

“Uses of the Axe”: Towards a Treeless New York

Max Page

. . . nearly ruined for the want of courage with the axe.

As the trees grow, the weaker are pushed aside, and finally destroyed by the more vigorous, and the plantation is gradually thinned. This is the operation which is always going on in the forest when man does not intervene. . . . Thick planting is but following the rule of nature, and thinning is only helping nature do what she does herself too slowly, and therefore too expensively.

Quotations used by Frederick Law Olmsted (1889)¹

“Oh dear, I’m so hot and thirsty—and what a hideous place New York is!” She looked despairingly up and down the dreary thoroughfare. “Other cities put on their best clothes in summer, but New York seems to sit in its shirt-sleeves.” Her eyes wandered down one of the side-streets. “Some one has had the humanity to plant a few trees over there. Let us go into the shade.”

“I am glad my street meets with your approval,” said Selden as they turned the corner.

Edith Wharton (1905)²



Figure 1: Off of Park Avenue, 1929. A single man stands not far from the lone tree on an Upper East Side Manhattan Street. *Collections of the Municipal Archives of the City of New York.*

Lily Bart, the tragic heroine of Edith Wharton's *House of Mirth* (1905), begins her long fall from the heights of New York's "new" wealthy society with a moment of respite in the company of Mr. Lawrence Selden beneath the trees of a small street just north of Grand Central Station. The moment is brief, but it is a wonderful foreshadowing metaphor for the rest of the novel, for Lily soon finds little respite from the raw heat of 1880s New York's vicious social world. She realizes only too late that it is Lawrence Selden, the aloof bachelor, who can provide relief from this world. In the end, she finds peace in the calming influence of sleep medicine, which lulls her into a never-ending slumber.

Lily Bart, as well as the young Edith Wharton, would have found little respite not only from the symbolic heat of New York's social life, but from the very real heat of the city. For when Wharton wrote the novel, and even when Lily Bart sought a husband and financial security on Fifth Avenue in the 1880s, there were few street trees to cool the stone and asphalt streets of New York. Even though the island had not many years before been home to immensely rich and diverse forests and vegetation, virtually all that remained of that natural world that had so captivated the early Dutch and English settlers were street names: Mulberry,

Orchard, Pine, Cedar. As the city grew, one city historian wrote in 1899, “the public gardens, the private lawns and flower beds and the street shade trees gradually disappeared, until the brownstone and red brick of the house walls, the gray of the pavement, expelled the remembrance of the restful green of fields and grove, and love of Nature was stifled in the dirt-laden air by the bustling life of the human ants.”³

By the end of the nineteenth century, New Yorkers were well on their way to effectively segregating nature into park lands, suppressing it beneath the straight streets of the city’s 1811 grid plan, and wiping it away from the daily lives of citizens in order to make way for the accelerating spin of destruction and rebuilding. We now look at New York and think of the natural landscape of the city in terms of a few obvious features: the infamous black bedrock, which juts out in Central Park and makes possible the city’s skyscrapers, or perhaps the enviable deep harbor, which promoted New York’s rapid rise to economic preeminence in the early- and mid-nineteenth century. And yet it is almost impossible, except in a few places in the larger parks of the city, to be visually reminded that the island of Manhattan had one of the richest natural environments in North America, a product of an explosive past of volcanic activity creating a mountain range to equal the Rockies, glacial movements leveling those mountains and creating an extremely hard bedrock beneath a surface of fertile tillage soil, and oceans slowly fracturing the rock, carving out rivers.⁴

In this essay I describe how a city of remarkably rich and diverse natural landscapes was transformed almost exclusively into a setting for real estate transactions and commercial enterprise, and how a vocal group of social reformers sought to resist this transformation. Thus, it is not inaccurate to see in late nineteenth- and early twentieth-century Manhattan the progressive drive to rationalize the physical island of Manhattan, creating a grid of capitalist development. The natural landscape, which most blatantly and obviously seemed to oppose the designs of real estate speculators and city officials, had, literally, to be brought into line. Hills were leveled to make the landscape match the lines on the grid plan, water was drained from ponds where speculators had bought plots, streams were submerged into pipes, marshes were filled, trees were torn down.

The suppression of nature, was, in a way, only “skin deep.” Much like the false facades of commercial buildings that hid their internal steel structures, New York appeared outwardly to have destroyed natural features of the island or at least kept them on a tight leash. But if trees could simply be ripped out, just beneath the surface the stream still ran, and the veins of soil and rock still shaped how and where buildings could be built. Wind and fire, water and diseases would continue to pose challenges to city builders and social reformers.

Nonetheless, if nature continued to shape how the city was built, a fundamentally new vision of the city and of nature’s place within the city had taken hold by the early decades of the twentieth century. Thus, in this article, I want to describe how a new attitude toward nature in the city developed and became, in a sense,

“second nature” in the minds of New York’s city builders.⁵ Like oil and water, nature and New York do not mix well, ran the trope. Manhattan, they argued, would inevitably become a totally manmade landscape. The vision of the booming metropolis as somehow “beyond” nature served particular purposes. For commercial real estate developers, it slowed efforts to plan a park, parkway, and street tree system that in other cities took root, and thus justified their relatively free and rapid development and redevelopment of the land. But the image of a wasteland of commerce also supported the work of reformers who raised their work of reintroducing parks and street trees to Manhattan to a crusade.

Rather than trying to tell the many stories of how New Yorkers covered over their natural waterways, or remade their swampy coastline, or leveled the natural hills of the island, I focus on one aspect—the elimination of street trees—in order to approach the larger question of the meaning of nature in the turn-of-the-century city.⁶ Street trees—as opposed to trees and vegetation within the city’s parks—posed difficult and fascinating issues. While parks, as Elizabeth Blackmar and Roy Rosenzweig have effectively argued, represented an important shift in the role of city government in removing space from the real estate market, they were clearly demarcated as the public realm. Street trees, on the other hand, were ambiguously placed at the cusp between private and public, extra-market entities planted within the heart of commercial Manhattan. The fight over their removal, preservation, and renewed planting allows us to watch the tug of war between real estate developers, a growing government apparatus, and individual home and landowners as they creatively built and destroyed the city.

We begin with a curious crusade.

Natural New York

According to Frederick Law Olmsted, some well-to-do New Yorkers went crazy in 1889. In response to necessary “thinning” of trees in Central Park, New York had found itself faced with a barrage of criticism by neighboring citizens. Appalled at the sight of park workers felling their treasured trees, citizens had organized to stop the atrocities. Sure that this was the work of some corrupt park office (there had been many in the Tweed years), citizens had taken the case to the press, lobbied in the legislature and even in Congress for the removal of the responsible park officials! Some, Olmsted reported, “have hastened to stand before a partly felled tree and have attempted to wrest the axe from the hand of the woodsman.”⁷ Olmsted, along with J.B. Harrison of the American Forestry Congress, was hired by the West Side Improvement Association to study the true merits of the case. Although there was little love lost between Olmsted and the Board of Commissioners of Central Park—he had been relieved of his duties in January of 1878—he wholly backed the practices of the recently rehired Samuel Parsons and Calvert Vaux in their efforts to initiate widespread pruning of trees.⁸

Ironically, while he had for years attacked the park leadership for inappropriate removal of shrubs and trees, in this case Olmsted turned his ire on the

riotous citizens. He calmly, if not a little condescendingly, proceeded to show how every landscape architect knew that it was necessary to periodically thin groups of trees, that the death of some trees was a necessary aspect of growth of forests. He scoffed at the unprofessional attitudes of citizens, who "though well-meaning" had no understanding of the care of trees. He used most of the space of his report to quote from various authorities in the field of horticulture and landscape design, proving the unanimous support for the park department's methods. He concluded that public-spirited citizens would have to temper their enthusiasm with a good "degree of respect for the technical responsibility involved that few have yet begun to realize to be its due."⁹

This episode of civil unrest died quickly. And, despite the dramatic descriptions to which Olmsted was prone, it would be inaccurate to describe the 1889 protest against tree thinning as a major public dispute.¹⁰ Nevertheless, this curious little event, the 1889 critique of the uses of the axe, reveals much about New Yorker's relationship to their natural environment and its destruction at the turn-of-the-century. What could make the people of Edith Wharton's Fifth Avenue, who so carefully circumscribed their actions so as not to cause alarm, suddenly splay themselves in front of a tree to protect it against the axe of the pruners? Why the obsession with trees?

