Raising Red Hook:

Preserving a Neighbourhood on the Edge of the World

by

David Tucker

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David Tucker
figure 1: Photograph of Red Hook's view of The Statue of Liberty
Abstract

After spending time in New York City one quickly becomes desensitized to its characteristic congestion, and must seek out stillness: an increasingly rare commodity. I found stillness in New York City while on a journey to Sunny’s, one of the city’s oldest bars, located in the isolated Brooklyn neighbourhood of Red Hook. Red Hook’s small town feel is entirely anti-Manhattan, yet its waterfront views of Lower Manhattan remind Red Hook that its unique identity was born out of its proximity to Manhattan. The future of Red Hook’s identity is uncertain as it is vulnerable to the forces of gentrification and climate change. Most of this low-lying coastal neighbourhood is predicted to be inundated by the ocean as soon as the year 2050. This thesis investigates Red Hook’s identity as one of the most unique places in New York City through narratives of its past, present and future. These narratives propel the proposal of architectural methods for preserving Red Hook’s identity in a speculative and flooded future.
Acknowledgments

Shoutouts to Zach Colbert, Sunny Balzano and Tim Sultan
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1.0 Context

figure 2: Photograph of Manhattan’s culture of congestion at The Queensborough Bridge
1.0 Context

1.1 Manhattanism

At the heart of Rem Koolhaas’ analysis of the history of New York in *Delirious New York*, is the city’s Culture of Congestion, which he explains is the real enterprise of Manhattan’s Architects. The brand of New York, recognized all around the world, was built by New Yorkers striving to succeed within the congested confines of a small island organized by a strict urban grid.

Anyone who visits the city is wowed by all of the wonderful and wretched things within. Skyscrapers. Crime. Fashion. Cockroaches. All born from the congestion. What intrigued me after living in the city this past summer, was how New Yorkers cope with the congestion. I noticed that New Yorkers become desensitized to the congestion. Koolhaas writes about Salvador Dali, who was drawn to the mystique of New York, but was disappointed upon arrival in New York. Koolhaas speculates that:

“Dali’s first discovery is that in Manhattan Surrealism is invisible.”

Even as a fresh, and temporary, New Yorker I quickly understood Dali’s observation. When New York’s brand of congestion became part of my daily commute and daily routine, the surreal became my daily norm, and in turn stillness became surreal. Reflecting on my time in New York, my favourite moments in the city were those of discovering stillness. The abundance of Manhattanism makes moments of anti-manhattanism all the more unique. The real magic of New York isn’t the congestion; it is the moments of stillness amidst the congestion. It is this stillness that creates truly remarkable urban communities.
1.0 Context

1.2 Anti-Manhattanism: Red Hook

With Manhattan’s congestion bursting off of the island and spilling into the boroughs, seeking stillness has become increasingly difficult. One neighbourhood, however, has managed to survive relatively untouched by New York’s characteristic congestion. The quaint, yet gritty neighbourhood of Red Hook exhibits an uncanny stillness, despite being in clear sight of Manhattan’s financial district. Red Hook’s unique character is different than that of any neighbourhood in the five boroughs, yet maintains an identity that is entirely New York.

figure 3: Red Hook highlighted within New York City. Image taken from Google Earth.
1.0 Context

1.3 Inspiration: Sunny’s Bar

I discovered Red Hook this summer on a tip from a friend who directed me to what he said was one of the oldest bars in New York. The journey to Sunny’s is like entering a time-warp, as skyscrapers and subways are replaced by cobblestone streets and vacant lots. The cobblestone streets and vacant lots exhibited a calmness I had not encountered anywhere else in New York. This atmosphere is juxtaposed by unrivalled sights of the Statue of Liberty and of lower Manhattan’s iconic skyline. These observations would seem unremarkable if taken in a typical neighbourhood; but here, next-door to the global epicentre of urbanism, stillness becomes more than remarkable. Even in their most modern iterations, both Red Hook and Sunny’s Bar are more integral to my personal portrait of New York City than places like Times Square, The Oculus or Rockefeller Center.
In order to explore Red Hook from our thesis studio in Ottawa, among other sources, I turned to Sunny’s Nights: Lost and Found at a Bar on the Edge of the World by Tim Sultan. The book offers an account of Red Hook’s history through Sultan’s experience working at one of its most iconic establishments: Sunny’s Bar. The book begins in the early 90’s with Sultan taking a wrong turn and deciding to get lost exploring the still streets of Red Hook, landing him in Sunny’s Bar. Inside he found a unique crowd quietly watching the projection of a ballet dance from an old film reel. His first thought upon entering was:

“I had come to a place, it seemed, where the world was returning to its most elemental properties.”
Sultan’s portrait of Red Hook is that of a sanctuary from the congestion of Manhattan, which he escapes to weekly in order to tend bar at Sunny’s. His story comes to an end when he notices Red Hook changing and realizes that his sanctuary cannot last forever. He writes:

