RESILIENT DEN CITY

Jersey City waterfront towards a Human Public Realm
“We shape cities and they shape us”
Jan Gehl
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Kevin Lynch in his book “The Image of the City” describes Jersey City as a place of only transit instead of place where to live; it is crossed by rail tracks and overlayed roads. The city has not a center, or at least not only one. They are four or five. Few are the referements in the city and it is marked by the presence of hard edges. The only attraction was not even in the city but in the view from the city: the New York profile. It is almost the same everywhere. There is nothing distinctive or characteristic, the main streets are recognizable only because of the street sign.
1.1 BACKGROUND AND PROBLEM STATEMENT

The way cities are planned and developed has dramatically changed over the last half century. Until 1920 cities throughout the world were primarily developed on the basis of centuries of experience. Life in the urban areas was a vital part of the wealth experience and it was taken for granted that cities are built for people.

In step burgeoning urban growth, city development was handed over to professional planners. Theories and ideologies began replacing tradition as the basis for development. Modernism with its vision of the city as machine, with its part separated by functions became highly influential. A new group then, traffic planners, came gradually on the scene with their ideas on how to ensure best conditions for car traffic replacing completely urban spaces with cars routes.

Moreover all those ideologies have put low priority on civic spaces, people interaction and mixed use of streets neglecting the role of city space as meeting place where people trade, communicate and exchange ideas; in addition to that, marketing forces and architectural trends have slowly shifted the attention from active cities to individual buildings cities. The old tradition where cities offer their spaces to dwellers as social forum no longer exist. The modern evolution with its car traffic increase for transportations has completely changed the face of our cities and if this flow would not stop there will be the end of urban life resulting in lifeless cities devoid of people.

The book “The Death and Life of Great American Cities” by Jane Jacobs in 1961 already discusses about the dramatic changes of urban planning theories pointing out the problem of how car traffic increase and free standing individual buildings growth were affecting the life of the city overlooking to a constant decrease of public spaces.

Cities were growing and the attention to car traffic was actually pushing out urban life from public spaces. During the last decades, despite the problem persists, many researcher on urban planning theories have studied from the inside out the issue having now a huge amount of knowledge about it. Therefore ideas and applications on how to create better conditions for urban spaces have already found fulfillment; interest for people’s condition and city life is making car traffic a lower priority. Moreover, principles of traffic calm down and sustainability issues have been introduced and despite the vehicular traffic phenomena has been explosive, a lot of cities worldwide have already successful addressed and tackle the problem. Not surprisingly most of the progress are seen in the most economically advanced parts of the world as well as there are examples where the attention to city life has not really been on the agenda having as a result planning ideologies where the human dimension was completely neglected.

Is also to be said that from the new millennium most of the population became urban rather than rural because more people have the need to reach the city for daily activities and primary needs such as work, school, go to the market or just for shopping. Together with the cities also the infrastructure to connect the suburbs to the city centre has grown disconnecting pedestrians and urban life step by step.

There are essentially two different types of urban space system; one is where buildings define space and the other is where buildings are objects in space. The first type is what is usually called traditional urban space while the second type is defined modernist urban space. During the second half of the 20th century, the morphological structure of the public space changed into two different significant ways: The first is the shift from buildings embedded in urban blocks defining streets and squares to buildings as separate freestanding objects-buildings standing in an amorphous space. The second is the shift from interconnected, small scale, finely meshed street grids to larger scale road networks surrounding superblocks with discontinuous road layouts within.

1Plan Voisin axonom-etry
1.2 RELEVANCE

It is now generally accepted that city life and regard for people in city space must have a key role in the planning of cities and more largely in built-up areas. This issue has been not only mis-managed for years, it is also now realized how caring for people in the city is an important key in achieving more lively, safe, sustainable and healthy cities¹, all goals of crucial importance in the 21st century.

This research proposal faces the challenge of bringing back the idea of cities as places where people meet, exchange ideas, trade and interact. Cities must be designed for people and not for machines.

The idea of a sustainable city is only possible if we think at its development as a synergy between public transport, walking and cycling.

Moreover if the problem is to develop a new high density settlement, the presence and the need for well planned urban areas that are human in scale, sustainable, safe, lively and healthy has to increase in proportions. Squares, streets, footpaths are the plinths of the city because they enable cities to come to life, encourage meetings between people and accommodate diverse activities; is well known how a human city with carefully designed streets, squares and green areas create pleasure and well being for those who live, work, play or just pass by there every day.

Must be a right of all citizens to be able to have free access to public areas, full of life and activities or to move between the various points of interest within five and fifteen minutes by walk or by bike.

Well designed cities are able to inspire people who live in them while poorly designed cities brutalize people who live in there.

¹ Jan Gehl, Cities for people, Island Press editor, 2010. pp 63-91-105-111
1.3 RESEARCH APPROACH

What if we could mix a public space that allow people to actually enjoy the city at eye level? What if all car routes would be replaced by organic, inter-connected and active facade frontages? By working on a new notion of public spaces, making people realize the potential that they have, we would be able to come out with a new urban hybrid that enhance all the possible potentials of Jersey City.

This would be the best achievement we could ever hope. The problem is to understand how to reach this goal in an effective way, making people interact with the issue. As I’ve already stated, over half the world’s population is now in urban areas. Therefore, we should use those urban spaces as places for people, where they can interact as a community. The answer is then to find a way that let people use the city space.

1.4 PUBLIC SPACE: ROLE AND DEFINITION

But what is exactly a public space? Public space is a physical (or virtual) location characterized by a social and collective use where everyone has the right to move or talk. It is the space of the community and as such is distinguished from private space reserved for the personal, intimate, family.

In human societies, especially in an urban environment, it represents all spaces of passage and meeting that are for all users, such as streets, squares, parks, stations, public buildings such as libraries, town halls or others.

The quality of a public space depends on several factors such as accessibility, intensity of use and social relations which can promote the visibility and the mixture of behaviors and different social groups, the ability to promote the identity of the symbolic place, the adaptability to various uses over time.

These features are sometimes found in hybrid spaces public/private that may fall fully into the category of public spaces while vice versa publicly owned spaces are sometimes lacking. This is why the notion of public space is not always associated with the notion of public property. Some hybrid spaces of private property characterized by a collective use as places of worship, shopping malls are not public spaces but spaces open to the public because of some applied restrictions or prohibition of access in respect of certain categories of people.

2 Giancarlo Cansoni, La difficile arte, Fare città nell’era della metropoli, Politecnica, Maggioli editor, Milano, 2008
4 Maurice Harteved, Republic Rebirths and Publicly-Owned Space, Chapter 3, pp. 88-96
1.5 REASONS FOR STUDYING PUBLIC LIFE IN CITIES

There is more focus than ever before on the human dimension in city planning and the need for quality in the public realm of our cities. Cities all over the world are rediscovering their public spaces and a general awareness has been awakened regarding the need for dignified, high quality city environments for people.

People are invited to repossess their cities and restrictions are being made to reduce parking and traffic in central city areas in order to make room for more people oriented activities. Two opposite directions in city planning can presently be identified. In some cities walking and public life are disappearing, emphasizing that life is becoming more and more privatized. In other cities public life is carefully supported by the introduction of good pedestrian environments in order to suppplement the private life spheres with a well functioning public domain offering a wide range of attractive public activities.

The fact that people in all parts of the world respond eagerly and enthusiastically to these new opportunities for walking and participating in public life in public spaces, indicates that walking environments and other types of public spaces where people can meet are important assets in present day society (possibly even more so than 20, 30 or 50 years ago). In a world being steadily privatized, public spaces are gaining in importance.

It is the purpose of this study to collect such information to improve the quality of the city spaces. The collection of such information will serve as a useful tool for the ongoing work of designing new public spaces and buildings for in the project Resient Dencity in Jersey City. It will make it possible in the future to follow new trends, identify changes in the use of patterns in the city, as well as creating a general public awareness of people in the city and in the quality of it.


1.6 AIM AND RESEARCH QUESTION

The aim would be:

Firstly propose a model of a new network of public spaces for Jersey City waterfront on a human scale, where the use of the groundfloor maximizes its potential to be a lively experience within the city.

Secondly to design an hybrid building that enhances the public realm.

HOW CAN I CREATE AN AUTHENTIC AND HUMAN URBAN EXPERIENCE THAT ENANCHES JERSEY CITY’S PUBLIC REALM?

SUB QUESTIONS:

WHICH ASPECTS CONTRIBUTE TO A MORE LIVELY URBAN LIFE?

HOW DOES THE BUILT ENVIRONMENT AFFECT THE URBAN EXPERIENCE?

