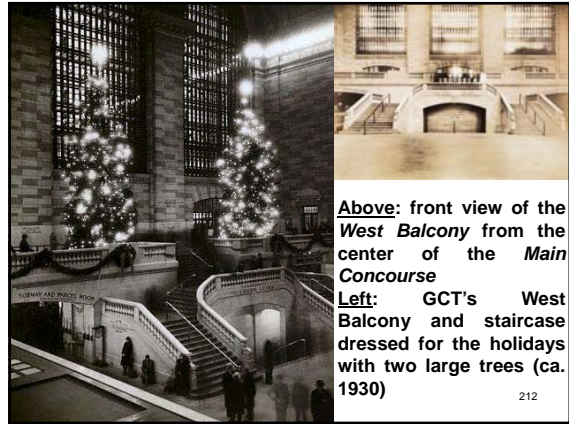
Room of Rooms

204





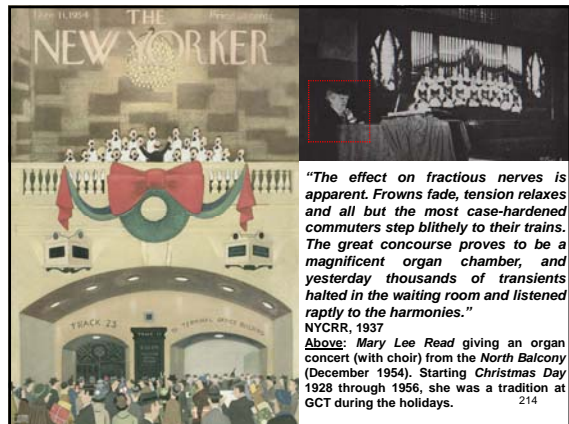
Above Left: view from West Balcony (1913)
Above Right: view of West Balcony and staircase (1913)
Left: modern view of the Main Concourse (looking towards the West Balcony) ²¹¹



Above: front view of the West Balcony from the center of the Main Concourse
Left: GCT's West Balcony and staircase dressed for the holidays with two large trees (ca. 1930) ²¹²



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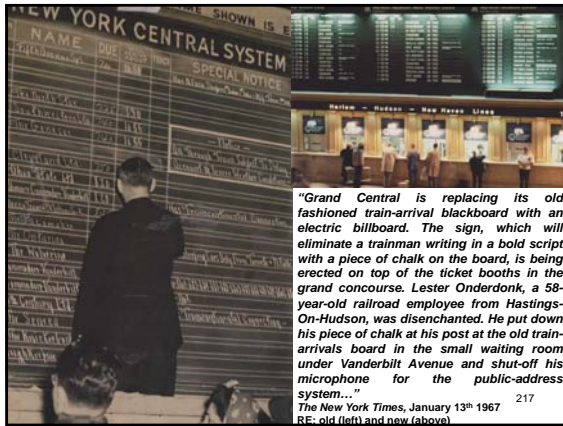
"The effect on fractious nerves is apparent. Frowns fade, tension relaxes and all but the most case-hardened commuters step blithely to their trains. The great concourse proves to be a magnificent organ chamber, and yesterday thousands of transients halted in the waiting room and listened raptly to the harmonies."
 NYCRR, 1937
Above: Mary Lee Read giving an organ concert (with choir) from the North Balcony (December 1954). Starting Christmas Day 1928 through 1956, she was a tradition at GCT during the holidays. ²¹⁴



Above: Main Concourse ticket windows with original grills, rails and light fixtures (ca. 1913) ²¹⁵



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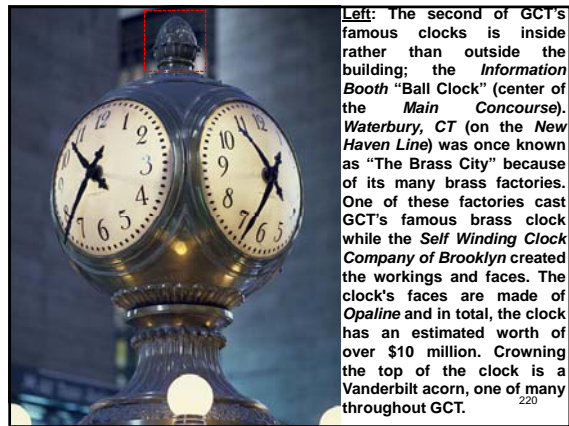
"Grand Central is replacing its old fashioned train-arrival blackboard with an electric billboard. The sign, which will eliminate a trainman writing in a bold script with a piece of chalk on the board, is being erected on top of the ticket booths in the grand concourse. Lester Onderdonk, a 58-year-old railroad employee from Hastings-On-Hudson, was disenchanted. He put down his piece of chalk at his post at the old train-arrivals board in the small waiting room under Vanderbilt Avenue and shut-off his microphone for the public-address system..."
 The New York Times, January 13th 1967
 RE: old (left) and new (above)



"Do you know what I hope? I hope that when they plug in the new system, when it is finished in a week or two, the whole thing blows up."
 Lester Onderdonk, NYCRR arrivals board attendant
 RE: until early 1967, an attendant updated the *Billmore Room's* arrivals board with time and track information manually via a chalkboard. In January 1967, a electrically powered mechanical-digital ("split-flap") display board (left) replaced the attendant and the chalk board. A fully digital-electronic arrivals board (right) later replaced the mechanical-digital board

The Four Faces of Time

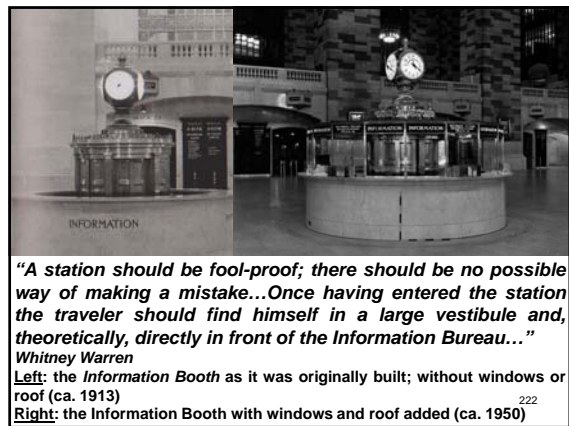
219



Left: The second of GCT's famous clocks is inside rather than outside the building; the *Information Booth "Ball Clock"* (center of the *Main Concourse*). *Waterbury, CT* (on the *New Haven Line*) was once known as "The Brass City" because of its many brass factories. One of these factories cast GCT's famous brass clock while the *Self Winding Clock Company of Brooklyn* created the workings and faces. The clock's faces are made of *Opaline* and in total, the clock has an estimated worth of over \$10 million. Crowning the top of the clock is a *Vanderbilt acorn*, one of many throughout GCT.

The Information Bureau

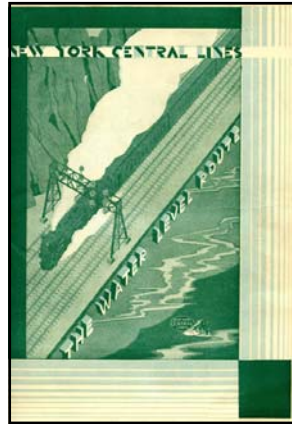
221



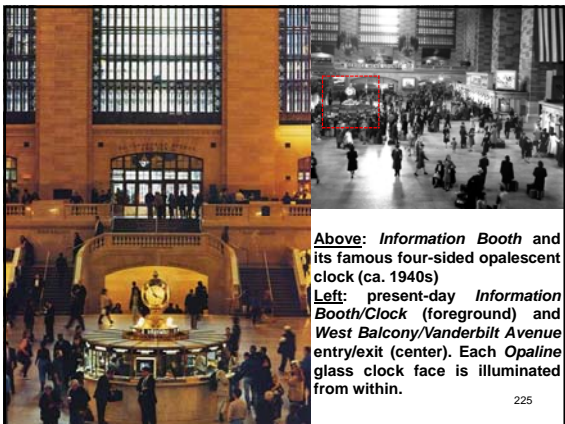
"A station should be fool-proof; there should be no possible way of making a mistake...Once having entered the station the traveler should find himself in a large vestibule and, theoretically, directly in front of the Information Bureau..."
 Whitney Warren
Left: the *Information Booth* as it was originally built; without windows or roof (ca. 1913)
Right: the *Information Booth* with windows and roof added (ca. 1950)



"One of the most marvelous products of the present age is the man, or group of men, in the 'Information Bureau' at a great railway terminal. He is distinctly a product of this age of rush and congestion and specialization...His head is a psychological marvel, synchronized with the clock and the calendar; automatically he knows 'what's the next train?' whether it be on a full-schedule weekday, or a slim-schedule Sunday or holiday. His ready-reference memory for minutely exact facts and figures goes a long way toward confuting the doctrine of human fallibility. And his double-weave, seamless, never-rip patience would bring a tinge of green into the eyes of Job himself..."
The New York Times, June 11th 1916
 Left: cartoon from *New Yorker* magazine (05/18/1940)



"Information men' deal largely with time tables, and time tables deal almost exclusively with figures...Now, if you will take the total number of trains and multiply them by the number of stations, the result will represent a small part of the exact-to-the-minute facts that must be photographed upon the memory of the 'information man.' Between the Grand Central and Albany, Chatham and New Haven are trunk lines, with their own particular trunk lines. All of these lines mean stations, and all of these stations mean more figures for the 'information man.'"
The New York Times, June 11th 1916
 224



Above: Information Booth and its famous four-sided opalescent clock (ca. 1940s)
 Left: present-day Information Booth/Clock (foreground) and West Balcony/Vanderbilt Avenue entry/exit (center). Each Opaline glass clock face is illuminated from within.
 225



"Sometimes the clerks at the information booth at the Grand Central station wonder themselves why they don't go mad. Folks ask the silliest questions. 'Where could I have a live turkey stored until Christmas?' 'I'm going to Chicago the day before Christmas. Will the train get there in time?' 'Can I take a kitchen table and four chairs with me on the train and put them under my berth?' 'Can you tell me the address of a lady who came here three years ago from Czech-Slovakia and married a banker in Westchester? The banker died, and I can't recall his name.' These are some of the reasons why it requires about three years to train a good information man to handle the 25,000 questions the bureau is called upon to answer each day."
Atlanta Constitution, December 22nd 1930
 Left: cartoon from *New Yorker* magazine (12/24/1949)

21,500,000 Minutes

227



"The four-faced 'Golden Clock' above the information booth in the middle of the main concourse of Grand Central Terminal will be removed for repairs next Tuesday. That will be the first interruption to the bronze clock's ticking in the 21,500,000 minutes, more or less, since the terminal was opened in 1913. A spokesman admitted yesterday that the timepiece was losing 'a minute or two per day.' The error was corrected hourly, however, by the electric control system tied to the Naval Observatory."
The New York Times, Jan. 17th 1954
 Left: the ball clock undergoes an overhaul (1954). The *Self Winding Clock Company of Brooklyn* did the upgrade and rejuvenation to its original masterwork.
 228



Above: this clock in the secret basement (M42) is in-sync with the atomic clock/s of the U.S. Naval Observatory. 229

The Yip-In

230



Above: in April 1968, 3K members of the *Youth International Party* (a.k.a. "Yippies") stormed into the *Main Concourse* of GCT tossing hot cross buns and firecrackers while floating balloons up toward the *Sky Ceiling*. Then, a dozen yippies scaled the *Information Booth*, ripped off the clock hands, scribbled graffiti and defiantly passed around lighted marijuana "joints" in full view of the police. After the "Yip-In" was broken up, a total of sixty-one were arrested. One of the opal clock faces was pierced by a bullet fired, apparently, from a policeman's gun. 231



Above: *Information Booth* (ca. 1976). Though it had been spared the wrecking ball, GCT was far from saved. After decades of deferred maintenance the building was deteriorating rapidly. The roof leaked, stonework was chipping away, structural steel was rusting, pollution and dirt had stained surfaces black and commercial intrusions (like the *Kodak Colorama* and the *Newsweek* clock) blocked out natural light. 232

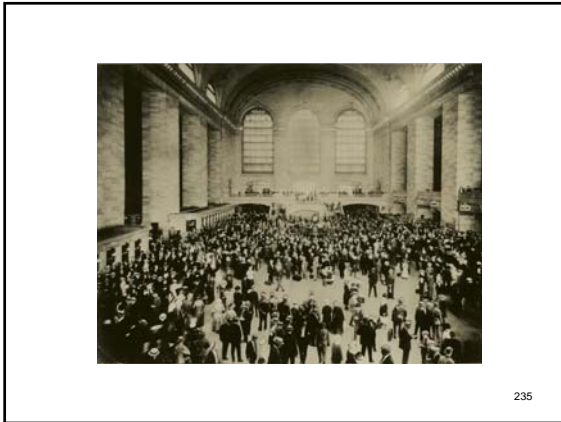
Everybody's Meeting Place

233

Feb. 6, 1995 THE NEW YORKER Price \$2.50

"It's a railway terminal, of course; but it's also a kind of crossroads at the heart of New York. It's known to everybody, open to everybody; and its splendid Concourse is everybody's meeting place. 'I'll see you at the Golden Clock at Grand Central.'... You heard these words, sometimes, in the mouths of people who had never been to America, but who understood that, once arrived, they could surely find each other beside the four-faced Golden Clock at Grand Central Station."
David Marshall, Author

234



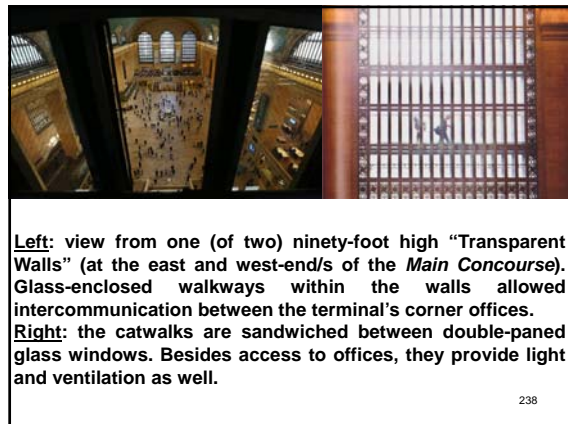
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237

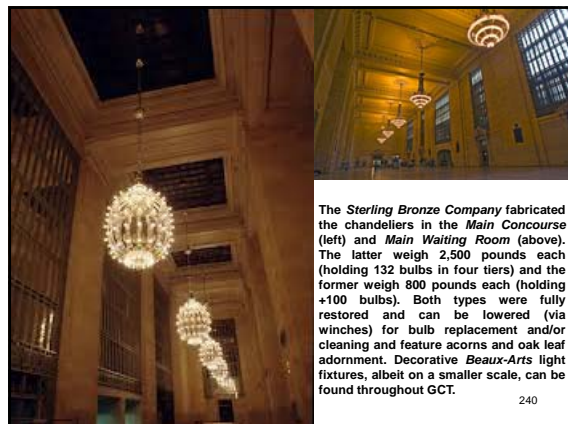


Left: view from one (of two) ninety-foot high “Transparent Walls” (at the east and west-end/s of the *Main Concourse*). Glass-enclosed walkways within the walls allowed intercommunication between the terminal’s corner offices.
Right: the catwalks are sandwiched between double-paned glass windows. Besides access to offices, they provide light and ventilation as well.

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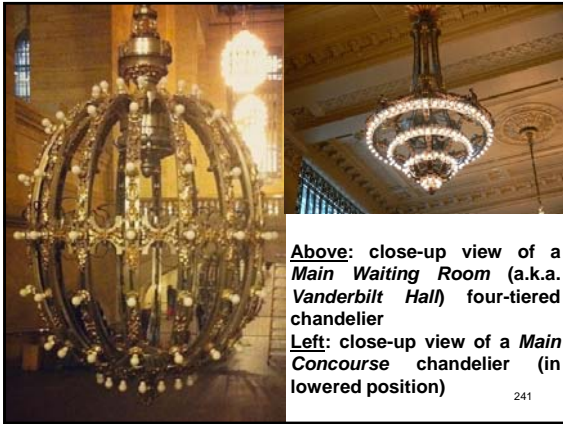


239



The *Sterling Bronze Company* fabricated the chandeliers in the *Main Concourse* (left) and *Main Waiting Room* (above). The latter weigh 2,500 pounds each (holding 132 bulbs in four tiers) and the former weigh 800 pounds each (holding +100 bulbs). Both types were fully restored and can be lowered (via winches) for bulb replacement and/or cleaning and feature acorns and oak leaf adornment. Decorative *Beaux-Arts* light fixtures, albeit on a smaller scale, can be found throughout GCT.

240



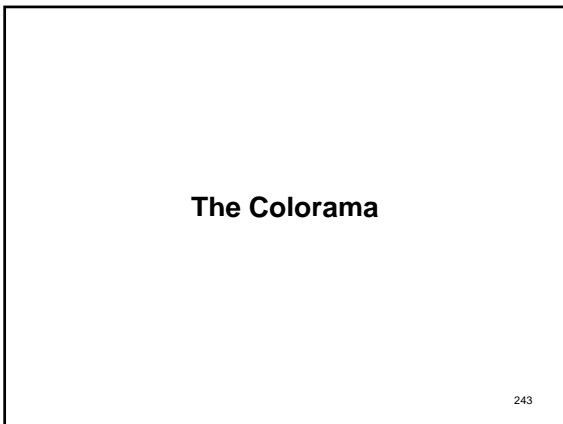
Above: close-up view of a *Main Waiting Room* (a.k.a. *Vanderbilt Hall*) four-tiered chandelier
Left: close-up view of a *Main Concourse* chandelier (in lowered position)

241



Left: general view of the interior of the *Main Concourse* of GCT, shown some time after the morning rush hour (January 1968). It seemed that GCT's best days were behind it by the late 1960s.
Right: with the decline of rail travel due to automobile ownership, better roads and air travel, the railroads were desperate to generate income. In the case of GCT, that meant putting advertisements just about everywhere. The photo (from 1978) shows the ticket windows in the *Main Concourse*, and the blatant advertisements that surrounded it. Cigarettes were advertised on the departure board and a clock (at left) advertising *Manufacturers Hanover Trust Bank* hung over the entranceway to *Vanderbilt Hall*.

242



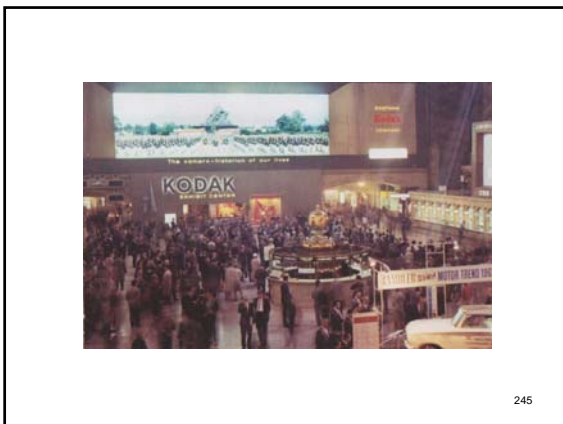
The Colorama

243

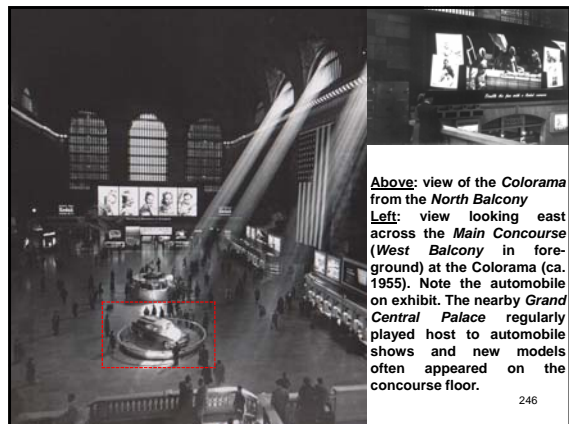


Left: the famous *Colorama* in GCT (ca. 1988) was another way the NYCRR generated income through advertising in the terminal. Eighteen-feet high and sixty-feet wide, the *Colorama* was a fixture for forty years (1950-1990).
Right: postcard of the *Colorama* (ca. 1950s). The *Colorama* was a transparency lit by more than a mile of tubing which cast a colorful glow on the *Main Concourse*. The selection of *Colorama* images; 565 in all, switched out every three weeks, many by noted photographers such as *Ansel Adams*. Inspired by the beautiful color photographs, it was hoped passersby would be inspired to go out and take their own beautiful pictures (with *Kodak* cameras and film). It sat atop the stairless *East Balcony*.

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Above: view of the *Colorama* from the *North Balcony*
Left: view looking east across the *Main Concourse* (*West Balcony* in foreground) at the *Colorama* (ca. 1955). Note the automobile on exhibit. The nearby *Grand Central Palace* regularly played host to automobile shows and new models often appeared on the concourse floor.

246



"A chapter of photography history is coming to an end...the city's most famous meeting spot has been brightened by a succession of huge, colorful images that have been installed by the world's most famous photography firm. It all began in 1949, and this month's entrant is number 565 in the series. It's also the last. After December 30, the Colorama will be history."

The New York Times, December 3rd 1989

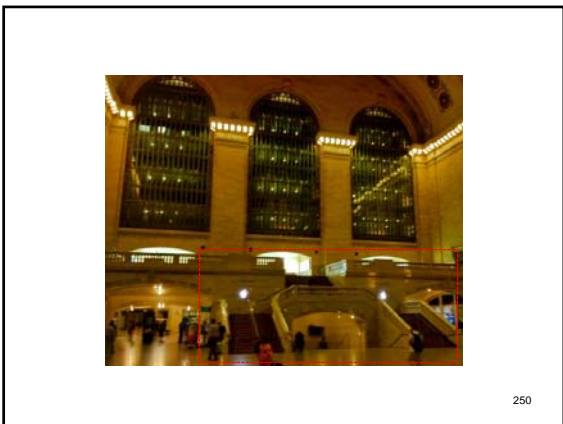
Above: though the *Colorama* made its last appearance as the 1980s drew to a close, during the restoration of the *Main Concourse* in the late 1990s, extra large advertisements appeared, albeit on a temporary basis. After the restoration was completed in 1998, large-scale advertisements were banished for good. ²⁴⁷

Missing Link

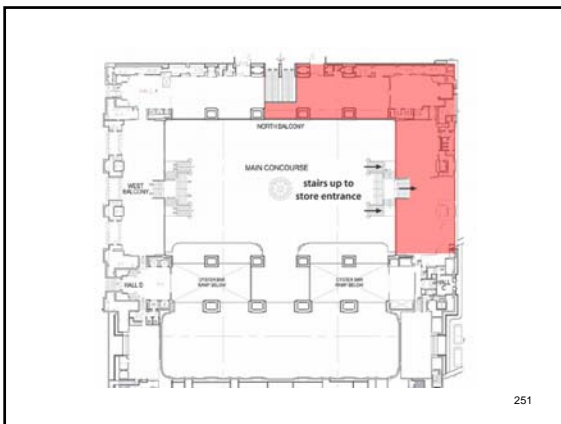
248



Above: construction of the *East Balcony Staircase* (left). One of the most substantial modifications to GCT during the restoration in the late 1990s was the *East Balcony Staircase*. While the balcony hosted various different things over the years: the *Servicemen's Lounge* during both WWI & WWII and the *Kodak Colorama*, it was a difficult space for commerce due to lack of access. An original blueprint displaying a second staircase at the east-end of the *Main Concourse* was discovered thus it was finally realized. Due to the historic nature of the building, this modification would never have been permitted had original plan not been found. The area below the balcony, which also had its own array of tenants (baggage check and a bank), was removed to make room for the new addition. With the staircase in place (right), the *East Balcony* was now easily accessible and made into prime retail space. ²⁴⁹



250



251

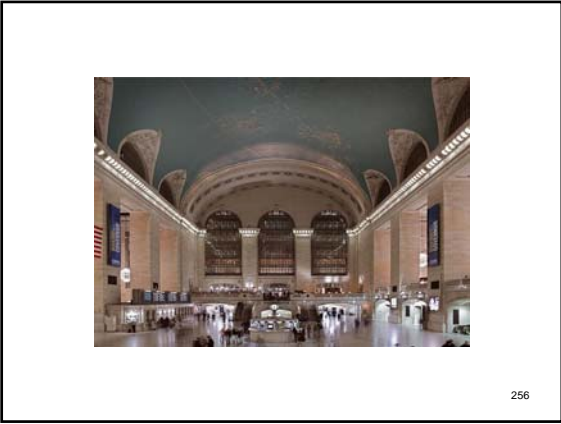
God's Point of View

252

Above the 38K square-foot *Main Concourse*, a vaulted plaster ceiling would provide a view of the heaven's as they appear in the October sky (from *Aquarius* to *Cancer*) rather than the original scheme which included skylights (they proved impractical). Two broad gold bands represented the ecliptic and the equator while fifty-nine (of 2,500) stars were illuminated. The constellations of the *Zodiac* were represented in gold leaf. More appropriate for a dome than for a vault, up to fifty painters coordinated their work to ensure the shade of blue selected was uniform throughout. An intimate of the Vanderbilt family and prominent artists/writers such as *Claude Monet*, *James Whistler*, *John Singer Sargent* and *Marcel Proust*, *Paul-Cesar Helleu* worked with a *Columbia University* professor of astronomy on the ceiling's design while on a three-month visit to *New York City* whereby he was carrying out several portrait commissions in 1913. He sketched out the *Sky Ceiling's* design for *Whitney Warren* but it was left to two local scenic designers; *J. Monroe Hewlett* and *Charles Basing* to execute the work. Soon after the terminal opened, it was noticed (by an observant commuter familiar with astronomical observation) that the ceiling design, except for the constellation *Orion*, was inverted (backwards). Too late to redo the ceiling which was already widely admired, the *NYCRR* proclaimed that the ceiling design was, in fact, executed from "God's point-of-view" thus, it was entirely appropriate as-is.

