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MODERN PARK AS A RESULT OF URBAN SPACE RECYCLING – A REVIEW OF NEW YORK CITY'S DEVELOPMENTS

WSPÓŁCZESNY PARK JAKO EFEKT RECYKLINGU PRZESTRZENI MIEJSKIEJ – PRZEGLĄD NOWOJORSKICH REALIZACJI

Abstract

The development of organized green areas in the specific circumstances of New York's "culture of concentration" [1, p. 10] takes place, among others, in areas whose original function has changed or found a new peripheral location. Many projects related to transport, storage, or freight forwarding have been completed in post-industrial areas. The issue of urban space *recycling*, besides the basic question of adapting the area to a new function, requires a particular reference to the cultural heritage of the place, including its material legacy, which is sometimes difficult to preserve and expose. This article presents characteristic examples of urban *recycling* in particular districts of New York where the new function of a city park has been overlaid on unused areas, while preserving their characteristic environmental circumstances and cultural identities.

Keywords: space *recycling*, revitalization, gentrification, city parks, cultural and environmental circumstances

Streszczenie

Rozwój terenów urządzonej zieleni miejskiej w szczególnych uwarunkowaniach „kultury zagęszczenia” Nowego Jorku [1, s.10] odbywa się między innymi w obszarach, których pierwotna funkcja wygasła lub znalazła nową, peryferyjną lokalizację. W wielu zrealizowanych przypadkach wykorzystano tereny poprzemysłowe, związane z transportem, magazynowaniem i spedycją. Problematyka recyklingu przestrzeni miejskiej, poza podstawowym zagadnieniem adaptacji terenu do nowej funkcji, wymaga szczególnego odniesienia się do kulturowego dziedzictwa miejsca – w tym jego materialnej spuścizny, niejednokrotnie trudnej w zachowaniu i ekspozycji. Artykuł prezentuje charakterystyczne przykłady miejskiego recyklingu realizowanego w poszczególnych dzielnicach Nowego Jorku, prowadzącego do wpisania nowej funkcji parku miejskiego w zdevaluowaną przestrzeń z zachowaniem jej charakterystycznych środowiskowych uwarunkowań i kulturowej tożsamości.

Słowa kluczowe: recykling przestrzeni, rewitalizacja, gentryfikacja, park miejski, uwarunkowania kulturowe i środowiskowe

1. Introduction

The clear symptomatic trend of laying new functions over inactive parts of the city is exemplified by East River Park, located on the eastern shore of lower Manhattan. The park, which was completed along with the building of East River Drive (a large transport project) was opened in 1939; the 20-hectare area absorbed, among others, the 19th century docking ports and warehouses located along the East River [2, p. 187]. Despite its ambitious functional design, the enterprise, financed from the federal budget, lacked any reference to the original function of the area, which was essential to the life of the district and the city. The realized development effectively diluted the scale, spatial system, and the characteristic artefacts of the waterfront part of the Lower East Side, which now can only be deduced through an analysis of historical maps and iconographic materials [3, p. 132]. From the point of view that was common at the beginning of the 20th century, such a development went well with the overall planning strategy of the city [2], but the results became evident much later¹.

A contemporary comparative analysis of the west and east shore of lower Manhattan can easily identify the differences in the attitudes towards the *recycling* of unused urban spaces which took place nearly a century apart. The development of Hudson River Park, a nearly 10-kilometer-long linear park marked out along the west shore of lower and mid-town Manhattan, set a specific standard in the reuse of exploited, degraded urban space, whilst preserving its cultural origins [5, 175]. The Master Plan, elaborated in 1997, provided for division of the development into seven segments that made up a coherent whole; however, the project took into account the local diversity and uniqueness of the district [6]. The first segment of the park was opened in 2003; the others were completed in subsequent years. As a result of consistent investment, the inactive areas of ports and warehouses acquired the new, attractive function of a park that complemented the local urban fabric [7]. Preserving the cultural heritage of the area and its identity in the city landscape was crucial to the entire development; these conditions included a characteristic spatial layout with a sequence of nearly one hundred port jetties, some of which acquired new recreational functions, while others underwent a process of controlled entropy, introducing the dimension of time into these new urban spaces. As of 2015, the total development was 70 per cent complete, creating an undisputed standard of excellence in the process of green area development and urban space *recycling* [8].

