Rebranding the Brooklyn Navy Yard: Market + Place

Lauren Buckheit

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Rebranding the Brooklyn Navy Yard Market + Place
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Creating Connection on large scale sites, like the Brooklyn Navy Yard’s 300 acres, through a network of small scale, informal interventions. Water. Wall. Rail.
Contestation

Historically, market and place had continuity. Market was defined by place — a commercial program shaped by its surrounding social and cultural environment. Market was realized at the overlap of commerce and religion, markets and feasts; all were interrelated. However, as we switched to a consumption based economy the coherence between the two diminished. Markets no longer were shaped by the surrounding micro-cultures, but by temporal consumer trends.

When assessing current branding strategies this separation between market and place is also apparent. In one instance, market branding includes creating corporate identities through product, image/semiotics, and built form. This brand identity does not address place, but is sculpted to exist anywhere and everywhere. Its brand is universally identifiable. Yet, its consumer environments, when compared, are undiscernible. Conversely, place branding strategies are concerned solely with place and its many identities. Place branding involves reassembling, repositioning, and reformulating the identities of a place to produce a succinct image to the public. As Zukin states, “it is now within this tension of market and place that new [architectural] brand development must be established.” The establishment of such an architectural brand development has the capacity to reintegrate market and place. Within this integration new approaches will emerge that accomplish commercial pursuits cohesively with place based issues. The site of the Brooklyn Navy Yard, one that is currently at the interface of the public and private realm, is a rich local to hypothetically demonstrate this reintegration.

The Brooklyn Navy yard is a 300 acre, water-front site, located in Brooklyn, NY, along the East River. Established in 1801, the site was home to one of the nation’s first five naval shipyards. During its peak in World War II, the yard employed as many as 70,000 men. After WWII however, the shipyard was sold off and left largely vacant from the 1980’s forward. Today however, the site houses a large industrial park, with initiatives underway to transform the yard into an innovative hub for new industry. So far, 334 tenants, ranging from small design manufacturing firms and entrepreneurial startups to large film studios, own space in the wharfs.

Thus, a rebirth of design and manufacturing is presently occurring in the Brooklyn Navy Yard. However, it is occurring within the closed walls of the yard, at a building by building renovation basis. The entire function of the yard is being reconceived, but its new identity is internalized within separate warehouses, dispersed throughout a 300 acre site. In order to transform the Brooklyn Navy Yard into an element for economic and urban development, the yard needs to be rebranded as a holistic identity to the city - not only redefining BNY’s market identity as a new manufacturing hub, but place branding it as an integrated commercial/civic network that reconnects with its surroundings.

Notes:
6. Ibid.
“At the peak of its activity nearly 75,000 men and women were employed by the Yard and the monthly payroll ran around $15,000,000.”
Market and Place

Sharon Zukin, Landscapes of Power

“Historically, of course, market and place are tightly interwoven. At its origins, a market was both a literal place and a symbolic threshold, a “socially constructed space” and a “culturally inscribed limit”...Markets occupied a specific place and time, usually in front of the church on festival days”.

Now, “market no longer internalized place. Instead, in a long and painful process that lasted through most of the nineteenth century, place began to internalize market culture”.

Notes:
The Development of Commercial Markets

- Historically Interwoven
  Social institutions of markets & places supported each other

- Historically
  Market = literal place & symbolic threshold
  Market was cross boundary/long distance trade
  Market was also bound by community

- Feudal Times
  Market occupied place and time
  Usually across from church on festival days
  Product exchanges and interactions provided means for community survival

- 19th Century
  Pullman, Illinois / Gary, Indiana
  Place internalized market
  Socio-spatial structuring by market norms

- 19th Century
  Adam Smith - The free movement of workers from job to job would permit labor to find its "best" price.
  19th c. Change - factory town planners - maximize worker's attachment to factory to optimize market control

- Post World War II
  Capital investment flowed to new regions
  Concept of labor mobility applicable again
17th Century
London markets - "Island in space and time" locality could be confined and tempered into a cultural matrix of production.

18th Century
Halles / Quai de la Vallee, Paris 5000-6000 peasants came daily with vegetables/fruits - spatial, temporal effects of market on sense of place.

19th Century
Post French Revolution - Entrepreneurial roles exist both employees and workers began to claim the rhetoric and symbolic language of market forces.

1970s - 1980s
Attaching workers to firm - not through place, but within company. Worker movement, dislocating certain developed cultural environments.

Post-Industrial Economy
As the industrial economy declines, places defined by market, become vacated towns.

Global Capitalist Economy
Now we have a production/consumption economy. Businesses have globalized market is homogenized. Market and Place are completely distinct, the company's base in one country, workers in another.

Notes:
Place Internalizes Market

Pullman, Illinois

In Illinois, the Pullman Car Company created a factory town during the 1880’s. This town encompassed the factory, workers’ housing for employees of the railroad car company, and their families. George Pullman, owner of the company, dictated not only the layout of the company town but also behavioral standards that workers had to meet to live and work in Pullman.¹

This factory town exemplified place’s internalization of market. The town’s spatial and social norms were dictated by market needs. Pullman created a standard that responded to these capitalistic needs by creating a town for housing a labor reserve.² Socially, this attached people not to a place or cultural local, but to factory employers.³

People Attached to Employer

Town’s Housing, Industry, Culture, and Social Life Dictated by Market Needs of Factory Owner

Pullman Factory Town - Factory to the West with the Worker’s Housing to the East

Image of Pullman’s Worker Housing
Bethlehem, Pennsylvania

Within a five year period from 1981-1985, more than five million Americans lost their jobs due to factory and plant closings. America’s steel industry was especially affected. The day after Christmas in 1982, Bethlehem Steel Corp. announced it would cut 10,000 jobs nationally and 2,300 locally. Bethlehem, as a town, was centered around the steel industry.

Thus, product and business cycles affected the life cycle of the town. As a result, when the industry closed, the physical and social environment was also devastated. Places that are primarily defined by capitalistic forces soon become vacated towns. This causes a lack of “authentic” place-based identity, outside its market identity.