The strength of the Fifth Avenue society's response to tree thinning in Central Park must come in part from the speed in which trees on Manhattan's streets were eliminated. If other cities failed to become "*urbs in horto*," as Chicago dreamed it would, New Yorkers' suppression of nature from their island proceeded with startling thoroughness, especially considering the richness of that landscape. Despite the persistence of natural processes and natural forms, the sense of ceaseless change in the natural just as in the human-made worlds, of "restless renewals," as Henry James called them in 1907, was established during this era.¹¹ The remarkable changes of the late nineteenth century, while clearly destructive of the centuries of natural environment, mimicked it in the violent change which had always dominated in Manhattan. William Beebe, a student of natural New York in the early part of the twentieth century aptly summarized the distant past as well as the conditions at the turn of the century:

If New York's past could be compressed, the island would appear, to an onlooker, considerably like a frenzied fever chart. What was destined to become a supreme Urban Center has been tossed about, raised high in the air, lowered until it was at the bottom of a mighty sea; it has more than once been hidden beneath a half mile of solid ice.¹²

This metaphor is useful as we listen to New Yorkers of the turn of the century who called upon this image of their city to understand the human changes occurring

with equal force and with a seeming inevitable, “natural” progression. For if ever the clichéd phrase—“the only real permanence is change”¹³—were true, it was so when applied to New York, both in its natural and human-made environments. New Yorkers both recognized that they had destroyed much of their natural heritage but also saw, based on the example of the natural history of the island, that nature was resilient and persistent and would, if aided by people or freed by people, reassert itself. This logic undergirded efforts to replant street trees on the resistant streets of Manhattan.

Tree Culture: The Decline and Rebirth of Street Trees

If Killian van Renssalaer and his West Side Association members were unique in the fervor with which they protested the cutting down of trees, they were not alone, nor were they simply obsessed with their valuable park. For the decline of trees from the streets of New York was precipitous, almost complete, and one of the most visible changes in the city’s physical landscape. A bird’s eye-view of New York in 1830 would have been dominated by trees covering over three- and four-story brick homes and businesses. Fifty years later the bird would have found few opportunities to land, although the artist would have had far less trouble drawing the buildings.

“The City is approaching a period when it will be without trees if its present policy of tree culture is continued,” intoned the Tree Planting Association of New York City in 1914. The Association had been working since 1897 to promote tree planting by the city and by private owners. In offering statistics of trees planted and trees removed in order to spur action, they essentially acknowledged defeat. Between 1908 and 1911 they surveyed Brooklyn and Manhattan and concluded that 9,000 trees had been removed and 584 planted. Surveying carefully six small sections of Manhattan, they found a declining number of removals—350 in 1908, 185 in 1909, and 75 in 1910—but none planted.¹⁴ Laurie Davidson Cox, a professor at the Syracuse College of Forestry, surveyed Manhattan in 1916 and found only 5,400 street trees up to 110th Street, most in bad condition.¹⁵ In Brooklyn the situation was even worse; they estimated that possibly 200,000 trees had been removed since the turn of the century.¹⁶ Brooklyn, expanding rapidly, especially after the consolidation of the city in 1898, saw wholesale removal of trees from what would become the vast expanses of working-class and middle-class housing. By 1880, even though some side streets and a few avenues had street trees, the elimination of street trees from the downtown was largely complete. The disappearance of street trees was all the more striking because there remained within a short ride north of the dense downtown—to the Upper East and West Sides and the “annexed districts” of northern Manhattan and the Bronx—large tracts of fields and farms, with shade trees growing heartily. Photographs of the city at the turn of the century highlighted this contrast between

the treeless built-up areas of Manhattan and its northern areas with sheep farms and wooded estates.

To some, the uniformly bad news about street trees in New York at the turn of the century illustrated a sad truth: Trees and cities do not mix well. The conditions of downtown Manhattan—lack of soil and water, stone and cement sidewalks preventing water from reaching roots, underground water and gas mains destroying roots, pollution—stacked the deck against street trees. At the turn of the century there were other problems which are less pervasive today: attacks by horses, the wholesale cutting of tops of trees to make way for phone and electricity lines, a lack of knowledge about maintaining and aiding sick trees. City government contributed to the decline of street trees by reshaping the city in order to facilitate the development of commerce. Streets were widened, sidewalks and curbstones were laid to separate pedestrian and road traffic, gas and water mains were placed beneath the streets.¹⁷ Workmen chopped mercilessly at the tops and branches of trees to make way for telephone and electric posts and their wires which crisscrossed city streets. Gas leaks, electrical wires, and horse biting wounds ranked among the major causes of death among trees. The trees that shaded Lily Bart survived against great odds; they needed sunlight, a deep well of soil for roots, but also a wide surface opening to allow oxygen to reach the roots. These were all scarce. What it did not need it got much of: pollution, excessive shadows, and numerous injuries from people and animals.

The statistics of tree removal and planting reveal only part of the story. Not only were trees being ripped out of the ground by the thousands, but the remaining few and even the newly planted ones were doomed with short life spans. Surveys by Cox and the Tree Planting Association noted that even on streets where there were trees, even newly planted ones, many were dying or only barely surviving. J.H. Prost, one of the premier "city foresters" in the country, estimated that even in Chicago, where conditions were more conducive to street trees, for every ten trees planted three to five would die within ten years; in his survey of the trees of Chicago's streets in 1910 he found more than three thousand dead trees.¹⁸ Dead trees, tree advocates reminded citizens and city officials, were worse than no trees at all; they were dangerous, looked bad, reflected negatively on the city's image, and cost a great deal to pull down.¹⁹

Observers and advocates of a healthy "tree culture" repeated the litany of offenses New York and New Yorkers had taken against trees in their midst and concluded that

the history of tree planting in New York City shows that there has been no definite and systematic plan of work and as a consequence streets have been planted promiscuously with all kinds of trees and with little or no regard to the width of streets, nature of soil, nor to the artistic effect of certain trees in relation to the height of

buildings upon those streets. No other city the size and importance of New York in the civilized world has paid less attention to the proper development of the planting of its streets and parks.²⁰

Though other cities also faced similar problems and had seen great rows of elms disappear long before the Dutch Elm disease decimated them, New York's elimination of trees was far more rapid and complete than other cities. Some cities, like Washington, D.C., were cited repeatedly by advocates and professionals as having long maintained their trees. Other cities were well on their way to replanting. Newark, for example, established a Shade Tree Commission in response to a state law and began a program of planting 27,000 young trees on 180 miles of streets, creating a city nursery, hiring expert foresters, and disseminating "fruitful educational propaganda concerning trees."²¹

