

DOMINIKA KUŚNIERZ-KRUPA*

THE ORIGINS OF SPATIAL DEVELOPMENT OF MANHATTAN¹

GENEZA ROZWOJU PRZESTRZENNEGO MANHATTANU

Abstract

This paper presents issues connected with origins of spatial development of Manhattan, a district of New York. The creation of Manhattan is associated with the growth of New York which started as a settlement called New Amsterdam, built in 1625 by Dutch settlers. Nowadays, Manhattan is one the most desirable districts in the world. Unfortunately, its cultural landscape recorded in photographs, films, and primarily in the consciousness of its inhabitants, has been fading away in recent years. One of the most characteristic elements in this part of the city, tenement houses, are currently bought out on a large scale and subsequently demolished. Multi-floor apartment blocks with their styleless architecture, which occupy the area of several tenements, are built in their place. The article presents a historical outline of the district against the background of its present image and changes which may not always be positive.

Keywords: New York, Manhattan, cultural landscape

Streszczenie

Niniejszy artykuł prezentuje problematykę związaną z genezą rozwoju przestrzennego nowojorskiej dzielnicy Manhattan. Historia powstania Manhattanu wiąże się z rozwojem Nowego Jorku, którego początkiem była osada Nowy Amsterdam zbudowana w 1625 roku przez osadników holenderskich. Obecnie Manhattan jest jedną z najbardziej pożądaných dzielnic na świecie. Niestety jego krajobraz kulturowy „zapisany” na fotografiach, w filmach, a przede wszystkim w świadomości jego mieszkańców od kilku lat zaciera się bezpowrotnie. Kamienice czynszowe będące jednym z charakterystycznych elementów tej części miasta są obecnie masowo wykupywane, a następnie burzone. W ich miejsca buduje się wielokondygnacyjne apartamentowce o anonimowej architekturze. Artykuł przedstawia rys historyczny dzielnicy na tle jej dzisiejszego obrazu i zmian, które nie zawsze są pozytywne.

Słowa kluczowe: Nowy Jork, Manhattan, krajobraz kulturowy

* Ph.D. Eng. Arch. Dominika Kuśnierz-Krupa, Institute of History of Architecture and Monument Preservation, Faculty of Architecture, Crakow University of Technology.

¹ The paper was prepared within the project ”University of technology of the 21th century – Development programme of Crakow University of Technology – the highest quality teaching for future engineers”, financed by the European Social Fund and state budget within Sub-measure 4.1.1.

1. Beginnings of settlement unit the end of the 17th century

Manhattan is among the most famous and admired districts in the world. It is an island covering nearly 59 km², inhabited by approximately 1.6 mln people. It is surrounded by the Hudson River in the west and the East River in the east. Manhattan is divided into three parts: Downtown, Midtown and Uptown with Fifth Avenue which constitutes a borderline between East Side and West Side.



III. 1. Manhattan. View from the Empire State Building eastward (photo by D. Kuśnierz-Krupa, 2010)



III. 2. Manhattan. View from the Empire State Building towards the south-east (photo by D. Kuśnierz-Krupa, 2010)

The creation of Manhattan is associated with the growth of New York because a Dutch settlement called New Amsterdam, which gave rise to the later city, was founded in this area in 1625. Therefore, it can be said that New York was born in the heart Manhattan.

Before settlements developed in the area of later districts, it had been inhabited by Native American tribes: Rechgawawanc, Weckquasgeek and Canarsee. The first European to visit the territory of the future Manhattan was an Italian sailor, traveler and explorer, Giovanni da Verrazano, in 1523².

The area in which the settlement developed was particularly advantageous from a geographical point of view. It was an elongated island measuring app. 21.6 km by 3.7 km (in the widest part), which was bordered by an ocean bay from the south, the Hudson River from the west and the East River from the east. The bay allowed for establishing a port here, from which goods could be transported along the Hudson River further inland³. Its discovery in 1609, by an English sailor and explorer Henry Hudson, initiated development of the first colony in the southern part of the island. In 1625, the first settlement called New Amsterdam was founded in this place by the Dutch West India Company⁴.