Notes:
2. Ibid.
3. Ibid.
4. Ibid.
5. Tolkien, Bil. “In desperate 1983, there was nowhere for Pittsburgh’s economy to go but up.” Pittsburgh Gazette (Pittsburgh, PA), December 23, 2012.
Sharon Zukin, Landscapes of Power

"It is now within this tension of market and place that new [architectural] brand development must be established".¹

New approaches must be sought that accomplish commercial pursuits with placed based issues.

Notes:
market
market branding

Market branding includes creating corporate identities through product, image/semiotics, and built form. This brand identity does not address place, but is sculpted to exist anywhere and everywhere. Its brand is universally identifiable yet its consumer environments, when compared, are undiscernible.
Apple: the world’s most valuable brand
Apple Stores Around the World
20% of Apple's Revenue is generated from their Physical Stores.
The Retail Experience

The 5th Avenue Apple store exemplifies the architectural realization of their market brand. The store is submerged below grade, with their patented, glass cubed storefront acting as the face to the public. It is sleek, innovative, and constantly being updated with the newest building technology. By traveling down the patented glass staircase, you arrive within the hub of the store. The store layout is focused on product interaction and consumer engagement, rather than the typical commercial pick and purchase method. Thus, even the social interactions that are involved in the purchase process are designed to be uniquely Apple. Every design move is made to relate back to the company's brand and further capitalistic pursuits.
Spatial Organization

Pick and Purchase Method

Patented Interactive Store Layout
The Retail Experience

Apple Product Packaging is a transparent package with the product name and the Apple logo. There is no product photos. They allow the consumer to see through to the “real thing”. The same exists with the Apple Retail Storefronts. They are patented to be transparent shells that allow the consumers to see in on products and interactive/social activity.

Fifth Ave Apple Retail Store

The Fifth Ave cube is constantly being renovated as new building technology is developed. Larger, seamless pieces of glass are now used, totaling 15 panes, compared to the previous 90. This shows how the same production values are applied to the stores as well as their products.

Materials

Interior Design:
A light wood is selected for the exhibition tables. Glass is utilized to bring light into the space and create visibility between public and interactive store environment. Walls are either white or covered with aluminum to relate to the product and packaging.

Notes
from branding through product design to branding through architectural design
place
**Place Branding**

Involves reassembling, repositioning, and reformulating the identity of a place to produce a succinct image to the public.
The Concept of Place
as framed by Kim Dovey in “Becoming Places”

Bourdieu (1920-2002) Starting from the role of economic capital for social positioning, Bourdieu pioneered investigative frameworks such as cultural, social, and symbolic capital, and the concepts of habitus, field or location, and symbolic violence to reveal the dynamics of power relations in social life.

Derrida (1930-2004) defy the alliance of architecture with authority and social order. “Khora” – non-placeable place, the third genus, radical otherness that “gives place” for being.

Lefebvre (1901-91) Place a relationship between spatiality and sociality. Space is a means of production and a product of place.

Heidegger (1889-1976) spatial ontology: Engagement with place, What guides Heidegger’s thinking is a conception of philosophy’s starting point: our finding ourselves already “there,” situated in the world, in “place.” Being and place are bound together.

Kevin Lynch (1918-84) Place legibility - the ease with which people understand the layout of a place. Attempted to isolate features of a city, and see what is making it so attractive to people. To understand the layout of a city, people first create a mental map. Explores concepts of place through landmarks and urban identities.

Foucault (1926-84) Place as constructed subjectivity; power as dispersed micropractices: power and knowledge used as forms of social control.

Zukin (1951-present) expresses how a spatially connected group of people mediate the demands of cultural identity, state power, and capital accumulation.

Massey (1944-present) “place has been evident in a whole range of settings – in the emergence of certain kinds of nationalism, in the marketing of places, in the new urban enclosures...they construct identities for places”. Place identity is provisional and unfixed. It is defined by multiple identities and histories, its character comes from connections and interactions rather than original sources and enclosing boundaries.

Architectural/Social Theorist & the Concept of Place

Place emerged first as ‘topos’, in early Greek philosophy with Aristotle. It was seen as a form of ontological ground, a view of place that is inseparable from being or existence. To exist is to exist in a place.
<table>
<thead>
<tr>
<th>Accessibility and Distanciation</th>
<th>Appropriation and use of Space</th>
<th>Domination and Control of Space</th>
<th>Production of Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material spatial practices (experience)</td>
<td>flows of goods, money, people, labour power, information, etc; transport and communications systems; market and urban hierarchies agglomeration</td>
<td>land uses and built environments, social spaces and other 'turf' designations; social networks of communication and mutual aid.</td>
<td>private property in land; state and administrative divisions of space; exclusive communities and neighbourhoods; exclusionary zoning and other forms of social control (policing and surveillance)</td>
</tr>
</tbody>
</table>

| Representations of space (perception) | social, psychological and physical measures of distance; map-making; theories of the 'friction of distance' (principle of least effort, social physics, range of a good, central place and other forms of location theory) | personal space; mental maps of occupied space; spatial hierarchies; symbolic representation of spaces; spatial 'discourses' | forbidden spaces; territorial imperatives; community; region; culture; nationalism; geopolitics; hierarchies | systems of mapping, visual representation, communication, etc; new artistic and architectural discourse; semiotics |

| Spaces of Representation (imagination) | attraction/repulsion; distance/desire; access/denial; transcendence 'medium is the message' | familiarity, hearth and home; open places; places of population; spectacle (streets, squares, markets); iconography and graffiti; advertising | unfamiliarity; spaces of fear; property and possession; monumentality and constructed spaces of ritual; symbolic barriers and symbolic capital; construction of 'tradition'; spaces of repression | utopian plans; imaginary landscapes; science fiction ontologies and space; artists' sketches; mythology of space and place; poetics of space; spaces of desire |


Notes:
2. Ibid.
The Concept of Place

Place is both a **objective location in space**.

Quantitative

Plato's: "topos"
Heidegger: "Stelle" as for the container
The external limit of a thing in universal space of an objectified environment.¹

Notes:
a relation between humanity & environment

Qualitative
Norker-Shultz- genius loci- “spirit of place”
Plato and Derrida’s “Khora” is what gives place being
Heidegger - “Ort"

“it is an immaterial, phenomenal, semantic, non-measurable dimension
How the social, cultural, physical environment uniquely effects each
person to create the spirit of place - the meaning people give to their
surroundings.”