“Live long enough in New York and everyone tends to develop a theory as to when New York stopped being ‘New York’. This is strictly a local phenomenon. No citizen of Boston, Wichita, or Seattle has ever bothered with this sort of municipal introspection, while in New York it is compulsory to periodically rhapsodize about the days when the city was more elegant, more seedy, more avant-garde, more soulful, more disreputable, more sophisticated, more freaky, more tolerant, more incomparable. This theory has its sub-theories, one for every neighbourhood.”
Sultan’s theory was apparent to me as I began crafting my own portrait of Red Hook by interviewing locals, asking them what they found special about their neighbourhood. The many generations of Red Hookers all gave different answers and all provided different theories as to when Red Hook stopped being “Red Hook”. If one characteristic had to be identified that spanned the many different versions of Red Hook it would be the personality of its residents. The early settlers, the dockworkers, and even the gentrifiers all share a personality that is large enough for New York City, but is too eccentric for Manhattan or even Brooklyn. In a short story written in 1927 called *The Horror at Red Hook* the author H.P. Lovecraft introduces the personality of Red Hook as he writes:

“More people enter Red Hook than leave it—or at least, than leave it by the landward side—and those who are not loquacious are the likeliest to leave.”
2.0 Red Hook

figure 7. Photograph of the East River Ferry in the Atlantic Basin on its way to Manhattan
Map Legend

- Water
- Streets
- Green Space
- Roads

Red Hook
Brooklyn, NY

Figure B: Map of Red Hook
2.0 Red Hook

2.1 History

There have been many versions of Red Hook, some of which have exhibited stillness and some have exhibited congestion. Beginning with the Dutch colonists who arrived in 1636 to find marshland inhabited by the Lenape Native Americans, Red Hook’s history begins with stillness. After roughly 200 years of being farmland, Red Hook was industrialized in 1850 with the construction of the Atlantic Dock. The maritime industry of Manhattan relocated to Red Hook and brought with it New York’s characteristic congestion. Industry quickly consumed the marshland with ports, shipyards, warehouses and manufacturing sites. Workers lived in shantytowns and mingled with people from around the world in bustling taverns. Brooklyn rose to international significance with Red Hook serving as New York’s connection to the rest of the world.

figure 9: Illustration of Red Hook circa 1875
https://commons.wikimedia.org/wiki/File:Red_hook_circa_1875.gif
2.0 Red Hook

figure 10: Red Hook's changing coastline from 1770 to 2018
The congestion completely consumed the marshland in the 1930s as Red Hook was fully developed into a paved urban grid with modern streets. Robert Moses, the prolific New York City Urban Planning Commissioner, left his mark on Red Hook by developing the New York City Housing Authority (NYCHA) Red Hook Houses overtop of the old shantytowns. At the time, these state-of-the-art developments raised the standard of living in Red Hook. Moses was also famous for developing a vast networks of expressways connecting the 5 boroughs. The Brooklyn-Battery Tunnel connected lower Manhattan with Red Hook and the elevated Gowanus Expressway continued that route over the Gowanus Canal.
2.0 Red Hook

With the advent of the shipping container in 1962, Red Hook’s shipping infrastructure became obsolete. New York Harbour’s principal port relocated to New Jersey, and the abandoned shipping infrastructure would lay dormant for years, suffocating the neighbourhood. Red Hook became a more than undesirable place to live and Robert Moses’ fraught interventions began to further exacerbate the issue. The elevated expressway encouraged traffic to fly past Red Hook while physically cutting the peninsula off from Brooklyn. Financial issues plagued NYCHA and their social housing projects all over the city fell into disrepair from a lack of maintenance. The Red Hook Houses in particular, due to their isolation in an all but abandoned neighbourhood, became overridden with crime and drug abuse. Some say that Red Hook was the home of the crack epidemic of the 1980s. Sultan writes of this period:

“Surrounded on three sides by water and on the fourth by an expressway, the neighbourhood was isolated and strangely remote. It was a corner of the city that rarely made the news. And when it did, it was mostly in connection with crime, tragedy, or municipal neglect.”

Revival began in the 1990s as urban pioneers began to move to Red Hook. Despite the neighbourhood still being considered undesirable, dangerous and inaccessible; cheap rent attracted small-scale manufacturers, industrial businesses and artists. Residential development was kickstarted in 2002 when a Fairway Market opened, the first grocery store in the area. Next, Ikea moved in, followed by a Tesla
dealership. Small businesses soon began opening up on Van Brunt Street and real-estate prices began to rise. Some residents feared that Red Hook would suffer the same type of rapid gentrification typically seen throughout Brooklyn.