III. 3. Satellite photo of the southern Manhattan (source: Google Earth, New York)

In 1626, an engineer Crijn Fredericxsz arrived to the island. He initiated the erection of a fort on the island, the functional program of which included a place for trade, a housing section and public utility buildings (a hospital, school and church)⁵. The fort was built in the area designated by Willem Verhulst who was the director of the colony. The original

² E.Homberger, *The historical atlas of New York City*, Publ. Swanston Publishing Limited, 1998, p. 18.

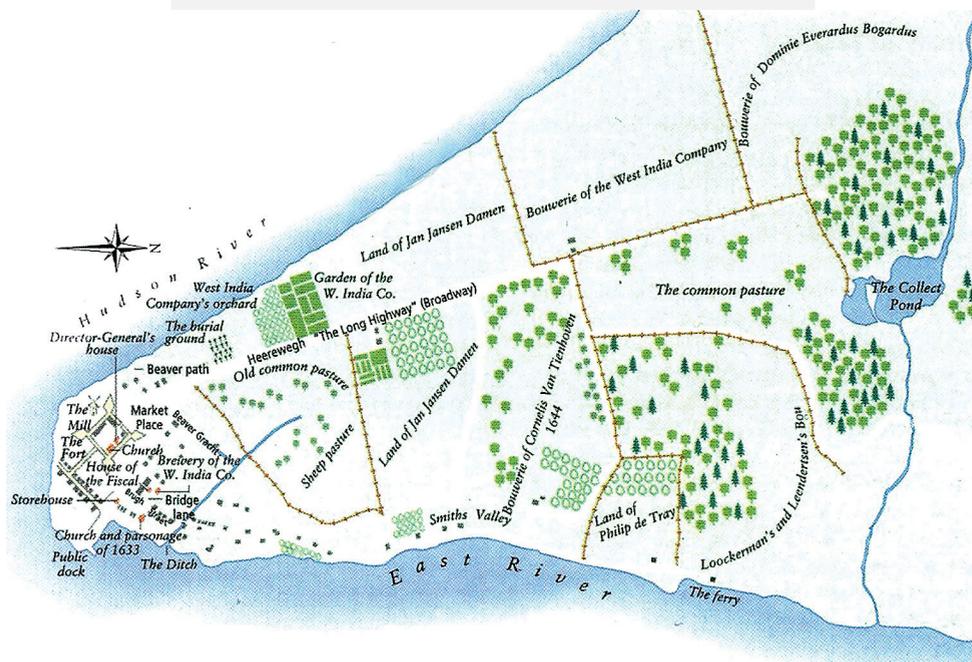
³ *Ibidem*, p. 12.

⁴ M. Motak, *Miasta Ameryki Północnej w okresie pionierskim 1559–1681. Dzieje formy urbanistycznej*, Publ. Politechnika Krakowska, Kraków 2004, p. 73.

⁵ E. Homberger, *op. cit.*, p. 20.

urban layout of the settlement developed in an organic way, which is visible in the plan of streets in southern Manhattan even today (Ill. 3.). A determined, orthogonal street layout, which allowed for allotting larger plots intended for future farms along the main road running from the north to the south of the island, was introduced much later.

Slaves, transported from Africa, were used during the fort construction and other work carried out in the colony⁶. The first stage of the island colonization ended in bloody conflicts with its native inhabitants, the result of which was almost complete destruction of the settlement. It was rebuilt again in 1647 by Peter Stuyvesant, who was in charge of the first management in the town, which was to restore organization and moral order as well as economic sense to the Dutch settlement. Stuyvesant had the waterfront and fort rebuilt, as well as additional defensive elements introduced⁷. Despite his efforts, he didn't achieve his purpose. It was primarily connected with the constantly increasing power of the English, who took over the settlement in 1664, and changed its name from New Amsterdam to New York. It was then inhabited by nearly 1500 people⁸ [7]. Since then, the town started to develop rapidly, its population grew, making it the second largest settlement in English colonies.



Ill. 4. Manhattan during the 1640 (source: [4, p. 29])

⁶ *Ibidem*.

⁷ D. Kuśnierz-Krupa, *Nowy Jork – Architektura i rozwój przestrzenny do końca XIX wieku*, „Wiadomości Konserwatorskie” nr 29/2011, Publ. ZG SKZ, Warszawa, p. 60.