New York's Tree Planting Association was optimistic that with "skilled management" trees could be reintroduced to Manhattan's streets; they argued in 1914 that in six sections where they found 738 trees there could be as many as 10,500.²² Laurie Cox suggested a goal of planting 200 trees per mile, thus increasing the number of street trees to 17,000 in Manhattan.²³ But perhaps they protested too much; even the optimistic leadership accepted that "a large portion of the streets of the Borough of Manhattan presents conditions which do not warrant the cultivation of street trees."²⁴ In essence, despite arguing fervently for widespread planting of trees, they were willing, out of pragmatism, to sacrifice a large portion of the Island to "complete denudation."²⁵

The short life span of trees, which remains virtually unchanged today, served as a poignant symbol of the failure to reserve places for nature within the city.²⁶ The few trees which survived on Manhattan's streets appeared to be shackled escapees from Central Park. Street trees—in their various states of sickness and finally death—were thus barometers of harmful change in the city, advertising not its prosperity but an essential sickness at its core.

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In the face of these powerful forces that seemed to require the elimination of street trees from the city, a variety of actors in the city development drama reacted with an organized, if only partly successful, effort to replant street trees. Though Frederick Law Olmsted and urban visionaries of the nineteenth century had long seen street trees as an essential design tool, it was only in the last decade of the nineteenth century, with the rise of City Beautiful planning ideals allied with Progressive social reform organizations, that street trees earned earnest defenders.

Although parks represented early attempts of city governments to take control over urban development, they shied away from extending this control beyond the boundaries of parks, parkways, and squares. Regulation of street trees

is first recorded in New York City as early as 1708, but over the next two hundred years it had changed little. The City Council acted merely to allow private owners to plant streets or set fines on willful destruction of trees.²⁷ An 1869 New York state law gave tax breaks for individuals who planted trees along public roads.²⁸ Legal cases around the country had established at least minimum protection of trees from attacks, whether by malicious individuals and their animals, or by companies seeking to lay gas lines or electric wires.²⁹ In 1902, New York state law gave the parks department official jurisdiction over street trees. But the law had been a “dead letter on the statute book” for a decade due to the failure of the Board of Estimate to provide any funding for street tree planting.³⁰ Well into the twentieth century, then, the Parks Department had only limited authority over street trees, offering advice and assistance and approving applications by private organizations and individuals to plant trees. Planting and maintaining street trees remained a largely private affair.

The establishment of Arbor Day marked the starting point of the street tree movement. Begun in 1874 in Nebraska under the inspiration of Sterling Morton, later a Secretary of Agriculture under Grover Cleveland, the holiday had spread quickly. New York adopted Arbor Day relatively late, in 1888, but with eagerness. Mainly focused on the schools, Arbor Day celebrations were full of pageantry, including speeches on such topics as “What the leaves do” and “The most useful tree.”³¹ The focus, however, was on the planting of trees. New York state planted some 24,000 trees in 1889, the year of the Central Park tree thinning controversy.³² From 1889 to 1909, 317,166 trees were planted in New York state on Arbor Day. But, despite this apparent enthusiasm, it was short-lived, a report in 1909 noted that only 60,944, approximately one in five, still stood in 1909.³³

Most of the trees planted on Arbor Day were not in the heart of Manhattan; the obstacles posed by the city’s forbidding environment precluded the one-day frenzy of planting from taking place there. But the wide publicity that came with the Arbor Day celebrations boosted the efforts of private tree planting organizations. These organizations, especially the Tree Planting Association of New York, founded by Cornelius Mitchell in 1897, spurred the street movement in the city. The Tree Planting Association led a host of organizations, including neighborhood organizations, botanical societies, flower societies, and garden groups, in organizing efforts to replant the city’s streets. In fact, given the Parks Department’s limited role, the Tree Planting Association was more than an advocacy organization; in a way, it served as a wing of the Parks Department, just as the Charity Organization Society’s Tenement House Committee served as the precursor to the city’s own Tenement House Department and the Fifth Avenue Association served as planning board and private police department to the Avenue. It was an exemplary progressive social organization, blending religious fervor, a belief in the importance of environment for shaping behavior, a strong faith in professionals and their scientific knowledge, a continued paternalism toward the poor, and a new insistence on government involvement.

The Association was founded with the intent of completing Olmsted's work: creating a "complete plan for beautifying the city" by systematically planting trees along streets and avenues.³⁴ Cornelius Mitchell appealed to the nostalgic pangs of his members by reminding them of "their pleasurable reminiscences, the aspects of many of the streets and the small parks [below 14th Street]. Here were to be found on every hand, thriving, vigorous trees in considerable variety. . . . A luxuriant foliage and often beautiful blossoms in season."³⁵ Mitchell would have agreed with the jeremiad of Carl Bannwart, who moved from nostalgia to a chastisement of the past generation, and applause for the work of the current one:

Not so long ago, as men not yet old remember, Manhattan Isle as to many of its residence streets was a veritable grove of trees. What "old New Yorker" can forget the glory of the verdure of the olden East Broadway, or of Elm street that took its name from the towers of spreading green that lined its walks, or of old Marion street with its maples, or Prince street, or Lafayette place, or Waverly place, or Washington place, and so many, many thoroughfares of the fine old town all "awave with trees." But a perverse generation came upon the scene, and in the name of progress the "practical" man had his benighted, Philistine way with the trees.

New York has begun to repent, and to lament its folly, and the first stirrings of a purpose to make reparation are manifest. Private individuals and civic organizations are at work and successfully so—reviving the ancient New York spirit that loved and fostered trees.³⁶

The Tree Association did not itself plant trees or fund the planting of trees. Rather, it considered itself a vocal advocacy group and clearinghouse for information on tree planting. It advertised the value of trees and provided for individual property owners, information on how and what trees to plant, how to maintain trees, and a list of city tree nurseries.³⁷

Despite their insistent claim that trees were crucial for saving the lives of the poor tenement dwellers by cleansing the air, water, and earth, the Association was primarily interested in planting trees along avenues and in wealthier residential areas. The Association's Tenement Shade Tree Committee struggled valiantly, though perhaps vainly, to plant trees in tenement districts. Even though the middle class and wealthy had fled further and further north in Manhattan, or into the outer boroughs, the poorest New Yorkers lived in the Lower East Side, which in the first decade of the twentieth century became, the densest place in the world. The Small Parks Act of 1887 had brought some relief in the form of a series of small parks, such as Mulberry Bend, Stuyvesant, and Corlears Hook Parks.

Despite these efforts, anything more than small pockets of grass and trees was elusive. This was in part because of the conditions of these neighborhoods and the social and commercial life the recent immigrants developed there. The immigrant neighborhoods were, for one, extraordinarily dense, averaging in the worst blocks up to 1,000 people per acre. The "old law" (pre-1901) tenements covered up to 90 percent of the standard twenty-five by one hundred foot lots. The tiny lots between the backs of tenements were used for trash and for outhouses. On the streets, sidewalks were not wide like those on the avenues of upper Manhattan, nor were they intended to be reserved for pedestrians. Instead, they served as linear marketplaces and public meeting grounds. The crowded, loud, commercial culture of Hester and Orchard Streets, Mulberry Bend and Chatham Square precluded the development of the new ideal that the homeowners and businesspeople of Fifth Avenue were developing.