The Solution of the Ceiling Problem

"It must have taken courage in Mr. Warren, the architect, to call in for the solution of his ceiling problem an artist hitherto known, publicly at all events, as a decorator. He has had his reward...M. Helleu has made a remarkably good ceiling...simply painted a lovely blue, and against this cloudless sky the signs of the Zodiac are delicately indicated in gold...His light, airy scheme, fragile as it is in its essential quality, nevertheless fits constructively into the vast architectural ensemble. Both for its intrinsic merit, its delicate, distinguished beauty, and for its significance as in some sort a protest against the conventional, overpainted decoration, it is heartily welcomed."
New York Tribune, February 16th 1912

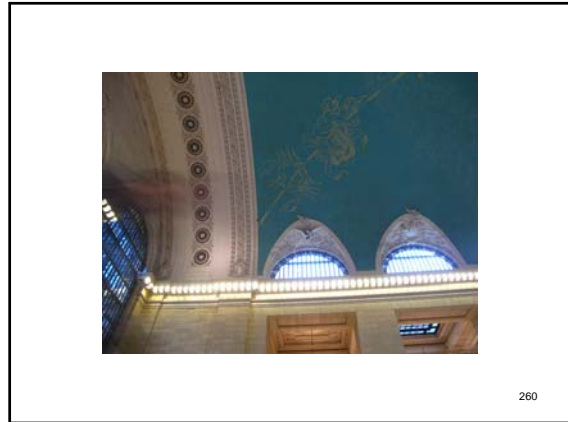


Nothing But Simple Lines

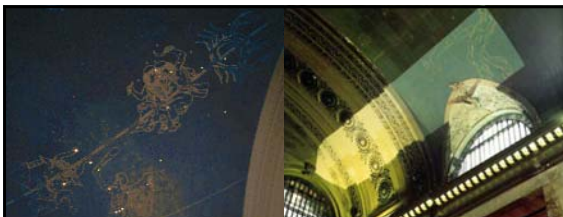


"I was surprised when I went into the Grand Central Terminal the other day, when looking up I saw only stone vaulted ceilings...but with simple lines, giving the effect of a great thing easily achieved...It is a tremendous thing for your art when you accomplish great effects with nothing but simple lines...If you aim for good lines only, and get them, as has been done in the Terminal, then you may add all the decoration you wish without spoiling your building."

Achille Duchene, visiting French Architect – December 1912 259



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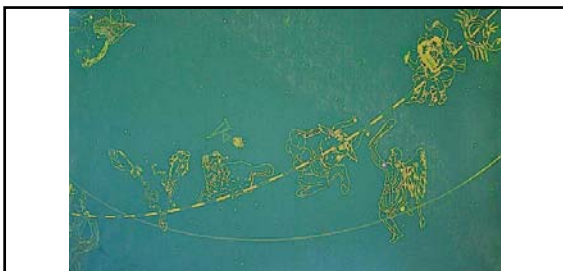


"It fits the bill. After all, that's what a thing must do architecturally...it became a question of decoration. All decoration means something if it is appropriate..."

Whitney Warren
RE: his "starry ceiling" 261

A Picture of Wondrous Beauty

262

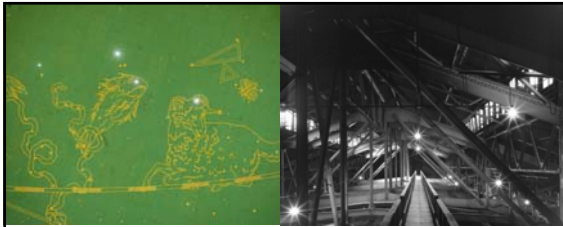


*"The dominant note of the color scheme is a turquoise blue such as one sees in the sky of Greece and of southern Italy. The contour of the ceiling produces a gradation of tone that gives an effect of illimitable space. As one passes down the incline to the suburban concourse and catches a glimpse of the ceiling, there is revealed a picture of wondrous beauty and so startlingly natural that one for the moment imagines himself in some old building of Pompeii having no ceiling save the blue sky itself..."*²⁶³

Railway and Locomotive Engineering, March 1913

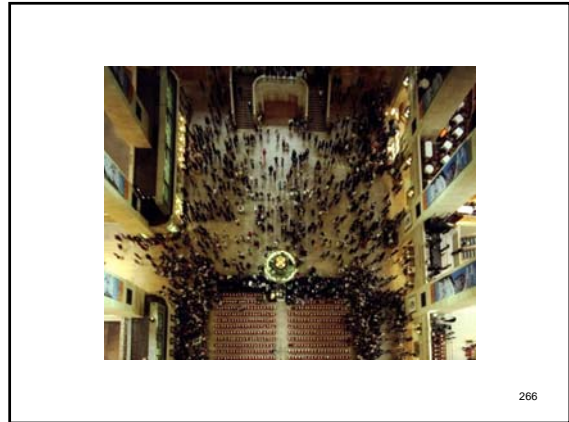


Above: during the restoration of GCT in the late 1990s, the Sky Ceiling was thoroughly cleaned of nearly a century of grime. The photograph at left highlights just how dirty the ceiling was (right-side before cleaning, left-side after). Below the constellation Cancer (in the northwest side of the Main Concourse) this small square was left dirty as a testament to future generations as to just how dirty the ceiling once was. Early drawings of the Main Concourse by Warren & Wetmore show a large skylight rather than a decorated ceiling. Interestingly, during the 1998 restoration (right), it was determined by spectroscopic analysis that the dirty coating of black on the ceilings and walls was caused not by exhaust from trains but tar and nicotine from generations of smokers passing thru the building.²⁶⁴

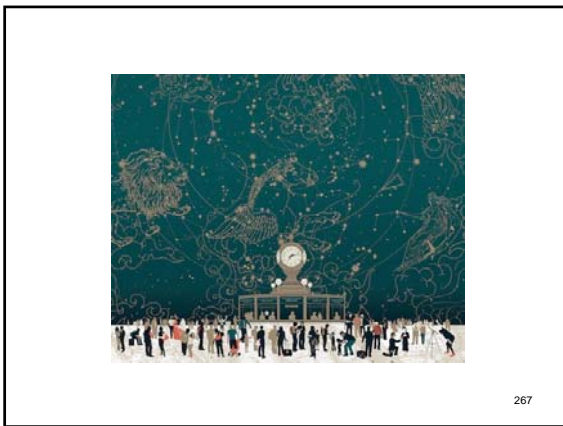


Left: restoration of GCT's famous *Sky Ceiling* was completed in 1998. In 2010, new LED lights were installed to light up the fifty-nine stars of the constellations represented. The interior restoration of GCT began with the cleaning of the *Main Concourse's Sky Ceiling*. As restoration and renovation continued, the project generated more than 2K construction and construction-related jobs throughout *New York State*.
Right: attic space and catwalk above the *Sky Ceiling*

265



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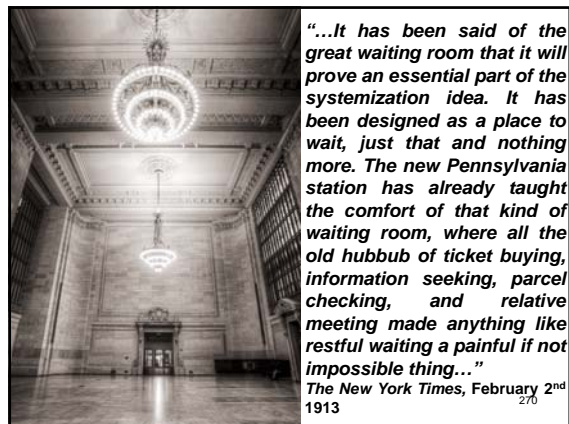
267

The Great Waiting Room

268

"It is not to be an art museum, or a hall of fame, but a place of dignified simplicity, easy of access and comfortable."
 Associated Architects of Grand Central Terminal, 1911
 RE: the design of GCT's Main Waiting Room

269



"...It has been said of the great waiting room that it will prove an essential part of the systemization idea. It has been designed as a place to wait, just that and nothing more. The new Pennsylvania station has already taught the comfort of that kind of waiting room, where all the old hubbub of ticket buying, information seeking, parcel checking, and relative meeting made anything like restful waiting a painful if not impossible thing..."
 The New York Times, February 2nd 1913

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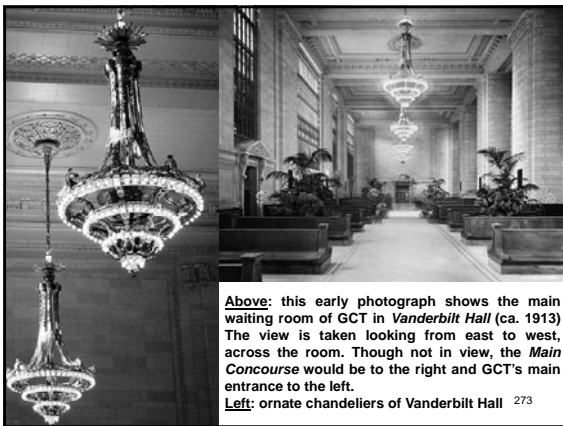
Caption: "The General Waiting Room, 110 Feet Wide, 320 Feet Long, 150 Feet High. The New Pennsylvania Railroad Station New York City"

271



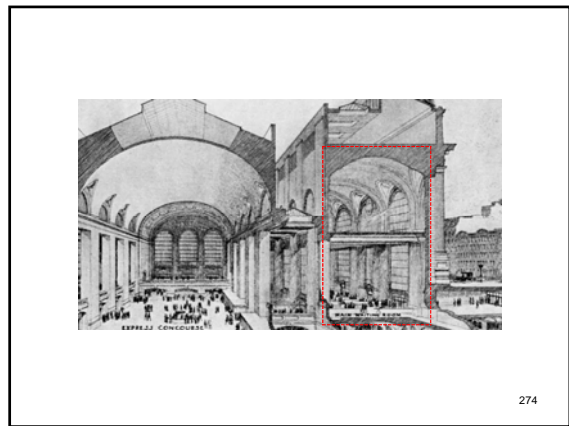
Left: caption: "Prospective view of the Great Waiting Room, 1912." European palaces had highly decorated rooms and chandeliers and In the United States of 1912, the ideals of progress and modernity were given the royal treatment as well with their own impressive public rooms. It was said that the Great Waiting Room (a.k.a. "Vanderbilt Hall") could hold 5K people.

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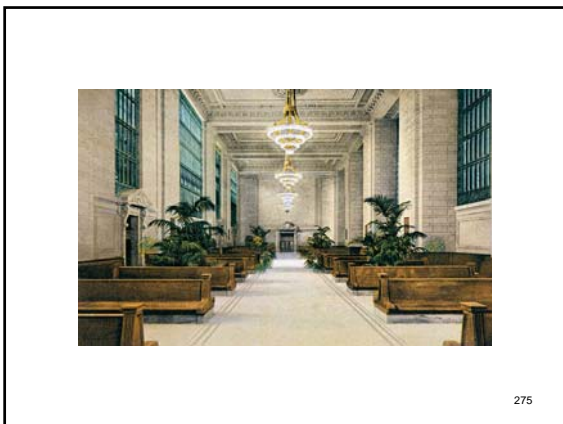


Above: this early photograph shows the main waiting room of GCT in Vanderbilt Hall (ca. 1913) The view is taken looking from east to west, across the room. Though not in view, the Main Concourse would be to the right and GCT's main entrance to the left.
Left: ornate chandeliers of Vanderbilt Hall

273



274



275



Above: weary travelers await their trains (ca. 1940s)
Left: view of the Main Waiting Room in Vanderbilt Hall (ca. 1941). Heavy use over the years is evident in the scuffing of the wooden bench

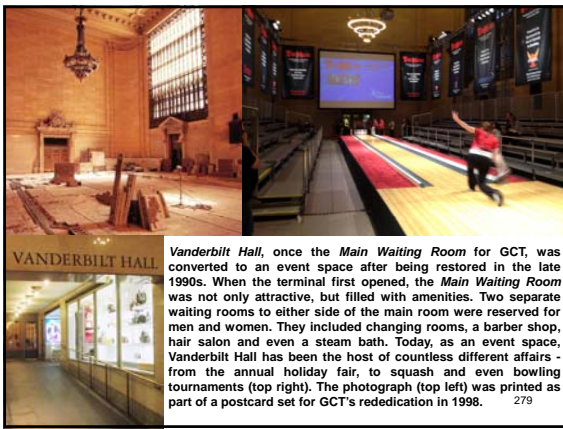
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278



VANDERBILT HALL

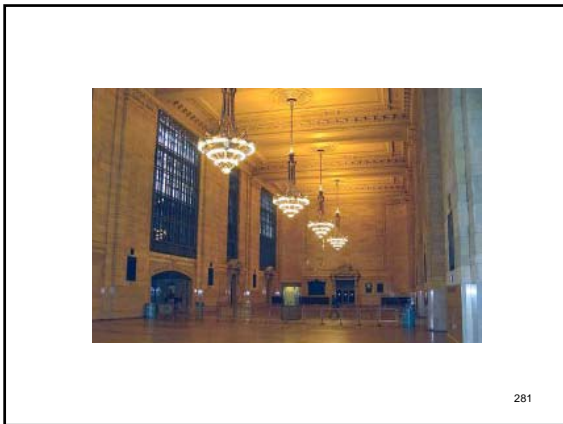
Vanderbilt Hall, once the *Main Waiting Room* for GCT, was converted to an event space after being restored in the late 1990s. When the terminal first opened, the *Main Waiting Room* was not only attractive, but filled with amenities. Two separate waiting rooms to either side of the main room were reserved for men and women. They included changing rooms, a barber shop, hair salon and even a steam bath. Today, as an event space, Vanderbilt Hall has been the host of countless different affairs - from the annual holiday fair, to squash and even bowling tournaments (top right). The photograph (top left) was printed as part of a postcard set for GCT's rededication in 1998.

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Throughout the year, *Vanderbilt Hall* - GCT's 12K square-foot former main waiting room, is now the site for ongoing free promotions and entertainment ranging from tennis exhibits to the annual holiday fair, which brings seventy-two craftsmen, artisans and international importers to the terminal, selling an array of merchandise for holiday gifts. The great room was restored in accordance with the restoration master plan, and was inaugurated as a public exhibition and special events space.

280



281

The Last Word in Segregation

282

"...As the last word in segregation, consider the announcement that even sentiment is to be segregated in the new Grand Central Terminal. There are specially deigned ports of the station known as the 'Kissing Galleries.' They are the place you may go to meet the person you want to meet. These galleries run alongside the inclined walks on which the stream of passengers from a train just arrived make their way to the street. Slightly elevated, it is promised that they will offer exceptional vantage points for recognition, hailing, and the subsequent embrace. Time was when the embracing went on all over the terminal, and the indignant handlers of the baggage trucks would swear that their paths were forever being blocked by leisurely demonstrations of affection..."

The New York Times, February 2nd 1913

283



"This is where, more often than not, New York Central would platform their incoming trains bearing homebound soldiers, sailors, airmen and Marines. The room was just really a contained explosion of joy, of happiness seeing these troops returning. Hence, its name."

Dan Brucker, Metro-North Spokesman

RE: the *Biltmore Room* (a.k.a. "Kissing Room") was completed in 1915 and provided an elevator link to the *Biltmore Hotel* that stood above it, at the corner of 43rd Street and Vanderbilt Avenue. Then known as the *Incoming Train Room*, the station-within-a-station provided express train passengers easy access to taxis (up the stairs on 43rd Street) and to the *Roosevelt Hotel* (via a passage to the north). The nickname was derived from the trains that used the long platforms of the station's west end (that's where troop trains arrived). In 1981, The Biltmore Hotel's shell was converted into an office building thus the room has been underused in the decades since.

284



"The Kiss" by Ernst Haas, Grand Central Terminal, NY 1958

285

Rules on Kissing

286

Rules on Kissing – Grand Central Terminal

Rules regarding kissing will be enforced by GCT staff

No kiss shall last longer than 5 seconds

Keep your tongue in your own mouth

The attendants will have orders to stop all osculation and send the participants to the Romeo and Juliet room. No soul kisses...only straight 'goodby' and 'how-are-you' greetings of less than five seconds duration.

No kissing in any part of the Terminal other than the Kissing Gallery

Those who meet by chance in other parts of the station than the "Kissing Gallery" will be under the watchful eye of attendants who at the first sign of an affectionate embrace will politely request that the kiss parlors are the proper place for that sort of thing.

Please abide by the above rules

The purpose of the room is to do away with this promiscuous kissing around the station, and centralize it.

287



Left: waiting area in front of the departures chalk-board in the *Biltmore Room* (ca. 1953)

288



Left: the spot where arriving travelers once embraced their sweethearts, pals and family, presently houses a pair of shoeshine and repair kiosks, a flower stall and a newsstand.

Right: an artist's rendering of the *Biltmore Room* as it will look after renovation. By 2019, the newsstand, kiosks and flower stall will be removed and replaced by a pair of escalators and an elevator that will return the *Kissing Room* to its status as a busy meeting place for travelers arriving in New York City. In this contemporary case, the 80K *Long Island Rail Road* riders who will use the new *East Side Access Terminal* below GCT.

289

A Neighborhood Shopping Center

290

"More badly busy, more madly various than Coney Island are the station's 61 concessions. Kiddy cars are sold at August Stumpf's, diamond rings at Samuel Kamerow's, shoe shines in the Union News Co. stands, orchids at J.S. Nicholas's, oysters at Mendel's Bar, shaves at J.P. Carey's, theater tickets, groceries, dress suits, sodas, electric light bulbs, books, lunches, radiograms, cigars, stamps. And from it all rolls into Central's pockets about \$2 million-a-year."
Fortune magazine

291

"The two concourse levels are surrounded on three sides by interconnected passages along which run rows of stores: food, liquor, flower, apparel, book and barber shops; restaurants; newspaper and magazine stands; telegraph and theater ticket agencies; lunch and milk bars. A newsreel theater, an art gallery, Traveler's Aid service, and recreational exhibits are available in the building. All these facilities, reached by underground corridors from adjacent hotels and office buildings, make Grand Central also a neighborhood shopping center."

WPA Guide to New York City, 1939

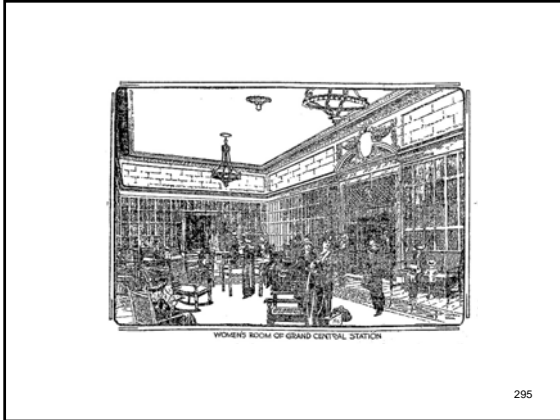
292

Ladies Conveniences

293

"Let us begin in the woman's boot-black room. Woman travelers at Grand Central Terminal may step into a handsome, brightly lighted room entirely out of sight of the rubbernecks, where colored girls in neat blue liveries will polish their shoes. Or if the hair gets out of curl in a damp day's journey the woman passenger may go to the woman's hairdressing parlor in Grand Central Terminal, a magnificent apartment with walls and ceilings of Carrara glass, where none but her own sex will see while she has her hair dressed in the very latest style. Next she may stop into an equally sumptuous manicure parlor, or, if she is in a hurry, the manicure will attend her while the hairdresser works. Should the woman passenger want to primp up some more, or if she should want to return after a shopping tour to change her costume for a social function, she may have her suitcase or her trunk, for that matter, sent to a private dressing room, for the use of which, with a maid in attendance, she will pay but 25 cents..."
NYCRR, 1913

294



295



296

"...Probably no woman ever started on a journey without forgetting something. These little oversights need cause no worry to the traveler in the Grand Central Terminal. The little knickknacks she may need to complete her toilet are to be found right at hand, almost at the door of her dressing room at the same prices she pays in her favorite store, or if the hairdresser does not happen to have what she wants she has but to stop across the main waiting room or send a messenger to a hall, from which opens a row of shops right in the terminal itself, where complete lines of everything that travelers can be expected to want are on sale. After all these exertions the traveler will probably feel hungry. Only a few steps away from her dressing room is a handsomely appointed restaurant..."
NYCRR, 1913

297

A Grotto Like Effect

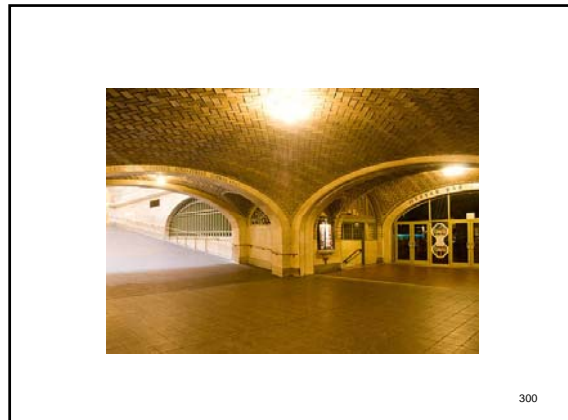
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"Adjoining the concourse on the suburban level is the restaurant which has been planned with great care and in which every appointment will be of the best. Ordinarily a station restaurant does not appeal strongly to travelers. This one will be as fine as any in the best hotels in point of service and equipment...It is such an inviting room, being artistically treated by a series of Guastavino arches of cream colored tile, giving a grotto like effect, that no one will want to pass without taking a meal."