Red Hook’s relative survival from the flood of gentrification can be attributed to zoning laws on building height restrictions, its lack of a subway and to an actual flood caused by Superstorm Sandy in 2012. Local residents have fought developers from building above the four-storey limit in order to preserve the neighbourhood’s unique open sky. Large condominiums have been avoided and instead smaller homes more consistent with the existing typologies have been constructed. Many local residents worry though that the fight against big developers could still be lost.
2.0 Red Hook

2.2 Transportation Isolation

According to a local real estate agent, the largest deterrent for people moving to Red Hook is still its perceived inaccessibility from Manhattan. Red Hook’s isolation began in the 1960s when it was cut off from the water by abandoned infrastructure, cut off from the land by the expressway, and cut off from the Metropolitan Transit Authority (MTA) mass transit system as the streetcars were removed.

Recent efforts have connected Red Hook to NYC’s bike sharing system and to the NYC East River ferry system. Unfortunately, New Yorkers are unlikely to rely on these systems year-round. Red Hook’s nearest subway station is inaccessible by New York City standards. In order to reach the Smith Street subway station from Red Hook one must either connect using a bus or cross beneath the Gowanus Expressway at one of its few pedestrian crossings. It is no secret that a New York City neighbourhood cannot grow without subway access, and Red Hook is no exception. Real estate wise, its growth has been stunted by New York City standards. Transportation isolation has, however, allowed Red Hook to grow into one of the rare communities of stillness that are so special to New York City.
2.0 Red Hook

figure 13: Photograph of one of the few pedestrian crossing under the Gowanus Expressway

figure 14: Photograph of the Gowanus Expressway from inside Red Hook
2.0 Red Hook

figure 15: Transportation Map of Red Hook
2.3 Climate Change

In October 2012, Superstorm Sandy wreaked havoc on New York City and brought to light the cities’ lack of resiliency towards natural disasters. Low-lying Red Hook was among the hardest hit areas in the city and after the storm most of the neighbourhood remained underwater for days. A mandatory evacuation notice was issued, but many people stayed in the neighbourhood and were trapped in buildings surrounded by flooded streets. The Red Hook Houses were without power for nearly three weeks following the storm.

figure 16: Deep flood water remained after Superstorm Sandy
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2.0 Red Hook

Superstorm Sandy was a 100-year storm, however, experts predict that due to climate change similar storms will have a far higher frequency.\(^1\) The base flood elevations estimated by FEMA for storm events in Red Hook can be seen in figure 17. These values were adjusted after flood levels from Superstorm Sandy surpassed FEMA's original estimates.

As a peninsula, Red Hook is exposed to the ocean on three sides, but it can also be flooded from the interior. The current peninsula is mostly man-made land, built on a marsh with a high water table. When the water table rises, streets and basements inland can experience serious flooding. To make matters worse, ocean levels globally are predicted to rise as a result of climate change. The triple threat from storms, groundwater and rising ocean levels will cause permanent flooding in Red Hook's residential, commercial and industrial areas. The coastline is predicted to change according to figure 18 by the year 2050 with much of the neighbourhood underwater.

The triple threat is extremely difficult to defend against. Protecting the neighbourhood from another Sandy would require a 16-foot high wall around the entire peninsula.\(^2\) Building such ludicrous infrastructure would be problematic for obvious reasons, but it would also trap the groundwater inside, potentially making matters worse.

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1. New York City Department of City Planning. “Existing Conditions and Brownfields Analysis Red Hook, Brooklyn” New York City, September 2014.

2.0 Red Hook

Red Hook is the most vulnerable area in New York City to flooding and will be the first victim of our changing climate. Today’s coastline was constructed by pushing the ocean away. Nature is pushing back and will eventually return the coastline to a state resembling the marshes that the Lanape originally occupied.

After Sandy some residents returned to rebuild Red Hook, while many who lost everything never returned. The rebuild lead to some gentrification, but has also deterred the more risk-averse gentrifiers. Some new structures, such as the Ikea, have been built with resiliency in mind. Unfortunately, these resilient solutions are typically in isolation; no project is prepared for a future of permanent flooding. The Ikea was built on stilts and with its building systems located on the roof, and was therefore able to operate as an emergency shelter in the wake of Superstorm Sandy. The Red Hook Houses required extensive repairs that are still ongoing and will eventually total over US$550 million. The Red Hook Houses experienced the most humanitarian damage from the storm as their building systems were located below the flood’s elevation. Part of the renovations so far have included full roof replacements, relocation of building systems above the 1-100 year flood elevation, and installing emergency power generators. Future plans involve raising the interior courtyards between the housing developments above the 1-100 year flood elevation. During future floods, residents could be rescued from these raised courtyards.

These strategies, however, fail to plan for the inevitable future where the flood water will not recede after the storm. When Red Hook’s streets become canals, the Ikea and the Red Hook Houses could become islands. How will refugees or even shoppers reach the Ikea? How will thousands of NYCHA residents live on islands?

