
Symbolic Icons: Conflicting Visions of the Gowanus Canal

Jerome Krase

(Brooklyn College, City University of New York, USA)

JKrase@brooklyn.cuny.edu

The four-hundred-year history of Brooklyn, New York, has provided opportunities to observe many conflicts and competitions over how neighbourhoods are symbolically presented and represented which significantly affect the lives of local residents and businesses. In recent years, conflicts and competitions over representation have resulted in heated public discourse such as over historical place names, and monuments. One of the most contentious of these discourses has been about gentrification and displacement in and around the Gowanus Canal. Over the centuries the area has changed from a primitive uninhabited marshland to its current actively developing urban neighbourhood. In each epoch, changes have been captured in images, and those images have impacted the area itself. This article will employ multi-modal methodologies to explore these changes and how they have been locally contested in print and digital media in three sections: Historical Images, Pollution, and Gentrification.

Keywords: Vernacular landscape; pollution; public discourse; gentrification; displacement.

Introduction

The ‘Super-Diversity’ of Brooklyn, New York’s almost three-million residents, and its contentious four-hundred-year history, have provided an opportunity to observe the many conflicts and competitions over how neighbourhoods are symbolically presented and represented. These images have significantly affected the lives of local residents and businesses. In recent years, some of these conflicts and competitions over representation have resulted in heated public discourse such as over historical place names and monuments that some regard as racially biased. (Jelley-Shapiro 2021) One of the most contentious of these territorial or spatial discourses has been about gentrification and displacement in Brooklyn (Krase and DeSena 2016, Krase 2022) and, ironically, around the highly polluted and territorially stigmatized Gowanus Canal. This article will employ multi-modal methodologies to explore these changes and how they have been locally contested in print and digital media in three sections: Historical Images, Pollution, and Gentrification.

As might be expected, over the centuries the area has changed from a primitive uninhabited marshland to its current actively developing urban neighbourhood. Starting with the Dutch colonization and resultant displacement of Native Americans from the territory in the 17th century, almost every change resulted in conflict and/or competition between, and among, public and private interests which also have challenged the then current notions of legitimacy. Concrete historical changes have also been accompanied by changed visual representations that have had impact on the past, present and future identities of the area. Historically, these representations have impacted the lives of residents in the past as well as newcomers well beyond those defined as ‘minorities’ and ‘marginalized’ communities. It must be noted as to these ‘morals of legitimacy’ (Pardo 2000, Pardo and Prato 2019, Krase and Krase 2019) that poor and working-class immigrant Irish and Italians who populated the area from the second half of the 19th through most of the 20th centuries have been scrupulously overlooked in most commentary today on both the past pollution and current gentrification in the area. In part, this is because so many of those had been poor not only improved their socioeconomic status before the invasions of gentry but, as residential and business property owners, they benefitted by it.

The Importance of Seeing

Because Brooklyn is familiar to many due to its media popularity, studies about its neighbourhoods are often seen as parochial. However, as major segment of a global city, it is a paradigmatic site for visual and symbolic competition. As noted by Saskia Sassen (2001), they are sites for the contradictions of the globalization of capital where both the powerful and the disadvantaged are concentrated in which they compete for contested terrain. According to Kieran Bonner ‘...globalization is not just about the movement of capital by global corporations, but also about the movement of people who are often in contest with such economic developments’ (Bonner 2007: 277). John Brinckerhoff Jackson had also called us to look at what ‘[...] lies underneath below the symbols of permanent power expressed in the Political Landscape’ (Jackson 1984: 6) because what ordinary people do in a particular physical territory and how they use objects therein are critical for understanding the space.

Robert A. Beauregard and Anne Haila note that postmodernists tend to ‘[...] portray the contemporary city as fragmented, partitioned, and precarious, and as a result, less legible than its modernist precursor’ (Beauregard and Haila 2000: 23). However, they argue that a distinctly postmodern city has not displaced the modern one. Rather they find there is a more complex patterning of old and new, and of continuing trends and new forces that result in different kinds of segregation and different logics of location. Especially important is the uneven spatial competition that lower class immigrants face with more privileged members of society. In this regard, Roland van Kempen and Peter Marcuse (1997: 4) also argued that uniform patterns cannot be expected and they offer contemporary residential community forms in the ‘citadels of the rich’, gentrified areas, middle-class suburbs, tenement areas, ethnic enclaves, and what is to them a ‘new type’ of ghetto. Relatedly, Anthony King (1996) speaks of cities as ‘text’ to be read. Vernacular landscapes are crucial to that reading. Sharon Zukin also noted that the emphasis of urbanists had been on competition over access and representations of the urban centre. ‘Visual artefacts of material culture and political economy thus reinforce — or comment on — social structure. By making social rules “legible” they represent the city’ (Zukin 1996: 44).

In discussing Henri Lefebvre’s ‘Spatial Practices’, David Harvey noted that those who have the power to command and produce space are therefore able to reproduce and enhance their own power. It is within the parameters outlined by these practices that the local lives of ordinary urban dwellers take place. For Harvey (1989, 265) ‘Different classes construct their sense of territory and community in radically different ways. This elemental fact is often overlooked by those theorists who presume a priori that there is some ideal-typical and universal tendency for all human beings to construct a human community of roughly similar sort, no matter what the political or economic circumstances’. Pierre Bourdieu (1977: 188) noted that the production of such symbolic capital also serves ideological functions, because the mechanisms through which it contributes ‘to the reproduction of the established order and to the perpetuation of domination remain hidden’. Bourdieu’s notion of the ‘habitus’ or practices that produce, in this case visible, regularities is also helpful in this regard (1977: 72-95).

For Lefebvre the visual was central to the production and reproduction of social space of any scale. ‘People *look*, and take sight, take seeing, for life itself. We build on the basis of

papers and plans. We buy on the basis of images. Sight and seeing which the Western tradition once epitomized intelligibility, have turned into a trap: the means whereby, in social spaces, diversity may be simulated and a travesty of enlightenment and intelligibility ensconced under the sign of transparency' (Lefebvre 1991: 75-76). In sum, vernacular landscapes reflect the battle between large and small interests and the outcomes are usually the designs of powerful forces often beyond even the knowledge of local people.

