From Private Allée to Public Shade Tree: Historic Roots of the Urban Forest

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Since the middle of the nineteenth century the urban landscapes of Europe and America have been notable for their extensive plantings of trees. Along boulevards and in the large parks and small squares of most cities, trees shape and ornament the landscape in ways that are familiar everywhere. Before the 1850s the use of trees in public areas was less common, and planting patterns differed distinctly from one country to another. These patterns originated in the late sixteenth century, when ornamental plantings first began to shape the public landscapes of Western cities. Before that time, during antiquity and the Middle Ages, city trees were found mostly in private gardens and only rarely in streets or other public spaces. Most of the early plantings in the public landscape were patterned after those of private gardens, but as the use of trees increased, new landscape forms were developed for new settings and new purposes; these new forms even added new words to the vocabulary of urban geography.[1]

The distinctive patterns by which trees were introduced into the public urban landscape reflected national differences in urban life and in the way cities expanded from their medieval conformations. As urban cultures converged, planting forms that were

A watercolor showing the avenue of Lombardy poplars planted under the direction of Thomas Jefferson along Pennsylvania Avenue, leading to the U.S. Capitol. Signed by G. Burton, 1824.

developed first in one country for one purpose were adopted later in other countries, often for different purposes. The major cultural centers that fostered new types of urban plantings were found in France, the Low Countries (especially the Netherlands), Great Britain, and the British colonies that later became the United States. Italy and Germany, and to a lesser extent Spain, played vital roles in this process but were much less important as centers of innovation.

The First Innovations: Urban Allées

The earliest public plantings in cities adapted the form of the garden allée to new purposes. Since the Renaissance, rows of trees had been used to help structure the spatial composition of large private gardens, first in Italy and then more widely in France. In the late sixteenth century, ancient city walls were converted into massive earthworks to withstand the new weapons and siege tactics of the age, and these newly enlarged structures were planted with allées of trees. The first were apparently in Antwerp, in the Spanish Netherlands (in what is now Belgium), and in Lucca, Italy, both planted in the 1570s. They were meant primarily to provide shady promenades for city residents, although they may also have been intended to camouflage the city walls when seen from a distance.[2]

At the end of the sixteenth century allées began to appear in recreational areas, where they were used for bowling, for archery, and most importantly, for a new game very popular with the upper classes in the first half of the seventeenth century, similar to croquet and called in Italian *pallo a maglio*, in French *palmail*, and in English *pall mall*. Special areas of lawn lined with trees were laid out for the game, first in Paris in the 1590s and later in Berlin (Unter den Linden) and London (Pall Mall) by the 1650s.[3]

In 1616 another innovation appeared in Paris: an allée of much larger proportions, planted specifically for recreational carriage riding. Called La Cours de la Reine, it was built on the orders of Marie de' Medici, the new Queen of France, who had learned the pleasures of carriage riding in Florence. The Cours was laid out alongside the Seine, just beyond the walls of the newly enlarged Tuileries garden, and was itself walled off to public access.[4] The form of the *cours* was imitated in most major French cities by the middle 1600s and in London, Berlin, Madrid, and Rome by the end of the century.

Later in the seventeenth century another form of allée emerged in France, most prominently in Paris: the exterior avenue, a tree-lined road leading from a main city gate. The most important was the Avenue des Tuileries (now the Avenue des Champs Elysées) to the west of the Tuileries garden, just north of the Cours de la Reine. The avenue combined the form of the garden allée with that of the tree-lined rural road, which goes back farther in history.

Around the same time a fourth variant of the allée was constructed, again in Paris, in the form of the circumferential tree-lined boulevard, no longer atop rebuilt defensive walls but on the remnants of ramparts Louis XIV had decommissioned beginning in 1670. By the

A section of De Wit's 1695 plan of Cologne shows rows of trees planted on the city walls and two medieval church squares also planted with trees.

end of the century the whole of the ramparts on the north side of Paris were transformed into a continuous promenade with double lines of elms on either side. Here at the boundary between city and countryside, the allée provided a delightful elevated pleasure ground, popular for promenades on summer evenings. In the eighteenth century it attracted a number of expensive shops, restaurants, theatres, and other amusements, thereby becoming more like a tree-lined street than originally intended.[5]

All these variants of the allée were first introduced into the urban landscape at its edges: alongside, just beyond, or atop city walls. Most were originally intended as places for recreation, separate from the city itself. It was only when the cities later expanded that the allées were surrounded by buildings and made part of the street system, as in the case of Unter den Linden, which as a result of Berlin's growth changed from an exterior mall into a tree-lined street in the heart of a newly built-up area.

The Use of Trees in New Urban Areas

As towns and cities grew in population in the seventeenth and eighteenth centuries they were at first prevented from expanding outside their newly enlarged walls by the enormous expense required to rebuild these massive fortifications.