3 Langfield, 2017
2.0 Red Hook

figure 17: Base Flood Map of Red Hook according to FEMA projections
2.0 Red Hook

figure 18: Red Hook's changing coastline from 2018 to 2050 (projected)
3.0 Field Work

figure 19: Photograph of Brooklyn Waterfront Artists building
3.0 Field Work

3.1 Photography

During the first semester of my thesis project, I returned to Red Hook to document the neighbourhood’s identity. I spent 5 days wandering Red Hook, taking photographs and speaking to people along the way. Each day I followed a different route through Red Hook and used different transportation methods to enter and exit the neighbourhood; including the subway, the bus, the East River Ferry, the Ikea Ferry and once simply by walking from downtown Brooklyn. My attempt to photograph every corner of Red Hook captures the neighbourhood’s unique identity in opposition to Manhattan’s congestion. Each photo captures multiple characteristics unique to Red Hook which combine to create a personal (and perhaps universal) portrait of stillness. Architectural features such as cranes, piers, expressways, warehouse doors, low roof lines and Sunny’s Bar emerge from these photographs and contribute to Red Hook’s identity. Sultan captured Sunny describing the importance of Red Hook’s unique features in one of his many soliloquies from behind the bar:

“‘There is nothing very useful about a sunken wreck, a retired shipyard, a crooked paving stone, or an untraveled street… We are drawn to the window nonetheless, for these things colour the view.’ Sunny said after watching a smokestack being dismantled day by day, ‘These places are the personality of Red Hook. They’ve accumulated over time in just this way. Getting rid of them is like going to the doctor after you’ve lived most of your life and erasing the features that make each of us who it is that it is we are.’ New York was, of course, only doing what cities always do—moving ahead.”
3.0 Field Work

figure 20: Photograph of a ship in the Erie Basin

figure 21: Photograph of typical buildings along Conover Street at King Street
3.0 Field Work

figure 22: Photograph of an empty lot near the west coast

figure 23: Photograph of an empty lot across the street from Sunny's Bar
3.0 Field Work

figure 24: Photograph of an old NYC emergency alarm station

figure 25: Photograph of the Mary A. Whalen, PortSide NewYork’s office in the Atlantic Basin
3.0 Field Work

figure 26: Photograph of the ruins of the Red Man Funeral Home

figure 27: Photograph of Peter, a lifelong resident of Red Hook
3.2 Character Maps

In the spirit of Sultan, I also documented the neighbourhood through its people. During my wanderings I was able to speak with people over organized interviews, casual beers and spontaneously in the street. I discovered many personal and unique portraits of Red Hook, which differed greatly based on what year the storyteller first arrived in Red Hook. It became clear that the collective portrait of Red Hook is dynamic, which reinforced both Koolhaas’ theory of New York’s constant state of change and Sultan’s theory of neighbourhood nostalgia.

To assemble a collective portrait of Red Hook, I drew portraits of Red Hook from others’ perspectives, based on my observations. The perspectives are from people I met, from people I read about and from people I have speculated about in the past and the future. Each portrait is a map drawn to depict a character’s version of Red Hook, along with a quote or anecdote. Each individual portrait of Red Hook contributes to the collective portrait of the neighbourhood’s identity.
My phone was dead, so the pizza delivery guy went to my house and to both of the bars I work at to find me.

figure 28: Portrait of "Local"
Dear nest family,

The new world is spectacular! We've built mills here just like the ones back home. I can't wait for you all to join me here. There is so much space!

figure 29: Portrait of "Dutch Colonist"
We got white people livin' in the P's.
Now we're family by choice, not by skin colour.
At first I fought against the IKEA opening across the street, but now that it’s here I don’t even notice it. They do a good job of diverting the traffic through the industrial streets so we don’t see it.

figure 31: Portrait of “Ikea”
Some people hate all the fancy new bars and restaurants opening up. They say it gets too busy on the weekends.
I love it though, it's more customers in my bar and now I don't have to take the bus to go out for dinner!

figure 32: Portrait of “Weekend-warrior”
The commute from Chelsea is easier than you'd think. Doing my research here is much better than being stuck in a traditional biology lab, because here I get to share ideas with a wide variety of people.

No, I don’t really hang out in Red Hook other than to have lunch.

figure 33: Portrait of “Transit Commuter”
I love working in Red Hook, but I’m glad it’s only temporary. I don’t know how I would get here once it’s too cold to bike.

figure 34: Portrait of “Bicycle Commuter”
I remember when the projects was the worst part of Red Hook. Now we're all that's left!

figure 35: Portrait of "Flooded Future"
You can't beat the view from the expressway.
I don't know why anyone was sad about abandoning Old Red Hook.

figure 36: Portrait of "Fully Flooded Future"
4.0 Raising Red Hook

figure 37: Speculative image of a flooded warehouse
4.0 Raising Red Hook

4.1 Flooding

Change is inherent to New York City; as Koolhaas demonstrates that the city is perpetually in a state of reinventing itself. Red Hook is not immune to change as it has been reshaped by the forces of colonization, shipping container technology and drug abuse over the years. Climate change poses an unprecedented existential threat for all of New York City. Red Hook’s acute vulnerability to this threat means that it will experience the consequences first and most severely.