2. Recycling, revitalization, and gentrification of urban space

By way of *recycling* inactive areas of the city, their spaces assume new functions and forms of use². Significant transformations of post-industrial areas of New York into parks appeared in the city landscape at the end of the 20th century [10]. The scale of recycling in the urban space of New York is remarkable. Along with the successful recycling of the space recovered for public

¹ A comprehensive criticism of urban planning which ignores the local character of the area can be found in Jane Jacob's book "The Death and Life of Great American Cities", published in 1961 [4].

² Apart from frequent commercial and residential investments, it also includes a city park [9].

green areas of New York, there was an intense revitalization of inactive areas of the city, together with an evident gentrification of the surroundings [11] and improvements in environmental conditions³. The very positive evaluation of the completed projects remains closely related to improving the quality of urban spaces, which acquire a new, attractive function, an image based on the cultural identity of the area, as well as better operating conditions⁴. It should be noted that the projects designed by public sector architects were of high quality [13].

3. Parks in the process of urban space recycling – characteristic examples in manhattan and its close vicinity

- ▶ MANHATTAN, Governors Island – a park in the former military zone.

Governors Island, nearly a kilometre away from the southern tip of Manhattan⁵, used to constitute a strategic point of New York's military defence. Between 1800 and 1996⁶ the nearly 70-hectare area of the island was a closed zone serving as an administrative and logistical base for the US army and finally as a local base for the US Coast Guard. The interesting cultural accumulations (mainly in the former fortifications and the historical spatial system of the housing base) led to the granting of National Historic Landmark status to a significant part of the island.

At the end of the 20th century, the final termination of the island's defensive function and the decentralization of the administrative structures inside this closed, inaccessible area led to interesting investment opportunities⁷ in this attractively located city area⁸ and its efficient ferry connection (Fig. 1). The final character of the island's development was determined by way of

³ Including, for instance, the improvement in the water and soil quality, reduction of noise, retention of rainwater.

⁴ New park projects are often the winners of architecture competitions; it is also a common practice to commission project designs to landscape architects with acknowledged work experience [12].

⁵ In the administrative sense, Governors Island belongs to Manhattan.

⁶ In 1800, the state of New York ceded the island to the federal government; in subsequent years important military objects and an administrative base for the American military were located on the island. During the First World War it served as a logistical base for troops dispatched to Europe. During WWII it was mainly an administrative center and a recruitment point. In 1966 the military importance of the island expired when the US Department of State decided to reduce the military installations. The specific location of the island was still utilized – this time as a base for the US Coast Guard. After 30 years in operation, the base was closed in 1996 [14].

⁷ The Van Allen Institute offered a broad open contest entitled "Public property" in 1996. The aim was to examine the potential of the island in its broad urban, cultural, and eco-physiographic context. Proposals submitted by 200 participants from 14 countries proved to be deeply absorptive of the place and flexible as to its future function. The major value of the contest, however, was sparking off a debate on open, public access to the island and giving the place an active recreational, cultural and innovative character [15].

