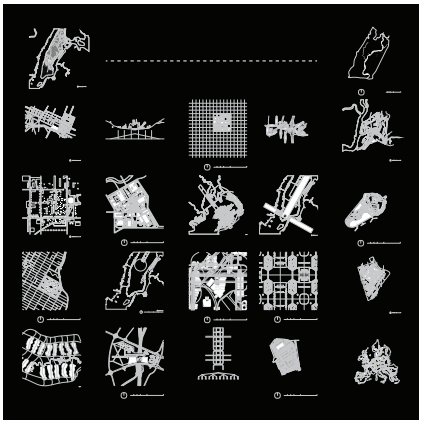


COLLAGE & CONTRADICTIONS

A regional survey based on prospective manifestations.

by Andreas Huemer

DIPLOMA THESIS

COLLAGE & CONTRADICTIONS

A regional survey based on prospective manifestations.

by Andreas Huemer

DIPLOMARBEIT

zur Erlangung des akademischen Grades einer/s Diplom-Ingenieurin/Diplom-Ingenieurs

STUDIENRICHTUNG

Architektur

Technische Universität Graz
Erzherzog-Johann-Universität
Fakultät für Architektur

BETREUER

Klaus K. Loenhart, Univ.-Prof. Dipl.-Ing. (FH) MDesS Harvard MLA
Institut für Architektur und Landschaft

August 2011

STATUTORY DECLARATION

Deutsche Fassung:

Beschluss der Curricula-Kommission für Bachelor-, Master- und Diplomstudien vom 10.11.2008 Genehmigung des Senates am 1.12.2008

Englische Fassung:

TU Graz
Graz University of Technology
Senat

EIDESSTATTLICHE ERKLÄRUNG

Ich erkläre an Eides statt, dass ich die vorliegende Arbeit selbstständig verfasst, andere als die angegebenen Quellen/Hilfsmittel nicht benutzt, und die den benutzten Quellen wörtlich und inhaltlich entnommene Stellen als solche kenntlich gemacht habe.

Graz, am .....

.....
(Unterschrift)

STATUTORY DECLARATION

I declare that I have authored this thesis independently, that I have not used other than the declared sources / resources, and that I have explicitly marked all material which has been quoted either literally or by content from the used sources.

Graz, ...

.....
date (signature)

INTRO

INTRO

This document is an analysis of utopias on urbanism. A survey of what some of the greatest architects invented throughout the last century.

The most precious projects were selected through a set of rules.

RULES

1. Only projects related to architecture.
2. Only projects after 1920.
2. Only projects based on a well-known theory established before the project.
3. Only Visionaries who write and build projects.
4. Rules will be broken when necessary.

THEORY

The starting point were three Theory Readers.
I came across Joan Ockmans "Architecture Culture 1943 - 1968". An almost 500 pages thick book, including some of the most influential essays within 25 years of theoretical studies on architecture.
Concluding this 25 years with Kate Nesbitt's „Theorizing a new Agenda for Architecture" and the Book „Architecture Theory" by K. Michael Hays gave the right foundation fort his studies.







The focus for this study while going through these books, was of course urbanism and the essays possible translation in our times.

For example Victor Gruen summarizes his essay Cityscape and Landscape: "For success on a grand scale, we will need more than plans and energy and even money. We will need the legal weapons to fight the battle, we need more effective legislation for condemnation proceedings, we need new zoning laws and, we may need federal funds at least as guarantee for loans for urban and suburban rehabilitation. We need educational programs for our architectural schools in which integrated planning is stressed, and we need the active help and cooperation of artists, designers, and creative men in all fields in order to win in the blitzkrieg of technology."[1]

I would suggest to include engineers and specialists in our team of cooperation and the architect should be seen as the coordinator of this big team of specialists since they tend to focus on their specialisation while forgetting to focus on the big picture.
The Theory Readers show how interconnected one theory is to another as John Summerson writes: "I suppose nobody will doubt that Le Corbusier Vers une architecture has been the most consequential book on architecture written in this century."[2]
On the one hand Summerson criticizes Vers une architecture as very consequential but on the other hand it never proposed anything new. He saw the book more as a critique on the French rational tradition.

All these interconnections are incredibly interesting but not yet physically conceivable and lack in their representation by not showing influences from outside, for example wars or inventions.
In order to achieve the wanted outcome it was necessary to give the theory it's physicality.

PHYSICALITY

Physicality through the connected project.

INFLUENCES

To show influences the graphical report of timelines will help to represent clear facts.

COMPARABILITY

Finally in order to compare one theory or one project to another and to get results from the study it is necessary to find a rating system for urbanism.

PRACTICABILITY

The practicability of the study gets visible through a study on the New Jersey Meadowlands, an area so close to New York City but so different. The quality and importance of that area will get clearer through the studies results.

1 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 199

2 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 229

TABLE OF CONTENT

DIPLOMA THESIS 3
Statutory Declaration 5
Eidesstattliche Erklärung 5
Statutory Declaration 5

INTRO 5
Rules 7
Theory 7
Physicality 7
Influences 7
Comparability 7
Practicability 7

INTRO 7

TABLE OF CONTENT 8

PLANS 10
Early Town Planning 10
Manual 13

CITY SYSTEMS 14
Transforming old ideas 14
Example Loopcity VS. NY Loop 15

COMMISSIONERS PLAN NY 16

PLAN VOISIN PARIS 18

BROADACRE CITY 20

STUYVESANT TOWN 22

MARS PLAN LONDON 24

DOORN MANIFESTO 26

FORMULARY FOR A NEW URBANISM 28

FORT WORTH 30

GEODESIC DOME NEW YORK 32

AGRICULTURAL CITY 34

A PLAN FOR TOKYO 36

SHINJUKU RESTORATION 38

PLUG-IN CITY 40

A CITY IS NOT A TREE 42

JOINT CORE SYSTEM 44

CONTINUOUS MONUMENT 46

NO-STOP-CITY 48

PARK DE LA VILLETTE 50

FRESH KILLS PARK 52

GOVERNORS ISLAND 54

MASDAR CITY 56

ROAD MAP 2050 58

DENSITY 60
Projects Density in Person / km² 60

FACT SHEETS 62
2D Area Charts 62

PRINCIPLES 64
Qualities & Grievance 64

PROJECTS SUMMARY 66

CONNECTIONS 68
Time line 68

PROJECTS SCALE 70
Scale 70

INFLUENCES 72
Time line 72

INFLUENCES 74
Data 74
Nominal Oil Price 74
Global co² Emissions 74
GDP Growth 74
IMF 74
GDP Definition 74
Oil Discovery - Consumption 75
World Economy Ratio 75

INFLUENCES 76
Time span 76

LOCALISING 78
Collage & Contradictions? 78
Left Out? 78

SOURCES 82

NEW YORK NOW 84
After the Commissioners Plan 84
Carpet 84
Zoning law 85

MANHATTAN 86

HISTORY 86
Development 86
History of New Yorks Infrastructure 86

CLIMATE 88
Temperature NYC vs. VIENNA 88
Wind Data US 89

PROBLEMS 90
The Age Problem 90
Manhattan 90
Staten Island 90
The Bronx 90
Brooklyn 91
Queens 91

FEARS 92
Global warming 92

INTERVIEWS 94

POTENTIAL 96
Residential growth 96
Congestion charge as a chance for others 96
Express Bus Routes 97
Public Transport 97

TRANSPORT 98
Transit capacities Expansion 98

CENTRAL PARK 100

MEADOWLANDS 102
VISIONS 102

FACTS 104
Site 104
Problems 104
NJMC 104
Structure of the New Jersey Meadowlands Commission 104
Turnaround 104

NJMC 104
Energy Master Plan 106

RENEWABLE RESOURCE 106
Wind & Resource Potential 106
Biopower 107
Solar Power 107

AERIAL VIEW 108

HISTORY 110

MEADOWLANDS 110

HISTORY MEADOWLANDS 112
General History 112
Landfills 113

PRESERVATION 114
What to Preserve 114

LAND OF BRIDGES 116
Hackensack River Bridges 116

MAPPING THE AREA 118
Municipalities 118
Wetlands 119

FLOOD DIAGRAM 120
Floods every 100 years 120
Wetlands 121
Floods 121

WETLANDS 122
ENHANCEMENT & CONSERVATION 122
Planyc 123
Why they are valuable 123

COMMUNITY FACILITIES 124
Community Facilities 125

REDEVELOPMENT 126
Developable sites 127

REDEVELOPMENT AREAS 128

REDEVELOPMENT AREAS 130

REDEVELOPMENT AREAS 132

REDEVELOPMENT AREAS 134

LANDFILLS 136
Landfill sites 137
Waste Management 140
Waste Incineration 140

WASTELAND 140
Waste 140

TRANSPORT 142
Rail & Road 142
Stations & Service 143

CURRENT LAND USE 144
Land use 144
Land use 145

CURRENT LAND USE 146
Land use 147

MEADOWLANDS 148
Secaucus 148
Visions 149
Location 149

QUALITIES 150
How To? 150

COLLAGE 152
Research 152
New York City 152
Commissioners Plan 152
The Borders 152
Listed institutions verses 153
Listed Structure 153
Plan Voisin 153
Separation of Functions 153

COLLAGE 154
Broadacre city 154
Jersey Farmers' Market 154
Stuyvesant town 154
Affordable homes 155
The Region Loop 155
MARS Plan London 155

COLLAGE 156
Doorn Manifesto 156
Cycling the Meadows 156
Fort Worth 156
Walking distance - Shopping 157
Energy Plans 157
Geodesic Dome New York 157

COLLAGE 158
Agricultural City 158
The Community in-between the Turnpike 158
A plan for Tokyo 158
Secaucus the new Core? 159
New Plazas 159
Shinjuku Restoration 159

COLLAGE 160
Plug-In City 160
Plug-Ins Secaucus 160
A city is not a tree 160
Secaucus is not a tree 161
Joint Transport system 161
Joint Core System 161

COLLAGE 162
Continuous Monument 162
Secaucus - Same Everywhere 162
No-Stop City 162
No-Stop Industry 163
No-Stop Industry 163
Cross-Program secaucus 163
Park de la Villette 163

COLLAGE 164
Fresh Kills Park 164
The Educator 164
Governors Island 164
The Preserver 165
Energy Educator 165
Masdar City 165
Roadmap 2050 166
Energy Flows 166

THE EDUCATOR 168

SOLAR-SPORT PARK 170

ENERGY FLOWS 172

EDUCATOR 174
Bird-watching 175

MEADOWLANDS 176
Theory 176
Project 176
Designer 176
Historical Context 177
Qualities & Grievance 177
Date of issue 177
Historical context 177
City system 177
Expendability 177
Facts 177
Distance to Public Transport 177
Base 177
Main transport system 177
Funding 177
Conclusion 179

EPILOGUE 179
Thank you 181

THANKS 181

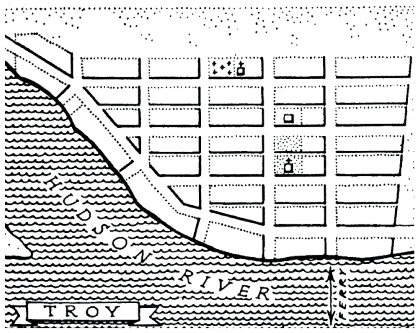
SOURCES 182
Citation 184
Citation 186
Graphics & Images 190
Selected Books 193

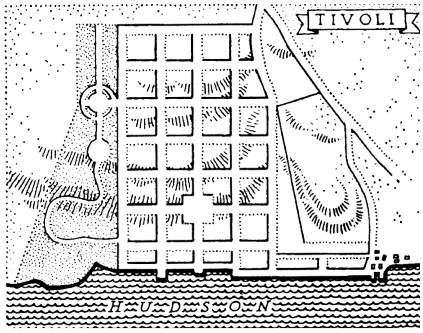
RECOMMENDATION 193

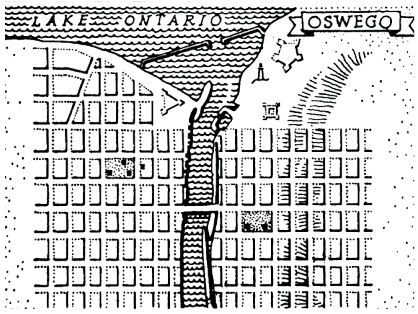
PLANS

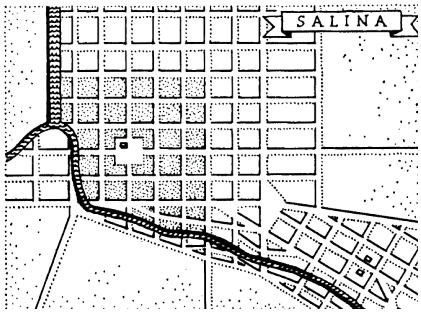
EARLY TOWN PLANNING

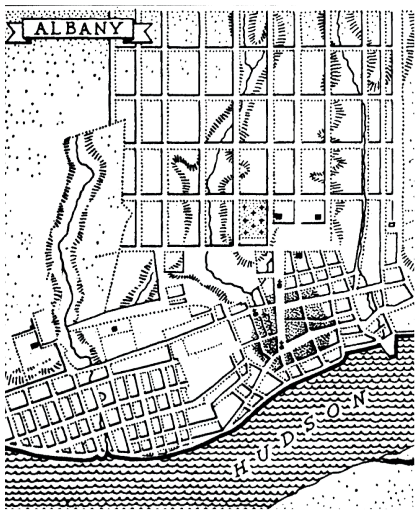
To compare one project to another can be very difficult and sometimes frustrating.
It's easy to find thousands of plans and drawings but there's no book, which compares the theoretical background and the quality of the project, in such a simple way that by just flipping through it someone can understand the most interesting principles of a project, which then be could be transformed into a new one or combine the visions into a more appropriate proposal for the 21st century.