Water will inundate Red Hook from the coast, from the sewers and from the sky; turning its streets into canals and its coastal infrastructure into wrecks. For the future imagined by this thesis, it will be assumed that global ocean levels do rise and that Red Hook is inundated by water according to the estimated depths published by experts. Even Manhattan, with seemingly unlimited capital resources, is currently struggling to build flood protection infrastructure. Red Hook was promised $200 million after hurricane Sandy, but that number has quickly dropped to $100 million; a budget capable of protecting only part of the neighbourhood from a “mild coastal storm surge”\(^1\). For these reasons, effective flood-proofing seems unlikely and complete inundation is a more likely scenario.

Life can go on in Red Hook, but it will have to change. Architectural solutions can help rearrange the urban fabric in such a way that Red Hook’s unique personality can be preserved in a flooded future.

\(^1\) Langfield, 2017
4.0 Raising Red Hook

4.2 Precedence

“There were no playgrounds at this end of Red Hook; there was no grass at all.
The ball fields were the flat roofs of the warehouses on the neighbouring street.”

Sultan recounts this anecdote from Sunny about the Red Hook of Sunny’s youth. The neighbourhood was inundated by the shipping industry, so children resorted to rooftops to find space for playing games, seeking stillness by rising above the congestion. The infrastructure for a new Red Hook above the water already exists along the typical 2-4 storey semi-detached rooftops. Typologies for circulation also already exist in the form of piers extending into the ocean and the expressway bridging the Gowanus Canal. To paraphrase Sunny: “we cannot erase the features that make each of us who it is that it is we are.” Instead we can rearrange these features that create personality and character to arrive at new solutions.
4.0 Raising Red Hook

figure 38: Image highlighting the cranes of the Atlantic Basin

figure 39: Image highlighting the iconic entrance to Sunny's Bar
4.0 Raising Red Hook

figure 40: Image highlighting Red Hook’s signature open sky

figure 41: Image highlighting ground level garage doors typical to the neighbourhood
4.0 Raising Red Hook

figure 42: Image highlighting The Gowanus Expressway

figure 43: Image highlighting a pier in the Erie Basin
4.3 Raising

In Raising Red Hook, Sunny’s Bar will act as the prototype for raising Red Hook. If Sunny’s character and neighbourhood-social-hub status can be preserved in a flooded future, then the same strategy can be applied to other buildings. Sunny’s iconic ground level entrance, with the yellow sign, the striped awning and the neon-lit windows will one day be several feet under water. All of these features could be relocated to a new entrance on the roof that would enter into the upper levels of the building, where the Balzano family used to live. Sunny’s could continue to exist, in the same iconic building, but on a new level. The quaint backyard patio could be moved to the rooftop and would become the closest rooftop bar to the Statue of Liberty in all of New York City.

Red Hookers would access Sunny’s via a raised boardwalk that lands on the roofs of the cluster of buildings between Reed Street and Beard Street along Conover Street. This boardwalk would be wide enough for casual pedestrians and commuting cyclists to share.

The rooftop near Sunny’s would provide entrances to the other buildings in the cluster such as apartment units and industrial spaces. Sultan described Sunny’s as “a bar on the edge of the world” which is precisely the feeling one gets when standing at the waters edge across Conover Street, a short stroll from Sunny’s front door. In a flooded future, Sultan’s description would become more literal as one would no longer have to cross the street to feel on the edge of the world.
4.0 Raising Red Hook

figure 44: Schematic Section of Sunny's Bar
4.0 Raising Red Hook

Predictions for how Red Hook will flood inform which parts should be raised. Red Hook’s current zoning can be seen in figure 45 along with an overlay of the predicted coastline in 2050. Looking first at which parts will not flood, it is of note that the Red Hook Houses and Coffey Park will remain dry and should remain relatively safe in a flooded future. Coffey Park is currently the largest park in Red Hook, not counting the contaminated ball fields in the south (most of which are predicted to be underwater). The park is located on Richards Street, long seen as an economic divide between NYCHA’s projects to the east and the gentrified Van Brunt area to the west. It is almost uncanny how the future coastline is predicted to flood the commercial and residential buildings from the west coast, but will only reach Richards Street, leaving the public housing to the east above water. Along the south and east coasts, most of what will be flooded is either abandoned maritime infrastructure, parking lots or 1-2 story warehouses. Although these low-lying typologies contribute to the character of the neighbourhood, they will realistically become casualties of the flood.
4.0 Raising Red Hook

figure 45: Current zoning Map of Red Hook with overlay of the projected coastline in 2050
4.0 Raising Red Hook

After considering how the new coastline will effect the neighbourhood, it is clear that the homes and businesses to the west of Richards street will become inaccessible. Reconnecting this area for pedestrian access will be the focus of Raising Red Hook. It will be assumed that after the flood, new construction (of complete buildings) will be near impossible in the inundated areas, and that they will become somewhat of a heritage neighbourhood referred to as “Old Red Hook”.