This does not mean, of course, that the immigrants did not value or want a neighborhood where trees were a constant presence. Indeed, the residents of the Lower East Side in part evaluated their neighborhood by the presence—and disappearance—of trees in their midst. In their monumental 1901 work on the condition of tenements in New York City, Robert de Forest and Lawrence Veiller included testimony on conditions in the City's poorest slums. One woman commented on the meaning of the trees that had disappeared.

After a few years in this house we tried another. This house had rather a refined, quiet aspect, and was well kept and clean. . . . But best of all, our scenery had changed. Actual trees grew before us and green yards and pretty flowers. In the street next ours, right opposite, were two small, low, private houses, and to the people in the tenements around, the open space and lovely green were like a veritable oasis in the desert of down town [sic]. . . . It was a very happy change, and we were permitted to enjoy it for a little while, indeed a very little while.

Lots, I understand, are very valuable, and soon the beautiful trees were cut down. It was a barbarous thing. The green yards and flowers went next, and then we knew, though at first we mourned and wondered, that all this digging and uprooting meant new houses of greater height and depth. Once more we were to have the high, forbidding walls before us. Nor did it take long. In little over a year it was all accomplished, and even our beloved bridge was hidden from view.³⁸

Tree advocates noted the paradox that where trees were most needed, they were most absent. The Tree Association argued that something should be done to ensure that the new tenement areas of Brooklyn were planted with trees, and the older ones of Manhattan given at least the consolation of a few trees. "From both an aesthetic and a hygienic standpoint," the Executive Committee of the Tree Planting Association wrote in 1903, "the tenement house districts offer an encouraging field for the outlay of the comparatively small sums of money and the effort necessary to provide sheltering and life-giving foliage where it is needed vitally."³⁹ But even the humanitarian plea was rejected by downtown business people, who argued that "effort in this direction . . . is wasted. . . . The fewer trees they plant where they have no other function than to temporarily obstruct the sidewalks, the better for the success of the movement."⁴⁰ By the second decade of the twentieth century, tree advocates had relented; the most comprehensive plan for tree planting in New York essentially suggested no tree planting below Washington Square, and the vast majority was planted in the upper east and west sides.⁴¹

The limitations on the Tree Planting Association's work in tenement districts was just further evidence of its general impotence in fighting to replant Manhattan's streets. From its birth, the organization had called for city government control of street trees in the hopes that the parks department could then initiate a long-term, coherent planting program. "The growth of the greater city," wrote Steven Smith, one-time Health Commissioner and head of the Tree Planting Association, in 1912, "is far too rapid in every direction to await the slow movements of the people under the pressure of voluntary organizations."⁴² The call for city control over street tree planting came not simply from financial considerations but also from a frustration with the reliance on individual property owners. The ways in which individual owners who planted trees went wrong were innumerable: some planted trees too close to one another, others planted "inappropriate" trees (ones that required too much water or were not resistant to pollution), and most failed miserably in maintaining trees over time. The last problem was to be expected; with the rapid turnover in land and property ownership it was inevitable that trees planted by one owner would be ignored by the next, and perhaps ripped out by the third. The tree association had to rely on the abilities and good judgment of citizens to do the task of creating tree-lined streets, even as it insisted on the standards of new professional "tree men."

Thus, the street tree movement, despite its enthusiasm and widespread support among leaders of the city's social reform movements, was always limited by the lack of government control and financial support, the dependence on fickle and unmanageable individual initiative, and the resistance of the business world. Stemming the tide of destruction of nature within the heart of the commercial city turned out to be much more difficult than the rhetoric of the reformers suggested. Street tree advocates, unlike their earlier comrades, the park designers, were never able to create a safe place removed from the field of real estate development.

In part they were doomed because their focus was not undeveloped land on the edge of development or in overbuilt tenement areas, but rather built-up avenues in the heart of the commercial city. But also, they were never a truly oppositional force. Tree advocates billed their work not as a sharp challenge to the city’s rapid growth but merely as a way to soften and smooth over the chaotic debris—in terms of architectural cacophony and an unhealthy environment—left by the city’s creatively destructive mode of growth.

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Although their power was limited, and they fought against great obstacles of bad environmental conditions, municipal indifference, budgetary constraints, and citizen apathy, tree planting professionals and their allied organizations were fiercely committed to their work. “The love of trees has come to stay,” insisted Carl Bannwart of Newark’s Shade Tree Commission. “The conviction is strengthened that we must have them in our cities.”⁴³ What motivated the founders of the organizations or the professionals who argued so fiercely for trees and painstakingly described how trees could be reintroduced to forbidding cement and asphalt cities?⁴⁴

One set of arguments for street trees centered on their value for the health of the city. Trees cooled the city; they produced oxygen while removing pollutants from the air; they moistened the air and eliminated dust; they purified the soil and eliminated disease. Edith Wharton’s Lily Bart sought shade to protect her from the heat as she waited for the train that would take her to an estate along the Hudson. For New Yorkers who could not leave, the heat of the city was far more insidious.⁴⁵ Stephen Smith insisted that many of the three to five thousand summer deaths in the city could be avoided if trees were planted throughout the city. Smith mustered extensive data he had assembled as Health Commissioner to prove what others simply believed as a matter of almost religious principle: trees could clean the air and absorb the disease of the city.⁴⁶

Perhaps more important, at least to those who had the power to actually affect the number of street trees, were the arguments for trees in the beautification of the city. Trees would be the “element of beauty and relief to [the] usually commonplace rigidity of line and barrenness.”⁴⁷ Following Olmsted’s arguments for a system of parks and parkways, tree advocates believed that trees offered visual foils to the monotony of the city and its crass commercial architecture. In a city dominated by an architecture of spectacle, where historical styles were crassly recycled, the presence of nature’s beauty could, critics argued, soften the deleterious effects of commerce.⁴⁸ Second, street trees would be the closest approximation to a park network that New York could afford. For Laurie Cox, the Forestry School professor who prepared plans for a street tree system, lines of trees along streets and avenues would serve as a substitute for an absent park system. “Due to intensive use of all available real estate,” he wrote, “a park system by means of these ordinary forms of park connections would appear to be

practically impossible. We must make use in some form of the existing streets.”⁴⁹ Finally, many planners saw an even more grandiose role for street trees. By laying out single or double lanes of trees along both sides of streets, planners hoped to achieve what the City Beautiful movement had failed to achieve: a system of connecting boulevards organizing the city around monuments and public buildings. Street trees offered one last chance to achieve visual order in a city that had failed to realize its City Beautiful goals.⁵⁰

Beyond its aesthetic, health, and recreational value, nature in the form of parks, and even street trees, had long been recognized as valuable to property, useful in attracting investments and shoppers, and generally as improving the image of the city. Tree planting advocates noted—usually as the first, most important “good” of planting trees—the value of trees to property. Carl Bannwart, a tree expert, wrote in 1915: “The appearance of a city is its chief material asset. The calibre of a city’s people, as a whole, is exactly expressed in the outward and visible aspect of their municipal home. Now there is nothing that gives tone to this aspect like well-kept parks and well-treed streets.”⁵¹ Just as Central Park had sent the land values around it skyrocketing, advocates insisted that trees almost automatically increased the value of real estate. The financial value of trees to adjacent property was not mainly practical—their cooling effects, for example—but more intangible: trees offered variety in the visual landscape and gave a sense of the street or neighborhood as being “well kept.”