WHAT ELEMENTS INTIMATELY CONNECT THE VARIOUS PROGRAMS?

2

ANALYSING: UNDERSTANDING CITY QUALITIES
2.1 CHARACTERISTICS OF A GOOD CITY

In order to carry out a qualitative analysis of the public spaces, an approach for the evaluation is required. The quality of the public spaces is viewed from a pedestrian perspective, as it should be, considering a walking speed of 5 kilometers per hour.

A good city is defined in the following terms:

1. A good city that offers the opportunity to walk and stay in without being too much overcrowded. Its facade must be pleasant especially at street level to stroll alongside and attract people to watch them. Moreover, a clear structure in the pedestrian system has to be present and promenades must have the ability to connect important destinations in order to help pedestrians to find their way around and ensure a good walking rhythm with short waiting times at interruptions and intersection with other city axis. The presence of elements that allow people to rest is also important: well situated benches, secondary steps, seatings and soft edges as well as cafes and outdoor restaurants are essential to give the city diversity and identity.

2. A good city that enhances social and cultural exchanges and offers space for cultural activities as well as space for street theatre, music and small-scale commercial activities. The public spaces of a good city should offer a democratic space for all citizens and visitors in order to trade, deal, and compare.

3. A good city for talking, watching and experiencing with low level of noise, without car routes mixed with pedestrian paths that help to reach the goal of a more intimate public space with fine views and good details. Facade must express something and relate to the immediate surroundings.

4. A good city which is lively, diverse and safe to move around with a wide variety of users both day and night. Residences to ensure a 24 hours city life mixed with educational institutions, night activities that make public spaces safe and places where people want to be.
2.2 LIFE AND ACTIVITIES IN PUBLIC SPACES

City space has always been intensively used for people’s daily activities and it has been designed to satisfy people’s needs but, when car traffic started to grow faster all the spaces previously designed for humans have shifted their functions to car traffic spaces forcing the pedestrians condition to be less and less defined every year. In order to attenuate and solve the problem architects, planners and people should be able to understand and achieve the vision of a better city and realize that the need for lively, safe, sustainable and healthy cities has become a general and urgent desire.

Jan Gehl in his book “Cities for People” already noted that there are three types of activities that take place in public spaces:

1. NECESSARY ACTIVITIES
2. OPTIONAL ACTIVITIES
3. SOCIAL ACTIVITIES

Necessary activities are all an integrated part of our journey, people have to attend them and there is no choice; go to work, go to school, wait for the bus, provide primary needs for the house, bring goods to customers are all activities that take place under all conditions.

Optional activities are mainly recreational and fun; a good and inviting city space is needed to let these activities happen. These activities take place only and only if the urban space offers good conditions: walking down the promenade, standing up to admire and look at the city, sitting down to enjoy the weather or watching other people. If urban spaces is inviting and conditions for being outdoors are good the number of optional activities increase considerably.

Social activities include all kinds of contacts and interactions between people; These activities take place everywhere people go in the city.

In poor quality city areas one will only find necessary activities; people doing things they have to do.

In good quality city areas one will find not only necessary activities (carried out under decent conditions) but also a multitude of recreational and social activities people love to do while in cities. However these activities will only happen if the circumstances are right, in other words only if the city offers tempting, good quality spaces. This is why a good city can be compared to a good party - people stay for much longer than really necessary, because they are enjoying themselves.

As result of that is now more clear how much important is the physical quality of the space; planning and design are tools to be used in order to invite and influence people to just be outdoors going through their activities. Pedestrians are tempted to stop and enjoy the weather and the city, the city streets comes to life, people leave their building to stay in city space, chairs are in front of the buildings and children come out to play.
2.3 THE OPTIMAL PUBLIC SPACE

The key to establishing lively and safe public spaces is pedestrian traffic and pedestrian activities. The arrival to the public space will - in different combinations - happen via six forms of traffic - people will arrive on foot, by car, by train or tram, by bus or on bicycles. Eventually everybody will be pedestrians leaving their mode of transport behind and entering the public spaces experiencing the surroundings at eye level.

The traffic in good public spaces will primarily be dominated by walking, cycling and limited vehicular traffic. How the traffic will be distributed depends on the quality of the public spaces. If the vehicular traffic is too dominant the public spaces will neither be exciting for people nor lively. Worldwide examples show how public spaces with unfortunate compromises for pedestrians result in unattractive and deserted public spaces. If on the other hand good conditions are provided for pedestrians more people will walk and many recreational and attractive activities will follow. A public space of high quality will always be recognized by people interrupting their walk or daily business so they can rest, enjoy the city, the public spaces and be together with other people.

Good conditions for walking and for life on foot, along with a possibility for staying, for pauses and experiences are the key to attractive and lively public spaces.

TYPES OF USERS EXPECTED

1. Everyday users (people that live and work)
2. Visitors / customers (people that visit the function of the area)
3. Recreational visitors (People that visit the area because the public space is delightful)
4. Events visitors (visitors of special events)

TYPES OF ACTIVITIES EXPECTED

1. Daily necessary activities (to walk to and from)
2. Daily recreational activities (breaks and pauses)
3. Recreational activities (Recreation and play)
4. Planned activities (to be spectator or participant)

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1 Victor Dover, Iohn Massengale, forwarded by HRH the Prince of Wales afterward by James Howard Kunstler, Street Systems and Networks, Chapter 3, Willey & sons, inc., Hoboken, New Jersey, 2014, pp.164-175
When planning public spaces the most important group are those people who visit the area because users represent the potential to light up public space for recreation, pleasure, exercise, play etc.

To ensure that public spaces are lively and popular one must make sure that to this people are given good conditions. This means that the public spaces must be highly attractive. Within this user group the focus can be on children, teenagers, adults or the elderly, and the public spaces can be designed to meet the different needs of different groups. If the public spaces are very attractive one can, on a day with nice weather, expect the group of public space visitors to make up the majority of people in the public space.

To the right is a list of criterias to be used as a guide in the design of public spaces. To create a “100% place” - meaning a place that combines all or nearly all the essential qualities to obtain comfort and pleasure for people - the majority of the listed criteria should be met.

1 City of New York, Urban Waterfront Adaptive Strategies, A guide to identifying and evaluating potential strategies for increasing the resilience of waterfront communities to coastal flooding and sea level rise, NYC Department of City Planning, New York, 2013.
THE INVADED CITY
3.1 THE DENIED HUMAN DIMENSION

Cities have being inundated with car traffic to such an extent that the pedestrians and the public life have almost been squeezed out. With the dilate of territorial relations, the social cohesion of local organizations has known loosening and sagging; the tendency to favor the reduction of the physical space in favor of transport networks (transport of people and goods, etc.) has left a big scar on the territory in a global scale: all buildings, now, are related to these facilities and their positioning depends on their configuration in respect of the infrastructures. All these free standing buildings are unable to perform a significant figure in the open urban space that once was the place for social meeting.

When the vision of a city is seen as a whole, buildings act directly with the immediate surroundings, shaping public spaces and interacting with people who live them. However until today it seems that the new city shaper has become the infrastructure, the urban space is organized according to it. What comes out now is that transportation network, car routes and even mass transit system have completely squeezed out public life from cities.

As immediate problem of this separations in functions of the city, where public life is completely missing, society have met the social zoning too. The “mixite” of functions that Jane Jacobs showed to be essential to a city in order to be prosperous and lively in this cases is absent and the Taylorist theory where the city is divided by functions and the Fordist theory where city is connected through infrastructure have given life to an architecture which is clearly definable as uncivilized and dominated

1 Giancarlo Consolini, La difficile arte, Fare città nell’era della metropoli, Politecnica, Maggioli editor, Milano, 2008
2 Ibid.
Cities where walking and public life has become completely phased out. Many cities in North America are now in a situation where public life is non-existent. The realization of such infrastructures have constricted public life to move from outdoor to indoor. Shopping malls are a clear example of these interior public spaces (as have been defined) even if they are not properly public.

One should be able to practice the public space as a theater of relationships and to commensurate his presence with other physical presences. The opportunity to experience the diversity

4 Giancarlo Consommi, La difficile arte, Fare città nell’era della metropoli, Politecnica, Maglioli editor, Milano, 2008.
and complexity of public spaces has totally been neglected as well as the experience of the singularity of a place.

Today, especially in America, new metropolitan centers are defined as such just for a unique and limited function: people go to a specific place for a specific type of work or in a specific shopping mall to only buy a specific something. What has been lost in our modern cities is the complexity, all the cities designed by modernist architect are unable to produce complexity. Besides Jane Jacobs, also the American sociologist Richard Sennet states that cities have the power to transform us in more complex human beings; as long as they are complex I would add. A great example in Europe is the Cerda’s plan, where the research for an equilibrium ensures advantages of high speed city while preserving public spaces that are essential for the city life. Here motion and quiet come together in an unique way.