The western outskirts of Paris include the Cours de la Reine alongside the Seine and the Avenue des Tuileries running through the Champs Elysées. Plan of Paris by John Roque in 1754

The first section of the tree-lined promenade planted atop the former walls of Paris in the 1670s is shown as it was in 1739 in Turgot's engraving. The large bastion was known as the Grand Boulevart and gave its name to the promenade and to posterity.

When population pressures finally forced a move beyond the walls, the expansions were carefully thought out and followed long range plans that sometimes included open spaces with trees. This early form of city planning took on different characteristics in different countries, resulting in widely different patterns of tree plantings. The cases of Holland and Great Britain provide good illustrations of these differences.[6]

Urban Expansion in Holland: Tree-lined Canals and Streets

The earliest and most widespread planting of trees in the newly enlarged cities occurred in the Netherlands. It appears that trees were first planted along exterior canals (much as they were elsewhere on city walls) that later were surrounded by new construction. But in the early years of the seventeenth century, as several Dutch cities expanded rapidly to accommodate a sharp rise in population, entirely new areas were laid out around new canals lined with trees. The rows of trees thus became widespread throughout the urban fabric, in residential and commercial areas as well at the periphery of the city.

The expansion of Amsterdam after 1615 was the largest and best known, but many other towns and cities also included tree-lined canals in their new districts. In some Dutch towns old canals were filled in to form streets and in a few towns these streets were planted with rows of trees. These new urban landscapes were unprecedented and astounded people from other parts of Europe. Even French visitors, familiar with a wider use of urban greenery than other Europeans, were amazed at the extensive tree plantings in the interior of Dutch cities. One visitor in the 1660s facetiously reported that he could not tell whether he was seeing a town in a forest or a forest in a town.[7]

One of the earliest tree-lined canals of the Netherlands was the Oude Delft, seen in this early twentieth-century postcard view of Delft.

Urban Expansion in Great Britain

An altogether different landscape form was used as urban areas expanded in Britain from the late seventeenth century into the middle of the nineteenth century—the residential square. Unlike most public squares on the continent, British squares were used as centerpieces for new development projects comprised of several blocks of new housing around an open space that was usually railed in, with a garden at the center. The earliest squares were paved or simply planted with grass, but in later years they included trees and shrubs. By the end of the eighteenth century most of the residential squares had been turned into leafy parks, some with a great variety and density of plantings. London, Bath, and Edinburgh made extensive use

An old postcard view of Leicester Square in London. The gardens were first laid out around 1720.

of green squares and the variant forms of circuses and crescents. These parks were for the exclusive use of the surrounding tenants, however, and were not open to the general public. Some are still private today, but others rank among the most important public green spaces in what is now central London: Grosvenor Square, Berkeley Square, Russell Square, Leicester Square.[8]

Early Tree Choices in Europe

Evidence regarding the tree species used in these early forms of urban planting is scanty at best, but they are known to be limited in number. Elms *(Ulmus)* seem to have been preferred above others and were used on the boulevards and the Cours de la Reine in Paris and for the avenues at Versailles, as well as on the Mall in London. The Avenue des Tuileries, however, was first planted in the 1670s with horse chestnuts *(Aesculus hippocastanum)* and sycamore maples *(Acer pseudoplatanus)*. Lindens *(Tilia)* were used on the canals in Amsterdam in 1615 and along Unter den Linden in Berlin in the 1640s and were intermixed with elms on the Avenue des Tuileries in Paris when it was replanted in the 1760s. The London plane tree *(Platanus x acerifolia)* did not appear until the end of the seventeenth century. Berkeley Square is reputed to have the oldest surviving plane trees in London, planted in the 1760s. All these species are tolerant of compacted, somewhat poorly drained soils, and are easy to transplant—vital attributes for urban trees then as well as now.

American Innovations and Imitations

An entirely different opportunity arose in the American colonies where plans for many new towns were informed by a strong desire to experiment with idealized urban forms, including new kinds of public spaces that were often planted with trees. New Haven with its nine equal squares, the middle one left open as a kind of public park; Philadelphia with its original plan for five public squares; and Savannah with its repeating pattern of squares and parks were among the most innovative.[9]

More significant for the later development of urban landscapes in America, however, were two distinctive features common to colonial towns. The first was building density, which varied widely from town to town but was usually much lower than that of towns in Europe. After receiving a map of New Amsterdam in 1660, the directors of the Dutch West India Company in Amsterdam complained to Peter Stuyvesant that the houses were surrounded by "excessively large lots and gardens."[10]