⁸ E. Homberger, *op. cit.*, p. 32.

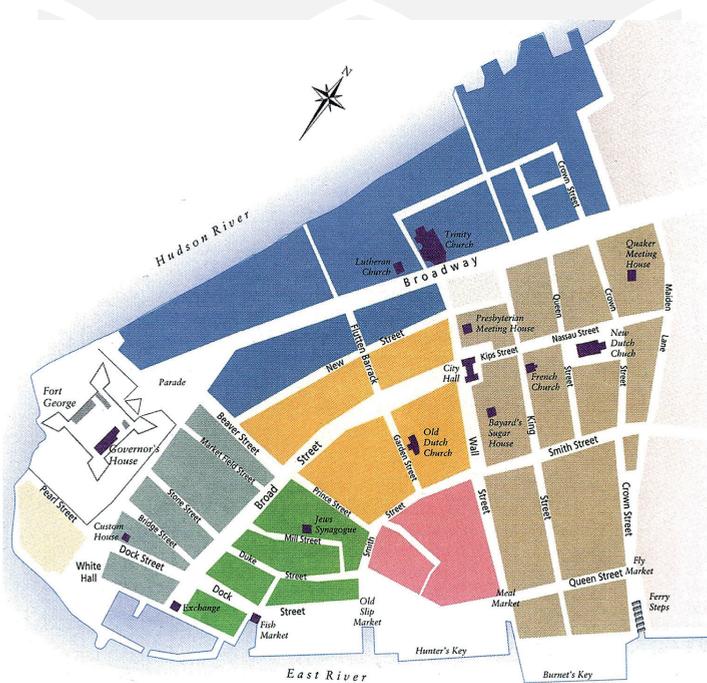


III. 5. Manhattan during the 1670s (source: [4, p. 31])

It was then that a lot of construction and modernisation work was carried out in the town. The Great Dock was built around 1676, as a result, the existing waterfront was considerably enlarged. At the same time, the road between Manhattan and Harlem was laid out. A new ferry service in Spuyten Duyvil, connecting the town with the area in the north, was also opened then. In that period, significant economic progress took place in Manhattan, which was reflected in Wall Street changing from a little known and unfrequented narrow path on the outskirts of the town into the center of commercial and financial life of New York, and later also of the world⁹. New York was granted its town charter in 1683, as a result, twenty years later it was already inhabited by 4000 people¹⁰.

2. Manhattan in the 18th century

The 18th century brought about more changes in Manhattan. The Market House which functioned as a market hall was built at the east end of Wall Street. In this period, the street grid and division into plots were irregular. Houses had between two and four floors. Some of them were built from cut stone, while others from white Dutch brick¹¹.



III. 6. Manhattan in the beginning of 18th century (source: [4, p. 40])

⁹ D. Kuśnierz-Krupa, *op. cit.*, p. 60.

¹⁰ M. Motak, *op. cit.*, p. 79.

¹¹ E. Homberger, *op. cit.*, p. 41.

In the discussed period, division into richer and poorer city districts became visible in New York. Areas connected with trade located near the docks in the vicinity of Water Side Street (later Dock Street), Queen Street, Bridge Street and Pearl Street were inhabited by mostly wealthy English, Huguenot and Dutch merchants. Their houses were frequently facing the East River where ships were moored¹². In those times, one could also notice the division of streets according to professions of their residents. Craftsmen and ship builders lived in Queen Street and Smith Street; brick makers and carpenters in Broadway, along Broad and Bridge Streets, while cartwrights in Upper Northward. Such street division reflected ethnic division. Thus the Dutch constituted the majority among inhabitants of Upper Northward, Smith Street, Broadway (West Ward), New, Queen, Broad, Stone and Beaver Streets. The English and the French, in turn, constituted the majority in Queen Street (south of Wall), in Pearl and Dock Street. The Jews, who prospered very well under the British rule, inhabited Mill Street where the first synagogue and a Hebrew school were erected in 1730.