For Cerda the urbanization obeys to precise rules and responds to an end which is highly humanitarian: the shape it is nothing, more important are the adequate satisfaction of human needs. Two are the main human needs to be taken into account in the urbanization: the need of individual freedom and the need to socialize. These two essential needs are expressed by humans in spaces where to stop - rest and in the spaces of movement that then can be translated and figured in home and in streets.

These elements must comply without exception the previously expressed needs. Great importance is given to the road where the function is not only to facilitate the movement but above all to allow access to the houses and to favor the light and the air needed. A further point is that in planning the shape of the buildings, the quadrilateral is preferable since it is at the same time more natural and the one that allows a greater exploitation of the soil.

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6 Idem, "Cerdà, Teoría General de la Urbanización" ("General Theory of Urbanization", 1867), to support his 1859 project for the Barcelona Extension.
“..the most important fact, for a man, is the possibility of continuous choice between collective life and freedom of social control, the constant possibility of choice between solitude and aggregation, between the closed and the open space, between the noise and silence.”

Ludovico Quaroni

PROJECT PRECEDENTS
4.1 PORTLAND

Inspired by grassroot movements and visionary politicians, Portland has demonstrated that it is possible to create a pedestrian-friendly city even in the country where the car is king. Trams that were discarded in the 1950s were reinstated in Portland in the 1980s, and today the city has a well-functioning public transport system of buses and several tram lines, which are free to passengers in the city centre. The design of the streets and squares and the relationship of buildings to public spaces follow a set of detailed design guidelines that emphasize top quality for pedestrians. Thus Portland has wide footpaths with attractive surfacing, and numerous appealing parks and squares.

WEB: http://www.portlandmaine.gov/934/Services

Portland, Oregon, USA; Pedestrian-oriented policy with detailed design guidelines.

Portland urban fabric, Oregon, USA; Source: Google Earth
4.2 MELBOURNE

With 3.3 million inhabitants, Melbourne is Australia’s second largest city. Its history, street pattern and mix of high and low buildings in the city centre are reminiscent of many other large cities. However, where other cities have surrendered their streets to the automobile and developed indoor shopping malls, Melbourne decided to keep its streets as the city’s most important public spaces. The city undertook extensive renovation of pavements and street furniture, reinforced its status as a green city and developed a policy for active facades along the footpaths. Thus Melbourne has ensured that its streets invite people to walk.

4.3 STRASBOURG

In only a decade (starting in 1990) Strasbourg has carried out an extensive urban renewal project. The conditions for city life, cyclists and public transport have been improved dramatically, while car traffic has been markedly reduced in the city centre. A linear public space policy introduced an elegant new tram line, which inspired the renovation of squares, streets and roads along its route. Constructing the 12.6-kilometre line literally paved the way for public space improvements both in the centre and on the outskirts of the city. The changes in public space and traffic have been a great success, and a new tram line was inaugurated in November 2000, doubling the length of tracks laid. A third line is presently being prepared.

1 http://www.coe.int/t/dg4/cultureheritage/heritage/landscape/Publications_en.asp

Strasbourg urban fabric. Source: google Earth
4.4 BARCELONA

For the past two decades, Barcelona has been the most important source of inspiration for architects, landscape architects, urban planners and politicians who work with public spaces. Nowhere else in the world can the viewer see in one and the same city so many different examples of new parks and squares and so much exuberance and experimentation in their design.

Barcelona has been both radical and imaginative in implementing its public space policy. In only a decade, several hundred new parks, squares and promenades were created by tearing down dilapidated apartment buildings, warehouses and factories, as well as by renovating existing squares and regulating traffic to benefit pedestrians.

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1 Learning from Barcelona; twenty years of urban projects and their reception, Jean-Louis Cohen, 1998.
2 http://www.publicspace.org/en/text-library/eng/2-learning-from-barcelona-vingt-ans-de-projets-et-leur-reception
4.5 THE COPENHAGEN EXAMPLE

On these pages a general presentation of Copenhagen will be made in order to illustrate the developments in Copenhagen City centre where for 40 years a step by step policy has been followed for turning a car oriented city into a people oriented city. One of the catalysts for this development was a strong public demand but also the rising fuel prices and the increased taxes on private cars over the same period.

The development has involved stopping the through traffic, reducing the number of car parking spaces in the centre and increasing the amount of space set aside for pedestrian activities from 15,000 m², when the first pedestrian scheme was introduced in 1962, to the present day 100,000 m² of car free streets and squares. These physical changes have been the background for a dramatic increase in the number of people using and enjoying the city. In the case of Copenhagen these changes are well documented through surveys on the relationship between public life and public space quality carried out over three decades. The general development of the main street in Copenhagen (Strøget) is quite similar to the development in many other cities - Portland, Melbourne etc. The development can be described in four steps:

1. THE CAR-ORIENTED PHASE: THE STREET IS FILLED WITH CARS AND PEDESTRIAN AREAS ARE LIMITED TO NARROW FOOTPATHS.

2. THE SHOPPING PHASE: THE STREET IS PEDESTRIANIZED AND PEOPLE VISIT MERELY TO SHOP AND LOOK AT THE WINDOW DISPLAYS.

3. THE CULTURAL PHASE: NEW ACTIVITIES BEGIN TO APPEAR, PEOPLE SETTLE DOWN AND RECREATE, THE EFFECT SPREADS TO ADJOINING STREETS AND AREAS.

The Town Hall Square was renovated in connection with Copenhagen being the European Cultural Capital in 1996. Right: The Town Hall Square in 1995 before renovation when traffic divided the square in two separate parts.

Renovation turned the Town Hall Square into a large unified bowl-shaped space defined by a pavilion building in dark glass on the left lower side of the image.

Bicycle traffic in Copenhagen has grown by 65% since 1980. Bicycles are an important link in the transport system and handle 33% of commuter traffic.
Despite the European example is useful in order to understand the basic principles behind public spaces and the way they have to be treated, it is also crucial and important to understand how this basics are applied in the american context of New York's area. The Commissioners' Plan of 1811 was the original design plan for the streets of Manhattan, which put in place the grid plan that has defined Manhattan to this day. It has been called "the single most important document in New York City's development."[1]

The plan originated as a proposal by the New York State Legislature, adopted in 1811 for the orderly development and sale of the land of Manhattan between 14th Street and Washington Heights. The plan is arguably the most famous use of the grid plan and is considered by most historians to have been far-reaching and visionary. Since its earliest days, the plan has been criticized for its monotony and rigidity, in comparison with irregular street patterns of older cities, but in recent years has been viewed more favorably by urban planning critics.[2]

Central Park, the massive urban greenspace in Manhattan running from Fifth Avenue to Eighth Avenue and from 59th Street to 110th Street, is not a part of this plan, as Central Park was not envisioned until 1853.

The commissioners published their plan in March 1811 in the form of an eight-foot map with an accompanying 54-page pamphlet. [1] The grid had 12 primary north-south avenues roughly parallel to the shore of the Hudson River and numerous cross streets arranged in a regular right-angled grid. (Broadway, an existing road, was not included in the 1811 plan, and was added to the grid later.[1]) Except in the north and south ends of the island, the avenues would begin with First Avenue on the east side and run through Twelfth Avenue in the west. In addition, where the island was wider, there would be four additional lettered avenues running from Avenue A eastward to Avenue D.

There would also be 155 orthogonal cross streets. The location of the cross streets was fixed at the boundaries of 5-acre (20,000 m2) parcels into which the land had previously been divided. The basepoint for the cross streets was First Street: this was a short and inconspicuous street, which still exists, and originally ran from the intersection of Avenue B and Houston Street to the intersection of the Bowery and Bleecker Street. Peretz Square, a small, narrow triangular park bounded by Houston Street, First Street, and First Avenue, is the grid’s cornerstone.[3]
The numbered street and avenue plan was eventually continued north of 155th Street. It was also continued into the Bronx; however, the grids on the east side and west side do not match up exactly, especially in the northern reaches of the borough. North of Washington Square Park in Manhattan, the numbered cross streets are divided into East and West at Fifth Avenue; south of the Park, Broadway is the boundary between East and West numbered cross streets.