Bankers' Magazine, January 1912

RE: named for *Rafael Guastavino*, an immigrant architect from *Spain* who brought the time-tested *Catalan* technique of using thin tiles (in a *Herringbone* pattern) and cement to create fireproof vaults, the *Guastavino Vault* (a.k.a. *Guastavino Tiles*) was a patented structural system used widely in the late 19th/early 20th Century/s. Early subway stations (i.e. *City Hall*) and *Bridgemarket* (below the *Queensboro Bridge*) are fine examples of its use in *New York City*. *Whitney Warren* wanted to create the look and feel of a *Keller* (Cellar) – a low, vaulted basement room where food and alcohol are served (like in the *Paris* of his student days). They became very popular in hotels of the era.

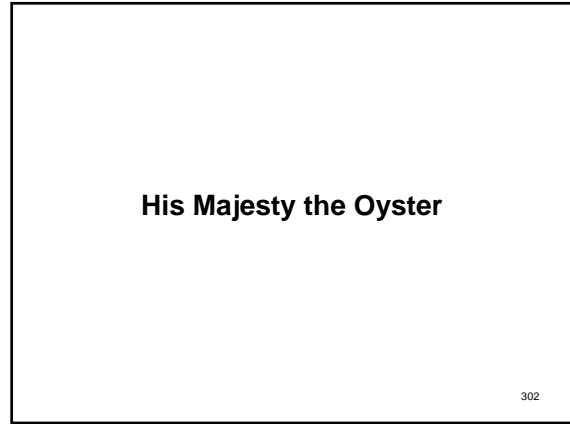
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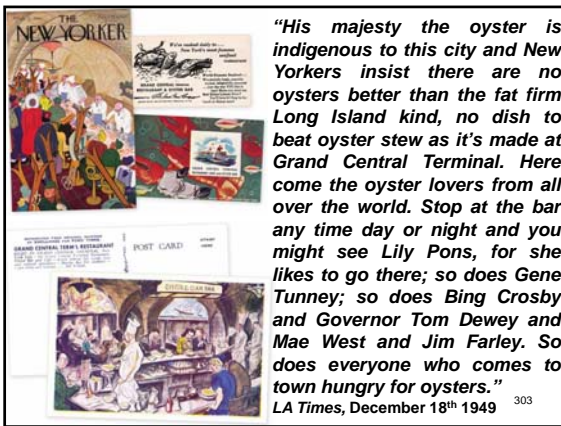
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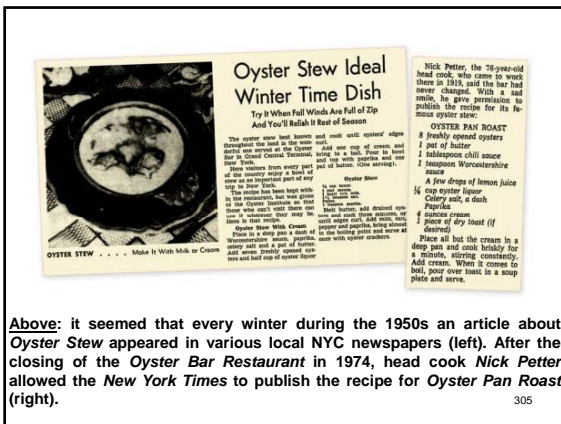
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303

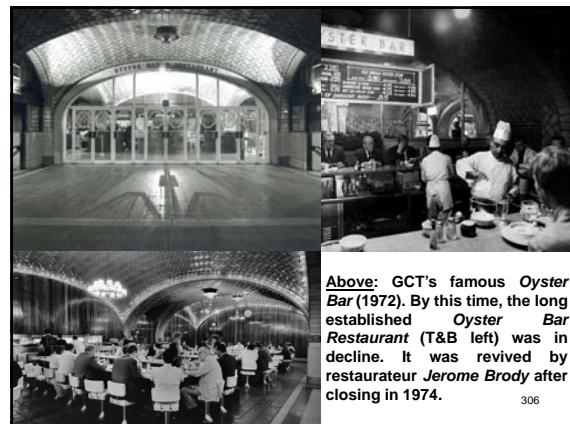


304



305

Above: it seemed that every winter during the 1950s an article about Oyster Stew appeared in various local NYC newspapers (left). After the closing of the Oyster Bar Restaurant in 1974, head cook Nick Petter allowed the New York Times to publish the recipe for Oyster Pan Roast (right).



306



"The fabled Oyster Bar and Restaurant at Grand Central Terminal, where generations of harried commuters, world travelers, shoppers and midtown workers mingled under vaulted tile ceilings for seafood with a dash of bustling New York, was all but destroyed in a roaring fire early yesterday. Fire officials said the flames turned the restaurant into an inferno, melting down kitchen equipment and furnishings, bringing down hundreds of ceiling tiles and blackening the sprawling dining room, the wood-paneled saloon and a room with long serpentine marble counters where patrons for decades had sat elbow-to-elbow for quick lunches."
The New York Times, June 30th 1997

Above: the Oyster Bar Restaurant after the devastating June 1997 fire (left) and the restored restaurant in 2012 (right)

307

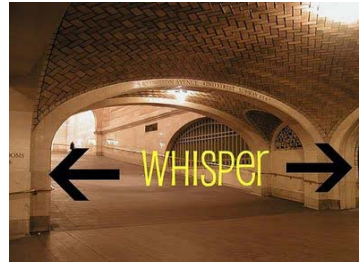
The Whispering Gallery

308



GCT's "Whispering Gallery" is located outside of the Oyster Bar & Restaurant, between two ramps down to the Lower Level. It's a four-cornered Catalan vault, sunken slightly from the main floor. It was designed by the father and son team of Rafael Guastavino and Rafael Guastavino, Jr. Whispering galleries occur when a dome, vault, arch or other kind of circular or elliptical area occurs. Sonic "foci" areas appear along the space's circumference. While one person stands in one corner and talks or whispers, the sound reflects along the curvature of the surface (called "telegraphing") and converge at the other "focus" where the other person is standing. Thus, conversations can be carried out between people standing in different parts of the building and over relatively long distances. The GCT Whispering Gallery is a local favorite for marriage proposals.

309



310

The Agora

311



"If you happen to come up from the Lexington Avenue subway line in the right part of Grand Central Terminal, you will walk into the train station's biggest surprise. Under the lights of 5,000 shimmering Austrian crystals suspended from a sculpture in the form of an olive tree are two fresh-fish stands, a cheese market, a spice bazaar, a greengrocer, a butcher shop, a bakery and six other small food stalls. In this equivalent of a European food hall, glistening oysters sit on chipped ice...spicy aromas waft...350 domestic and imported cheeses are on display...In a city with no shortage of dazzling marketplaces, Grand Central is still unique, with independent vendors grouped together, each with its own cash register."
The New York Times, December 22nd 1999

Above: at left, grocery store in GCT (ca. 1917). At right, the 7,400 square-foot Grand Central Market (opened in 1999) and olive tree crystal sculpture.

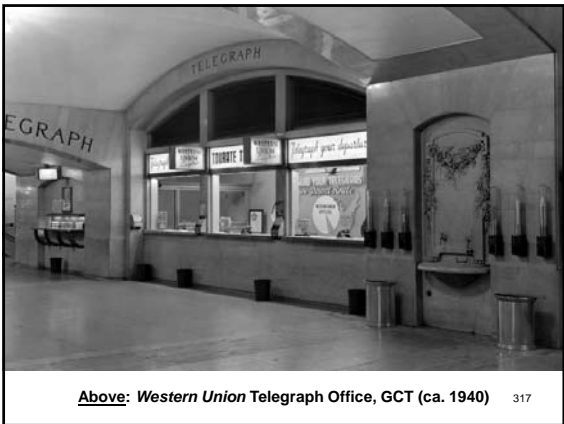
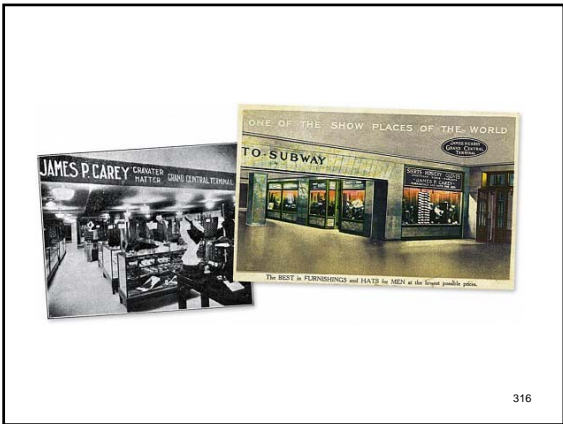
312

The Only Place on Earth

313

"...The only place on earth outside his own home that a man may have a private barber shop for his own exclusive use, with a barber in attendance at his pleasure, is at Grand Central Terminal. Many men, particularly those occupied with large affairs, like to get away from the crowd whenever possible. For this purpose they travel in private cars or in compartments or drawing rooms in sleeping cars. Now, for the first time they can have a private barber shop reserved by wire for their use upon arriving in New York at any hour of the day or night. The cost of this luxury, including the services of a barber, is \$1 an hour...The man with two days' business or pleasure to crowd into one can reserve a dressing room at the barber shop, leave his suitcase there all day, rush back at 6 o'clock to get into evening clothes, with the aid of a valet if he wishes, all for 25 cents. A haberdashery adjoining the barber shop is ready to replace a lost collar button or supply anything else needed, Here, at least, men are accorded equal rights with women..."

314
NYCRR, 1913



From All the Nations of the Earth

318

"...Since travelers from all the nations of the earth pass through Grand Central Terminal, the management has provided the most extraordinary linguistic talent ever assembled in one business in order that no traveler may need to resort to the sign language...Should sudden illness seize the traveler in the Grand Central Terminal a physician from the emergency hospital, right in the building, will be at his side in a couple of minutes..."

NYCRR, 1913

319

The Old and Vexatious Puzzle

320

"...The handling of baggage is one of the greatest problems of the railway terminal – a problem the burden of which is felt by both transportation company and passenger. In the model station just opened a new and satisfactory solution has been worked out for this old and vexatious puzzle. The passenger will no longer have to hunt out a more or less remote baggage room. Under the new Grand Central system he won't need to go to the baggage room at all; he will check his baggage with the same convenience and dispatch with which he buys his railroad ticket..."

The New York Times, February 2nd 1913

321



Left: a porter is seen in this 1936 photo carrying the baggage of a passenger through GCT. A porter's job included carrying bags, greeting arriving passengers, making the bedding in the sleeping cars, shining shoes and keeping the cars tidy. Many porters were African-American, a tradition started by George Pullman in his sleeping cars which utilized newly freed slaves after the Civil War.

322

"...On the east side of the concourses on both the suburban and express levels are baggage-checking counters. A passenger entering either of these concourses will find nearest at hand a row of ticket windows. His transportation purchased at one of them, he passes along to another row of windows where, if he so desires, he can secure his Pullman seat, berth or section. Continuing on his way, he comes to the baggage-checking counter. If he has hand luggage with him that he wishes to check, he goes to one section of the counter which is especially set apart for this purpose. His transportation shown, he receives a check; a duplicate is put on his valise, and the valise is placed on an automatic carriage which bears it immediately to the baggage room, which is back of the main terminal building..."

The New York Times, February 2nd 1913

323

Free From Further Baggage Cares

324



"...The passenger shows his transportation and his transfer or his express company check to one of the men at the baggage-checking counter. A railroad baggage check is handed to the passenger, who can there upon go on his way free from further baggage cares. The man behind the counter fastens a duplicate of the railroad check that he has already given to the passenger to the passenger's transfer or express company check, and both are dropped into a pneumatic tube and shot to the baggage room. In this latter place a man identifies the baggage by means of the transfer or express company check; the duplicate railroad check is put on the baggage, and the baggage is immediately put in place so that it will go out on the next train leaving for the destination specified on the railroad check..."

The New York Times, February 2nd 1913

325

The Baggage Subway

326



"...Outgoing baggage is loaded on electric trucks and sent down by elevators to the baggage subway. The trucks are then sent through the subway and lifted by elevators to the track level. The baggage is then transferred to the designated train. The operation is reversed for the incoming trains. By this arrangement the passenger platforms are kept free of baggage trucks, a nuisance ordinarily encountered in railroad stations."

Railway and Engineering Review, January 25th 1913

Above: view (looking south) of the 45th Street facade of the Baggage Building which was located at the rear (north-side) of GCT (ca. 1916). The Pan AM Building (now the Met Life Building) would be built on the site of the Baggage Building in the early 1960s. The New York Central Building (1929) straddles Park Avenue between 45th and 46th Street/s.

327

Red Caps

328



Left: a "Red Cap" porter carting luggage for 20th Century Limited passengers (ca. 1950s). A NYCRR official brought back from London red caps for the porters to wear thus was their nickname derived. When GCT first opened in 1913, passengers were instructed not to tip them. There once were over five-hundred Red Caps at GCT.

Right: NYCRR Red Cap porters rest on a baggage trolley at GCT during a railway workers' strike in May 1946

329

Green Caps

330



"Tell your troubles to the Green Cap. If you miss your train; if you are going to be late for dinner; if you forgot your briefcase; if you could not get the theater tickets; if the car broke down; give the message to the Green Cap at the Grand Central Terminal and he will make everything alright again, with your wife, your office, your garage...That was the way things went all day yesterday, the first in the career of the Green Caps."

New York Tribune, July 2nd 1922
Above: cartoon appearing in the *New York Tribune* on July 16th 1922. Caption: "Some of the last minute messages which the Green Caps at the Grand Central Station are given to deliver." On July 1st 1922, GCT instituted the "Green Caps" - a message exchange service for travelers which accepted and/or relayed messages by telephone. Twelve Green Caps circulated the terminal and two runners collected the messages bringing them to the Main Message Exchange Office (on the Vanderbilt Avenue side of GCT). A parcel delivery service (to points outside of GCT) was soon added to the Green Cap's repertoire. 331

The Most Intimate Theatre in America

332



"A theatre of playing card size has accordingly been built in Grand Central Terminal...Furthermore, though the programs will be comparatively brief, more traffic than in the ordinary theatre is expected in the aisles and between the rows; and the little auditorium, therefore, was planned with six inches of additional knee space for members of the audience...Showing the completeness of the arrangements, there will be a private elevator for theatre patrons between the Upper and Lower Levels of the terminal."

Wall Street Journal, May 4th 1937
Above: ticket booth (left), the newsreel theater (right) 333


From back of postcard above: "The Most Intimate Theatre in America...Up-to-the-Minute Newsreels and press scoops...cartoons...newest short subjects...major companies' previews. News Added as it occurs" 334

The *Brooklyn Eagle* of November 30th 1936, reported "the formation of Grand Central Newsreel Theatre, Inc., which has been organized for the purpose of constructing and operating a newsreel theater and cocktail lounge on the main station level of Grand Central Terminal between the Hotel Commodore and the Graybar building." The 242-seat theater with "stadium-style" seating (with standing room in the back of the theatre) opened May 12th 1937 with a twenty-five cent admission and a continuous show running from: "10 AM to midnight." Walter Winchell, in his January 19th 1937 column, described the audience as "travelers killing minutes before train time...watching the films with one orb and the clock near the screen with the other." Jack Cluett's column, of April 12th 1937, told of a woman with "four pieces of baggage who was lugged out of the Grand Central newsreel theater at an early hour. The lady was found wandering up the aisle in her nightgown looking for the washroom. She had boarded the theater by mistake, thinking it was the Boston sleeper." The advent of television would bring an end to tiny newsreel theatres with their programs of short subjects. By 1966, it was the last *New York City* theater showing newsreels. It closed in 1979. The entrance of the theatre is now a retail store; near the Graybar Passage, opposite Track 17. During a 1997 restoration, workers discovered (under a false ceiling) a small dirt encrusted cerulean and gold Sky Ceiling mural depicting Saturn with shooting stars once belonging to the old Grand Central Theatre. 335

"Theatre interior is as complete a departure from the prevailing motif in cinema houses as one could hope for. The walls are of simple knotted pine, splayed out every third board or so in order to eliminate echoes. They are backed by acoustical plaster. Audiences enter from the side. In the rear, under the projection booth, is, of all things, an inglenook, with an unpretentious fireplace and room for a couple of easy chairs or seventy standees."
The New York Times, May 9th 1937
RE: what would have been a distraction in any other theatre, a large illuminated clock was installed over an exit door near the front of the theatre lest the theatre patron/s miss their train. 336

The Changing Times

337



Remodeling has overtaken one of the world's most renowned theaters, that within the Grand Central railroad terminal in New York. Originally installed 23 years ago as a covered theater, it later changed to an hour's program of shorts, primarily for people waiting for trains. Sketched above is how the entrance will appear with remodeling completed. Drew Iversen, New York, is the architect.

"Times change, and the production of short subjects that were once a staple of all movie house bills are in short supply, but the Grand Central Theatre carries on. It has been four years or so since the last newsreel for theatrical use was produced. But cartoons can still be found, as well as travelogues...The neatly maintained theater has a changing audience; a lunchtime crowd of businessmen, salesmen and a scattering of secretaries, and an evening crowd, generally older, often residents of Tudor City or Murray Hill, who share a love of travel and find the Grand Central Theatre a comfortable place to review old favorites or size up the possibilities of a new vacation spot...the charge at all times is one dollar."
The New York Times, August 29th 1972

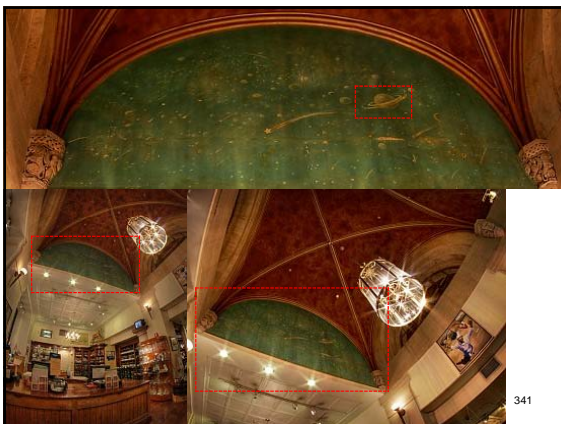
Above: at left, redrawing entitled: "Changes come to Grand Central Theatre" - Motion Picture Herald, January 14th 1961. The remodeled theater entrance at right. 338

The Other Sky Ceiling

339

"Mr. Sarg was watching his favorite mural hanger cover the walls of the lounge at the Grand Central Theatre...We heard Mr. Sarg tell the painter, 'Paint the ceiling a flat sky blue, and some time tomorrow I'll come around and paint the stars on it myself.' This area, or breathing space, will be called the Tony Sarg appointment lounge. Here people who have missed trains may pause and catch their breath..."
The New York Times, May 9th 1937

Above: the "Sky Ceiling" mural by artist Tony Sarg rediscovered during the 1997 restoration 340



And then, Bang

342

"We've often heard of the office of Mr. John W. Campbell, but only the other day did we get into it. It's right in the Grand Central station; commuters rush by it every day without dreaming there's such an office there...There's a small anteroom and then, bang: the office deluxe. It's sixty feet long, thirty wide; the ceiling is twenty-five feet above you. At a huge carved desk at the far end of the room sits Mr. Campbell, looking tiny. There is a pipe organ with three thousand pipes in the wall at his right, a piano at his left; Mr. Campbell can make them play, either alone or together, by pushing buttons on his desk. He usually has one or both going."

New Yorker magazine, July 9th 1932

RE: *John W. Campbell* was chairman of the board of the *Credit Clearing House of New York* (it later merged with *Dun & Bradstreet*). Though the elegantly furnished *Renaissance* style space was known as *The Campbell Apartment*, he used it, primarily, as an office by day and a gathering place for musical entertainment by night.

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In 1923, tycoon *John W. Campbell* leased the 3,500-square-foot space from *William K. Vanderbilt II*. The space was a single room sixty-feet long by thirty-feet wide with a twenty-five foot ceiling and an enormous faux fireplace (Campbell kept a steel safe in it). Campbell commissioned *Augustus N. Allen* to build an opulent office, transforming the room into a thirteenth-century Florentine palace with a hand-painted ceiling and leaded windows. It also featured a gothic *quatrefoil* designed mahogany balcony, that still exists. A Persian carpet took up the entire floor and was said to have cost \$300K. Campbell added a piano and pipe organ and at night turned his office into a reception hall, entertaining fifty to sixty friends who came to hear famous musicians play private recitals. After Campbell's death in 1957, the rug and other furnishings disappeared and the space became a signalman's office and later a storage room where the *Transit Police* stored arms and other equipment. It also became a small jail (in the area of the present-day bar). After falling into a state of disrepair, the space was restored and renovated in 1999. The walls and ceiling were brought back to their original splendor and the steel safe now sits in the massive fireplace. The new bar was done in the same *quatrefoil* mahogany style as the balcony.

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"The room is Italian Renaissance, from the colored beams in the ceiling (which painters lay on their backs for months painting) on down. Chairs carved with ducal crowns and coats of arms stand around...Mr. Campbell is modest and reticent about his office. Says he just likes to have things around; no other point to it."

New Yorker magazine, July 9th 1932

Above: painted wood ceiling/s in the *Campbell Apartment*

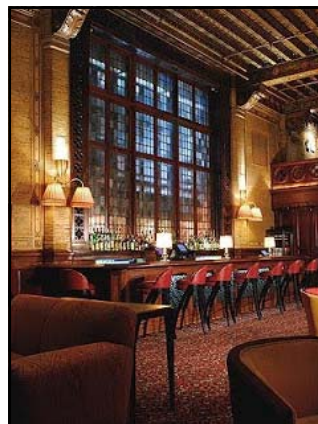
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Cocktails From Another Era

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"The restoration and renovation of Grand Central Terminal has turned up a treasure. A suite of rooms on the Vanderbilt Avenue side of the building that was decorated like a Florentine palazzo and for years was hidden behind the sheetrock and fluorescent fixtures of the Metropolitan Transportation Authority offices, is slowly emerging from the dust. By next year, it will be an elegant lounge serving casual food."

The New York Times, November 26th 1997

Left: present-day bar at the *Campbell Room*, a chic cocktail lounge. Their slogan is: *"Cocktails From Another Era"*

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Before Black Rock

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"The central studio will contain dressing rooms, rehearsal rooms, carpentry shop, and a laboratory. Provision also has been made for the cutting, editing, and scanning of motion picture films. The project is designed to promote the first full-scale working model in this country of a complete television unit operating under typical conditions of actual daily production. The mode of operation is to make as many experiments as possible in order to make as many errors as possible in advance as a means of establishing television on the same standard of entertainment value as other mature arts."

Chicago Daily Tribune, August 24th 1937

RE: in 1937, the *Columbia Broadcasting System (CBS)* announced that experimental television broadcasts would originate from GCT (from directly above the *Main Waiting Room*). In 1939, the room was fitted-out with broadcasting equipment connected to a transmitter atop the nearby *Chrysler Building*. WWII interrupted the birth of television, but it resumed with new vigor after the war and CBS would maintain their GCT facility until 1964 despite the fact that fuzzy images were generated from the vibrations caused by the trains many levels below. A portion of the former studio is now a private tennis court.

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Above: at left, CBS News staff (including Walter Cronkite) at CBS Studio 41, Grand Central Terminal Studios for presidential election night rehearsal with equipment set-up (November 4th 1956). At right, an amateur juvenile boxing match being filmed in the CBS Grand Central Studios (ca. 1946). Among the many notable productions originating from CBS' GCT studio were;

- See it Now (with Edward R. Murrow)
- The CBS Evening News (with Douglas Edwards)
- The Goldberg's
- What's My Line?
- As the World Turns
- Guiding Light
- The Morning Show

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"C.B.S.-TV apparently is going to blubber its weather forecast on 'The Morning Show' from 7 to 8 A.M. beginning Tuesday. Meteorological data will be posted on the side of a specially built tank by Ginger Stanley, who will swim under water during the presentation"

The New York Times, November 19th 1955

RE: starting in 1955 (from Studio 41 in GCT), champion underwater swimmer Ginger Stanley presented the national weather report submerged in a tank.

