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Parallel and overlapping temporalities of city fabric, the New York Parkway Odyssey: 1870s-2000s

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ABSTRACT

By revisiting its history from 1870 down to the present, this essay examines the role played by the figure of the parkway - both as idea and as object - in the urban development of the New York metropolitan area. It is the "Odyssey" that interests us here: from the emergence of the Brooklyn parkways designed by Frederick Law Olmsted and Calvert Vaux, to the invention as a total project of the first modern parkway along the Bronx river, from the deployment of a system of regional parkways planned by Robert Moses in the 1930s to its obliteration in the face of the prominent development of highways, followed by the first attempts to rehabilitate historic parkways in the 1970s, when the city was going through a major crisis. Today, the renewed interest of designers and historians has made the parkway an important part of the heritage of urban planning, confronted with major projects and operations that mobilize different scales, uses and disciplines, between conflicting urban policies and temporal shifts. By looking back on its history and projecting its future, the inventory of the New York Parkway history provides valuable lessons with regard to the global changes affecting the contemporary city.

KEYWORDS: New York planning history, infrastructure, parkway, highway, temporalities, narratives, landscape architecture, urbanism, heritage

Introduction: The parkway as idea and object

“Broadly speaking, parkroads are roads to, through or in parks²”. This is how the landscape architect Charles Eliot (2nd) introduced the “parkroad” in a 1922 article published in the *Landscape Architecture* review, and entitled “The influence of the automobile on the design of parkroads”. The broader acceptance of the term parkway, first coined in 1868 in two words (park-way) before being merged into a single word, conferred it with an elastic meaning as witnessed by the various functions attributed to it from when it first appeared – i.e., recreational and circulatory uses, at urban and regional level – and its fit at the juncture between different design and planning disciplines, from civil engineering to landscape architecture. This polysemous nature explains why parkways look different from one city to the next precisely because of the way in which they are embedded in their own specific urban context. As John Nolen and Henry Hubbard wrote in 1937:

What is a parkway? How does it differ from a boulevard, or an avenue, or a highway beautified with trees? These terms and many others have been so loosely applied and have crystallized by custom as the names of such different things in different places, that nothing but specific local knowledge will make it safe to apply to a “parkway” in one town what has been learned about a “parkway” in any other town³.

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² Eliot, « The influence of the automobile on the design of parkroads », 27

³ Nolen and Hubbard, *Parkways and Land Values*, XI-XII

In describing causalities, scales and narratives in terms of how infrastructures are rooted in their urban environment, we can make sense of cities and their temporalities, representations and practices. This is the purpose of this essay which, by revisiting its history from 1870 down to the present, examines the role played by the figure of the parkway – both as an idea and an object – in the urban development of the New York metropolitan area whose growth has been shaped by a series of historic infrastructures including elevated railroads, port areas and parkways.

The importance of the parkway in New York metropolitan history may be gauged firstly in the pioneering achievements that have left an indelible mark on the cityscape, i.e., the first parkways designed in Brooklyn in the 1870s, the regional parkway system laid out in the 1930s or the projects currently under review to redevelop the historical Bronx River and Henry Hudson parkways. It can also be appreciated from the manner in which the idea of the parkway maintained a dialogue with the urbanism of the city. The milestones we will cover will provide an overview of the parkway's successive eras, clarify its origins, understand its effects and identify the underlying representations. They correspond to phases in the expansion of New York City and they are both an integral part of, and the witnesses to this process. What the city *says* about the parkway; what the parkway *does* to the city: at each stage in its development, the parkway embraced an experiment that enabled the city to transcend its size and project its future. This pre-eminence is finally reflected in the writings and debates that publicized this form and gave it a central place in the history of the city through the many events, publications and exhibitions that helped to make it part and parcel of urban heritage from the 1970s on.

How can the prism of the parkway provide an understanding of the manner in which cities approach their planning? How can we account for the endurance and renewed use of this form in spite of regular failures and setbacks? Retracing the idea of the parkway – i.e. how it was given material form, its disappearance and reappearance - and identifying changes in what the notion meant and forks in its path, require a focus on the discourse and images that embodied the notion over time, to understand the underlying projects and the urban ideal that they embraced, and to pinpoint the mediations involved in these achievements. In so doing, by revisiting this long period, this article brings the visible and invisible heritage of this parkway Odyssey up to date and sheds light on its current urban relevance.

The corpus we drew upon for our research consists of a set of sources collected from different archival locations: from the New York Public Library and New York Municipal Records; from the archives of Frederick Law Olmsted kept at Fairsted in Brookline, Mass., where he lived and had his studio from 1883 until his death in 1903; from the archives of Robert Moses kept at the New York Public Library (the Robert Moses papers) and the Metropolitan Transport Authority Special Archives. An overview of articles published throughout the twentieth century until tomorrow in American architecture, landscape and planning reviews also constituted a secondary corpus used to analyze changing ideas about parkways among urban planning and landscape architecture professionals. This entire corpus treats the parkway as an *archive* of the city, marked by the different phases of intensification and acceleration, latency and concealment that have built its history. The ongoing issues raised by the research highlight its parallel and overlapping temporalities as well as the close and complex relationship with the city which, as the historian Bernard Lepetit stressed "is never in synch with itself"⁴.

⁴ Lepetit, "Le temps des villes", 11

Figures of the New York parkway: 1870s-2000s

The parkway was invented at a time when the automobile – ‘the horseless carriage’ – was in its infancy. The term first emerged as ‘Park-way’ in a statement entitled “Observations on the progress of improvements in street plans” and written in 1868 by Frederic Law Olmsted (1822-1903) and Calvert Vaux (1824-1895) to discuss the future thoroughfares that would need to be laid out in Brooklyn following the opening of the new municipal park, Prospect Park⁵.

Beyond the city boundaries: the origins of the parkway

Olmsted and Vaux had already attained a certain renown by 1858 when they successfully tendered for the future Central Park edification. By the mid-nineteenth century, New York was a significant commercial metropolis that already went as far as 42nd Street, while Manhattan, the most populous borough, already had 500,000 inhabitants (only 60,000 people were living there in 1800). While the orthogonal grid in the Commissioners' Plan of 1811 helped to urbanize the land extensions, parks were notably absent from this accelerated development programme. The Plan only contained seven small plots set aside for squares and gardens, or as Mayor Caleb S. Woodhull recalled in 1850, the equivalent of one quarter of one of the biggest London parks⁶. Speculative urban development and shortcomings in the grid plan gave rise to a debate that pitted supporters of a network of small scattered parks against advocates of a major park – a metropolitan amenity that would keep pace with the size of the city and its future expansion. The competition that Olmsted and Vaux were to successfully tender for was part of the campaign conducted by those who supported this second alternative⁷.

Olmsted’s roles as landscape architect and social critic need to be considered together and they resulted in him being supported by a group of reformers who had understood that the *cityscape* would forge the image of the nation. He was close to the Democrat Andrew Haswell Green, Chairman of Central Park Commission from 1857 to 1871, who was to play a dominant role in the creation of Greater New York. Olmsted also struck up a friendship with James S.T. Stranahan, Head of Brooklyn Park Commission, putting him in charge of Prospect Park and its future parkways⁸.

The seminal text “The Park-way” reflected an urbanophile vision based around an observation of the spontaneous urbanization taking place in European and American cities marked by a strong correlation between booming cities and fading ties between urban centres and their regional environment. “Evils of town-life have diminished as towns have grown larger⁹ ». Far from criticizing big cities, whose relentless march they observed, the authors advocated their ‘enlargement’, an idea which Olmsted developed in a new statement entitled “Public Parks and the enlargement of towns” (1870). The idea of public parks reflected a city planning approach that incorporated park complexes as part of the founding structures of future cities, conducive to a pastoral urban lifestyle. “The park should, as far as possible, complement the town. [...] What we want to gain is tranquility and rest to the mind¹⁰.”

⁵ Olmsted and Vaux, “The PARK-WAY”

⁶ Carr, “The parkway in New York City”, 126

⁷ Weil, *Histoire de New York*, 118-121; Maumi, *Usonia*, 83-84

⁸ Fein, “Parks in a democratic society”, 26

⁹ Olmsted and Vaux, “The PARK-WAY”, 15

¹⁰ Olmsted, “Public Parks and the Enlargement of Towns”, 81

One of Olmsted and Vaux's watchwords was anticipation. Because they believed urban expansion was set to accelerate, because Brooklyn and Manhattan would soon form a single community due to the enlargement of the port area and its advanced urbanization, it was necessary to plan for the future needs of this expansion and mitigate the risks of speculation that could spoil future opportunities. As Olmsted declared in relation to Central Park:

It must be remembered, also, that the Park is not planned for such use as is now made of it, but with regard to the future use when it will be in the centre of a population of two millions hemmed in by water at a short distance on all sides [...]¹¹.

In other words, the peripherally-located park of the present would become the centre of the city of the future. This inversion would also extend to the 'Parksystem', a series of natural and recreational amenities comprising parks and parkways, intended to redraw the boundaries and forms of the city of tomorrow and become its fundamental structures. Within this perspective, the city is no longer just endowed with parks, it is designed *like* a park and Olmsted sought to 'civilize' the city by means of the landscape, deploying the parksystem like a city in reverse.

“With the determination of location, size and boundaries, should therefore be associated the duty of arranging new trunk routes of communication between [the park] and the distant parts of the town existing and forecasted¹².” The Parkway proposal – which was still being talked of in the singular – was submitted to Brooklyn Park Commission for the purpose of modifying the urban grid plan. Firstly, it was intended to facilitate access to the parks from the city centre and its suburbs. Next, it was about showcasing the attractiveness of the park by laying out the surrounding neighbourhoods. The Parkway became the backbone from which the city extended by providing city dwellers with close and accessible landscape amenities indispensable for the edification of 'Keen City Man'¹³.

The first examples in New York, the Brooklyn parkways, known as the Eastern Parkway – laid out between 1870 and 1874 – and Ocean Parkway – laid out between 1874 and 1876 – linked Prospect Park to Ralph Avenue, and Church Avenue to Seabreeze Avenue, respectively [Figure 1]. The Ocean Parkway, six miles long, reached the Ocean just opposite Coney Island. Both parkways were inspired by the Parisian and Berlin avenues including Unter den Linden Strasse and the Avenue de l'Impératrice (now known as Avenue Foch) which Olmsted had visited in the fall of 1859 during a trip to Europe. The design of the Eastern Parkway showed two large thoroughfares as well as lateral walkways bordering residential neighbourhoods. Thoroughfares were separated by a central "Park-way" landscaped with six lines of elms, maples and lime trees. [Figure 2 and 3]. While Olmsted intended these trees to provide “a shaded green ribbon”, extending the rural nature of the park into the city, the landscape architect reasoned in terms of the overall cityscape. He wanted to extend the parkway through the rich countryside around Brooklyn through East River up at Welfare Island (now known as Roosevelt Island) in order to link up with Central Park, thus anticipating the construction of Queensboro Bridge at this point on the river. Olmsted thus hoped that future urban development in north Manhattan would include a network of scenic roads along the banks of the Hudson and beyond, to the magnificent site of the Palisades on the opposite side of the river in New Jersey¹⁴.

¹¹ *Ibid*, 92

¹² *Ibid*, 83

¹³ Olmsted and Vaux, “The PARK-WAY”, 26

¹⁴ Landmarks Preservation Commission, “Eastern Parkway”, 1

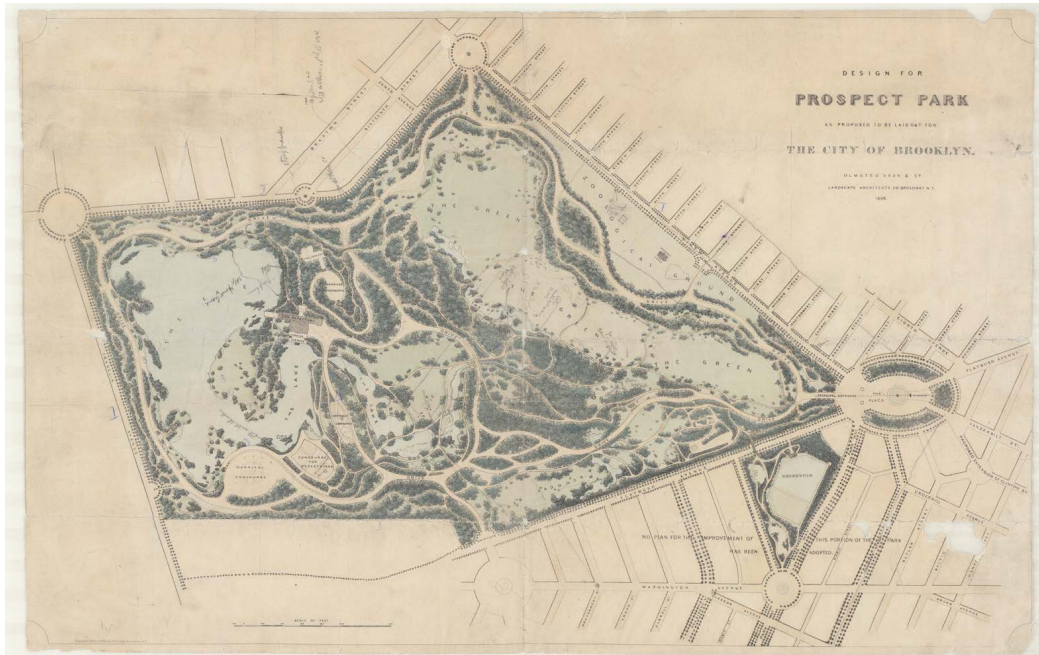


Figure 1. Olmsted and Vaux, Landscape Architects, 'Design for Prospect Park as proposed to be laid out for the City of Brooklyn', 1868; Courtesy of the United States Department of the Interior, National Park Service, Frederick Law Olmsted National Historic Site.