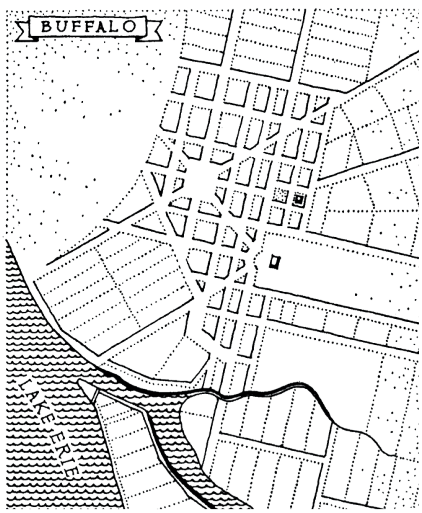


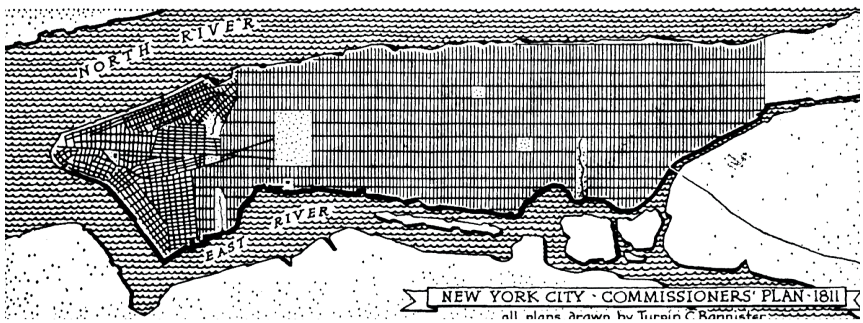


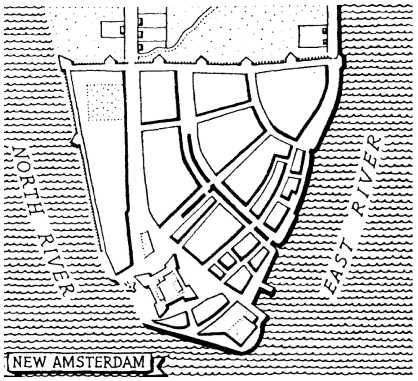


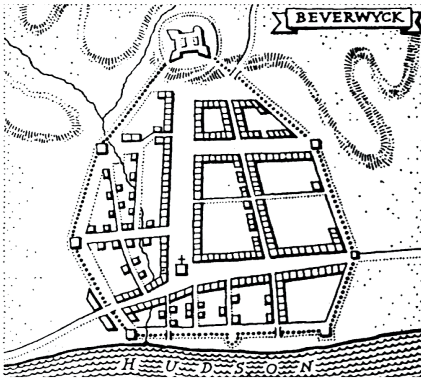


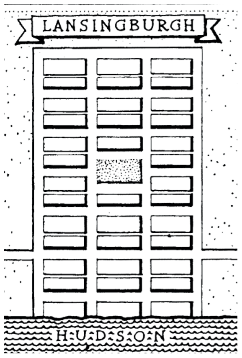


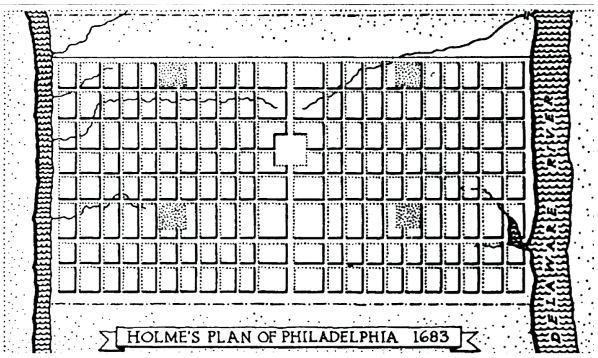


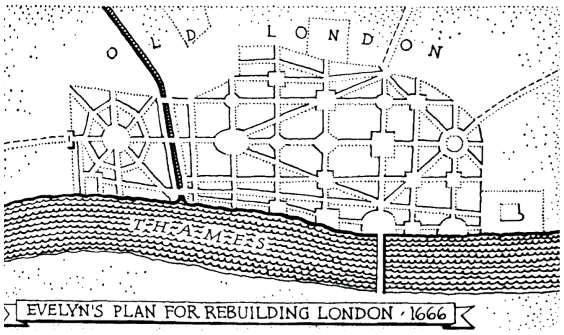


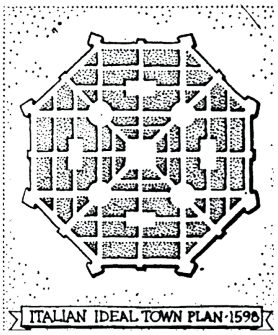


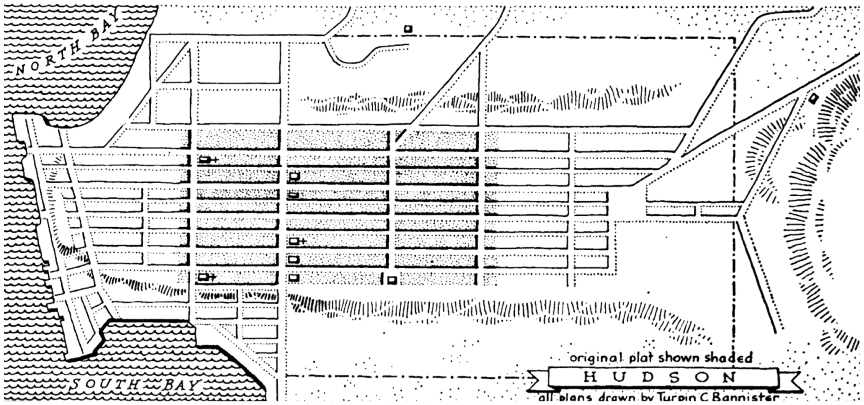












All Maps from: Early Town Planning in New York State Author(s): Turpin C. Bannister Source: The Journal of the American Society of Architectural Historians, Vol. 3, No. 1/2, The History of City Planning (Jan. - Apr., 1943), pp. 36-42 Published by: University of California Press on behalf of the Society of Architectural Historians Stable URL: http://www.jstor.org/stable/901254 . Accessed: 08/06/2011 04:40

COM-PARATIVE VALUES

To compare one project to another a set of comparative values was developed. Starting off with facts:

DATE OF ISSUE

Theory
Project

Extracting facts from the general time-line meant as external influences.

HISTORICAL CONTEXT

Politics
Wars

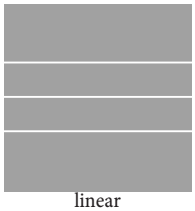
Inventions
Live

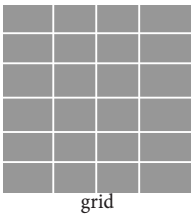
Even if most of the projects are rather hypothetical, a lot of them are very well calculated which gives the possibility to compare a projects facts.

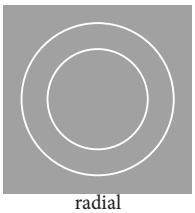
To define the System four patterns were defined.

CITY SYSTEM

To talk about the future of a project it's necessary to know if it was meant to be an expandable ore closed system.


linear

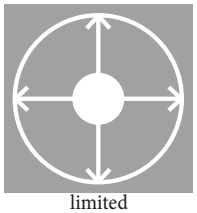

grid

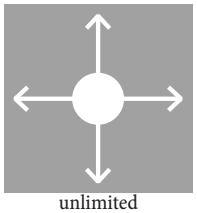

radial

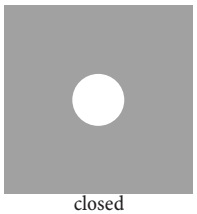

irregular

EXPENDABILITY

A deeper research is necessary to get to know the program of a city.
Sometimes some essential parts seem to be missing.


limited


unlimited


closed

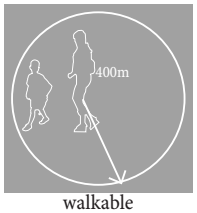
FACTS

LandUse2d
Water:
Infrastructure:
Built Area:
Housing, Industry, Public
Green space:
Agriculture Lawn Park Wilderness

Density p/km2
Climate
Elevation

Sometimes planners "forget" that humans are actually the ones who will have to live inside the city. For this the scale is very important. Would someone be able to walk through the city or would this someone rely on cars to get around.

HUMAN SCALE



walkable


carcity

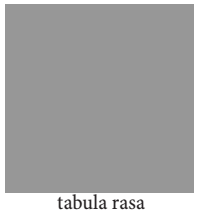
What is the city based on? Does it work with Con-

MANUAL

text or could it be anywhere in the world.

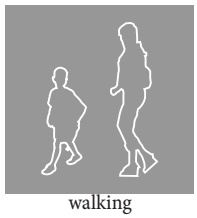
BASE

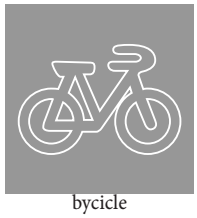

context


tabula rasa

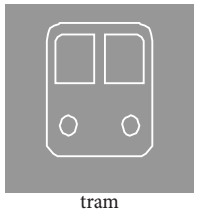
The connection to Transport systems are a criteria of how people chose where to live.

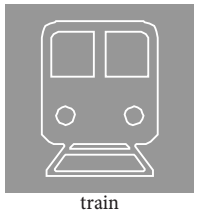
MAIN TRANSPORT SYSTEM

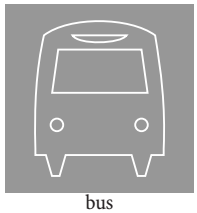

walking


bycicle


car


tram


train


bus

Very interesting for a project is also the fact if it was sponsored by the public, for example a government, or if was the interest of a private investor.

FUNDING

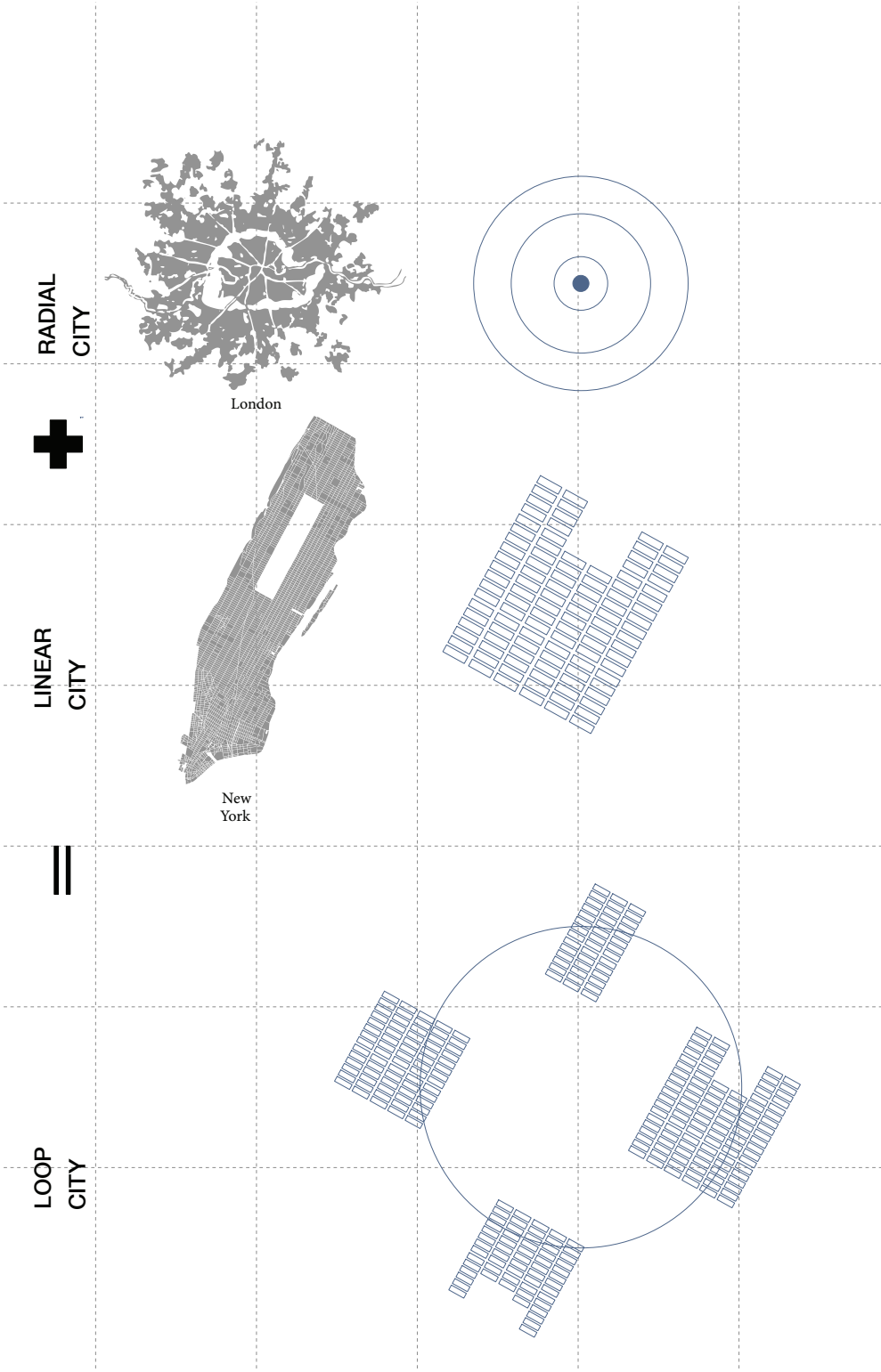
	public	private
Investor	ⓧ	◯

CITY SYS-TEMS

TRANSFORMING OLD IDEAS

Architects always come up with “new” ideas, but for people who studied history in a more decent way it sometimes just looks like a repetition of a just not as well known project.
Some others, know history well and are able to translate them into a more advanced system.
This is just a thought on how this could work even if this is nothing new but maybe a way to rethink the current city systems by not ignoring their history.

The difficulty to get that historical overview and not only relate it to architectural problems led to the following charts.



EXAMPLE LOOPCITY VS. NY LOOP

Loopcity by BIG

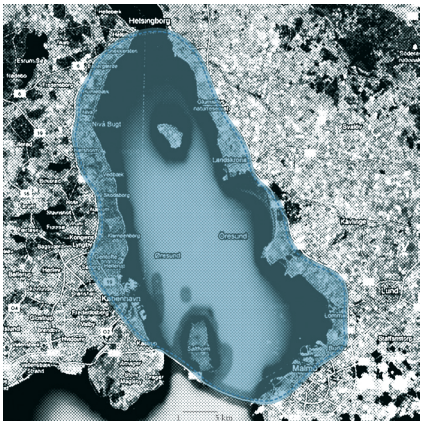


Image source: Loop City from BIG byAndreas Huemer



Image source: Arch Daily, Big Loop City, 2010, link: http://www.archdaily.com/76482/loop-city-big/ - Accessed July 2011

Thoughts on how a NY Loop could look like- compared in the same scale

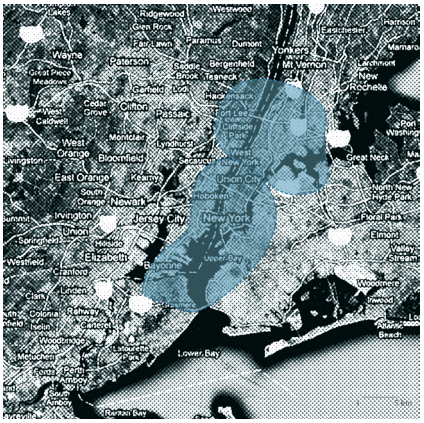
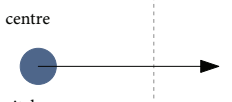
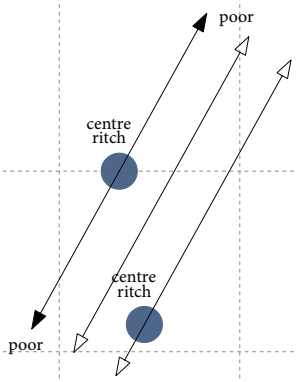


Image source: Loop New York by Andreas Huemer

One centre

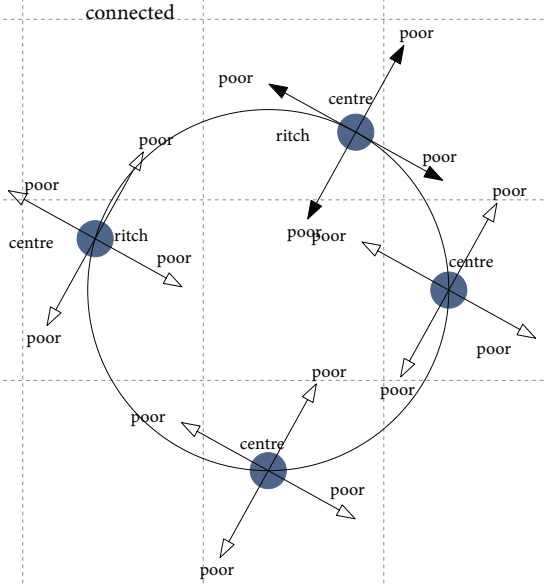


Multible centres



Multible centres with no direct connection to each other

Multible centres connected



Multible centres with direct connection to each other for easier
- transport
- water supply
- energy supply
- waste disposal

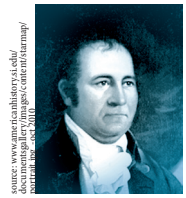
-ectc.

COMMIS-SIONERS PLAN NY

1811



source: http://upload.wikimedia.org/wikipedia/commons/thumb/1/1d/Broadway_in_1861.jpg/1280px-Broadway_in_1861.jpg (2011)



source: www.americanhistory.si.edu/documentsgallery/images/centerdisharmap/portrait_lrg_sm.jpg (2010)

THEORY

Commissioners Plan - 1811

"The operating theory was that street frontage near the piers would be more valuable than the land-locked interior, the waterfront being the location of commerce and industry of the time, and so it would be to everyone's benefit to place avenues closer together at the island's edges."[1]

But in 1813, Simeon De Witt already has a theory backing up his system as Reuben Skye Rose-Redwood writes: "In his treatise on surveying, The Elements of Perspective (1813), De Witt declares, "The Americans are an inventive people; perhaps more so than any other existing." It was not so much that Americans had "any superiority of intellect," but rather that their circumstances were "more favourable." In particular, De Witt argues that the ease with which "the means of comfortable subsistence may be procured" enables Americans to contemplate the "improvements" that are to come. For, it "leaves leisure to the mind to wander through the mysterious, unfathomable repositories of possible things; to the boundless field of improvement before us."[2]

"While the founding fathers of the United States of America are often portrayed as proponents of "freedom" and "enlightenment" by mainstream historians, not to mention contemporary politicians, the thoughts and actions of Simeon DeWitt and Gouverneur Morris clearly demonstrate that underlying the rhetoric of freedom was the will to power and the development of disciplinary mechanisms of social control."[3]

"DeWitt strongly believed that the science of surveying (linear perspective) was "well-calculated" to lead the youthful American population "into a cheerful submission to that extent of discipline which is held necessary for rearing them to maturity." The principles of surveying—especially the "rules of symmetry" and the use of "algebraic characters"—made one's thought process "intelligible" by keeping "the whole process of . . . reasoning continually before [one's] eyes."[4]

1 *Encyclopedia results for Commissioners' Plan of 1811: Stable URL: http://www.glossary.com/reference.php?q=Commissioners'+Plan+of+1811 Accessed: 08/06/2011*
2 *Rationalizing the Landscape: Superimposing the grid upon the island of Manhattan Author(s): Reuben Skye Rose-Redwood Source: The Pennsylvania State University, The Graduate School ,Department of Geography, 2002, Reuben Skye Rose-Redwood , p. 71 Stable URL: http://geotest.tamu.edu/userfiles/72/Rationalizing_the_Landscape_FINALCOPY.pdf Accessed: 08/06/2011 04:40*

Quotation in quote by DeWitt, Simeon (1813), The Elements of Perspective, Albany: H.C. Southwick.
3 *Ibid. p144*
4 *Ibid p182*

PROJECT

Commissioners Plan - 1811

"In a nutshell, that was the task New York City's Common Council (the City Council of its time) gave to statesman Gouverneur Morris, surveyor John Rutherfurd, and New York State Surveyor General Simeon De Witt in the spring of 1807. These three men were appointed "Commissioners of Streets and Roads" and would spend the next 4 years developing a plan that would meet the Common Council's stated goal of "laying out Streets... in such a manner as to unite regularity and order with the public convenience and benefit and in particular to promote the health of the City..."[1]

The commissioners, Gouverneur Morris, the lawyer John Rutherfurd, and the surveyor Simeon De Witt, published their plan in March 1811.
The map had a size of eight foot, showing 12 main avenues running from north to south and several cross streets while the there was one street running in an angel through the grid which is still known as the Broadway.