⁸ In 2005, Santiago Calatrava, at the request of New York's mayor, prepared a draft project to connect Governors Island to Manhattan and Brooklyn with a cable car. The objective was to efficiently connect the island to the rest of the city; a visually light structure based on three structural pylons was planned to introduce an interesting, lapidary spatial form into the landscape of New York Bay. This bold proposal was never realized, one of the reasons being the high projected cost of the investment [15].

a closed design contest in 2006 by the non-profit Trust for Governors Island⁹ organization; the master plan was elaborated in 2010 and covered the southern part of the island, which was free of historical buildings and valuable cultural accumulations.¹⁰ The plan covered an area of over 35 hectares, or nearly half of the island's area. Half of this space was allocated to a park; the remaining area became a development zone with hotel, conference, and education functions in mind. The key element of the project was the synthetic inclusion of the planned park into the existing cultural space of the island, with regard to the many circumstances determined by its location, including the potential threat of flooding from New York Bay.¹¹

The composition of the park was based on a nodal point in the geometric centre of the island where the historical urban interior permeated the projected terrain of a contemporary park. In a manner symptomatic of the newly created urban landscapes of New York [17], the key issues of natural and cultural circumstances of the proposed space were treated synergistically. A far-reaching intervention into the original flat landscape of the island led to the elevation of the terrain¹²; this provided shelter against high winds and potential flooding of the park, and, at the same time improved the landscape value of the surrounding area (Fig. 2).

The two-phase development of the park was completed in the middle of 2016. The tourist turnout since then suggests a high level of acceptance of the idea of creating a new public space in the specific context of a satellite area away from the urbanized core of the city.¹³ The process of the island's revitalization will be finally finished when the new investment in the designated development zones is completed.

⁹ The short list of finalists: Field Operation / Wilkinson Eyre Architects *New York, USA / London, United Kingdom*; Hargreaves Associates / Michael Maltzan Architecture, Inc. *New York, USA / Los Angeles, USA*; Ramus Ella Architects (REX) / Michel Desvigne Paysagistes (MPD) *New York, USA / Paris, France*; West 8 urban design landscape architecture b.v. / Rogers Marvel Architects / Diller Scofidio + Renfro *Rotterdam, The Netherlands / New York, USA*; WRT LLC / Weiss / Manfredi / Urban Strategies. Inc. *Philadelphia, USA / New York, USA / Toronto, Canada* [14].

In December 2007, the contest winner was announced: the international design studio West 8 Urban Design Landscape Architecture, which was set up in 1987. It is an international studio specializing in designs for urban planning and landscape architecture; apart from its headquarters in Holland, it has an office in Belgium, and, upon winning the contest, also in New York. It is worth noting that, among the studio's many projects realized in Europe, West 8 took part in the "City of Tomorrow" exhibition in Malmö in 2001, which placed emphasis on the issues of ecology and sustainable development and the identity of the local landscape [16].

¹⁰ In 2001, the northern, nearly 9-hectare side of the park, where the most valuable historical buildings (for example, Fort Jay and Castle Williams) are located, was granted the status of Governors Island National Monument and brought under the federal administration of the National Park Service.

¹¹ New York lies in a hurricane hazard zone and is susceptible to possible consequences such as the flooding of low-lying coastal areas; since the 17th century New York has suffered from over 80 hurricanes; the last one, Hurricane Sandy in 2012, caused catastrophic damage, flooding the area of lower Manhattan; this threat is of a recurring and escalating character.

¹² As a result of macro-levelling measures, the central part of the park was elevated, while the terrain slopes down toward the shoreline. In the southern part, a zone of controlled flood retention was established and complemented with plants of naturally high water retention. To protect the area against high winds, four artificially built hills were constructed in the windward part of the island. These hills, with their vast bases and heights between 7 and 21 meters, constitute a sort of breakwater defense that protects the park and the island's interior [18].

¹³ When the military function expired, wider access to tourism was made possible in 2005, when it was visited by 8 thousand people. The park was opened to the public in May 2014 (first phase), which raised the number of visitors to 450 thousand in 2015 [19].