As noted by Kruse, urban regeneration and policies of urban change are reflected in vernacular landscapes and these changes can in turn facilitate further gentrification by making the areas more visually attractive (Kruse 2012: 221. See also: Kruse and DeSena 2020a, 2020b, 2016).

Gentrification's history of higher status invaders displacing lower status residents remains closely tied to the process defined by Ruth Glass. (1964) Since then it has been described progressively grander prefixes: 'Super' (Lees 2003); 'Hyper' (Shaw 2008); and 'Planetary' (Lees et al 2016). In general, analyses of gentrification fall under two general types: Political Economic, following Neil Smith (1979), and Cultural Consumption, following David Ley (1996). The literature on Gentrification describes it as ruthless force that destroys communal nostalgic urban neighbourhoods, and replaces them with individualist and consumer-driven ones. Gentrifiers are often viewed as (neo)colonizers, appropriating working and lower-middle-class lifestyles (de Oliver 2016). Most studies focus on sections where displacement was most likely to occur such as poor and working-class areas (Slater 2003). However, in the Gowanus area, recent luxury development projects are also pressuring middle-class residents to leave, as rents rise and buildings with affordable apartments are razed to make way for luxury ones. Another more subtle contributor to gentrification that is critical for the polluted Gowanus Canal area is 'green gentrification', which according to Kenneth Gould and Tammy Lewis (2016) is a process of improving the environmental qualities of more and less depressed areas either as preparation for gentrification or improvements that occur after the gentrification begins.

My direct involvement in the current upscale redevelopment of the canal, began in the early 1980s when I consulted with the Gowanus Canal Community Development Corporation (GCCDC. Kruse and Greenblatt 1981). In that study I conducted a photographic architectural survey of the properties along the west side of the canal to facilitate development grant applications. The GCCDC was created by local activists to combat housing and business deterioration in the area. Decades later, I became a member of its Board of Directors and then its President in 2012. This experience was crucial in providing a close-up view of how business and political élites, along with other pressure groups used or constructed symbols in order to legitimize their positions and gain popular consensus. In this regard, easily manipulated symbols such as 'greening' and terms like 'affordable' housing continue to make local democracy precarious by confounding public discourse.

Gowanus History in Brief

The Gowanus Canal in Brooklyn, New York, is almost two miles long and borders, or runs through, the well-known neighbourhoods of Red Hook, Carroll Gardens, Gowanus, Park Slope, Boerum Hill and Cobble Hill. Although the area around the canal had been settled by Europeans in the 17th century, and long before that by Lenape Native Americans, the Gowanus Creek as

it was then known, was not developed into a canal from the tidal marshland fed by freshwater streams until the mid-19th century. By the turn 20th century, local industries had drained large amounts of pollutants into the canal. Over subsequent decades, attempts to remedy the problem failed miserably; even after the 1950s when most industrial uses ended. By the 1990s, it was recognized as one of the most polluted bodies of water in the United States. However, despite the pollution, due to its closeness to Manhattan by public rapid transit and nearby desirable Brooklyn neighbourhoods, powerful developers became interested and used their considerable political influence, and also courted local community groups, to call for environmental remediation. As a result, in 2009 the Gowanus Canal was designated as a Federal Superfund site and work to clean the canal began in earnest in 2013.

Historical Imagery

In the course of its four-century history the area and the canal itself has been represented by visual and textual imagery. The area's early settlers named the waterway 'Gowanes Creek' after *Gouwane*, who was the chief of the local Lenape tribe of the Algonquian linguistic group that dominated the Northeastern United States. The Lenape farmed along the shores of the creek until being displaced by Dutch settlers from 1630 to 1664, who built a tobacco plantation and tide-water gristmills in the area.



Figure 1. Lenape Village in Gowanus, Brooklyn New School Native American Museum. 2016 by Jerry Krase. Every year the Brooklyn New School, a public grade school, organizes a Native American Museum in which students create exhibits about the Lenape who lived in the area. In this cropped photo, students pose around their model of a Lenape village.

The creek and its outlets into New York's Inner Bay were also locations for other farms as well as clam and oyster fishing. In 1700, Nicholas Vechte built a farmhouse of brick and stone which is still in use and called the Old Stone House. The house and the wider area were important in 1776 during the Battle of Long Island during the American Revolution. Maps drawn during the British colonization show New York City as 'Part of Nassau Island', later referred to as Long Island on which, at its most western end, Brooklyn is located. (See <http://bklyn-genealogy-info.stevemorse.org/Map/1766.Vill.Bklyn.html>). A map of the Battle of Long Island, part of which took place in Gowanus, shows how Lord Stirling lead an attack against the British in order to buy

time for other troops to retreat at the Battle of Long Island, in 1776. (See: <https://www.npr.org/templates/story/story.php?storyId=14969025>).

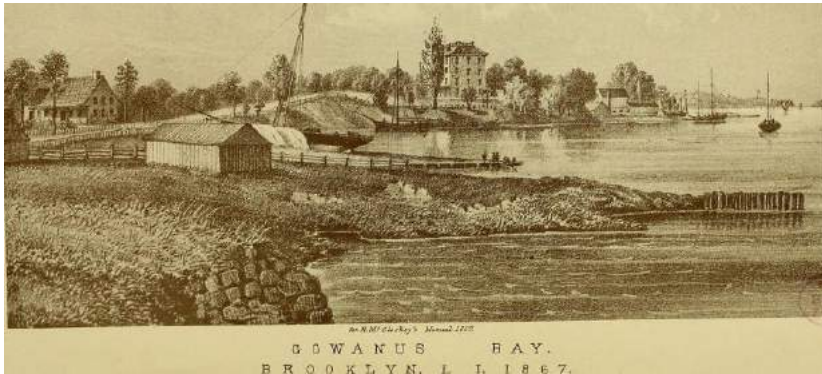


Figure 2. Sunset at Gowanus Bay in the Bay New York (1851) by Henry Gotten.