The Components

**identity (n)**
Refers to a persistent sameness and unity which allows that thing to be differentiated from others. Identity connotes both a persistent sameness with oneself...and a persistent sharing of some kind of characteristic with others. ¹

---

**sociological**
- social
- customs/values
- Places' people/culture

**geometric**
- spatial
- building
- monument
- places' built environment

**anthropological**
- historical
- event
- places' history

---

**Notes:**
“Bringing Back Broadway”
L.A. city planners aim to maintain the historical identity of South Broadway’s theater district.

preservation of identity

“Better Market Street”
Reconstructing the identity of San Francisco’s Market Street Corridor and reconsidering its role in the city.

reconstruction of identity

Las Ramblas
Las Ramblas’s identity has been maintained over the years with only small “enhancement” changes, such as landscaping and marketspace.

enhancement of identity
what is place branding?

Place branding involves reassembling, repositioning, and reformulating the identity of a place to produce a succinct image to the public.
Place Branding

Understanding What “Place Branding” Encapsulates
Place Branding

The concept of place branding has grown as the world continues to globalize. Today, there are more than 300 cities in the world with over a million inhabitants. In Europe, there are more than 500 regions and 100,000 different kinds of communities competing for the same jobs.¹

Thus, nations, regions, cities, and institutions realize as the world becomes globalized, they compete with other destinations for people, resources, and business. Place Branding promotes a certain location, so that when people want to participate in certain activities, they think of that location first.²

Most times place branding is not developed in one single direction, but consists of a compilation of different fields—tourism, technology, investment, business.³ These fields influence place creating multiple identities.

Influences of Place Branding:
1. Increase attractiveness of companies and investments.
2. Promotes the objectives of the tourism industry.
3. Promotes public diplomacy
4. Supports the interests of the exporting industry
5. Strengthens citizen’s identity

Place Branding Factors:
1. Culture - Civitas
2. Physical Environment
3. Social Development
4. Political Stance
5. Economic/Business
   Investment Temperature

---

Place Branding Development

- **1800s**: Place Branding driven by Sea trade
  -hs dominated
- **1950s**: Place Branding defined by individual industries and services
- **1990s**: Place Branding defined by advertising and international tourism
- **2000s**: Place Branding centered around civic branding - Natural and soften the cityscape

---

Seattle Place Brand Campaign

metronatural

---
Branding

Branding is about relations - the way our brains associate with different objects and values. Celia Lury defines brand as a set of relations between products and services over time, and how “the brand” becomes a singular object, comprised of these many associations.¹

Brand: As a Object of Economy

Cultures of Circulation
Benjamin Lee and Edward LiPuma discuss circulation, and how it is not just categorized as the movement of ideas, goods, and people - but is a cultural market process within itself. Thus, the brand is a form that mediates supply and demand within the framework of circulation. The brand as “an object” comprises of relations between products in time. The brand is a dynamic object of movement - never fixed.²

The Philosophy of Money
Georg Simmel discusses how money and price diminish qualitative distinctions. The market is driven by price, which has caused objects to be seen as monetary equivalents, instead of related individuals. “The brand presents an alternative to the calibration of the market. Brand is not the means, as money is, but the medium. The reintroduction of quality into exchange”.³
Brand: As New Media Object

The new media theory helps highlight the multifaceted nature of a brand. Brand is concrete (materialized through specific products) and abstract (relations between products in time).

The Language of New Media
Lev Manovich describes the new media object as a software operating system or media interface, and how it is a mix between software and cultural conventions - a physical operating system, an interface, software, and conventions for organizing the media object as a whole. The brand can also be seen as a similar platform.4

The Interface
The interface - A boundary that connects and separates two spaces, an inner and outer environment. As an interface, the brand is a frame that organizes the two-way exchange of information between the inner and outer environments of the market in time, informing how consumers relate to producers and how producers relate to consumers.5

Notes
2. Larry, Brands, p. 4.
3. Ibid.
4. Larry, Brands, p. 5.
5. Larry, Brands, p. 6.
Identity is Multivalent

“Identity” in itself is singular. An identity. However the concept is also multivalent, comprising of multiple facets. One of multiples.

“A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social ... there is no language in itself, nor are there any linguistic universals, only a throng of dialects, patois, slangs, and specialized languages”.

Origin

Western ideology is based on origin. The tree grows from one seed, producing a trunk and continuously branching out; it grows and spreads vertically, yet the tree can be traced back to a single origin. Even language is viewed this way as can be identity creation - stemming from a single control."
Brooklyn Navy Yard

Personal

Gender Identity

Disassociated Identity Disorder

Ability for Multiple Digital Identities

Notes
Identity dictated by one
Versus continuously shaped by many
Parties Involved

**Stakeholders (host)**
Stakeholders often contribute to identity creation of place through their policies, investments, actions, behavior, and relationships.

- The City of New York
- Brooklyn Navy Yard Land Owner
- Corporations
- Brooklyn Navy Yard Development Corporation

[urban planner] [land owner] [investors] [BNYDC board of directors]

**Target Audience (guest)**
Target Audience include those who the place branding strategies are aimed towards; it defines those who the strategy benefits and is created for.

- Brooklyn Navy Yard Tenants
- Visiting Business/Future Tenants
- Residents of Vinegar Hill, Dumbo, Williamsburg
- Residents of Manhattan, Different Borrows, Elsewhere - Recreational Use

[designer] [designer] [neighborhood resident] [visitor/tourist]
All Stakeholders (host & guest)

By allowing an integration of market and place, the interface between public and private becomes less rigidly defined. Thus, market is not walled off or internalized - with its identity governed by a small majority of predominately land owning men - but is incorporated with its surroundings, with the public - allowing for the public, residents, workers, and landowners to inhabit the area and define its identity. Relating to Delueze, it no longer is stemming of from a single place of origin but is singularly created by many.