Coming back to the architectural and urban planning issues, it is worth emphasizing that in 1730, the process of filling-in tide plots was already very advanced. Wharves named after merchants and ship owners started to be built along the river. New city walls were built to the south of the Collect Pond, while the areas which had previously been gardens and pastures were to serve residential function¹³. In the second part of, streets to the west of Broadway had been laid out. Because of building development, the Collect Pond was surrounded by built-up urban areas and the town spread far north from Wall Street. The 18th-century building development quickly replaced the Dutch relics. New buildings along quays and wharves changed the character of streets lining the East River. Dockyards and objects connected with trade carried out in ports were now being located in the upper sections of the town. Public utility buildings were erected in urban areas.

Because of the war waged by Great Britain against France, the English government decided to raise taxes in their colonies, which provoked violent protests. New York merchants joined the boycott of goods imported from Great Britain. Those events led to the outbreak of a military conflict in 1775 – the American Revolution. In consequence of the military activities in that period, New York was seized by the British and became their main headquarters¹⁴.

Both the great fire in 1776 and the seven-year period of military occupation led the town to ruin. During the fire, 1/4 of the town including the Holy Trinity church and the Lutheran church was destroyed¹⁵. Due to the inflow of loyalists, the population of New York at the time increased from 17 000 to 30 000. This increased number of residents positively affected the economic development of the town. After finishing the British-American war, loyalists began to leave New York in great numbers, moving to other British colonies.

The American army led by Washington seized Manhattan on November 25, 1783. In 1785, the town became the capital of the New York state and temporarily of the whole

¹² *Ibidem*.

¹³ *Ibidem*.

¹⁴ G.B. Nash, *The urban crucible: the northern seaports and the origins of the American Revolution*, 1986, Publ. Harvard University Press, p. 226.

¹⁵ E. Homberger, *op. cit.*, p. 56.

country¹⁶. At that time, the town was still in a state of disrepair. In the years 1784–1789, the town was tidied and rebuilt, particularly in the area west of Broadway, below Barclay Street, which was destroyed by the fire in 1876. Five especially appointed commissioners were in charge of the rebuilding process. During the process of tidying and rebuilding the city, Greenwich Street was widened and cobbled, and other streets were regulated to make their layout clearer. The landscape along the East River had also changed. The waterfront, which provided the motivation behind the economic development of the city, was enthusiastically if not chaotically built-up which was connected with unclear ownership of the land. New York of those times lacked impressive public utility buildings. One such building was the City Hall, therefore, a decision was made that it should be adapted to serve as the Federal Hall (a building). Naturally, it required a complete refurbishment supervised by Pierre Charles L'Enfant. Because of the adaptation, the city faced the necessity of erecting a new City Hall, the design for which was selected in a competition won by Joseph Mangin and John McComb.

During the 1770s, the built-up area of New York reached Roosevelt Street, and west of Broadway Street it reached the areas located above Chambers Street. Twenty years later, the built-up area reached the present day Brome Street in the east and Reade Street in the west. During the 1780s, the Common Council commissioned by the state authorities began to lay out new streets and modernise the existing arteries. It was caused by the fact that in the New York of the times, the majority of streets, even in the most commercially lively part of the city (in the vicinity of the docks), were unpaved. Both Broadway and Wall Street were paved then, which confirms their increasing social and economic importance¹⁷. By the end of the 18th century, important financial institutions (banks and insurance companies) had their headquarters in Wall Street. The wealthiest residents of the city also built their houses there. Broadway, on the other hand, where trade in luxurious goods flourished, became a venue where many elegant shops were opened.