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Above: video tape control room at the GCT studios. In 1958, CBS opened the first large-scale video tape facility at their Grand Central studio. During television's Golden Age in the 1950s, programming schedules expanded and America's appetite for new programs grew so rapidly that the networks, whose primary production facilities were in New York City, were pressed for space. Thus CBS' decision to utilize GCT for studios and control rooms. CBS used its Grand Central facilities as master control for the network right up to 1964 before beginning a move to the new CBS Broadcast Center in the renovated Sheffield Farms Dairy Building on West 57th Street. That year too, CBS' famed "Black Rock" corporate headquarters (designed by architect Eero Saarinen) opened in NYC.

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"...Originally an art gallery, and then a CBS recording studio, it was taken over in 1966 by an Hungarian immigrant who installed a 65-foot ski slope made of astroturf and two tennis courts (left). In 1984, Mr. Trump took over operation of the sports club, then just tennis courts, and ran it, in his words, 'with great success'...While business executives volleyed tennis balls, Metro-North began eyeing the space (right) for its conductors, who were forced to spend their federally mandated rest time in cramped, cockroach-ridden locker rooms in the bowels of Grand Central... A new conductor lounge was planned but there was sufficient space left over in the cavernous Terminal. Metro-North issued a request for proposals for a sports facility to be developed...with room for just one court and two practice alleys..."

The Wall Street Journal, November 2010

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**PUBLIC NOTICE
TWO TENNIS COURTS
AT
GRAND CENTRAL
TERMINAL**

METROPOLITAN TRANSPORTATION AUTHORITY is interested in leasing to a qualified firm or firms the operation of the tennis court facility at Grand Central Terminal. The facility which has approximately 23,177 square feet on three floors, contains two full size tennis courts, shower, locker and sauna rooms, lounge area, offices and additional space for other use. Expressions of interest or negotiating such a lease will be entertained from persons with at least three years experience in the management of tennis court facilities or who propose to manage the operation through a firm having such experience.

The sole purpose of this notice is to obtain expressions of interest in negotiating a lease as described above. METROPOLITAN TRANSPORTATION AUTHORITY makes no commitment by this notice to enter into such lease, reserves the right, in its sole discretion, to select those firms or firm with which to negotiate, or to elect not to negotiate with any firm.

Qualifying firms should submit no later than May 24, 1976, verified financial statements, annual reports or auditors' report, a summary of their pertinent experience and such other data as may be relevant to:

**STANLEY A. LEWIS
DIRECTOR OF REAL ESTATE
METROPOLITAN TRANSPORTATION AUTHORITY
1700 Broadway
New York, New York 10019**



Vanderbilt Tennis Club
Grand Central Terminal

"Only in Manhattan, where indoor tennis courts are rarer than personal garages, would anyone sign up a year in advance for an hour of tennis. And only on this space-strapped island would they pay as much as \$210 an hour for the privilege..."

The Wall Street Journal, November 2010

Above: the single court of the current Vanderbilt Tennis Club

Left: original New York Times ad (April 20th 1976). Donald Trump won the concession in 1980 leasing the space for nearly thirty years (until 2009). It attracted celebrities and tennis professionals alike.

The Largest Sales Gallery of Art in the World

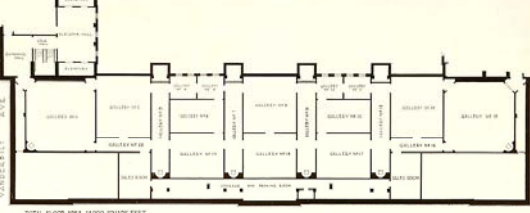
356

"More than \$100,000 is being spent by the New York Central Railroad and the Painters and Sculptors' Gallery Association in clearing out the sixth floor or attic of the Grand Central terminal, and refitting it as the largest sales gallery of art in the world. The top of the building was filled with sacks of cement, cases of obsolete stationery, lumber and other material and had been in disuse since the building was erected. It will be occupied by twenty galleries when the remodeling and redecoration is completed."

The New York Times, March 11th 1923

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**Floor Plan of Grand Central Art Galleries
Sixth Floor, Grand Central Terminal
15 Vanderbilt Avenue**



TOTAL FLOOR AREA 14000 SQUARE FEET
TOTAL LENGTH 500 FEET
CENTRAL VESTIBULE 60 FEET
TOP CORNER 2000 FEET

DELOD and BAECKER
ARCHITECTS


Founded in 1922 by prominent artists such as John Singer Sargent, Edmund Greacen and Walter Leighton Clark (originally as a non-profit cooperative), 15K square-feet of GCT's sixth floor was home to Grand Central Art Galleries. An art school opened on the seventh floor in 1924 and the art gallery remained at GCT until 1958. Metro-North's operation's center now occupies the gallery's display space (above). The gallery boasted that it was "The Largest Sales Gallery of Art in the World."

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"When the Grand Central Art Galleries open on March 21 there will be inaugurated in this country a cooperative art gallery such as was never before planned for the sale of works of American art...Walter L. Clark realized that many artists' cooperative sales galleries or societies had been wrecked on the shoals of 'art politics' and temperamental differences between members who were not, primarily, business men. Therefore he worked out the idea of having the organization, as a machine for selling art works, conducted solely by practical business men...The artist members act only as a committee to pass on applications for membership which guarantees the quality of the works shown."

Art News, An International Newspaper of Art, March 17th 1923

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"The initial exhibition, seen for its own sake, is a beauty. Every artist seems to have realized that it is an occasion for putting his best work forward, and his best work could not be more favorably shown to the public. Even the galleries of the newest museums are not quite so favorable"

The New York Times, March 1923

Above: medal commemorating the founding of the Grand Central Art Galleries. The Grand Central Art Galleries officially opened on March 23rd 1923. The event featured paintings by Charles W. Hawthorne, Cecilia Beaux, Wayman Adams, John Singer Sargent and Ernest Ipsen. Sculptors included Daniel Chester French, Herbert Adams, Robert Aitken, Gutzon Borglum and Frederic MacMonnies. The gala event attracted 5K people and received a positive review from the New York Times. In keeping with the founders' conception of the Galleries as a commercial as well as artistic organization, the majority of the works on display were for sale. As such, two-thirds of proceeds on commercial sales were distributed to artists.

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"The busy man – or busier woman – may now buy a masterpiece between trains. If the business world has no time to go to art galleries, then art galleries must go to the business world. At all events, the pioneer in this democratic venture has just swung out a shingle in the Grand Central Station...Paintings by our best-known artists hang but a few steps from the electric locomotives that start our cross-country fliers on their way. The men from San Francisco or San Antonio may step from gallery to parlor car or vice versa without losing more than a fraction of his valuable time."

The New York Times, March 18th 1923
Above: exhibition of artist William R. Leigh's African studies at Grand Central Art Galleries (ca. 1940). In 1958 the Galleries moved to the second floor of the Biltmore Hotel, where they had six exhibition rooms and an office. They remained at the Biltmore for twenty-three years, until it was converted into an office building. The Galleries then moved to 24 West 57th Street, where they remained until they ceased all activity.

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NEW ART SCHOOL OPENS.

Reception Held in Studios Over the Grand Central.

The new Grand Central School of Art opened yesterday with a reception for the instructors and an inspection of the school studios, attended by more than 300 guests, including art students, patrons and artists. Miles Bronson, a Vice President of the New York Central Railroad and terminal manager, accompanied by the staff, officially inspected the school. The instructors will be Edmund Greason, President; George Pearce Emitt, Chester Beach, Ezra Winter, Dean Cornwall, Helen Dryden, Nicholas Fechin, Julian Boves and George Elmer Browne. The school's capacity is 600 students, and more than 200 have already enrolled.

The school occupies more than 1,000 square feet on the top of the east wing of the Grand Central Terminal and has been constructed in accordance with the plans of Julius Gregory, architect; Chief Engineer Sturgis and Chief Contractor Solan of the New York Central.

"More than a score of workmen were engaged yesterday in taking the roof off the east wing of the Grand Central Terminal in preparation for replacing it with glass skylights for the new Grand Central School of Art. The school will occupy 7,000 square feet of floor space, and will be one of the most completely equipped institutions of its kind in the country."

The New York Times, August 21st 1924
 RE: In 1924, under the combined direction of John Singer Sargent and Daniel Chester French, a group of New York-based artists decided to open an art school in GCT. The 7K-SF attic of the east wing offered an ideal location for teaching painting and sculpture, costume design and commercial illustration. Operated by the Art Gallery, the school closed in 1944. The school had/has no relationship to the Grand Central Academy of Art.

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The Secret Library

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One place that a tour of GCT most likely will never go is the Williamson Library (one level above the East Balcony), founded in 1937 by Frederick Ely Williamson (1876-1944, at left) who was president of the NYCRR from 1935 to 1944. Williamson was not just a railroad executive, he was also a member of the *The New York Railroad Enthusiasts* club. He founded the library that was named after him in 1937. The library has been under the care of the club ever since its founding and, in general, is inaccessible to the public. Behind its innocuous door is to be found an archive of over 3K railroad-related books, periodicals, and other literature (visitation for research is by appointment only). The room is mainly used for New York Railroad Enthusiasts' club meetings and is home to various railroad artifacts such as a remnant of the original 20th Century Limited red carpet.³⁶⁴

Lost & (Sometimes) Found

365

"In a typical year about 3,000 coats and jackets; 2,500 cellphones; 2,000 sets of keys; 1,500 wallets, purses and ID's; and 1,100 umbrellas find their way into the Metro-North Lost and Found in Grand Central Terminal. That, along with some stranger items like a basset hound, \$9,999 in cash stuffed into a pair of socks, two sets of false teeth and a \$10,000 diamond ring, makes the task of sorting and returning as much as possible a formidable one...In 1990, only about a quarter of the 400 or so items received in a month were returned to their owners. In May of this year, 1,700 items were turned in and more than 900 were returned. The sharp increase is due in large part to computerizing the operation."

The New York Times, August 20th 2002
Above: at left, GCT's Lost Property Room (ca. 1936). Since 1920, 15K to 18K items per year found their way to GCT's lost and found department (right). GCT claims an 80% success rate at returning lost items with their computerized system.

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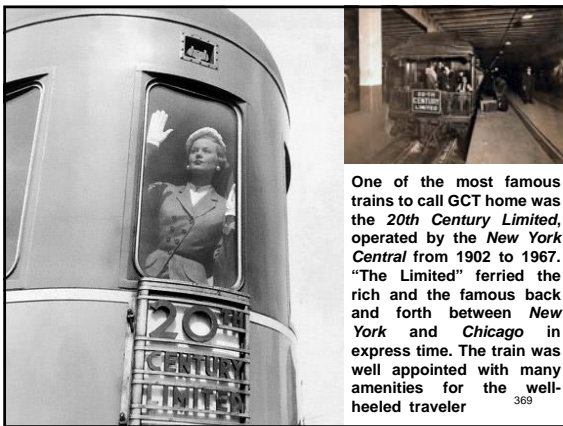
Rolling Out the Red Carpet

367

"Everything sparkling clean and in order, the Century, pre-heated in winter, pre-cooled in summer, is backed into Grand Central at 4:50 P.M. A 260 foot red carpet weighing half a ton is unrolled down the platform. Two minutes before departure time a signalman pulls a series of switch-throwing levers which will give the great train a clear pathway out of the station. Passenger timetables say the Century departs at 6 P.M. The operational timetables used by train crews are more exact. They read 6:01 – to allow stragglers to get aboard. Chicago Daily Tribune, August 25th 1957

RE: the NYCRR's 20th Century Limited. The New York to Chicago "Limited" typically left from Track 28 in GCT.

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One of the most famous trains to call GCT home was the 20th Century Limited, operated by the New York Central from 1902 to 1967. "The Limited" ferried the rich and the famous back and forth between New York and Chicago in express time. The train was well appointed with many amenities for the well-heeled traveler

369

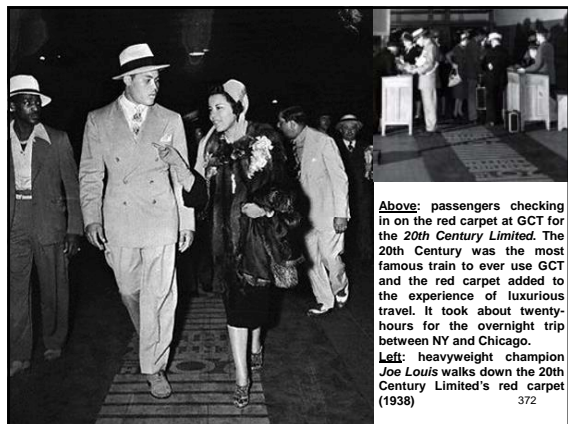


Above: New York Central employees literally rolling out the red carpet for the 20th Century Limited passengers to tread upon (top left). The phrase: "rolling out the red carpet" entered the English language because of this famous train. Parts of the original red carpet that was used in GCT survive and one remnant is housed in Grand Central under the loving care of The New York Railroad Enthusiasts (top right). Another part of the carpet is kept with the Hickory Creek - a restored observation car that was used on the 20th Century Limited (left).

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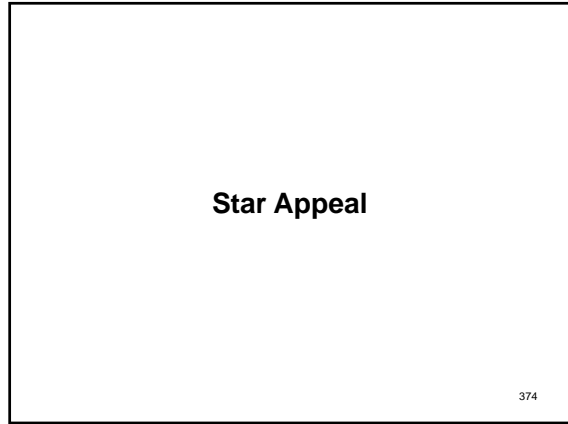


Above: passengers checking in on the red carpet at GCT for the 20th Century Limited. The 20th Century was the most famous train to ever use GCT and the red carpet added to the experience of luxurious travel. It took about twenty-hours for the overnight trip between NY and Chicago. Left: heavyweight champion Joe Louis walks down the 20th Century Limited's red carpet (1938)

372



Above: Mayor "Gentleman" Jimmy Walker and William K. Vanderbilt inaugurate a new express service on the 20th Century Limited (1932). Because the Limited used only Pullman sleeper and observation cars, it carried relatively few passengers (usually tycoons and celebrities).
373



Star Appeal

374



Top Left: actor James Cagney boarding a train at GCT while he photographs reporters standing on the platform (Cagney was practicing for his role in the 1933 Hollywood film *Snatcher*).



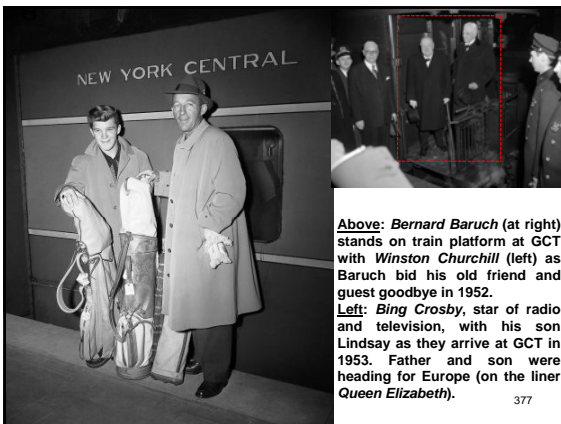
Top Right: actor/comedian Jack Benny plays the violin from the rear of a train in GCT in 1938
Left: George Herman "Babe" Ruth and his wife Claire smile as they board a train in GCT on February 5th 1942, bound for Hollywood. The Babe would play himself in the motion picture *Pride of the Yankees*, based on the life of Yankee great Lou Gehrig.
375



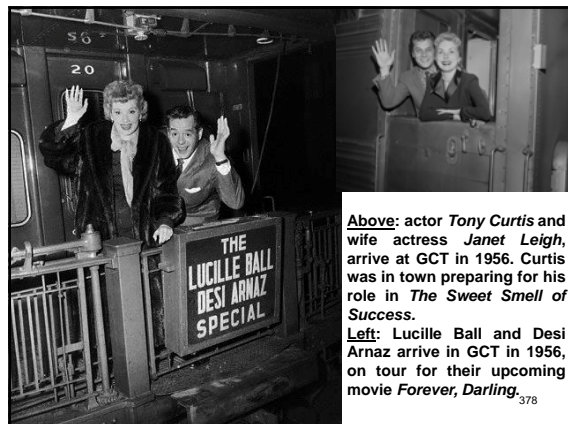
Top Left: Pullman Redcap Porters carry their hero boxing great Joe Louis (a.k.a. "The Brown Bomber") in GCT



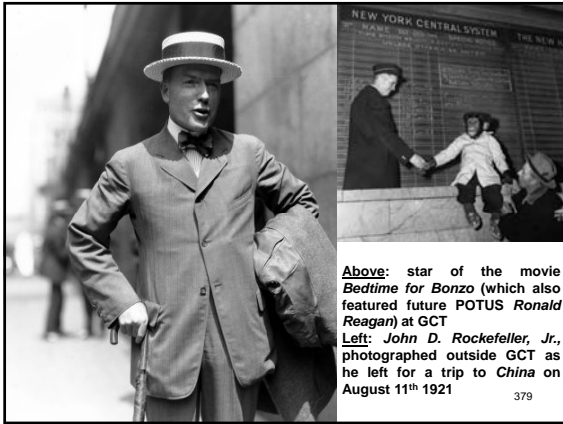
Top Right: Joe Louis, heavyweight champ, arrived at GCT on May 11th 1938. He came to New York to sign up to fight Max Schmeling at Yankee Stadium June 22nd 1938. He is being warmly greeted by Jim Williams, Chief Porter (a.k.a. "Redcaps") of GCT.
Left: newly crowned World Middleweight Boxing Champion Jake LaMotta (accompanied by his wife Vicky) arrives from Detroit at GCT where he defeated French World Champion Marcel Cerdan in 1949.
376



Above: Bernard Baruch (at right) stands on train platform at GCT with Winston Churchill (left) as Baruch bid his old friend and guest goodbye in 1952.
Left: Bing Crosby, star of radio and television, with his son Lindsay as they arrive at GCT in 1953. Father and son were heading for Europe (on the liner *Queen Elizabeth*).
377



Above: actor Tony Curtis and wife actress Janet Leigh, arrive at GCT in 1956. Curtis was in town preparing for his role in *The Sweet Smell of Success*.
Left: Lucille Ball and Desi Arnaz arrive in GCT in 1956, on tour for their upcoming movie *Forever, Darling*.
378



Above: star of the movie *Bedtime for Bonzo* (which also featured future POTUS Ronald Reagan) at GCT
Left: John D. Rockefeller, Jr., photographed outside GCT as he left for a trip to China on August 11th 1921

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Top Left: Bonzo's on-screen co-star and presidential candidate (at the time) Ronald Reagan shakes hands with a commuter aboard a train from Connecticut to GCT in 1980
Top Right: Diana Ross poses in the Main Concourse of GCT in 1968. In 2000, she used GCT's main public space again to announce the "Return to Love" tour of The Supremes.
Left: actress Rita Hayworth (and her reflection) arrive at GCT via the 20th Century Limited (ca. 1940s)

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To the Fair

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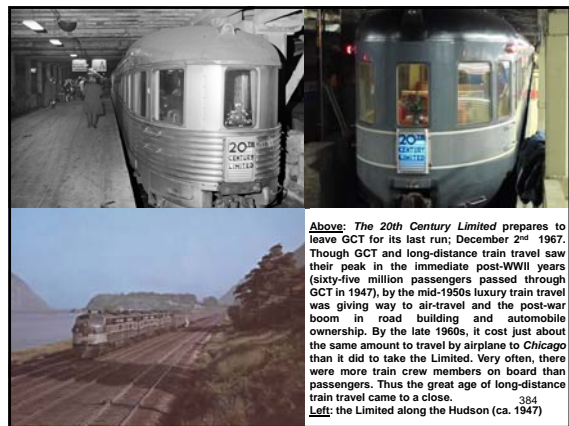


Pa Kettle: "Nice City" Daughter Kettle: "Pa, this is the station"
RE: excerpt from the movie: *Ma and Pa Kettle Go to Town* (filmed at GCT, 1950). At left, the *Fifield* family arrives via train in GCT for a trip to the 1939 *New York World's Fair*. Harry and Lydia Fifield of *Stonington, Connecticut*, raised a total of seventeen children, including six sets of twins. At the *Flushing Meadow* fair, they were declared the "World's Champion Twin Family."

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End of an Era

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Above: The 20th Century Limited prepares to leave GCT for its last run; December 2nd 1967. Though GCT and long-distance train travel saw their peak in the immediate post-WWII years (sixty-five million passengers passed through GCT in 1947), by the mid-1950s luxury train travel was giving way to air-travel and the post-war boom in road building and automobile ownership. By the late 1960s, it cost just about the same amount to travel by airplane to Chicago than it did to take the Limited. Very often, there were more train crew members on board than passengers. Thus the great age of long-distance train travel came to a close.
Left: the Limited along the Hudson (ca. 1947)

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Above: the bankrupt *Penn Central* was still responsible for operating hundreds of daily commuter trains in GCT, but starting in 1971 there was a new tenant -*Amtrak*, the nation's inter-city passenger rail carrier sponsored by the federal government. Seen here is the tail-end observation lounge car for the "Lake Shore Limited," the last remaining vestige of the *New York Central's* passenger service between *New York* and *Chicago*. Seeking to consolidate its terminals in *New York* and eliminate the awkward transfer, all Amtrak service to *New York City* was consolidated to *Penn Station* with the opening of the *Empire Connection* down the west side of *Manhattan* in April 1991.

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"The world won't end, but who would have thought that in one fell swoop they could saw off Grand Central Terminal for the rest of America?"
Kent Barwick, President of the *Municipal Art Society*
RE: In 1989, *Amtrak* announced its plans to consolidate its operations in *Penn Station* thus abandoning GCT altogether for long-distance service. On April 6th 1991, *The Maple Leaf* left GCT bound for *Toronto* marking the end of Grand Central as: "The Gateway to a Continent." Henceforth, GCT would be limited to serving six counties in two states (NY and CT), essentially as a commuter rail terminal for the *Metropolitan Transit Authority's* (MTA) *Metro-North* commuter railroad.

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"The cold weather is setting in. Should anyone decide to dig in for the winter, I recommend the Grand Central as a good place. That terminal, with its catacombs and its connecting clubs, offices, and hotels now offers a complete existence - all of the necessities of life, plus clean fun."
E.B. White, January 1929

Above: entry to GCT (at the corner of 42nd Street and Vanderbilt Avenue) during a heavy winter snowstorm (ca. 1950). Passengers and pedestrians alike could find shelter, transportation and just about everything else they needed through those doors.

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Part 10

Comings & Goings

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War Footing

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Wartime Guide to Grand Central Terminal

By the 1940s, the equivalent of forty percent of the population of the *United States* traveled through GCT every year (65 million in the peak year of 1946). During *World War II*, millions of soldiers, sailors, airmen and marines passed through GCT on their way to and from the battle fronts. So many in fact that the U.S. government opened a special branch of the USO inside the station. Considering its high profile and vital importance to the war effort, its perhaps not surprising that Grand Central was the target of sabotage during the war. In 1942, from a U-Boat offshore, four German agents landed on *Long Island* with plans to destroy key logistical locations in the northeast including GCT. They were apprehended before doing any damage, but if they had made their way to the station's secret subbasement (known as "M42"), they would have had to deal with a platoon of heavily armed soldiers whose sole purpose was to guard the nerve-center of the terminal 24/7/365. M42 never appeared on any plans of GCT and its location remains a secret.