Originally drawn by George Hayward, an image of the Gowanus Bay from the 1867 manual of the Brooklyn Common Council. On the left is the former home of Simon de Hart, known as the De Hart or Bergen House. Source: Courtesy of the Brooklyn Public Library.¹

The image of the area around the Gowanus Canal radically changed as industry invaded in the 19th century. These changes are expressed in text, photos and maps in the Gowanus conservancy's Hall of Gowanus Digital Library: 'Exploring the History of Gowanus, Brooklyn through Material Culture'. Relatedly, Proteus Gowanus is a gallery and reading room located on the banks of the Gowanus Canal that links the arts to other disciplines and to the community. In 2011, The Hall launched this Gowanus Archive for those interested in the past and future of the canal. The digital archives contain over sixty-six gigabytes of maps, GIS data, photos and digital sediments accumulated by the community. (https://issuu.com/proteusgowanus/docs/gowanus_history_presentation_final_lowres; See also: <https://storymaps.arcgis.com/stories/629c46b2651f4ceab0f4678250dfbbc2>).

The maps in the archive visually document the changes in Gowanus from the old roads and farm field lines in 1880 to how the flourishing Canal was engulfed by the rapidly expanding Park Slope area, as the last remnants of the Gowanus Marshes were filled in for the Red Hook Port in 1897. A 1924 aerial survey photo shows the future Carroll Street Subway Station, two large gas works (See Figure 3) and the Brooklyn Trolley Dodgers Stadium. The 1942 map, drawn by The United States Army Corps of Engineers, is an inventory of industrial businesses along the Canal, when barged coal was the fuel of choice for the Canal Industrial Zone. The City of New York's Aero Service Aerial in 1951 shows the Gowanus area fully developed, with the now third generation of houses being torn down and others built such as the Gowanus Houses public houses. Finally, the 2004 New York City Department of Information Technology and Telecommunications colour aerial photograph, highlights some of the sites being considered for new residential and commercial development at the time such as the currently existing upscale Whole Foods supermarket.

¹ This work is in the Public Domain. The Center for Brooklyn History at Brooklyn Public Library can provide a copy of this work free of charge.



Figure 3. Citizens Manufactured Gas Plant 1924.

A network of Manufactured Gas Plants, operated by numerous individual companies, powered the New York Metro Area. This site housed the Citizens Manufactured Gas Plant, built by the Citizens Gas Company. It was part of a cluster of three such plants around the Gowanus, supplying energy to Brooklyn from the 1860s to the 1960s. After delivery to this plant, coal was heated to produce a gas that could be used for lighting, heating and cooking. The gas was cooled, cleaned and stored on site in large holding tanks. At the time, there were no environmental laws and some by-products remained. Source: Courtesy of the Brooklyn Public Library.²

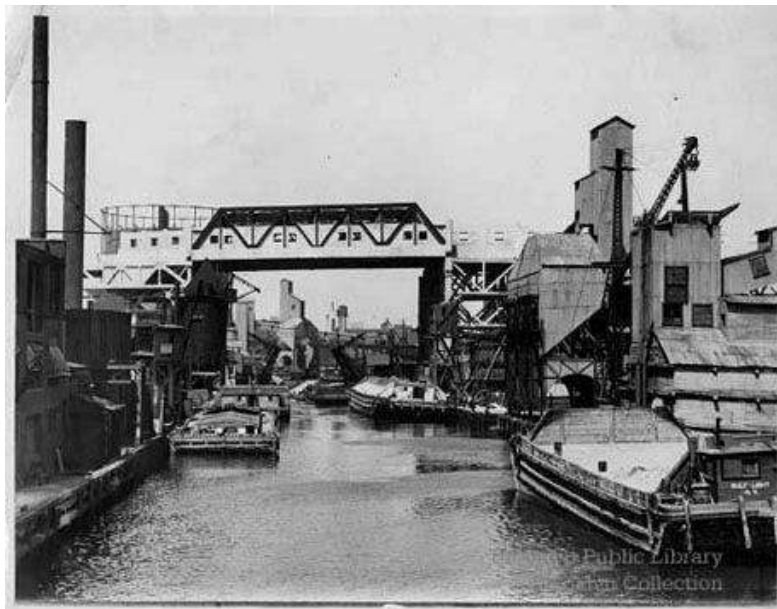


Figure 4. Gowanus Canal Traffic 1920s.

This photo shows the barge congestion along the Gowanus Canal. Source: Courtesy of the Brooklyn Public Library.³

² This work is in the Public Domain. The Center for Brooklyn History at Brooklyn Public Library can provide a copy of this work free of charge.

³ This work is in the Public Domain. The Center for Brooklyn History at Brooklyn Public Library can provide a copy of this work free of charge.

Pollution

By the middle of the 19th century, the Gowanus Canal had evolved into an active commercial shipping centre for Brooklyn. This location attracted noxious industries such as coal to gas and sulphur manufacturing plants, tanneries, chemical plants and paint factories that polluted the canal as well as the surrounding area. Closed at one end, with no water to flush out the toxins, the navigable water took on a reddish-purple colour for which it later earned the name 'lavender lake'. A residual 'black mayonnaise' also accumulated on its bed. The pollution was so bad near the end of the century, that a New York State commission suggested the closing of the canal entirely but business interests prevailed and it remained open. Attempts at reducing the effluence resulted in a long list of failures. An early 20th century building boom increased sewage drainage into the canal and new sewer lines conveyed sewage from other neighbourhoods into the canal. By 1910 a flushing tunnel was built but that also failed, which was the first error in a series that continued for fifty-years, as the canal became a dumping place. With a large Italian American population in the area, rumours that lasted for decades spread that the canal was a body dumping ground for the Mafia. In this regard, it must be noted that some bodies and human remains have been found. By 1993, only one company used the Canal for shipping and currently most barges carry fuel oil, sand, gravel and scrap metal for export.