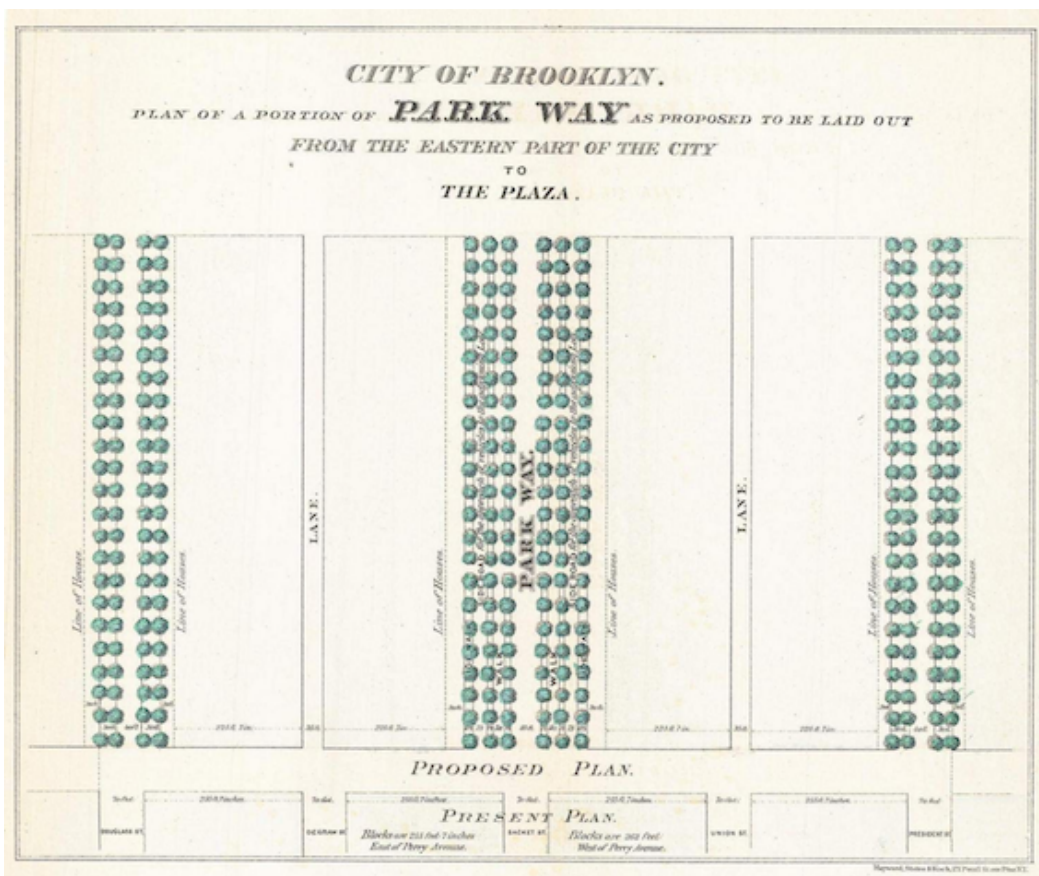


Figure 2. Plan of a section of Eastern Parkway, Brooklyn, First published in the 1868 edition of William Bishop's Manual of the Common Council of the City of Brooklyn, Source Wikimedia Commons.

Pending further recolonization of the hypercentre, park and parkway together traced out the boundaries of the Brooklyn Parksystem. As the “East Parkway” report published in 1873 stressed, “Prospect Park then will be as accessible from the lower portion of the city of New York as the Central Park, and the journey to the former will in all respects be far preferable¹⁵”. In actual fact, it would prove difficult both to use and control the thoroughfares and adjacent lands although many prestigious religious and cultural institutions, eager to make the most of the elegant new parkway, would relocate there. Although the City was delighted that these new thoroughfares would get commuters from Brooklyn to Manhattan City Hall in less than twenty minutes, the rapid transit systems being developed using rail and water-borne transport were connecting the different parts of the metropolis, accelerating the metropolization dynamic and triggering pressure on real estate that was very difficult for the City to control.



Figure 3. Ocean Parkway, Brooklyn, The new bicycle path, 1894. Courtesy of New York City Parks Photo Archives.

Gardens for the machine: the invention of the modern parkway

After Brooklyn, the Bronx was next to get new parkways and the major changing scale of these marked the beginning of a new era. This new borough was created in 1874 north of Harlem in a territory annexed from Westchester County (23rd and 24th wards). It would be incorporated into Manhattan in 1898 along with the three other boroughs of Brooklyn, Staten Island and Queens to form Greater New York, at that time the western world’s first metropolitan government.

The waterways, lakes, woods and views of these territories conferred them with exceptional qualities that led Olmsted – in association with the engineer James R. Croes – to pitch the idea

¹⁵ Olmsted, *The East Parkway and Boulevards in the City of Brooklyn*, 17

of a parksystem to the New York City Parks Department to help protect the natural resources and scenic nature of the sites in question. Fearing that the Bronx River might attract more industries that would use it as an open-air sewer, their report recommended creating a parkway all along the river. But the municipal councillors showed little enthusiasm for this, preferring to adopt a grid plan. This, added to the disagreements over the construction of Central Park, convinced Olmsted to leave New York and pursue his career in Boston where he would work with Charles Eliot on the Muddy River improvement scheme and the creation of an entire metropolitan parksystem, the Emerald necklace¹⁶. The bitterness that Olmsted felt was reflected in a pamphlet, “The Misfortunes of New York”, in which he criticised the lack of ambition for what he felt should have been “the plan of a Metropolis”¹⁷.

However, the preliminary studies carried out by Olmsted and Croes were not entirely in vain and their ideas were taken up by an influential group of citizens and elected representatives who wished to anticipate the consequences of suburban flight and the need for an ambitious planning policy. Their number included John Mullaly, Editor of the *New York Herald*, founder of the New York Parks Association in 1881 and author of *The new parks beyond the Harlem* (1887). Their efforts bore fruit in 1884 with the enactment of the New York Parks Act, which gave the green light for six new public parks located in the Bronx. All were within a half-hour train ride of Grand Central Station and the first three sites chosen – Van Cortlandt Park and Lake, Bronx Park and Pelham Bay Park – were way ahead of existing municipal parks in terms of their size and the quality of their natural and landscape features as well as their integration into a parksystem designed as part of a town planning framework. Their completion in 1888 was followed by the completion of Pelham and Mosholu parkways, and later by the Bronx River Parkway¹⁸.

This new parkway ran for sixteen miles along the Bronx River, from Bronx Park to White Plains in Westchester County up to Kensico Dam in Valhalla. Coordinated by the engineer Jay Downer (1877-1949), it was designed by landscape architects Hermann W. Merkel (1873-1938) and Gilmore D. Clarke (1892-1982) who enlisted the help of prestigious architects such as Delano and Aldrich firm [Figure 4]. At the ninth national City Planning Conference in Kansas City (1917), Downer highlighted the parkway’s territorial dimension:

The parkway was not laid out on a comprehensive city plan but constitutes in itself a large item of planning, and provides a main axis, or backbone for the development scheme of the important city and suburban territory which it serves¹⁹.

Construction of the parkway was intended to clean up the river that flowed through the zoo, the botanical gardens and the parks to the south, and to landscape the areas it went through, which were rich in natural resources and potential locations for future suburbanisation.

¹⁶ Zaitzevsky *Frederick Law Olmsted and the Boston Park system*

¹⁷ Olmsted, “The misfortunes of New York”, 45

¹⁸ “Report to the New York Legislature of the Commission to select and locate public parks in the twenty-third and twenty-fourth wards of the city of New York”, 7-8

¹⁹ Downer, “The Bronx River Parkway”, 91



Figure 4. ‘A general view of the Bronx River Parkway Reservation as a connecting parkway between the Park system of New York City, the Croton and Catskill watersheds and the Harriman and Palisades Interstate Parks’, Bronx Parkway Commission, 1918. Courtesy of the Westchester County Archives.

The organization chart of the Bronx River Parkway Commission showed the integration of the design professions involved, from arts to technology, from construction to plantations, from civil engineering to landscape architecture [Figure 5]. Both were combined in an original design where the parkway was conceived as a total project, intended to transcend nature, lived as a panoramic and recreational experience²⁰. Hermann Merkel stressed the need to showcase the river as the key landscape feature. He wished to present it as “a humanized naturalness” whereas the Bronx Parkway Commission, which was in charge of construction, promised a progressive environmental, recreational and suburban parkway design as stipulated in the

²⁰ Gandy, *Concrete and Clay*, 122

Bronx Parkway Act, which was included in the introduction to the annual reports tracking project progress between 1907 and 1925: “The parkway area also provides space for various park features including wooded areas, playfields and lakes for water sports, particularly swimming, canoeing and skating²¹.” Aside from the large area covered, the parkway’s modernity was apparent in two key features. Favouring exclusive access to recreational vehicles – and in certain areas only – was intended to ensure, without any interruptions for cross traffic, a smooth and continuous flow of traffic from the gates of the city out to the Westchester countryside; besides, the large perimeter left around the parkway was to make it easier to control its development and to reap the benefits of the higher property prices it generated.

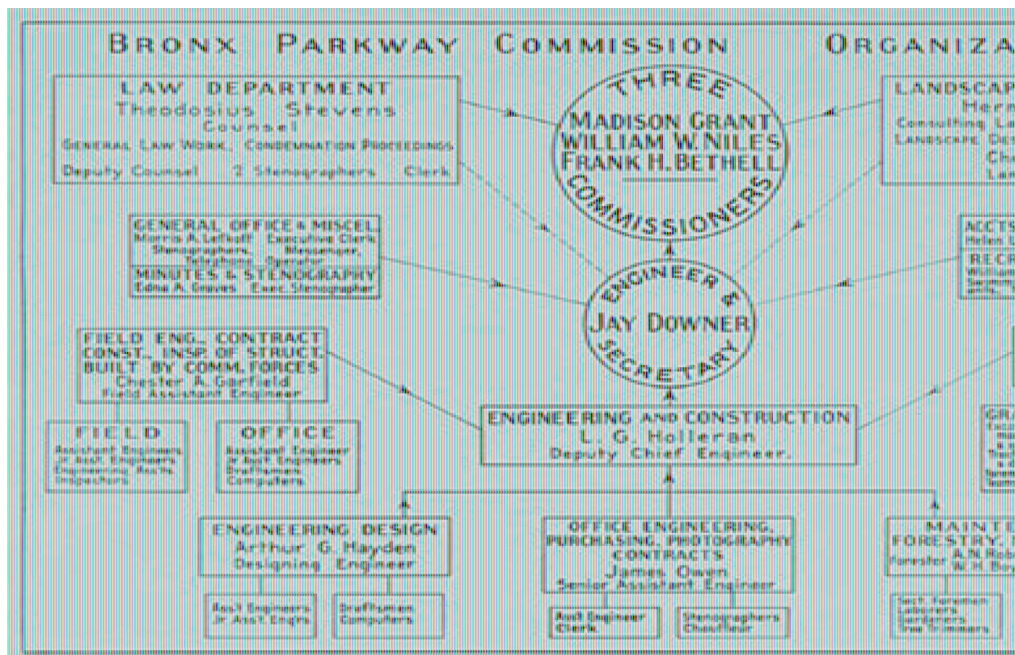


Figure 5. Organizational Chart of the Bronx Parkway Commission, 1919–1922 in Report of the Bronx Parkway Commission, December 31, 1922. Source New York Public Library.