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'round-the-clock Lounge

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"During the war, Grand Central played host to countless servicemen and women. Millions of troops traveled over the railroads of America each month. Many passed through the station en route overseas and returned later on their way home. These uniformed wayfarers often arrived lonely and weary...The USO and Travelers Aid came to the rescue. A 'round-the-clock lounge was opened on the balcony above the concourse, where games were provided or where the tired soldier or sailor could curl up with a book, magazine or newspaper. A muted radio offered programs, and a canteen served coffee and sandwiches."

Coronet magazine, 1946

RE: the *Travelers Aid Society of New York* had been helping travelers in need at Grand Central since 1905 when they opened a small desk near *Track 30*. During WWII, the TAS opened a 5K square-foot *Servicemen's Lounge* on the *East Balcony* (a.k.a. "Gallery"). Staffed by +/-200 volunteers, it was one of 120 *Servicemen's Lounges* across the country during the war. The lounge closed in June 1945 and the TAS opened a small booth on the *North Balcony* in 1948 staffed by three workers.

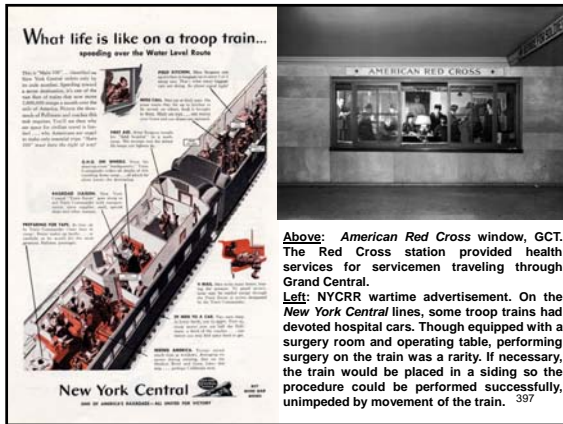
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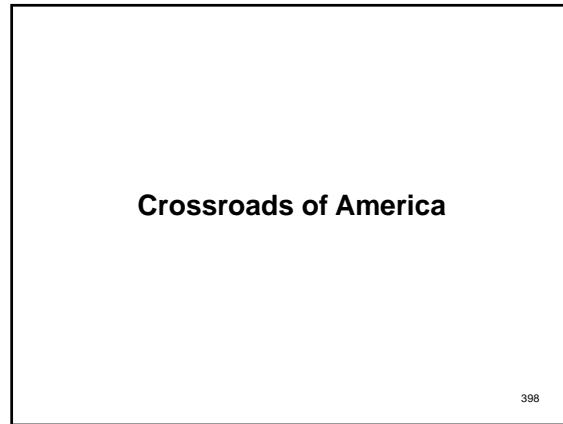
"In ten months more than 1,200,000 servicemen were guests of patriotic organizations active in the terminal. The Travelers Aid Society Lounge handles more than 100,000 a month. Men are given sleeping chairs, blankets and tags which state he time they are to be awakened. Cigarettes are free. Books and writing materials are furnished. Free billiard rooms are always open and entertainment includes movies and singing."

Popular Mechanics, November 1944

396



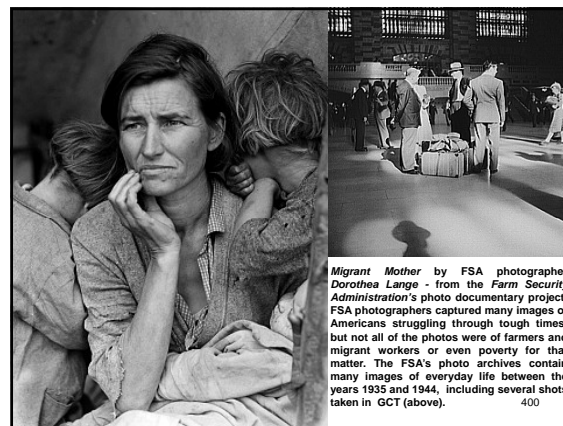
Above: American Red Cross window, GCT. The Red Cross station provided health services for servicemen traveling through Grand Central.
Left: NYCCR wartime advertisement. On the New York Central lines, some troop trains had devoted hospital cars. Though equipped with a surgery room and operating table, performing surgery on the train was a rarity. If necessary, the train would be placed in a siding so the procedure could be performed successfully, unimpeded by movement of the train. 397



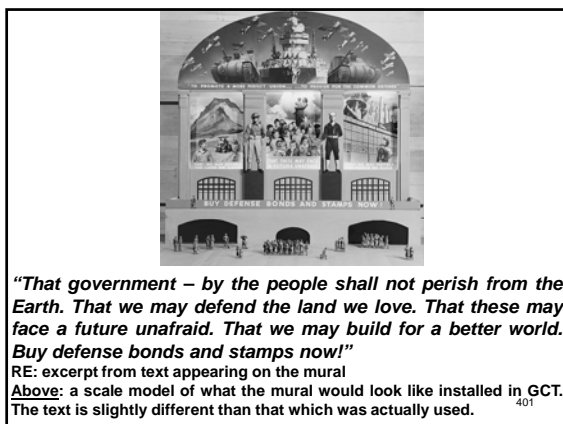
Crossroads of America

398

In the aftermath of the *Pearl Harbor* attack that thrust isolationist America into the World War, Treasury Secretary *Henry Morgenthau, Jr.* commenced a war bond drive with the goal of raising \$10 billion to prosecute the war to final victory. As a center of American life and culture, where better to solicit Americans to perform their patriotic duty by buying war bonds than GCT; the "Crossroads of America." To this end, it was decided that a large photo-mural montage would cover the east windows of the *Main Concourse* (from the *East Balcony* to the vault of the *Sky Ceiling*) to get the message out to the traveling public to buy war bonds and stamps. The Treasury Department would pay for the mural and use photos from the *Resettlement Administration* whose focus was on building relief camps for migrant workers and refugees from the depression-era droughts in the Southwest. A photography project to document the work was established, and when the Resettlement Administration later became the *Farm Security Administration*, the documentary photography project was expanded. Some iconic images of American life during and after the *Great Depression* were captured by FSA photographers. The mural not only used photographs from the Farm Security Administration's archival collection, but it was itself documented from start to finish by FSA photographers. Measuring 96 by 118-feet, the mural made the claim that it was the largest photo-mural in the world. The mural was proclaimed the "World's Greatest Photo-Mural," by the *New York Herald* upon its dedication on Sunday, December 14th 1941 – exactly one week after the attack on *Pearl Harbor*. 399



Migrant Mother by FSA photographer *Dorothea Lange* - from the *Farm Security Administration's* photo documentary project. FSA photographers captured many images of Americans struggling through tough times, but not all of the photos were of farmers and migrant workers or even poverty for that matter. The FSA's photo archives contain many images of everyday life between the years 1935 and 1944, including several shots taken in GCT (above). 400

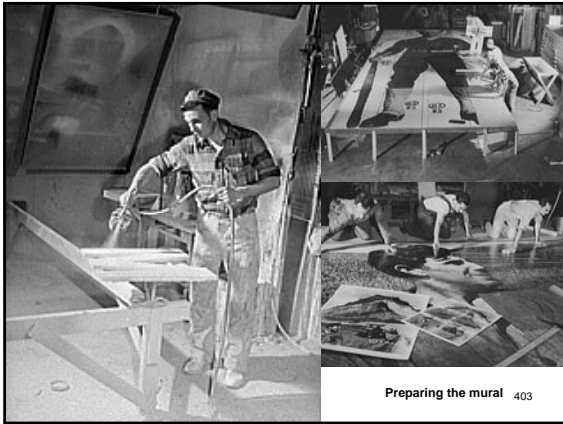


"That government – by the people shall not perish from the Earth. That we may defend the land we love. That these may face a future unafraid. That we may build for a better world. Buy defense bonds and stamps now!"

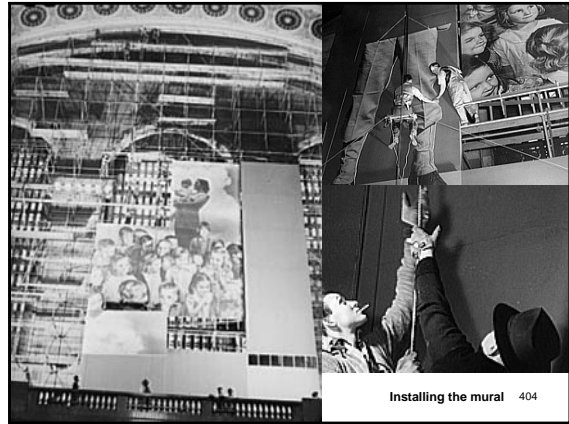
RE: excerpt from text appearing on the mural
Above: a scale model of what the mural would look like installed in GCT. The text is slightly different than that which was actually used. 401



Above: artists in *Washington D.C.* planning the mural
Left: one of the main (center) FSA photos used in the mural. A total of twenty-two FSA photographs were incorporated into the GCT photo-mural 402



Preparing the mural 403



Installing the mural 404



The photo-mural (above) was originally planned prior to the *United States'* entry into WWII. Work for the mural had begun three months prior to its installation, thus it was dedicated in December 1941 – soon after the *Pearl Harbor* attack. After the U.S. entered the war, the sign was changed to “War Bonds” as opposed to “Defense Bonds” (visible in this photo). The FSA’s photography unit was reassigned to the *Office of War Information* and a year later, disbanded.

405



Left: note the banner in this 1943 photograph (above the *New York Central's* ticket windows in the *Main Concourse* of GCT): “*Today We're a Military Railroad. Our best service to you is to speed the men who are speeding Victory.*” During WWII, the Central operated personnel trains, mail, equipment, freight and hospital trains. An average of two million troops per month were transported over the NYCRR system during the war. Seats for civilians were limited and Americans were urged to make only essential trips.

406



The NYCRR played a critical role in the war effort by efficiently moving men and materials across the land. In 1945, a *Victory Loan War Bond* drive attracted 1K people per hour (nearly 15K total). They passed through a special seven-car train in GCT to view the original German and Japanese surrender documents which had brought the war to its successful conclusion.

407



Challenge Met

408



**Dedicated to
The Men and Women
of the
New York Central System
Who Served with the
Armed Forces of Our Country
in World War II**

**Their Valor
Challenged the Insolence
of the
Enemies of Humanity**

**Erected by the
Veterans Association of
the New York Central System
Metropolitan Chapter
1945**

409

Cold War

410



Above: model of a fallout shelter on display in GCT's lower level, October 1962. In September 1961, a letter written by *President Kennedy* appeared in *Life* magazine, advising Americans to build fallout shelters. This example was built by a company called *Shelters for Living* and was designed to accommodate a family of five or six people. Marketed as a "cheerful as possible" multipurpose room, the shelter could also be enjoyed as a family library or music room: "Why be drab about your shelter, when it's more fun, and costs no more to survive in style?"⁴¹¹

411



"Thousands of troops will stream from home armories throughout the metropolitan area to Grand Central Terminal to entrain for Camp Drum, near Watertown..."
The New York Times, July 8th 1955

Left: the 165th Regiment of the *Rainbow Division* assemble in GCT before boarding trains for *Camp Drum*, July 9th 1955

Right: members of New York's 77th *Infantry Division* wait for a train in GCT in 1962. They are heading to *Camp Drum* in upstate *New York* for training. The 77th was one of the six combat divisions of the *U.S. Army Reserve* held ready for rapid deployment worldwide.⁴¹²

412

Space Race

413

"In New York the Redstone missile of the U.S. Army and the largest operational weapon of its kind in the free world poked its shiny nose up toward the ceiling of Grand Central Terminal. It was being displayed for three weeks as a salute to the International Geophysical Year. It weighs five tons, is 63 feet tall and required two days' work by 14 men to set it up."

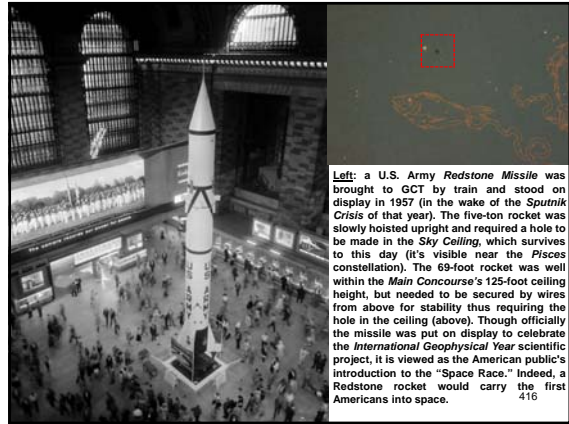
Life magazine, July 22nd 1957

414



Above: Crowds gather at GCT to view the Army's Redstone Missile which was put on display to alleviate feelings of insecurity among the American public after the Soviet Union successfully launched Sputnik on October 4th 1957.
Left: the 69-foot tall Redstone missile being hoisted into a vertical position

415



Left: a U.S. Army Redstone Missile was brought to GCT by train and stood on display in 1957 (in the wake of the Sputnik Crisis of that year). The five-ton rocket was slowly hoisted upright and required a hole to be made in the Sky Ceiling, which survives to this day (it's visible near the Pisces constellation). The 69-foot rocket was well within the Main Concourse's 125-foot ceiling height, but needed to be secured by wires from above for stability thus requiring the hole in the ceiling (above). Though officially the missile was put on display to celebrate the International Geophysical Year scientific project, it is viewed as the American public's introduction to the "Space Race." Indeed, a Redstone rocket would carry the first Americans into space.

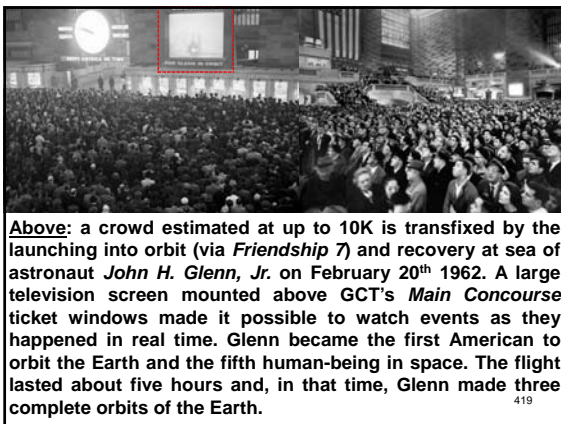
416

Godspeed, John Glenn

417

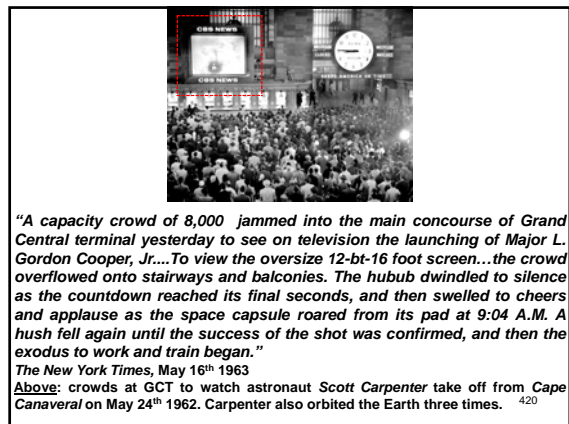
"The thoughts of millions of New Yorkers were riveted for hours yesterday on one man alone in space...The most spectacular display of interest occurred in Grand Central Terminal...They began to arrive about 6:30 a.m. Their numbers swelled rapidly after 8 a.m. Just before the blast-off, Captain Frank Campbell of the railroad police estimated that 9,000 to 10,000 persons stood shoulder to shoulder, their faces turned like sunflowers to the screen"
The New York Times, February 21st 1962

418



Above: a crowd estimated at up to 10K is transfixed by the launching into orbit (via Friendship 7) and recovery at sea of astronaut John H. Glenn, Jr. on February 20th 1962. A large television screen mounted above GCT's Main Concourse ticket windows made it possible to watch events as they happened in real time. Glenn became the first American to orbit the Earth and the fifth human-being in space. The flight lasted about five hours and, in that time, Glenn made three complete orbits of the Earth.

419



"A capacity crowd of 8,000 jammed into the main concourse of Grand Central terminal yesterday to see on television the launching of Major L. Gordon Cooper, Jr....To view the oversize 12-ft-16 foot screen...the crowd overflowed onto stairways and balconies. The hubub dwindled to silence as the countdown reached its final seconds, and then swelled to cheers and applause as the space capsule roared from its pad at 9:04 A.M. A hush fell again until the success of the shot was confirmed, and then the exodus to work and train began."
The New York Times, May 16th 1963
Above: crowds at GCT to watch astronaut Scott Carpenter take off from Cape Canaveral on May 24th 1962. Carpenter also orbited the Earth three times.

420

"In New York City, thousands watched the recovery of Apollo 13 in the Pacific on a giant television screen above the old New Haven Railroad ticket windows in the upper level of Grand Central Terminal. There were nervous whispers of 'They've got this far at least,' and 'it's amazing.' Three times there was a long, loud clapping – once when the space capsule appeared on the screen high in the sky, then when it splashed into the Pacific and again when the astronauts limped out."

The New York Times, April 18th 1970

421

A Universally Recognized Place

422

"In such details resides Grand Central's power as an almost universally recognized 'place,' even as it offers a superb spring board for fantasy. How many other structures could be so universally identified by a few fragments of their graphics?"

RE: excerpt from *Celluloid Skyline*. Indeed, GCT would play host to *Hollywood* movie-makers on many occasions and includes, among others, the following films;

- *Going Hollywood*
- *Twentieth Century*
- *Spellbound*
- *North by Northwest*
- *The Band Wagon*
- *Grand Central Murder*
- *The Cotton Club*
- *Men in Black II*
- *The Prince of Tides*
- *The Freshman*
- *The House on Carroll Street*
- *One Fine Day*
- *The French Connection*
- *The Ice Storm*
- *Carlito's Way*
- *Midnight Run*
- *Superman*

423



"Anyone spying on the location work Alfred Hitchcock has been doing here for the last two weeks on his suspense drama 'North by Northwest'...The presence of the legion of Metro-Goldwyn-Mayer technicians and Cary Grant, the film's star, was anything but a secret, as curious crowds gathered wherever the film people went to work including Grand Central Terminal."

The New York Times, September 7th 1958

Above: crowds gather (left) to watch the filming of Alfred Hitchcock's (right) suspense thriller *North by Northwest* in GCT, 1958. Released in 1959, the film starred Cary Grant, Eva Marie Saint and James Mason. Not only was GCT featured prominently in the movie, but the Central's famous *20th Century Limited* made an encore appearance as well.

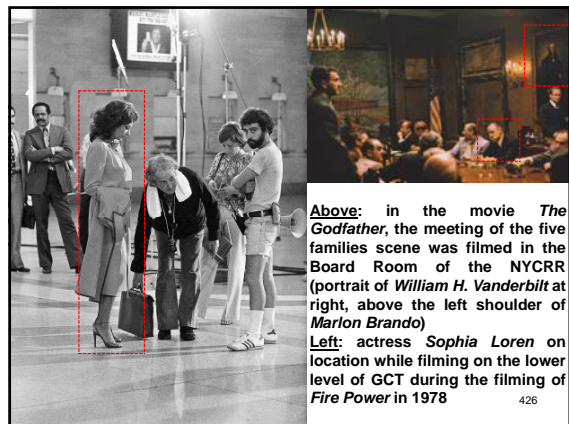
424



"In the montage that opens 'North by Northwest,' we see waves of New Yorkers rushing through the great room – some on their way to trains and subways, others simply passing through, enjoying a covered shortcut from one part of Midtown to another. No wonder that later in the film, Cary Grant – an innocent man now become a fugitive – looks to the concourse and its throngs to provide the anonymity he desperately needs."

RE: excerpt from *Celluloid Skyline*

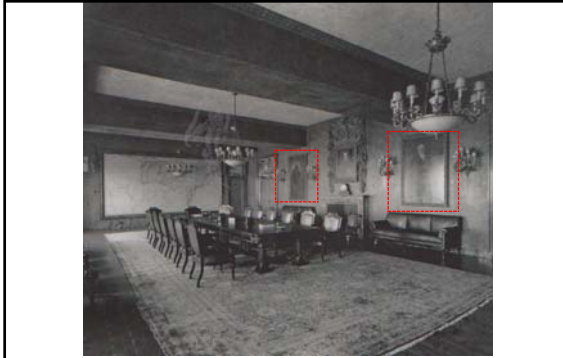
425



Above: in the movie *The Godfather*, the meeting of the five families scene was filmed in the Board Room of the NYCRR (portrait of *William H. Vanderbilt* at right, above the left shoulder of *Marlon Brando*)

Left: actress *Sophia Loren* on location while filming on the lower level of GCT during the filming of *Fire Power* in 1978

426



Above: Board Room of the NYCRR. The Commodore's portrait is to the left of the fireplace and William H. Vanderbilt's portrait is to the right. 427

Crossroads of a Million Private Lives

428

"...Grand Central Station! Crossroads of a million private lives! Gigantic stage on which are played a thousand dramas daily!
 RE: excerpt from the prologue of NBC's dramatic radio anthology *Grand Central Station* (1937-1953)

429

"Before a crowd of 17,000, one of the largest ever assembled in Grand Central Terminal, Mayor Walker and Colonel James C. Fitzmaurice unveiled the veteran Junkers all-metal monoplane 'Bremen' yesterday afternoon at 3 o'clock...The unveiling was preceded by a luncheon at the Hotel Commodore, attended by transatlantic aviators including Amelia Earhart...The late Baron Guenther von Huenefeld donated it to the people of the city of New York in appreciation of the reception tendered to him and his crew on their completion of their historic flight."
The New York Times, May 22nd 1929
 RE: a large crowd (left) looks on as the Bremen (right), a German Junkers W33 aircraft; the first plane to successfully fly west across the Atlantic, is placed on display in GCT's Main Concourse on May 21st 1929

430

"The number of people who pass through Grand Central in a year approximates the total population of the United States."
WPA Guide to New York City, 1939

431

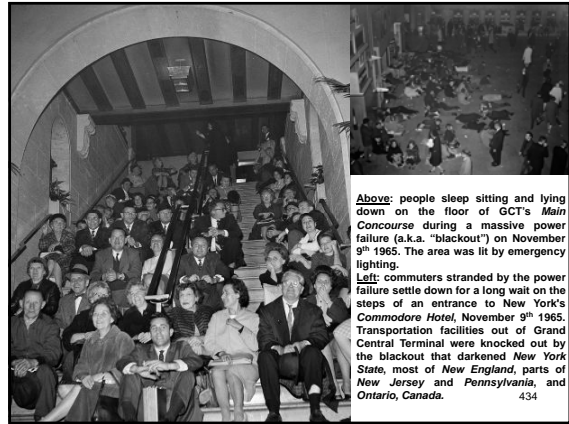
Hurry Up and Wait

432



Top Left: would-be passengers sit on their luggage in GCT on May 23rd 1946, when they were stranded in the terminal by a rail strike
Top Right: Independence-Day travelers wait in a long line for a train to Boston on July 4th 1942.
Left: a passenger draws a pair of eyeglasses on a subway poster in 1961. The NYC Transit Authority put up subway posters throughout GCT to help passengers while away the time while waiting for trains.