The second characteristic that distinguished most colonial towns from their European counterparts was the practice of leaving street tree planting to private citizens, rather than making it the responsibility of the government. This resulted in a heterogeneity unknown in Europe. In 1748 trees that lined many of New York City's streets attracted the attention of Peter Kalm, the Swedish botanist. He noted the presence of plane trees *(Platanus occidentalis)*, black locusts *(Robinia pseudoacacia)*, lindens, and elms. Albany in the 1760s was described by another observer: "The town . . . was a kind of semi-rural establishment; every house had its garden, well, and a little green behind; before every door a tree was planted, rendered interesting by being coeval with some beloved member of the family; many of their trees were of a prodigious size and extraordinary beauty, but without regularity, every one planting the kind that best pleased him."[11]

Large City Parks and Gardens

After allées, the most important landscape forms for bringing trees into cities were the large city park and the large public garden. Most public gardens began as royal gardens, of which large sections were usually open to the public and which devolved into state ownership with the demise of monarchies. The gardens of the Tuileries and of Luxembourg in Paris and the Tiergarten in Berlin are the best-known examples, but there were dozens more across Europe. On the continent these semi-public open spaces usually included carefully tended beds of flowers and shrubs between allées of trees lining crushed gravel paths, all laid out in regular geometric arrangements characteristic of formal gardening. Outside some cities were large hunting parks, usually forested, and less frequently open to the public. Near London, however, were several royal hunting parks that
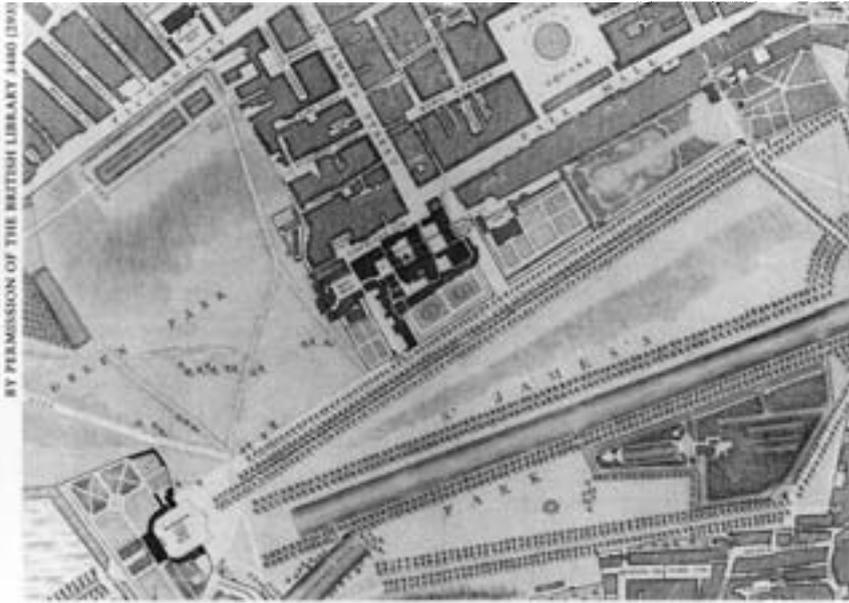
Part of Green Park and St. James's Park in Westminster in 1746 are seen in a portion of John Roque's map of London The original Pall Mall had been replaced by a street, but a new mall ran alongside St James's Palace, at center, to Buckingham House (later Buckingham Palace), at lower left

admitted certain classes of the public for recreation as early as the seventeenth century. The first of these was St. James's Park, followed by Green Park and Hyde Park, all to the west of London in Westminster.[12]

In America there was no comparable public use of private gardens and parks, although some wealthy residents occasionally opened their gardens to visitors. More important for the eventual development of parks were the large areas of publicly owned land adjacent to some towns and reserved for future expansion. In the early years much of this land was used for recreational purposes, as well as for grazing livestock or drilling militias, and portions were kept for public parks when the majority was sold to developers to accomodate urban growth. The Boston Common, the earliest example, and New York's City Hall Park originated this way. Other large parks were created in the nineteenth century on land purchased for that purpose by city authorities, such as Philadelphia's Fairmount Park and New York's Central Park.

Late Eighteenth- and Early Nineteenth-Century Elaborations

By the middle of the eighteenth century trees were being planted in an ever increasing number

of ways in the urban public landscapes of western Europe and America. Regional differences were beginning to give way to more cosmopolitan landscape forms. Especially prominent in much of Europe were forms derived from innovative uses of the allée in France. These forms were variously called malls, promenades, or boulevards. Allées laid out originally for playing pall mall might be converted to carriage promenades, then to pedestrian promenades, and finally to arterial streets when the area succumbed to urban expansion.