The parkway took eighteen years to complete and cost 16.5 million US dollars. This long gestation period was due to difficulties in both raising funds to acquire land and cleaning up the river. Construction began in 1917, at a time when the entry of the United States into the WWI slowed the momentum and the price of land still-to-be-acquired increased. Upon completion in 1922, the opening of the first mile of the parkway was a big success and quickly became a popular destination for nocturnal outings and summer swims [Figure 6]. Nevertheless, while the integrity of the site was not to be sacrificed to private interests, demands for a parkway designed as an open air leisure amenity triggered conflicts between protectors of nature and promoters of urban recreational facilities. The former objected to the proposed amenities – play areas, baseball diamonds and tennis courts – which the latter considered essential to sustaining the popularity of the project, provided they could not be seen from the parkway. Evoking the Promethean myth of technology, Charles Eliot 2nd was already anticipating the success to which the parkway idea would fall victim:

The whole countryside has become the motorist’s park. [...] I cannot help wondering whether this may not be but another case where man in his inventions has outstripped his ability to control them. [...] Are automobiles and the other concomitants of the rush of life to govern and control our art²².

²¹ Report of the Bronx Parkway Commission, 31st December 1917, 8

²² Eliot, 2nd, “The influence of the automobile on the design of park roads”, 28, 29, 37



Figure 6. Hand-coloured view of the Bronx River Parkway north from the Broad Street Viaduct in Mount Vernon, N.Y, circa 1920s, Courtesy of the Westchester County Archives.

The Parkway was inaugurated on 5 November 1925 in the presence of a number of notable personalities including the U.S. National Parks Director who compared it to the big, recently-protected natural parks of the West Coast like Mount Rainier, Crater’s Lake or the primary forest of Redwoods. The Governor of the State of New York, Alfred E. Smith was unable to attend but he sent his speech in which he described the inauguration as an ‘historic event’ and a ‘milestone’ in the development of the city and the State, lauding the visionary role of Olmsted and Vaux, the inspiration behind this major undertaking²³.

The introduction to the concluding report of the Bronx River Parkway was less emphatic and more forward-looking, stressing the limits of the undertaking, its reduced size and the importance of thinking big in the future. This concern was addressed as early as 1922 with the creation of the Westchester County Park Commission which looked into extending the Parksystem to the part of Westchester County lying north of the Bronx. New parks and parkways were planned down in the County’s valleys to showcase the region’s abundance of landscape, natural and water resources and plans were drawn up to extend the Bronx River Parkway by another forty-two miles. Over a ten-year period, eighty-eight miles of new parkways would be built outside the limits of Greater New York²⁴. [Figure 7].

²³ Report of the Bronx River Parkway Commission, 31st December 1925, 77

²⁴ Annese, “The impact of parkways on development in Westchester County”, 117-121

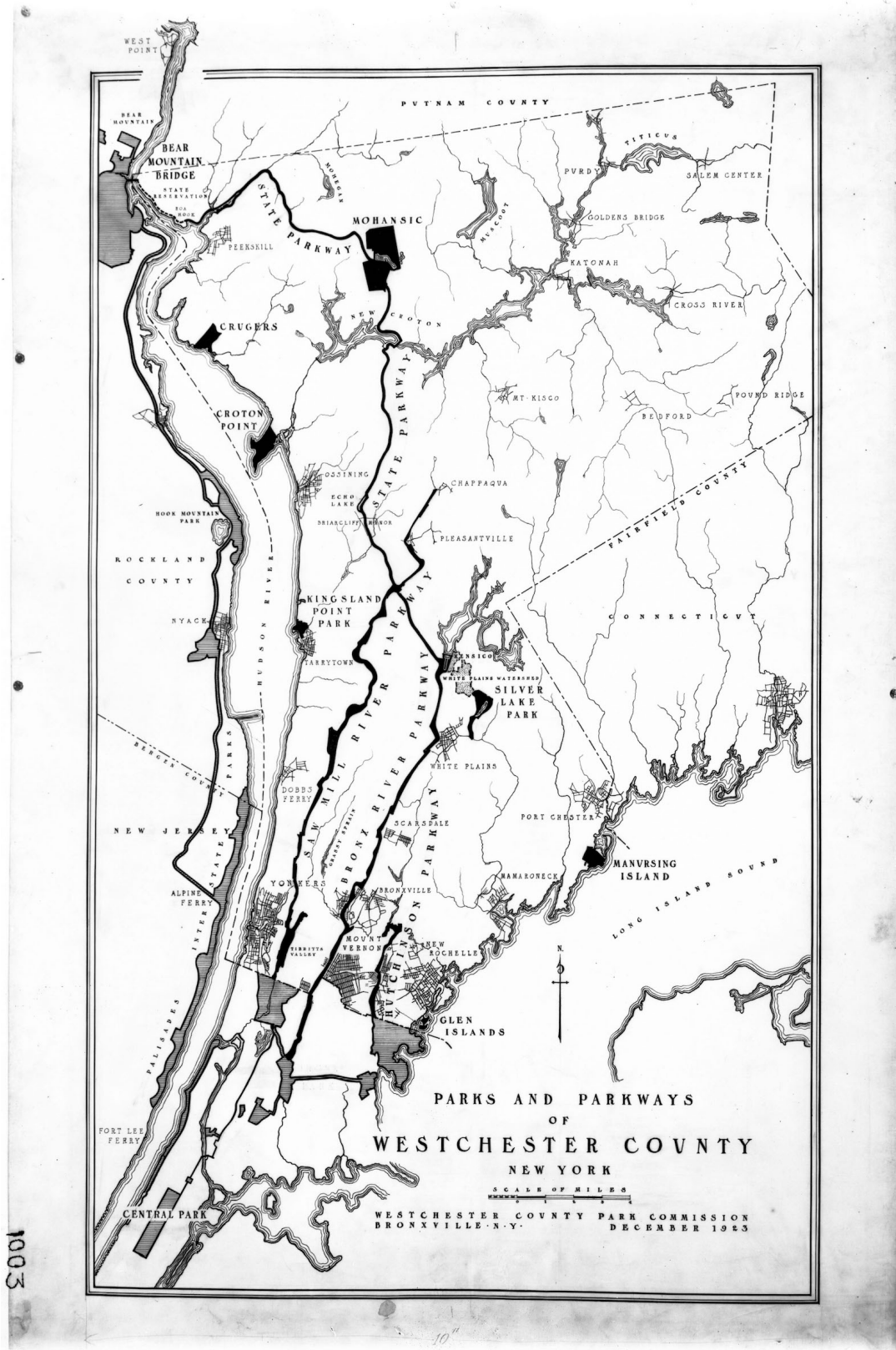


Figure 7. Westchester County Park Commission map of the parks and parkways in Westchester County, December 1925. Courtesy of the Westchester County Archives.

The change in scale that underpinned these developments can also be gauged by the suburbanisation dynamic they helped to sustain as automobiles – which were still fairly scarce when parkways were in their infancy – became more common throughout American society. Between 1920 and 1926, the total number of registered motor vehicles in the New York metropolitan region grew from 540 000 to 1 300 000²⁵. And in the summer of 1927, there were already 35,000 automobiles each day wending their way along the Bronx River Parkway at the week-ends and during holiday periods. Even as a pastoral image of parkways continued to be depicted in commissions and the media, the original idea – providing city dwellers with an opportunity to enjoy the pleasures of nature on the outskirts of town – paradoxically signalled a change in their nature. Indeed, the burgeoning metropolis rapidly spread out into rural areas and the pent up mass of automobiles gradually began to encroach on the landscape. At the end of the 1920s, Manhattan’s population was decreasing, Brooklyn continued to grow while the Bronx began to take off and the population of Westchester County swelled as successive waves of wealthy families moved out from the city centre²⁶. The Bronx became one of the most attractive suburban areas while the completion of the parkway pushed up land values, generating handsome gains for both the City and county on top of the taxes levied for the use of the amenities. As auto use increased and technological advances allowed for higher speeds, design changes will allow for greater traffic capacities, leading to alter the original conception of the parkway. [Figure 8]

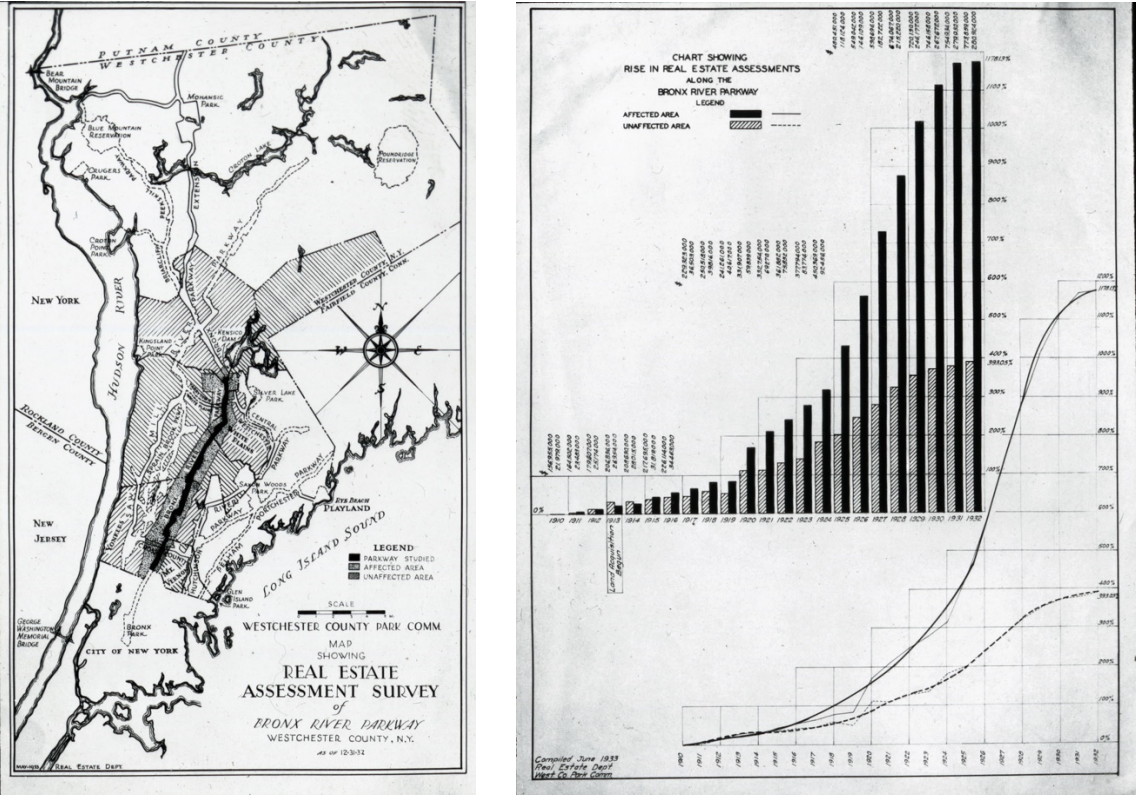


Figure 8. (a) Map highlighting the effects of Bronx River Parkway in real estate values in Central Westchester County, December 1932. Courtesy of the Westchester County Archives. (b) Chart showing real estate assessments along the Bronx River Parkway, from 1910 to 1932. Courtesy of the Westchester County Archives.

²⁵ Gandy, *Concrete and clay*, 123

²⁶ The population of the Bronx rose from 89,000 in 1890 to 1.4 million in 1940. Source Sutcliffe, *The Metropolis*, 328

Shifting paths: the regional metropolis

The Westchester parkways paved the way for the regional system set up under the Regional Plan of New York and its Environs, the first of its kind, drawn up at the behest of the Russell Sage Foundation under the leadership of Thomas Adams (1873-1940) who was appointed General Director of Plans and Surveys in 1923. This ambitious plan generated 470 recommendations that would be implemented by the Regional Plan Association (RPA), the first metropolitan agency to be founded in the United States in 1929²⁷.

Before it was actually set up, the Regional Plan was the focus of a sometimes bitter debate concerning different visions of what New York should look like in the future. The ideological opposition that pitted the ‘Metropolis’ against the ‘Region’ helps to highlight shifting approaches to planning in New York in the interwar period. Even though the Regional Plan was presented as an alternative to the speculative hyperconcentration affecting the Island of Manhattan, Adams sought out the means of preventing suburbanisation of the whole region. As the proponent of a “scattered recentralization”, he was opposed to the “radical decentralization” advocated by Lewis Mumford, who founded the Regional Planning Association of America (RPAA) in 1923. This association pioneered the garden cities of Radburn and Sunnyside Gardens. The dispute came to a head in June 1932 in the pages of *The New Republic* newspaper where Mumford pointed up the shortcomings of the plan. “The hope of the city lies outside itself”, he exclaimed, castigating Adams who believed that the future of the city lay in its “outlying fringe”²⁸. Although he did not underestimate the potential difficulties of a project as ambitious as the Regional Plan, Mumford – who qualified the harmful effects of the “compromises” adopted as “drifts” – highlighted the disparities between aims, concepts and actions and the failure to counteract the powerful economic forces at work on the city²⁹.