Fig. 1. Ferry harbour in Governors Island (photo by W. Gadomska)



Fig. 2. Shaped terrain elevations (photo by W. Gadomska)

- **BROOKLYN** – Brooklyn Bridge Park, adaptation of the waterfront and the closed port docks

Historically, the western shore of Brooklyn – an important port serving the majority of transatlantic and continental freight traffic – was part of an essential element of New York's metropolitan structure. The logistical value of the district followed from the favourable geographical location on the estuary of two important rivers (The Hudson River and the East River) into New York Bay and the open ocean. The area particularly predestined for the port and storage function was the stretch of the Brooklyn shore that is close to the southern tip of Manhattan; from 1814 a regular ferry connection between Manhattan and Brooklyn was in operation, and in 1883 both banks were connected with the Brooklyn Bridge. The turn of the century was a period of intense development of the port infrastructure and the land-based facilities which included warehouses, cold stores, factory buildings, etc., all of which exert a heavy influence on the characteristic shoreline, local landscape, and the evasive peculiarity of the place.¹⁴

The gradual termination of the port and the storage functions of New York's shores began in the 1980s and was, among other factors, a consequence of the consistent development of port and shipment infrastructure¹⁵ in the neighbouring state of New Jersey. In 1984, the Port Authority, an interstate agency in charge of ports, [21] decided to sell a stretch of the shore together with six jetties and several buildings. A local community group, the Friends of Fulton Ferry Landing, which later developed into Brooklyn Bridge Park Conservancy, protected this attractive area from commercial use by developers.

The idea that the freed space could be filled with a park took shape [22] in the 1990s and the master plan was elaborated in 1998. The park project provided for the adaptation of the six port jetties and a connection – via a wide stretch of greenery – to a waterfront promenade of winding pathways and bicycle lanes [23]. As a result, an attractive linear park came to life (designed by landscape architect Michael Van Valkenburgh) of over 2 kilometres in length and an area of 34 hectares,¹⁶ including interesting formal developments and rich functionalities.

Brooklyn Bridge Park exemplifies a holistic approach to urban recycling, operating at different scales and using various techniques of preserving the cultural uniqueness of the place. Besides the basic revitalization of the inactive area in the original port and dock configuration, the original profile of the port waterfront, created by characteristic saddle roofs, was well-preserved. On one of the jetties, the roof cover was adapted for a team sports area; on two other jetties the pillars of the steel structures were used as support for modern sun shading structures. In the construction, many architectural details used the existing elements of the park: the original timber from the demolished port warehouses was recycled [23], while stone blocks retrieved during the modernization of one of New York's bridges were built into some parts of the development. The designed reconfiguration of the land area of the park was completed using soil extracted in civil engineering projects in various parts of the city.

¹⁴ Excerpt of Harvey Shapiro's poetry (1924–2013) "National Cold Storage Company" 1966.

¹⁵ Container Transport System [20, p. 310–311].

¹⁶ The park's completion was the largest enterprise in Brooklyn since the establishment of Prospect Park; opened in 1867, at 215 ha this is the largest park in the district [24, p. 286].

This new public space in Brooklyn has become part of the landscape relations in the city. The park arrangement and the reshaping of its terrain allow the lower Manhattan skyline to be viewed from a new perspective which has never been taken advantage of before¹⁷ (Fig. 3). The value of the park as a vantage point is closely related to the evident changes in the city panorama, for example, in the area of the World Trade Center [25]. On the other hand, Brooklyn Park has established itself as a new, important element of the landscape as seen from southern Manhattan,¹⁸ bringing the much-transformed port area into the urban space.



Fig. 3. Recreational lawn with a view of Manhattan (photo by W. Gadomska)

Besides the preservation and exposition of a culturally significant district of New York, the completion of the new project ushered in a new type of urban landscape with highly efficient sustainable functions in a metropolitan space. In addition to the basic preservation of the rich local biocenosis (Fig. 4), the park is also an area for rational rainwater management and solar energy production for its own use to offset the negative consequences of the city's development.¹⁹

¹⁷ The views from high elevations have been possible since the middle of the last century thanks to the vast Brooklyn-Heights Promenade that runs above the Brooklyn-Queens Expressway, while the view from the level of the shore was limited due to difficult access to the shoreline.