433

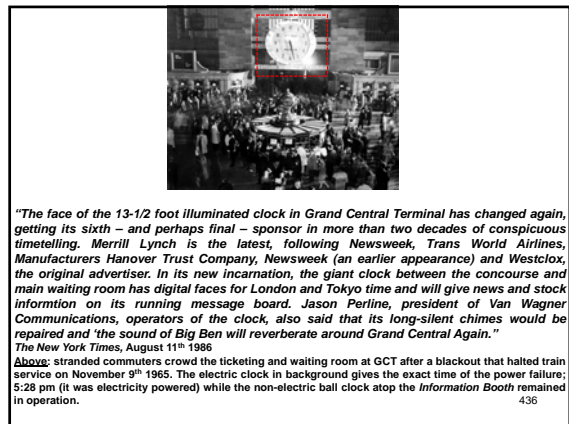


Above: people sleep sitting and lying down on the floor of GCT's Main Concourse during a massive power failure (a.k.a. "blackout") on November 9th 1965. The area was lit by emergency lighting.
Left: commuters stranded by the power failure settle down for a long wait on the steps of an entrance to New York's Commodore Hotel, November 9th 1965. Transportation facilities out of Grand Central Terminal were knocked out by the blackout that darkened New York State, most of New England, parts of New Jersey and Pennsylvania, and Ontario, Canada.

434

Conspicuous Timetelling

435

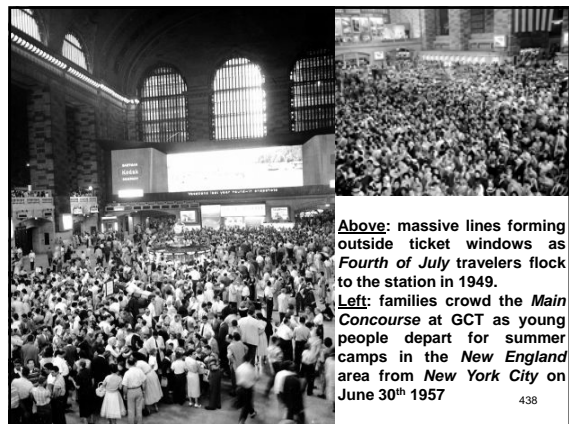


"The face of the 13-1/2 foot illuminated clock in Grand Central Terminal has changed again, getting its sixth - and perhaps final - sponsor in more than two decades of conspicuous timetelling. Merrill Lynch is the latest, following Newsweek, Trans World Airlines, Manufacturers Hanover Trust Company, Newsweek (an earlier appearance) and Westclox, the original advertiser. In its new incarnation, the giant clock between the concourse and main waiting room has digital faces for London and Tokyo time and will give news and stock information on its running message board. Jason Perline, president of Van Wagner Communications, operators of the clock, also said that its long-silent chimes would be repaired and 'the sound of Big Ben will reverberate around Grand Central Again.'"
The New York Times, August 11th 1986
Above: stranded commuters crowd the ticketing and waiting room at GCT after a blackout that halted train service on November 9th 1965. The electric clock in background gives the exact time of the power failure: 5:28 pm (it was electricity powered) while the non-electric ball clock atop the Information Booth remained in operation.

436

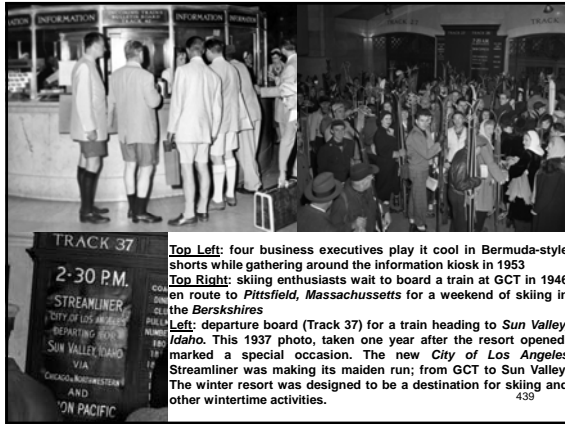
Arrivals and Departures

437

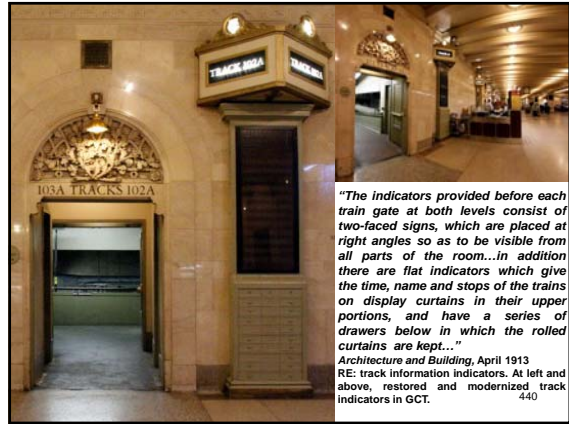


Above: massive lines forming outside ticket windows as Fourth of July travelers flock to the station in 1949.
Left: families crowd the Main Concourse at GCT as young people depart for summer camps in the New England area from New York City on June 30th 1957

438



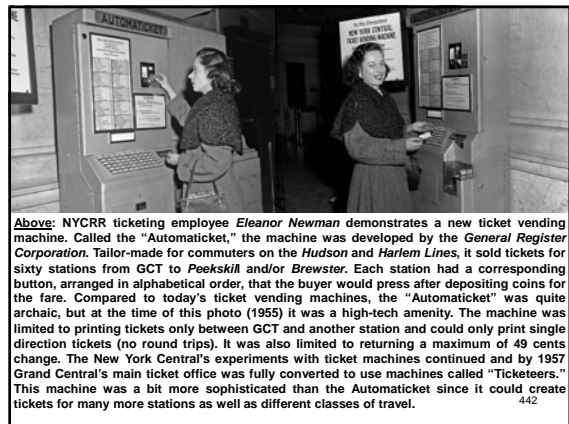
Top Left: four business executives play it cool in Bermuda-style shorts while gathering around the information kiosk in 1953
Top Right: skiing enthusiasts wait to board a train at GCT in 1946 en route to *Pittsfield, Massachusetts* for a weekend of skiing in the *Berkshires*
Left: departure board (Track 37) for a train heading to *Sun Valley Idaho*. This 1937 photo, taken one year after the resort opened marked a special occasion. The new *City of Los Angeles Streamliner* was making its maiden run; from GCT to Sun Valley. The winter resort was designed to be a destination for skiing and other wintertime activities.



"The indicators provided before each train gate at both levels consist of two-faced signs, which are placed at right angles so as to be visible from all parts of the room...in addition there are flat indicators which give the time, name and stops of the trains on display curtains in their upper portions, and have a series of drawers below in which the rolled curtains are kept..."
Architecture and Building, April 1913
 RE: track information indicators. At left and above, restored and modernized track indicators in GCT.

The Automaticket

441



Above: NYCRR ticketing employee *Eleanor Newman* demonstrates a new ticket vending machine. Called the "Automaticket," the machine was developed by the *General Register Corporation*. Tailor-made for commuters on the *Hudson* and *Harlem Lines*, it sold tickets for sixty stations from GCT to *Peekskill* and/or *Brewster*. Each station had a corresponding button, arranged in alphabetical order, that the buyer would press after depositing coins for the fare. Compared to today's ticket vending machines, the "Automaticket" was quite archaic, but at the time of this photo (1955) it was a high-tech amenity. The machine was limited to printing tickets only between GCT and another station and could only print single direction tickets (no round trips). It was also limited to returning a maximum of 49 cents change. The New York Central's experiments with ticket machines continued and by 1957 Grand Central's main ticket office was fully converted to use machines called "Ticketeers." This machine was a bit more sophisticated than the Automaticket since it could create tickets for many more stations as well as different classes of travel.

442



Above: in 1973, *Chase Manhattan Bank* installed "Convenience Cash" - the first cash dispensing machines (ATM) at GCT

443

Making a Statement

444



Left: NYC Police examine debris after an explosion blew one locker apart and damaged three others in GCT on May 6th 1953. No one was hurt despite the fact that the blast occurred along the ramp from the main to the suburban (lower) level of the terminal while crowds of commuters were on their way home. On September 11th 1976, a Croatian nationalist group planted a bomb in a coin locker at GCT. After stating their political demands, they revealed the location and provided the instructions for disarming the bomb. The disarming operation was improperly executed and the resulting explosion wounded over thirty and killed one bomb squad specialist. ⁴⁴⁵



Above: an estimated 450 women pose nude inside GCT on October 26th 2003 as part of artist *Spencer Tunick's* latest New York project. Participants meet at a specific place and time, strip off their clothing and then align their naked bodies into sculptural shapes and formations that build on "features of streets, buildings and cityscapes." ⁴⁴⁶

Part 11

Time to Take a Stand

447

"Is it not cruel to let our city die by degrees, stripped of all her proud monuments, until there will be nothing left of all her history and beauty to inspire our children? If they are not inspired by the past of our city, where will they find the strength to fight for her future? Americans care about their past, but for short term gain they ignore it and tear down everything that matters. Maybe this is the time to take a stand, to reverse the tide, so that we won't all end up in a uniform world of steel and glass boxes."
Jacqueline Kennedy Onassis

448

G.C.T. Rail Traffic Record 62,762,860

Railroad passenger traffic in Grand Central Terminal in 1944 totaled 62,762,860, the highest in the history of the Terminal, J. H. Hootin, Jr., Manager of the Terminal, reports. This total, equal to almost half the population of the United States, was 2,888,807, or 4.73 percent higher than the traffic handled in 1943.

A new record for passengers carried on any single day was made December 26, when the total reached 257,769, as compared with the previous high record of 222,005, set on December 28, 1943.

On 28 days during 1944, as compared with 14 days in 1943, passengers in and out exceeded 200,000. Long distance passengers increased 1,114,267 and suburban passengers increased 1,519,100 over the total for 1943 for both the New York Central and New Haven railroads.

The rate of increase of New York Central and New Haven long distance passengers did not quite equal the increase in the suburban passengers for the two railroads, a reversal of the trend since 1941. Suburban passengers on the two roads totaled 34,184,221, which was 704,693 passengers more than the previous maximum, reached in 1929.

Use of railroad systems saw its peak in the 1920s but began to falter in the mid-to-late 1930s. World War II revitalized use of the railway systems in the early 1940s and brought the industry back to prominence (left). While this period saw nearly half of Americans using the railroad systems, by the late 1940s there was once again a steep decline in railroad use. In 1947, over sixty-five million people (40% of the population of the *United States*) traveled through GCT. However, it was, in fact, after a record 252,251 passengers passed through GCT on July 3rd 1947 that the decline of the great terminal began. Railroads were now in competition with federally subsidized interstate highways and intercity domestic airlines. In 1954, the NYCRR announced that it was considering building the world's tallest building on the site of GCT to help mitigate its \$24 million annual deficit.

449

The Hyberboloid

450



In 1954, real estate developer *William Zeckendorf* proposed replacing GCT with an 108-story, 4.8 million square-foot skyscraper which would be 350-feet taller than the record holding *Empire State Building* (1,250-feet) at 1,600-feet. Architect *I.M. Pei's* "Hyberboloid" design featured a pinched glass cylinder tower with a wasp waist and an observation tower at its top (left). However, a public outcry against the planned demolition of GCT led by leading architects resulted in an abandonment of the plan in 1955.

451

"Probably the finest big room in New York...It belongs in fact to the nation. People admire it as travel carries them through from all parts of the world. It is one of those very few building achievements that has come to stand for our country. This great room is noble in its proportions, alive in the way the various levels and passages work in and out of it, sturdy and reassuring in its construction, splendid in its materials – but that is just the beginning. Its appeal recognizes no top limit of sophistication, no bottom limit. The most exacting architectural critic agrees in essentials with the newsboy at the door."

RE: excerpt from a letter signed by 220 architects published in *Architectural Forum* magazine pleading the great concourse be spared the wrecker's ball to make way for Mr. Zeckendorf's Hyberboloid tower

452

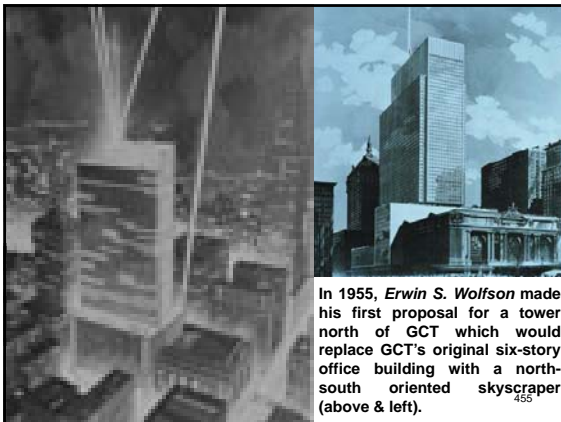
A Great Piece of Civic Architecture

453

"...before the plans reach rigid crystallization, there is a chance that public opinion can persuade the heads of these railroads to consider some schemes whereby, without arresting the desirable progress implicit in their project, this great piece of civic architecture could be spared."

The New York Times, 1954

454

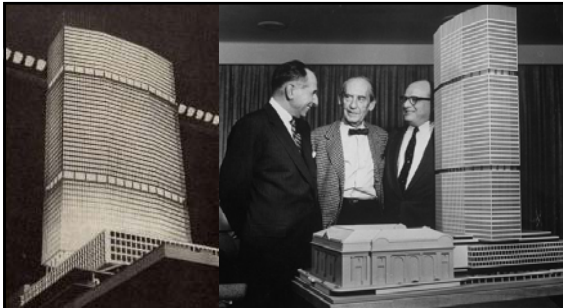


In 1955, *Erwin S. Wolfson* made his first proposal for a tower north of GCT which would replace GCT's original six-story office building with a north-south oriented skyscraper (above & left).

455

Grand Central City

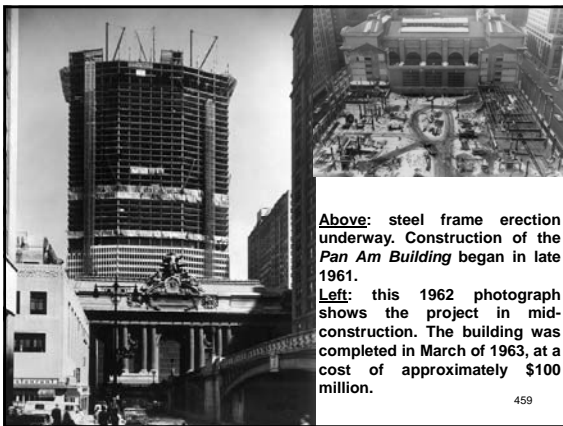
456



Above: left-to-right, architect's Emory Roth, Walter Gropius and developer Erwin Wolfson with a model of "Grand Central City" (1959) – a massive 2.8 million square-foot octagonal skyscraper sandwiched between GCT and the New York Central Building (on an east-west axis this time around to relieve the crowding of the latter by the earlier scheme which included 3 million square-feet). The building was designed by Emory Roth & Sons in association with Walter Gropius and Pietro Beluschi (the tower design was based on the Pirelli Tower in Milan, Italy). It replaced entirely the six-story Grand Central Terminal Office Building to the north of the GCT.



Left T&B: support for the 45K-ton steel frame utilized two-hundred existing columns plus an additional ninety-five sunk into bedrock fifty-five feet below Park Avenue for what became the Pan Am Building
 Right: the long hidden back facade of GCT exposed when the Grand Central Terminal Office Building was demolished for the construction of the new 59-story Pan Am Building (January 1961)



Above: steel frame erection underway. Construction of the Pan Am Building began in late 1961.
 Left: this 1962 photograph shows the project in mid-construction. The building was completed in March of 1963, at a cost of approximately \$100 million.

Blockbuster

"Many planners agree that this addition to an overbuilt New York is one more rapid step toward the certain strangulation of the city, and its eventual paralysis. However, as long as private enterprise controls city land, use and economics and legislation offer no incentives to improved urban design, such buildings are inevitable, and neither developer nor designer is to blame. The blockbuster building is here to stay, a singular symptom of one of the most disturbing characteristics of our age: A loss of human scale that seems irrevocably tied to a loss of human values."

Ada Louise Huxtable, New York Times Architecture Critic

New York Central's Changing Scene

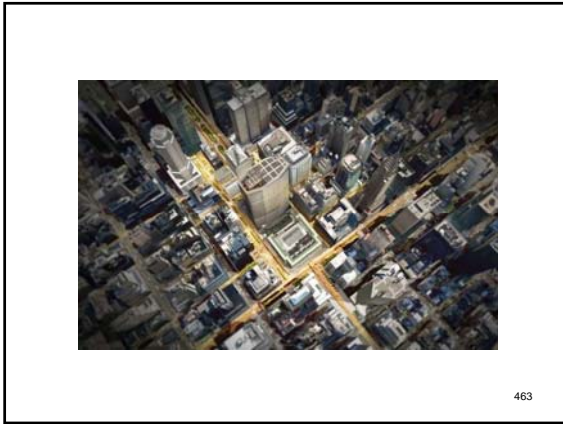
1927: The site in 1927. Site is Grand Central Terminal which sits inside Park Ave. The main part of building is completed in 1913. In 1927, the main part is complete, with an overall of 122,000 sq ft. The building is built on the bedrock of the Grand Central Terminal. The building is built on the bedrock of the Grand Central Terminal. The building is built on the bedrock of the Grand Central Terminal.

TODAY: Today Grand Central Terminal connects with the Pan Am Building (1963). The building is built on the bedrock of the Grand Central Terminal. The building is built on the bedrock of the Grand Central Terminal. The building is built on the bedrock of the Grand Central Terminal.

New York Central's Changing Scene

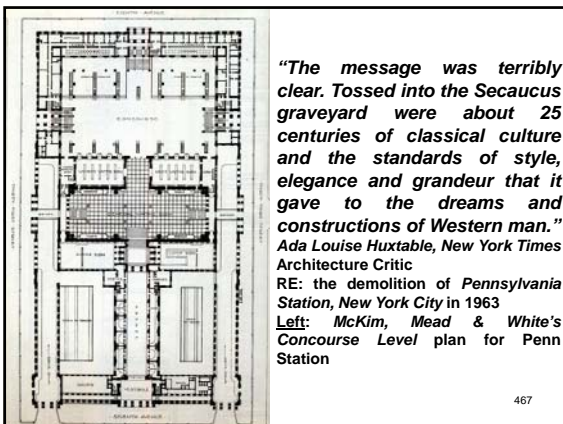
"When Commodore Vanderbilt, surely a champion of free enterprise, organized the Grand Central area, enterprise was free enough to create order in the grand manner of Versailles, on the grand scale of the railway age. What is happening now is hardly more than what happened in Rome in the Dark Ages – men tear down great works to put up the best they can."

Harper's magazine

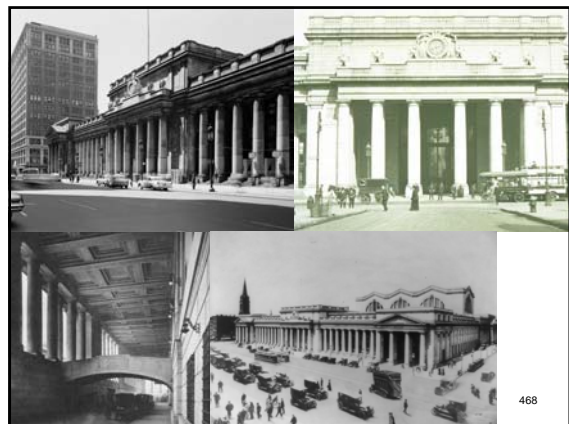


A Terribly Clear Message

466



"The message was terribly clear. Tossed into the Secaucus graveyard were about 25 centuries of classical culture and the standards of style, elegance and grandeur that it gave to the dreams and constructions of Western man."
 Ada Louise Huxtable, New York Times Architecture Critic
 RE: the demolition of Pennsylvania Station, New York City in 1963
 Left: McKim, Mead & White's Concourse Level plan for Penn Station

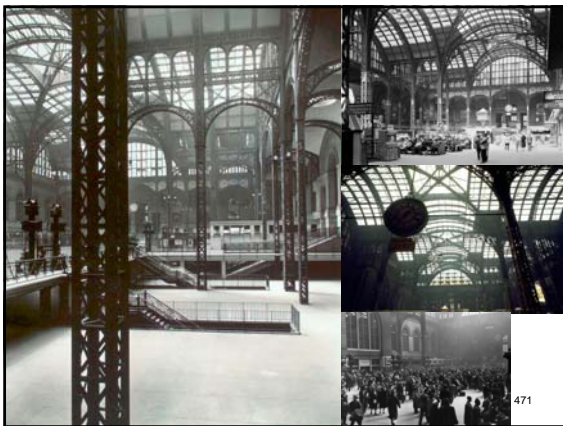




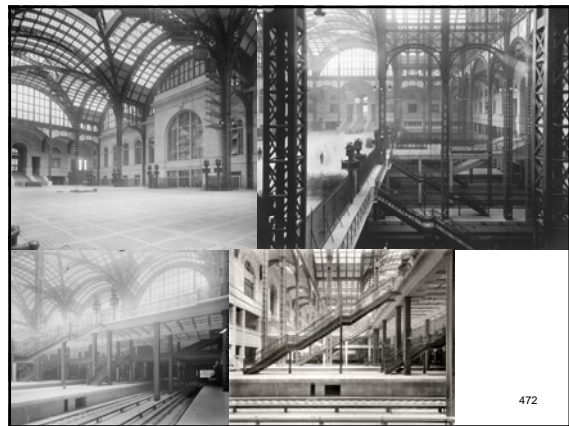
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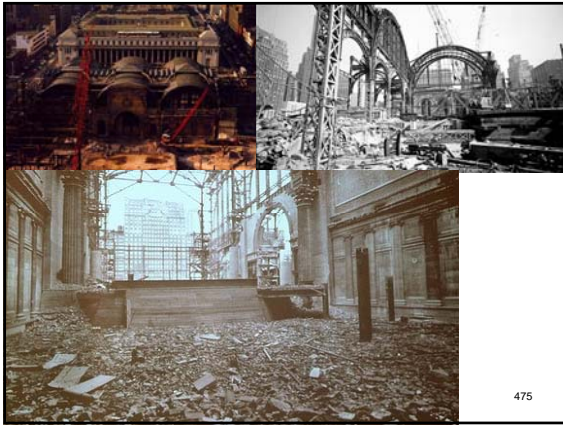
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Farewell Penn Station

473

"Any city gets what it admires, will pay for, and, ultimately, deserves. Even when we had Penn Station, we couldn't afford to keep it clean. We want and deserve tin-can architecture in a tinhorn culture. And we will probably be judged not by the monuments we build but by those we have destroyed."
 RE: "Farewell to Penn Station" - *New York Times* editorial, October 30th 1963

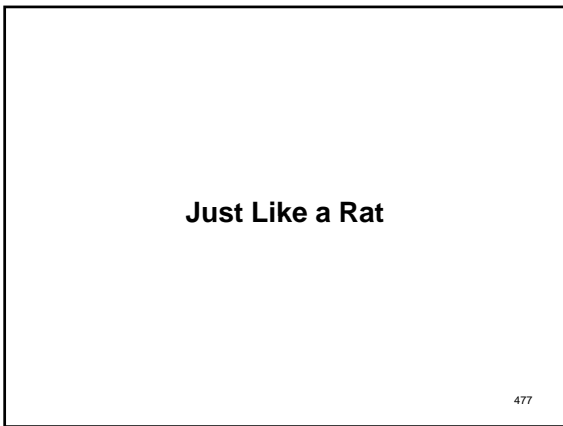
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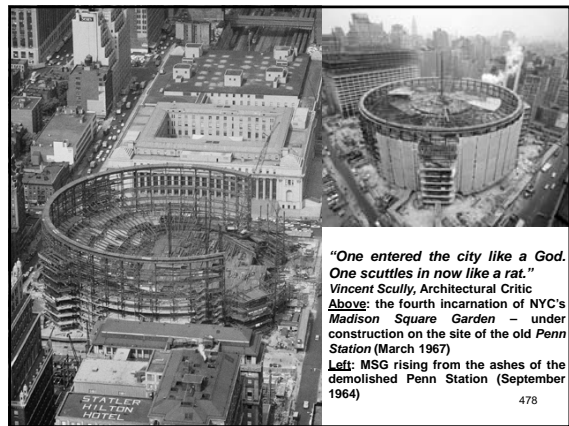
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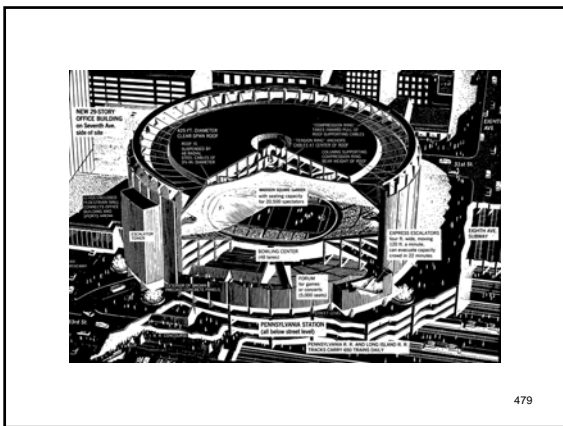


477



"One entered the city like a God. One scuttles in now like a rat."
 Vincent Scully, Architectural Critic
Above: the fourth incarnation of NYC's Madison Square Garden – under construction on the site of the old Penn Station (March 1967)
Left: MSG rising from the ashes of the demolished Penn Station (September 1964)

478



479



480

“Like ancient Rome, New York seems bent on tearing down its finest buildings. In Rome, demolition was a piecemeal process which took over 1,000 years; in New York demolition is absolute and complete in a matter of months. The rise of modern archaeology put an end to this kind of vandalism in Rome, but in our city no such deterrent exists.”