As would be expected, the image of the Gowanus Canal and surrounds radically changed. As to popular images, Thomas Wolfe described it as 'huge symphonic stink' of the canal which was 'cunningly compacted of unnumbered separate putrefactions' in his 1940 novel *You Can't Go Home Again*. (1940) As to the popular Mafia legends, a character in Jonathan Lethem's *Motherless Brooklyn* (2000) refers to the canal as 'the only body of water in the world that is 90 percent guns'. As to contemporary poor taste in mass media, an episode of the 2009-11 TV show *Bored to Death* was titled 'The Gowanus Canal Has Gonorrhea.' (See https://www.imdb.com/title/tt1650079/?ref=fn_al_tt_1). In 2014, a comic book series *Tales of the Night* entitled 'It Came from the Gowanus Canal', was published about a toxic sludge monster living in the canal who takes revenge on a gangster who once dumped bodies there. A frightening poster by Larry Antal was sold at the Gowanus Souvenir shop that sells trinkets, nick-nacks and novelties crafted by local artists in celebration of the neighbourhood's famed toxic waterway. Most relate to the many weird tales about the canal such as 'Gowanus Swim Team' T-shirts, poison bottles labelled with various toxins found in the canal, and handcrafted mutant action figures (Mixson 2015). There was also a 'It came from the Gowanus Canal Again: Comic Release Party at Gowanus Souvenir Shop' in 2017 and as reported in a local online paper:

'It's not the water you should fear. It's him'. We know that there is plenty of coal tar at the of the Gowanus Canal in Brooklyn. We know that raw sewage flows into it during heavy downpours, compliment of the City of New York. Occasionally, a whale will lose its way and swim into the polluted waterway to die. According to *Tales of the Night*, a comic book series published by so What? Press, there is something even more sinister lurking in the murky waters of everyone's favourite EPA Superfund: the Gowanus Golem, 'Brooklyn's most toxic monster'. Golem made his first appearance in the 2014 'It came from the Gowanus Canal' issue. Now 'he is back in Issue 7, a

follow-up of one of the series' most popular tales. In 'It came from the Gowanus Canal Again', the monster is after a couple of thugs who are responsible for the death of a young boy. Barista and blogger Nora and her roommate Charlie come to the rescue to put an end to the supernatural activity.' (PMFA 2017, See also: Tyler 2016)

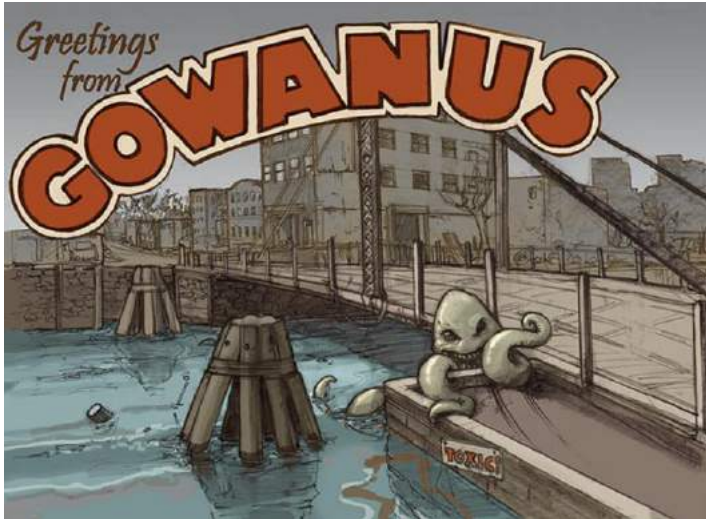


Figure 5. 'Greetings from Gowanus Canal', 2014, by Simon Fraser/Eugene Lehnert.

Artwork created for novelty postcards such as those sold at the Gowanus Souvenir Shop. Source: By Simon Fraser: si@simonfraser.net and Eugene Lehnert: euge04@aol.com - Artwork commissioned by Eugene Lehnert., CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=40234126>⁴

Cleaning the Gowanus Canal and Its Image

The 1948 Federal Water Pollution Control Act (1948), the creation of the Environmental Protection Agency (EPA) in 1970 and the Clean Water Act (1972) provided a base for more effective efforts at remediating the extreme environmental degradation of the canal. Consequently, in 1971, the city held hearings on a Gowanus Industrial Urban Renewal Project, but did not support it with funding. In 1974, the Gowanus Canal's water was tested for bacteria and found typhoid, cholera, dysentery and tuberculosis. Another assessment found an almost total absence of oxygen, raw sewage, grease, oil and sludge. The Red Hook Sewage Plant was completed in 1987 to divert more sewage input and a repaired flushing tunnel began operating in 1999. In 2002, the United States Army Corps of Engineers and the DEP conducted an Ecosystem Restoration Feasibility Study of the Gowanus Canal area. The DEP also initiated a project to meet the city's obligations under the Clean Water Act.

The biggest boost to the cleanup came in 2009, as the EPA proposed a 'Superfund' designation that would allow it to clean up the contaminated site and force '...the parties responsible for the contamination to either perform cleanups or reimburse the government for EPA-led cleanup work' (EPA <https://www.epa.gov/superfund/what-superfund>). However, the Mayor of New York City at the time, Michael Bloomberg, and the GCCDC stepped forward to oppose the listing. The City offered to produce a plan to match that of the EPA and to do it faster. Bloomberg had been promoting his 'Luxury City' idea for the future of New York City that encouraged luxury development and an upscaling rezoning agenda. According to Greenberg, the Bloomberg

⁴ This file is licensed under the [Creative Commons Attribution-Share Alike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/).

administration sought to refashion the city in order to appeal to global elites ‘[...] by attracting high-end retailers, hotels, stadiums, and residential towers [...]’ (2010: 131). He, and the GCCDC, which had real estate professionals, as well as local business and property owners on its board, felt the designation would seriously stigmatize the area even further and discourage investment. For example, the city had earlier granted a zoning change to a developer, who abandoned their project when the canal was declared a Superfund site. In the years since the designation many local residents and organizations have questioned the EPA’s cleanup methods fearing the spread of toxic waste onto nearby public areas. In contrast to upscaling, a richly illustrated plan, ‘Reconsidering Gowanus’, that would not displace local residents was offered in 2010 by the Steven L. Newman Real Estate Institute Research and Development Department at Baruch College, CUNY. (https://issuu.com/proteusgowanus/docs/2010_reconsidering-gowanus_steven_n).