3. Manhattan in the 19th century

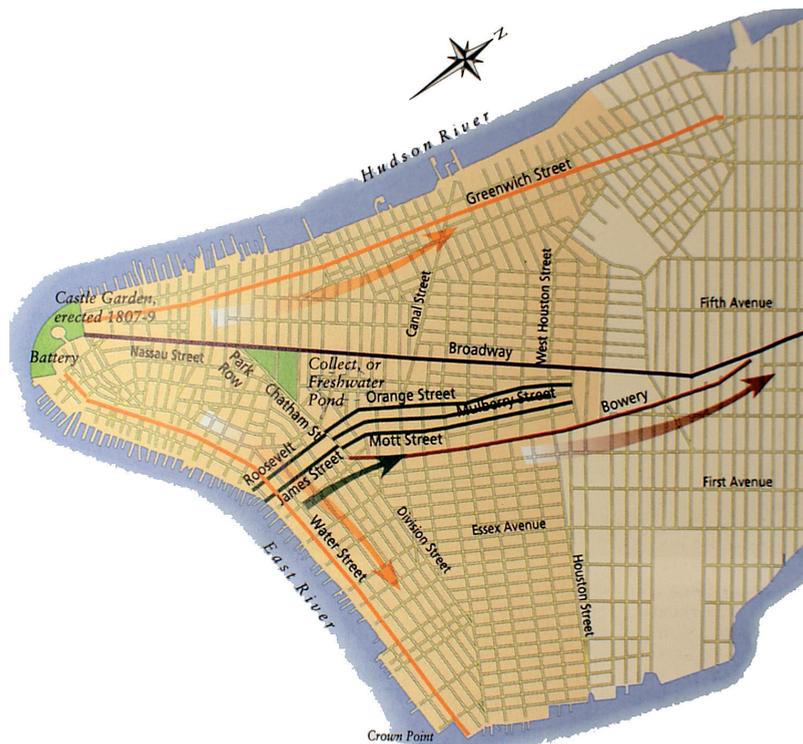
At the beginning of the 19th century, changes in the street layout relating to the development of the city towards the north were exceptionally rapid. Traditional city landmarks (such as the Tontine Building or Brick Church) disappeared, which confused and annoyed New York residents. The fact reflecting the quick pace at which the city image altered was its population which grew from about 125 000 to almost 815 000 in the years between 1820 and 1860.

Besides urban layout, the architecture of Manhattan began to change, too. Along the main commercial streets, such as e.g. Wall Street, huge, monumental and richly decorated houses were erected which were to reflect the financial status of their owners¹⁸. The original buildings of Manhattan gradually started to vanish, only to be replaced with buildings representing various styles modeled on Italian and French residences. This architecture wasn't uniform and created the impression of chaos.

¹⁶ T. Tołwiński, *Urbanistyka, T.II, Budowa miasta współczesnego*, Publ. Min. Odbudowy, Warszawa 1948, p. 117.

¹⁷ E. Homberger, *op. cit.*, p. 58.

¹⁸ *Ibidem*, p. 64.



III. 7. Manhattan around 1811 (source: [4, p. 69])



III. 8. Wall Street at the end of the 19th century (source: [10, p. 16])



Ill. 9. Wall Street nowadays (photo by D. Kuśnierz-Krupa, 2010)

In the 1830s, a fire broke out which destroyed the majority of tenement houses built by local millionaires at the beginning of the 19th century. They were replaced with commercial service and office buildings, which led to a surge in property prices in the Downtown area which was then the wealthiest part of Manhattan. That, in turn, resulted in the development of residential building in its northern part which had not been as invested into as the Downtown area¹⁹.

Since 1860, Central Park, established between 1857–1880, became an import area of Manhattan. The Park, designed by Frederic Law Olmsted and Calvert Vaux, was initiated by New York politicians who picked up the idea of creating the first public park put forward by intellectuals living in Manhattan. The Park was not only to improve the health of the district residents, it was also to increase the value of property situated in its neighbourhood, in the then poorly invested city area above the Croton Reservoir and 5th Avenue and 42nd Street²⁰.

In the second half of the 19th century, Manhattan was divided according to class, religion, race, as well as political views. Upper classes were afraid of hooliganism and violence in the streets. In his realization of Central Park, Olmsted saw a chance to educate the inhabitants of overcrowded tenement houses and to strengthen the sense of belonging and community among the rich and the poor²¹.

¹⁹ E. Homberger, *op. cit.*, p. 78.

²⁰ M. Wilczkiewicz, *Central Park w Nowym Jorku, jego geneza i teraźniejszość*, „Wiadomości Konserwatorskie”, No 29/2011, Publ. ZG SKZ, Warszawa, p. 106.

²¹ *Ibidem*, p. 108



III. 10. View of Central Park. In the background buildings of the Upper West Side (photo by D. Kuśnierz-Krupa, 2010)

Around 1870, the urban life of Manhattan concentrated on the narrow strip of land between the 4th and 6th Avenue, from the 8th Street in the south to the 40th. The plots located in the vicinity of this fashionable part of the city were filled with impressive bourgeois houses built from brick and brown sandstone.