The rectangular layout came from very simple but solid ideas: "In considering that subject they could not but bear in mind that a city is to be composed principally of the habitations of men, and that straight-sided and right-angled houses are the most cheap to build and the most convenient to live in. The effect of these plain and simple reflections was decisive."[2]

The organisation had a clear pattern: "These streets are all sixty feet wide except fifteen, which are one hundred feet wide, viz.: Numbers fourteen, twenty-three, thirty-four, forty-two, fifty-seven, seventy-two, seventy-nine, eighty-six, ninety-six, one hundred and six, one hundred and sixteen, one hundred and twenty-five, one hundred and thirty-five, one hundred and forty-five, and one hundred and fifty-five--the block or space between them being in general about two hundred feet."j[3]

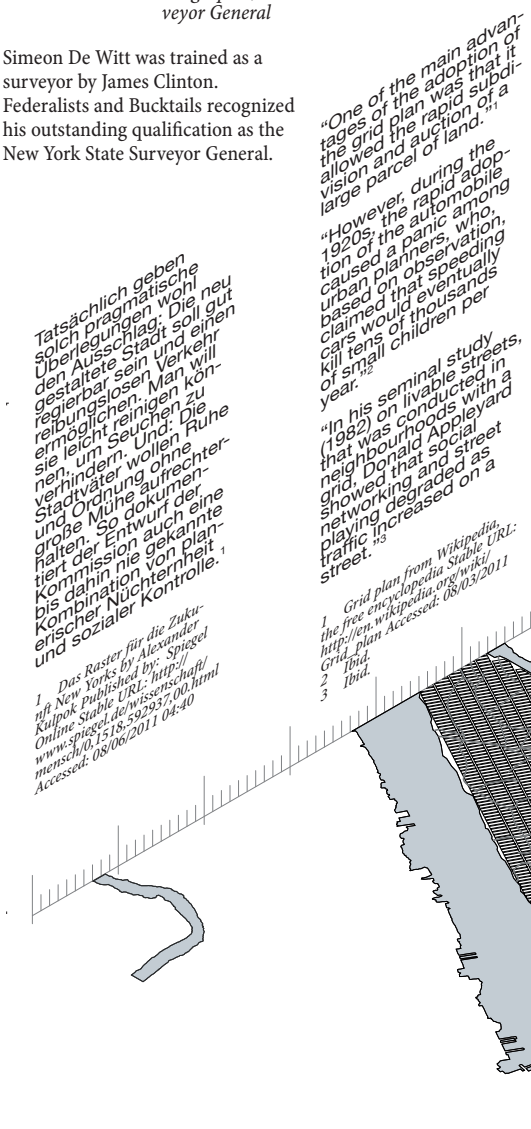
But the plan did not take any regards of the topography, although John Randel, Jr. (1787-1865), who worked for De Witt, completed a full survey of Manhattan Island including "Farm Maps" of the whole island.

1 *Designing the City of New York: The Commissioners' Plan of 1811 by Artis Wright, Stephen A. Schwarzman Building, Map Division July 30, 2010, visited Jan 2011 <http://www.nypl.org/blog/2010/07/30/designing-city-new-york-commissioners-plan-1811>*
2 *Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm>*
3 *Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm>*

DESIGNER

Name	***Simeon De Witt***
Nationality	*American*
Born	*December 25, 1756*
Died	*December 3, 1834*
Profession	*Geographer, Surveyor General*

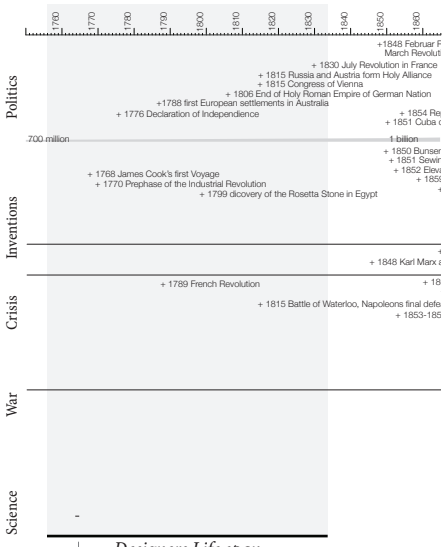
Simeon De Witt was trained as a surveyor by James Clinton. Federalists and Bucktails recognized his outstanding qualification as the New York State Surveyor General.



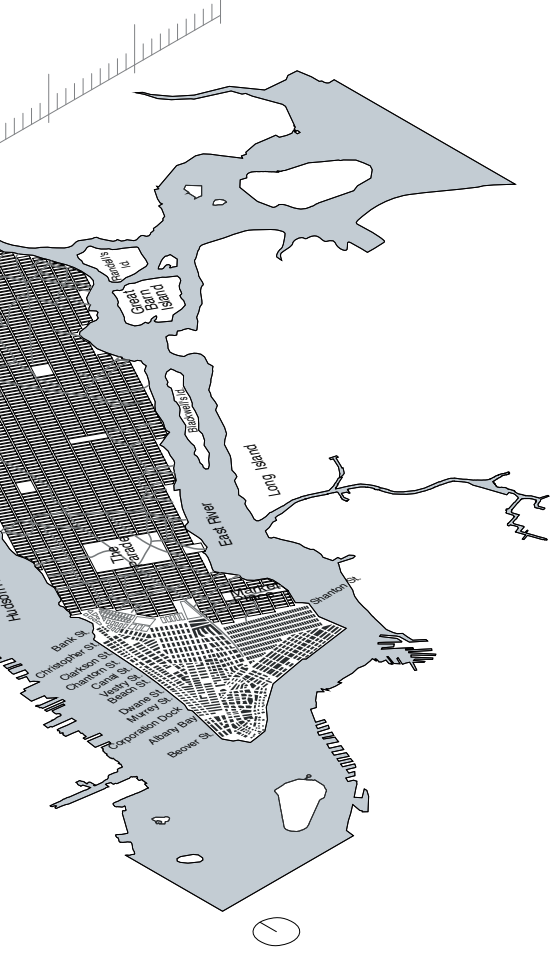


COM-PARATIVE VALUES

HISTORICAL CONTEXT

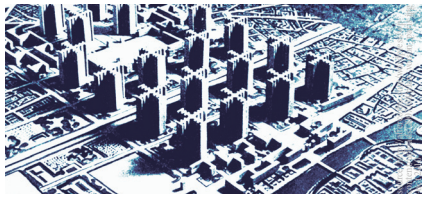


Designers Life span



PLAN VOISIN PARIS

1925





source: http://www.parkhillflats.co.uk/lecorbusier.jpg -oct 2010

THEORY

Vers une architecture - 1923

"Vers une architecture, translated into English as Toward an Architecture and commonly known as Towards a New Architecture is collection of essays written by Le Corbusier (Charles-Edouard Jeanneret), advocating for and exploring the concept of modern architecture. The book has had an undeniable lasting effect on the architectural profession, serving as the manifesto for a generation of architects, a subject of hatred for others, and unquestionably a critical piece of architectural theory. The architectural historian Reyner Banham once claimed that its influence was unquestionably "beyond that of any other architectural work published in this [20th] century to date" (Banham 1960: 246), and that unparalleled influence has continued, unabated, into the 21st century.

The polemical book contains seven essays, all but one of which were published in the magazine L'Esprit Nouveau beginning in 1921. Each essay dismisses the contemporary trends of eclecticism and art deco, replacing them with architecture that was meant to be more than a stylistic experiment, rather, the architecture would be one that would fundamentally change how humans interacted with buildings. This new mode of living derived from a new spirit defining the industrial age, demanding a rebirth of architecture based on function and a new aesthetic based on pure form.

The authorship of the book was complex. Le Corbusier co-owned L'Esprit Nouveau with fellow purist painter Amédée Ozenfant. They co-signed many of the original essays as "Le Corbusier-Saugnier," and Ozenfant had been a close friend of Corbusier. Ozenfant denied having written the book, claiming that the essays were based on conversations the two had had together about theories written by Auguste Perret and Adolf Loos. As the book became more known, their fight became more heated. Ozenfant began to claim not only more credit for authorship, but also that Le Corbusier had purposefully excluded him by dedicating the original edition to Ozenfant.

The English language translation of the book has also been a source of controversy in regards to its change of style and very specific alterations to the text. The alterations have generated criticism and required correction, even as some of them began to define architectural language. A new translation was released in 2007 that is meant to be truer to the meaning Le Corbusier intention."[1]

PROJECT

Plan Voisin - 1925

Corbusier criticised the idea of demolishing buildings and replacing them with new ones which would just look the same as their predecessors.

The Plan Voisin was never meant to demolish the whole city and start with a Tabula rasa. Le Corbusier argued to get Paris ready for the next Century and in order to preserve it's Monuments and Listed Buildings it would need to get a lot denser.

Le Corbusiers critique was that nobody actually understood the situation of a city where traffic was about to rise and the old streets wouldn't be capable of such an amount of cars.

He even called that development a cancer which would force the already ill traffic system to collapse.

The "Haußmannsche Plan" for Paris inspired Corbusier do imagine a new Paris build in the way that modern traffic could flow again.

Corbusiers argument was that the railway forced the cities to change so the cars must do the same. "The motor car has killed the city; the motor car must save the great city." With this quote, Le Corbusier asked companies like Peugeot, Citroen and Voisin to sponsor his project and Mr Mongerman, director of "Aeroplanes G. Voisin" accepted without any doubts.

"Plan Voisin," sponsored by another famous automobile manufacturer, in 1925. In it, he proposed to bulldoze most of central Paris north of the Seine, and replace it with his sixty-story cruciform towers from the Contemporary City, placed in an orthogonal street grid and park-like green space. His scheme was met with criticism and scorn from French politicians and industrialists, although they were favourable to the ideas of Taylorism and Fordism underlying Le Corbusier designs. Nonetheless, it did provoke discussion concerning how to deal with the cramped, dirty conditions that enveloped much of the city."[1]

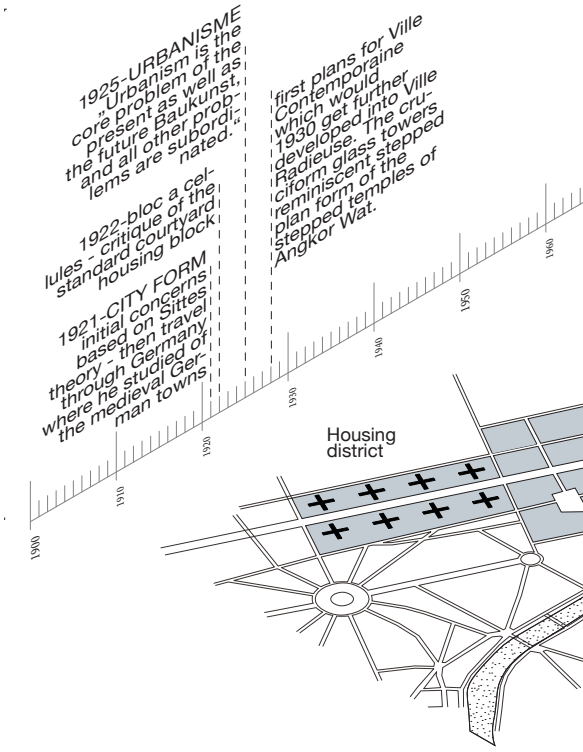
DESIGNER

Name	***Le Corbusier***
Nationality	*Swiss / French*
Born	*October 6, 1887*
Died	*August 27, 1965*
Profession	*Architect, Designer, Urbanist, Writer, Painter*

Le Corbusier's given name was Charles-Édouard Jeanneret-Gris.

He was among and also one of the most famous pioneers of modernism, also called international style.

Studies about modern high-rise and the desire to provide better living conditions for crowded cities led to radical designs which are still worth to discuss.



1 Source: Le Corbusier: Towards a New Architecture. Dover Publications, 1985

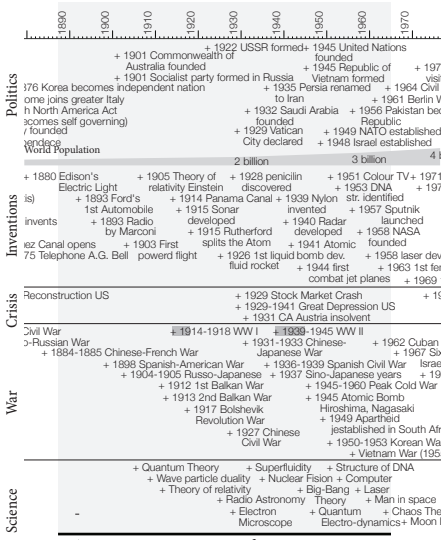
Summary by: Toward an Architecture by Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Toward_an_Architecture -oct 2010

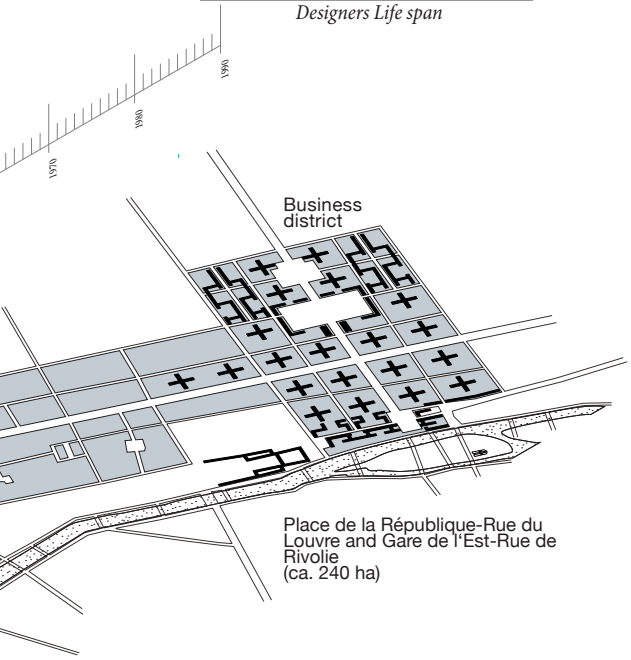
1 Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007



COM-PARATIVE VALUES

HISTORICAL CONTEXT





QUALITIES & CRITIQUES

TALL TOWERS AND DENSE HOUSING PROJECTS WOULD CREATE EMPTY SPACE FOR PARKS AND LAWNS, LET THE CITY "BREATHE" AGAIN AND, GIVE THE CITY SOME LIFE QUALITY BACK.
THROUGH CREATING MORE DENSITY OLD MONUMENTS AND LISTED BUILDINGS COULD BE PRESERVED WHILE GETTING THE CITY READY FOR THE NEXT CENTURY.

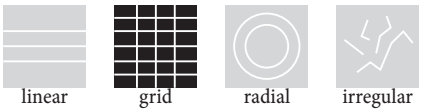
DATE OF ISSUE

Theory	*1923*	*Towards a new Architecture*
Project	*1925*	*Plan Voisin*

HISTORICAL CONTEXT

Politics	*1922*	*USSR formed*
Wars	*1914 - 1918*	*World War I*
	1917	*Bolshewik Revolution*
Inventions	*1914*	*Panama Canal*
	1915	*Rutherford splits the Atom*
Crisis	*1929*	*Stock Market Crash*

CITY SYSTEM

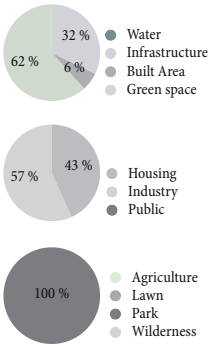


EXPENDABILITY



FACTS

Land Use 2d		
Water	0 %	
Infrastructure	32 %	
Built Area	6 %	
Housing		43 %
Industry		57 %
Public		0 %
Green space	62 %	
Agriculture		0 %
Lawn		0 %
Park		100 %
Wilderness		0 %
Total	100 %	
Density p/km2	**19600**	
Climate	oceanic	
Elevation	flat	



data source: estimated from reproduced plans

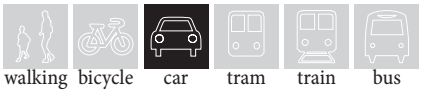
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



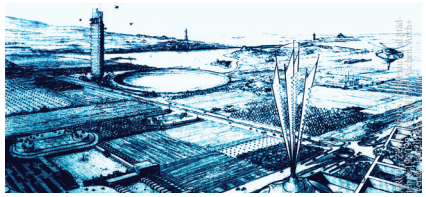
FUNDING

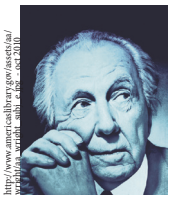
	public	private
Investor	○	ⓧ

Plan Voisin text sources:
Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Le_Corbusier -oct 2010

BROAD-ACRE CITY

1934





http://www.americanlibrary.gov/assets/aa/wright/aa_wright_aihd_e.gif - oct 2010

THEORY

The disappearing City - 1932

The disappearing City followed the Book Usonia from 1928. Usonia's principles were based on four keywords: Organic, Decentralization, Integration, Democratic.
Wright constructs a theory based on history saying that the typos of the troglodyte constructed what is now the modern mega city and this would tend towards absolutism and communism while the typos of the nomad would develop a decentralised, organic and democratic architecture.