As to autoethnographic insight, after occasionally consulting with the Gowanus Canal Community Development Corporation since 1981, I was invited to join its Board in 2008 and rose to its Presidency in 2012. I also served on the local Gowanus Canal Advisory Committee. Along with other GCCDC Board members, at a meeting with the EPA in Brooklyn, I argued that the designation would harm local residents and business because of the Superfund stigma. The EPA representative replied that since the canal already had a terrible reputation, the designation couldn't make it worse. The Superfund designation resulted in competing visions for the future of the canal. As reported by Joseph Berger in *The New York Times*,

‘This is the tipping point for Gowanus’, said Jerome Krase, a professor emeritus of sociology at Brooklyn College and a former president of the Gowanus Canal community Development Corporation, a neighborhood group. ‘What's going to be interesting is to see whether it's going to contribute to a kind of middle- and upper-middle-income neighborhood in between gentrified Carroll Gardens and highly gentrified Park Slope. What's unusual about this project is it's being done in the middle of the wasteland.’ (Berger 2012)

Since its founding in 2009, the local environmental group, the Gowanus Conservancy, had been advocating for a greener development for the area that included extensive parkland and open spaces as well as restoring the vitality of the canal by partnering with the EPA and the New York city Department of Environmental Protection. This is how it describes itself on its website:

‘Gowanus Canal Conservancy is dedicated to facilitating the development of a resilient, vibrant, open space network centered on the Gowanus Canal through activating and empowering community stewardship of the Gowanus Watershed. Since 2006, we have served as the environmental steward for the neighborhood through leading grassroots volunteer projects; educating students on environmental issues; and working with agencies, elected officials, and the community to advocate for, build, and maintain innovative green infrastructure around the Gowanus Canal.’ (<https://gowanuscanalconservancy.org/about/>)

As previously noted, the Conservancy also provides an elaborate illustrated history of the Gowanus area which has informed some parts of this article. Its Hall of Gowanus Digital Story Map explores maps, photographs, timelines and tools for personal reflection that are unique to

the Gowanus neighbourhood that are well-worth exploring. Although the Conservancy would not think of itself as advocating displacement of the most vulnerable residents of the area, as previously noted by Kenneth Gould and Tammy Lewis, improving the environmental qualities of depressed areas can, accidentally or purposely, prepare for it (Gould and Lewis 2016).

In 2013, the EPA approved a \$506 million plan to clean the Gowanus Canal to be completed by 2022. There were three steps: dredging contaminated sediment from the bottom of the canal; capping the dredged areas; and implementing controls on combined sewer overflows to prevent future contamination. Most important for the visual appeal of the canal involved excavating and restoring approximately the shoreline along the canal. Subsequently, this beautification project has been enhanced by both public and private funds. The public restoration was to be paid for by the ‘responsible parties’ for the pollution designated by the EPA. The Superfund cleanup began in 2017. However, there were concerns by local groups such as the GCCDC that some of the clean-up activities could pose a health risk by disturbing and spreading water and air pollution. Recent articles in the press have proved that the concerns were well-merited. For example, Voice of Gowanus, a local advocacy group reported that the New York City Department of Environmental Conservation confirmed the release of toxic vapours at levels that triggered an emergency alarm and work stoppage on July 27th at a worksite adjacent to EPA’s massive Gowanus Canal Superfund zone. The worksite is part of the former Citizens Manufactured Gas Plant (MGP), which is currently undergoing partial remediation and toxic containment under the supervision of DEC, an effort that has been widely criticized by the EPA and the community for its inadequacy. Children who had been playing at a playground directly across from the site reported smells to local political representatives who demanded an explanation from the EPA and DEC. Weeks after the incident, the DEC reported ‘that at the same time the children were exposed to noxious fumes, the on-site air monitors at the former MGP site had exceeded the warning level for Volatile Organic Compounds (VOCs), thereby triggering a work stoppage. While helpful to the construction workers, nobody else in the area was told of the incident or warned of the potentially harmful chemicals in the air’ (Seth 2022).



Figure 6. Public Place, 2022. By Jerry Krase.

The city government took over this site at Smith and 4th Streets in 1975 and designated it a public place for use as ‘public recreation space’. Despite the legal standing as a ‘Public Place’, developers have continually proposed developing the site for other uses. National Grid is accountable for cleanup of the massive pollution from coal gas manufacture. Upon completion it will be turned over to the New York City Parks Department.

In a related vein, Kirstyn Brendlen had reported that the federal EPA was concerned that New York State's plans '[...] to clean up the heavily contaminated Public Place site are insufficient and would leave behind dangerous chemicals that could present health issues to the surrounding neighborhood [...]' The agency's director Superfund and Emergency Management had reported in February of 2022 of '[...] the potential for dangerous chemicals and contaminated groundwater to 'migrate' into the Gowanus Canal and the soil, which could lead to "soil vapor intrusion", wherein hazardous gasses leech upwards into buildings.' (Brendlen 2022).

Gentrification

As in other depopulated and deteriorated NYC neighbourhoods such as Williamsburg, Brooklyn and SOHO in Manhattan, as early as 1980, the Gowanus area had attracted artists and musicians and other members of what Richard Florida called the 'creative class' (2002). The real and virtual appearance of art studios, bars, restaurants and other businesses associated with hipster or gentrification culture made the area even more attractive to both patrons, new and old residents and, of course, developers. Local politicians and organizations collaborated to make the neighbourhood more attractive to newcomers and discourage old-timers from leaving. For example, in 1999, the GCCDC was given \$100,000 to produce and distribute a bulkhead study and public access document. The next year it got \$270,000 from the New York City Department of Parks and Recreation 'Green Street' program to construct three street-end open spaces along the Gowanus Canal. New York States Governor George E. added an additional \$270,000 to create a revitalization plan in 2001. In 2002, \$100,000 in capital funds were allocated for a pilot shoreline project and, in 2003, Congresswoman Nydia Velazquez allocated another \$225,000 for a comprehensive community development plan. These plans and pilot programs led in to the area east of the Gowanus to be rezoned in 2003 and 2009 for high density residential use with a strong commercial component. At about the same times, plans to rezone Gowanus itself were in process.