Projects for new parkways here must be understood in the changing context of a large metropolis faced with urban and suburban sprawl and, consequently, increasing traffic congestion. In this context, the development of coherent road networks emerged as a central challenge of the Regional Plan, to absorb commuting traffic flows and complement the overall rail-based public transport system. The role of parkways then appeared more ambiguous, even though the Regional Plan projected an ambitious system for New York and Long Island, Connecticut and New Jersey. In a speech delivered at the 19th national City Planning Conference in Washington (1927), Thomas Adams called for more Westchester-type parkways which he praised highly, as Mumford had already done. He claimed that these projects reflected his approach to “Metropolitan regional planning”³⁰. The extension of the system of parks and parkways was covered in studies carried out by the firm of Olmsted Brothers where Frederick Law Olmsted Junior (1870-1957) was principal consultant for the Regional Plan³¹. [Figure 9]

²⁷ Regional Plan of New York and its Environs (Adams, Lewis and Orton), *Vol II: The Making of the City*

²⁸ Mumford, “Regions – To live in”, 15

²⁹ Mumford, “The Plan of New York”, 125

³⁰ Adams, “Regional highways and parkways in relation to regional parks”, 180

³¹ Frederick Law Olmsted Junior was Frederick Law Olmsted’s son. In 1897, he set up the firm of Olmsted Brothers with his cousin John Charles Olmsted (1852-1920) who, following the death of his parents, had been adopted by Frederick Law Olmsted

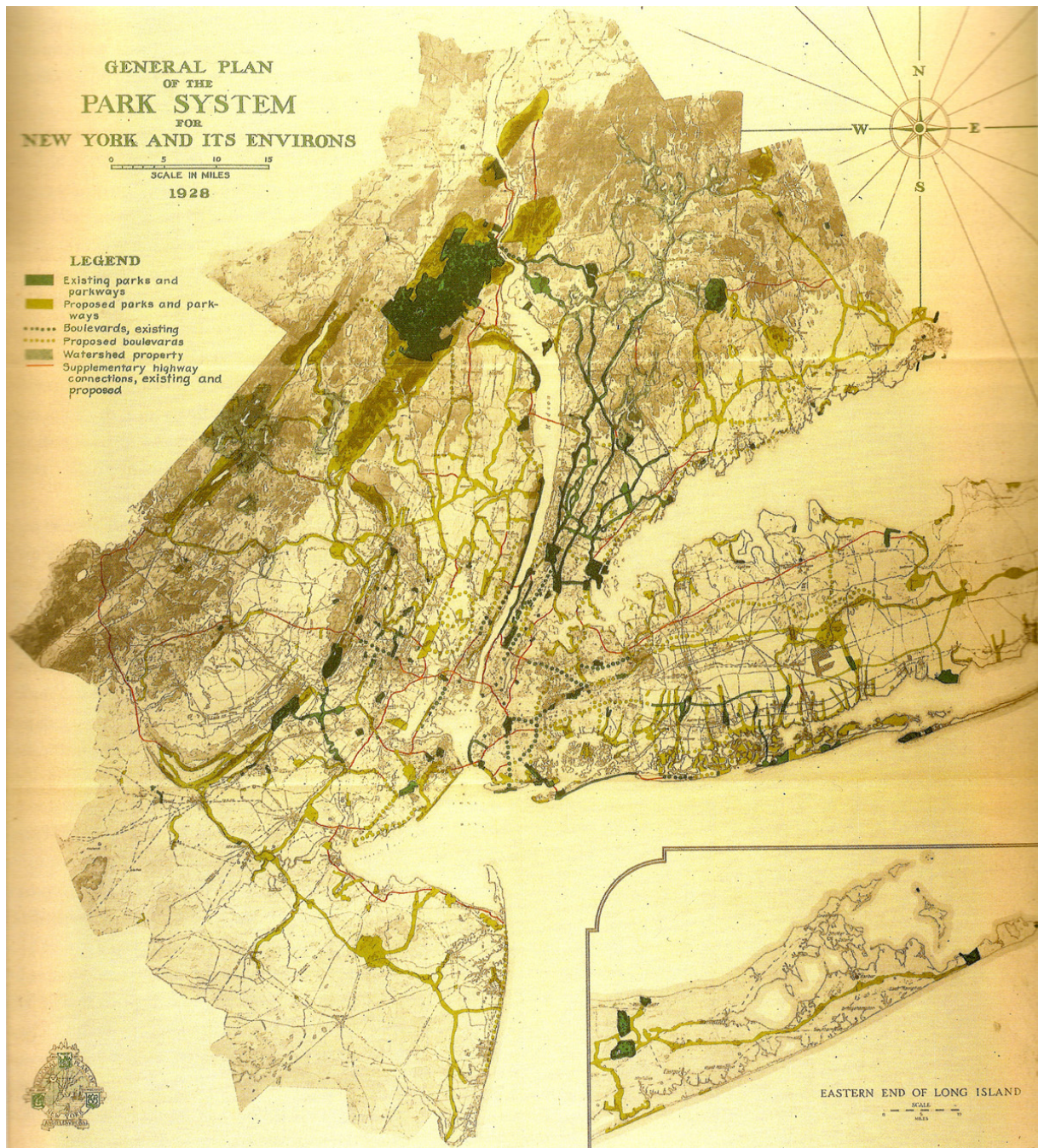


Figure 9. General Plan of the Parksystem for New York and its environs, Regional Plan of New York and its Environs, 1928.

However, associating the terms highway and parkway revealed a number of ambiguities as illustrated by the proposed “Highway system of parkways and parks” that appeared on a map drawn up by the Engineering Division under the heading of Transport³². This proposal aimed to respond to the explosion of commuter traffic that suburban rail and road networks had not been able to absorb. Following the example of the Westchester Parks and Parkways system, the plan argued for an integrated highway system, figured by diagrams and maps, which would combine and develop existing networks, offering “the most flexible forms of transportation”. “Highways serve a greater variety of human needs and enter more intimately into the social and

³² Regional Plan of New York and its Environs (Adams, Lewis and Orton), *Vol I: The Graphic Regional Plan*, 274-285

political structure of communities than railroads or transit lines. [...] They should be coordinated with the means of communication by rail³³.”

The confusion introduced by the Regional Plan was deliberate at a time when highways, freeways and parkways were being deployed in a competitive manner as vehicle ownership rates in the United States began to soar. They reflected the shifts in how their functions and purposes were being represented. The parkway was variously being depicted as a link between large parks, a green-verged highway or a traffic thoroughfare. The mechanisation that was turning parkways into freeways was becoming apparent while highways could be requalified as parkways by merely having a few trees planted along their verges and following a curved trajectory. Such confusion was fueling a debate that regularly played out in professional publications. In 1932, Gilmore Clarke, who continued to work on the parkways of Westchester County with Jay Downer, published an article in the *American Magazine of Art* entitled “Our highway problem”. He called for application of the aesthetic principles of the parkway as a means of reforming the highway model being deployed. “All highways cannot be parkways, but they can be planned so as to utilize the important principles that obtain in parkway design³⁴.” In a new article entitled “Modern motorways”, which he published in late 1933 in *Architectural Record*, Clarke clarified his thoughts. “We must stop building arterial highways, as such and instead construct parkways for passenger cars and freeways for trucks, buses and passenger cars³⁵.”

The parkway projects being mooted during this period were part of an expansionist vision for building new ‘connections’ between urban, suburban and regional park systems at city and county level as well as at geographical region and state level. One of the promoters of this policy was Robert Moses (1888-1981), Chairman of the Metropolitan Conference of City and State Park Authorities. Beginning in 1924, as President of Long Island State Park Commission, he developed recreational possibilities on the peninsula to allow New Yorkers to make the most of the ocean shore and newly-created beaches. Moses was also the head of the Triborough Bridge and Tunnel Authority up until 1960. The abundant toll revenues generated by the three bridges would be used to fund the expansion of the New York parksystem. In 1934, he was given the reins of the City Parks Department by the newly elected mayor Fiorella La Guardia, who Moses managed to persuade to consolidate control over all five New York boroughs.

These large responsibilities, extended to state and municipal parks departments as well as authorities responsible for strategic bridges and tunnels, gave Moses extensive power over the future of the metropolis, a power that was to grow further with the Federal support provided by the New Deal. During this period, Moses was not in charge of highways, which were tightly controlled by engineers from the State Highways Department and the Federal Bureau of Public Roads. But his expanded vision of parkways and their role in the New York's metropolitan highway system would establish him as a major player leading to a change in the very nature of the parkways³⁶.

It is now proposed to extend [the modern parkway construction] into the heart of the city and to offer an effective substitute for present bottleneck city streets, tying together the parkways in the various boroughs making them one unified system³⁷.

³³ *Ibid*, 210-216

³⁴ Clarke, “Our highway problem”, 290

³⁵ Clarke, “Modern Motorways”, 430

³⁶ Gutfreund, “Rebuilding New York in the Auto age, Robert Moses and his highways”, 86

³⁷ Letter from Robert Moses to Fiorella La Guardia, 7th December 1937

At the same time as the parks system was being extended to the metropolitan region, new thoroughfares were being planned inside New York, similar to a reverse colonisation policy deployed by Moses from the City Parks Departments.



Figure 10. Henry Hudson Parkway, Interchange and Boat Basin, 79th street, ca. 1937. Courtesy Municipal Archives, City of New York.

The Henry Hudson Parkway in Manhattan was inaugurated in December 1936 [Figure 10]. Designed by Gilmore Clarke and architects Delano and Aldrich, the parkway runs along the Hudson River from 72nd to 125th street, before crossing Harlem and getting back on Bronx and Westchester parkways and continuing through to Saw Mill Parkway. The new parkway was lauded by Lewis Mumford as “the finest single piece of large-scale planning [...] since the original development of Central Park³⁸”. The opening marked a turning point that reflected the acceleration of the New York infrastructure programme which was largely financed by the Federal Government as part of the New Deal and the Public Works Administration. These new State funds, combined with the “Cash cow” of the Triborough Bridge revenues, would guarantee construction loans and secure additional borrowings, paving the way for accelerated road construction programmes. In just a few years, from 1934 to 1939, 325 miles of parkways were built serving more than 6,000 acres of beaches and parks. Saw Mill Parkway (1935), Henry Hudson Memorial Bridge (1936), Grand Central Parkway (1936), Henry Hudson Parkway (1937), Marine Parkway and Bridge (1937), Circumferential Parkway (1938) – the names of the new parkways were all chosen carefully and reflected local place names and a desire to differentiate themselves from highways which were assigned numbers by the States³⁹. [Figure 11]

³⁸ Quoted in Stern, Gilmartin and Mellins, *New York 1930*, 700, note 116

³⁹ Letter from Robert Moses to Reginald M. Cleveland, 11th May 1939



Figure 11. (a) ‘Robert (or I’ll resign)’; Cover of Fortune, June 1938. (b) « The Land of Moses, Map of New York City and Long Island, veined and freckled by Robert Moses’ parks and parkways », Fortune, June 1938

Construction of this regional parkway system anticipated and accompanied the suburban development of the city. Far from being intended merely for contemplation and wandering, the parks were primarily intended as places of leisure with amenities ranging from stadia to swimming pools and skating runs to baseball diamonds. And the parkways – criss-crossed by dense highways – were the channels through which this expansion in urban recreation flowed. As stressed by Robert Moses:

This is not just an automobile roadway, it is a narrow shoestring park running around the opening territories which have been dead, relieving the pressure on other parts of the city, connecting the city with the suburbs and the rest of the country, raising land values, encouraging building and spreading our population⁴⁰.

In 1937, Harvard University’s Regional Planning department, headed up by John Nolen and Henry Hubbard (the latter was a partner with the firm of Olmsted Brothers), published *Parkways and Land Values*, which drew up three studies on parkways for Metropolitan Boston, Kansas City and Westchester. They described the process of suburbanisation in which the parkways played an active role. The New York study drew upon the documents produced by the Westchester Parks Commission, stressing the spectacular increase in land and real estate values and the local tax base⁴¹.

New York versus New York: the decline of the parkway

Despite their mobilisation in favour of the war effort, the New York municipality and authorities were not about to disengage from planning for the future of their city. Indeed, during

⁴⁰ Letter from Robert Moses to the *New York Daily Mirror*, 3rd December 1938

⁴¹ Nolen and Hubbard, *Parkways and Land Values*

the War, they drew up the “Post-war program” under the impetus of Federal Government initiatives to devise major public works programmes and boost job creation⁴². Mobilizing multibillion dollars investments, the ambitious Federal Highway Program – linked to Federal Government support for home ownership – would finance the construction of thousands of miles of highways throughout the country, leading to a massive suburbanisation of American cities. Little by little, the automobile began to produce a world that included all things urban in its midst, what Kenneth Jackson termed ‘Drive in society’ or the ‘Centerless city’⁴³. Between 1950 and 1960, while the population of Greater New York stagnated at 8 million, that of the metropolitan area grew from 13 to 17.5 million inhabitants.