In "The disappearing City" Wright quotes:
"... the future city will be everywhere and nowhere ..."[1]
"... greatly different from the ancient cities ..."[2]
"America needs no help to build Broadacre City. It will build itself, haphazard."[3]

Wright asks to forget about steam power and the railway, he thinks the silent power of electricity and the automobile will be future.

Three new forces that will transform our civilisation:
Electrification, Mechanical Mobilization, Organic Architecture

Wright's idea of Organic Architecture was never clearly defined but Kenneth Frampton calls it, "the economic creation of built form and space in accordance with the latent principles of nature as these may be revealed through the application of the reinforced- concrete construction..."[4]

PROJECT

Broadacre City - 1934

Broadacre City can be seen as the antithesis to Le Corbusier's agglomerated ideas.
The main transport through Broadacre would be by car, orthogonal organized connected to a regional system of Highways.
The family was the centre of Wrights planning which also gave the project it's name, every family would get 1 acre (4000m2) which should get used by them for farming as self supply.
These family homes would then get surrounded by proper farms, decentralised factories, as well as housing and cultural institutions.

Wright called it a "new pattern for living in America".

Broadacre should develop regional centres for up to 5000 inhabitants which should have small sub centres but the centres themselves should be far enough away from each other to avoid agglomeration.
For Wright it wasn't only a question of decentralise cities, he tried to show that we should get away from a centralised government and the centralised bank system, a result from the current economic situation. Henry Ford once said: "Self help is the only means of combating the economic depression. Anyone refusing to cultivate his garden will be dismissed".

Kenneth Frampton writes about the connection of Henry Fords mass production of the automobile and the effect of Depression which lead Frank Lloyd Wright to develop a new strategy for restructuring the social order of the United States.

He wanted to get rid of long transport systems for goods.

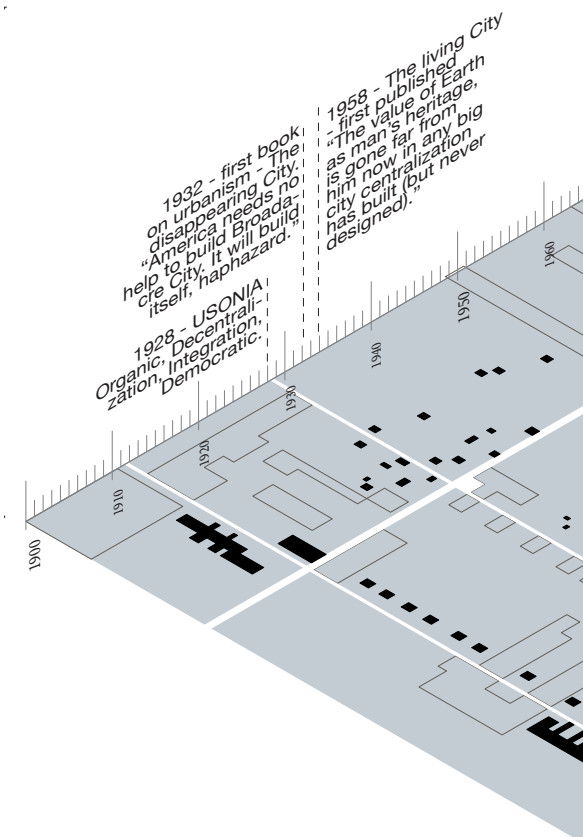
Worth to mention is that Frank Lloyd Wright was working for years on that idea until he finally presented a huge scale model (3.7m / 3,7m) to the public and he could only do that because he had taught very enthusiastic students ath his Taliesien school.

A lot of the buildings from broadacre appeared as similar versions in Wright's design and some others were remodelled he already built, in other words he created an ensemble of his ideas through a great vision.[1]

DESIGNER

Name	***Frank Lloyd Wright***
Nationality	*American*
Born	June 8, 1867
Died	April 9, 1959
Profession	*Architect, Interior designer, Urbanist, Writer, Educator*

Frank Lloyd Wright's given name was Frank Lincoln Wright.
He was a leader of the Prairie School movement which was a movement against the "assembly line production".
In 1991 he was recognised as "the greatest American architect of all time" by the AIA.



1 *Wright, Frank Lloyd: The living City, New American Library, New York, 1958*
2 *Ibid.*
3 *Ibid*
4 *Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007*

Further Reading:

49 cities, WORKac, Storefront for Art and Architecture

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman ISBN-10: 0847815226

Frank Lloyd Wright via Wikipedia, link: http://en.wikipedia.org/wiki/Frank_Lloyd_Wright - oct 2010

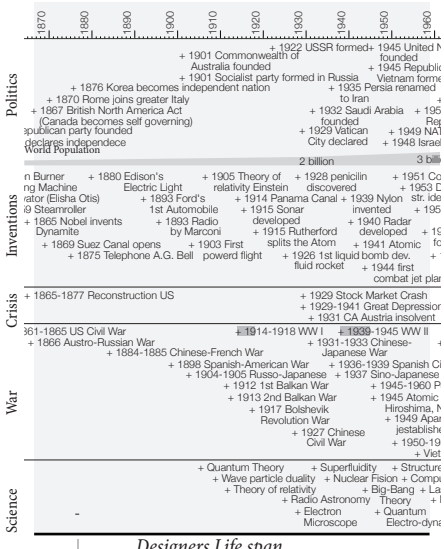
Broadacre City via Wikipedia, link: http://en.wikipedia.org/wiki/Broadacre_City -oct 2010

1 *ARCH+ Zeitschrift für Architektur und Städtebau 196/197 : Post Oil City, Aachen, Arch+ Verlag, Jan 2010 p. 134*

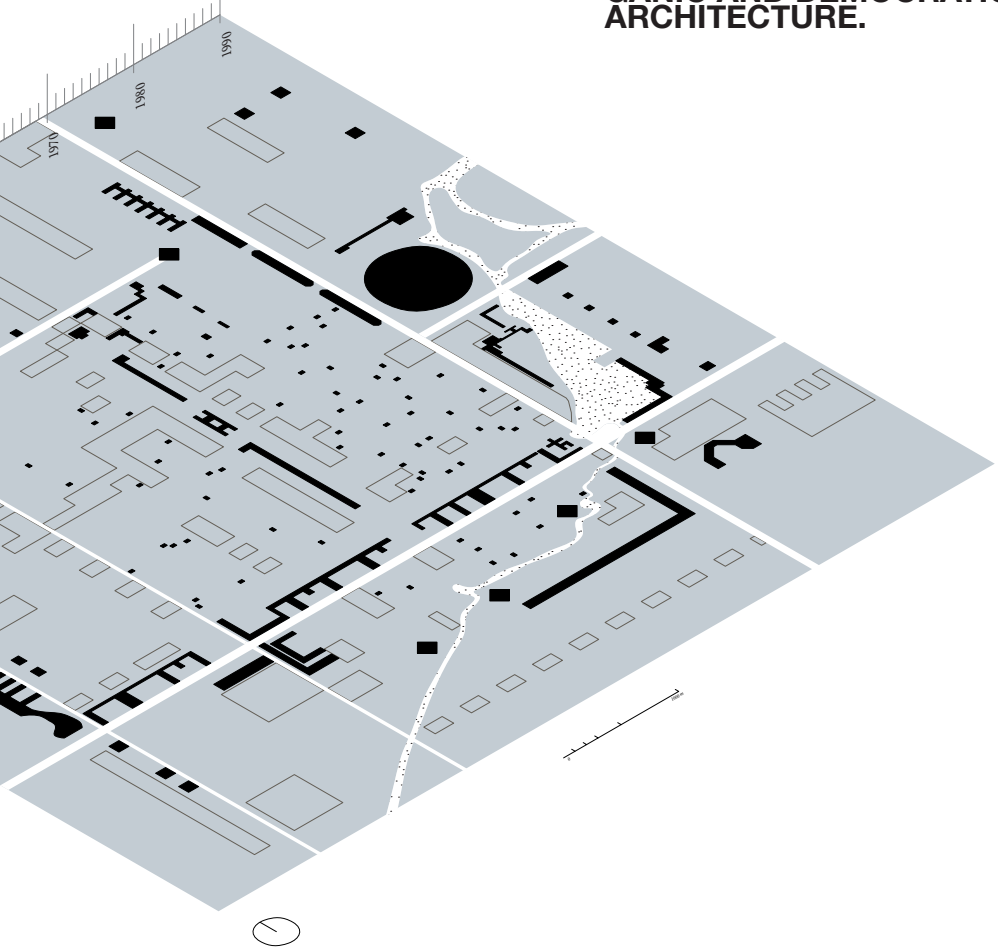


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Designers Life span



QUALITIES & CRITIQUES

WRIGHT'S IDEAS RESULTED FROM ECONOMIC PROBLEMS, TECHNICAL PROGRESS AND NEW WAY'S OF MOBILISATION
- ORGANIC,
- DECENTRALIZATION,
- INTEGRATION,
- DEMOCRATIC
WHAT'S INTERESTING IS THAT THIS TOPICS COME UP AFTER EVERY BIGGER FINANCIAL CRISIS BUT ARE FORGOTTEN AS SOON AS PEOPLE CAN LIVE THEIR OLD LIFE AGAIN.
THE TYPOS OF THE NOMAD WOULD DEVELOP A DECENTRALISED, ORGANIC AND DEMOCRATIC ARCHITECTURE.

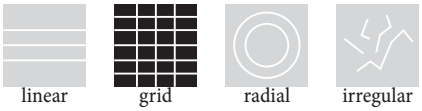
DATE OF ISSUE

Theory	*1932*	*The disappearing city*
Project	*1934*	*Broadacre City*

HISTORICAL CONTEXT

Politics	*1922*	*USSR formed*
	1932	*Saudi Arabia founded*
Wars	*1914 - 1918*	*World War I*
	1931 - 1933	*Chinese - Japanese War*
Inventions	*1928*	*Penicillin discovered*
Crisis	*1929*	*Stock Market Crash*
	1929 - 1941	*Great Depression*

CITY SYSTEM

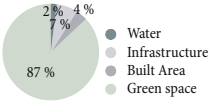


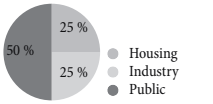
EXPENDABILITY

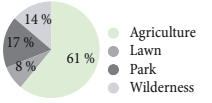


FACTS

Land Use 2d	
Water	2 %
Infrastructure	7 %
Built Area	4 %
Housing	1 %
Industry	1 %
Public	2 %
Green space	87 %
Agriculture	53 %
Lawn	7 %
Park	15 %
Wilderness	12 %
Total	100 %







Density p/km2	**615**
Climate	humid continental
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

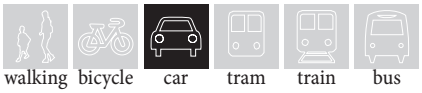
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

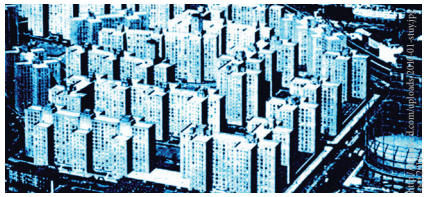


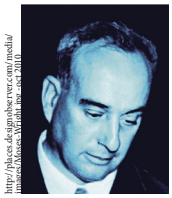
FUNDING

	public	private
Investor	○	ⓧ

STUYVE-SANT TOWN

1944





http://places.designobserver.com/media/images/Moses_Wright_toc_oct2010

THEORY

Mr. Moses Dissects the Long-Haired Planners - 1944

Robert Moses was assails foreign and academic architects. His writing was a letter to the New York Times.

"First, let's have a general look at the "Beiunskis." A Beiunski is usually a refugee whose critical faculties outrun his gratitude to the country which has given him a home. He is convinced that we are pretty backward people and doesn't mind saying that they ordered things better in the old country."

"Obviously, Saarinen thinks he can apply Scandinavian experience to American conditions. This is the way they do it in Stockholm, according to John Graham Jr. In Housing in Scandinavia: In the inner City, property owned by the city is sold to private enterprise at prevailing market prices. The city may also sell its land in the Inner City area at a figure lower than the market value when the city is assured that the land will be put to a social use or, as expressed by the Stockholm authorities, "when the city is certain that the benefit of low price of the land will actually redound to the good of the tenants and not the advantage of the purchaser." If this strikes you as pretty strong stuff, have a look at another distinguished foreign figure in our midst, Walter Gropius."

"Then there is Lewis Mumford, lecturer on planning and author of The Culture of Cities, an outspoken revolutionary, often quoted with approval by conservatives who obviously have no notion of the implications of his philosophy."

"The man who does not love his country and his own town can do nothing for them. It does not matter whether it be the land or place of his birth or of his adoption - so long as he becomes part and parcel of it. Carl Schurz did as much for the United States as any native son of no matter how deep and distinguished roots. The patriotic conservative will find plenty of faults at home. He should be eager to remedy them, but he must be loyal to the institutions and to the local scene in which his lot is cast. To revolutionary planning sophisticates this will seem simple to be the point of imbecility, but truths, like ballads, are always simple."[1]

PROJECT

Stuyvesant Town - 1947

"Peter Cooper Village is a large private residential development on the East Side of the borough of Manhattan in New York City, and one of the most iconic and successful post-World War II private housing communities.[citation needed] Stuyvesant Town, known to its residents as "Stuy Town", was named after Peter Stuyvesant, the last Director-General of the Dutch colony of New Amsterdam, whose farm occupied the site in the seventeenth-century. Peter Cooper Village is named after the 19th century industrialist, inventor and philanthropist Peter Cooper, who founded Cooper Union. The complex, which was planned beginning in 1942 and opened its first building in 1947, replaced the Gas House district of gas storage tanks.

The complex is a sprawling collection of red brick apartment buildings stretching from First Avenue to Avenue C, between 14th and 23rd Streets. It covers about 80 acres (320,000 m2) of land. The development located between 14th and 20th Streets, Stuyvesant Town, has 8,757 apartments in 35 residential buildings and with its sister development, Peter Cooper Village – located between 20th and 23rd Streets – the complex has a combined 56 residential buildings, 11,250 apartments, and over 25,000 residents.

The combined development is bordered by the East River/Avenue C on the east, the Gramercy Park neighbourhood on the west, the East Village and Alphabet City to the south, and Kips Bay to the north. The surrounding area to the west is notable for historic Stuyvesant Square, a two-block park surrounded by the old Stuyvesant High School, Saint George's Church, and the Beth Israel Medical Center."[1]

DESIGNER

Name	***Robert Moses***
Nationality	*American*
Born	*December 18, 1888*
Died	*July 29, 1981*
Profession	*Urban Planner*

Robert Moses shaped New York like no one else. He even got compared to Baron Haussmann. Although hew was never trained as a planner, architect, or engineer he was able to shape New York the way it appears today.
Moses was never elected as a public figure but he had the power to control public decisions.



http://upload.wikimedia.org/wikipedia/en/9/9a/Stuyvesant.jpg -oct 2010

1 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y.

1 summary by Wikipedia, link: http://en.wikipedia.org/wiki/Stuyvesant_Town—Peter_Cooper_Village -oct 2010

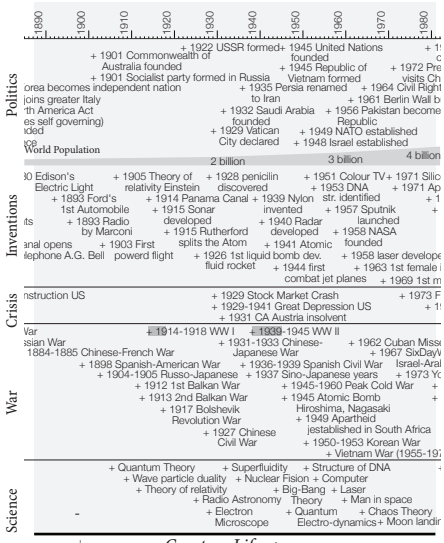
source: Design Observer, link: http://places.designobserver.com/entry.html?entry=12687

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y.