Redevelopment Sites

In the late 1990s real estate values were surging in neighbourhoods near the canal such as Carroll Gardens and Park Slope and interest in the Gowanus area increased environmental risks. Groups concerned with the possible loss of jobs and affordable housing in the area pressured local elected officials to create a 'Gowanus Manufacturing Zone'. These groups also believed that the zone would spur the creation of manufacturing and related employment which never materialized and the cleanup itself enticed speculation into Gowanus. Given this failed hope, in the summer of 2016, the rezoning process restarted. Officials planned to reveal a more comprehensive plan in 2018, including rezoning a 43-block area and requiring developers to reserve 25% of the new units for 'affordable' housing. It must be noted that the term 'affordable' is misleading. For example, in most local residential developments in upscaling neighbourhoods like Gowanus the 'affordable' apartments are essential reserved for Moderate-income units are set aside for households with income between \$85,920 and \$128,880 and middle-income units are affordable to households with income between \$128,880 and \$177,210 (Bhat 2022).

In June 2017, the Gowanus Canal Conservancy also began the process of designing a redevelopment plan for the area which can be found on its website noted previously. Another visioning project was conducted by the Clemson University Graduate School of Architecture's in collaboration with the GCCDC during its 2010 New York City summer seminar. Its ideas and related events were quite prescient as to the future of the area; which is the present as I write this.

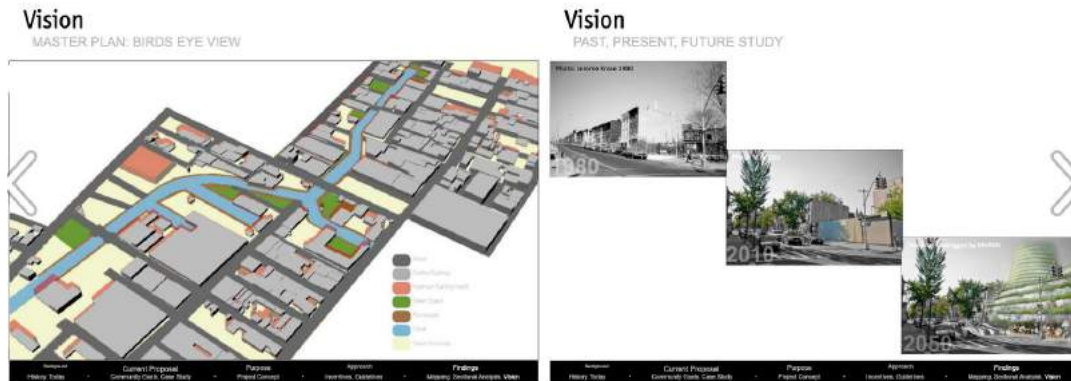


Figure 7. ‘Vision: Past, Present, Future Study’, Clemson University NYC Summer Studio, 2011. This image combines the 1980 and 2010 Repeat Photographs by Jerome Krase of Bond Street near the Gowanus Canal and a 2050 Vision of the students in the Clemson Summer Studio. Source: Rediscovering Gowanus: Zoning Research Project, A presentation formed as a collaboration between students of Clemson University's NYC Summer Studio, 2011, <https://issuu.com/lena319/docs/gowanus>.

By late 2017, although this area had gentrified rapidly, some residents and community groups continued to opposed vigorously the new developments. For example, at a public hearing about Gowanus rezoning in 2019, the local Assemblywoman Joanne Simon did not see how the city can expect it ‘[...] to become a model green neighborhood without taking into account the CSO problems we have’ (Wong 2019). Since then, several upscale developers have bought abandoned or little-used waterfront sites along the canal. As the greening continues, this has expanded well beyond the canal.

‘Brooklyn Utopias: Along the Canal’, was a public outdoor exhibition that asked artists to consider what a ‘Utopia’ would look like for the neighbourhoods bordering the Gowanus Canal. At the indoor and outdoor venues which opened in April 2022, artists presented works about the utopian visions of others as well as their own in the form of printed banners hung on the fences surrounding J.J. Byrne Playground in Park Slope and Coffey Park in Red Hook. The artists were asked to comment on one of the above neighbourhoods and address the following questions:

- What does a ‘Brooklyn Utopia’ look like for you, specifically in the neighbourhoods bordering the Gowanus Canal?
- How can this area’s unique history, as well as current developments, inform its future?
- What is the role of artists in creating a more ‘Utopian’ Gowanus?

Many expressed ideas for improvement and more positive neighbourhood futures, as they addressed: equity, diversity, political and social structures, environment, gentrification, and poverty (<https://ioby.org/project/brooklyn-utopias-along-canal>).

I, and some of my students, visited the exhibition on May 22, 2022. With their permission, I present some of their comments below.

Armyda Escobar

‘Overall, I enjoyed this small class field trip. I had never been to Gowanus or had been aware of the canal until taking this class. I did not take any images of the gentrification you described on the different sides of the street, but that moment of the trip has stuck with me since. It’s unbelievable to think that one side of a street could be entirely gentrified, while the other street is not. However, I feel that this could also be said about the canal itself. Whole Foods’ side of the canal has been beautified, yet the other side remains the same. It’s crazy what money can do to one side of a street/canal.’

Royta Iftakher

‘The trip to the canal was very interesting in the sense that I’ve never really explored an area of the city so different from what is conventionally associated with taking a field trip. The canal was gritty, dirty, and full of promises and expectations for what the neighborhood could one day become. I’m glad I was able to go because now I can say I understand a part of the city that is more than just an opportunity for a quick photo op. The canal, the gentrification, the exhibition at the old stone hone house, and the conservancy were crucial in putting together a landmark of the city. The canal somehow holds the past, the present, and the future within it. The past is represented by the lingering pollution and undeveloped land, the future being the construction.’

Vanchi Ly included some photographs in her report and commented on what she thought were the points the artists were trying to make.

‘Photo 3: Artwork depicting a utopian Gowanus canal, clean of trash and full of life. I thought this reflected what people hoped the reformed Gowanus canal could become. It reflects how bad the pollution has become in the current canal. Photo 4 and 5: The Gowanus Blue Schools Design Challenge, a part of the Gowanus conservancy exhibit. I thought it was pretty insightful and innovative to have children in schools plan out eco-friendly design plans relevant to their neighbourhoods. Photo 6, 7, 8: The park included in the Whole Foods parking lot. I thought it was a big contrast to have this lavish Whole Foods, complete with the park when the overlooking Gowanus canal was littered with trash and pollution. There were murals across the canal, and I thought that added some colour to the dreary environment.’