Most of the numbered avenues have been officially renamed over parts or all of their routes: only First, Second, Third and Fifth Avenues have never been renamed, though some of the named avenues, such as Avenue of the Americas (Sixth), are also known by their numbers. Two additional avenues were interpolated amongst the original avenues: Madison Avenue was built between Fifth Avenue and Park Avenue (formerly Fourth Avenue), and Lexington Avenue, known south of 20th Street as Irving Place, was built between Park Avenue and Third Avenue. Several other avenues were added to the grid when Upper Manhattan was developed, such as Riverside Drive, Claremont Avenue, and Saint Nicholas Avenue. The old Bloomingdale Road – which is pictured on the original 1811 map, but which was not part of the planned grid – was eventually preserved as part of what is now known as Broadway.

Over the years, portions of Avenue A were renamed Sutton Place in Midtown Manhattan, York Avenue in the Upper East Side, and Pleasant Avenue in East Harlem. Portions of Avenue B were also renamed East End Avenue in Yorkville.

The plan of numbered crosstown streets has survived for two centuries with only minor variations and irregularities, especially below the original 155th Street northern boundary. The most notable irregularities are in Harlem where West 125th and West 126th Streets go off on a diagonal to the north, and in the West Village where a number of streets vary from the original plan. Among them is West 4th Street, intersecting with West 10th, 11th, 12th and 13th Streets.

In 1853, Central Park was laid out between 59th and 110th Streets and Fifth Avenue and Eighth Avenues. Other major interruptions of the 1811 plan include the main Columbia University campus in Morningside Heights, the Columbia University Medical Center campus in Washington Heights, Lincoln Center, Morningside Heights, and the Columbia University campus in Morningside Heights, the Columbia University Medical Center campus in Washington Heights, Lincoln Center, Morningside Heights.
Park, Stuyvesant Town, Peter Cooper Village, and the City College of New York.

The plan was vociferously criticized from the start, not the least because it did not take into account the natural topography of the island.


Modern reaction to the grid has been sharply divided. Noted architecture critic Lewis Mumford wrote that: “With a T-square and a triangle, finally, the municipal engineer, without the slightest training as either an architect or a sociologist, could “plan” a metropolis...[1]” while urban historian John W. Reps said of it that “As an aid to speculation the commissioners’ plan was perhaps unequaled, but only on this ground can it justifiably be called a great achievement.” [11] Such criticism may be beside the point, since facilitating “buying, selling and improving real estate” was, according to chief surveyor John Randel Jr., one of the purposes of instituting the grid. [5]

One critic recently pointed out that the wide avenues attract retail and commercial use, among other benefits, [2] and architect Rem Koolhaas comments that it created “undreamed-of freedom for three-dimensional anarchy.” [4]

One of the main difference between European and American public spaces is that in US and especially in NY metropolitan area the most of the public spaces are privately owned. Although the term “privately owned public space” was popularized by Harvard professor Jerold S. Kayden in the 2000 book Privately Owned Public Space: The New York City Experience, written by him in collaboration with the New York City Department of City Planning and the Municipal Art Society of New York, the history of privately owned public space commenced decades earlier when New York City introduced an incentive zoning mechanism in 1961 offering developers the right to build 10 square feet of bonus rentable or sellable floor area in return for one square foot of plaza, and three square feet of bonus floor area in return for one square foot of arcade.
4.7 NEW YORK’S BUILT AND UNBUILT RELATIONS

What is then really important for the design process is to analyze and comprehend how the built environment interact with the unbuilt and how those can be related in order to create connections and places of stay while at the same time being lively and safe for all kind of users. So, what can we learn about the interrelation built-unbuilt from the new york’s area?

While the bustle of a city may signify its vitality, the calm of its parks and public spaces represent its humanity. Much like the famous skyscraper, city parks have become an important element of a city’s identity. As New York City’s chief city planner Amanda Burden explains, public spaces make cities work.

In her TEDxTALK on the subject, Burden cites New York City’s Paley Park as a prime example of thoughtful development. Burden recounts each element that contributed to the park’s success, through attention to detail and consideration for creature comforts. These elements included movable furniture, greenery and other people, all of which feed our needs for both social interaction and personal space.

Even in a super-fast high-tech world, these parks prove it is still important to stop and smell the roses. City landscaping, in some ways, is the ultimate interactive public art. The immersive experience of parks and gardens can positively impact people both physically and mentally.

Public spaces, like public artworks can revitalize an area. Both use design and detail to engage city dwellers and add meaning to a specific location. A prime wide example of this phenomenon can be seen in the development of New York City’s Broadway Boulevard as well as in smaller context as Astor Place and Union Square. The projects demonstrated a reclamation of city space for city people through design and functional details.
One of the best example of great public space in NY context is for sure Bryant Park. Bryant Park Corporation was founded in 1980 with a charge to reclaim Bryant Park for the people of New York City. Since then, the talent, dedication and execution of the BPC board and staff has transformed the park into the greatest public space in the world.

The ongoing mission of the BPC is: to create a rich and dynamic visual, cultural and intellectual outdoor experience for New Yorkers and visitors alike; to enhance the real estate values of its neighbors by continuously improving the park; to burnish the park’s status as a prime NYC tourist destination by presenting a meticulously maintained venue for free entertainment events; and to help prevent crime and disorder in the park by attracting thousands of patrons, at all hours, thus fostering a safe environment.

The BPC is privately funded, and operates Bryant Park with private sector techniques and management methods. The BPC provides sanitation, security services, spotless restrooms, colorful gardens, and seasonal horticultural installations for the park, and maintains a lush lawn that is open to the public. This beautiful unbuilt space offers interesting amenities, free educational programs and free high-level entertainment for people of all ages.
4.9 UNION SQUARE EXAMPLE

What is interesting in Union Square is that in 1976, the Council on the Environment of New York City (now GrowNYC) established the Greenmarket program, which provided regional small family farmers with opportunities to sell their fruits, vegetables and other farm products at open-air markets in the city.

That provided to the whole neighborhood a continuous presence of people that trade and interact by enlivening the plaza. Infact, due to its central position in Manhattan and its many nearby subway routes, Union Square is a really popular meeting place. There are many bars and restaurants on the periphery of the square, and the surrounding streets have some of the city’s most renowned attractions.
In the case of the beautiful Greenacre park the “why It works ?” can be explained through few basic points:

1. It is located directly on the street so that people are attracted to look and to go in.
2. There are movable chairs and tables so people can be comfortable and can have some control over where they sit.
3. A waterfall provides a focal point and a dramatic reason to visit the park and its noise creates a sense of quiet and privacy.
4. There is shade in the summer from the trees yet their thin structure allows a beautiful dappled light to pass through.
5. Overhead heat lamps on the upper level heat the park in cool weather.

GreenAcre Park functions as a living room for the community and the “regulars: who use it make a significant contribution to the safety of the park.

History & Background

6. Last but not least, there is good, reasonably priced food.

With a 25-foot-high waterfall cascading over the rear wall, skillfully landscaped trees and plantings, an outdoor cafe, and shady arbors, the park was designed to make the most of its small size. Built in 1971 by the Greenacre Foundation, (founded two years earlier by Mrs. Jean Mauze, the former Abby Rockefeller) the park was developed to provide New Yorkers with “some moments of serenity in this busy world.” The park’s award-winning designs were created by Hideo Sasaki, former chairman of Harvard’s Landscape Architecture Department, and Harmon Goldstone, who served as consultant. Greenacre park is heavily used, but not enough to make it feel busy.
5.2 TEADROP PARK

Teardrop Park is a 1.8-acre public park in lower Manhattan that transcends its small size, shady environment, and mid-block location through bold topography, complex irregular space, and robust plantings. Teardrop’s design and construction were coordinated with the development of four surrounding apartment buildings, each ranging from 210 feet to 235 feet in height.

As children are considered Teardrop’s most important users, the park is designed to address the urban child’s lack of natural experience, offering adventure and sanctuary while also engaging mind and body. Site topography, water features, natural stone, and lush plantings contribute to an exciting world of natural textures, dramatic changes in scale, and intricately choreographed views.
5.3 PALEY PARK

Located within Midtown’s cultural district and surrounded by high-rises, this park is a welcome respite from the sights and sounds of urban living.

The park was developed (and every detail considered) by the person who paid for it, William Paley, former Chairman of CBS. Mr. Paley was involved in all aspects of planning the park from its conception to the selection of just the right hot dog.