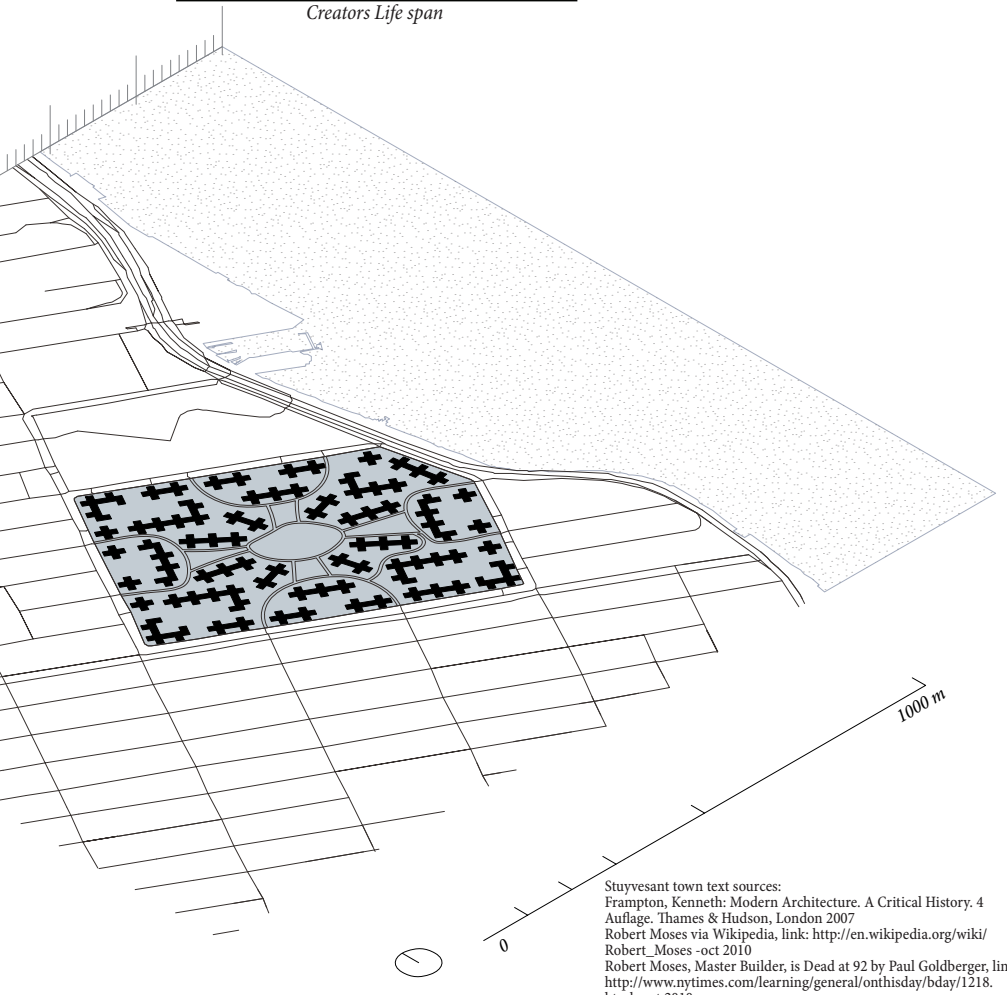


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

MOSES WAS VERY CRITICAL ABOUT FOREIGN ARCHITECTS BUT IT HAT NOTHING TO DO WITH RACISM. IT WAS HIS WAY OF SAYING WE DO IT DIFFERENT OVER HERE. THE STUYVESANT PROJECT WAS THE GREATEST RESETTLEMENT EVER DONE IN NEW YORK. RELOCATING 11000 PEOPLE SEEMS TO BE IMPOSSIBLE TODAY - AT LEAST IN EUROPE.

Stuyvesant town text sources:
Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007
Robert Moses via Wikipedia, link: http://en.wikipedia.org/wiki/Robert_Moses -oct 2010
Robert Moses, Master Builder, is Dead at 92 by Paul Goldberger, link: http://www.nytimes.com/learning/general/onthisday/bday/1218.html -oct 2010

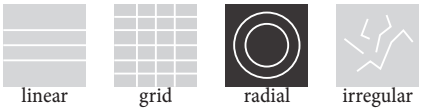
DATE OF ISSUE

Theory	*1944*	*Mr. Moses Dissects the Long Haired planner.*
Project	*1947*	*Stuyvesant Town*

HISTORICAL CONTEXT

Politics	*1945*	*United Nations founded*
	1948	*Israel established*
Wars	*1939 - 1945*	*World War II*
	1945 - 1960	*Peak Cold War*
Inventions	*1941*	*Atomic Bomb*
	1945	*Combat Jet Planes*
Crisis	*1929 - 1941*	*Great Depression US*

CITY SYSTEM



linear grid radial irregular

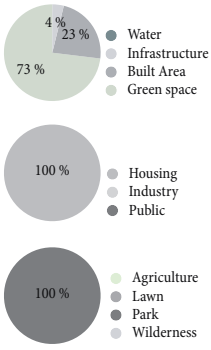
EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d		
Water	0 %	
Infrastructure	4 %	
Built Area	23 %	
Housing		100 %
Industry		0 %
Public		0 %
Green space	73 %	
Agriculture		0 %
Lawn		0 %
Park		100 %
Wilderness		0 %
Total	100 %	
Density p/km2	**42086**	
Climate	humid continental	
Elevation	flat	



data source: estimated from reproduced plans

DISTANCE TO PUBLIC TRANSPORT



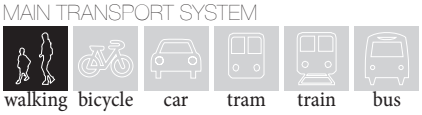
walkable inaccessible

BASE



context tabula rasa

MAIN TRANSPORT SYSTEM



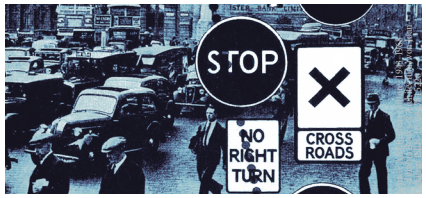
walking bicycle car tram train bus

FUNDING

	public	private
Investor	ⓧ	◯

MARS PLAN LONDON

1951





collage of images by Andreas Huemer

THEORY

CIAM 8 - Needs at the Core - 1951

"Summary of Needs at the Core

1. That there should be only one main Core in each city.
2. That the Core is an artefact - a man-made thing.
3. That the Core should be a place secure from traffic-where the pedestrian can move about freely.
4. That cars should arrive and park on the periphery of the Core, but not cross it.
5. That uncontrolled commercial advertising-such as appears In the Cores of many cities today-should be organized and controlled.
6. That varying (mobile) elements can make an important contribution to animation at the Core, and that the architectural setting should be planned to allow for the inclusion of such elements
7. That in planning the Core the architect should employ contemporary means of expression and - whenever possible-should work in cooperation with painters and sculptors."[1]

CIAM 8 took place in 1951 in the town of Hoddesdon in Somerset, England, under the auspices of the MARS Group, the London-based wing of CIAM. The reason for a second meeting in England so soon after the Bridgwater congress was that it was the year of the Festival of Britain, a great popularizing exhibition in London that was intended to bring modern architecture to the British public. At a deliberate remove from this activity, in a "lonely Victorian mansion... not far from London though without rail connection to it: as Sigfried Giedion described the meeting's selling point, CIAM focused on the core of the city. This theme represented a conscious expansion of the four basic urban functions that had been elaborated in the Athens Charter - dwelling, work, recreation and circulation. As such, it brought to a head many of the crucial issues that had been shaping the postwar debate: monumentality and symbolic representation, the question of collective values, the relationship of modern architecture to historic places and artefacts. In more material terms, the recent experience of reconstructing city centres destroyed by wartime bombardment and the need to respond to the disintegration of urban life caused by accelerating suburbanization called for new attention. In his opening statement CIAM president Jose Luis Sert called for a reversal of the trend toward unplanned decentralization and a new process of recentralisation. The participants offered original applications of CIAM principles to civic centres at every scale of human gathering and within a very broad geographic purview..."[2]

1 *Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136*

2 *The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton*

PROJECT

Mars Plan London - 1951

Within the Modern Architectural Research (MARS) Group emphasis was placed on analytical research and research methods that would produce conceptual solutions; in the case of the Plan for London someone spoiled the image by referring to it as a 'Master Plan', which was far from the authors' intentions. A title so dogmatic as this brought many criticisms and effectively deterred any serious considerations of the finer points of the plan. Indeed C. B. Purdom, the author of a number of important books on planning in Britain in the inter-war period called it a 'fantasy that has no relation to the needs and aspirations of men'.

The Plan was a modified linear concept, the result of a hierarchical rationalization of a plan's function. Its planners saw London as a growth pattern held together by one main artery and controllable in all directions. The diagrammatic layout of the plan resembled the skeleton of a gigantic herring with a main vertebra, extending from Tilbury in the east to Rickmansworth in the west, devoted to commerce, industry, administration and the docks, and also including the existing areas taken up by the West End and the City. The bones formed the pattern of the residential units and the local pockets of industry and commerce. On top of the skeleton was overlaid the flesh of parks and recreational areas. The main backbone of the plan was capable of extension westward along the lines of earlier linear plans and the residential units were extensible in a north or south direction. Along the main east-west central axis all major forms of transport were to be routed and linked with a rotary system, which extended north and south - like a pair of combs – into the residential zones. Three railway stations - replacing the ten in use in the late thirties - were situated on the main axis going underground through the conserved West End and City. There were sixteen residential districts in total, each broken down hierarchically into one District Unit of 600,000 people, subdividing into three subdistrict units of 200,000 each and again subdivided into four Borough Units each of 50,000 people apiece. Each of the 16 residential districts measured approximately 8 miles long by ½ miles wide and the population was spread out in various densities. High density areas were nearer the main arteries and predominantly flatted, while low density housing lay exclusively on the outside edge.[1]

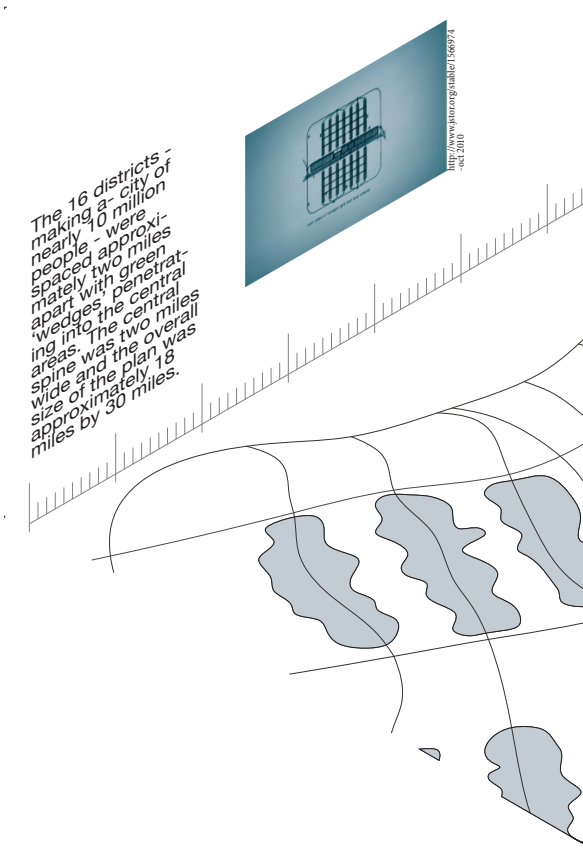
1 *Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46*

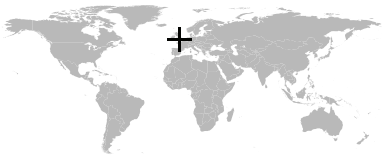
Team10 webpage, link: http://www.team10online.org/research/papers/delft1/welter.pdf - accessed oct 2010

DESIGNER

Name	***MARS Group***
Nationality	*British*
Born	*1933*
Died	*1957*
Profession	*British Modern Architecture Movement*

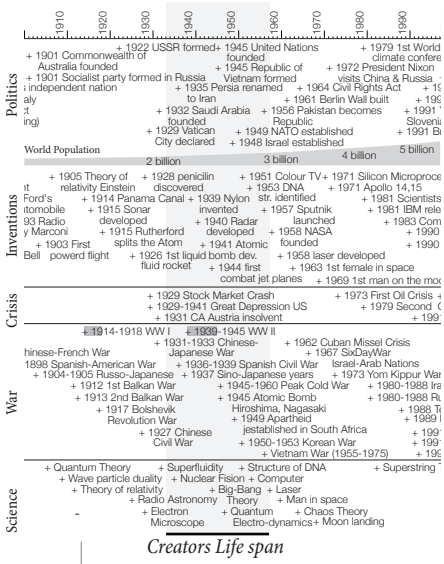
The Modern Architectural Research Group was a British group to support modern architecture.
Morton Shand and Wells Coates, chose Maxwell Fry and F. R. S. Yorke as the founding members.
Details of the London Plan were published in the Architectural Review in 1942. At this time the Group had about 58 members but already disbanded in 1957 because of creative differences.





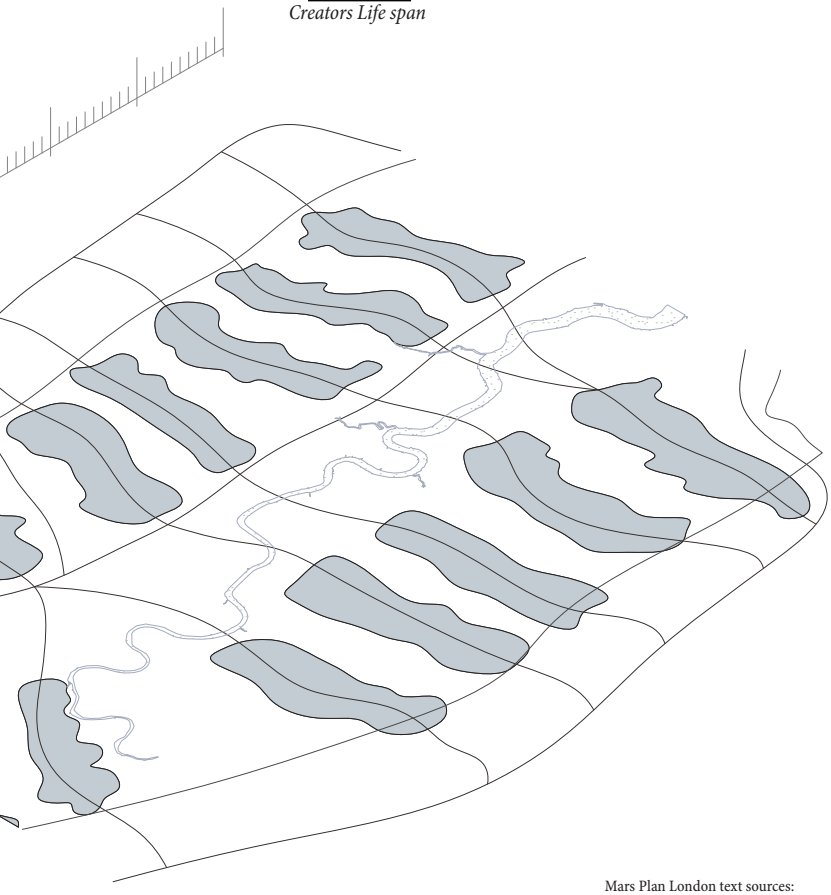
COM-PARATIVE VALUES

HISTORICAL CONTEXT



QUALITIES & CRITIQUES

PLANS AS CONCEPTIONAL SOLUTIONS NOT AS CONCRETE PLANNING. THE MARS PLAN WAS A THEORETICAL RESEARCH BUT THE WAY IT GOT TRANSLATED INTO A PLAN LED PEOPLE TO MISUNDERSTAND IT. A LINEAR CONCEPT CONNECTED WITH A RING-TRANSPORT SYSTEM.