Moses – still in charge of parks and parkways – took on new responsibilities for building engineering works (bridges and tunnels) and major highways which he shared with the Port Authority, run by Austin Tobin. These programmes aimed to ‘complete’ network infrastructure in a vain attempt to put an end to increasing traffic congestion. Urban Expressways that had been planned before the War but shelved due to lack of funds were brought up to date, linking the roads along the Hudson and the East River via Mid- and Lower Manhattan. These projects were a testimony to the huge changes dictated by the massive volumes of traffic now travelling along roads while technical specifications reflected strict Federal regulations necessitating close cooperation between the State Highway Department and Federal Bureau of Public Roads⁴⁴. The Mid-Manhattan Expressway which had been mooted as early as 1926 as part of the Regional Plan, was once again put forward in the Post-war Program. It now comprised ten overhead lines ‘crossing’ the Lower East Side, Bowery, Chinatown, Little Italy and the future neighbourhood of Soho. These new arteries were intended not merely to enhance the performance of the highway network, but to facilitate urban renovation of the inner city thanks to the accompanying “slum clearance” operations. [Figure 12]

This new thinking of infrastructure marked a change in the nature of raised issues. Here the city was no longer considered as a *milieu* but as a *field* of application for the transport policies envisaged at larger scales, regional and federal. The massive increase in car traffic was combined with the codes and standards issued by traffic engineering and the need to create loops and thoroughfares for road systems that had their own logic. The shift from territorial to circulatory, from urban to federal, was reflected in the design of highways. Originally at level, giving a careful attention to the landscaping, the infrastructure was now thought in elevation or trench, designed as an interstate link whose gauges were expanding, conditioned by the growth of traffic and the needs for regional interconnections. Due to the duration and complexity of their implementation, as well as their spatial and social impacts, these ‘megaprojects’ had implications for the professionals who were in charge of their design. Integration of skills that prevailed before, was now shifting to a range of close partitions, in particular between traffic management and landscape practice.

⁴² Letter from Robert Moses to Holden A. Evans, 6th November 1944

⁴³ Jackson, *Crabgrass Frontier*

⁴⁴ Di Mento and Ellis, *Changing Lanes*, 91



Figure 12: Mid Manhattan Expressway, Circa 1950. Source: <https://www.nycurbanism.com/blog/2019/7/22/mapmondays-mid-manhattan-expressway>.

Widely supported by Federal programs, the colossal funding for infrastructure also produced important shifts. Alongside the all-powerful Robert Moses, city councilors, developers, builders and banks assert their omnipotence, the financial amounts at stake - whether it be the costs of the operations undertaken or the revenues expected from tolls - shifting the order of magnitude for issues and conflicts that would inevitably arise from highway projects in dense areas. As part of Interstate highway 95 along the East Coast, the construction of the Cross-Bronx Expressway lasted from 1948 to 1963. Originally planned in the Regional Plan as part of a huge metropolitan highway loop, it was symptomatic of the split between a vision of a modern highway network - promoting fluidity, safety, regulation and regional links - and the defence of community fabrics. The advent of this interweaving of roads and viaducts led to the displacement of populations and the destruction of some neighbourhoods in the Bronx.

Associated with the massive suburbanization that large American cities were undergoing, major national changes resulting from the social, economic, cultural and demographic transformations of the 1950s crystallized in the projects that Moses implemented in New York, leading to a significant alteration of the parkway aesthetics to adopt a more efficient and safer, less picturesque and attractive, expressway aesthetic. This shift was also the result of changes in the institutional and financial foundations of Moses' road building power. In 1956, with the new Federal Highway Act, 90 percent of construction costs were covered by Interstate highway legislation and Moses focused almost exclusively on projects eligible for these funds⁴⁵.

Just as in other big North American cities, these projects turned into hubs of intense opposition to 'the world' of the highway and its predatory approach⁴⁶. In New York, they underpinned the combat of Jane Jacobs, a journalist and community activist and the face of the battle to save Greenwich Village from the threatened destruction due to the Lower Manhattan Expressway project. In 1958, Lewis Mumford – an influential source of support – published an article entitled “The Highway and the City” in *Architectural Record*, denouncing the uncontrolled urban effects of highway building. [Figure 13] Castigating the “[triumphant] ideal of the suburbs, the antithesis of a real city”, Jacobs published *Death and Life of great American cities* in 1961 as an indictment of the urban planning ‘experts’ who she believed were responsible for urban erosion. Along with Mumford, other heavyweight allies would be recruited to the cause, including the New York Society of Architects and two associations, Artists against expressways and Lower Eastside Businessmen. With support from the media, a coalition was formed, soon to be joined by John Lindsay, a Republican Congressman who was running for mayor. When he eventually got elected in 1966, he officially shelved the project on July 16, 1968, marking the end of a bitter struggle during which Jane Jacobs was arrested for breaching the peace⁴⁷.

The issue of highways penetrating into town centres filled the pages of the Transport section of the Second Regional Plan launched in 1959 under the aegis of the Regional Plan Association and finally approved in 1968. The massive urban dimension was reflected in the aerial portrait of the region taken from 35,000 feet and presented in the introduction. “Atlantic Urban Region” and “Super-city or a chain of cities” were the terms introduced by the landscape architect Christopher Tunnard and the planner Boris Pushkarev to describe the urbanisation of the east coast of New York whose population was set to reach forty-two million. The Plan was more than just an alternative and presented itself as a critique of an entire approach, highlighting the whole question of ‘need’ as frequently expressed in an ‘elastic’ manner by the proponents of highways with a view to influencing decisions. It concluded that: “The only hope for improving autospeeds is to increase speeds, convenience, frequency and comfort of subways, buses and railroads. Therefore, the Second Regional Plan proposes no added automobile entries to the Central Business District⁴⁸”.

⁴⁵ Gutfreund, “Rebuilding New York in the Auto age, Robert Moses and his highways”, 90-91 ; Bromley, “Not so simple! Caro, Moses and the impact of the Cross-Bronx Expressway”, 25.

⁴⁶ Miller, “Expressway Blight”; Berman, “Robert Moses: The expressway world”; Gray, McCullough, Obenhaus, “The world that Moses built”

⁴⁷ Mumford, “The Highway and the city”; Jacobs, *Death and life of great American cities*; Di Mento and Ellis, *Changing Lanes*, 157-160

⁴⁸ Regional Plan Association, *The Second Regional Plan, A draft for discussion*, 82

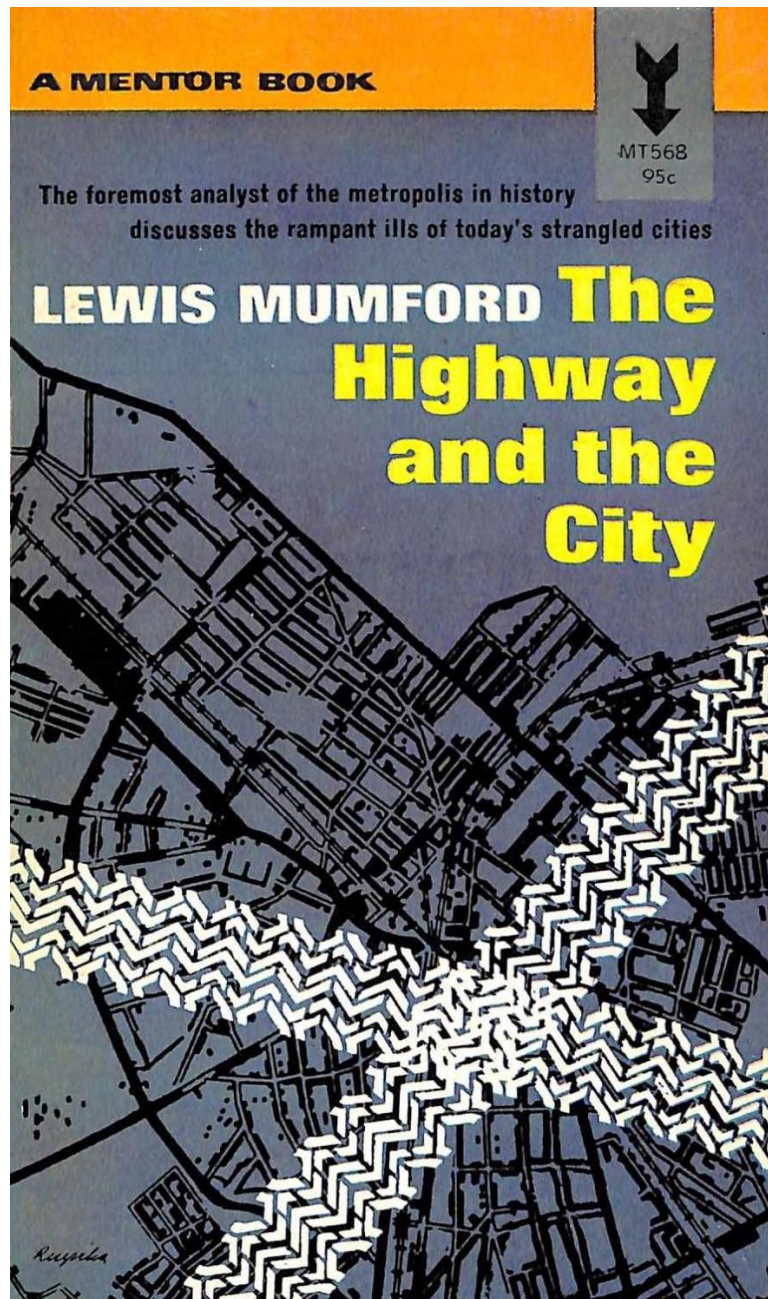


Figure 13. Lewis Mumford, *The highway and the city*, 1963.

What became of the idea of the parkway during this phase of urban expansion and changed trajectories for roads? It appears to have disappeared from practices amid the feisty battles that punctuated Expressway projects – rejected as anti-urban – or in the deployment of Federal Highway networks – presented as state-of-the-art techniques. Despite being one of the biggest cheerleaders of the New York highway-building programme, Moses still remained attached to his initial prerogatives of parks and parkways which he continued to manage, aware of their mobilization potential. He used the platform of an expanded parksystem to continue to develop his new projects. As Robert Caro puts it in a critical biography of his achievements: “Whether or not he so intended, he turned parks, the symbol of man’s quest for serenity and peace, into a source of power⁴⁹.”

⁴⁹ Caro, *The Power Broker*, 256

The shift from end purpose to alibi is apparent in the way in which the new key players in highway building – traffic engineers – seized upon the idea of the parkway as a means of tackling congestion from a perspective that was more utilitarian than territorial. The actions of landscape architects were even trickier as they were asked to contribute to these new structures in a more minor role as Stanley Abbott acknowledged, although he nevertheless appealed for increased ‘collaboration’:

Our impact upon highways will be measured by our ability to promote broader concepts of land use and control [...] or measured by our part in building popular recognition that complete highways are more than pavements and drainage ditches⁵⁰.

The article published in 1958 in *Landscape Architecture* by Nelson M. Wells under the title “The parkway influence on highway design”, stressed the virtues of the parkway and went further in the necessary reaffirmation of the position of landscape architects within the professional sphere of roadbuilding⁵¹. This was also the view of the engineers William Bugge and William Snow, who published a collective work, *The highway and the landscape* in 1959. In it the authors introduced the notion of the “Complete highway” as part of an evolutive vision of the direction in which the parkway idea would be reappropriated to recreate the highway and avoid earlier mistakes⁵². This work also included an article by Gilmore D. Clarke, “The idea of the parkway”, calling for a “total design” that would renew the parkway by leveraging history. It was first and foremost the extreme attention to detail that he highlighted in the design of the Bronx River Parkway, which he believed had remained unaltered since its creation – constant attention to detail that is also apparent *vis-à-vis* its geography. In particular, Clarke does not simply adhere to a vision of “road beautification” that may suffice to keep their colleagues happy. “The artistry of the complete highway is not superficial [...]. The artistic highway will become an intimate and integral part of the terrain it traverses⁵³.”