New York Chapter of the American Institute of Architects (AIA), 1963
 RE: In April 1963 – before demolition of Penn Station had begun, NYC Mayor Robert F. Wagner named a twelve-member Landmarks Preservation Commission (LPC). Too late however to save Penn Station from its ignominious fate. In 1965, over the objections of the city’s powerful real estate interests, the city council codified the LPC with police power and the right of eminent domain. Property owners could seek tax relief under the new law as well. During its first two years, the LPC designated nearly two-hundred structures worthy of landmark status.

481



“I really believe Grand Central Terminal was saved because of what happened at Penn Station.”

Peter Samton, Architect
 RE: as a civic leader and architect, Samton was active in trying to save both Penn Station and GCT
 Above: one of the last remnants of the original Penn Station; a staircase between Tracks 3 and 4.

482

A Symbol of the City Itself

483



“A magnificent example of French Beaux Arts architecture; that it is one of the great buildings of America, that it represents a creative engineering solution of a very difficult problem, combined with artistic splendor; that as an American Railroad Station it is unique in quality, distinction, character; and that this building plays a significant role in the life and development of New York City...evokes a spirit that is unique in this city and combines distinguished architecture with a brilliant engineering solution, wedded to one of the most fabulous railroad terminals of our time. Monumental in scale, this great building functions as well today as it did when it was built. Grand Central always has been a symbol of the city itself.”

Landmarks Preservation Commission, August 1967
 RE: excerpt from GCT’s formal landmark designation. On April 6th 1967, the LPC declared eleven structures - including GCT, as New York City landmarks

484

Despite the landmark designation in early August 1967, within a few weeks the nearly bankrupt NYCRR sent out invitations to architects for the design of a 45-story, two-million square foot tower atop the terminal’s Main Waiting Room. In their efforts to generate revenue, they had shamelessly sold space to advertisers – both audio and visual, in the terminal, but it was not enough to save the sinking ship. In 1948, passenger service revenue for the Central was \$135.5 million, in 1954 it was \$106.5 million and by 1964, only \$55 million. The razing of Penn Station and the Penn Plaza real estate development that took its place had bought the Pennsy some time, so too the Grand Central City development raised capital for the Central, but it was not enough to cover their rising costs and diminishing revenue. On February 1st 1968, the Central and Pennsylvania RR’s were merged to form the Penn Central. In 1970, it declared bankruptcy and by 1976 it was merged into Conrail which was a federal agency charged with running failing freight lines. The states of New York and Connecticut purchased and/or leased the Central’s commuter lines maintaining the LIRR (from Penn Station) and forming Metro-North (from GCT) via New York State’s Metropolitan Transportation Authority (MTA).

485



“Thus, close to a quarter of a million commuters in the nation’s largest city ride trains that are state owned or are heavily subsidized by public agencies. If this isn’t ‘nationalization’ it is something quite close to it.”

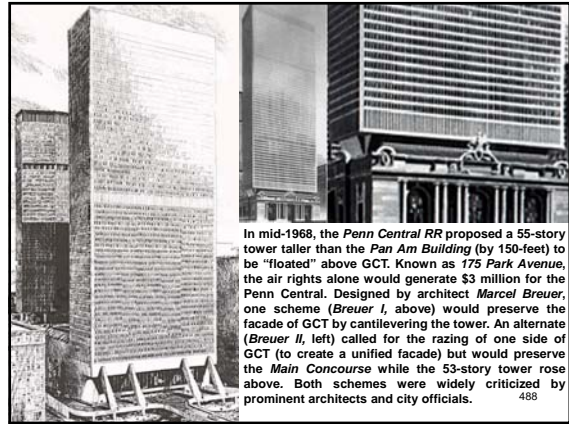
RE: excerpt from: The Wreck of the Penn Central. The Pennsy had owned the LIRR since 1900 and was sold to New York State for \$65 million. A similar arrangement created Metro-North in 1983.



486

175 Park Avenue

487



488

Both Breuer designs were submitted to the LPC for approval (the city planning commission had no jurisdiction since the building did not require any zoning variances). Penn Central leased GCT to developer UGP Properties, Inc. who in turn had proposed building one of the two towers designed by Marcel Breuer above GCT. Under Breuer I, the terminal's facade would have been preserved, but rendered virtually invisible and the entire Main Waiting Room and part of the Main Concourse would have to be demolished under the scheme. On September 20th 1968, the LPC rejected the Penn Central's claim that the project would have "no exterior effect" (the LPC's jurisdiction was limited to the exterior of a building). On August 26th 1969, the LPC voted 8 to 0 to deny Penn Central a "Certificate of Appropriateness" for both Breuer schemes. Unable to get LPC approval, Penn Central filed suit against the city alleging a "Taking." To mitigate any hardship claim, the LPC offered Penn Central the Transfer of Development Rights (TDR) which would have allowed them to sell the air rights above GCT to other developers for their own use. However, Penn Central felt this was not enough to be considered just compensation for the loss of their land use and litigation ensued in the fall of 1969.

489

"Horrible – terrible. We put the Pan Am Building way back from the main part of the terminal, replacing an ugly structure over the train shed. It formed a gracious backdrop for the terminal itself."

Richard Roth
 RE: Breuer I and II schemes. Richard Roth (of Emory Roth & Sons) was the principal architect of the Pan Am Building.

490

"...a bizarre scheme that could only be conceived in and for New York...Designation by the Landmarks Commission does not insure preservation. All the railroad has to do is show that the building is enough of a losing proposition to prove 'hardship' under the landmarks law and permission must be given to demolish after certain procedures have been satisfied. This is having your landmark, but taking a certain calculated risk of dooming it."

Ada Louise Huxtable, New York Times Architecture Critic
 RE: the Breuer I and II schemes

491

An Aesthetic Joke

492

"To protect a Landmark, one does not tear it down. To perpetuate its architectural features, one does not strip them off. We have no fixed rule against making additions to designated buildings—it all depends on how they are done...But to balance a 55-story office tower above a flamboyant Beaux-Arts facade seems nothing more than an aesthetic joke. Quite simply, the tower would overwhelm the Terminal by its sheer mass. The 'addition' would be four times as high as the existing structure and would reduce the Landmark itself to the status of a curiosity. Landmarks cannot be divorced from their settings - particularly when the setting is a dramatic and integral part of the original concept. The Terminal, in its setting, is a great example of urban design. Such examples are not so plentiful in New York City that we can afford to lose any of the few we have. And we must preserve them in a meaningful way - with alterations and additions of such character, scale, materials and mass as will protect, enhance and perpetuate the original design rather than overwhelm it."

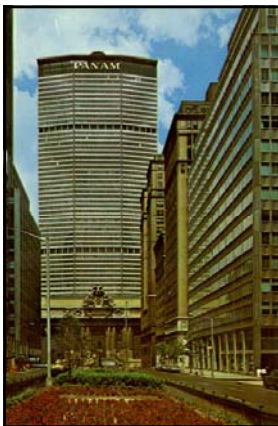
Landmarks Preservation Commission, August 1969

RE: excerpts from the summary of why the *Breuer II* scheme was rejected outright by the LPC. As for *Breuer I* (which received more sympathetic consideration than *Breuer II*), the LPC focused on the effect that the proposed tower would have on GCT and its surroundings; in particular the dramatic view of GCT from *Park Avenue South*.

493

Dramatically Terminated Vistas

494



"...dramatically terminated vistas...Trinity Church at the end of Wall Street, Washington Arch at the foot of Fifth Avenue and the RCA Building at the end of Rockefeller Center gardens. Yet none of these have the sweep that Park Avenue still provides for the Grand Central Terminal from the south."

Landmarks Preservation Commission, August 1969

RE: excerpts from the summary of why the *Breuer I* scheme was rejected by the LPC

495

"...beyond the scope of any permissible regulation and constitute a taking of plaintiff's private property for public use without just compensation...highly debatable and at best doubtful. The aesthetic quality of the south facade is obscured by its engulfment among narrow streets and high-rise buildings. It is hardly seen at all except for a short distance to the south on Park Avenue, and even there the view of the facade is intersected by the encircling roadway and by tall buildings that line Park Avenue. Furthermore, the terminal is set against the backdrop and contrasting lines of the Pan Am Building, which appears to hang over the terminal and to dwarf it..."

RE: arguments made in the *Manhattan State Supreme Court* by the *Penn Central's* lawyers (*Dewey, Ballentine, Bushby, Palmer & Wood*) claiming the LPC's rejection/s were unconstitutional and went on to challenge the landmark status of GCT. The suit sought \$8 million for each year development was delayed.

496

Justice *Irving Saypol* heard the case in the state supreme court (he was the prosecutor in the 1951 *Julius and Ethel Rosenberg* espionage case). Despite the *Friend of the Court* briefs offered by the *Municipal Art Society* on behalf of GCT, Saypol invalidated GCT's 1967 landmark designation and found that by preventing *Penn Central* from earning rent on the air rights for the proposed tower, the LPC created an "economic hardship constituting a taking of property." The city had offered to allow a transfer of air rights from GCT to the adjacent *Biltmore Hotel* as a compromise (TDR), but Saypol ruled this "uneconomical." However, Saypol had deferred from ruling on the constitutionality of the city's landmarks law stating: *"The point of decision here is that the authorities empowered to make the designation may do so but only at the expense of those who will ultimately have to bear the cost, the taxpayers."*

497

"Bernie wanted us not to appeal. He had some thought that we were exposed. He was very concerned. I remember the Penn Central people coming to see us and they urged us not to appeal, too. We debated the issue in front of Abe and he said appeal."

RE: recollections of *John Zuccotti* – former chairman of the *NYC Planning Commission*. The city's corporation counsel – *W. Bernard Richland*, was concerned over the *Penn Central's* claim that the landmark designation of GCT had already cost the railroad \$60 million and further litigation would expose the city to a liability for damage claims at a time when NYC was in a very precarious financial position. Despite his chief attorney's trepidation, NYC Mayor *Abraham Beame* overruled his counselor's advice and decided to seek an appeal of Saypol's ruling.

498

The *Penn Central* suit against the city argued that under the *New York Historical Preservation Law*, it was entitled to a reasonable return on the value of its property whereas in the existing condition, GCT could not break even and because (a) Penn Central was a regulated railroad, and (b) as it was in bankruptcy, it could not cease the deficit-causing operations thus suffering a taking of its property for which it was entitled to compensation. The trial court had agreed. On appeal, the *New York Appellate Division* reversed, holding that *Penn Central* did not use proper accounting methods to demonstrate that it was suffering an ongoing deficit, but it afforded Penn Central no opportunity to rectify these evidentiary shortcomings on remand and retrial. On further appeal, the *New York Court of Appeals* affirmed the decision of the Appellate Division, but on an entirely different legal theory; it never addressed the decision of the *Appellate Division* concerning proper accounting methodology. In a novel opinion, it ruled that in *New York State*, a property owner was entitled to a return not on the value of his entire property, but only on that increment of its value that was created by private entrepreneurship. The court then affirmed the Appellate Division, but unaccountably, also granted Penn Central the opportunity to try the facts that would have to underlie the newly-minted Court of Appeals holding. Since this would have been impossible (the Court of Appeals conceded that such a task presented "impenetrable denities" and would require Penn Central to separate the inseparable), Penn Central sought review by the *U.S. Supreme Court*.

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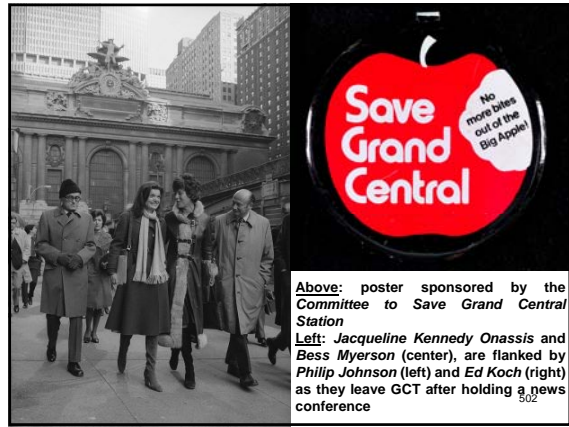
The Committee to Save Grand Central Station

500



Karl Katz – a board member of the *Municipal Art Society*, invited his good friend *Jacqueline Kennedy Onassis* (center) to an exhibit he designed dramatizing the potential razing of GCT. *Fred Papert* (left) – a former JFK advance man, recruited the former first lady onto the MAS board where her passion to save the city's architectural heritage – in particular GCT, from *Penn Station's* ignoble fate was critical in the long fight to save it. In a handwritten plea invoking the memory of her late husband and his love for GCT, she single-handedly convinced a cautious *Mayor Abraham Beame* to join the *Committee to Save Grand Central's* fight. Other public figures such as architect *Philip Johnson* (right), Congressman *Ed Koch* and former NYC Public Advocate *Bess Meyerson* also played important roles in helping to save GCT via their high-profile public advocacy.

501



Above: poster sponsored by the *Committee to Save Grand Central Station*

Left: *Jacqueline Kennedy Onassis* and *Bess Myerson* (center), are flanked by *Philip Johnson* (left) and *Ed Koch* (right) as they leave GCT after holding a news conference

502

Penn Central Transportation Co. v. New York City

503

In the *United States Supreme Court*, *Penn Central* changed theories, arguing that it was receiving a reasonable return on its property, but arguing instead that the regulation took its air rights above GCT which had been designed to accommodate a twenty-story building on top of it. The Supreme Court disagreed, and held that under a new taking test it formulated in this opinion, the economic impact on Penn Central was not severe enough to constitute a taking because Penn Central could continue with its present use whose return, it conceded, was not unreasonable so the regulation did not interfere with its reasonable investment-backed expectations. The court therefore found that the city's restrictions on GCT did not amount to a taking. In the opinion of the court: "...the *New York City law* does not interfere in any way with the present uses of the Terminal. Its designation as a landmark not only permits but contemplates that appellants may continue to use the property precisely as it has been used for the past 65 years: as a railroad terminal containing office space and concessions. So the law does not interfere with what must be regarded as Penn Central's primary expectation concerning the use of the parcel. More importantly, on this record, we must regard the *New York City law* as permitting Penn Central not only to profit from the Terminal but also to obtain a 'reasonable return' on its investment." – U.S. Supreme Court Justice *William J. Brennan, Jr.* The dissent argued that in this case there was a net transfer from the Penn Central to the people of the city who were meant to benefit and that it was not fair to have the entire burden of preserving GCT fall on its owners. That cost is the opportunity cost of not developing the airspace over the terminal.

504

For the Benefit of Sightseers

505


"...Moreover, the pre-existing air rights are made transferable to other parcels in the vicinity of the Terminal, thus mitigating whatever financial burdens appellants have incurred."

U.S. Supreme Court Justice *William J. Brennan, Jr.*
 RE: the *New York State Court of Appeals* ruling that landmarking was constitutionally within a municipality's police powers and such designation did not constitute an indefensible "taking" of property by the government, upheld by the *U.S. Supreme Court* in a vote of 6 to 3 on June 26th 1978. Justice *William Rehnquist* wrote for the dissenting opinion: *"The City of New York, because of its unadorned admiration for the design, has decided that the owners of the building must preserve it unchanged for the benefit of sightseeing New Yorkers and tourists."* In any event, GCT was spared the fate of its former rival *Penn Station*.

506

Bravo, Jackie O

507



"At the terminal yesterday, people from all over the world gathered in the newly restored South Hall to sign and scribble their feelings in a memorial book to Mrs. Onassis. Nearby, a spotlighted plaque read: 'Jacqueline Kennedy Onassis led the fight to save this beautiful terminal. The victory won in the United States Supreme Court in 1978 established the public's right to protect landmarks in cities and towns all over America.'" The New York Times, May 22nd 1994

Above: memorial tribute to *Jacqueline Kennedy Onassis* in GCT (at right)

508

Part 12

Revival

509

After the *Penn Central* went bankrupt in 1970, operation of GCT was turned over to *Conrail* and in 1983, to *Metro-North*. By the early 1970s, GCT had become a haven for the homeless who flooded the public spaces and habitated in the train yard. To try and counter this trend, *Conrail* cancelled all pre-dawn trains and in 1973, GCT was closed from 1:30 to 5:30AM for "cleaning." By 1978, many of the properties the railroad owned were sold-off including the *Biltmore* and *Commodore Hotel/s*. On the bright side, the fiscal crisis of the early '70s was waning and a new, pro-active mayor and champion of GCT – *Edward I. Koch*, was in residence at *City Hall*. The high-profile fight led by *Jacqueline Kennedy Onassis* and loss of *Penn Station* had made the public more in-tune with the significance of GCT and sympathetic to its revival. In 1988, the terminal celebrated its 75th anniversary. Despite the reprieve from the wreckers ball, GCT was in dismal condition after years of neglect. According to the MTA: *"After decades of deferred maintenance, the building was crumbling. The roof leaked; stonework was being chipped away; structural steel was rusting. Pollution and dirt had stained surfaces. Commercial intrusions blocked out natural light."* Leaks and falling plaster caused areas to be closed-off to the public. Thus, when *Metro-North* took charge in 1983, their first priority was making the roof watertight.

510

Mole People

511

Top Left: one of GCT's "Mole People" – panhandling by day, tunnel dwellers by night
Top Right: homeless sleeping on benches in the Main Waiting Room (ca. 1970s)
Left: a 1986 photo showing a homeless man sleeping in GCT with all his belongings. By 1990, Metro-North created a Community Services Unit (part of the MTA Police Dept.) just to deal with the significant number of homeless living in the terminal.

512

Above: \$4.5 million roof repairs underway in 1987 (right). Before anything could be done to the interiors, GCT needed to be made weather-tight; it was no small/easy task. Due to expansion and contraction, metal fatigue had caused the copper plates (especially at the roof's fringes) to fray and fracture. A total of 55K square-feet of copper needed to be replaced. Eight-foot long copper panels were nailed to wooden strips spaced twenty-inches apart and the six-foot high frieze was repaired in-place. During WWII, eight twenty-four foot square skylights were "blacked-out". The black paint was peeled away or the glass pane/s replaced.

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Above: interior view of four of the twenty-four foot square roof skylights that were restored as part of the roof repair work

514

The Godfather

515

"First and foremost, we want Grand Central to be a terrific train station again. Secondly, it's important to restore the building's architectural integrity. And thirdly we want to improve the way we use space for retail purposes."

Peter E. Stangl, President of Metro-North, February 1988

RE: on September 23rd 1980, the LPC extended its protection to GCT's interior spaces. In 1983, Peter Stangl became the first president of Metro-North and in the mid-1990s, he became MTA Chairman. If Jacqueline Kennedy Onassis gets the credit for saving GCT from the wrecker's ball, it is Stangl who gets the credit for the terminal's revitalization. A Grand Central commuter himself, he held GCT in high regard and would spare no expense to restore it to its former glory. In 1988, the architectural firm of Beyer Blinder Belle was selected by Stangl to create a master plan for the terminal's restoration and revival which included fourteen firms with specialty skills. The firm was experienced in historic restoration having worked on the Ellis Island Immigration Museum previous to their involvement with GCT. John Belle – a principal of the firm, credits Stangl for much of the restoration's success stating in later years: **"...the Godfather of this project; he was the best thing that an architect needed – a patron."**

516

A Destination in its Own Right

517

In April 1990, MTA/Metro-North announced an ambitious \$425 million master plan for the complete restoration of GCT. However, the budget was soon cut to \$240 million due to budget restraints. Through some clever "creative accounting" and a bond issue backed by retail revenue, the original \$425 million budget was nearly doubled allowing for further improvements including new passageways, platforms, utilities etc. Stangl announced at the revealing of the master plan that he wanted GCT to be "a destination in its own right." To that end, Beyer Binder Belle (BBB) set to work meticulously cataloging the terminal's condition. Fortunately, in 1992 two historic structure report volumes (including the building's origins, history and existing conditions) was discovered in the terminal's plan room. It contained more than 18K documents (drawings, photographs etc.) This provided a basis for BBB to work and plan from. An obstacle which needed to be overcome before the master plan could be initiated was obtaining clear title of the building. The issue was resolved in 1993 when the Penn Central Corporation of Cincinnati extended its long-term lease with the MTA/Metro-North Division from sixty to one-hundred and ten years. Penn Central would receive an increased annual payment amounting to \$2.4 million and assume any/all liability for environmental hazards (i.e. asbestos) along the right-of way and in the train yard. Critically, the lease included a provision whereby the Penn Central relinquished any/all rights to develop the air space over GCT, to demolish the 42nd Street facade and/or drive columns through Vanderbilt Hall. With the long-term lease in-place, the interior restoration, additions, improvements commenced in earnest.

518



Left: 1988 - Metro-North asked retail specialists Williams Jackson Ewing to prepare a Master Retail Plan to address amenities and services in GCT

Right: 1990 - A \$425 million Master Plan for GCT was presented at a public hearing and subsequently adopted in concept by the Metropolitan Transportation Authority

519

A Triumph of Architecture

520

"The many functions and services of Grand Central Terminal and its brilliant architectural and urbanistic design form a whole that is far greater than the sum of its parts. Good architecture, as defined by Vitruvius, integrates 'commodity, firmness, and delight.' In its extraordinary balance between usefulness, endurance and beauty, Grand Central emerges, on the brink of the 21st century, as a triumph of architecture."