The City of New York
Brooklyn Navy Yard Land Owner
Corporations
Brooklyn Navy Yard Development Corporation

urban planner
land owner
investors
BNYDC board of directors

identity

Brooklyn Navy Yard Tenants
Visiting Business/Future Tenants
Residents of Vinegar Hill, Dumbo, Williamsburg
Residents of Manhattan, Different Borrowers, Elsewhere - Recreational Use

designer
designer
neighborhood resident
visitor/tourist
Need for Integration of Market and Place

**Market Branding**
Global Brand-no consideration for place
designed to be located everywhere and anywhere

**Place Branding**
Involves reassembling, repositioning, and reformulating the identity of a place to produce a succinct image to the public.
network
instead of a building... a network

Doreen Massey talks about place as the locus of interconnection of open-end trajectories. Both people and objects exist simultaneously, but at the same time carry in them their own history (trajectories).

The Holistic Brand

Brand architecture is an organization’s approach to the design and management of its brand portfolio. The concept of brand architecture has been applied to the branding of places. Place brands can organize its many ‘sub brands’ in a similar way to that in which corporations manage their portfolio of product and service brands. The big question is how to develop a holistic brand that is coherent across a range of different areas of activity with different target audiences.

Network Approach

Hankinson discusses the conceptualization of place brands as relational networks, focused on the need for collaboration between private and public sector organizational methods and distributive approach to the ownership of place branding the urban. Residents are critical participants in the co-creation of an enduring place brand.

Lefebvre discusses how “social space contains a great diversity of objects, both natural and social, including the networks and pathways, which facilitate the exchange of material things and information. Such “objects” are thus not only things, but also relations.”

Notes
Network Approach

When considering how to create a holistic identity of both place and market - a network approach is relevant. A network approach is the "conceptualization of place brands as relational networks, focused on the need for collaboration between private and public". Therefore, it is not a singular entity that creates identity, but the relation between contextual networks.

Notes:
Public Private Integration

While firms are connected to each other through identifiable networks, they are still viewed as individual entities within their physical environment. Public, private integration is needed within these different networks to allow for a holistic identity of both market and place.
The High Line
Landscape Network

Architects: Diller Scofidio + Renfro
Landscape Architect: James Corner
Location: New York, New York
Client: NYC Dept of Parks and Rec
Area: 1.45 mi
Construction: Phase 1: 2009
Phase 2: 2011
A Network, Comprised of Different Parts, Creating a Holistic Identity for Chelsea & the Meatpacking District
**The Nodes**

- Chelsea Park
- Chelsea Hotel
- Chelsea District

**Different Cultural Venues**

- 531 W 31 St
- 340-350 W 31 St
- 338 E 13th Ave
- 138 W 13th Ave
- The Wool Stores

**New Residential Towers**

- Fall 2013 Art Display

**Fall 2013 Art Display**

- Cheek by Jowl
  - Litpel, Jun Yu Jena
- High Line Channel 22
  - Osa Moses, Osa
- Eiria Vanale
  - Litpel, Osa Abacal, Osa
- The Wool Stores
  - The Wool Stores
- High Line Railroad
  - Park's Pier
- High Line Channel 14
  - Guido van der Werve
  - Nummer nagen
- Humphrey House
  - Lyft Lingeri
The Park Above the City

The New York Highline is a public park that stretches across Manhattan’s West Side. It is built on the site of the historic New York Central Railroad’s West Side line, that ran through the city from 1934 - 1980. ¹ This railroad was elevated over the city, which separated it from typical street level transportation.

The Highline Network

After the closure of the West Side line, the raised rail laid vacant throughout the 1990’s. ² Overgrown, it became a space in the city that stood in stark difference to the sculpted, designed city fabric. Today, it stands as the Highline park - continuing to be uniquely defined as a green network above the city.

It is the Highline’s role as a network that allows this project to be so successful. It is not a defined park, contained to certain blocks, that functions in isolation from the city fabric. The highline weaves its way around and through buildings, integrating a civic landscape with the private market place. And, while it is comprised of many parts, the park mediates and allows for relational connections, creating a holistic identity for the West Side.

Notes
2. Ibid.
An integrated public private network

Separate from a different than the city fabric
Oslo Opera House

Architects: Snohetta
Location: Bjørvika, Oslo, Norway
Client: Ministry of Church and Cultural Affairs
Area: 38,500sqm
City + Fjord

This project aims to draw together the Oslo Fjord (water) and the city, which currently are disjointed. The Oslo Opera House creates a new central space to tie together the city and the waterfront through a unique public/private integration.

The Carpet

The design stems from ideals of joint ownership, public access, and monumentality. Snohetta tries to achieve this by creating a "carpet" surface that peals up from the Fjord, sloping to the top of the building. The carpet mimics the cityscape, horizontally extending out through ramps and bridges. While these large horizontal ramps create an image of monumentality, the building remains a civic figure within the city landscape. Visitors can walk over the building, skate on it, splash in the fjord, and sunbathe. Railings are excluded from the rooftop surface, with only marble ledges and height changes to direct patrons. It is a civic landscape, a piazza rising from the fjord.

Notes
2. Ibid.
Joint Ownership + Civic Space
Integration + Identity

The Factory

Snøhetta designed the production programs, such as rehearsal rooms, set design, and offices, to function as a ‘factory’. This factory is located on the East side of the building, relating to the city, while the performance halls are situated to the West. The sloping roof pulls up from the water to integrate the two with a civic cityscape. The factory on the East was planned to allow people on the street to view the internal ‘private’ workings - such as the studios and workshops. Thus, the factory relates to the commercial urban and reiterates the public nature of the building through open views to these private programs.

The Street

The Opera House Street is considered the internal border that separates the stages and public space from the private production side (rehearsal space, ballet studios, and workshops). Visitors can travel this “street”, and while the public and private programs are physically separated, they are linked visually. Visitors can peer through transparent surfaces to witness sewing rooms and set creation, thus, still making this area a gradation of public.

The Galleries

The Grand staircase comes up from the atria, composed of the wooden wall. This intimate wooden interior mimics Oslo’s shipbuilding past and leads to three public galleries. The galleries and walkway allow visitors to travel internally to the upper levels of the structure.