This is the perspective that Christopher Tunnard wished to promote in *Manmade America: Chaos or control?*, which he published in 1963 with Boris Pushkarev. He devotes an entire section to roadbuilding aesthetics under the title, “The paved ribbon, The aesthetic of freeway design”. “The paved ribbon should neither destroy the landscape nor be hidden in the landscape. Rather, it should accentuate its character by a firm, yet sensitive, alignment⁵⁴.” Here again, the authors stressed the exemplary nature of the Bronx River Parkway in support of this contention, highlighting the importance of an approach to highway design that focuses on detail and freedom of design to produce a unique and refined object. This stated preference for “the aesthetic entity” as opposed to the “engineering solution” raised the whole issue of project management and the authors were quick to recognise the inherent difficulties here given all of the different professions now involved in roadbuilding, i.e., landscape architects, engineers and planners. Finally, Donald Appleyard and Kevin Lynch, authors of *The View from the road*, a ground breaking study of the Boston highway bypass, spearheaded calls from the planning profession to reappropriate roads as ‘works of art’⁵⁵.

⁵⁰ Abbott, “Parks and parkways, a creative field when the task is to avoid creation”, 22-24

⁵¹ Wells, “The parkway influence on highway design”

⁵² Bugge and Snow, “The Complete Highway”

⁵³ Clarke, “The idea of the parkway”, 38, 46

⁵⁴ Tunnard and Pushkarev, *Manmade America*, 209

⁵⁵ Appleyard, Lynch, and Myer, *The view from the road*

Crisis and renaissance: parkway as a heritage

“An ugly traffic wall between the city and the river” was how Lewis Mumford decried what the Henry Hudson Parkway had become when writing in *The Time* in 1973, despite having roundly praised it when the parkway was inaugurated. This was the year that witnessed the completion of the World Trade Center and the first oil price shocks, one year after the publication of the Club de Rome report on “The limits to growth”, which issued a damning indictment of the consequences of productivism. It also marked the beginning of a major crisis in New York driven by urban, infrastructural, fiscal and political factors. In the face of major social and racial inequalities, the City was losing the middle classes and jobs, reducing its tax base at a time when needs were greater than ever due to crumbling, unmaintained infrastructure⁵⁶. This financial crisis in a city that could no longer make ends meet resulted in New York being placed under the care of the banks, ushering in seven years of austerity.

This crisis coincided with the publication in 1974 of Robert Caro’s monumental biography of Robert Moses, *The Power Broker*, which traced the spectacular rise, and the equally spectacular fall of the city. While the book – winner of the Pulitzer price - was very critical of the actions of the planner, whose tenure ended with a messy transition period, it remained fascinated by Moses’s personality. It translates the exaggeration of the embodiment of the city’s destiny by the ‘colossus’ Moses, both admired and hated to the highest degree, whereas many of his actions can only be grasped in the context of the changes and constraints that guided them⁵⁷. This personification was accompanied by the “renaissance” of another New York icon, Frederick Law Olmsted Senior. This almost Christ-like term of “renaissance” was chosen by the historian Albert Fein in recognition of the plethora of publications that had appeared since the 1950s, to which Fein himself contributed a number of essays on Olmsted’s environmental thinking⁵⁸.

The movement to confer Olmsted’s *oeuvre* with heritage status continued steadily into the 1970s with a whole collection of books marking the 150th anniversary of the landscape architect’s birth, celebrated by the City of New York with a number of exhibitions in prestigious locations⁵⁹. In 1970, the Metropolitan Museum staged “The rise of an American architecture, 1815-1915”, presenting the legacy of the park vision as the “fulfilment of the city”. A final sequence in the last gallery forcefully presented the tragic destruction of major parts of the city’s history to make way for highway programmes and urban renovation⁶⁰. In 1972, a major exhibition held at the Whitney Museum of American Modern Art, “Olmsted’s New York”, was rebranded “The New York that might have been” when it toured the rest of the country. At the same time, a retrospective of Olmsted’s work was being presented at the Washington National Gallery.

William Alex, who curated the Whitney exhibition along with Elizabeth Barlow Rogers, wrote of how Olmsted knew “how to rearrange nature without breaking it; to urbanize it intelligently, leaving it rationally connected to the big city⁶¹”. Many observers adopted a nostalgic tone, regretting a lost golden age and the fact that the urban and political circumstances that made such works possible probably no longer existed. However, cautioning against the pitfall of

⁵⁶ Gandy, *Concrete and Clay*, 52-59

⁵⁷ See Bromley, “Not so simple!”. Ray Bromley’s analysis of nearly 60 pages of Caro’s book devoted to the role of Robert Moses in the Cross-Bronx Expressway project showed this excessive propensity to designate Moses as “guilty” when the contexts and reasons were much more complex and multiple.

⁵⁸ Fein, *Landscape into cityscape, Frederick Law Olmsted’s plans for a greater New York City*; Fein, “The Olmsted renaissance, a search for national purpose”

⁵⁹ Jordy, “Going back to the father figure”

⁶⁰ Huxtable, “The tower, the house and the park”

⁶¹ Johnston, “Olmsted will be honored around country”

celebration, Carter Wiseman, in an essay entitled ‘The playground pioneer’, urged people not to lose sight of Olmsted’s guiding principles which were, in his view, even more acutely relevant for today’s ecology and urbanism, while the artist Robert Smithson, in an essay entitled “Frederick Law Olmsted and the dialectical landscape”, denouncing the image of a “lost paradise that deprives us of a solid dialectic”, called for the complete range of possibilities to be explored. “No more than any single person, nature is not a one-way process.”⁶²

In 1980, a fresh retrospective was presented at the Metropolitan Museum of Art, “The Art of Olmsted Landscape” at the initiative of the Landmarks Preservation Commission which had managed to get Ocean Parkway (1975) and Eastern Parkway (1978) listed as heritage sites⁶³. Aside from commemorations, it was the pioneering achievements of parkways that were again being rehabilitated. Bringing them back into the mix provided an alternative to the ravages meted out to the city and the region by highway building programmes. At the beginning of the 1980s, assigning them heritage status coincided with a number of critical studies analysing the transformation of parksystems and affirming the parkway as a retrospective narrative of the city while stressing the contemporary relevance of the idea⁶⁴.

In 1989, *Landscape Architecture* published a special edition entitled “Parkway design, a lost art?” [Figure 14]. This issue must be seen in the context of a meeting of the representatives of 28 organisations who were part of the American Association of State Highway and Transportation. “Why the classic parkways of the past still put most urban freeways to shame?” It was devoted to the art of the parkway and the first article by Benjamin Forgey delved into the origins of the parkway as a means of designing the future. The second article by Michael Leccese provided a retrospective of parkway creation, calling for a ‘Parkway manifesto’ as a means of reintegrating landscaping expertise, once again referencing Bronx River Parkway, denouncing the mistakes made in the wake of its manipulation, lauding the work of Robert Moses, and highlighting the responsibility of the engineers who unilaterally ruled over the infrastructures.

While the Moses reputation is recovering from that assessment, his parkway system has been under assault [...]. As of 1986, the New York State Department of transportation planned a total of \$187 million of ‘improvements’ that would eradicate some of those assets. [...] Now, however, the pendulum appears to be gently swinging [...] back toward parkway design⁶⁵.

The newly rediscovered values of the parkway and the possible alternatives they could represent in the face of highway chaos went hand in hand with increased heritage status. In 1992, a thirteen-mile section of the Bronx River Parkway was placed on the National Register of Historic Places, followed by a campaign to raise funds to renovate the parkway which had been greatly impaired by seventy years of service⁶⁶. This change in focus took place as part of a regional planning reset and the 1996 publication of the Third Regional Plan which now covered three States. The main title, “A Region at Risk”, set the tone for the rest of the report. One of the cornerstones of the ‘resilience’ trumpeted in the plan consisted of a “Greensward”, defined

⁶² Wiseman, “The playground pioneer”; Smithson, “Frederick Law Olmsted and the dialectical landscape”

⁶³ Goldberger, “Landscape as design: two shows focus on Olmsted”. Landmarks Preservation Commission, “Ocean Parkway, Borough of Brooklyn”, “Eastern parkway, Borough of Brooklyn”

⁶⁴ Laurence, “Olmsted landscape pales the actual landscape”; Rogers, “The Bronx Parks System, A faded design”; Cranz, *The politics of Park design*; Zapatka, “The American parkway, origin and evolution of the Parkroad”; Krieger and MacKin, “Il sistema dei parchi di Boston”

⁶⁵ Forgey, “Parkway design, a lost art?”, 47; Leccese, “Roadways recovered”, 49, 50, 51, 55

⁶⁶ Samuels and Carsky, cited in Melvin, “Bronx River Parkway: acting to save a dream”

as a regional infrastructure of forests, marshes and estuaries that set the “green limits for future growth”⁶⁷.

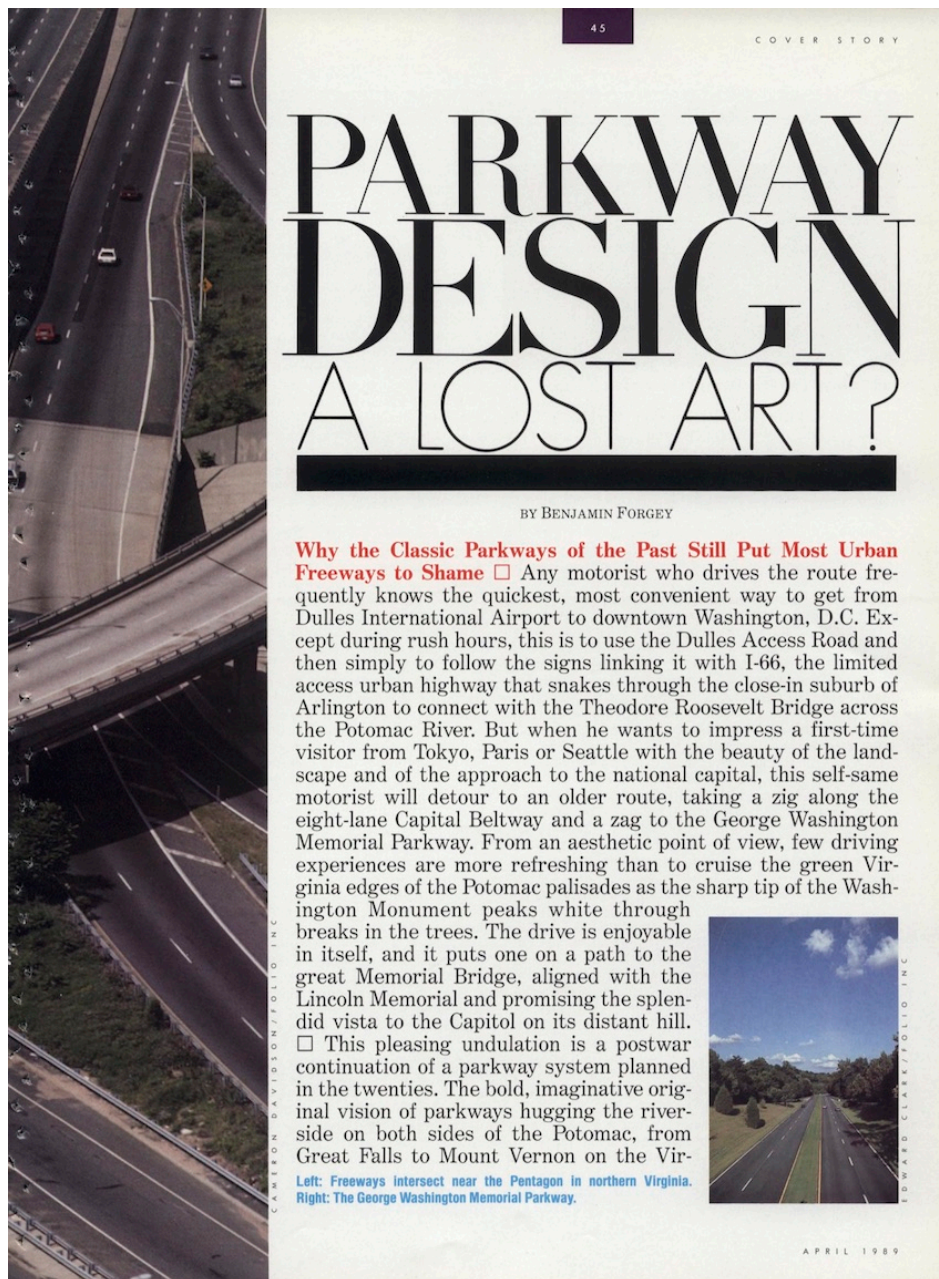


Figure 14. Benjamin Forgey, ‘Parkway design, a lost art?’, *Landscape Architecture*, April 1989. Republished with permission from *Landscape Architecture Magazine*.