Summary

In this article I attempted to demonstrated the many ways that social, economic and political competitions over urban places and spaces are symbolically presented and represented. I also

tried to make it clear that these often conflicting socially constructed images significantly affected the lives of local residents and businesses. In the recent case of Gowanus, the most contentious of these territorial or spatial discourses has been about gentrification and displacement in Brooklyn (Krase and DeSena 2016, Krase 2022) and, ironically, around the highly polluted and territorially stigmatized Gowanus Canal. To provide a solid foundation for understanding the contemporary battles over the future of the community, a visualized history of the area over the centuries was also presented and enhanced by digital and virtual sources due to the limitations on figures in this publication.

I hope that the readers and viewers will recognize how concrete historical changes have been accompanied by changed visual representations that have in turn been actualized and impacted on the past, present and future identities of the area.

Historically, these representations have impacted the lives of residents in the past as well as newcomers well beyond those defined as ‘minorities’ and ‘marginalized’ communities. It must be noted as to these ‘morals of legitimacy’ (Pardo 2000, Pardo and Prato 2019, Krase and Krase 2018) that poor and working-class immigrant Irish and Italians who populated the area from the second half of the 19th through most of the 20th centuries have been scrupulously overlooked in most commentary today on both the past pollution and current gentrification in the area. In part, this is because so many of those had been poor not only improved their socioeconomic status before the invasions of gentry, but as residential and business property owners, they benefitted by it.

Appendix: Methods

This article has employed multi-modal methodologies to explore the visible changes in the Gowanus Canal area, and how visions of the present and future have been contested in print and digital media. Principal among these have been visual ethnography, which Donna Schwartz suggests is ‘... best fitted to the research scene and most useful for humanist sensibilities’ (1989: 152). A portion of the article is autoethnographic, which as noted by Carolyn Ellis, Tony E. Adams and Arthur P. Bochner ‘describes and systematically analyses personal experience to understand cultural experience’ (Ellis et al. 2011: 1). To add depth to the changing appearance of the area, images from historical archives have been searched. *Wikipedia* provided an excellent outline of the history of the canal (Wiki 2022). Searching for visual archives and references to the Gowanus area were conducted judiciously via digital and virtual ethnography. As noted by Daniel Dominguez et al., ethnography via the Internet, ‘maintains its own dialogue with the established tradition of ethnography and formulates its relation to this tradition in different ways’ (2007: 1). In several places, are the fruits of my own visual ethnography. For Sarah Pink, ethnography is a reflexive and experiential process through which understanding, knowing and (academic) knowledge are produced (2009: 8). In its visual iteration methodology the ethnographer’s sensing body is placed amidst the multisensoriality of social encounters or interactions. One case, Figure 7, is an example of repeat photography. As noted by John Rieger ‘Perhaps the most reliable way we can use photography to study social change is through the systematic visual measurement technique of ‘Repeat Photography’ or, simply, “rephotography”’ (2011: 133; See also Doucet

2019). Also included, were recent comments by student who visited the area on a field trip supervised by the author, and other unique visions of Gowanus.

References

- Beauregard, R. A. and Haila, A. 2000. The Unavoidable Continuities of the City. In P. Marcuse and R. Van Kempen, (eds) *Globalizing cities: a new spatial order?* Oxford: Blackwell.
- Berger, J. 2012. Grand Plan for a Toxic Site Is Scorned and Celebrated. *The New York Times*, 8 October. <https://www.nytimes.com/2012/10/09/nyregion/development-plan-near-gowanus-superfund-site-is-scorned-and-celebrated.html>; Accessed 6 September 2022.
- Bhat, S. 2022. Housing: Trends to Watch for the Future of NYC. *The City*. <https://www.thecity.nyc/2022/1/5/22869518/housing-trends-to-watch-for-the-future-of-nyc>; Accessed 24 September 2022.
- Bonner, K. 2007. Reflexive Theorizing While Travelling through Montreal and Toronto: The Global Cities Discourse, New Urbanism and the Travel Essays of Jan Morris. In J. Sloan (ed.), *Urban Enigmas: Montreal, Toronto, and the Problem of Comparing Cities*. Montreal and Kingston: McGill-Queens University Press.
- Bourdieu, P. 1977. *Outline of a Theory of Practice*. New York: Cambridge University Press.
- Brendlen, K. 2022. EPA Letter Warns State Cleanup of Gowanus Green May Leave Contamination Behind. *The Brownstoner*. <https://www.brownstoner.com/development/gowanus-green-brooklyn-public-place-epa-letter-warns-contamination-superfund-cleanup/>; Accessed 22 September 2022.
- Domínguez, D., et al. 2007. Virtual Ethnography. *Forum: Qualitative Research*, 8 (3). <http://www.qualitative-research.net/index.php/fqs/article/view/274/602>; Accessed 1 April 2015.
- Doucet, B. 2019. Repeat photography and Urban Change. *City*, 23 (4-5): 411-438.
- Ellis, C., Adams, T. E., Bochner, A. P. 2011. Autoethnography: An Overview. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 12(1), Art.10. <http://www.qualitative-research.net/index.php/fqs/article/view/1589/3095>; Accessed 1 June 2015.
- Florida, R. 2002. *The Rise of the Creative Class*. New York: Basic Books.
- Glass, R. 1964. *London: Aspects of Change*. London: Centre for Urban Studies and MacGibbon and Kee.
- Gould, K., Lewis, T.L. 2016. The Gowanus Canal: From open sewer to the Venice of Brooklyn. In *Green Gentrification: Urban sustainability and the struggle for environmental justice*. London: Routledge.
- Greenberg, M. 2010. Branding, Crisis, and Utopia: Representing New York in the Age of Bloomberg. In M. Aronczyk and D. Powers (eds), *Blowing up the Brand: Critical Perspectives on Promotional Culture*. New York: Peter Lang.
- Harvey, D. 1989. *The Urban Experience*. Baltimore: John Hopkins University Press.
- Jackson, J. B. 1964. *Discovering the Vernacular Landscape*. New Haven: Yale University Press.