¹⁸ Among other points, Elevated Acre Park provides excellent observation conditions.

¹⁹ They may include, among others, the negative influence of the transport system within New York, which was expanded in the first half of the 20th century and generates serious spatial and environmental consequences,



Fig. 4. Biodiversity of the coastal part of the park (photo by W. Gadowska)

► QUEENS – Gantry Plaza State park, adaptation of a former trans-shipment hub

In the 19th century, the neighbourhood of Hunters Point²⁰ (the western side of Queens on the East River) was a convenient area for the district's industrial development. The well-developed shoreline of the East River, the Queensboro Bridge²¹ (raised in 1909) connection to Manhattan, and the close vicinity of the industrially advanced Brooklyn predisposed this place for storage and production functions. The expansion of the Long Island Rail Road²² made the area an important freight forwarding point. The favourable conditions stimulated the growth of the district over the decades, which saw the development of multi-industrial sweat shops, factories, and warehouses. The character of the district began to change in the last decades of the 20th century due to the global shift in economic geography and the

including noise. The shape of the park in the form of an elevated embankment running parallel to the three-level Brooklyn-Queens Expressway artery helps reduce the level of noise by a noticeable margin.

²⁰ Historically, Hunters Point was a part of Long Island City, which until 1898 was an autonomous settlement independent of New York City.

²¹ Since 2011, the official name of the bridge is Ed Koch Bridge (Edward Irwin Koch was the mayor of New York from 1978–1989).

²² Modified several times, The Long Island Rail Road has been in operation since 1834.

consistent relocation of the industrial and logistic centres of American cities to outside of their boundaries.²³ The industrial shore of Queens lost its economic character. The high-rise Citicorp office at Court Square [26] (designed in 1989) and the New York home of the PS 1 Contemporary Art Center (now MoMA PS 1) [27, p. 293] in an empty public-school building in a desolated area were local landmarks. At the same time, the close vicinity of Manhattan and the good connections with other city boroughs opened up new opportunities for real estate development on a large scale.

Clear signals of the search for new functions to redefine the spatial character of Queen's western shore appeared in the last decade of the 20th century. First, the Master Plan was elaborated in 1993–1995, then the Gantry Plaza State Park project was designed to become the first phase of the development of the nearly 8-hectare area along the East River (designed by landscape architect Thomas Balsley) [10, p. 17–27]. The first stretch of the park was completed in 1998; the interesting utility program²⁴ and the attention paid to take into account the cultural context of the location set a high standard for a new public space.



Fig. 5. Historical cranes bearing witness to the area's tradition (photo by W. Gadomska)

²³ A. Toffler in his works characterized the origin, scale and consequences of the phenomenon, e.g. in "The Third Wave".

²⁴ Designed on the four jetties were characteristic seats, crab fishing stands, a table for cleaning fish, etc.

Gantry Plaza State Park's composition was determined by two clear directions in the local space: its direction parallel to the shoreline defined the course of the multi-track foot promenade, while the direction perpendicular to the shoreline was determined by the remains of the tracks of the former rail branch line. The central area of the park adapted the former cargo shipment square (previously located where the land meets the river) and its historical technical infrastructure, dominated by two high dockside gantry cranes from 1925 that enabled the transfer of cargo (Fig. 5). The artefacts of the former cranes were used to create new landscape relations in the place and their frame structures create attractive views of the skyline of midtown Manhattan. (Fig. 6). Besides the conservation role of the adaptation of the old industrial space for the needs of the park, the former function of the area was symbolically preserved: the water transport tradition of the city is continued by the terminal for water taxis and ferries on one of the four jetties flanking the massive pillars of the cranes.