Featured in William H. Whyte’s film The Social Life of Small Urban Spaces, the park is a success for several reasons; for one, it is located directly on the street so that people are attracted to look in and enter. It has good, reasonably priced food, as well as moveable chairs and tables that let people be comfortable and have some control over where they sit. A waterfall provides a dramatic focal point and a reason to enter the park; its noise blocks out the sounds of the city and creates a sense of quiet and privacy. There’s adequate shade in the summer from the trees, though they allow a beautiful dappled light to pass through their leaves. But still, the special quality of the park is that people being in it said that they liked it because they could be “alone” in a busy city and it gives them a quiet, restful feeling. In reality, Paley Park is a quite heavily used place, but the moveable chairs allow people the freedom to sit where they choose. It is also very noisy - but the noise is white noise from the waterfall. Nestled between a group of high-rises, Paley highlights the context of living in metropolitan areas. As the park’s page on Project for Public Spaces explains, these elements combined to create a space of serenity for many people in hectic Manhattan. The park’s instant popularity highlighted the space’s importance as a city sanctuary, it brings out the natural instincts of those living in an unnatural environment.
6

JERSEY CITY WATERFRONT: A PHOTO ESSAY OF ITS PUBLIC SPACES
6.1 PICTURES CONTENTS

The following photos have been shot during the group trip to the site in Jersey City in the months of October and November 2014. The main goal of the photo essay is to let the readers realize and better understand what is the current situation and what are the weakness and strengthness of the site*.

They can be summarized in the following concepts:

1. CAR TRAFFIC / PEDESTRIANS AND THE PUBLIC LIFE HAVE ALMOST BEEN SQUEEZED OUT
2. LOW PRIORITY TO PEDESTRIANS / CAR ROUTES HAVE REPLACED URBAN SPACE
3. CONTINUOUS INTERRUPTIONS / CARS PARKING AND TRAFFIC LIGHTS AFFECT THE WAY PEOPLE
4. EXPERIENCE THE CITY
5. PARKING LOTS / BARRIER BETWEEN TWO PLACES, GIVE BORING AND UNINVITING URBAN SPACE
6. UNSAFE PLACES / GIVE SENSE OF DISORIENTATION, MAKE THE CITY UNLIVABLE
7. DISTORTED SENSE OF SCALE AND GENERAL VIEWS / TOO MUCH OPEN SPACE, NO ATTRACTION,
   CARELESS PLANNING
8. UNATTRACTIVE GREEN AREAS / LACK OF ATTRACTIVE FUNCTIONS AT GROUND FLOOR
9. URBAN SPACE WITHOUT IDENTITY / NO COMMUNICATION BETWEEN WHAT IS BUILT AND WHAT IS OPEN SPACE
10. UNUSED PLAZAS WITH GREAT POTENTIALS / BESIDES THE POTENTIAL OF A LONG VIEW ON MANHATTAN THE WATER-
   FRONT IS COMPLETELY EMPTY OF PEOPLE
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12. UNATTRACTIVE STREET FRONUITAES PSOR FACADES GROUND FLOOR FACADES ARE UNINTERESTING, CLOSED AND
   INACTIVE
13. POOR CITY QUALITY AT EYE LEVEL / NO VISIBLE VARIATION OF FUNCTION, NO DETAILS AND NOTHING INTERESTING TO
   LOOK AT
14. MONOTONOUS ENVIRONMENT / POOR QUALITY OF PUBLIC SPACE AND ANNOYING VIEWS
15. TOXIC ENVIRONMENT / LAST PLACE WHERE PEOPLE WANT TO SPEND THEIR TIME
16. DEGRADING URBAN SPACE / MAKE UNSAFE PLACES AND INACCESSIBLE TO PEOPLE
17. BAD OVERALL CONTEXT / THE BIG PICTURE OF THE CITY DOESN'T ENHANCE PUBLIC ACTIVITIES

* All pictures credits are of Cosimo Conserva

Kevin Lynch,
The Image of the City (1962)

“This is really one of the most pitiful things for Jersey City, if someone comes here from a distant place there is anything because I can say “oh I want you to see this, this is so beautiful.”

The following photos have been shot during the group trip to the site in Jersey City in the months of October and November 2014. The main goal of the photo essay is to let the readers realize and better understand what is the current situation and what are the weakness and strengthness of the site*. They can be summarized in the following concepts:

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Kevin Lynch,
The Image of the City (1962)
WARNING
Possible Sewage Overflows
During and Following Wet Weather
Contact with Water May Cause Illness

AVISO
Posibles desbordamientos de aguas negras
durante y después de eventos de lluvia
El contacto con esta agua puede causar enfermedades
7

THE PROJECT RESILIENT DENCITY
7.1 GOALS AND OBJECTIVES

The Project Resilient Density formally began in September of 2014 with the start of ExploreLab 19. The project is being undertaken by a research group consisting of four graduation students. They are Cosimo Conserva, Matteo Ferraeze, Vincent Marchetto, and Mattia Tintori.

On the right is a diagram that helps explain how the group plans the work together to solve this complex problem. The diagram shows that the problems stems from a changing climate, which is in turn raising sea levels, which in turn is making hurricanes have a more dramatic impact. The United States had responded to this problem through a quick recovery approach. Instead of protecting places they collect insurance money from land owners in flood zones, so that economic relief can be provided to people suffer losses during flood event. Also new local building regulations are being introduced that forces the ground floor of each building to be above base flood elevation. This creates undesirable urbanism, ultimately detracting from the value of the city instead of improving it. The Project Resilient Density began to find a better solution to these problems.

The group has identified four major elements of the project each of which have become the individual focus of a single group member. Mattia Tintori is researching the feasibility of creating a multi-purpose levee for the waterfront, not only to protect Jersey from storm surge but also improve recreation amenities along the waterfront. Matteo Ferraeze is researching a network of green infrastructure that will store rainwater during a heavy rainfall, as well as provide park spaces for people to use throughout the year. Cosimo Conserva is focused on the public realm and how this community can be designed in a way that maximizes the comfort of the pedestrian and Vince Marchetto is focused on density and how the private sector can invest money on the waterfront in order to have a payback in the future.

This group created 5 principles which will guide the research. A common solution will not be deemed acceptable unless these requirements are met.
Propose an integrative strategy and design that will make Jersey City resilient to extreme climate episodes, while fostering prosperity and boosting image and liveability.

1. Create alternatives for urban mobility, contributing to the well-being of citizens and integrity of the environment.

2. Create an iconic place that will make JC recognisable as a desirable place to live, work, and invest.

3. Create opportunities for Jersey City’s residents to be able to touch, interact, enjoy, and live the water.

4. Design an environment that will create public goods and foster economic prosperity.

5. Develop different scenarios that deal with the uncertainty of the future climate.
PUBLIC REALM: TOWARD A SOLUTION FOR JERSEY CITY WATERFRONT
**8.1 THE PUBLIC REALM IN THE OVERALL PROCESS**

In the case of the Jersey City Seawall, The Public Realm, as well as all the other three topics, plays a very important role and it is strictly related to the final group work. It serves as a tool to give to the project the predicted urban quality that enhances not only the quality of life but also encourages people to employ and discover the various possibilities that a well-planned public space could give. The main goal of this project, concerning the public spaces, is to try avoid as much as possible car traffic and all its related problems and give space and opportunity to pedestrians through a totally new way of planning and conceiving the hierarchy and the configuration of streets, plazas, and so on and so forth.

“Walking is not just transportation. One of the key factors in understanding the complexity of areas for walking is that there is much more to walking than walking. Pedestrians change from walking to standing or sitting without notice and they have no parking problems when stopping, staying or sitting down for a while. It is all the things you tend to do, but did not plan to do, while you walk, that makes walking such a pleasure...”

Jan Gemzoe (2001)
**8.2 THE LOCATION**

Jersey City is the seat of Hudson County, New Jersey. It is situated on the east side of the United States of America facing the Hudson River and the island of Manhattan, NY. As of the 2010 United States Census, the population of Jersey City was 247,597, making it the second-most populous city in New Jersey, after Newark.

Part of the New York metropolitan area, Jersey City lies across from Lower Manhattan between the Hudson River and Upper New York Bay and the Hackensack River and Newark Bay. A port of entry, with 11 miles (18 km) of waterfront and significant rail connections, Jersey City is an important transportation terminus and distribution and manufacturing center for the Port of New York and New Jersey. Service industries have played a prominent role in the redevelopment of its waterfront and the creation of one of the nation’s largest downtown office markets.

After a peak population of 316,715 measured in the 1930 Census, the city’s population saw a half-century long decline to a low of 223,532 in the 1980 Census, but since then the city’s population has grown, with the 2010 population reflecting an increase of 7,542 (+3.1%) from the 240,055 counted in the 2000 Census, which had in turn increased by 11,518 (+5.0%) from the 228,537 counted in the 1990 Census.

In order to come out with a successful plan, analysis of the site are of crucial importance.
The area of the site is in close proximity to all kind of transit. The closest airport is Newark. Of all the places in New Jersey, downtown Jersey City has the most transit connectivity to Manhattan. This is achieved through two different Path train lines, A tunnel for automobiles, and three ferry stops. Hoboken Station which is on the Northern border with Jersey City also offers a heavy rail connection to the West.