Accessing Old Red Hook will be made possible from a main artery down Red Hook’s current main artery Van Brunt Street. Two raised boardwalks, one on either side of Van Brunt Street, will connect the rooftops along the length of Old Red Hook. Smaller boardwalks will then branch off of Van Brunt to connect the other buildings of Old Red Hook. Instead of having two boardwalks down each street, one on either side, it will be more economical to construct the smaller ones mid-block. Similar to alleyways, these smaller pathways will create more intimate connections within the blocks. The boardwalks will ramp down to ground level at Richards Street, with many of them landing in Coffey Park. The entrance to the Van Brunt area would be diverted to Coffey Park. Currently, pedestrians can cross the Gowanus Expressway into Red Hook directly on Van Brunt street. This allows tourists and visitors to completely bypass the east part of Red Hook. In the flooded future, the boardwalk ramps at Coffey Park will hopefully turn Richards Street into a connector between east and west, instead of the divide between rich and poor.
4.0 Raising Red Hook

figure 46: Schematic Plan for Raising Red Hook
4.0 Raising Red Hook

figure 47: Schematic Plan for Raising Red Hook near Sunny's Bar
5.0 Narratives: A Flooded Future

figure 48: Speculative image of Red Hook’s flooded future along Van Brunt Street
5.0 Narratives: A Flooded Future

5.1 Sunny’s Rooftop Bar

I discovered Old Red Hook on a tip from a friend who directed me to what he said was one of the oldest bars in New York. Sitting at a rooftop bar enjoying a drink with a view of the Statue of Liberty was precisely what I had hoped to be doing on a regular basis when I moved to New York City. What I didn’t expect, however, was that the drink would be a can of Narragansett beer and that the view would also include the Manhattan skyline from across the harbour. Moving to a coastal city in a post-climate-catastrophe world, I knew I was subscribing to a life of congestion, overpriced cocktails and smog. I’m grateful for the ability to escape that life each time I enter Sunny’s Bar and take in the stillness of Old Red Hook.

Sunny’s Bar in Old Red Hook, one of the few coastal neighbourhoods in the country without a flood wall, attracts a special type of clientele who are not afraid of the ocean. Sunny’s Bar is hardly a “rooftop bar” by New York City standards. At Sunny’s you will not find glass walls, outdoor heaters, or even servers. What you will find is a rooftop. The only entrance to Sunny’s is from an adjacent building’s roof. This roof has been annexed by Sunny’s patron’s as the de facto patio. To get a drink on Sunny’s “patio” you have to go inside and get it for yourself. Sunny’s Bar still operates on the honour system, both to pay for your drink and to return your glass. You can buy a cocktail and wander off to Van Brunt Street, or further if you wish. The only distinction between the bar’s patrons and anyone else on the boardwalk is a drink in hand.
The waters of the New York Harbour come right up to the facade of Sunny’s bar, making the rooftop parapet the threshold of Brooklyn’s coastline. The century old parapet is a popular place for Sunny’s clientele to sit, though it is not for the faint of heart. During high tide, harbour water can occasionally splash up over top of the parapet. Although the breeze has become more smoggy than salty and the aggressive seagulls have apparently become alcoholics, I maintain that this is the most beautiful spot in all of New York City.

The clientele at Sunny’s usually falls under the category of eccentric and loquacious. You can’t go to Sunny’s without meeting someone new, unless of course you’ve been so many times that you know everyone already. Such a place surely does not exist within the flood walls of Manhattan. Out of all of the unique people I have met at Sunny’s, none are more special and unique than Ms. Balzano, the bar’s current owner and a direct descendant of Sunny Balzano, the bar’s namesake. Ms. Balzano immediately befriends anyone who steps foot on Sunny’s rooftop and will inevitably subject them to her endless storytelling.

Ms. Balzano was born in Red Hook and has worked at Sunny’s Bar for so long that she remembers a time when people could drive cars right up to its entrance. The original Sunny’s Bar, as I learned during one of her lengthy soliloquies about the past, was located downstairs until it was of course filled by the ocean. Ms. Balzano can recount repairing that original bar many times before moving it upstairs, “I come from a long line of Balzanos whose purpose seem to be to perpetually rebuild
this bar.” She told us one night, “my family first rebuilt the bar after Superstorm Sandy. Then it was destroyed by Hurricane Zach. So we rebuilt the bar. Then it was destroyed by Hurricane Jill. So we rebuilt the bar. Then the ocean started to creep inside from the street and destroyed the bar. We wanted to rebuild the bar and waited patiently for the water to recede. We waited for weeks but the water never left. So we rebuilt the bar, but on the top floor where the water can’t get it. People thought we were crazy each time, but especially that last time. Guess what, though, it turned out to be the best thing we’ve ever done. Once the nostalgic regulars saw the view from up here, they were on board with Sunny’s upstairs. Plus the new replica sign is quite good if I do say so myself.”