Central Park was still located relatively far from that part of the city, nevertheless its surrounding also began to evolve. Elegant houses were being built along the east and west boundary of the park.

The streets of southern Manhattan (lower Broadway, below Canal Street) previously vibrant with life and now built-up with commercial buildings, were deserted in the evenings. In order to enliven them again, new, attractive architecture was introduced. It was then that the first New York office building was erected, called the 'Flatiron', designed by Daniel Burnham & Co. The building was favoured by artists who believed it to embody the spirit of the epoch and the city, like the Statue of Liberty or the Brooklyn Bridge²².

Manhattan of the 1870s, already boasted two skyscrapers more than 70 m high: the Tribune Building and the Western Union Building; an elevated city railroad along Greenwich Street from the Battery to Cortland Street, as well as elegant restaurants and hotels with standard comparable to those in Europe²³.

One of the most famous streets in Manhattan is 5th Avenue which appeared on the city plan in 1911. Until 1840, it remained unpaved and lined with houses, farms, homesteads and gardens. It was only around 1834, when the important Brevoort family built their

²² M. Reiss, *New York Then and Now*, Publ. Salamander Books, 2007, p. 62.

²³ *Ibidem*, pp. 95-96.



III. 11. The 'Flatiron' office building at the beginning of the 20th century. View from 5th Avenue (source: [10, p. 76])



III. 12. The 'Flatiron' office building today. View from 5th Avenue (photo by D. Kuśnierz-Krupa, 2010)

Georgian-style mansion here, that the prestige of the street rose. Gradually, hotels, churches and houses of affluent New Yorkers, such as doctors, merchants, businessmen and bankers, were erected here, which caused an address on 5th Avenue to be among the most desirable in the city as denoting a high social and material status.

Practically throughout the 19th century, the streets of Manhattan were lined with 5-storey residential buildings, while commercial buildings reached the imposing height of 8 storeys. Until 1892, the highest building in the city was the spire of the Trinity church. The growing demand for commercial space increased the importance of buildings' height and the time needed for erecting them.

Because of its incredibly fast development during the 2nd half of the 19th century, New York faced a housing crisis. To a certain extent, tenement houses, later known simply as 'tenements', provided a solution for the insufficient number of flats. They were 3 or 4-storey buildings, where two families lived on each storey. In the course of time, tenements were enlarged by adding timber extensions in the backyard. Historical sources inform that around the mid-1870s, there were 15 thousand tenement houses in Manhattan whose technical and first of all, sanitary conditions were constantly deteriorating. Therefore, the city authorities appointed the Metropolitan Board of Health which was to monitor the sanitary conditions in Manhattan²⁴. It was then that the long-lasting process of improving the housing conditions really started. Legal acts passed in 1879 limited, for example, the size of the plot fragment which could be built-over, and prohibited the sectioning off of the so called 'dark rooms'. Architectonic competitions were organized in order to select the best architectural solutions. A proposal to widen the most neglected streets, for example, Mulberry Bend or Five Points, was also put forward then. Acts passed by the Metropolitan Board of Health in the following years (1887 and 1895) introduced a gradual improvement of standards and inspections of the tenements which were more rigorous in their consequences. However, a growing population, low pay and unemployment, as well as political and financial lobbies which absolved the tenement owners from responsibility for their condition, negatively affected the reform results. It led to a situation where, at the turn of the 19th and 20th century, 42 700 tenements in Manhattan were inhabited by 1 585 000 people. Despite several regulations and rules which were to curb the practice, extensions were still built at the back of existing tenements, and their technical state was the same as that of the 19th-century buildings. The apartments there did not have access to daylight or fresh air, and sanitary conditions were abysmal.

Despite several negative phenomena which occurred in New York during the 2nd half of the 19th and the beginning of the 20th century, it quickly became the icon of the United States. Its enormous progress was based on the development of enterprise which also shaped the development of other cities.

In reference to the urban layout of Manhattan, the year 1811 seemed to be of particular significance. Then, an urban planner John Randel, in a plan he had prepared, covered the whole of Manhattan with an orthogonal grid of streets thus creating building plots measuring app. 70 m × 200 m, derived from the tradition of European medieval town planning. Such a block was to encompass two rows of houses with internal gardens. It is worth

²⁴ E. Hombberger, *op.cit.*, p. 110.