Notes

2. soci
3. seo
4. seo
This project is successful because of the civic integration. Besides the overarching move of the rooftop space, small internal moves are made with the concept of "joint ownership" always in mind. The interior is a continuation of the outdoor "cityscape". Visitors should feel as though they are continuing to walk in the public domain - circumnavigating the building, visiting the galleries, peering into the "factory" to see costume making, or occupying the atrium as an interior public square. It is the public integration, that not only knits together the buildings programs and the Oslofjord and city, but creates a holistic identity for this building and waterfront.
site
Brooklyn Navy Yard

The Brooklyn Navy Yard is located along the East River across from Manhattan's Lower East Side. Surrounding neighborhoods are primarily residential. To the west is Vinegar Hill, Fort Greene and Clinton Hill neighborhoods to the South, and Williamsburg to the North. These neighborhoods contain a mix of high-rise public housing, such as those located a few blocks west of the Navy Yard. Many of these public housing buildings were erected for Navy worker housing in the 1950's. Two to four story brownstones are the main residential vernacular for Vinegar Hill, while multi-story residential buildings populate Clinton Hill and Fort Greene.

To the southwest, is Brooklyn's main commercial corridor - "Downtown." It is the borough's civic center with main commercial buildings, eight colleges and universities such as Brooklyn Law School and the Polytechnic Institute of NYU. DUMBO is also west of the Navy Yard. Once an industrial hub for Brooklyn, the area now is a mix of high-end residential and office space for the city's biggest technology-based businesses. The area between downtown, DUMBO, and Vinegar Hill has begun to be called Brooklyn's "Tech Triangle".

Notes:
2. Ibid.
3. Ibid.
Navy Yard Timeline

1776-1783
The American Revolution
As many as 11,500 die on the British prison ships moored off Wallabout Bay, the most infamous being the Jersey, where American soldiers, merchants and traders are imprisoned for disobeying the British embargo.

1801
Navy Yard Established
President Adams favors a strong central government and a navy capable of protecting commerce and defending the young nation. Adams moves quickly to authorize the establishment of the first five naval shipyards including Brooklyn. Federal authorities purchase the old Brooklyn docks and 40 acres of land for forty thousand dollars.

1837
Advent of Steam Engineering
The 9-gun side-wheel steamer Fulton II is launched as the first U.S. steam warship assigned to sea duty.

1841-1851
Dry Dock 1
First granite dry dock on site. This makes the first use of a steam-powered pile driver in the United States.

1852
Medical Innovation
Naval Medical Hospital built on site.

1889
Explosion Sparks the Spanish-American War
The launch of the USS Maine, made in Brooklyn, begins the "battleship era". Its sinking nine years later in Havana sparks the Spanish-American War.
1938
Employment Record
The Yard employed about ten thousand men.

1939-1945
World War II
The Yard doubles in size when the government annexes adjacent land to construct the world's largest dry docks and crane. The population explodes as Yard management increases the workforce to 70,000 employees. Women are hired for the first time to work at the Yard. WWII ends on September 2, 1945 when Japan signs unconditional surrender on the Yard-built USS Missouri.

1946
Yard Closes
The Brooklyn Navy Yard is closed along with over 90 other military bases.

1969-1981
Industrial Park

2001-2011
Expansion
The City of New York takes note of BNYDC's success and funds major upgrades. Warehouses are divided up to accommodate small businesses and design/manufacturing jobs. Businesses grow to 275 with nearly 6,000 employees. The largest Yard expansion since WWII is underway.

2004
Steiner Studios
The 310,000-square-foot facility is the largest offers five soundstages and state-of-the-art film/television production facilities. In 2010, Steiner Studios begins major expansion to double in size, constructing five new sound stages and adaptively reusing the former Navy Applied Science Laboratory.

2009-2011
Green Industry & Bldg 92
BNYDC finances the nation's first multi-story, multi-tenant green industrial building, designed by Navy Yard tenant Duggal Eco-Solutions. BLDG 92, an exhibition, visitor, and employment center gets built to promote Yard tenants and history.

Notes:
Brooklyn Navy Yard Site Plan
with Images of Structures in Current Condition
Current Redevelopment Plan for Selected Warehouses
Surrounding Neighborhoods

The Old Neighborhood

The Brooklyn Navy Yard opened in 1801. During this time, the area saw a large influx of immigrants. To the left of the shipyard housed a large Irish immigrant population. The area was named Vinegar Hill after a battle in the Irish Rebellion.¹ Vinegar Hill became filled with taverns, and game rooms to service many of the Navy Yard employees.

In 1900, Williamsburg's population began to climb. More small factories opened along the waterfront. Immigrants in Williamsburg were mostly from Eastern Europe, especially Poland and Russia. A large number of Italian immigrants also settled in this area.² Williamsburg became a highly densified residential area for the factory workers. In 1917, the neighborhood contained the most densified blocks in all of New York City.³

Within the shipyard there was housing for naval officers and high ranking shipyard employees, such as the Paymaster and Chief Engineer. This included a settlement at the southwest of the yard called “Admirals Row”.

Notes

4. ibid.
Vinegar Hill

Vinegar Hill is located between the Brooklyn Navy and DUMBO. The neighborhood is now filled with townhouses, interspersed with the occasional warehouse or factory. The majority of people live above their work in townhouses. Farragut House is also located here. This complex is a complex of fourteen, ten-story apartment buildings.

Dumbo

Dumbo has New York City’s highest concentration of technology firms. Dumbo is home to 25 percent of New York-based tech firms. Within a 10-block radius are 500 tech and creative firms that employ over 10,000 people.

Williamsburg

Williamsburg’s over the last twenty years has changed from a Polish and Irish population, to that of the artistic community, due to affordable rents and large renovated warehouse spaces. However, today rent prices have increased and new condominiums and high-rise buildings are populating the fabric. In 2005, the area was approved for major rezoning changes. This included a waterfront revitalization project, park spaces, and a required amount of affordable housing.