“Rethinking Moses, what if New York’s notorious master builder wasn’t such a bad guy after all?”: in its edition of August-September 2002, it was the turn of the journal *Metropolis* to begin rehabilitating the “Power Broker”. He was the subject of a major exhibition in 2007 designed by historians Hillary Ballon and Kenneth Jackson at three locations that were highly symbolic of his work: The Museum of the City of New York, the Queens Museum of Art and the Wallach Gallery. The exhibition showed once again the controversial nature of Moses’ legacy, as evidenced by the controversy it sparked between Jackson and Caro - who did not take part in it

⁶⁷ Regional Plan Association, *A Region at Risk*

- with Jackson arguing that Caro had "demonized" Moses⁶⁸. [Figure 15] In the wake of this retrospective, the Museum of the City of New York hosted a new permanent exhibition, *New York at its core*, retracing the history of New York from its origins, the cycles of crises and rebirth it has endured, from the Great Depression through the 1970s together with more recent catastrophes suffered by the City such as the World Trade Center attack and Hurricane Sandy.

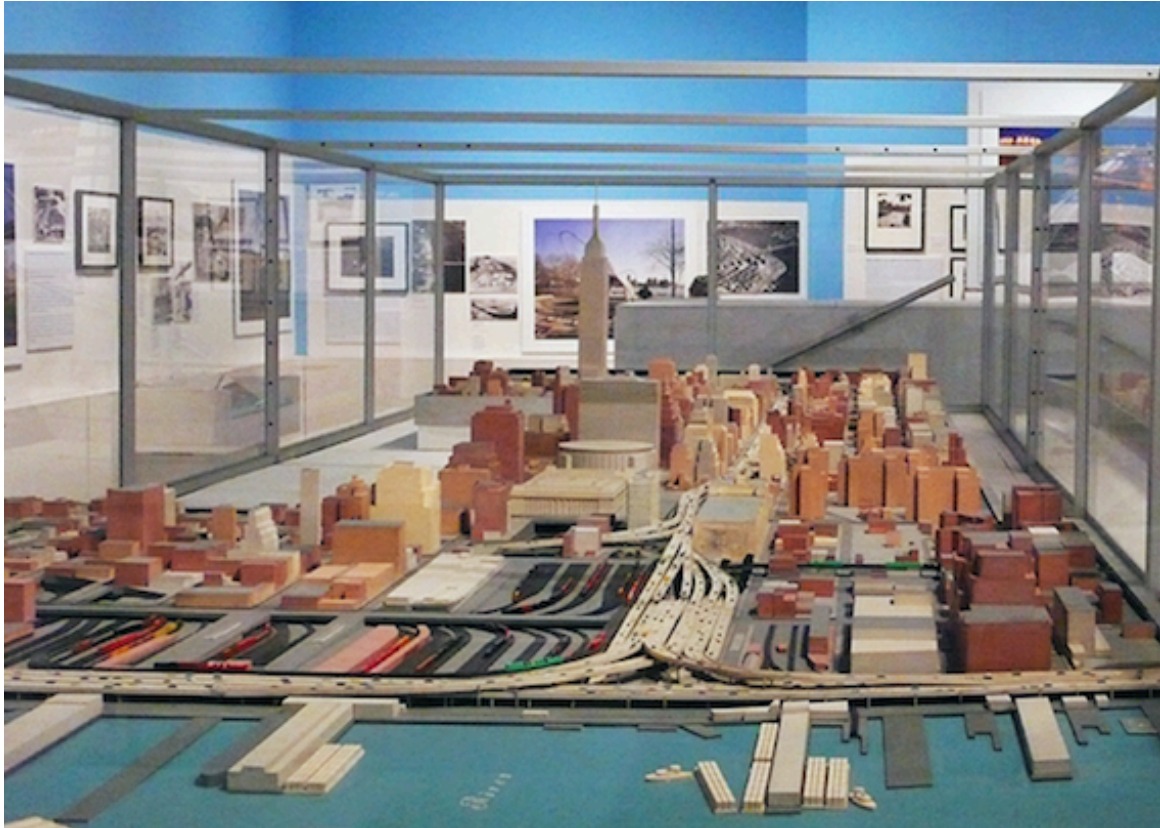


Figure 15. Exhibition ‘Robert Moses and the modern city, Remaking the Metropolis’, Museum of the City of New York, 2007. Courtesy of Pure+Applied.

The rehabilitation of Moses was accompanied by the promotion of his achievements, including the Cross-Bronx Expressway, which researcher Michael Caratzar considers a historical construction worthy of a preservation campaign. As David Gissen pointed out in the review *Quadrants*:

It may be the curators, preservationists, and historians – and not the engineers – that begin to recuperate the US’ infrastructure both as a thing and an idea. This in turn, transforms what we understand both infrastructure and history to be⁶⁹.

The Henry Hudson Parkway in its turn was relabelled a “scenic byway”, the prelude to a long-term renovation project⁷⁰. ‘Rethinking’ was again the term employed by the historian Francesco Dal Co in 2010 in the introduction to the special edition of *Casabella* presenting a series of major projects inspired by the Landscape Urbanism school.

⁶⁸ Lopate, “Rethinking Robert Moses”, 42, 44, 46, 48, 50; Ballon and Jackson, *Robert Moses and the modern city*; Tonnelat, “Robert Moses (1888-1981)”

⁶⁹ Gissen, “Infrastructure preservation”

⁷⁰ “[The label initiative as a scenic byway] intended to encourage local communities to protect road corridors of outstanding scenic, natural, recreational, cultural or historic significance”, Source: State Department of Transportation. Morrone, “The most beautiful thing in the world”.

[Olmsted] made [nature] the object of his projects, having understood how designed nature can contribute to govern or orient processes of metropolitan development. [...] If it were to rethink the need to make disciplinary specificities more permeable, and to make the tools designers have developed, in pursuit of objectives that are all too often in disagreement, more compatible⁷¹.

Nobody doubts that upcoming projects to renovate Henry Hudson Parkway or the Bronx River Parkway will generate fresh debates that will need to be tackled in the light of these issues.

Conclusion: The future of the parkway in motion

At the end of this panorama, the figure of the New York parkway appears from several angles. First of all, through the many experiences that have embodied it: from the *formal* parkway designed to structure the urban extensions of Brooklyn, to the *pastoral* parkway, a planning instrument for the Bronx and Westchester; from the *comprehensive system* expanding the metropolitan area out into the region to the *pharmakon* renovating city centers or reassembling distended links. Beyond these achievements, the omnipresence of the figure of the parkway is apparent in the writings, debates and various projects. It has generated a whole series of supports to affirm its existence, consolidating another material culture, as Robert Smithson noted about the Olmsted retrospective at the Whitney Museum: "The maps, photographs and documents in catalog form and recently exhibited at the Whitney Museum of American Art are as much a part of Olmsted's art as the art itself⁷²".

Focusing on commemorating the 150th anniversary of Olmsted's birth gives some idea of the importance assumed by the figures of parks and parkways in contemporary urban thinking along with their endurance and renewal. 1972 marked the destruction of entire swathes of the inner city as part of highway building programmes and accompanying slum clearance operations just as the city was grappling with an urban, social, infrastructural and fiscal crisis. The context of emerging political ecology led William Alex, head of the scientific curator of the Olmsted exhibition, to say:

Just as the argument is being taken up all over the world as to whether man has actually succeeded in severing the links of the biosphere, the organic chain that binds his very existence on this planet, this country's, and perhaps the world's most important environmental artist-engineer, Frederick Law Olmsted, comes to take his place on the stage of history⁷³.

« [However], the danger is that we may so enshrine him as a heroic figure of a past age that his spirit may be lost to our own⁷⁴. » The celebration of Olmsted led observers to caution against the risk of relegating the vision of landscaping to a past era while in their view, it continued to be completely contemporary. After Olmsted, the time came to rehabilitate Robert Moses in exhibitions and books dedicated to his work which appeared at the turn of the new century. In a provocative vein, the editorialist Phillip Lopate wrote in 2002: « From my own ant's view perspective, [Moses] was one of the greatest heroes of the 20th century and one of our greatest Americans⁷⁵ ». Drawing upon Robert Caro's monumental biography, *The Power Broker*, Lopate highlighted the misinterpretations that have been made of this book together with the tendency in contemporary urbanism to look for "the good guy and the bad guy" and recount

⁷¹ Dal Co, "Landscape architecture", 98

⁷² Smithson, "Frederick Law Olmsted and the dialectical landscape", 119

⁷³ Barlow Rogers, Alex, *Frederick Law Olmsted's New York*, 167

⁷⁴ Wiseman, « The playground pioneer », 105-106

⁷⁵ Lopate, « Rethinking Robert Moses », 48

“this Manichean tale – how Moses ruined or tried to ruin New York – [which] has indeed become the city’s Postwar master narrative, our Romulus and Remus Myth”⁷⁶. Unlike the simplistic narrative featuring a pantheon of exaggerated or fallen icons that personify the city's urban planning, a more nuanced analysis should focus on the contexts and foundations for the projects undertaken. In this perspective, exploring the archives of professional itineraries and the works produced is essential to understand "the city at present" that inherited the parkway and all the conditions in which its Odyssey unfolded⁷⁷.

The multiple causalities and contradictory forces that this *inventory* of the New York parkway brings to light reveal registers of temporalities whose explanation seems essential for understanding its possible futures. As such, the *relationship* that the parkway has forged with its urban environment is paradoxical insofar as this is both close – the figure of the parkway was deployed as part of the metropolitan metamorphosis – and distended insofar as the parkway is an object in itself with its own capacity to emancipate. Smithson emphasized this in his essay, “The dialectical landscape”, in relation to Olmsted’s parks when he reminded us that the time needed to carry out the landscaping, which was in essence unfinished and always in motion - “[remaining the place for] the unexpected and the contradiction on all levels of human activity, be it social, political or natural” - was not of the same order as that of the city itself⁷⁸.

In this dialectical relationship with the city, the global vision and unity of the parkway as a comprehensive territorial planning project has often come up against the fragmentation of its urban completion despite the capacity for anticipation and control stated from the very beginning of its design. This means that the realization of the design depends as much on the intentions underpinning its deployment as on the impact of contingencies on its trajectory. With overlapping scales, there are also coexisting functions between circulatory, recreational and suburban uses, sometimes in a conflicting manner. The ambiguous hygienist focus of this major planning initiative also had a social and political dimension as the park historian Timothy Davis has indicated in an essay on the use of photography by the Bronx River Parkway Commission to track the progress of its work. Between 1907 and 1925, the commission conducted a number of photographic campaigns to document changes in progress. Stressing the project’s ‘before’ and ‘after’, the iconography invisibilises the working classes, just a few paces away, who have been ‘displaced’ to make way for the future parkway to be used by better-off motorists⁷⁹. With the creation of a uniquely privatized form of public space, the naturalisation of the city adopts a dual perspective here: a physical clean and controlled landscape perspective bearing out the hygienist virtues of the project, and a political perspective of the social processes that underpin the whole initiative.

Another distortion arises from the discrepancy between expectations regarding exclusive use of the parkway conducive with pastoral evasion from everyday urban life and the reality of massive parkway use driven by the suburbanisation of the middle classes. By documenting the centrality of landscaping, the photographic corpus put together by the Bronx River Parkway Commission may be used to reconcile the potentially conflicting image of the automobile thoroughfare with the established visual taxonomy of “the techno-pastoral garden⁸⁰”. The gradual, staggered democratisation of the car was to ‘derail’ the model more than once. This was apparent in saturated parkways as the middle classes flocked to the recreational amenities created by Moses, or in the massive volumes of traffic on metropolitan parkways such as Henry

⁷⁶ *Ibid*, 42

⁷⁷ Mac Laughlin, “The environment: Olmsted’s Odyssey”

⁷⁸ Smithson, “Frederick Law Olmsted and the dialectical landscape”, 119

⁷⁹ Davis, “The Bronx River Parkway and photography as an instrument of landscape reform”

⁸⁰ Berman, 299

Hudson Parkway, decried by Lewis Mumford in 1973 whereas the edifice had been roundly applauded when it opened in 1937.

Despite these failures, the resurgence of the figure of the parkway is still apparent as shown by the new Landscape Urbanism school of thought based, as Bruno de Meulder and Kelly Shannon pointed out, on the heritage of the American parksystems in forging the notion of “Landscape-infrastructure”. The proponents of this line of thought militate for a “disciplinary realignment” that seeks to go beyond traditional professional and spatial divisions and to forge strong bonds with parkway heritage, which has fed a field modelled on interprofessional positions – between civil engineers and landscape architects, between planners and project stakeholders⁸¹. This debate over know-how and practices was especially intense in the eve of the Second World War when the parkway, a project originally based around the territorial landscape - in which the figure of the designer was powerful, emblematic of a combination of engineering science with the aesthetic sophistication of landscape architecture -, was transformed into a traffic and regional project that was forced to deal with society’s soaring vehicle ownership at the same time as it helped to amplify the phenomenon. Here, the dominant figure was the project stakeholder, embodied by Robert Moses, who favoured “performance” over “plan”, supported by the influential engineer⁸².