If a high density project was built on the waterfront, building large scale transit infrastructure to support it would not be necessary. Some of the infrastructure could be upgraded but building new tunnels would not be necessary. Path service could also increase the frequency at which trains are running which could be a way to deal with the increase in capacity.
From the mass and void map (up), emerges two distinct urban fabrics, one is the tight knitted historic rowhouse neighborhoods on the back of the map, and the other is the former industrial areas. The fabric of these former industrial areas facing the waterfront clearly presents a broken down urban tissue. It is not related to the existing back part of the city and the most of the buildings present huge lack of activities and amenities at
From the road hierarchy map, it emerges that the whole existing area adjacent to the site is mainly reserved to car traffic. Despite the fact that the whole waterfront is still reserved for pedestrians, the connections with it lack paths that allow people to reach the site in a safe way. Three types of roads are prevailing on the map: common streets with regular car speed; Boulevards that actually cut in two sides the city (the existing part and the industrial part); Holland Tunnel that regulates the traffic going to and coming from Manhattan.
From the zoning map (up), emerges that the urban tissue presents huge lack in the mixité of functions. All buildings perform only one function, mainly offices and dwellings on the waterfront. This lack of mixité in function causes the absence of activity after working hours, especially at night when the waterfront results to be completely empty giving to who is walking by there the feeling of unsafe place where people don’t want to spend their time. Besides the big potential of a view on Manhattan this space is completely unattractive.
The Pierhead Line was created in 1913 by the War Department of the United States Federal Government. During that time industry had become so powerful that the form of the land no longer posed an obstacle. Railroad and shipping could easily redefine the waterfront edge to increase the size of their operations. Federal regulation was needed to make sure that the industrialists drive for prosperity would not obstruct the navigation corridors of the Hudson River.

This line is a clear limit for the project. The Hudson River has been dredged outside of this line, making it much deeper and harder to fill. Also going through a public process to change this regulation would be lengthy and expensive.
7.8 DEFINING THE SITE

Besides the pierhead line there is also a bulkhead line which regulates how far into the river fill can be placed. This line would have to be changed, or moved to where the pierhead line is today. Since this area is no longer a port it does not make sense to have a pierhead line since piers are only built in working port areas.

Nevertheless the site emerges as the area between the existing pierhead line and the existing bulkhead line. While this water may be mostly water today, in its former life it was completely covered with boats and piers. Real estate that is this close to jobs and this close to public transit should not be left to decay. It should be converted into high density communities.

8.9 SITE AREA

The area of the site is 230.25 Acres or 93.16 Hectares.

The area of the site is very large, about 2.5 times larger than Battery Park City. It is also a complex site having to deal with existing infrastructure and views. It offers spectacular views of Manhattan.

8.1.0 SITE OWNERSHIP

(From left to right)
Lefrak = 44.0%
JCRA = 16.5%
State of NJ = 3.9%
Mack Cali = 10.2%
EQR = 2.1%
The City of Jersey City = 8.0%
Goldman Sachs = 3.6%
NJ Dept. of Military Affairs = 3.4%
NJ EPA = 8.0%
9

PLANNING TOOLS
9.1 TO ASSEMBLE OR DISPERSE

The informations carried out until now about strengthening life in city emphasizes the importance of groundfloor for the attractiveness and functionality of cities. This represent the exchange zone between buildings and city, between built and unbuilt; here is where life from both inside and outside can meet and where people pass close by and have time to enjoy experiences as well as interact with other people on their way.

Several general city planning make up a crucial prerequisite to work with the human dimension. The most important principles, which are indispensable, are illustrated here on the right. The first four principles primarily deal with quantity and show how to ensure that people and events are merged together in built up areas; the fifth principles is about how to improve the quality of city space in order to invite people to live it and spend more time there.

1. Carefully locate the city’s functions to ensure shorter distances possible between them and a critical mass of people and events.
2. Integrate various functions in cities to ensure versatility, wealth of experience, social sustainability and a feeling of security.
3. Design city space in order that it is inviting and safe for people who pass by there.
4. Open up the edges between city and buildings in order to allow life from inside the buildings to interact with the outdoor life and work together.
5. Work to strengthen the invitations to invite longer stays in city space because the more people are involved in city activities the more people will join them.
In the 1960’s and 1970’s, when car invasion gathered speed, basically two typologies of streets existed; those were traffic streets and pedestrians streets. In the same period in many new built up areas road systems were established in accordance with the idea of segregating car traffic and pedestrians/bicycle traffic into two completely separate traffic systems. while the idea was terrific in theory, it was always problematic in practice, because human traffic as a general rule chooses the shortest routes possible. Moreover, separate path systems often led to safety and security issues in the evening and at night.

In later years, especially in 1970’s when the first oil crisis dramatically reduced traffic growth, the interest in developing more varied solutions grew. The development of integrated traffic streets started with with the wooners in The Netherlands and quickly spread throughout Europe. Traffic calming principles grew in popularity and quite and playing streets were introduced. The new types of streets reduced traffic and speed, turning them into a more lively and friendly environment.

In the last decades, ideas about traffic reorganization and integration have spread more widely around the world; The latest addiction to the category of of types of streets is shared streets, which function pretty well if they are interpreted as streets where pedestrians have a clear first priority.
9.3 SEEING AND HEARING CONTACTS

Under all circumstances seeing and hearing other people provides information, overview and inspiration. Having in mind the fact that the life in streets is more capable at slow speed, where pedestrians can have the time to observe and reflect, it is more simple to describe how physical planning can invite or repel basic seeing and hearing contacts.

Inviting requires unobstructed views, short distances, low speed, staying on the same level and orientation toward what is to be experienced; looking closer at this prerequisites, we can see that these simple physical frameworks are found in old pedestrian cities and lively pedestrian streets.

In contrast, interrupted lines of vision, large distances, high speed, multistorey placement and orientation away from people blank people form seeing and hearing others.

looking closer at these prerequisites, we can see that the same physical frameworks are found in many new built up areas, residential areas and suburbs.
9.4 DESIGNING THE GROUND FLOOR

In the last decades, ground floor design has suffered a setback in the form of large units, many closed facades, blind windows and lack of detail. These developments have robbed many city streets of casual pedestrians, removing life from streets and increasing the feeling of insecurity, especially once it gets dark.

Taking this considerations in mind Stockholm, Sweden, undertook a major urban renewal project in 1990 and developed a five step scale for registering and assesting its groundfloor. This made possible to gain an overview of the areas and streets in the city that needed improvements.

This type of registration can be used to make comparisons between cities and districts, as well as serving as starting point for establish an active policy to ensure attractive ground floors along city streets.

In recent years many cities have used this method for registering and assessing the attractiveness of groundfloors as an important tool in their effort to develop a certain quality in city space.

“Walking is not just transportation. One of the key factors in understanding the complexity of areas for walking is that there is much more to walking than walking. Pedestrians change from walking to standing or sitting without notice and they have no parking problems when stopping, staying or sitting down for awhile. It is all the things you tend to do, but did not plan to do, while you walk, that makes walking such a pleasure…”

Jan Gemzoe (2001)
In his book “Cities for People” Jan Gehl fully describes the four key objectives needed in order to reach the goal of a better city; lively, safe, sustainable and healthy are objectives achievable only through a citywide political intervention to ensure that the residents of the city are invited to walk and bike as much as possible in connection with their daily activities. The concept of the lively city is much stronger when residents are invited to take part at life of the city; when people walk, bike or just stay in city spaces the atmosphere change, people enjoy the city and streets are full of life.

The concept of a safe city is reachable only if people stay in city space; dwellers are the only ones that can establish a safe neighborhood just living and attending the city. A city that invite citizens to walk and bike is a city that has a structure that offers short walking distances, great quality of public spaces and variation of urban functions. More activities means more eyes on the streets and that is for sure a founder element for safer cities.

The concept of the sustainable city is strengthned if the biggest part of the transport system is by mean of “green mobil- ity”, which means that travel by bike, foot or public transport should be taken for granted and considered as the basis of a better city. The healthy city is a desire that could be satisfied just by assuming that walking and biking must became natural activities while moving within the city for all kinds of business.

All these considerations about how to set a better city take in account the human dimension where the scale of the city fits the way of how people perceive and react to urban spaces. Moreover, compared with others ordinary social investments such as health care costs or high quality automobile infrastructure, the costs for taking care of the human dimension are so modest that in every part of the world, even in the poorest countries, the efforts and the investments are possible. However the benefits of taking into account the human dimension while designing a new city or just when operating within an existing context are enormous and our cities cannot afford anymore to leave the prominent problem unresolved.

