

The Rise of the City

An Urban Society

No aspect of late nineteenth-century life was more important, or more dramatic, than the explosive growth of cities. In 1870, only New York and Philadelphia had populations greater than 500,000; by 1910, eight cities did, and three of these contained more than a million people. In 1870, fourteen cities (only three west of the Mississippi) had more than 100,000 people; by 1910, there were fifty, thirteen in the West. Smaller cities, too, multiplied in number. By 1910, 35 million people, or 39 percent of the population, lived in communities with more than 8,000 persons; in 1870, the figure had been 8 million. The growth of cities was fueled both by migrants from the countryside and by immigrants from Europe, Latin America, and Asia: in 1910, in all major cities north of Baltimore, most of the population consisted of immigrants and their children.

The cities were of two types: metropolises and “specialist” cities. Most metropolises had sizable populations as early as 1870, and they were first and foremost commercial centers. Often situated where long-distance water transportation routes met railroad junctures, these were places where a region’s products were brought for processing and shipping and where goods from outside the region arrived to be broken down and redistributed within the region. They were also banking and financial hubs and, between 1870 and 1900, became great manufacturing centers: New York, Chicago, and Philadelphia constituted the largest manufacturing clusters in the nation.

The smaller, specialist cities were themselves of two kinds. One provided financial and commercial services to the surrounding rural areas, while also processing and shipping local specialty goods that originated in the countryside. Richmond, for example, handled cigarettes, while Sacramento dealt in canned fruits and vegetables. In the Northeast and the Midwest, a second type of specialty city flourished: the mill city of manufacturing city. Fall River and New Bedford, Massachusetts, made textiles; Lynn and Brockton, Massachusetts, made shoes; Dayton, Ohio, produced machine tools and cash registers; Columbus, Ohio, produced railroad cars. Taken together, these specialized cities made up the two major manufacturing belts: one stretching along the Atlantic coast from Maine to Virginia, and the other extending from Buffalo west to St. Louis and Milwaukee. When linked to the larger, metropolitan centers by the railroads and the telegraph, these cities formed a national urban market as well as a national urban society.

Cities and Technology

The dramatic growth of urban populations gave rise to both an expansion and a reconfiguration of urban space. The mid-nineteenth-century city was compact, a walking city whose boundaries were set by the need of almost everyone to walk to work. The doubling or tripling of cities’ populations placed irresistible pressures on those boundaries.

Expanding the physical space of cities demanded new modes of transportation. Omnibuses (horse-drawn streetcars on wheels) had appeared in many places by mid-century, opening new areas to settlement, but they were slow, uncomfortable, and too expensive for anyone outside of the middle and upper classes. Similarly, commuter railroads permitted the wealthy to live in suburbs miles out of town, but they did not serve the majority of the population. Between 1850 and 1890, the most common form of public transportation became the horse-drawn streetcar on rails, an innovation made possible through a new technique of laying tracks flush on the pavement. These streetcars were larger, faster, and cheaper than omnibuses, and running on rails permitted them to have more predictable schedules. By 1887, 400 streetcar companies, in 300 communities, were conveying 175 million passengers a year.

Yet horse-drawn streetcars were dirty, crowded, and uncomfortable. “You can ride in a horse-car,” wrote Mark Twain, “and stand-up for three-quarters of an hour, in the midst of a file of men that extends from front to rear . . . or you can take one of the platforms, if you please, but they are so crowded you will have to hang on by your eye-lashes and your toenails.” Many riders were appalled at the spectacle of overworked horses straining to pull overcrowded cars, while the horses themselves contributed to urban pollution and disease. In the 1880s, 15,000 horses died each year on the streets of New York alone, with their carcasses often left to rot. The average droppings of a draft horse amounted to ten pounds a day.

Entrepreneurs and inventors tried to come up with alternatives to the horse-drawn streetcar. One was the elevated train, driven by steam power and run on tracks mounted on pillars. Elevated lines were constructed in several cities, including New York and Chicago, but they proved extremely expensive to build, they were noisy and caused vibrations for blocks around, and they often dumped oil and hot ashes on unlucky pedestrians walking below. Another experiment was the cable car, pulled by a steam-driven underground cable. The first cable car line was built in San Francisco in 1873, and other cities gave them a try, but they also proved to be expensive to construct, as well as prone to mechanical breakdowns; in addition, since all cars had to move at the same speed, there was no way for a cable car to ever make up any lost time.