Fort Greene

Fort Greene was historically home to a large Irish immigrant population. The neighborhood contains Fort Greene Park, which was designed by Frederick Law Olmsted. Today, it remains a residential area with Victorian style houses. While surrounding Brooklyn neighborhoods have experienced gentrification, Fort Greene remains one of the most racially and economically diverse neighborhoods in all of New York City.
Internalized Site

Navy Yard Walled In
Limits Connection with Surrounding Environment

Development is Dispersed
New Identity is Internalized

Minimal Relation to Waterfront

Vinegar Hill
Dumbo

Disconnect

Williamsburg
Brooklyn Navy Yard -
Transportation Networks

The Brooklyn Navy is located on Wallabout Bay, between the Manhattan and Williamsburg Bridge. Both bridges are the major link between Brooklyn and Manhattan. The Brooklyn-Queens Expressway is a major arterial connecting Brooklyn to Queens and the Bronx. This expressway is located just one block South of the Navy Yard. The subway lines that connect Manhattan to the Navy Yard are further from the gates. The Brooklyn Navy Yard’s Sand Street gate is fifteen to twenty minute walk from the A/C train at High Street or F train at York Street. Bus lines stop closer to the gates. Bus lines B57 or B69 can be taken to Cumberland St or Flushing Ave, B62 to Flushing Ave, B48 to Flushing or Classon Ave gates.¹

The Navy Yard is located on the East River, however it is underutilized as a venue, a transportation network, and resource. Currently, only four firms are utilizing the waterfront for ship repair and shipping.² The East River Ferry stops in Williamsburg and in Brooklyn Bridge Park. The BNY is yet to be integrated into this transportation route.

Notes:
2. Ibid.
U.S. Naval Networks

Navy Yard Ship Network
Washington, DC Naval Yard - 1 acres
The Washington Navy Yard was established on October 2, 1799, the date the property was transferred to the Navy. It was the oldest NAVY establishment.

Boston (Charleston) Navy Yard - 30 acres
Established in 1801, it was originally designated as an active naval installation on July 1, 1874, and the 30-acre property was transferred to the Boston National Historical Park.

Mare Island Naval Shipyard - 956 acres
This is the first United States Navy base established on the Pacific Ocean. It is located northeast of San Francisco. The Navy purchased the original 956 acres of the shipyard in 1853 and opened for operation in 1854. The yard played a major role as the Western naval base in WWI, as well as for the Navy's Pacific fleet until 1917.

Philadelphia Navy Yard - 1200 acres
The yard was officially established in 1776. New facilities were built in 1871 on League Island. It is one of the largest naval shipyards in the United States. The yard employed 40,000 people who built 53 ships and repaired 574.

Notes
Waterfront Dry Dock Network

Dry Dock Section
1. **Plate Preparation Building**
   This is where raw steel is processed. The plate is shot-blasted for cleaning, coated to protect against rust, and then precision-cut into plates.

2. **Flat Panel Building**
   This is where the majority of steel is fabricated. Steel plates are joined into panels, welded, and stiffened with girders for stability.

3. **Curved Panel Building**
   This is where the remainder of the steel plates are fabricated into bow and stern shell modules. Huge bending rolls can curve 2-inch thick steel.

4. **Painting Facility**
   This is where the panels are coated to protect against weather. Modules are cleaned and coated to avoid touch-ups in the grave docks.

5. **Outfitting Building**
   This building is where the modules that require piping, and electrical work go to. These are outfitted indoors.

6. **Graving Docks**
   The BNY docks are among the largest in the US - four 200 ton cranes, and four 75 ton cranes can work in tandem along the docks.

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**Notes:**
Navy Yard Tenants

BNY Firm Types:

94 Firms  Artisan/ Niche Manufacturing: Companies that product either one-off or customized products- with limited production runs. Some examples are installations, custom furniture, or fine art pieces. These processes usually involve in-house manufacturing equipment.

18 Firms  General Manufacturing: Companies that produce large quantities of standardized products.

1 Firm  Marine Manufacturing: Companies that deal with marine services and ship repair.

1 Firm  Power Generation: The cogeneration plant at the BNY that creates power for the NYC grid.

5 Firms  Entertainment: Studios, like Steiner Studios, that are in the production business of movies and entertainment.

26 Firms  Contractor Shops: Companies involved in the construction trades, such as general contractors.

11 Firms  Office Space: Companies that utilize the warehouses for general office space.

31 Firms  Warehouse/Distribution: Companies that use the space mainly for the storage and distribution of goods.

Approximately 60% of Tenants are Architecture/Design or Film/Media Firms.
Tenant Community - Manufacturing Collaboration

While the Brooklyn Navy Yard Industrial Park houses many different manufacturing tenants and design firms, collaboration is a common occurrence within the walls. In addition to sharing manufacturing equipment, 61% of tenants buy and/or sell products and services from other BNY tenants. This intra-yard commerce accounts for approximately $9 million dollars in transactions. These transactions include everything from office supplies to installations and fabricated furniture. Furthermore, 36% of tenants partake in sharing equipment.⁴

Notes:
2. The Brooklyn, p. 50.
3. The Brooklyn, p. 49.
Brooklyn Manufacturing Zones

The City has three primary manufacturing zoning districts (M1, M2, M3). These M zones range from light manufacturing to heavy duty metal and machinery manufacturing. M1 districts can contain some commercial uses. However, residential is usually prohibited from M zones.

The NYC Department of City Planning newly introduced the MX zone allocation. These zones allow for a mix of housing and manufacturing. However, without requirements to balance residential and manufacturing, the higher profit from residential rents put pressure on industry. In New York between 2001-2011, 2,000 acres of manufacturing land was rezoned, mostly for residential use.

Major City Owned Industrial Properties
1. Brooklyn Navy Yard
2. South Brooklyn Marine Terminal
3. Bush Terminal
4. Brooklyn Army Terminal
5. Hunt’s Point Produce, Meat, and Fish

- M/MX Zones (Manufacturing and Mixed Use)
- IBZ Zones (Industrial Business Zones)
- Combined M and IBZ Zones

Notes:
South Brooklyn Marine Terminal, located in Sunset Park, is one of only two points of rail freight access to New York City. And it's the only point in the City where rail cars arrive via water. The terminal focuses on maritime services specializing in automobiles and other roll-off cargoes.

Bush Terminal is a historic shipping/warehousing complex on the waterfront in Greenwood Heights. Now owned by Industry City Associates, the complex is home to a mix of businesses such as artisans, garment manufacturing, data centers, and warehousing.

The Brooklyn Army Terminal was the largest U.S. military supply base through WWII. Now it is a commercial complex of offices, piers, docks, cargo loading, and warehouses. It is located in Sunset Park, Brooklyn.