There is more to walking than just walking. A car-free develop-
ment creates a social environment that stimulate a whole new relationship between a citizen and the street. The “sociability” of the street becomes as important, or even more important, than any singular purpose on just transport. While walking appears to be a relatively low technology option, the appropriate supporting infrastructure can actually require a good deal of technical sophistication. Ensuring a safe, effective, useful, and enjoyable pedestrian experience involves a significant planning and design effort. The texture of the walking surface, dimensions of walking area, surface colors, climate control measures, street legibility, cleanliness, lighting, landscaping, routing design, ramps and crossings, amenity infrastructure, and other design factors all require a rigorous understanding of customer needs, local conditions, and the available options. The right combination of design and policy can create a car-free environment that allows a wholly functioning modern city.

Issues such as the delivery of goods and access for public services should be addressed early in the design process. Otherwise, the economic and functional viability of an area can become compromised. Subtle design features can determine whether an area creates an effective environment in terms of both sociability and functionality. In turn, these features underpin the ultimate economic viability of the area.

Throughout life we have a costant need of new information about people and the surrounding society. Informations come to people when they are involved into something, in that case the society or even better the city and its urban space. Studies from all over the world show the importance of urban life as an attraction; people like to stay where things are happening and they always go seeking the presence of other people. Different activities within the city will attract different categories of people: sometimes people performing arts, playing or shopping are more attractive than people sitting and standing at the café or vice versa but still the more are the activities the more people will go out to join or watch them; studies on benches and chair positioning in city space show how the seats with the best view of city life are more desirable than those who don’t.

Going over the history of cities, urban spaces has always been the place where people meet, trade, exchange ideas, made political and economical deals; everything was done outdoors, in public space and under a completely public view. The city was the meeting place. City spaces have kept their founding function as a social meeting place until modernist planning ideologies moved the main attention on developing a rational and streamlined setting for only necessary activities making foot or bike travel almost impossible. Trade, meeting places and service functions have all been moved into indoor shopping malls. The results of these trends is amply visible especially in Jersey City where city life, pedestrians and the concept of city space as a meeting place have been cancelled or either has never existed.

42 Granary square, by Paul Lincoln in urbanpixel.com

42 Washington square NYC, by Cosimo Con-
9.5 STREETS FOR URBAN LIFE

The terms streets, boulevards, avenues, should suggest the idea of accommodating and reconciling the demands of movement and social space within the same physical space; they should have function of both connecting different parts of the city and being places for social interactions emphasising the association of streets with quality of public life rather than dividing elements within cities.

A sustainable urban space design requires patterns that are able to accommodate and integrate the demands of various movement system while supporting public relations and exchanges; together with public space network’s role as movement place there is also a need for a multi purpose use of it where social spaces and multi purpose spaces are separated only if absolutely necessary still having a considerable overlap of functions.

However the big problematic, that still persists today, is that the physical space used by cars is the same used by pedestrians: majors and minors roads provide obstructions to pedestrians movement, creating problems of severance and connectivity; moreover if we think about heavy traffic roads it is pretty clear how it affects the social use of streets.

A first approach in finding the right solution for Jersey city is given on the right page; This first approach try to set a hierarchy between car routes types and pedestrian routes. The example takes in consideration classic that is cut where the interconnected pedestrian path passes by. Despite the fact that in this way the block assumes a more organic shape because of the buildings that follow the pedestrian paths, a high level of interruptions are found in critical points where pedestrian paths meet the intersection with car routes. These intersection produce obstructions to people walking from one point of interest to another giving a sense of unsafe and interrupted urban fabric. The experiment seems to work only in relation with one block, while an hard and underlined connection between more blocks is still absent. If cities and buildings are going to invite people to come and stay, the human scale will require new treatments; if working with the human scale is neglected or fails city life will never have a chance: the planning order has to be first life, then space and finally buildings.

Once the city space and connections are set, buildings can be positioned in order to ensure the best relationship between life, space and buildings.

9.6 MULTIPLE LAYERS OF MOVEMENT

A basic distinction has to be made between pedestrian and vehicular movement; the vehicular movement is pure circulation while pedestrian movement is also circulation but also permits and promotes economics, social and cultural exchange.
The great advantage of a car is that they provide seamless travel from starting point to destination; it is a single purpose travel but, as already stated in previous pages, designing for vehicular traffic always creates gaps in the pedestrian movement experience. Anyhow, in urban terms, the experience of car travel is essentially discontinuous and exchangeless. There is no communication between the car and outside world. Opportunities for social interaction and exchange only appear once the car has been parked. Quality and continuity of urban space are less important for car drivers.

On the other hand, pedestrian travel is rarely single purpose: in going from one place to another, we usually stop to buy a newspaper, a bottle of water, to talk to a neighborhood colleague or friend. It is very common to stop and watch a window shop or have a drink at the café’ nearby our place or more simply enjoy a view or watch the “world go by” as Jane Jacobs states in her book in 1961. Pedestrian travel is this both circulation and exchange.

An organic pedestrian path that is completely separated from car traffic is needed to ensure the city a prosper public space. The integration of a green mobility (as Jan Gehl intended for this term) that ensure the presence of public transport and bike lane is also a fundamental element of the city. It has to be present in order to connect the city in a faster but sustainable way.

Having this in mind now, a new solution could be made; the approach given on the right page shows in step how to formulate a new hierarchy of network where the pedestrian is taken in consideration before any other aspect. Through a differentiation of car routes, green mobility as well as bike lane and public transport and, last but not least, pedestrian paths a new proposal for an optimal public space is given.

The scope of the experiment is to understand if the new scheme is actually working properly and if could be used to propose a solution for the new settlements in Jersey City.
9.7 THE PROPOSED MODEL

Successful public spaces are characterized by the presence of people, in an often self-reinforcing process. They support and facilitate the activities of people, their design should be informed by an awareness of how people want to use them. Connectivity and permeability are issues taken into account while carrying out this idea; the more the city is connected in its function and its urban tissue the more it is lively, healthy and sustainable.

The model results in a multifunctional street level that enhances urban economic and prosperity by being absolutely free of cars and with an absolute consideration of pedestrians. The blocks are shaped by the paths that cross them and different points of interest are easily reachable through pedestrian promenades that give the opportunity to people to experience and live the city with its public spaces. Relaxation, comfort, passive and active engagement as well as freedom to choose where to go and what path to take without being obstructed by cars is the main goal that the diagram tries to explain.
The times are changing, from the problem of global warming to worldwide competition among cities, and our streets need to change along with them. Until now, especially, NJ areas has not embraced a broad strategy for developing and caring for the public realm, but today, the world’s best cities such as New York Manhattan are strongly focused on quality of life. Designing streets as great places for people and not just as utilitarian corridors for vehicles takes full advantage of Jersey City’s density and vibrancy - it’s a new frontier in ensuring that Jersey City waterfront will be one of the greatest in the world.
The dike, besides its first scope of defending the city from catastrophic events such as hurricane Sandy, will sign also the edges of the site area. The infrastructure has the potential to accommodate all kinds of architectures, contributing to growth of the mixed use program. Having this as a starting point, city life, circulation patterns and buildings will be accommodated in order to enhance prosperity in public space and respect the human dimension.
10.2 CAR ROUTES

Car routes will be attached to the already existing car network. Once the routes reach the site area they will go underground leaving the space that they should have occupied to a public transport oriented policy and to a more sustainable and lively environment. The whole area is out of cars and parking lots (as highly present in the existing context) and a freecar and low speed development can take place.
The green mobility embraces public transportation systems and bicycling networks. They are structured in such a way that the whole site area is connected and the main hubs are at a maximal distance of 5-10 minutes by walk or bike. The green mobility routes that overlay on the underground car routes will serve the city as main shopping promenades and mixed use buildings. The represented grid, being free of car constrictions, is highly...
10.4 PEDESTRIAN PATHS

The pedestrian paths are the more important in the overall process: they have the power of shaping buildings by creating city spaces. They have being placed in order to intimately connect main hubs and secondary destinations. Their organic paths ensure complexity and detail of space, human dimension of buildings as well as safe and healthy streets. The main hubs represent the more important plazas and worship places. Streets
10.5 WALKING AND BIKES DISTANCES
10.6 MASTERPLAN ZONING

- High rise residential on the back, Low rise on the front, best view on the bay, best view on the Statue of Liberty
- Connection with Liberty State Park
- Office / Financial District
- Square at Exchange Place
- Big Park
- Art and Cultural District
- Sport and Recreation District
- Connection to Hoboken
- Best view on Midtown
10.7 MASTERPLAN CONNECTIONS