Despite the clear financial value of trees, many developers and property owners fought the imposition of street tree systems. The power of city developers and the image of lower Manhattan as predominantly commercial and industrial, led many to turn the tables on tree advocates and proclaim that, in fact, trees on the streets were destructive of the city. What tree advocates lamented as unfortunate, but remediable, conditions for trees, others saw as clear evidence that trees would only cause problems in places where they did not belong. Editorialists argued that tree roots were bad for building foundations and sidewalks and got in the way of laying out gas mains.⁵² The problems of having enough soil or water were secondary to the driving force of real estate development, which rendered low-density uses, such as parks or gardens, of trees in front of townhouses, obsolete. Those who criticized the planting of trees and even welcomed the removal of street trees from business areas had accepted and thus perpetuated the change in city structure that had been accelerating in the second half of the nineteenth century. From the antebellum “walking city,” New York was quickly becoming a city of segregated activities: downtown for business, uptown for residences. There would remain—in New York especially—more mixing of uses than in other cities. But the goal, enshrined in the 1916 zoning law, of separating commercial and industrial areas from residential ones became dominant. Those who criticized tree planting efforts in the downtown and tree advocates who were willing to sacrifice the downtown to a treeless future had adopted an attitude toward urban structure that would come to dominate American city planning for much of the century.

If trees were to be the park system New York never had, street tree advocates had to balance their design goals with the limitations of the dense, commercial city. On the basic issue of survival, trees were an extremely risky endeavor. On all sides—below ground obstructions, ground-level pollutants and horse bites, above-ground pollution and electric wires—trees faced enormous obstacles to healthy growth. The tensions between the hopes of tree advocates and the limitations of the commercial city were most clearly felt as tree advocates debated how best to plant trees, how to use trees as part of a larger urban design vision. Tree advocates had to carefully balance an image of the ideal street—of towering elms and maples creating a cathedral-like effect—with the constraints of the city. Even if Olmsted complained about the limitations placed upon him by the width of Central Park and the continued proposals for “encroachments,” within the park he was largely free to design a sophisticated pastoral landscape. But street tree planners had to consider the rights of individual homeowners, the needs of businesses, and the requirements of traffic. For instance, while trees were themselves “advertisement[s], helping to attract shoppers or house-hunters,” they could not be allowed to overshadow the real advertisements on the sides of buildings, nor darken shop windows, nor slow the drying of shoppers’ sidewalks after storms.⁵³

In order to balance the competing constituents along New York’s streets, trees would have to be “suppressed.”⁵⁴ Instead of the flamboyant elms, Manhattan needed straight, thin trees, which spread high above traffic, but required little soil and could survive the pollution and human and animal attacks New York supplied. Some urged that only shrubs and very small trees be used on Manhattan’s streets. Pruning, which so bedeviled Olmsted, had to be vastly stepped up to hold back the growth of trees. Like Bonsai trees, street trees in Manhattan had to be restrained, stunted in their growth so that they would “decorate” rather than “form” their surroundings. One tree expert wrote:

it will probably be necessary to clip the trees, in order to restrain them from too large growth, as well as to maintain the compact growth and regular outline which are most appropriate to trees which must necessarily be dominated by architecture.⁵⁵

Similarly, tree professionals urged that, especially in New York with its inhospitable built environment, trees not be overplanted. Throughout the tree planting literature, there was a concern among professionals that uninformed citizens and local tree planting organizations were always overcrowding trees in an effort to create thick shaded corridors like in the main streets of small towns.

The choice of trees is enormously informative about what goals tree advocates hoped to achieve. The elm, which was the favored tree in the United States, was the strong aesthetic favorite among citizens and professionals. But for

city streets the elm was “expensive”: it required a large amount of soil and regular pruning to prevent its branches from blocking too much light from adjacent store windows or getting in the way of wires and traffic. The ailanthus, the “tree of heaven” and the tree which would “grow in Brooklyn,” was extremely hardy, flourishing notoriously on tenement roofs and right out of asphalt. But the ailanthus was less attractive because it grew irregularly and gave off a bad odor at certain points of the year. The ideal tree thus had to be attractive enough (according to long-standing criteria of beauty), tough enough to withstand the harsh environment of the city, but also malleable enough to meet the design limitations of the busy and increasingly crowded business districts.⁵⁶

The choice of trees aptly summarizes the debates around street trees. Tree advocates, as they sought to balance a nostalgic and idealistic vision of lush avenues with a realistic assessment of the financial, bureaucratic, and environmental conditions, fought over what trees could be planted. “The truth seems to be,” wrote Elbert Peets,

that we are trying to apply our traditional village ideals of tree-culture, tree-form, and tree-species to our present entirely different urban conditions. As soon as we learn that we cannot grow in the heart of a city the elms and sugar maples which shade so many village roads, . . . we shall be able to bring trees back into the crowded parts of our cities.⁵⁷

“The Spirits of the Trees”

For planners and developers, street trees may have been just another urban design tool. But if street tree planners were satisfied with the smooth look of a row of trees along both sides of an avenue, many others revered trees on a far more individual basis. Beyond the value of trees for health-related reasons, or as tools for urban design, trees held far deeper, intangible meaning for New Yorkers.⁵⁸ Like the city hall that had given rise to a historic preservation movement, some trees were celebrated as historic monuments virtually on par with the city’s historic buildings. The same groups that watched over the City Hall, Frances Tavern, Hamilton Grange, and the Jumel Mansion, also kept tabs on the Hangman’s Elm in Washington Square Park and the trees around Hamilton’s Grange.⁵⁹ The rhetoric they used in speaking of the historic value of trees was similar too:

Treasures, indeed, though too seldom appreciated! Intimately associated as they are in many instances with our National life as well as with local events, much of the history of America is written in the story of her trees, living or otherwise, and can be traced through a study of

the part they have played in connection with its development. Living Links [sic] in the chain of human interests that spans the centuries, such trees possess a unique historic value, and should be carefully preserved.⁶⁰

As with historic buildings in New York, as the years passed there were fewer and fewer trees to preserve and celebrate. The American Scenic and Historic Preservation Society, established to protect historic buildings and landscapes, reported regularly on the state of New York's historic trees, and tabulated the yearly losses. In 1913 it reported on celebrations for the "Inwood Tulip," the "oldest and biggest tree in Manhattan," lamented the passing of the De Lancey Pine from the New York Zoological Park "on account of old age," and urged that city planners consider altering the street plans in order to save historic trees.⁶¹ City historians recalled with special sadness the passing of the last of the Stuyvesant Pear trees on Third Avenue and 13th Street, which had stood for more than two hundred years. The Historical Society was so struck by this loss that it took pieces of the dead tree and preserved it in the Society's new building on Central Park West.⁶²

This kind of dedication to individual historic trees suggests that, though treated much like historic buildings, trees resonated as historic landmarks in very different ways. Though "useless" compared to historic buildings, which could be adapted for different uses, trees were in other ways more powerful landmarks from the past. Where buildings were mute objects that had simply withstood the weathering effect of time and of men's actions, trees were living organisms that had grown and developed over time. The City Hall's Greek Revival columns reminded onlookers of the architecture of the early nineteenth century. Washington Square townhouses could speak to the memory of those who, like Henry James, had lived in the city awash in a sea of red brick. Trees, however, were living organisms and therefore could truly connect the present with the past, and suggest the shape of the future. As one chronicler wrote in 1909, "Arbor Day"

holds quite as rich possibilities of spiritual growth as of merely physical development. It is a symbol of progress. It is the only one of our American holidays which turns its face toward the future rather than toward the past. . . . Our young cities have too often been ruthlessly sacrificed to a brutal, hideous materialism; and a large number of our city children have never known the beauty of places devoted to "green things growing."⁶³

More effectively than historic buildings, trees could symbolize the passing of time.