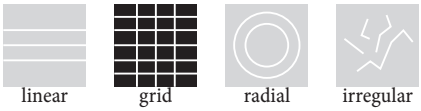
DATE OF ISSUE

Theory	*1951*	*CIAM 8 - Needs at the Core*
Project	*1951*	*MARS Plan London*

HISTORICAL CONTEXT

Politics	*1949*	*NATO established*
Wars	*1949*	*Atomic Bomb Hiroshima and Nagasaki*
	1950 - 1953	*Korean War*
Inventions	*1951*	*Colour TV*
Crisis		

CITY SYSTEM

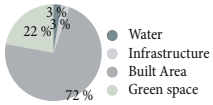


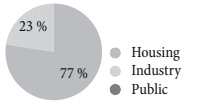
EXPENDABILITY

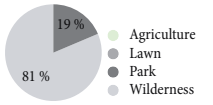


FACTS

Land Use 2d		
Water	1 %	
Infrastructure	2 %	
Built Area	41 %	
Housing		77 %
Industry		23 %
Public		0 %
Green space	13 %	
Agriculture		0 %
Lawn		0 %
Park		19 %
Wilderness		81 %
Total	57 %	







Density p/km2	**6863**
Climate	temperate marine
Elevation	hilly

data source: estimated from reproduced plans

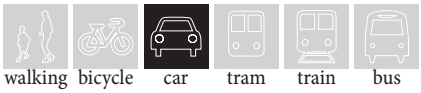
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



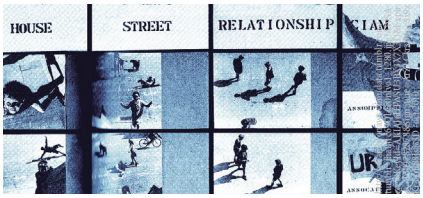
FUNDING

	public	private
Investor	ⓧ	◯

Mars Plan London text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136
MARS Group via Wikipedia, link: http://en.wikipedia.org/wiki/MARS_Group - accessed oct 2010
Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46

DOORN MANI-FESTO

1953





http://images.npg.org.uk/790_500/2/3/mw27323.jpg - oct 2010

THEORY

CIAM 9 Congress -1953

"... The 'younger' members were active at CIAM IX, attending council meetings, writing commission reports, and presenting most of the grids. Their architectural solutions displayed a wide range of formal articulations and theoretical frameworks. These differences notwithstanding, they recognized a common desire to create environments which would encourage relations between inhabitants, between a building and its environment, and which would accommodate the cultural needs of people.

Several projects, including those from Algiers, Chandigarh, Sardinia, and Jamaica, interested members for the manner in which they addressed local conditions and spiritual traditions. The Moroccan project, entitled 'Habitat for the Greatest Number' by ATBAT-Afrique and presented by Candilis and Michel Ecochard, captured the imagination of the 'younger' members more than any other for its attention to the sociological and cultural conditions of those for whom they were designing. Particularly impressed were the Smithsons, who regarded it as a new way of thinking and the greatest achievement since Le Corbusier's Unité d'Habitation in Marseilles.

The Smithsons presented their sociologically informed 'Hierarchy of Association' diagram which they prepared with their MARS colleagues Bill and Gill Howell and their 'Urban Re-Identification Grid'. These contributions proposed replacing the 'functional' hierarchy of dwelling, work, transportation, and recreation of the Athens Charter with what they referred to as the scaled unities of house, street, district and city, which was in line with earlier proposals by MARS for the CIAM VIII conference that recommended the inclusion of a category of scaled settlements from village to metropolis. The Smithsons' contribution has been accorded a great deal of importance subsequently in the accounts of Team 10 by Alison Smithson. However, reports of CIAM IX reveal that at the congress itself, their proposal received little attention by either generation.

The congress was perceived by most as articulating a confusing diversity of opinion. However, some acknowledged that in spite of the wide range of approaches there were similarities in intent. Many were dissatisfied with the proceedings and results of the congress which had failed to produce even an outline for a Charter of Habitat, and the younger members in particular were left with a profound disappointment with CIAM as an institution."[1]

1 Aix-en-Provence (France) 19-26 July 1953 by Annie Pedret, http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010

PROJECT

Doorn Manifesto - 1954

"Statement on Habitat

1. La Charte d'Athenes proposed a technique which would counteract the chaos of the 19th century and restore principles of order within our cities.
2 . Through this technique the overwhelming variety of city activities was classified into four distinct functions which were believed to be fundamental.
3 . Each function was realized as a totality within itself. Urbanists could comprehend more clearly the potential of the 20th century.
4. Our statement tries to provide a method which will liberate still further this potential.

As a direct result of the 9th Congress at Aix, we have come to the conclusion that if we are to create a Charte de I'Habitat, we must redefine the aims of urbanism, and at the same time create a new tool to make this aim possible.
Urbanism considered and developed in the terms of the Charte d'Athenes ends to produce "towns" in which vital human associations are inadequately expressed.
To comprehend these human associations we must consider every community as a particular total complex. In order to make this comprehension possible, we propose to study urbanism as communities of varying degrees of complexity. These can be shown on a Scale of Association as shown below:

We suggest that the working parties (crossed out: "commissions") operate each in a field (not a point) on the Scale of Association, for example: isolated buildings, villages, towns, cities. This will enable us to study particular functions in their appropriate ecological field . Thus a housing sector or satellite of a city will be considered at the top of the scale (under City, 1), and can in this way be compared with development in other cities, or contrasted with numerically similar developments in different fields of the Scale of Association. This method of work will induce a study of human association as a first principle, and of the four functions as aspects of each total problem."[1]

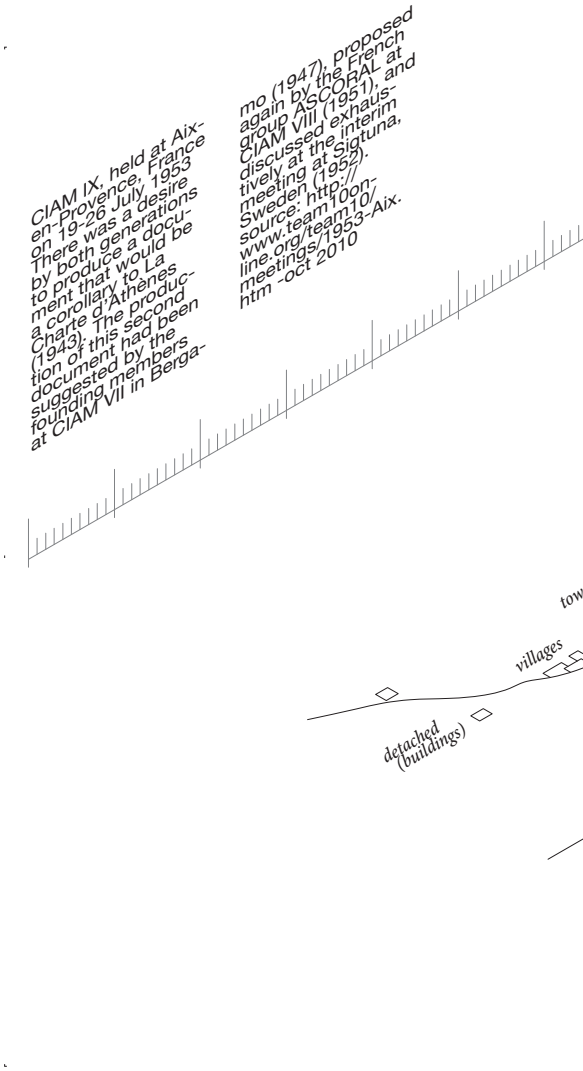
1 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton, link: http://www.team10online.org/colophon/index.html -oct 2010

DESIGNER

Name	***Alison & Peter Smithson***
Nationality	*British*
Born	*1928 & 1923*
Died	*1993 & 2003*
Profession	*Architect, Designer, Urbanist, Writer,*

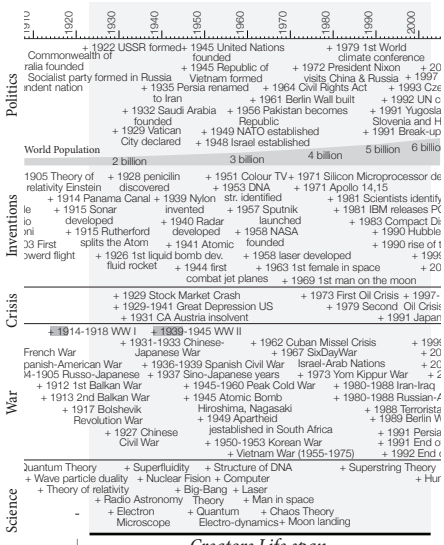
Alison & Peter Smithson studied architecture at Durham University.
Their architecture is often accociated with as "New Brutalism".
The two founded their own office in 1950 as a married couple.


CIAM IX, held at Aix-en-Provence, France on 19-26 July 1953 There was a desire by both generations to produce a document that would be a corollary to La Charte d'Athènes (1943). The production of this second document had been suggested by the founding members at CIAM VII in Bergamo (1947), proposed again by the French group ASCORAL at CIAM VIII (1951), and discussed exhaustively at the interim meeting at Sigtuna, Sweden (1952). source: http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010

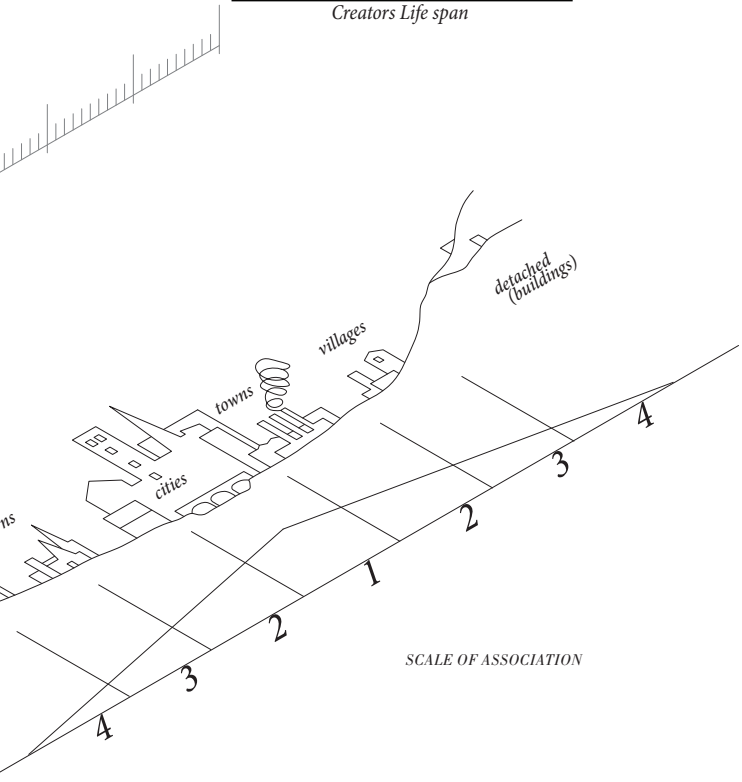


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



SCALE OF ASSOCIATION

QUALITIES & CRITIQUES

ONE CRUCIAL SENTENCE FROM THE MANIFESTO: "URBANISM CONSIDERED AND DEVELOPED IN THE TERMS OF THE CHARTE D' ATHENS ENDS TO PRO-DUCE "TOWNS" IN WHICH VITAL HUMAN ASSOCIA-TIONS ARE INADEQUATE-LY EXPRESSED." THE RECONSIDERA-TION OF THE HUMAN WAS AN IMPORTANT TURNAROUND SINCE THE VISIONS AT THE TIME SEEMED ALREADY TO AB-STRACT TO LIVE IN.

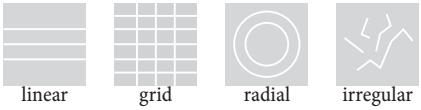
DATE OF ISSUE

Theory	*1953*	*CIAM 9 Congress*
Project	*1954*	*Doorn Manifesto*

HISTORICAL CONTEXT

Politics	*1949*	*NATO founded*
Wars	*1939 - 1945*	*World War II*
	1945 - 1960	*Peak Cold War*
	1950 - 1953	*Korean War*
Inventions	*1951*	*Colour TV*
	1953	*DNA str. identified*
Crisis	*1929 - 1941*	*Great Depression US*

CITY SYSTEM



linear grid radial irregular

EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d
Water
Infrastructure
Built Area
- Housing
- Industry
- Public

Green space
- Agriculture
- Lawn
- Park
- Wilderness

Total

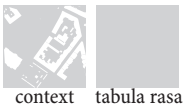
Density p/km2
Climate
Elevation

DISTANCE TO PUBLIC TRANSPORT



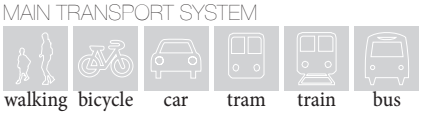
walkable inaccessible

BASE



context tabula rasa

MAIN TRANSPORT SYSTEM



walking bicycle car tram train bus

FUNDING

	public	private
Investor	○	ⓧ

Doorn Manifesto text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman
Peter Smithson via Wikipedia, link: http://en.wikipedia.org/wiki/Alison_and_Peter_Smithson - accessed oct 2010
http://www.team10online.org/colophon/index.html -oct 2010
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183
The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton
Team10 webpage, link: http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010

FORMULARY FOR A NEW URBANISM

1953





http://i2.ac-images-amazon.com/images/i/51d_b68d1l._SS240_.jpg 12.oct.2010

THEORY

Formulary for a new Urbanism - 1953

Unitary urbanism: the theory of the combined use of arts and techniques for the integral construction of a milieu in dynamic relation with experiments in behaviour.[1]

... The International situationiste bears this notice: "All the texts published in the International situationniste may be freely reproduced, translated, or adapted, even without indication of source." [2]

Some quotes will explain best how interesting this essay by Chtcheglov is four our time.

"We are bored in the city, there is no longer any temple of the sun." ...

"The various attempts to integrate modern science into new myths remain inadequate."

"Everyone wavers between the emotionally still-alive past and the already dead future."

"Architecture is the simplest means of articulating time and space, of modulating reality, of engendering dreams. It is a matter not only of plastic articulation and modulation expressing an ephemeral beauty, but of modulation producing influences in accordance with the eternal spectrum of human desires and the progress in realizing them."

Ivan Checheglov's essay ends with a very interesting look into the future.

"Our first experimental city would live largely off tolerated and controlled tourism. Future avant-garde activities and productions would naturally tend to gravitate there. In a few years it would become the intellectual capital of the world and would be universally recognised as such."

PROJECT

Letters from Guy Debord to Ivan Chtcheglov -1963

Dear Ivan

Your letter in two episodes has arrived, not without a delay in the delivery of the second one, due to a strike by the postal workers. There are frequently strikes and troubles of all sorts that are contemporaneous with our letters. I have never forgotten the first time I met you, at the moment that news came of the revolt in East Berlin, the historical importance of which has been well confirmed since then. I desire with all my heart that, in the agitation that develops at La Chesnais, the bureaucrats are routed,of course without their defeat leading you to replace them or to compete with them in their unfortunate speciality.

A delay has also been caused by a trip (perhaps it would be more exact to speak of a drinking party mixed in with trips) that, at present, has brought me to the Coast, where I debate with myself in a scene sufficiently confused by a little girl -- who perhaps is only half-interesting -- and a very advanced alcoholism. In the entirely pathological sense of the term: I drink several times a day, but principally in the morning, when it appears as the only remedy, after which things go less badly, one again finds oneself capable of doing everything and, right away, of drinking much more. This is all nothing new. ...

You say that this era is more and more dead. But: yes and no. It seems to us, from many signs, that the living forces are beginning to look for each other, behind the official decors (Left or Right, court orgarden) of the lamentable theatre of the era. It is all still to be played out.

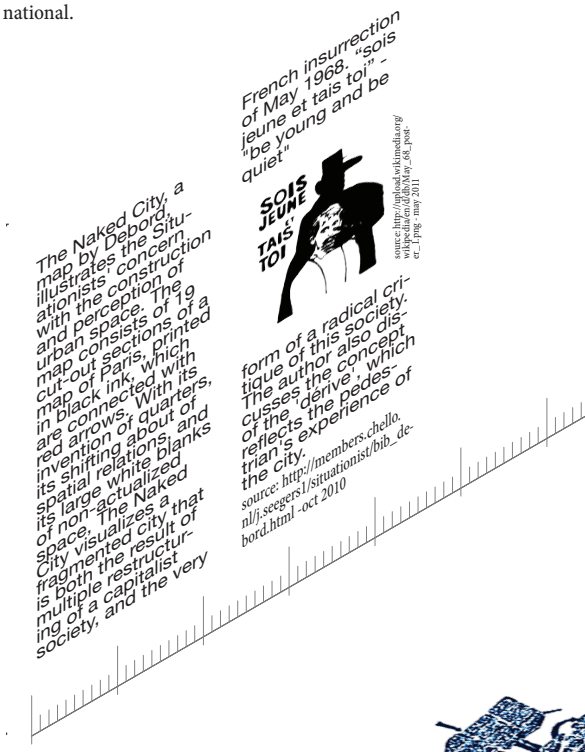
I remember April, etc. There is so much work in progress, as we have said. It is true, it is still true. I hope that we will see you soon.

Guy[1]

DESIGNER

Name	***Ivan Chtcheglov***
Nationality	*French*
Born	*January 16, 1933*
Died	*April 21, 1998*
Profession	*Writer, Theorist, Poet*

Ivan Chtcheglov wrote Formulary for a New Urbanism with the age of nineteen under a different name. (Gilles Ivain) This short essay was a very influential inspiration to the Situationist International.