- Jelly-Schapiro, J. 2021. What Kind of Power Should the Names of New York Have? *The New York Times* <https://www.nytimes.com/2021/12/07/opinion/new-york-street-names.html>; Accessed 9 September 2022.
- Krase, J., Greenblatt, R. 1981. Research Report. Land Use and Building Condition Survey: Bond Street-Gowanus Canal Area. *Gowanus Development Corporation*. Brooklyn, August.
- Krase, J. 2012. *Seeing City Change*. London: Routledge.
- Krase, J. 2020. Little Italies and Gentrification. In F. Mangiapane (ed.), *Etnografie del Contemporaneo*, 4, *Gentrificazione e margini*. <https://www.edizionimuseopasqualino.it/wp-content/uploads/2021/04/etnografiedelcontemporaneo3.pdf>
- Krase, J. 2022. Social Justice and Brooklyn Development: 500 Years of Struggle. In D. Mutnik et al. (eds), *The City is an Ecosystem: Sustainable Education, Policy, and Practice*. London: Routledge.
- Krase, J., DeSena, J. N. 2016. *Race, Class, and Gentrification in Brooklyn: A View from the Street*. Lanham, MD: Lexington Books.
- Krase, J., DeSena, J. N. eds. 2020a. *The Status of Interpretation in Italian American Studies: Gentrification around the World, Volume 1: Gentrifiers and the Displaced*. New York: Palgrave-Macmillan.
- Krase, J., DeSena, J. N. eds. 2020b. *Gentrification around the World, Volume 2: Innovative Approaches*. New York: Palgrave-Macmillan.
- Krase, J., Krase K. 2019. Undermining Governmental Legitimacy at the Grass Roots: The Role of Failed Promises and Inflated Expectations of Community Accountability. In I. Pardo and G. B. Prato (eds), *Legitimacy: Ethnographic and Theoretical Insights*, New York: Palgrave-Macmillan.
- Lees, L., Shin, H. B., López Morales, E. 2016. *Planetary Gentrification*, Cambridge: Polity Press.
- Lees, L. 2003. Super-gentrification: The case of Brooklyn Heights, New York City. *Urban Studies*, 40 (12): 2487-2509.
- Lefebvre, H. 1991. *The Production of Space*. (D. Nicholson-Smith, Trans.) Oxford: Blackwell.
- Lethem, J. 2000. *Motherless Brooklyn*. New York: Vintage.
- Ley, D. 1996. *The New Middle Class and the Remaking of the Central City*. Oxford University Press.
- Mixson, C. 2015. Memento gory! Gowanus Souvenir Shop sells canal-inspired keepsakes. *Brooklyn Paper*. 1 December. <https://www.brooklynpaper.com/memento-gory-gowanus-souvenir-shop-sells-canal-inspired-keepsakes/>; Accessed 23 September 2022.
- Pardo, I. 2000. Morals of Legitimacy: Interplay between authority, responsibility and trust. In I. Pardo (ed.), *Morals of Legitimacy: Between Agency and System*. Oxford: Berghahn.
- Pardo, I., Prato, G. B. eds. 2019. *Legitimacy: Ethnographic and Theoretical Insights*. New York: Palgrave Macmillan.

- Pink, S. 2009. *Doing Sensory Ethnography*. London: Sage.
- PMFA. 2017. It came from the Gowanus Canal Again: Comic Release Party at Gowanus Souvenir Shop, *Pardon Me for Asking: News from Carroll Gardens, Brooklyn and Beyond*. <https://pardonmeforasking.blogspot.com/2017/11/it-came-from-gowanus-canal-again-comic.html>; Accessed 25 September 2022.
- Rieger, J. H. 2011. Rephotography for Documenting Social Change. In E. Margolis and L. Pauwels (eds), *The SAGE Handbook of Visual Research Methods*. London: SAGE.
- Sassen, S. 2001. *The Global City: Strategic Site/New Frontier*. <http://www.india-seminar.com/2001/503/503%20saskia%20sassen.htm>; Accessed 7 August 2014.
- Schwartz, D. 1989. Visual Ethnography: Using photography in qualitative research. *Qualitative Sociology*, 12: 119-54.
- Seth, H. 2022. Toxic Vapor Release Confirmed by DEC Only After Students Report Noxious Fumes in Gowanus Playground. *Voice of Gowanus*. 20 September. https://www.voiceofgowanus.org/report_noxious_fumes.
- Shaw, K. 2008. Gentrification: What it is, why it is, and what can be done about it. *Geography Compass*, 2 (5): 1697-1728.
- Slater, T. 2003. Comparing gentrification in South Parkdale, Toronto and Lower Park Slope, New York City: A 'North American' model of neighbourhood reinvestment? CNR Paper #11. *Economic and Social Research Council Centre for Neighbourhood Research*. Retrieved from <http://www.neighbourhoodcentre.org.uk>.
- Smith, N. 1979. Toward a Theory of Gentrification: A Back to the City Movement by Capital, not People. *Journal of the American Planning Association*, 45 (4): 538-48.
- Van Kempen, R., Marcuse, P. 1997. The Changing Spatial Order in Cities. *American Behavioral Scientist*, 41 (3): 285-298.
- Wiki 2022 The Gowanus Canal. *Wikipedia*. https://en.wikipedia.org/wiki/Gowanus_Canal
- Wolfe, T. 1940. *You Can't Go Home Again*. New York: Harper & Row.
- Wong, P. 2019. Public Speaks Out Against Gowanus Rezoning at Scoping Meeting. *The Brooklynier*. 26 April, https://bklyner.com/public-speaks-out-against-gowanus-rezoning-at-scoping-meeting/?utm_source=Today+In+Brooklyn&utm_campaign=6384c512a1-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_cfebf1bc9c-6384c512a1-64245945; Accessed 4 May 2019.
- Zukin, S. 1996. Space and Symbols in an Age of Decline. In A. D. King (ed.), *Re-Presenting the City: Ethnicity, Capital and Culture in the Twenty-First Century Metropolis*. London: Macmillan.