Preservationists anthropomorphized historic buildings, speaking of the buildings as if they had been conscious in the past, and therefore carried

with them the “memories” of great events and people. While the rhetoric in defense of historic buildings could be quite melodramatic, it rarely struck such a personal note as could individual trees. De Long Rice wrote in his book, *The Spirits of the Trees*, that trees seemed like members of one’s family:

But there is a nameless tree, the most sacred and beautiful that waves from the green landscape of memory—nameless because it is not the same with us all. It may be an oak, a poplar, a chestnut, an apple tree, or any of the others; it is the tree that stood at the door of the old home. Our childish feet passed in and out beneath its boughs; it gave welcome asylum to sweet songsters that dwelt with us in poverty or in wealth; it spread its shadows for our plays and pranks, and for our lazy dream-filled hours.

Rice found some consolation in the immortality guaranteed trees by their use as furniture and building material:

Great trees, like great men, must live on in service after death, some to sweeten memory with flowers and fruits that vanished with our better years, others to know more serious duties in the march of human life. The whirling saw which parts the fallen bodies of the oak and the pine, sings to them a song of immortality, and sends their timbers of strength and beauty to while away the centuries in the fairest abodes of men—to wall and shelter happy homes; to be a table in a house of plenty; to be a chair beloved of weary beauty; to be a fiddle and carry and the soul of melody; to be a desk and hear a poet’s thoughts.⁶⁴

John Flavel Mines, a flâneur of New York in the late nineteenth century, poignantly described the removal of trees behind St. John’s Chapel on Varick Street to make way for a freight depot:

The only public execution I ever witnessed was the slaying of those great trees under which my sisters and I had played, and I would as soon have seen so many men beheaded. A fatal fascination drew me to the spot. I did not want to go, but could not help going out of my way to pass it by. The axes were busy with the hearts of the

giants I had loved, and the iron-handed carts went crashing over the flower-beds, leaving a trail of death. The trees lay prone over the ploughed gravel-walks, and a few little birds were screaming over their tops, bewailing the destruction of their nests. It was horrible. As I looked upon the scene, I knew how people must feel when an army passed over their homes, leaving desolation in its wake.

For Mines, the trees had been removed not for something equally valuable—"a block of homes"—but rather a "coarse pile of bricks for use as a freight depot, to make it a centre of ceaseless noise and riot." The destruction of this site of repose, an "earthly paradise," for an "abomination of desolation" did not speak well to the city's priorities.⁶⁵

Trees, as living organisms that grew slowly and steadily, and then could die of "old age," meant more as symbols of the flow of time than as monuments from specific moments in history. Where Fifth Avenue blocks could change dramatically in a decade, with sturdy buildings coming down in a day, trees could stand for decades or centuries. Trees offered few clues to the specific time in which they lived; their thick trunks and gnarled roots and branches simply spoke of great age, of the passing of time. Trees were celebrated not only because they stood in such stark contrast to the "unnatural" city around them, but because they represented a wholly different pace of time. Where the city progressed to a *molto allegro* pace, trees ambled at an *adagio* marking.

That, at least, was the image. But in New York, even the trees were being caught up in the "restless renewals," the yearly pulling down of the old to make way for the new, which had come to characterize the city's growth. Instead of "having more than the allotted life span of man," trees that would typically have outlived their planters virtually died crib death in New York. Trees were simply no longer standing to serve either as traditional historical monuments or as more abstract symbols of time.

The lamentations for the Stuyvesant Pear trees or the sadness at the passing of Hamilton's thirteen sweet gum trees may seem to have come from very different places than the worry about the rise in heat, the increased mortality among tenement children, or the quest for bringing order to the chaos of styles of building forms—all motivations for preserving and planting trees. In fact, they were entirely complementary. For just as the diseases and heat of the city literally killed people and destroyed the city, so too did the absence of these living beings suggest the intangible decay of the city as a social community. Thus physical destruction and social destruction were easily conjoined in the crisis around street trees. The inability of the city government and private citizens, working individually and together in reform organizations to protect and plant trees, portended a tragic future: disease, heat, and dust would make the city physically unbearable,

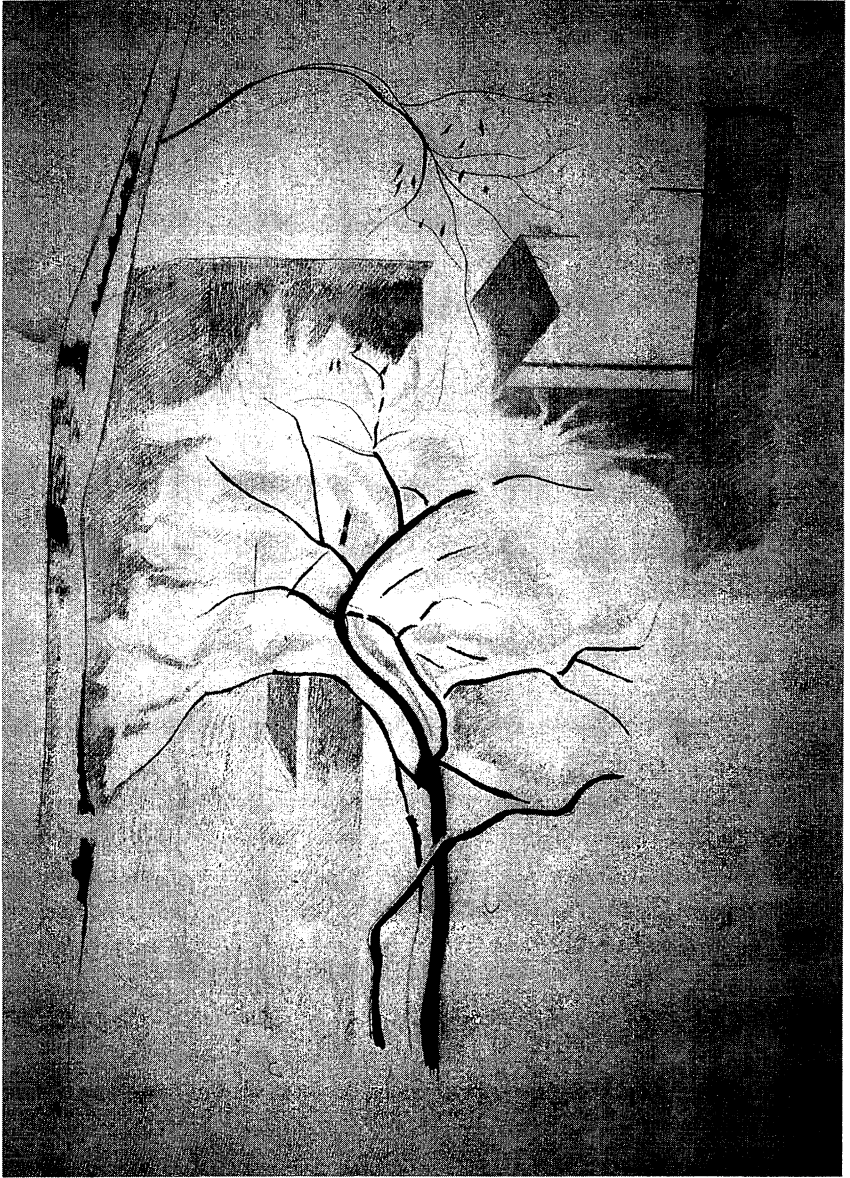


Figure 2: Joseph Stella, *Tree and Houses*, 1915-17. Stella, an 1896 immigrant to New York City is perhaps best known in New York for his images of Brooklyn Bridge, a symbol of the modern city. But he also turned his eyes to the fragile persistence of nature, as embodied by this tree, perhaps an ailanthus, surviving in the cracks of the pavement.

and bleak avenues of commercial buildings would sap the spiritual life and beauty from the city. New York would become simply a marketplace, not in any sense a community, nor the civilized capital city of the nation.