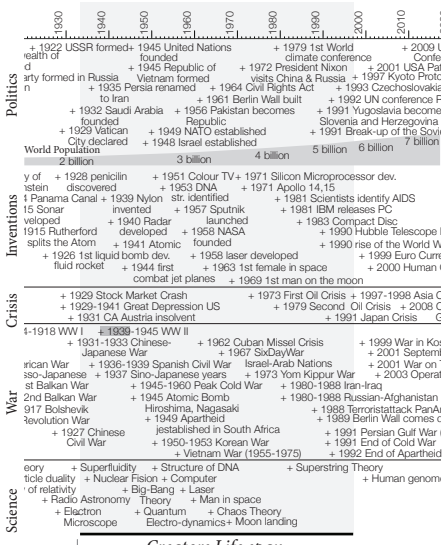
1 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167
2 Ibid. p. 167

1 Published in Guy Debord, Correspondance, Volume 2, 1960-1964. Footnotes by Alice Debord.Translated from the French by NOT BORED! April 2005. http://www.notbored.org/debord-April1963.html Page 2 of 2 -oct 2010



COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span

QUALITIES & CRITIQUES

**ART, POLITICS & CULTURE ALTHOUGH CHTCHEGLOV WASN'T REALLY A MEMBER OF THE GROUP HIS TEXT WAS ESSENTIAL TO THEM.
TAKING IDEAS AND TURNING THEM INTO A PROJECT, IN THIS WAY A WRITTEN PROJECT.
THE WEAKNESS IS THAT THERE IS NO SOLUTION TO THE CORE PROBLEM, IT'S ONLY CRITICISM, IT'S ONLY WORDS. " ARCHITECTURE IS THE SIMPLEST MEANS OF ARTICULATING TIME AND SPACE, OF MODULATING REALITY, OF ENGENDERING DREAMS."[1]**

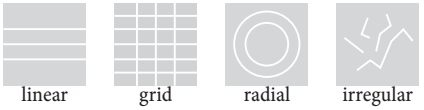
DATE OF ISSUE

Theory	*1953*	*Formulary for a new Urbanism*
Project	*1963*	*Letters from Guy Debord to Ivan Chtcheglov*

HISTORICAL CONTEXT

Politics	*1949*	*NATO founded*
Wars	*1939 - 1945*	*World War II*
	1945 - 1960	*Peak Cold War*
	1950 - 1953	*Korean War*
Inventions	*1951*	*Colour TV*
	1953	*DNA str. identified*
Crisis	*1929 - 1941*	*Great Depression US*

CITY SYSTEM



linear grid radial irregular

EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d
Water
Infrastructure
Built Area
- Housing
- Industry
- Public

Green space
- Agriculture
- Lawn
- Park
- Wilderness

Total

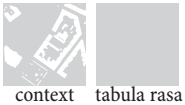
Density p/km2
Climate
Elevation

DISTANCE TO PUBLIC TRANSPORT



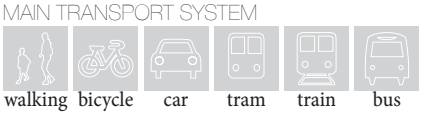
walkable inaccessible

BASE



context tabula rasa

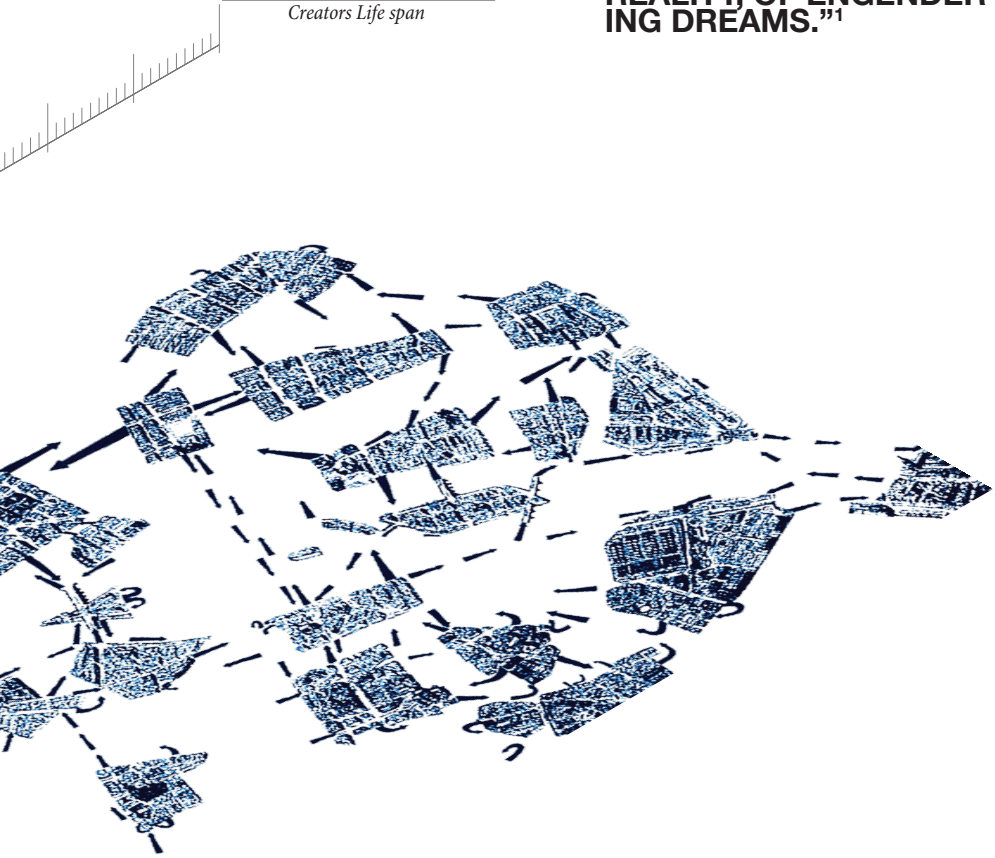
MAIN TRANSPORT SYSTEM



walking bicycle car tram train bus

FUNDING

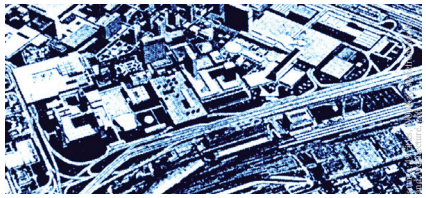
	public	private
Investor	○	ⓧ



1 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167
Formulary for a new urbanism text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman
Ivan Chtcheglov via Wikipedia, link: http://en.wikipedia.org/wiki/Ivan_Chtcheglov -oct 2010
Guy Debord web page, link: http://www.notbored.org/debord-April1963.html Page 2 of 2 - accessed oct 2010

FORT WORTH

1955





http://media-2.web.britannica.com/eb-media/62/19662-004-E2F2A1C1.jpg - oct 2010

THEORY

Cityscape & Landscape - 1955

Gruen writes: "We are swamped with an avalanche of new inventions, discoveries, machines, and gadgets. Our outlook is blurred by daily papers, television, magazines. We are exposed to philosophy, art criticism, analytical psychology, nuclear fission, spiritualism. We are confronted with abstractivism, nonobjectivism, new realism, surrealism until we all feel as if we are swimming in the middle of a big pot of 'genuine, kosher, Hungarian goulash, dixie style."[1]

A quote from 1955 which in my opinion would be even worse these days.

"Architecture's most urgent mission today is to convert chaos into order, change mechanization from a tyrant to a slave, and thus make place for beauty where there is vulgarity and ugliness."

The solution Gruen comes up with is called Subcityscape.

... Subcityscape is the reason why city planning, before it has even had a chance to become effective in our times, is already obsolete and why it has to be replaced by regional planning."

Translated into our time Gruen would have probably meant that to improve a city, a couple of small but local developments are much more effective than a huge Masterplan.

"Until a few years ago the only form of shopping facilities known in suburbia consisted of long rows of one -story structures along the arterial connecting suburbs with the city core. These strip developments still exist, and unfortunately, due to unwise zoning practise, they still grow. The story of their growth sounds like a recipe for building successfully commercial slums.

... For success on a grand scale, we will need more than plans and energy and even money. We will need the legal weapons to fight the battle, we need more effective legislation for condemnation proceedings, we need new zoning laws and, we may need federal funds at least as guarantee for loans for urban and suburban rehabilitation.

We need educational programs for our architectural schools in which integrated planning is stressed, and we need the active help and cooperation of artists, designers, and creative men in all fields in order to win in the blitzkrieg of technology."[2]

The blitzkrieg never stopped and the architect as a coordinator for different fields is still worth thinking about.

1 *Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 194 - 199*
2 *Ibid. p 194 - 199*

PROJECT

Fort Worth - 1955

Fort Worth is one of a dozen car-free pedestrian cities centres Gruen proposed in the US.

It can also be seen as a major revitalization plan.

"His project for a European-style pedestrian network in downtown Fort Worth featured 'businesses-on-a-podium' with garages interspersed throughout, easily accessible from a new ring road. In the creation of this dense core Gruen wanted to interrupt the "sterile, grid-iron street pattern" with playas and landscaped squares, in order to make streets "more surprising, more compact, more variegated and busier" according to Jane Jakobs."[1]

"In 1956, despite having no downtown planning experience, Gruen was invited by the head of the electric utility company in Fort Worth, Texas to create a plan for the city's entire downtown. Gruen's team spent weeks investigating and evaluating sales figures, tax revenue, traffic patterns, parking requirements and more. The team developed a grand proposal covering dozens of blocks, with a primary goal of making the streets more lively and walkable. To encourage pedestrian-oriented shopping, cars were to be banned from a six-block section of the main street. To limit traffic congestion, a ring highway was proposed to encircle downtown, with exits leading directly into parking garages. Many buildings were to be demolished and replaced. The plan drew tremendous national attention for its scope and for the abundance of supporting data. City leaders praised the plan as courageous, and immediately set to work lobbying for the huge public subsidies that would be required and for the power of condemnation. Over time, however, the state government chose not to provide adequate funding, and the grand proposal was not implemented."[2]

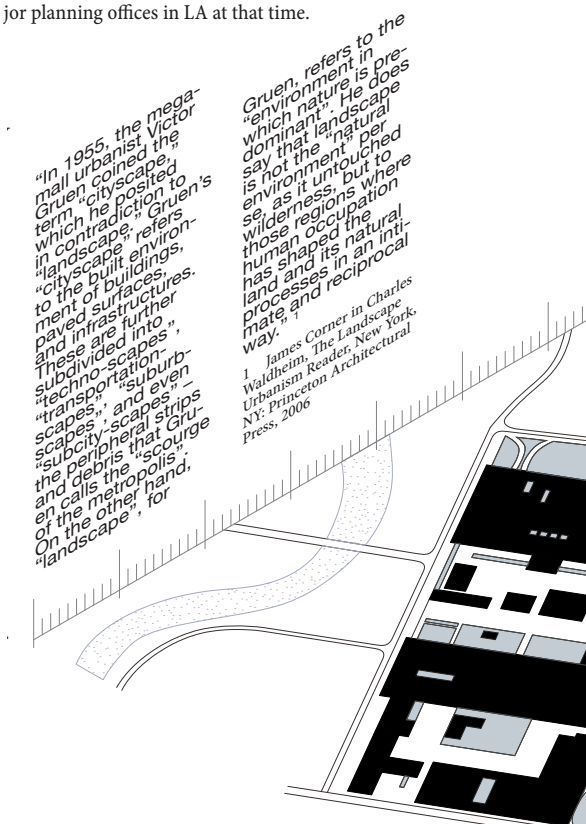
1 *49 cities, WORKac, Storefront for Art and Architecture*
2 *Mall Maker: Victor Gruen, Architect of an American Dream by M. Jeffrey Hardwick, 2004, University of Pennsylvania Press, link: http://www.landmarksociety.org/pdfs/55.pdf - accessed oct 2010*

DESIGNER

Name	***Victor Gruen***
Nationality	*Austrian, American*
Born	*July 18, 1903*
Died	*February 14, 1980*
Profession	*Architect, Urbanist, Writer*

Victor Gruen was educated as an architect in Vienna but hat to emigrate to the United States in 1938.

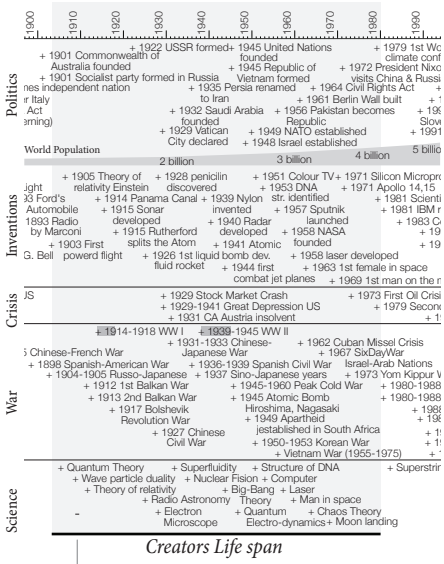
In the US he is best known for his pioneer work in designing shopping malls. Gruen was more or less a commercial architect which worked his way up from eight dollars in his pocket, when he arrived in the US, to one of the major planning offices in LA at that time.





COM-PARATIVE VALUES

HISTORICAL CONTEXT



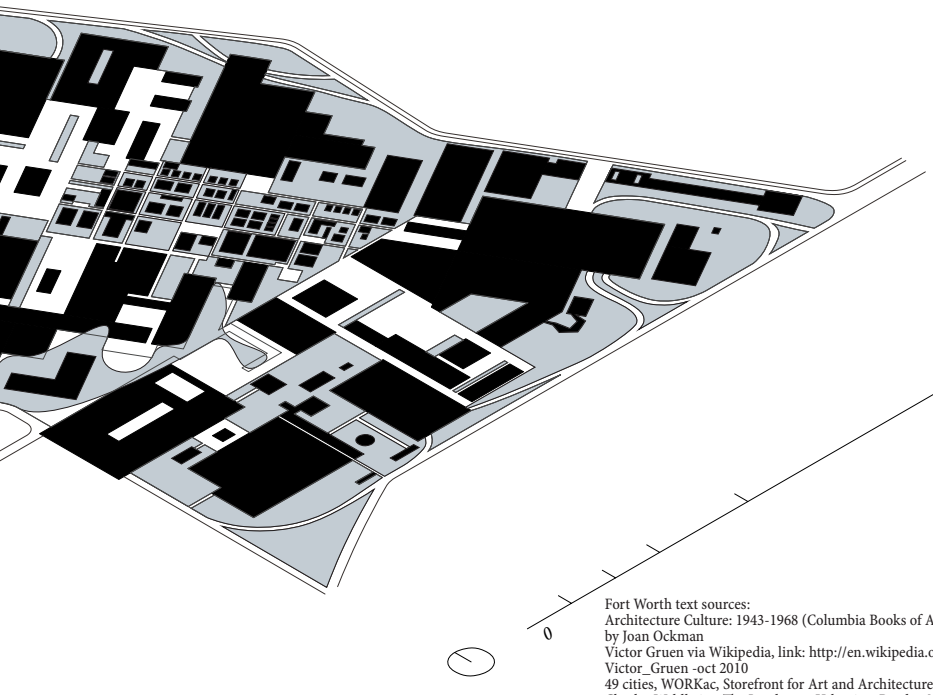
Creators Life span

QUALITIES & CRITIQUES

CAR-FREE PEDESTRIAN ZONE DESIGNED TO MAKE THE STREETS MORE LIVELY AND WALKABLE.

VICTOR GRUEN REALISED LATER IN HIS LIFE THAT HIS PLANS WOULDN'T WORK IF ONLY HALF OF THE PROPOSED SYSTEM WOULD BE CONSTRUCTED. BUT THE WAY HE UNDERSTOOD HOW TO WORK WITH A CITIES DATA IS REMARKABLE.

DETESTING CARPARKS BROUGHT HIM TO THE IDEA OF PLACING THE CARPARK ON THE ROOF.



Fort Worth text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman
Victor Gruen via Wikipedia, link: http://en.wikipedia.org/wiki/Victor_Gruen -oct 2010
49 cities, WORKac, Storefront for Art and Architecture
Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006

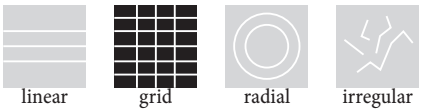
DATE OF ISSUE

Theory	*1955*	*Cityscape & Landscape*
Project	*1955*	*Fort Worth*

HISTORICAL CONTEXT

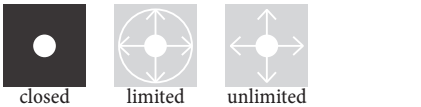
Politics	*1949*	*NATO established*
	1956	*Pakistan becomes Republic*
Wars	*1950 - 1953*	*Korean War*
	1955 - 1975	*Vietnam War*
Inventions	*1953*	*DNA str. identified*
	1957	*Sputnik launched*

CITY SYSTEM



linear grid radial irregular

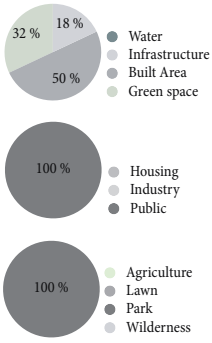
EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d	
Water	0 %
Infrastructure	18 %
Built Area	50 %
Housing	0 %
Industry	0 %
Public	50 %
Green space	32 %
Agriculture	0 %
Lawn	0 %
Park	32 %
Wilderness	0 %
Total	100 %



Density p/km2	**68160**
Climate	humid subtropical
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

DISTANCE TO PUBLIC TRANSPORT



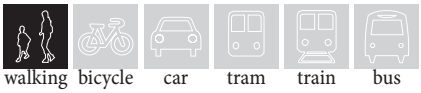
walkable inaccessible

BASE



context tabula rasa

MAIN TRANSPORT SYSTEM

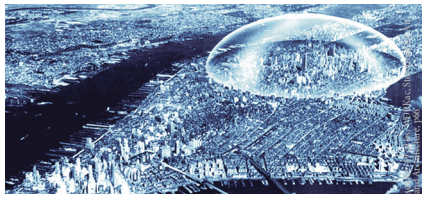


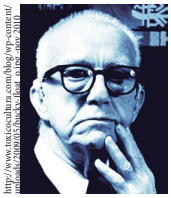
walking bicycle car tram train bus

FUNDING

	public	private
Investor	ⓧ	◯

GEODESIC DOME NEW YORK 1960





http://www.toxicocultura.com/blog/wp-content/uploads/2009/05/buckys-dome-nov-2010

THEORY

Designing a new industry - 1946

Buckminster Fuller realizes the potential of aircraft development at his time.