The Hunts Point Terminal, in the Bronx, is the location of the largest food distribution center in the world.
Navy Yard Zoning

- Residential
  - R5-B General Residence
  - R6 Walkups
  - R6-A 6 Story Residence
  - R6-B 4 Story Residence
  - R7 General Residence

- Manufacturing
  - M1 Light Manufacturing - Garments, Workshops
  - M2 Industrial Workshops, Iron/Metalworks
  - M3 Heavy Manufacturing - Asphalt, Carpet, Sewage

- Commercial
  - C6 General Commercial District

Notes:
Navy Yard Program Use

Notes:
BNY Real Estate Network

Ownership History

In 1966 the Brooklyn Navy Yard was decommissioned. Three years later, the City of New York purchased the land from the United States Navy, and approved an urban renewal plan for the site. When the Navy Yard was active, it was the highest employer for manufacturing jobs in Brooklyn. Thus, this urban renewal plan was aimed to attract manufacturers to the city, and especially to the area.

The project was originally managed by the Commerce Labor Industry in the County of Kings (CLICK). CLICK was established as a non-profit to oversee the yard for the city. However, in 1981 the city audit found mismanagement at CLICK, after the yard’s two biggest tenants - Seatrain Shipbuilding and Coastal Drydock - closed its gates. The yard then came under the management of the non-profit Brooklyn Navy Yard Development Corporation. This local development corporation manages and develops the former Brooklyn Navy Yard as an industrial park under a ninety-nine year lease with the City of New York. BNYDC leases four million square feet of space in the Yard. However, there was very little investment until 1996, due to the development corporation targeting large industrial firms, without much success.

As a result, the BNYDC re-evaluated their leasing strategy and focused on attracting small industrial firms and niche companies, rather than spending the effort to get large manufacturers/distributors. This strategy was highly successful.

BNYDC’s Different Roles

BNYDC manages the Brooklyn Navy Yard, under the terms of both a lease and a management contract with the City of New York’s Department of Small Business Services.

BNYDC’s mission roles include leasing and providing maintenance for properties, developing under utilized buildings, and general upgrading projects. Staffing roles include administration, legal services, external affairs, design and construction, utilities and maintenance, planning and development, financing, leasing.

Notes:
3. Ibid.
4. Ibid.
5. Ibid.
BNYDC's Developer Roles

**Administrator:**
Sometimes BNYDC acts as an administrator of development activity.
- Crafting strategies for specific sites
- Writing RFPs
- Gauging developer interest
- Investing in infrastructure
- Negotiating leases

**Example:** BNYDC identifying a private developer for the Admirals Row food market. The developer will also build a 100,000 sq ft industrial space above the food market, that will be turned back over to the BNYDC to manage and collect rent.

**Direct Developer**
In other instances BNYDC plays the role of direct developer
- Finding financing sources
- Commissioning the design
- Contracting the construction

**Example:** For the 2008 Perry St Building, BNYDC acted as a direct developer. BNYDC sourced private finance from Chase Bank.

Admirals Row Market

Perry Street Building
proposa
Nodes of Connection

The Waterfront Potential

The Brooklyn Navy Yard was one of the first five naval shipyards in the United States. Its origination was wholly attributed to its vital location along the East River. Throughout time, the success of the navy yard, as a local and place of industry, was directly related to its connection with the water. There were six dry docks constructed, that during naval occupation, housed some of the most distinguished warships. The river was used for industry, transport, and resources. Today however, only four firms utilize the water for industry- with two of the six dry docks currently operating. The East River ferry, and other means of water transport do not connect with the Navy Yard, but dock in surrounding neighborhoods. Therefore, the waterfront is underutilized. The connection with the water is essential in order to reintegrate market and place. The BNY is an internalized market environment that needs to be reintroduced to place based relationships.

Collaborative Workforce

One of the most unique traits of the Brooklyn Navy Yard, as a new design and manufacturing hub, is its collaborative environment. Tenants share manufacturing equipment and buy and sell services from each other. These exchanges are not primarily physical, but more a network of product exchanges and ideas. Understanding the social implications of this collaboration is essential, especially on a 300 acre site. Addressing possible spatial interventions for collaborative exchanges, could allow for unique public/private integration.
Brooklyn’s Navy Yard was previously one of the largest employers of manufacturing jobs in Brooklyn. At the peak of World War II, nearly 75,000 men and women were employed. Throughout the 20th century, the shipyard fell into disrepair. Today however, it is completely redefined as a new manufacturing and design hub for Brooklyn, and New York City. When considering the yards tenant portfolio, nearly 60% of the firms are design or film related. It will be advantageous to assess how art and design can not only be internal firm functions, but larger possibilities for civic engagement. Furthermore, addressing how these internal manufacturing/design programs will relate into a larger public-private network, is essential.

During Naval occupation, the shipyard was an integrated piece of the Brooklyn fabric. Its surrounding neighborhoods of Vinegar Hill and Williamsburg housed many of the yard’s workers. There were saloons, markets, and entertainment for the yard’s workers. There was constant interaction between the yard and the social-cultural environments around it. Currently, Vinegar Hill and DUMBO are huge tech hubs within Brooklyn, and Williamsburg is a major residential area with new waterfront park initiatives. The Brooklyn Navy Yard is walled in from its surroundings. This further internalized market environment of the BNY. Again, in order to reconnect market and place, the Brooklyn Navy Yard must not be seen as a contained site, but a territory that is in dialogue with its surrounding fabric. The intervention should engage these adjacent areas and address programmatic relationships that integrate the public into this highly private, market driven site.
Site Evaluation

Current Conditions-

The current BNY is approximately 300 acres. Development within these large warehouses is dispersed across the site. Each building has its own identity, and is making infrastructure updates internally. Building 92, a BNY museum has a public plaza, but only contained to its lot. The Navy yard is primarily hardscape. Projects concerning green space are either contained to specific parts of the site as isolated interventions, or literally internalized within buildings as greenhouse space. The site is home to six dry docks, dating from the 1850's on. Two are currently commercially active, while the others exist with minimal activation/utilization of the waterfront. Degraded, unprogrammed, hardscape zones are also located along the water. This furthers the disconnection and porosity of the site and under-utilizes waterfront land.
Development is dispersed, new “identity” is internalized
Currently minimal relation to waterfront
Infrastructural Need
Network Infrastructure