- High rise residential on the back, Low rise on the front, best view on the bay, best view on the Statue of Liberty
- Connection with Liberty State Park
- Office / Financial District
- Square at Exchange Place
- Big Park
- Art and Cultural District
- Sport and Recreation District
- Connection to Hoboken
- Best view on Midtown
10.8 MODEL COMPONENTS

WALKABILITY AND TRANSIT

CULTURE

DIVERSITY AND EQUITY

PARKS + PEDESTRIAN AND BIKE FRIENDLY + LOCAL MASS TRANSIT + REGIONAL MASS TRANSIT

CULTURAL INSTITUTIONS + MUSEUMS, HOSPITALS AND SCHOOLS + MIXED HOUSING AND HYBRID BUILDINGS

156  157
10.9 URBAN PROFILEE

- Many details and facade rhythms / street patterns, design of space, detailing is contribution to city quality at eye level
- Multiple functions at street level / give to people the opportunity to walk, sit, stand, listen and talk to light up urban spaces
- Iconic statues and soft edges / give sense of place and opportunity to stop and watch the environment
- Inviting open space, diversity and long views / life happens on foot, give the opportunity to walk and explore the city
- No cars, more walk and bike / give the time to observe, exchange and interact with other people
- Activities and events / people like watch other people, people are invited to live the city
- Lively, safe and sustainable streets / send friendly and welcoming signal with the promise of social interaction
- Water and vegetation / enhance biodiversity and give psychological pleasure
THE BUILDING
The walkscraper will reach the height of 190 meters and will be an icon for Jersey City. The building faces lower Manhattan waterfront and WTC.

The tower accommodates a public observatory at its top floors. The 360° panorama will ensure breathtaking views all over the NY metropolitan area.

At level 28 and 29 the tower accommodates restaurants and cafés at 112 meter above ground which are accessible to both public and private building users.

Floor space: 38,000 sq. m.

**FLOOR USE**
- Shops/Retail
- Dwellings
- Offices
- Hyatt Hotel*****
- Luxury apartments
- Public space

**FLOOR COUNT**
- 6
- 12
- 12
- 9
- 9
- 7

32,500 rentable sq. m.

The Building has in its middle a series of public attractions and a children playground that allow people to enjoy the view while playing and relaxing.

An alternation of 12 floors of offices and dwellings are situated in the lower part of the building to always ensure life, light and lively atmosphere to the ground floor.

**ENTRANCE AND SHOPS**
The base accommodates entrances to the buildings and shops that always ensure the presence of people and various activities at lower levels.
130/200 mm light weight concrete on metal re-entrant decking

150 mm wood panel raised floor

130 mm light weight concrete on metal re-entrant decking

MOTORIZED ROLLER BLINDS ON BMS CONTROL WITH MANUAL OVERRIDE

HEXCEL VISION SCREEN, WHITE GREY 5-10% (VARIES PER ELEVATION)

roller blind on s.s tensor rods

blind fixed to cast beaker

perimeter column encased in prefabricated fibrous plaster column casing/fire proofing

casted alluminium mullions

casted alluminium mullions

casted alluminium mullions

building fragment

DETAIL 1:5

st. steel beam HEB 500 h500 b300

reinforced concrete in encase perimeter column

insulation layer

external paving

fire stop detail

PHOTOVOLTAIC CELLS

ELECTRIC ENERGY TO LIGHT

canopy

rain water hopper

SINGLE GLAZED FIXED OUTER SKIN

LAMINATED EXTRA WHITE GLASS WITH 20% REFLECTIVE COATING

OPENABLE DGU, ALLUMINIUM FRAME (SIDE HUNG) PERMITS ACCESS FROM INSIDE TO CAVITY FOR CLEANING AND MAINTENANCE

DGU INNER-pane/weather line EXTRA WHITE GLASS (OPTIWHITE OR SIMILAR)

WITH LOW AND HIGH PERFORMANCE COATING

main entrance mechanical sliding door with movement sensor

RADIANT FLOOR
REFLECTIONS

The hereby thesis has been developed within the Graduation Studio “Explore Lab”. Explore Lab is a Graduation Laboratory of the Faculty of Architecture, TU Delft. In this Lab I had the opportunity to follow my fascination on public spaces by doing research and producing a graduation projet out of it.

The theme of the project involved the careful analysis of the urban context of Jersey City, NJ trying to figure out what are the strengths and weaknesses of the site by focusing the attention on public spaces. The main goal of the research was to collect informations and input for the design of the master plan which has been developed as a group work by merging four different research on four different aspects that led me to define the borders and special characteristics of my building site. Moreover, the results of the research have been largely useful to understand and best solve the complexity of an hybrid building that integrates at the same time private and public functions together. Despite the fact that the research outcome aimed to work as a guide line for the masterplan development, in its ensamble it also gave me the tools and the basics to approach the building design in the best way possible.

The opportunity given by the Graduation Lab to have the freedom to choose and define the graduation theme has required, during this year of research and design, a constant reconsideration and reorganization of the framework which has led the final design to be unique in its kind. The input given by the location’s circumstances with its needs and its challenges have brought me to extend my knowledge about public spaces, the way they are used and the way they should be used. My design goal has been from start to try transalte my research of public spaces in urban scale inside the building scale. Their integration into a building design have been, finally, a sort of crown for the design goal I was aiming at.

Since the direction of the thesis was not given from the Graduation Lab Studio, the method chosen for the thesis research was directly established by me. Firstly, since New Jersey region was chosen, a method to understand how to analyse and design city’s public spaces as people gatherer was researched; by looking at works done by Gehl, and examples in the metropolitan area of New York, Newark and New Jersey done by Mumford, Jacobs, Johnson, Whyte, Smith ecc I had the opportunity to collect riformations that led me to understand what were the problematics of the area and what were the possible solutions.

In a second phase the privately owned public spaces issue came back, as a top layer, introducing a second methodology to analyse the city from a POPS point of view. The deriving methodology used in the research process was fundamental for my thesis design. The elaboration of a method for a new analysis of the city aiming at tackling all kinds of the public spaces issue gave me the opportunity to gain a fixed, generalizable procedure, which finds its conclusions in giving very precise guidelines for the design phase.
The project “Resilient Dencity” has come together in order to 
find a new identity for the development of Jersey City. Sub-
stantial work in this research has been done towards propos-
ing a creation of a better Public Realm through an integrated 
movement strategy. The results of the research are intended to 
be used to create a framework on which the future urban and 
architecture design can be developed.

The road to a people friendly Jersey City with great city squares 
and room for people is long but a gradual process divided in 
steps will give his positive results. The message in this report is 
among others tales to illustrate that the development can hap-
pen (over a long period) if a strategy is outlined and the goals 
have been set. 
However, car traffic issues appear to be a significant theme to 
address in the future development of Jersey City waterfront. 
The development of a pedestrian network relates to the orga-
nizing of driving lanes, speed, traffic volumes and the amount 
of parking and thus driving to and from the city. The walking 
culture needs to be preserved and developed further. 

Another aim of this report has been to highlight the impor-
tance of improving conditions for recreational activities in the 
new development. With reference to the Copenhagen example 
Jersey City is still mainly perceived as a non-place area without 
its own identity, and the recreational opportunities are yet to 
be created and further developed.

Finally, with time, the identity of the public spaces can be de-
veloped to be as important for the city identity, history and 
culture as the built form. Jersey City is situated in a beautiful-
ly location with access to the Hudson river, surrounding parks 
and with a spectacular view on the fantastic island of Manhat-
tan. It now is the time to understand the true value of the city’s 
potentials and develop a resilient plan with great public spaces, 
that will strengthen the identity of the city as well as people’ s 
sense of ownership.

In many cities in the economically developed part of the world 
, notably Denmark and The Netherlands, as well as New York is 
doing are good examples to show a well organized and resil-
ient directed policy of making the city. The need for this type 
of reasonable coexistence between street uses is even more 
urgent in developing cities such as Jersey City.
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NYCDOT
www.nyc.gov/dot

PlaNYC
www.nyc.gov/planyc

Gehl Architects
www.gehlarchitects.dk

Sustainable Streets–NYCDOT’s Strategic Plan

www.nyc.gov/dot/stratplan

NYC Plaza Program
www.nyc.gov/plazas

DOT Pedestrians and Sidewalks program

Pedestrian Projects

Safe Routes to Schools

Safe Streets for Seniors

Safe Routes to Transit

NYCDOT Bicycle Program
www.nyc.gov/bicycle

CityRacks Design Competition
www.nycityracks.wordpress.com/

Coordinated Street Furniture

Public Art Program

Current DOT Projects