Starting at the end of the 20th century, the process of the post-industrial recycling of Queens' shores led to the structural exchange of local functions, which exerted an influence over a wide spatial context. In 2013, the new Hunter's Point South Park became a natural extension of Gantry Plaza State Park. This newly-created green area is the foundation for a spatial composition of a 30-hectare multi-function neighbourhood, including residential areas complemented with educational, commercial, and service functions [28].



Fig. 6. Skyline of Manhattan exposed from the recreational jetties (photo by W. Gadomska)

4. Recycling in urban space – second plan developments

the interesting results of turning inactive urban areas into active park areas are also discernible in former industrial districts outside the city centre²⁵. For the presented secondary developments, the original conditions included the peripheral location, the definitely worse transport links to the city, and the more frequent degradation of the area as a result of its industrial function. The key factor, however, was the landscape context, which exerts a heavy influence on the local space and is dominated by post-industrial forms and technical artefacts of a significant scale.²⁶ Through urban recycling, post-industrial areas whose locations are less amenable to adaptation have acquired a new function as parks, which are much desired in metropolitan circumstances and which preserve and expose the well-defined cultural landscape.

► BROOKLYN – Erie Basin Park, revitalization of historical shipyard areas

The park opened in 2008 in a historical harbour of Brooklyn port, which until the beginning of the 20th century was the most important point of freight shipment on the east coast of the USA. Apart from being a harbour, the areas close to Red Hook peninsula, on the waters of New York Bay, used to be home to shipyard plants, warehouses, storage areas and housing estates for shipyard workers. This rapidly growing section of Brooklyn began to lose its importance in the second half of the 20th century as its primary port function was marginalized by the containerization of freight shipments. The former area of intense port and industrial activity underwent gradual economic, social, and visual degradation. Despite the marginalization, the ship-repair yard, with its valuable 19th-century dry dock and well-preserved shipyard infrastructure, survived the transformation [30]. This area attracted a large investor who is planning to build a department store for a global retail network.

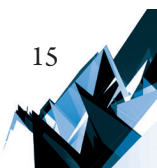
The park project,²⁷ initiated in 2002, was an indispensable part of the negotiations and changes to the local zoning plan, which enabled the realization of a controversial investment enterprise on a scale that would dominate the local landscape. Of the planned public-private partnership of the 9 hectares of land for development, nearly 30 per cent would be occupied by the park. On such conditions, the city sold the area of the former shipyard to a private investor [30].

The park's composition was based on the industrially shaped shore, including the characteristic remains of the shipyard's past: technical jetties, the repair dock gate, and the mooring infrastructure. The development of the two-kilometre shore created a characteristic linear park, spatially defined by the four port cranes that dominate the landscape with their height (Fig. 7). The artefacts of the technical equipment on the shore were clearly exposed and

²⁵ In the case of New York, defining a traditional downtown area is difficult: "*Manhattan has no center... if you asked a New Yorker for directions to 'the center of town', he would be bewildered*". James Traub, 2011.

²⁶ This daring adaptation of the post-industrial landscape to the needs of a modern park was made by Richard Haag, *Gas Works Park*, Seattle, 1975 [29].

²⁷ The project authors: Lee Weintraub Landscape Architecture, LLC, New York [30].



combined in theme blocks: the port rigging, shipyard devices, and mooring lines. The park area was also complemented with an interesting detail: customized steel daybeds (Fig. 8.), sets of benches, lettering with the park's name, and lighting. The reminiscent character of the park is complemented with a narration layer that corresponds with the spatial context: iconographic materials, shipyard worker's memories, and names of repaired vessels recorded on boards and reliefs. A characteristic motive which distinguishes the park area is the diagonal textured lines in the transport planes and in the vertical planes of the railings running along the preserved jetties, all of which constitute a clear reference to the rigging of ships when the shipyard was prosperous.