I like to arrive at Sunny’s early on weekends to take in the ocean breeze from the patio before it gets crowded. Depending on the direction of the wind, I can be chased indoors by the New Jersey smog, or I can be treated to some of the freshest air in all the boroughs. I’ll participate in the unofficial rituals of the bar like waving to boats that go by, or throwing bread crumbs to distract seagulls from my beer. During the afternoon, this end of Old Red Hook is not very busy. There are some locals going up and down the fire escapes to their apartments. Children can regularly be seen playing precariously on the edges of parapets and fire escapes. The children will play until inevitably their Spaldeen lands in the water and someone is sent to the bodega to get a new one. There are fisherman on the lower roof trying to catch whatever lives in the harbour, but who end up inadvertently cleaning the water of garbage. Once the sun goes down, the fisherman will retire to the bar for an evening drink, and soon after that crowds will begin to pour in from the boardwalk to catch some live music on the edge of the world.
5.0 Narratives: A Flooded Future

figure 49: Scene of Sunny’s Bar in a flooded future
5.0 Narratives: A Flooded Future

5.2 Van Brunt Canal

After living in Manhattan, crossing the threshold into Red Hook is a breathtaking experience. It is as if the super tall buildings of Manhattan and Downtown Brooklyn cannot migrate into Red Hook because they are too tall to duck underneath the Gowanus Expressway. Emerging from under the expressway was the first time I really saw the sky in New York City. The vast open sky above Red Hook is un-scraped by towers as few of the ancient buildings are taller than 6 storeys.

The way to Sunny’s Bar is through a series of raised boardwalks connecting the rooftops of Old Red Hook above the canals below. Some locals with boats can navigate the canals but for visitors like myself the boardwalks are the only way into Old Red Hook. From the entry ramp on Richards Street, where the water starts, the boardwalk cuts through what used to be residential backyards. The yards have since flooded and bridges now connect apartment entrances to the boardwalk. The flooded yards are now full of floating debris from the old buildings along with hundreds of damaged Spaldeens. I often see people sitting on fire escapes reading or climbing ladders into their homes while carefully balancing grocery bags.

At the Van Brunt Canal things get busier. Van Brunt Street has been the main commercial strip of Red Hook for over one hundred years. On my way to Sunny’s, I’ll always stop along Van Brunt to take in the action, as it has all of the ingredients of a New York City block with bodegas, cafes, piles of garbage, and of course pizza by-the-slice. The Van Brunt Canal is like an archeological dig, as
the old flooded versions of shops and apartments can still be seen slowly falling apart under water, while the new rebuilt rooftop versions can be seen off the new boardwalk. The regular New York City traffic noise is absent, but is replaced by noises from boat traffic and fisherman.

Ms. Balzano of course claims to be responsible for the continued success of these businesses, “They all copied us, and honestly, I’m thankful that they did. When we raised Sunny’s everyone on van Brunt Street did the same. They were very fortunate that the hurricanes made it possible by scaring away the residents living on those top floors. Ironically, though, now that the businesses are thriving again people want to move back! These people - always changing their minds! Sometimes I feel like the only person in New York that can make up their mind about this place.”
5.0 Narratives: A Flooded Future

figure 50: Scene of Van Brunt Canal in a flooded future
5.3 Red Hook Island

Red Hook Island is perhaps the most unique place I’ve been. The island is in fact a wrecked building, which has been occupied by an unlikely team of gardeners, basketball players and bees. The building is one of the taller structures in Red Hook and is the only structure in its vicinity breaching the ocean’s surface. Ms. Balzano explained to me that it was originally built as a private school almost a century ago, shortly after Superstorm Sandy. It was one of the most prestigious private schools in the city and became a major draw for wealthy families to move to Red Hook at a time when the neighbourhood was slowly gaining popularity. “You see, here in Red Hook, the universe always sorts itself out.” She once told me, “The community worked very hard to stop them from building that fancy school, but they did it anyways. Luckily mother nature made up her mind and the school was one of the first things the ocean swallowed! That really scared the wealthy people, so they all left!”

I took an East River Ferry to Red Hook Island to check out the community garden, and of course the view. The garden is quite the operation. An organization called Red Hook Community Farms used to be located across the street from the school, but had been washed away long ago. Once the private school evacuated, Red Hook Community Farms occupied the building’s rooftop and has since created a successful urban farm. Wandering around the rooftop farm was as surreal as visiting Sunny’s Bar. Rows of plants that could never grow amongst the smog of Manhattan are thriving and create a beautiful scene against the clear skies and the open water. To my surprise, birds other than seagulls could even be found perched in the rows
of plants. Part of the rooftop is sectioned off for dogs to run free, something I had never seen in an urban setting. One of Red Hook’s most newsworthy features, a bee colony, is located atop the island’s highest roof. The Red Hook Bee Colony is famous for being one of three urban bee colonies in the country. The colony is closed to the public, but the bees can be seen buzzing around the garden areas below.