"Infrastructure is a connective tissue that brings together disparate elements, instilling cohesion and purpose. The sheer scale and vast resources spent on network infrastructure presents tremendous opportunity to leverage unrealized potential in the urban environment". 1

Infrastructure as Progress
In the past, infrastructural projects were icons of progress and accomplishment for a nation or region. They were physical manifestations of societal accomplishment and were celebrated as such, through capital investment and public visibility.2 The Interstate Highway Act of 1956, when completed, made the U.S. have the second largest road network in the world.3 The Brooklyn Bridge, located West of the Brooklyn Navy Yard, was built in 1883 as a monument of technological innovation. It was an icon for the city and embraced by the public.4

Infrastructure Hidden Away
After the mid 20th century, infrastructural projects were viewed as functional attribute to society that should be concealed from public view. The projects were not conceived with the thought of incorporating design or public integration.

Infrastructure as Public Endeavor
Today, the radical transformation and creation of landscapes through infrastructural development is a global phenomenon. Accessibility lies at the root of development and the infrastructure needed to secure it determines the quality of the environment, especially at the local level by enhancing the dwelling quality of the public realm.5

Notes
1. Hung, Ying-Yu, Gerda Agunso, Julia Czeminski, and Adrian G. Cze. Landscape Infrastructure: Case Studies by SOMA Basel, Z2 Himalaya, 2011, p. 120.
Infrastructure

“The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communication systems, water and power lines, landscape, and public institutions”.

Shortcomings:
1. Often hidden from view, its logic and functional attributes are not immediately apparent.
2. The design/engineering of infrastructural systems was historically conceived in isolation, independent of the overall urban fabric/mission. This leads to incompatibility between the infrastructure and the surrounding context. This leads often to camouflage, mitigation, isolation versus integrated systems.
3. Infrastructural systems in the US are designed to maximize efficiency at the immediate given time, and are not designed for its further lifetime.

Aggregate - infrastructure is often composed of piecemeal objects. When consolidated, the collective whole has the ability to remediate and redefine a holistic identity.

Network - is the tissue that brings together these different elements to create a whole.

Increment - the phasing/time frame in which to implement a large scale network infrastructure project.

Public
Infrastructure

Usually conceived out of view/in isolation

Instead, an infrastructural intervention will act as the connective tissue to create an integrated public-private environment.

Public  Infrastructure  Manufacturing  BNY
design
Re-Connecting The Brooklyn Navy Yard Through Network Intervention

Creating Connections on large scale sites, like the Brooklyn Navy Yard's 300 acres, through a network of small scale, informal interventions. By: Lauren Buckheit
THE PUBLIC PERIPHERY

The Brooklyn Navy Yard is currently walled off from its surrounding context by a large masonry wall. Entrance to the yard is only accessible through secured gates. This intervention questions this public boundary, while still attempting to maintain the security of the industrial site. This is achieved through the manipulation of this physical boundary, utilizing existing facades as edge, and mirroring the adjacent park.
Commemorative Barry Park was acquired in 1836 by the Village of Brooklyn and named "City Park." It is the oldest park in the borough. It was renamed for commemorate Barry in 1961, due to its location next to the Brooklyn Navy Yard that Barry helped found.

WALK BY
WALK THROUGH
WALK IN
WALK ON

circulation
block party
gallery
security

Manipulation of Boundary

Push Public Boundary
Maintain Security
Manipulate Muted Surface
Storefront/View of BWY
Utilize Existing Structures

The Public Armature

3
mirror public park
utilize existing facade as boundary

3
entry access into larger network - converging circulations
THE PUBLIC PERIPHERY

The Brooklyn Navy Yard is currently walled off from its surrounding context by a large masonry wall. Entrance to the yard is only accessible through secured gates. This intervention questions this public boundary, while still attempting to maintain the security of the industrial site. This is achieved through the manipulation of this physical boundary, utilizing existing facades as edge, and mirroring the adjacent park.
Historic Development of Brooklyn Navy Yard Rail and Crane

1916

- Locomotive Crane

1933

- Early 4'8.5" Track
- Indoor Rail Service - December 5, 1933 - Rail service to building G4

- Browning #8 Locomotive Crane
- 4 Axle
- Approx. 35' tail

- Browning #8 Locomotive Crane
- 4 Axle
- 18'
1936

Locomotive Crane

50-Ton Locomotive Crane Swinging Test Load (1,400,000 lb), Browning Engineering Company, Contractor, 08/01/1936

C-C six axle Locomotive Crane

Approx. 55' tall

18'

1943

Semi Portal Jib Crane

37'
historic rail system

4′8.5″ Track Gauges

3′7″ Track Gauges

Transfer

18′ Track Gauges

Tracks Enter Structure

Deployable Structure for the Social / Existing Structures

Adapt to Design Base - Rotation, Mobility

Crane as Design Constraints

Rail Design

Utilize on Site Modular Construction

Customize for Program Need
The Transfor[mobile]

Deployment of social collective space. Allows for the activation of space when conjoined with deployable structure.
DEPLOYABLE STRUCTURE MECHANICS

SLIDING TRACK STORAGE

UNFOLD - HINGE

TRACK / LEVER ARM
THE WATERFRONT INTERVENTION

The waterfront intervention is located at Dry Dock 2. This intervention addresses the potential of the under-utilized BNY waterfront and inactive dry docks. The scheme attempts to extend a connection to the New Lab, as well as bordering warehouses. It argues for the definition of a collective space within the sea of leaseable area.
1. **Floating Cinema**
   - This intervention involves a floating structure, which reinforces the original use of housing boats and ships. It utilizes the dock as a collective space for communal activities like movies, yoga, etc.

2. **Aquatic Amphitheater**
   - The floating dock is also utilized in conjunction with the dry dock as an aquatic amphitheater. Again, a collective experience in social use.

3. **Waterfront Piazza**
   - As more BRY is utilized, there is a space designated for the public to use. This waterfront dock acts as a piazza in this way.

4. **Bridging**
   - Viewing the drydock perspective act as one structure. It not only creates a lively space but also integrates the New London buildings. Its BRY design and a co-parking space especially during the day.
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