The decisive breakthrough in transportation technology came with the successful application of electricity to street railways. This became possible through a series of inventions, including the dynamo in the 1870s. In 1887, Frank Julian Sprague, who had once worked for Thomas Edison, accepted a contract from the city of Richmond to build an electrified streetcar system. Completed in 1888, after much on-the-spot innovation, Sprague’s system used a central power source, with electric current carried to the streetcars through overhead cables. The cables were linked to the cars through wires and a small carriage called a “trolley”—all such electric cars thus came to be called “trolleys.” Sprague’s trolleys were an instant success. Pollution-free, they traveled on tracks at variable speeds, reaching up to twenty miles per hour; they were faster, cheaper, and more comfortable than horse-drawn cars. By

1895, more than 800 trolley systems were in operation in the country, and horse-drawn cars were rapidly phased out.

Other technological innovations facilitated the expansion of cities. Sprague, among others, helped design an electrical system that permitted trains to run underground. (Steam-powered trains could not run any distance underground because of the accumulation of gas, smoke, and dirt.) As a result, Boston opened a subway line in 1897, and New York followed a few years later. Other engineers improved techniques of bridge building, an essential task in the many cities that were near rivers or harbors. In the 1870s, construction engineers learned to sink stable piers in deep, swift-flowing water, and 1883 witnessed the completion of the Brooklyn Bridge (linking Manhattan to Brooklyn), a strikingly beautiful, mile-long creation that became a symbol of American engineering prowess: the Brooklyn Bridge was not only the longest suspension bridge in the world, but it was sturdy enough to carry two railroad lines, two double carriage lanes, and a footpath.

The enlargement of city space was also made possible by the widespread adoption of a new method of home construction: the “balloon frame” house, so called because it used a light, external frame to replace the heavy timber supporting walls that had dominated residential building for centuries. With its thin pieces of lumber set so that the stresses were spread throughout the structure, and machine-produced nails rather than complex joints, the balloon-frame house could be built inexpensively and rapidly. Complex carpentry and large work crews were unnecessary, and many urban workmen with basic mechanical skills could easily construct their own homes. The result, in the 1870s and later, was the transformation of home building from a specialized craft into a large industry. The balloon-frame house also permitted hundreds of thousands of middle-class and even working-class families to live in private residences in new neighborhoods opened by the streetcars.

The combination of streetcar systems and new modes of construction spawned the development of residential suburbs. Streetcars made outlying towns and villages more accessible to urban centers, and real estate developers constructed new suburbs along the streetcar lines. On the outskirts of Boston, for example, the three suburbs of Roxbury, West Roxbury, and Dorchester swelled in population from 60,000 to 227,000 between 1870 and 1900. Outside Milwaukee, the village of Hart’s Mill was transformed into the thriving suburb of Wauwatosa; near Norfolk, Virginia, a real estate company, relying on the streetcars, purchased a large tract of farmland and turned it into the exclusive suburb of Ghent. Nearly all residents of these suburbs were drawn from the middle and upper classes, who were seeking more living space, more community homogeneity, and an escape from the noise, pollution, and “foreignness” of the cities. Yet the suburbs themselves were also class differentiated: the wealthy usually resided in areas farthest from the city, while middle-class and lower-middle-class citizens lived in their own more modest suburbs.

By 1900, cities had been transformed. The walking city of 1850, in which residences and workplaces were interspersed in a compact physical space, had

given way to large metropolises with functionally differentiated neighborhoods. City centers were occupied by office buildings, financial institutions, large retail stores, and cultural attractions; they were almost devoid of residences. Not far away were grimy factory districts, often adjacent to tenements inhabited by the working poor: recent immigrants, the unskilled, men and women who were unable to afford streetcar fares and compelled to live in the least desirable and most congested housing. (This housing sometimes included large homes originally built for the wealthy but later subdivided into small apartments or rooming houses.) Beyond this inner ring were more middle-class residential neighborhoods of apartments or single-family houses, and still further out were suburbs. The new transportation networks tied different parts of the city together, permitting people to engage in activities in all parts of the city; yet at the same time, they encouraged the segregation of urban space by function and class. In 1890, journalist Jacob Riis published *How the Other Half Lives*, a classic description of life in New York's poor neighborhoods. What was notable about Riis's book was not only its content but that it had to be written at all, that affluent New Yorkers had to turn to a book to find out how their fellow residents were living.