This was Red Hook, so the weirdness had to be taken one step further. The lower roofs of the island contain basketball courts full of children playing ball at all times of day. The chaos of children shooting hoops and chasing each other through the gardens surprisingly contributes to the stillness of Red Hook Island.

Ms. Balzano is cautiously optimistic about the stillness of Red Hook Island, “We have to be careful with our little secret here. Pretty soon the wealthy people will want to live near our garden and will come running back. Next they’ll want to open their private schools again. I’m not worried though. Mother Nature always takes care of Red Hook.”
5.0 Narratives: A Flooded Future

figure 51: Scene of Red Hook Island in a flooded future
6.0 Reflections

figure 52: Photograph of Sunny's Bar's iconic neon sign at night
The future of Red Hook and New York City may never resemble the flooded future explored by this thesis. Or they might. Regardless, this thesis acts as a lens for people to better understand Red Hook, New York City and climate change. This collection of narratives from Red Hook’s past, present and future create a portrait of Red Hook’s identity. Speculating how architectural methods can help preserve this identity highlights the importance of such identities and architecture’s influence on them. New York’s culture of congestion is integral to its own identity, however, there are some enclaves of the city, such as Red Hook, where vertical growth from a congested grid is not the answer. Red Hook’s other unique position at the forefront of climate change’s existential threat presents an opportunity to face the threat using different ideology. Inhabiting Red Hook’s rooftops caps vertical growth, thus preserving anti-Manhattanism.

Barry O’Meara, the owner of Bait & Tackle, another iconic Red Hook bar, closed the bar shortly after Sandy. In an interview with the Guardian, he cited gentrification as the reason for calling it quits as he no longer wanted to run a bar whose clientele could no longer afford rent in the area.\footnote{Berner, Anna-Sofia. “Red Hook: the hip New York enclave caught between gentrification and climate change” The Guardian, September 25, 2018. https://www.theguardian.com/environment/2018/sep/25/red-hook-climate-change-floodplain-hurricane-sandy-gentrification} At the bar’s closing party he called Sandy the beginning of the end of Red Hook.

Then he corrected himself and said:

“There’s no such thing as a fucking end. But it was the beginning of something different.”

7.0 Post Script

Climate change will alter New York City, Raising Red Hook is a microcosm for the direction the city might take in the face of change. This thesis is not a master plan for Red Hook’s future, nor is it the design of a post disaster tourism experience. The future imagined by this thesis explores how a community can be resilient while maintaining a connection to its history of place. A schematic design is proposed to alter the spatial configuration of the neighbourhood rearranging its integral features such as streets, rooftops and fire escapes. While the circumstances of this future are extreme, the architectural proposal aims to remain subtle in an effort to respect Red Hook’s character. Raising Red Hook is illustrated in a series of architectural drawings and narrative stories.

Architectural representation is about storytelling. Every project is a story that begins within the context of a site. The story develops in a designer’s mind and is then realized for an audience. In architecture school students practice telling these stories using various methods of representation. This thesis utilizes the narrative format both to research a site and to represent an architectural idea. The final thesis presentation involved a discussion about this format as a form of practice based research in architecture school.

The decision to use narrative writing was inspired by researching literature on New York City, Red Hook and Climate Change. After my site visit to New York City, where I documented the neighbourhood through accounts from primary sources and through photography, I turned to literature to further understand these
three topics. Stories such as The Manhattan Transcripts, Sunny’s Nights, and New York 2140 were explored. These stories provided me with a window into post-climate-change Red Hook that would have otherwise been impossible to see from present day Ottawa. As the context for Raising Red Hook was set in literature, narrative writing was an appropriate tool for continuing the story.

Written narratives were used as an architectural tool to imagine the scenes of a flooded future. Drawing these ideas became easier to do after they were written. Drawing the scenes subsequently filled in the architectural details absent in the writing. The architecture of the raised boardwalks including scale, configuration and integration were more easily described through drawing. The stories of the fictional characters living in the flooded future such as Ms. Balzano, the patrons of Sunny’s Bar and the children playing ball games on rooftops were more easily described through writing. Writing provided a level of detail to the project consistent with the many portraits of Red Hook I researched over the course of the year.

The value of using two differing methods of representation was apparent during the final presentation as their strengths and weaknesses complimented each other. The drawings describe the new spatial configurations, while the narratives reinforce a connection to Red Hook’s history of place. Additionally, I discovered that drawing and writing, when used in tandem, is personally an effective method of architectural storytelling. While effective in the context of architecture school, I am confident that this method will be applicable in architectural practice and beyond academia.
Bibliography

Primary Sources


New York City Department of City Planning. “Existing Conditions and Brownfields Analysis Red Hook, Brooklyn” New York City, September 2014.


Secondary Sources


figure 53: Photograph of a signature can of Narragansett beer at Sunny's Bar