As cities grew larger, parks and gardens also began to play a more important public role, as places for recreation and as open space inside a densely built urban landscape that was beginning to lose touch with its rural surroundings. On the continent most of the large parks and gardens owned by royalty had been opened up to the entire public, but as late as the 1830s access to most of the royal parks to the west of London was still limited by gatekeepers to well-dressed people, thus excluding the lower classes. The need for public space in the city became a contentious issue in Parliament, forcing grudging action upon the reluctant crown, city, and local boroughs. The first new London park meant for full public access was Victoria Park, to the east of the city, opened in 1846.

Provincial towns and cities in Britain, on the other hand, had been laying out public parks since 1830. One of the most influential of these, laid out in the 1840s in the community of Birkenhead, near Liverpool, was dubbed "the people's park." It was visited by Frederick Law Olmsted in 1850, and its accessibility and rural atmosphere served as models for Olmsted a few years later when he and British-born architect Calvert Vaux designed New York City's Central Park.[13]

To a certain extent, the design of these new British parks reflected the changing tastes of the

times, as the geometrically arranged allées and avenues of the early eighteenth century gave way to irregular clumps of trees scattered across open fields by the end of the century, with beds of shrubbery and perennials added during the nineteenth. But even earlier, British parks had had a predominantly rural atmosphere, unlike the more formal public gardens on the continent, creating a contrast with the urban environment that became even more striking in later years when the parks' relative locations changed from peripheral

New York City's Union Square, about 1840.

to central as they were surrounded by urban developments. A much larger number of tree species was used in the parks than was the case along streets or in residential squares, including many of the "forest trees" deemed unsuitable for other urban uses, such as oaks *(Quercus)* and beeches *(Fagus)* and the occasional conifer, as well as a wide variety of smaller trees and shrubs.

In the independent United States of the 1780s, along with an increase in the number of street tree plantings in many towns, there was some movement toward establishing city parks and gardens. Around this time, the municipal government of New York City established the Battery, City Hall Park, and the cemetery in Greenwich Village that later became Washington Square. The 1790s saw a continued increase in planting, especially of the newly arrived Lombardy poplar *(Populus nigra* 'Italica'), which Thomas Jefferson had first encountered in France in the 1780s and ordered installed along Pennsylvania Avenue in Washington, D. C., when he was President. Although Lombardies were intensely disliked by some, they were planted in many cities to commemorate George Washington after his death in 1799, and most of the streets in New York and Philadelphia had at least a few of them by 1800.

By this time Americans had their share of all the forms of urban greenery used in Europe. Most towns had at least a bowling green, a pub-

lic park with shady walks, a seaside promenade, and perhaps a pleasure garden named after London's Vauxhall, Ranelagh, or Spring Garden. New York had the most complete ensemble, with its Bowling Green, Battery, City Hall Park; tree-lined streets (by the 1830s most major streets had rows of trees on both sides); several private pleasure gardens; and even a British-style residential square, Hudson Square, laid out in the first decade of the nineteenth century, with others like Gramercy Park and Washington Square following in the 1830s and 1840s. In Boston, the Common had had a mall since the 1720s; in the 1790s Charles Bulfinch created the British-style Tontine Crescent, modeled on the crescents of Bath and London, where he had studied architecture; and Britain's residential squares were imitated in Pemberton and Louisburg Squares, the latter still gracing Beacon Hill though closed to the public. And in the late 1830s the Public Garden had been added to the Common.[14]

Internationalization of the Western Urban Landscape in the Late Nineteenth Century

By the 1840s most cities in western Europe and America had begun to use a range of landscape forms that incorporated trees in the urban landscape and were accessible to the entire public. National differences still remained: residential squares were found in both Britain and America, but Americans planted trees along many inner

city streets, unlike the British. Formal gardens and tree-lined boulevards were most common in France. The tree-lined canals in Holland were still unique. Germany presented a more complicated picture with many different forms being used, some similar to French models, others more like the British. But almost everywhere the most common forms were shared: tree-lined promenades, large public parks and gardens, and small plazas and squares. The language of urban design had become as internationalized as the languages of architecture or painting. Each new urban expansion or redevelopment used more cosmopolitan forms than had the preceding ones, and by the 1850s there were fewer and fewer differences among the new sections of most cities, be they in France, Germany, or the United States.

The renovations of Paris in the 1850s and 1860s under Baron Eugène Haussmann brought all these forms together in one urban setting and created a model that exerted a powerful influence on urban designers throughout the world in the next half century. Haussmann's methods of renovation were incorporated into the Beaux Arts style of architectural and urban design that was used throughout the Western cultural realm, including foreign colonies of Europe and America. The style influenced cities as varied and far-flung as Chicago, Manila, Rome, Buenos Aires, Saigon, and New Delhi. It brought together combinations of allées, boulevards, parks, gardens, and squares in ways that differed widely but were recognizable to everyone as variations on a single theme: the use of trees and green spaces in public landscapes to frame and integrate new kinds of urban architecture and provide a new urban way of life.

Endnotes

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