The disciplinary realignment that landscape urbanists call for is closely linked to the pacification of the tensions maintained by the necessities of traffic and the landscape culture, as well as the selectivity of the use of the parkway must be balanced with its emancipatory vocation. Social and environmental inclusion is a challenge for the future of urban infrastructures, which should compensate for the elitism of their use and its crowding out effects or the massiveness of their use and its attacks on the integrity of the environment.

As a key component of territorial planning and an enduring support for fluctuating mobility, the parkway achievements have been forged against sometimes dissonant temporalities - between narratives and uses, and between promises and projects. These mismatches between expectations and experiences help account for the phenomena of persistence and renewal apparent in the birth, invention, deployment, eclipse and renaissance of the parkway. The future of the parkway is of great interest for contemporary urbanism. Its ability to handle contradictions and clarify underlying aporias can bring us precious lessons regarding the major changes affecting contemporary cities.

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⁸¹ De Meulder, Shannon, « Traditions of landscape urbanism », 70; Palmboom, “Landscape urbanism, conflation or coalition?”; see also Hough, “Frederick Law Olmsted is holding us back (There I said it)”, 136-140

⁸² Moses, « Plan and performance »

Bibliography

- “Report to the New York Legislature of the commission to select and locate for public parks in the twenty-third and twenty-fourth wards of the city of New York, and in the vicinity thereof, according to the provisions of the Act of the Legislature of the State of New York, chapter 253, passed April 19, 1883”, New York, 1886, Source New York Public Library
- “Report of the Bronx Parkway Commission”, 31th December 1917, Source New York Public Library
- “Report of the Bronx River Parkway Commission”, 31th december 1925, Source New York Public Library
- “Ocean Parkway, Borough of Brooklyn”, Landmarks Preservation Commission, January 28, 1975, n°3, LP-0871, 2 pages, Source Columbia University
- “Eastern parkway, Borough of Brooklyn”, Landmarks Preservation Commission, August 22, 1978, Designation List 117, LP-0998, 6 pages, Source Columbia University.
- Robert Moses Papers, New York Public Library*
- Letter from Robert Moses to Fiorello La Guardia, 7th december 1937, Box 97, Folder 1937
- Letter from Robert Moses to the *New York Daily Mirror*, 3rd december 1938, Box 97, folder 1938
- Letter from Robert Moses to Reginald M. Cleveland, Automobile Editor, *The New York Times*, 11th may 1939, Box 97, Folder 1939
- Letter from Robert Moses to Holden A. Evans, Executive Secretary, Postwar Public Works Planning Commission, 6th november 1944, Box 98, Folder 1944
- Robert Moses, « Plan and performance », An address delivered by Robert Moses at Duke University, 10th April 1939, Box 136
- Abbott S.W., « Parks and parkways, a creative field when the task is to avoid creation », *Landscape Architecture*, octobre 1953, vol 44, pp. 22-24
- Adams T., « Regional highways and parkways in relation to regional parks », Proceedings of the 19th national conference on city planning, Washington DC, np, 1927, pp.175-180
- Annese D., “The impact of parkways on development in Westchester County, New York City and the metropolitan New York region”, in International Linear Parks Conference, *Parkways: Past, Present and Future*, Appalachian State University, 1987, pp.117-121. DOI: 10.2307/j.ctt1xp3kv8.2
- Appleyard D., Lynch K. and Myer J., *The view from the road*, Cambridge, MIT Press, 1964
- Ballon H. and Jackson K.T., Eds, *Robert Moses and the modern city, The transformation of New York*, WW.Norton and Company, New York, 2007
- Barlow Rogers E., Alex W., *Frederick Law Olmsted’s New York*, Praeger, 1972
- Berman M., “Robert Moses: The world of expressway” in *All that is solid melts into air, The experience of modernity*, Penguin Books, 1982, pp.190-312
- Bromley R., “Not so simple! Caro, Moses, and the Impact of the Cross-Bronx Expressway”, *The Bronx County Historical Society Journal*, Vol 35, n°2, Spring 1998, pp.4-29
- Bugge W.A. and Snow W.B., “The Complete Highway”, in Snow W.B., ed, *The Highway and the landscape*, Rutgers University Press, 1959, pp.3-32
- Caro R.A., *The Power Broker, Robert Moses and the fall of New York*, Vintage Books, New York, 1974
- Carr E., « The Parkway in New York City », in *Parkways; Past, present and future, op.cit.*, pp.121-128. DOI: 10.2307/j.ctt1xp3kv8.23
- Clarke G.D. « Our highway problem », *American magazine of Art*, Vol 25, November 1932, pp.286-290
- Clarke G.D., “Modern Motorways”, *Architectural Record*, December 1933, pp.430-437
- Clarke G.D., “The idea of the parkway”, in Bugge W.A. and Snow W.B., ed, *The Highway and the landscape, op.cit.*, pp.33-55
- Cranz G., *The politics of Park design*, MIT Press, 1982
- Dal Co F., “Landscape architecture”, *Casabella*, June 2010, pp.2, 3, 98
- Davis T., « The Bronx River Parkway and photography as an instrument of landscape reform », *Studies in the history of gardens and designed landscapes*, April-june 2007, Vol27, n°2, pp.113-141
- De Meulder B., Shannon K., « Traditions of landscape urbanism », *Topos*, June 2010, n°71, pp.68-73
- Di Mento J.F.C. and Ellis C., *Changing Lanes: Visions and histories of urban freeways*, MIT Press, 2013
- Downer J., « The Bronx River Parkway », *The Proceedings of the Ninth National Conference on City Planning*, New York, D.C. McMurtie, 1917
- Eliot C.W., 2nd, « The influence of the automobile on the design of park roads », *Landscape Architecture*, October 1922, pp.27-37.
- Fein A., “Parks in a democratic society, a hundred years of landscape architecture”, *Landscape Architecture*, October 1964, pp.24-31
- Fein A., *Landscape into Cityscape, Frederick Law Olmsted’s plans for a greater New York City*, Cornell University Press, 1968

Fein A., « The Olmsted renaissance, a search for national purpose », in Kelly B., Guillet G.T., Hern E.W., eds, *Art of the Olmsted Landscape*, Arts Pub, 1981, pp.99-109.

Forgey B., “Parkway design, a lost art?”, *Landscape Architecture*, april 1989, p.47

Gandy M., *Concrete and Clay, Reworking Nature in New York City*, MIT Press, 2003.

Gissen D., « Infrastructure preservation », *Quaderns*, n°262, Autumn 2011

Goldberger P., « Landscape as design: two shows focus on Olmsted », *The New York Times*, October 13, 1981, p.71

Gray E., McCullough D.G., Obenhaus M., « The world that Moses built », 1989, Documentary, New York, WGBH, <https://vimeo.com/340060890>

Gutfreund O., “Rebuilding New York in the Auto Age, Robert Moses and his highways” in Ballon H. and Jackson K.T., Eds, *Robert Moses and the modern city, The transformation of New York*, WW.Norton and Company, New York, 2007, pp.86-93

Hough M., « Frederick Law Olmsted is holding us back (There I said it) », *Landscape Architecture Magazine*, Février 2012, pp.136-140

Huxtable A.L., “The tower, the house and the park”, *The New York Times*, 17th may 1970, p.115

Jacobs J., *Death and life of great american cities*, New York, Random House, 1961

Jackson K.T., *Crabgrass Frontier, The suburbanisation of the United States*, Oxford University Press, 1984

Johnston L., “Olmsted will be honored around country”, *The New York Times*, 15th january 1972, p.33, 35

Jordy W.H., “Going back to the father figure”, *Landscape Architecture*, october 1974, pp.422-428

Krieger A. and MacKin A., “Il sistema dei parchi di Boston”, *Casabella*, September 1986, pp.42-53

Laurence P., “Olmsted landscape pales the actual landscape”, *Industrial Design*, January-February 1982, pp.55-56

Leccese M., “Roadways recovered”, *Landscape Architecture*, april 1989, pp.49, 50, 51, 55

Lepetit B., “Le temps des villes”, *Villes, histoire et culture*, Université des sciences humaines de Strasbourg, n°1, December 1994

Lopate P., « Rethinking Robert Moses, What if New York’s notorious master builder wasn’t such a bad guy after all? », *Metropolis*, August-September 2002, pp.42, 44, 46, 48, 50.

Mac Laughlin C.C., « The environment : Olmsted’s Odyssey », *Wilson Quaterly*, summer 1982, pp.78-87

Maumi C., *Usonia ou le mythe de la ville-nature américaine*, Paris, Editions de La Villette, 2008

Meadows D., Meadows D., Randers J., Behrens W.W., *The limits of growth*, Universe books, 1972

Melvin T., “Bronx River Parkway: acting to save a dream”, *The New York Times*, October 18, 1992, p. WC13

Miller R.A. “Expressway Blight”, *The Architectural Forum*, october 1959, pp.158-163

Morrone F., “The most beautiful thing in the world”, *The New York Sun*, January 17, 2006

Moses R., « The comprehensive Parkway system of the New York Metropolitan Region », *Civil Engineering*, March 1939, pp.161-162.

Mumford L., « Regions – To live in », *The Survey Graphic*, n°54, 1925 pp.151-152

Mumford L., “The Plan of New York” in *The New Republic*, June 15, 1932, pp.121-126, and June 22, 1932, pp.146-148

Mumford L., « The Highway and the city », *Architectural Record*, April 1958, pp.179-186

Nolen J. and Hubbard H.V. *Parkways and Land Values*, Cambridge, Harvard University Press, 1937

Olmsted F.L. and Vaux C., « Observations on the progress of improvements in street plans, with special reference to the PARK-WAY proposed to be laid out in Brooklyn », Brooklyn, 1^{er} janvier 1868, 30 pages

Olmsted F.L., « Public Parks and the Enlargement of Towns » [1870], in Olmsted F.L., Edited by Sutton S.B., *Civilizing American Cities, Writings on city landscapes*, New York, Da Capo Press, 1997, pp.52-99

Olmsted F.L., *The East Parkway and Boulevards in the City of Brooklyn*, New York, Baker and Godwin Printers, 1873, Source New York Public Library

Olmsted F.L., “The misfortunes of New York” in Olmsted F.L., Croes J.R., “Preliminary Report of the Landscape Architect and the Civil and Topographical Engineer, upon the Laying Out of the Twenty-third and Twenty-fourth Wards,” City of New York, Document n°72 of the Board of the Department of Public Parks, 1877, in Olmsted F.L., *Civilizing American cities, op.cit.*, pp.43-51

Palmboom F., « Landscape urbanism, conflation or coalition? », *Topos*, June 2010, n°71, pp.43-44

Regional Plan of New York and its Environs (Thomas Adams with Harold M. Lewis and Lawrence M. Orton), *Volume One: The Graphic Regional Plan*, 1929, 416 pages

Regional Plan of New York and its Environs (Thomas Adams with Harold M. Lewis and Lawrence M. Orton), *Volume Two: The Building of the City*, 1931, 600 pages

Regional Plan Association, *The Second Regional Plan, A draft for discussion*, november 1968, 103 pages

Regional Plan Association, *A Region at Risk, the Third Regional Plan for the New York-New Jersey-Connecticut Metropolitan area* (Robert D. Yaro and Tony Hiss), Island Press, Washington DC, 1996, 300 pages

Rogers M., “The Bronx Parks System, A faded design”, *Landscape*, 1983, vol 27, n°2, pp. 13-21

Smithson R., « Frederick Law Olmsted and the dialectical landscape », *ArtForum*, February 1973, pp.117-128

Stern R.A.M., Gilmartin G. and Mellins T., *New York 1930, Architecture and Urbanism between the two World Wars*, Ed Rissoli, 1988
Sutcliffe A., Ed, *The metropolis, 1890-1940*, University of Chicago Press, 1984
Tonnelat S., “Robert Moses (1888-1981)” in Paquot T., *Les faiseurs de villes*, Infolio, 2010, pp.323-341
Tunnard C. and Pushkarev B., *Man-made America: Chaos or control?*, Yale University Press, 1963
Weil F., *Histoire de New York*, Paris, Fayard, 2000
Wells N.M., « The parkway influence on highway design », in “New highways: number one enemy? Ten specialists view (with some alarm) the highway program”, *Landscape architecture*, Vol 49, n°2, Winter 1958, pp.92-94
Wiseman C., “The playground pioneer”, *Harper’s Magazine*, february 1973, pp.105-106
Zapatka C., « The American parkway, origin and evolution of the Parkroad », *Lotus*, n°56, 1987, pp.97-128
Zaitzevzky C., *Frederick Law Olmsted and the Boston Park System*, Harvard University Press, 1982