Beyer Binder Belle

RE: the master plan developed by BBB included;

- Restoration of the Sky Ceiling in the Main Concourse
- Installation of an ornamental staircase to the East Balcony (matching the West Balcony's staircase)
- Increasing from 105K to 155K square-foot retail space
- Creation of a 43rd Street Passage into the terminal from Lexington Avenue (between the Grand Hyatt Hotel and the Graybar Building)
- Removal of walls/ceilings (above the ramps to the Oyster Bar Restaurant)

521

In 1994, the MTA board entered into an agreement with GCT Venture Inc. to develop a program for the revitalization of GCT. The challenge was to restore the terminal and to fuse the three previous separate traffic/s (long distance incoming, long distance outgoing and suburban traffic) into one "regional traffic." To that end, three objectives were followed;

- Renewal and updating of railroad operations (facilities and related service);
- Architectural restoration and rehabilitation;
- Revitalization of retail, office and commercial space-use throughout the terminal

The most important restorations were;

- **Vanderbilt Hall.** One of the most important parts of the restoration was the cleaning of the artificial Caen stone wall which is an imitation of limestone. After different tests, the option was to use liquated ammoniated latex rubber painted onto the wall. After one day, the mixture was peeled from the wall. The option was taken to transform Vanderbilt Hall from the Main Waiting Room into a setting suitable for commercial and/or cultural events. All of the oak benches were removed.

- **Main Concourse.** At the beginning of the 1990's, test-cleaning of the Sky Ceiling (in the southeast corner) was done. The analyses showed that the original painting was severely deteriorated. The decision was taken to conserve and restore the painting. The restoration used a chemical solution and/or repainting where necessary. The cleaning of the ornamental plaster was a relatively simple process: vacuuming the grime, cleaning with soap-and-water solution and repainting. The re-creation of the East Balcony staircase (structurally begun in 1911 but never finished) was of great concern to the LPC. The discovery of an original drawing by Warren & Wetmore showing a plan view of the staircase designed for the East Balcony justified the re-creation of the staircase to the LPC, as long as it was in harmony with the existing West Balcony's staircase. This staircase was critical in completing the original design of GCT and for balancing the concourse's overall design and flow (it also opened the balcony space to high-end retail). Research into the original color of the windows determined they were painted a light olive green.

522

continued...

...continued

- **Restoration of the Oyster Bar Ramps.** Originally, it was a 90-foot high space with five ornamental chandeliers. In 1927, the volume was dropped by adding a low ceiling which confined the passageway. The restoration demolished the low ceiling to restore the passageway's original volume. The wall on the upper passageway (which was created as a visual barrier between the long-distance and suburban passengers) was replaced by a balustrade.
- **The Campbell Apartment.** This space was done in eclectic styles mixing Medieval, Romanesque and Renaissance Revival. The "apartment" had deteriorated and its last function was as a police office. The restoration removed all contemporary construction and restored the space to its original volume thus exposing its magnificent decoration.

Construction had begun in 1996 starting with the \$5 million restoration of the Main Concourse's barrel vaulted Sky Ceiling. The ceiling had been replaced and repainted by artist Charles Gulbrandsen. By the 1920s, the original tempera on plaster was deteriorating badly. In 1944/45, the original ceiling was removed and asbestos-cement Flexboards were attached to the steel truss ceiling with galvanized wire. Gulbrandsen then repainted the mural onto the new substrate. By the 1990s, the grime and dirt covered ceiling was a shadow of its former self. A custom-made 120-ton aluminum tracked scaffold provided access to the ceiling without interfering with the flow of foot-traffic below.

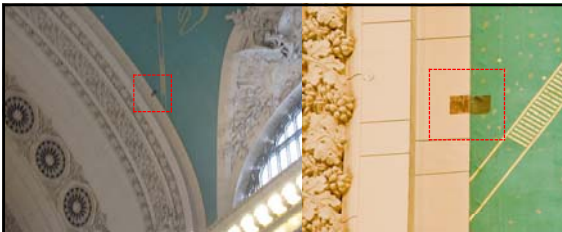
523

Structural Work on Concourse Ceiling of Grand Central Terminal Begins



Left: newspaper article concerning the removal of the original Sky Ceiling and its replacement in 1944/45. Note the use of a suspended scaffold to perform the work. As during the restoration fifty-plus years later, the flow of foot traffic in the Main Concourse below could not be disturbed by the work. Later in the year (summer), Charles Gulbrandsen and a crew of painters would recreate the October Zodiac, maintaining "God's Point of View."

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For nine months, section-by-section, restorers painstakingly applied *Simple Green* – an all-purpose non-toxic, biodegradable, environmentally safe cleaning solution applied with cheesecloth to the ceiling removing the accumulated grime and dirt from cigarette tar. Once the Sky Ceiling was exposed, it turned out to be in excellent condition requiring only five gallons of paint for restoration purposes. To commemorate the ceiling's restoration to grandeur, a small patch of dirt was left where the ceiling and marble interface to demonstrate the condition of the surfaces before and after cleaning for the generations of GCT patrons to come.

525

Under a Sky of Gilt Stars


526

"...all temporal vestiges are swept away and the great floor becomes a lake of smooth stone under a sky of gilt stars. Perhaps this is why the Main Concourse endures so memorably – not in its architectural eccentricities or complexity – but in its tenacious capacity to bear the brunt of change through changing times."

Beyer Binder Belle

RE: cleaning of the Main Concourse's marble floor. The construction management firm of *Lehrer McGovern Bovis* served as the primary contractor for the restoration of GCT which was widely praised when the restored terminal was rededicated on October 1st 1998. Though the major restorative work was complete, additional restoration/additive work continued well into the new century. The result was a transformation that made the commuter to *Poughkeepsie* as important to the new Grand Central as the movie star traveling on the *20th Century Limited* was to the old Grand Central.

527



Above: GCT restored to its 1913 splendor. *Grand Central Terminal* has become a major *New York City* destination and tourist attraction since its revitalization was completed in 1998. There are five fine restaurants and cocktail lounges, twenty casual eateries (in the lower level dining concourse), gourmet foods from *Grand Central Market* and fifty specialty shops throughout the concourses. All this and a ride to/from work or play, courtesy of the MTA (and the Commodore).

528

Part 13

A Never Ending Story

529

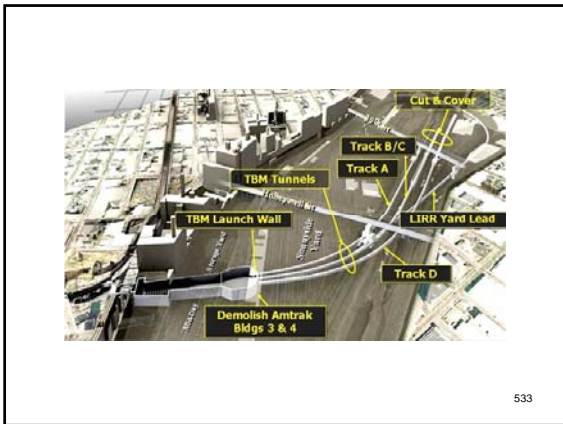
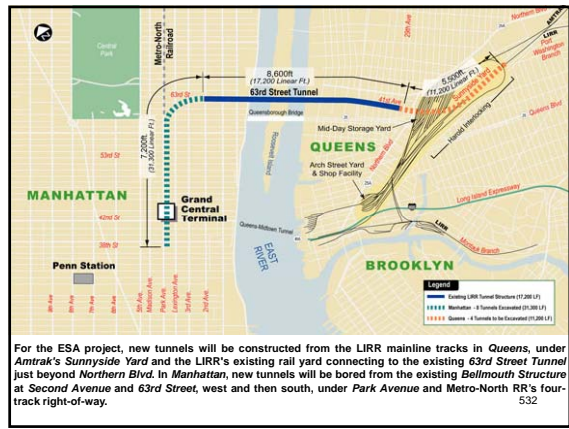
East Side Access

530



The East Side Access (ESA) project will be the first step in a long overdue integration of the region's web of mass transit facilities. It will ease rail and pedestrian congestion in NYC's Penn Station and will provide direct travel between Long Island and Manhattan's east side. It will also reduce automobile traffic on the Long Island Expressway and other arterial roads, thereby improving air quality in the region. It is anticipated that overall, 162K riders will travel to and from GCT on an average weekday (161K to/from Penn Station anticipated)

531





The LIRR's existing *Manhattan* terminus is at *Penn Station* on the city's west-side (located under *Madison Square Garden*). The ESA project will intercept twenty-four of the sixty trains per peak hour on their route to the historic *East River* tunnels and carry them into GCT on Manhattan's east- side. The new route will run via new soft ground tunnels in the Queens area, through the bottom two cells of the existing four-celled *63rd Street* immersed tube tunnel (built for the purpose in 1968) and into GCT through new rock tunnels built beneath the existing rail tunnels under *Park Avenue* (left). At right, Manhattan ESA rock tunnel (September 2011).

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536

A One Seat Ride

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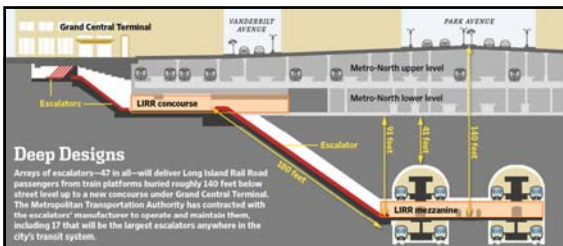


Seventy percent of the jobs in central *Manhattan* are within walking distance GCT located on the east side of Manhattan. The ESA project was conceived by MTA's LIRR to provide Long Island-based commuters with a "one seat ride" to the east side of Manhattan. This \$6 billion undertaking includes:

- A total of two miles of pressurized face tunneling through soft ground in Queens
- The use of the lower bores of a previously constructed immersed tube tunnel that crosses beneath the *East River*
- A total of seven miles of TBM-bored tunnels that will extend from the *East River* over to *Park Avenue* and then southward to GCT
- Two drill and blast caverns that will house new transit platforms below the GCT's existing train rooms

The hard rock tunnels in Manhattan cross beneath operating transit tunnels and some of the most expensive real estate in the world.

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Deep Designs

Arrays of escalators—42 in all—will deliver Long Island Rail Road passengers from train platforms buried roughly 140 feet below street level up to a new concourse under Grand Central Terminal. The Metropolitan Transportation Authority has contracted with the escalators' manufacturer to operate and maintain them, including 17 that will be the largest escalators anywhere in the city's transit system.

"To circulate some 80,000 commuters per day through the new station, the MTA will rely on a complex system of 47 escalators, some stretching 180 feet long and sinking more than 90 feet down, dwarfing any other in the city's transit system. And the success of the new station is riding in large part on how well they work." *The Wall Street Journal*, April 26th 2012

Above: at GCT, a new passenger concourse will be constructed in space currently occupied by Metro-North's *Madison Avenue Yard*. Eight tracks and four wide platforms will be constructed along with mezzanines and concourses beneath *Park Avenue* at an elevation below GCT's existing lower level.

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Above & Left: work on tunnels leading into caverns underneath GCT (Feb. 2013)

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"A huge public works project is currently under construction in New York City, connecting Long Island to Manhattan's East Side. Deep underground, rail tunnels are extending from Sunnyside, Queens, to a new Long Island Rail Road terminal being excavated beneath Grand Central Terminal. Construction began in 2007, with an estimated cost of \$6.3 billion and completion date of 2013. Since then, the cost estimate has been raised to \$8.4 billion, and the completion date moved back to 2019. When finished, the line will accommodate 24 trains per hour at peak traffic, cutting down on commute times from Long Island, and opening up access to John F. Kennedy International Airport from Manhattan's East Side..."

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The Atlantic, February 22nd 2013



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The Next 100 Years

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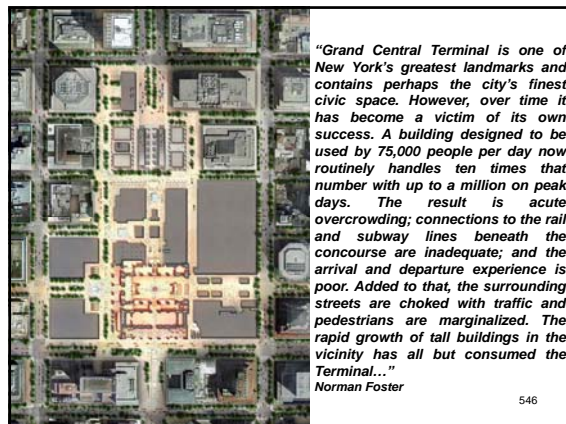


Three design firms: *Foster + Partners*, *Skidmore, Owings & Merrill* and *WXY Architecture + Urban Design*, were invited by the *Municipal Art Society of New York* to re-think the public spaces in and around the soon-to-be 100-year-old GCT and present their proposals at the third annual *MAS Summit* held on October 18th and 19th 2012 at *Jazz at Lincoln Center's Frederick P. Rose Hall*. The event was attended by over 1,100 movers and shakers who heard more than ninety speakers present their ideas concerning planning, design and infrastructure; preservation and sustainability; arts and cultural development and community engagement. The Summit's themes were development, density and diversity. With the coming 100th anniversary of the terminal on February 2nd 2013, the focus would be on GCT's next century in relation to the city all around it.

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Foster + Partners

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"Grand Central Terminal is one of New York's greatest landmarks and contains perhaps the city's finest civic space. However, over time it has become a victim of its own success. A building designed to be used by 75,000 people per day now routinely handles ten times that number with up to a million on peak days. The result is acute overcrowding; connections to the rail and subway lines beneath the concourse are inadequate; and the arrival and departure experience is poor. Added to that, the surrounding streets are choked with traffic and pedestrians are marginalized. The rapid growth of tall buildings in the vicinity has all but consumed the Terminal..."

Norman Foster

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“...Within the station, the proposal creates wider concourses, with new and improved entrances. Externally, streets will be reconfigured as shared vehicle/pedestrian routes, and Vanderbilt Avenue fully pedestrianized. The proposal also creates new civic spaces that will provide Grand Central with an appropriate urban setting for the next 100 years...”
 Norman Foster

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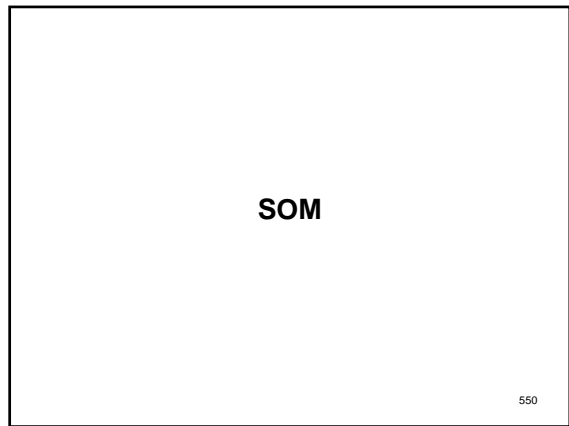
“...The 42nd street entrance to the south, where access is severely constrained, will be widened to fill the entire elevation by using existing openings, thus greatly easing accessibility. The access via tunnels on the northern approach from Park Avenue will be rebalanced in favour of pedestrians by creating grander, enlarged underground spaces through the Helmsley building. Lexington Avenue to the east will be tree-lined with wider sidewalks and will benefit from more prominent and enhanced tunnel access to Grand Central Terminal. The idea already mooted to pedestrianize Vanderbilt Avenue to the west would be extended. The street would be anchored to the south by a major new enlarged civic space between 43rd Street and the west entrance to the Terminal and to the north by a plaza accommodating new entrances to the East Side Access lines. Trees, sculpture and street cafes will bring life and new breathing space to Grand Central Terminal...”
 Norman Foster

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“...At platform and concourse levels where congestion is particularly acute for travelers on the 4, 5, 6 and 7 lines, we will radically enlarge the connecting public areas, to address the huge increase in passenger traffic in the last 100 years. This will transform the experience for arriving and departing commuters and passengers. A generous new concourse will be created beneath the west entrance plaza on Vanderbilt Avenue connecting directly into the main station concourse. This visionary master plan with its focus on pedestrians and travelers will allow Grand Central Terminal to regain the civic stature that it deserves as a major New York landmark and an appropriate twenty-first century transport hub.”
 Norman Foster

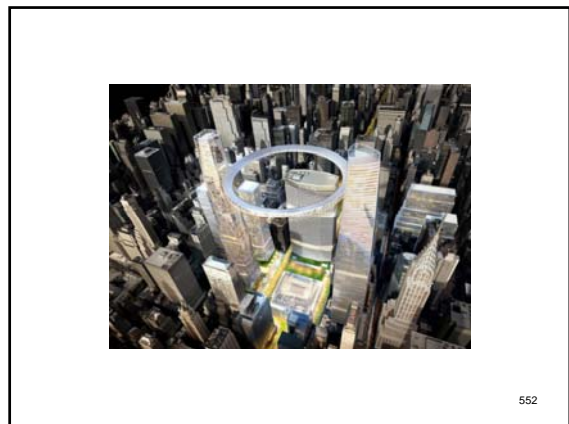
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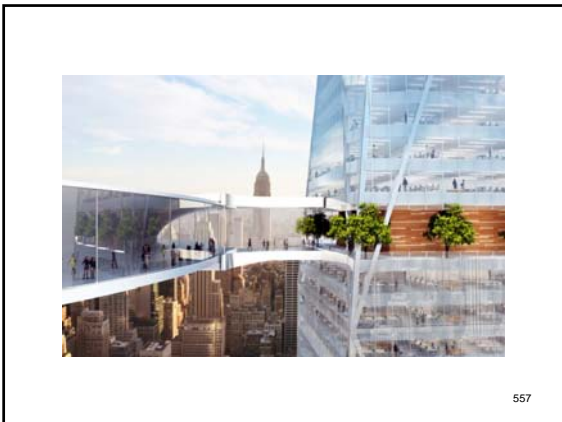
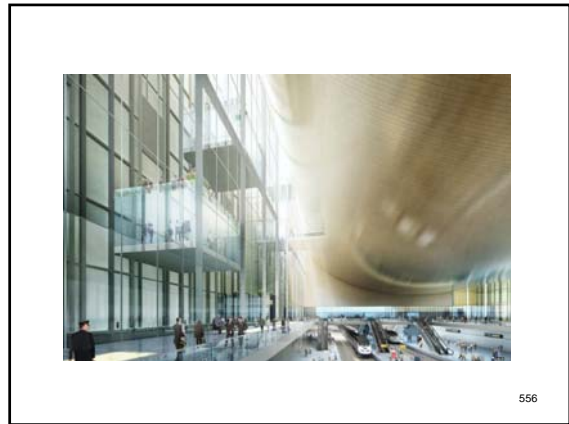
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“SOM’s vision proposes three solutions, all of which provide improvements – both quantitative and qualitative – to the quality of public space around the station. The first solution alleviates pedestrian congestion at street level by restructuring Privately Owned Public Spaces (POPS) to create pedestrian corridors through multiple city blocks, connecting Grand Central to nearby urban attractors. The second is a condensing of the public realm through the creation of additional levels of public space that exist both above and below the existing spaces. These new strata would be funded privately but under public ownership - Privately Funded Public Space (PFPS). The third proposal creates an active, 24-hour precinct around Grand Central Terminal in the form of an iconic circular pedestrian observation deck, suspended above Grand Central, which reveals a full, 360-degree panorama of the city. This grand public space moves vertically, bringing people from the cornice of Grand Central to the pinnacle of New York City’s skyline. It is a gesture at the scale of the city that acts both as a spectacular experience as well as an iconic landmark and a symbol of a 21st-century New York City.”
 Skidmore, Owings & Merrill

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“Throughout the history of New York City, urban growth has been matched by grand civic gestures. This balance between growth and civic response can be seen in examples such as the Commissioners’ Plan of 1811 which led to the gridded parceling of land, two zoning resolutions which recognized the potential for private development to shape the public realm and the creation of grand public place making such as Grand Central Terminal and the public parks of New York City. With the Department of City Planning’s proposed up-zoning of East Midtown and the anticipated completion of East Side Access in 2019, the city prepares itself for a new phase of urban growth. A consequence of this imminent growth in population density will be an increased demand for public space.”

Roger Duffy, SOM Design Partner

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WXY Architecture + Urban Design

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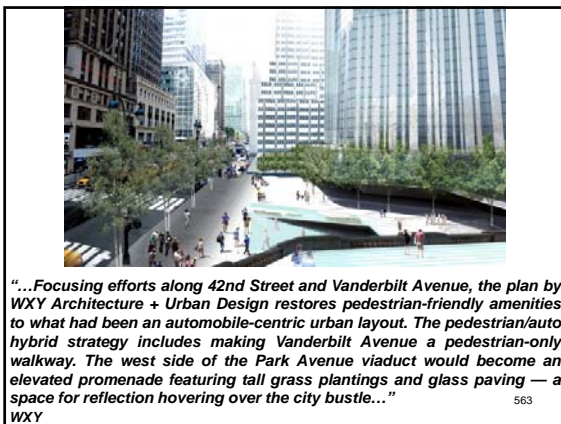


“WXY’s proposal would create a striking new ground transportation hub, through the following interventions:

- *Transforming Vanderbilt Avenue into a pedestrian-only street;*
- *Creating new public spaces around the base of the Met Life building;*
- *Adapting the west side of the current Park Avenue Viaduct into an elevated pedestrian and bicycle path, with a glass floor and seasonal plantings, and;*
- *Introducing a new tower, featuring “sky parks,” on the west side of Grand Central Terminal...”*

WXY

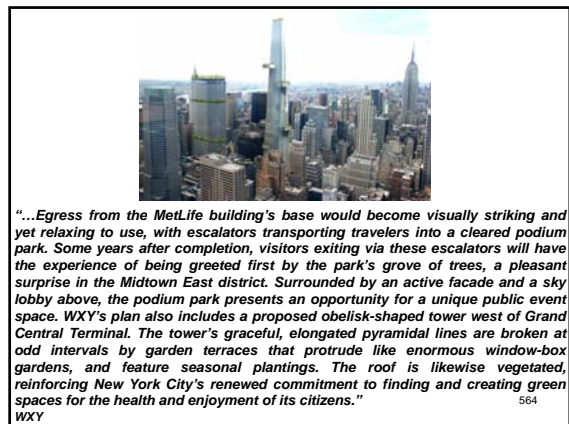
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“...Focusing efforts along 42nd Street and Vanderbilt Avenue, the plan by WXY Architecture + Urban Design restores pedestrian-friendly amenities to what had been an automobile-centric urban layout. The pedestrian/auto hybrid strategy includes making Vanderbilt Avenue a pedestrian-only walkway. The west side of the Park Avenue viaduct would become an elevated promenade featuring tall grass plantings and glass paving — a space for reflection hovering over the city bustle...”

WXY

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“...Egress from the MetLife building’s base would become visually striking and yet relaxing to use, with escalators transporting travelers into a cleared podium park. Some years after completion, visitors exiting via these escalators will have the experience of being greeted first by the park’s grove of trees, a pleasant surprise in the Midtown East district. Surrounded by an active facade and a sky lobby above, the podium park presents an opportunity for a unique public event space. WXY’s plan also includes a proposed obelisk-shaped tower west of Grand Central Terminal. The tower’s graceful, elongated pyramidal lines are broken at odd intervals by garden terraces that protrude like enormous window-box gardens, and feature seasonal plantings. The roof is likewise vegetated, reinforcing New York City’s renewed commitment to finding and creating green spaces for the health and enjoyment of its citizens.”

WXY

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"...Combining walkable skylights with wide staircases and a multi-level approach, points of entry to the Grand Central area become unusual and gracious outdoor rooms that provide access and support to an expanded terminal city. Direct access to and links between the multiple subway and train lines — including the new East Side Access/LIRR lines — would be greatly expanded and improved..."
 WXY 565

"New zoning rules should trigger real transportation links to public space. One way is to harness the untapped potential of Grand Central's edges. The plan for Midtown's near future needs to make the Grand Central neighborhood a place people enjoy being in not just running through."
 Claire Weisz, WXY Founding Principal 566



"This beautiful stamp captures both the universal appeal and excitement of travel, and the architectural grandeur that is uniquely New York. We issue the stamp today on the 100-year anniversary of the official opening of Grand Central Terminal when it began its reign as one of the most majestic public spaces in the world."
 Richard P. Uluski, USPS Northeast Area Vice President, Feb. 1st 2013 567



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