* * *

Over a hundred years after the tree battle in Central Park, another New Yorker went a little crazy in defense of the city's trees. This time, however, it was the city's Parks Commissioner, Henry Stern, who led a campaign to identify and publicly humiliate those who had torn down trees without the consent of the Parks Department, the guardian of all the city's trees. One Brooklyn man in March of 1995 was especially singled out for his removal of several trees in Sunset Park, Brooklyn. Peter Dworan is "the Ted Bundy of arbor-cide," said Stern. "He's a serial tree killer."⁶⁶ For the lost trees, Stern offered a moving funeral service, complete with burial and eulogy. Stern's crusade, odd as it may have seemed, struck a chord with citizens around the city. Indeed, the lamentation for a fallen tree, or a mistaken removal of one, has continued to provoke a strikingly large response from park advocates and the general public.⁶⁷

However moving the fight to protect individual trees or punish the perpetrators of "arborcide," these efforts do little to undermine the central notions about nature in the city hardened in the early decades of the century. For these are still battles over individual trees; they do not embrace a larger vision of nature in the city. The thinking about nature and cities that inscribed itself into public policy and into the minds of city dwellers has become "second nature." While there have been efforts at bringing nature into the heart of Manhattan, such as the extravagant gesture of nine palms trees rooted in a slide marble floor in Battery Park City's Winter Garden, nature remains carefully controlled and tamed. Ironically, it is those areas of the city that were least well served by tree advocates at the turn of the century that today have pioneered efforts to reintroduce nature into urban life. In the Lower East Side and "Alphabet City," in East Harlem and the South Bronx, empty lots have been turned into community gardens and *casitas*.⁶⁸ But these grassroots efforts, too, are threatened by the two sides of the development battles that shaped street trees in the early part of the century: developers of commercial and higher-rent property who hope to take advantage of these vacant properties, and reformers (from the city and the non-profit world) who see the opportunity to build new in-fill low-income housing. The possibility of designing with nature and not against it in the urban landscape remains a pursuit on the periphery, out of line with the dominant mode of thinking.

The experience of trees in the city has been one of the stories people tell themselves about change in the city, one of the "urban baedekers," as historian William R. Taylor has called them, that has helped city dwellers understand the new forms of the modern city.⁶⁹ There are, in fact, many "guidebooks," many experiences, that could provide ways of comprehending the city. Trees have provided one metaphor, one scenario for understanding, and perhaps accepting

more readily the cycle of destruction and rebuilding that has come to be “second nature” for inhabitants of cities. The experience of tree-planting in the city—where the story has been almost always been about failure and where only the tough and scrappy trees like the *Ailanthus* survive—may have helped establish the truism that nature cannot survive in Manhattan, that the tumultuous cycle of destruction and rebuilding is the “natural,” inevitable way of building cities.

Notes

1. J.M. Forbes and C.S. Sargent, quoted in Frederick Law Olmsted and J. B. Harrison, *Observations on the Treatment of Public Plantations, More Especially Relating to the Use of the Axe* (Boston, 1889) reprinted in Theodora Kimball and Frederick Law Olmsted, Jr., eds., *Forty Years of Landscape Architecture* (New York, 1928, reprint ed., Cambridge, 1973), 367.

2. Edith Wharton, *House of Mirth* (1905, reprint ed., New York, 1984), 4.

3. E. Idell Zeisloft, *The New Metropolis: Memorable Events of Three Centuries, from the Island of Mana-Hat-Ta to Greater New York at the Close of the Nineteenth Century* (New York, 1899), 218.

4. “Even the Grand Canyon, a spectacular example of the erosive power of running water, cannot compete with New York’s complex tale of past crises and upheavals, an account documented in stone and spanning more than one billion years of the earth’s history.” Christopher J. Schuberth, *The Geology of New York City and Environs* (Garden City, NY, 1968), ix. For a recent book of photographs of nature in New York City see Jean Gardner, *Urban Wilderness: Nature in New York City* (New York, 1988).

5. The phrase “second nature” is discussed in William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York, 1991), xvii.

6. In describing the destruction of one element of the natural environment, I intend to avoid falling into the trap of two simplistic arguments about nature in the city. One attempts to read a present political argument onto the past by nostalgically decrying industrial cities as “a bad mutation” of “an older way of building a city” (Warner, xii). The second, on the opposite end of the spectrum, offers a dim illustration of the false truism that nature cannot flourish in cities. I accept neither of these arguments, for they are neither historically accurate, nor intellectually illuminating. We cannot speak of a disregard for nature in the turn-of-the-century city when vast new parklands were being set aside and citizens of all classes filled them with increasing fervor. And recent literature has argued against the sharp distinction between city and nature (which mimics the rhetoric of the turn of the century), showing how nature remains a powerful force in cities and is not inherently at odds with the dictates of urban life. William Cronon discusses the problems and possibilities of urban environmental history in “Modes of Prophecy and Production: Placing Nature in History,” *Journal of American History* 76 (March 1990): 1131. Anne Spirn’s *Granite Garden* is an extended argument on this very point. Anne Spirn, *The Granite Garden: Urban Nature and Human Design* (New York, 1984), 174.

7. Olmsted and Harrison, *Observations*, (1889), 363.

8. Indeed, Olmsted had been the focus of attacks by defenders of trees in the park a decade earlier. He noted, in a letter to Gifford Pinchot in early 1895, that “the Park Board of New York passed an order forbidding me to have a single tree felled without a special order of the Board for that particular tree. There were at the time many thousands of poor, cheap rapid-growing trees scattered over the Park that had been planted to serve as nurses, and which were then, because of previous neglect when I was absent, over-growing, crowding and making wholly unfit for their purpose the trees which had been planted with a view to ultimate landscape effect.” Kimball and Olmsted, *Forty Years*, 166.

9. Olmsted and Harrison, *Observations*, (1889), 375.

10. Thinning referred to the cutting down of trees within a group of trees to prevent depletion of nutrients and sunlight. Pruning concerned the cutting of branches on individual trees.

11. Henry James, *The American Scene* (New York, 1907, reprint ed. 1968), 111.

12. William Beebe, *Unseen Life of New York as a Naturalist Sees It* (New York, 1953), 4.

13. Elizabeth Barlow, *The Forests and Wetlands of New York City* (Boston, 1971), 15.

14. TPA, “Report on the condition of the street trees of the city of New York, with suggestions for an organized system of scientific culture and conservation of trees for the greater city,” *Bulletin of the College of Forestry at Syracuse* 15: 12 (December 1914): 27.