III. 13. Life in the 19th-century tenements in New York, a lithograph (the Museum of the City of New York, s.v.)



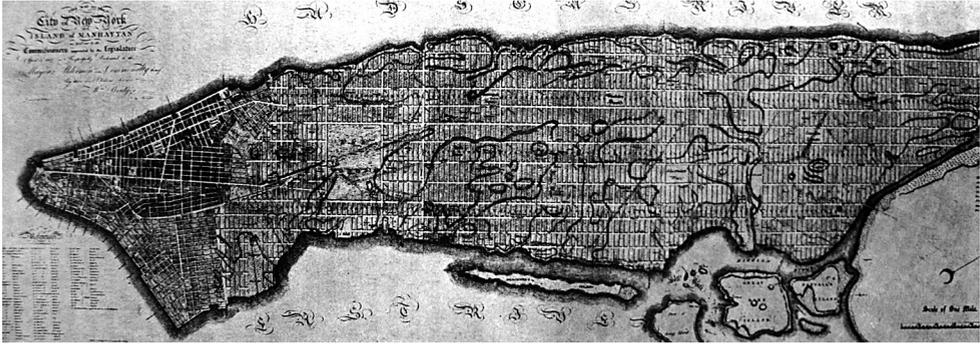
III. 14. Buildings in Manhattan at the end of the 19th century. View of a fragment of the 5th Avenue (source: [10, p. 74])



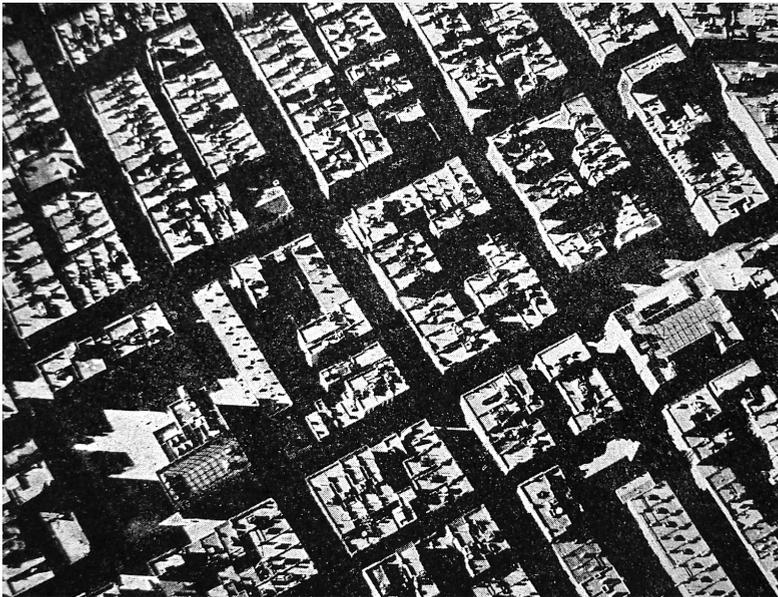
III. 15. Relics of the old, traditional housing quarter of Manhattan, preserved in Broome Street in Lower Manhattan (photo by D. Kuśnierz-Krupa, 2010)



III. 16. Relics of the old, traditional housing quarter of Manhattan, preserved in Orchard Street in Lower Manhattan (photo by D. Kuśnierz-Krupa, 2010)



Ill. 17. The city plan known as the “Commissioners’ Plan” from 1811 (source: [13, p. 119])



Ill. 18. The 19th-century building blocks in Manhattan (source: [13, p. 119])

remembering, that according to the plan the plots were to be built on up to 25% of their area and a maximum of 3 storeys high. However, by the end of the same century, those assumptions were already out of date, as the economic development of New York prompted the appearance of buildings on a completely different scale²⁵. The plan prepared by Randel, despite its minor drawbacks such as, for example no division between building and non-building areas, or lack of foresight concerning the needed public utility buildings, remained practically unaltered during the next century, in spite of the city population increasing to almost 3.5 million (Ill. 18).

²⁵ T. Tolwiński, *op. cit.*, p.121.