The park's development plan took into account some critical landscape issues related to both its location in the New York metropolis and in the local neighbourhood. The north-western side of the park was designed as a rectangular, green plain of elevated terrain; it is part of the attractive landscape exposition which accentuates the unique panorama of the industrial landscape of Red Hook against the characteristic skyline of southern Manhattan. On the other hand, the consistently designed green area and a sequence of screens which sets this section of the park apart compose an idiosyncratic vantage filter which limits the view of the large-scale commercial building.

The park, which has been open for 8 years, has clearly raised the standard of the marginalized post-industrial zone, contributing to its revitalization and gentrification. What turned out to

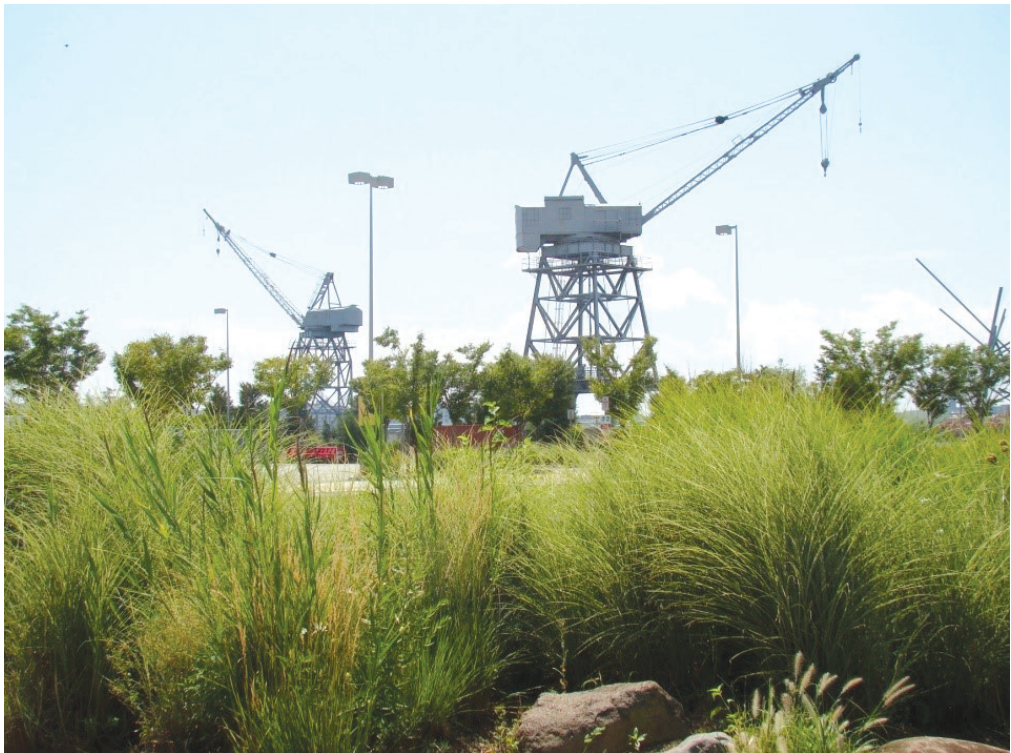


Fig. 7. Port cranes of the former ship-repair yard (photo by W. Gadomska)



Fig. 8. Steel daybeds (photo by W. Gadomska)

be a crucial factor was the creation of an alternative water transport route that links southern Manhattan to the mooring jetty which is now part of the park. In the designer's intention, the park was supposed to spur reflection on the global changes that are causing irreversible relocation of production to outside of the homeland, which, in consequence, leads to the termination of traditionally American industries. Besides the consumers who purchase goods in the retail centre, the park serves the local community²⁸ and makes an attractive place to visit for New Yorkers and tourists who appreciate the cultural dimension of the enterprise.