15. Laurie Davidson Cox, "A Street Tree System for New York City, Borough of Manhattan," *Bulletin of the College of Forestry at Syracuse University* 16: 8, (1916): 75.
16. TPA, *Annual Report* (1914), 6.
17. One tree expert insisted that "The greatest enemy of the shade tree is the curb-stone." Carl Bannwart, "Greatest Enemy of the Shade Tree," *Municipal Journal and Engineer* 32 (April 25, 1912): 619.
18. J. H. Prost, "What Chicago Is Doing for Its Trees," *Garden Magazine* 12 (1910): 18-20.
19. Like the bricks and windows and boilers of Mulberry Bend, which were sold at auction when the tenements were torn down, dead trees or those torn down to make way for train lines or even Riverside Park were sold. See the Park Department Minutes, Aug. 16, 1882 153
20. TPA, *Annual Report* (1914), 17-18.
21. Carl Bannwart, "The Movement for City Street Trees—A Survey," *National Municipal Review* 4 (1915): 239.
22. TPA, *Annual Report* (1914), 17.
23. Cox, "Street Tree System," 75. There was an obsession with counting the number of trees extant and newly planted. Cox urged the creation of a regular "tree census".
24. TPA, *Annual Report* (1914), 5.
25. *Ibid.*, (1914), 18.
26. Interview with Peter Eckert, New York City Parks Department, March 1994.
27. City of New York Department of Parks and Recreation, *Great Tree Walk Guide: The Great Trees of New York City* (1990), no pagination.
28. New York specified that elms had to be planted. William F. Fox, *Tree Planting on Streets and Highways* (Albany, 1903), 4-5.
29. See Albert D. Taylor, *Street Trees: Their Care and Preservation*, Cornell University Agricultural Experiment Station Bulletin 256 (1908).
30. TPA, *Annual Report* (1912), 17. See also: TPA, *Informational Bulletin* (1910), 8. Chapter 453 of laws of the State of NY said "no tree may be lawfully planted in any of the boroughs of the city without a previously obtained permit issued for the purpose by the Department of Parks."
31. N. H. Egleston, *Arbor Day: Its History and Observance* (Washington, D.C, 1896), 80.
32. *Ibid.*, 18.
33. Harlan Hoyt Horner, *Arbor Day Annual for Friday, May 7, 1909* (New York, 1909).
34. TPA, *Annual Report*, 1897, 6.
35. TPA, *Annual Report*, 1897, 7.
36. Carl Bannwart, "The Movement for City Street Trees," 242.
37. See for example TPA, *Informational Bulletin*, 1910.
38. Robert W. De Forest and Lawrence Veiller, eds. *The Tenement House Problem*, 2 vols. (New York, 1903), 1:395.
39. *New York Times*, 8 March 1903, 24. See also TPA, *Bulletin*, 1914, 6.
40. See *New York Times*, 1 March 1903, 8; 2 July 1903, 8; 12 November 1904, 8; 2 May 1905, 10.
41. Cox, map attached to article. In the very first report of the Association, Cornelius Mitchell had acknowledged that "A large portion of the City south of Twenty-third street is destined to be encroached upon by the resistless advance of business enterprise, and it is only in special instances such as fifth avenue, which has already been referred to, and the more spacious avenues and streets on the east and west sides and upon the barren open spaces, enlarged intersections of streets . . . to which our recommendations would apply". TPA, *Annual Report*, 1897, 26.
42. Stephen Smith, "Vegetation a remedy for the summer heat of cities: A plea for the cultivation of trees, shrubs, plants, vines and grasses in the streets of New York for the improvement of the public health, for the comfort of summer residents, and for ornamentation.," *Appleton's Popular Science Monthly* LIV (February 1899): 449.
43. Carl Bannwart, "Greatest Enemy of the Shade Tree," 620.
44. Indeed, many of the values espoused were repeated by advocates from the early twentieth century forward; today's Central Park Conservancy or Parks Council would offer very similar justifications for "greening" the city. See, for example, Herbert Muschamp, "From Stereotypes of Urban Decay to Signs of Life," *New York Times*, 3 April 1994, H32.
45. See Peter Schmitt, *op cit.*, on efforts to bring poor children to the country.
46. Smith, "Vegetation," 434.
47. TPA, *Annual Report*, 1897, 9.
48. The issue of "sham" architecture, as critiqued by Montgomery Schuyler, the preeminent architectural critic of the time, is discussed in Michael Millender, "Montgomery Schuyler and the Building of Beaux-Arts New York," unpublished manuscript, 1991.

49. Cox, "Street Tree System," 24.
50. Carl Bannwart, "Greatest Enemy of the Shade Tree," 621. Bannwart read his beliefs back into history, arguing that Baron Haussman's work in Paris was successful largely because of the "stately avenues of trees which form the most conspicuous and charming feature of Paris' civic landscape."
51. Bannwart, "The Movement for Street Trees," 238.
52. A debate on this issue raged for several days in the *New York Times* in April of 1901.
53. Elbert Peets, "Street Trees in the Built-up Districts of Large Cities," *Landscape Architecture* 6 (October 1915): 16.
54. *Ibid.*, 30.
55. *Ibid.*, 29, 30.
56. Practical tree manuals often opened with an illustration of an ideal street. See, for example, Albert Taylor, *Street Trees*.
57. "Street Trees," 15.
58. For an extended study of the meanings of trees, and other elements of the natural landscape, on Western thought and culture, see Simon Schama, *Landscape and Memory* (New York, 1995).
59. In December of 1908, the last of the thirteen trees which Alexander Hamilton allegedly planted to symbolize the thirteen original states were cut down. There are plans today to move the Grange for a second time, and to replant the trees next to the house. American Scenic and Historic Preservation Society, *Annual Report*, 1909, 81-82.
60. Katherine Stanley Nicholson, *Historic American Trees* (New York, 1922), 5.
61. American Scenic and Historic Preservation Society, *Annual Report*, 1913, 192, 197, 196.
62. The New York Historical Society apparently continued its tree preservation work. A cartoon in the *New York World* portrayed a stalwart Historical Society employee standing guard over "The Last Tree in Central Park" as tourists pass by. *New York World*, 22 May 1925, reproduced in R. W. G. Vail, *Knickerbocker Birthday: A Sesqui-Centennial History of the New-York Historical Society, 1804-1954* (New York, 1954), 223.
63. Robert Haven Schauffler, *Arbor Day* (New York, 1909), 3.
64. John Flavel Mines, *A Tour Around New York and My Summer Acre* (New York, 1893), 16-17, quoted by Judith A. Gilbert in letter to the *New York Times*, 7 May 1990, 14.
65. *Ibid.*, 16.
66. *Newsday*, 29 March 1995 A25.
67. See, for example, *New York Times*, 26 March 1994, B23.
68. For an excellent exploration of the gardens of the Lower East Side, see Diana Balmori and Margaret Morton, *Transitory Gardens, Uprooted Lives* (New Haven, 1993).
69. William R. Taylor, *In Pursuit of Gotham: Culture and Commerce in New York* (New York, 1992). The phrase "stories people told themselves about social change" is Timothy Breen's, borrowed from anthropology, and is discussed in his *Imagining the Past: East Hampton Histories* (New York, 1989).