4. Conclusions

It is significant that over a period of 250 years, until the end of the 19th century, from a small colonial outpost, New York developed into a metropolis whose rank, architecture and urban layout equaled those of the largest European cities. Together with the city, its main district, Manhattan, became one of the best known and most admired districts in the world.



III. 19. Present-day architecture of a New York street. View of a fragment of the 59 West Street, with Columbus Circle in the background (photo by D. Kuśnierz-Krupa, 2010)



III. 20. Present-day architecture of a New York street. View of a fragment of the 7th Avenue (photo by D. Kuśnierz-Krupa, 2010)



- III. 21. View of the building site of a new apartment block on the corner 55th West St. and 8th Ave. in Manhattan. Previously the site had been occupied by traditional New York tenements (photo by D. Kuśnierz-Krupa, 2010)



- III. 22. View of the building site of a new apartment block on the corner of Howard St. and Broadway. Previously the site had been occupied by traditional New York tenements like the ones adjacent to the plot (photo by D. Kuśnierz-Krupa, 2010)



III. 23. View of the apartment block on the corner of 93rd Street and Lexington Ave., erected during the last 10 years, which replaced the previous traditional New York tenements (photo by D. Kuśnierz-Krupa, 2010)



III. 24. A new apartment block in 92nd Street, in Manhattan. Next to it traditional New York tenements after restoration (photo by D. Kuśnierz-Krupa, 2010)

Unfortunately, in recent years, the cultural landscape of the district recorded in photographs, films, and primarily in the minds of its inhabitants and visitors, has been irretrievably obliterated. Tenement houses, constituting a characteristic element of the district, have been bought out and then demolished (Ill. 15, 16, 21), to be replaced by the styleless architecture of multi-storey apartment blocks. Can this investment expansion be stopped? It is worth preserving at least a trace of residential buildings characteristic of 19th and 20th-century Manhattan. However, only time will show if this can be achieved, and if the need for the identity of the place and preservation of the cultural landscape of Manhattan could prevail over the power or money and greed.

References

- [1] Ciucci G., *The American City: From the Civil War to the New Deal*, Cambridge 1983.
- [2] Furtak A.E., *Nowy Jork jako amerykańskie piekło lat pięćdziesiątych*, [in:] *Kultura miasta*, *Kultura Miasta* 2/3 (5) 2009.
- [3] Giedion S., *Przestrzeń, Czas i Architektura*, PWN, Warszawa 1968.
- [4] Homberger E., *The historical atlas of New York City*, Swanston Publishing Limited, 1998.
- [5] Johnson A., Willis C., *New York Architecture: A History*, Book News, Inc., 2004.
- [6] Lamb M.J., *History of the City of New York: its origin, rise and progress*, 1921.
- [7] Motak M., *Miasta Ameryki Północnej w okresie pionierskim 1559–1681. Dzieje formy urbanistycznej*, Politechnika Krakowska, Kraków 2004.
- [8] Muhlstein A., *Manhattan. Niezwykła historia Nowego Jorku od czasów Indian do roku 2000*, Państwowy Instytut Wydawniczy, Warszawa 1994.
- [9] Reynolds D.M., *The Architecture of New York City: Histories and Views of Important Structures, Sites, and Symbols*, Wiley, 1994.
- [10] Reiss M., *New York Then and Now*, Salamander Books, 2007.
- [11] Stokes I., Phelps N., *The iconography of Manhattan Island, 1498-1909*, Robert H. Dodd, New York 1915.
- [12] Sutcliffe A., *Towards the Planned City: Germany, Britain, the United States and France, 1780 – 1914*, St. Martin's Press, New York 1981.
- [13] Tołwiński T., *Urbanistyka, T. II, Budowa miasta współczesnego*, Ministerstwo Odbudowy, Warszawa 1948.
- [14] Wakeman A., *History and reminiscences of lower Wall street and vicinity*, The Spice Mill publishing co.
- [15] Wilson J.G., *The Memorial History of the City of New York. From its first settlements to the year 1892*, Forgotten Books.
- [16] Wilson R.R., *New York: Old & New, its story, streets, and landmarks*, v. 2, 1902.
- [17] Witheridge A., *New York Then and Now*, PRC Publishing, 2001.
- [18] Zaremba P., *Historia Stanów Zjednoczonych*, Bellona, Warszawa 1992.