► **BRONX – Concrete Plant Park, recycling of the degraded cement production plant**

The main parks of the Bronx are concentrated in the northern²⁹ and central³⁰ parts of the district, marking a noticeable disproportion in the number, area, and access to organized green areas in the southern neighbourhoods. To address this, new parks are being established

²⁸ The park made it possible for the residents of the neighboring housing estates to access the shoreline, previously inaccessible for decades [30].

²⁹ Pelham Bay Park, an area of 1122ha, the largest park in New York (over three times the size of Central Park) [24, p. 281].

³⁰ The centrally located 290ha Bronx Park includes, among others, the New York Botanical Garden and Bronx Zoo International Wildlife Conservation Park.

in the south of the Bronx.³¹ To generate synergy, it is necessary to implement a consistent system of parks and connecting green corridors that provide better access and create parity for the southern part of the district. A natural greenway corridor would be the riverbed of the Bronx River, which used to be important to the development of New York's industry. Right next to its western bank, the Concrete Plant park was opened in 2009.

The area of the new park had been in industrial use for decades. In 1987, the concrete production plant went bankrupt and the land became the property of the municipality. Apart from the profound degradation³² of the area, the history of the place made a specific mark on the local landscape, with characteristic elements of the technical infrastructure of the old concrete mixing plant dominating the area. As a result of the efficient activities of the well-organized local communities,³³ a contemporary park came to life which preserves the raw heritage of the Bronx River's post-industrial neighbourhoods.



Fig. 9. The Bronx River bank with elements of small architecture (photo by W. Gadomska)

³¹ e.g. the Ferry Point Waterfront Park, designed in 2008 to complement the area of the Ferry Point Park, set up in 1937 [31, p. 62].

³² For example, 10 thousand car tires were removed from the river bank; nearly 32 thousand tons of oil-contaminated soil (leaking underground tanks) were replaced [32].

³³ Quote: '... an example of what happens when the community leads and the government is smart enough to follow' [24, p. 123].

The over half-kilometre-long linear park³⁴ with a nearly 3-hectare area introduced a subtly marked foot and cycle path that runs north–south along the riverbed into the transformed space. In a good part of the waterfront, a geometrical edge on the shore was recreated, making a boulevard waterfront that allows easy access to the river (Fig. 9). Exposed in the central sector of the park are the dominating artefacts of the former technical infrastructure (cement silos, aggregate tanks, fragments of technological infrastructure), all in a monochromatic red-lead colour (Fig. 10) with evident signs of long-term use. In a clear reference to the area's tradition, concrete was deliberately used as the prime building material for architectural details: the retaining wall by the river and the transport planes in the park area. The whole space was made decisively greener: lawns were surrounded with local plants and ornamental grass, and clusters of trees were planted to provide the desired shade in the future.



Fig. 10. Technical infrastructure exposed in the park space (photo by W. Gadomska)

The park has been a well-functioning element of the local landscape for seven years; it is an area of recreation and contact with the river that serves the residents of the dense neighbouring housing development, which itself has poor green infrastructure. However,

³⁴ The project's author: James Mituzas, New York City Department of Parks and Recreation [24, p. 126]

the potential role of the park goes well beyond the neighbouring area: it will become part of a large-scale sequence of green areas known as the Bronx River Greenway. The Master Plan designed in 2005 provides for consistency and continuity of green areas along a nearly 40-km stretch, running north–south along the Bronx River and including parks of various scale and character [33].

5. Conclusion

the observed development of green areas facilitated in the specific conditions of New York's "concentration culture" takes place, among others, by means of the recycling of urban areas which have become inactive and deprived of their original functions. Besides the improvement of the overall balance of urban greenery, the completed investments have led to the revitalization and gentrification of significant areas and upgraded their environmental conditions. The resulting appreciation of the standard of these public spaces is due to the high quality of the realized projects, the individual formal solutions, and the clear references to the cultural past and identity of these places. The principle of respect for the cultural context of redeveloped urban spaces is present both in the well-exposed, downtown locations and in peripheral locations which have difficult local, cultural, and spatial conditions.

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