"The big fact that confronts us is that you of the aircraft industry have suddenly developed a whole new world which has recently been operating four times as much technology as was ever operated before - which happened to represent precisely the level of technology for which I had been waiting to get my house realised."[1]

What Fuller was looking for were new ways of mass production and although he was aware of the problems of repetition he found a solution for that:

"I must caution you that you will be confronted constantly by the statement that mass production of houses eliminates the aspect of individuality which is so cherished by humans and without which they are afraid they will lose the identity of their personality; therefore, mass production of houses will never gain popular acceptance.

My answer to that is that reproduction or regeneration of form is a fundamental of nature and that it is neither good nor bad in itself. However, reproduction of originally inadequate or awkward forms, or poor mechanics or wasteful structures, either by the hand of man or by the regeneration of the biological species, tends to amplify the original characteristics. If the original is annoying, reproduction become increasingly annoying; if the original is highly adequate to its designed purpose, reproductions become increasingly pleasing in that confirmation of adequacy. ..."[2]

"Just as fast as you boys can get out good production drawings and complete your calculations and get this house tooled up, we can produce two million houses a year"

Fuller thought he can sell his houses all around the world since there was such a big lack of houses after the war.

"If we can get the thing rolling, we can make houses available to everyone who wants houses, and very rapidly obsolete all old standards of living."

"I will prophesy however than within two years we will be down to somewhere under 100 man-hours from raw material as delivered to the aircraft industry (that is, as sheet aluminium in rolls, steel in rods and tubes, etc.) to finished house - under 100 man-hours. So your living cost is going to be low and your standards high and rapidly rising."[3]

1 *Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p. 87 - 92*
2 *Ibid. p. 87 - 92*
3 *Ibid. p. 87 - 92*

PROJECT

Geodesic Dome New York - 1960

"One of Buckminster Fuller's domed projects, the Dome over Manhattan was an attempt to rectify the wasteful nature of urban environment. The dome would keep warmth inside and prevent rain and snow from entering the business core of the city. Fuller was obsessed with the efficiency of a climate-free city, citing the enormous savings in elements such as snow removal to promote its superiority over traditional urban environment."[1]

"R. Buckminster Fuller spent much of the early 20th Century looking for ways to improve human shelter by:

Applying modern technological know-how to shelter construction.

Making shelter more comfortable and efficient.

Making shelter more economically available to a greater number of people.

....

He could do this, in part, because newer building materials were available, and partly because his structures use the principle of tension instead of the usual compression. About these homes, Fuller writes in 1928, "These new homes are structured after the natural system of humans and trees with a central stem or backbone, from which all else is independently hung, utilizing gravity instead of opposing it. This results in a construction similar to an airplane, light, taut, and profoundly strong."[2]

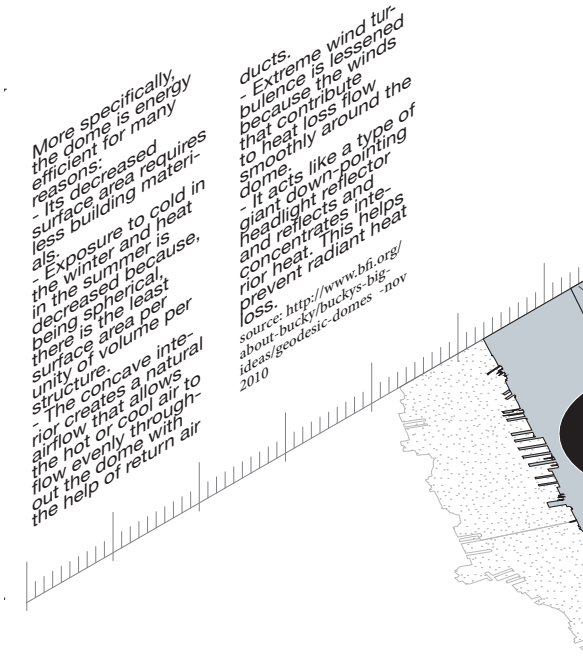
In 1944, the United States suffered a serious housing shortage. Government officials knew that Fuller had developed a prototype single family dwelling which could be produced rapidly, using the same equipment which had previously built war-time air planes. They could be "installed" anywhere, the way a telephone is installed, and with little additional difficulty. When one official flew to Wichita, Kansas to see this house, which Beech Aircraft and Fuller built, the man reportedly gasped, "My God! This is the house of the future!"[3]

1 *49 cities, 2010, WORKac, Storefront for Art and Architecture, p. 66*
2 *Geodesic Domes via Buckminster Fuller web page, link: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes - Accessed July 2011*
3 *Ibid.*

DESIGNER

Name	***Buckminster Fuller***
Nationality	*American*
Born	*July 12, 1895*
Died	*July 1, 1983*
Profession	*Architect, Engineer, Inventor, Designer, Writer*

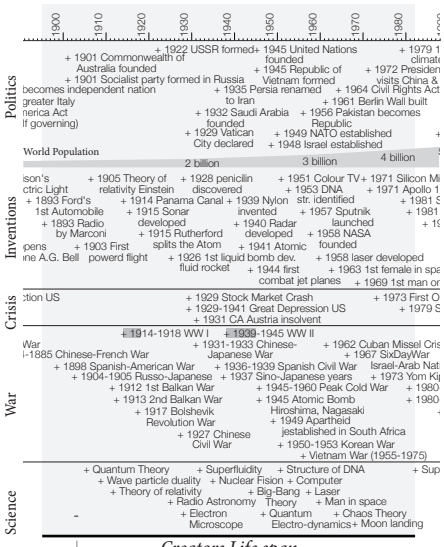
Buckminster Fuller often used the term Dymaxion for his design concepts. A short term for "dynamic maximum tension". For example the Dymaxion house. But what he is best know for are his Geodesic domes.


More specifically, the dome is energy efficient for many reasons:
- Its decreased surface area requires less building materials.
- Exposure to cold in the winter and heat in the summer is decreased because, being spherical, there is the least surface area per unity of volume per structure.
- The concave interior creates a natural airflow that allows the hot or cool air to flow evenly throughout the dome with the help of return air ducts.
- Extreme wind turbulence is lessened because the winds that contribute to heat loss flow smoothly around the dome.
- It acts like a type of giant down-pointing headlight reflector and reflects and concentrates interior heat. This helps prevent radiant heat loss.
source: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes -nov 2010



COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

REDUCE THE WASTEFUL NATURE OF THE URBAN ENVIRONMENT THROUGH A DOME.
NO MORE SNOW PROBLEMS, RAIN, COLD OR TOO WARM WEATHER.

THE THEORY ABOUT MASS-PRODUCTION IS ONLY DISTANTLY RELATED IN TERMS OF CONSTRUCTING THE DOMES.

THESE DAYS SOMEONE WOULD RATHER FOCUS ON THE RISING SEA LEVELS THAN NEVER CHANGING CLIMATE.
INSTEAD OF A DOME THE NEVER CHANGING CLIMATE BECAME REAL IN SHOPPING CENTRES.

Geodesic Dome New York text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman
Buckminster Fuller via Wikipedia, link: http://en.wikipedia.org/wiki/Buckminster_Fuller -nov 2010

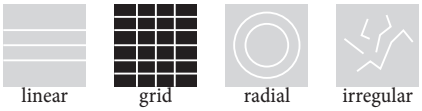
DATE OF ISSUE

Theory	*1946*	*Designing a new industry*
Project	*1960*	*Geodesic Dome New York*

HISTORICAL CONTEXT

Politics	*1949*	*NATO founded*
Wars	*1939 - 1945*	*World War II*
	1945 - 1960	*Peak Cold War*
	1950 - 1953	*Korean War*
Inventions	*1951*	*Colour TV*
	1953	*DNA str. identified*
Crisis	*1929 - 1941*	*Great Depression US*

CITY SYSTEM

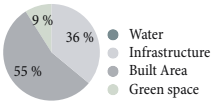


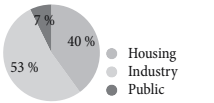
EXPENDABILITY

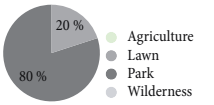


FACTS

Land Use 2d		
Water	0 %	
Infrastructure	36 %	
Built Area	55 %	
Housing		22 %
Industry		29 %
Public		4 %
Green space	9 %	
Agriculture		0 %
Lawn		2 %
Park		8 %
Wilderness		0 %
Total	100 %	







Density p/km2	**98362**
Climate	humid subtropical
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

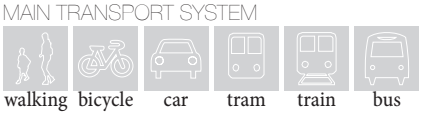
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

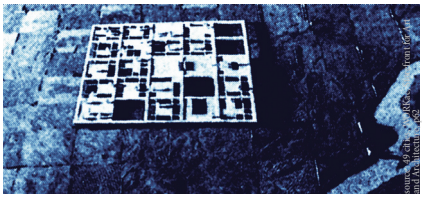


FUNDING

	public	private
Investor	○	ⓧ

AGRICULTURAL CITY

1960





http://www.kisho.co.jp/page.img/00071_01s.JPG nov 2010

THEORY

Proposals of a New Urbanism - 1960

Metabolism was a Japanese architectural movement active from 1960 to the early 1970s. It was launched at the World Design Conference in Tokyo (1960), and its initial members were the architects Takashi Asada, Kiyonori Kikutake and Kisho Kurokawa, journalist and critic Noboru Kawazoe, industrial designer Kenji Ekuan and graphic designer Kiyoshi Awazu; they were soon joined by the architects Fumihiko Maki and Masato Otaka.

"Metabolism 1960: Proposals for a New Urbanism, was published after the conference. In rejecting CIAM's static and ultimately classical conception of the city, Metabolism sought rather to emphasize that the city constantly undergoes change like an organism, hence the biological term borrowed for its name. The aim was to give order to such transformations by allowing for the different cycles of growth and decay of urban elements. Elements with longer life spans were to form an infrastructure to which short-term elements were to be attached in a manner that expedited the latter's periodic replacement, an idea that had been explored earlier by the Groupe d'Etude d'Architecture Mobile of Yona Friedman."[1]

"The Japanese architects that joined under this name promoted a flexible architecture and dynamic cities that could develop and grow through the elimination of their exhausted parts and the regeneration of new components in accordance with the necessity of the socio-economical environment. The city is conceived as a metaphor of the human body, and is seen as a structure that is composed by elements (cells) that are born, grow and then die, whereas the entire body continues living and developing.
Linking their theories with the Japanese cultural tradition of impermanence derived from Buddhism thought, metabolist architects believed the architecture shouldn't be static, but capable to undergo "metabolic" changes, and instead of thinking of fixed forms and functions, they developed structures and projects composed of mobile and flexible elements. As stated by the same Kawazoe referring to the form of the city of the future: "What will be the final form? There is no fixed form in the ever-developing world. We hope to create something which, even in destruction will cause subsequent new creation. This "something" must be found in the form of the cities we are going to make- city constantly undergoing the process of metabolism."[2]

1 *Proposals of a New Urbanism via Artnet, link: http://www.artnet.com/library/05/0573/t057373 - accessed nov 2010*
2 *Proposals of a New Urbanism via Jstor, link: http://www.jstage.jst.go.jp/article/jaabe/3/2/3_357/_article - accessed nov 2010*

PROJECT

Agricultural city - 1960

"It seems to me that there exists a city versus village concept with an emphasis toward cities when we say: "the flow of agricultural population into cities" or "dispersion of urban population". I am of the opinion that rural communities are cities whose means of production is agriculture. Agricultural cities, industrial cities, consumption cities and recreation cities should each form an integral part of a compact community. A distinct urban system should exist between these cities. Agricultural cities have a potential as future cities. And that is the reason why it is necessary to have a basic plan for their future expansion. The basic unit of the rural area of Japan is a 500m x 500m community centred around a shrine, a grammar school and a temple. According to the proposed plan, roads, water-service, electricity, monorails for work and other facilities are installed 4 meter above ground. This will enable common handling and administering of agricultural works. The level of the facility frame is the level of expansion of social life. And this is where shrine, schools and administrative institutions are established. The basic housing unit (vide) is in the shape of a mushroom, a one to three storied structure with a wooden frame aluminium roof. The mushroom shaped house has a ferro-concrete facility shaft to which living quarters and other facilities are attached. Water, electricity and gas are provided as municipal facilities. The equipment shaft is the centre of the mushroom structure as well as the equipment base which provides such architectural equipment as bathrooms, kitchen units, washbasins etc. The surrounding living area is a medium to facilitate circulation of architectural equipment. A 500m x 500m frame is the basic unit of one community. It consists of twenty five l00m x l00m blocks for 2000 people."[1]

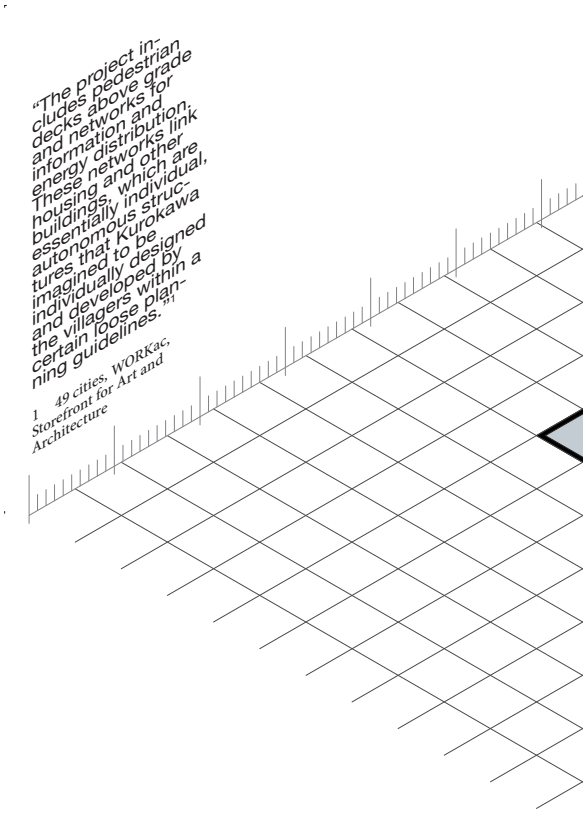
"The agricultural city provides for natural growth using a grid system of streets that contains the utility pipes underneath. While each of the square units made up of several households is autonomous, the village takes shape by linking them together. The living units multiply spontaneously without any kind of hierarchy, gradually bringing the village into being as the traditional rural settlement has development throughout Japanese history."[2]

1 *Agricultural city via Parole, link: http://parole.aporee.org/work/hier.php3?spec_id=3999&words_id=304 - accessed nov 2010*
2 *Ibid.*

DESIGNER

Name	***Kisho Kurokawa***
Nationality	*Japanese*
Born	*April 8, 1934*
Died	*October 12, 2007*
Profession	*Architect, Urbanist, Writer*

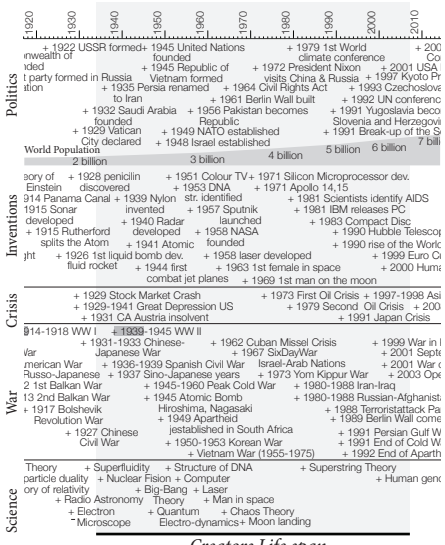
Kisho Noriaki Kurokawa can be seen as one of the founders of the Metabolist Movement. After a Bachelor in architecture at Kyoto he moved to Tokyo to achieve a Master at Tokyo University under the guidance of Kenzo Tange.





COM-PARATIVE VALUES

HISTORICAL CONTEXT

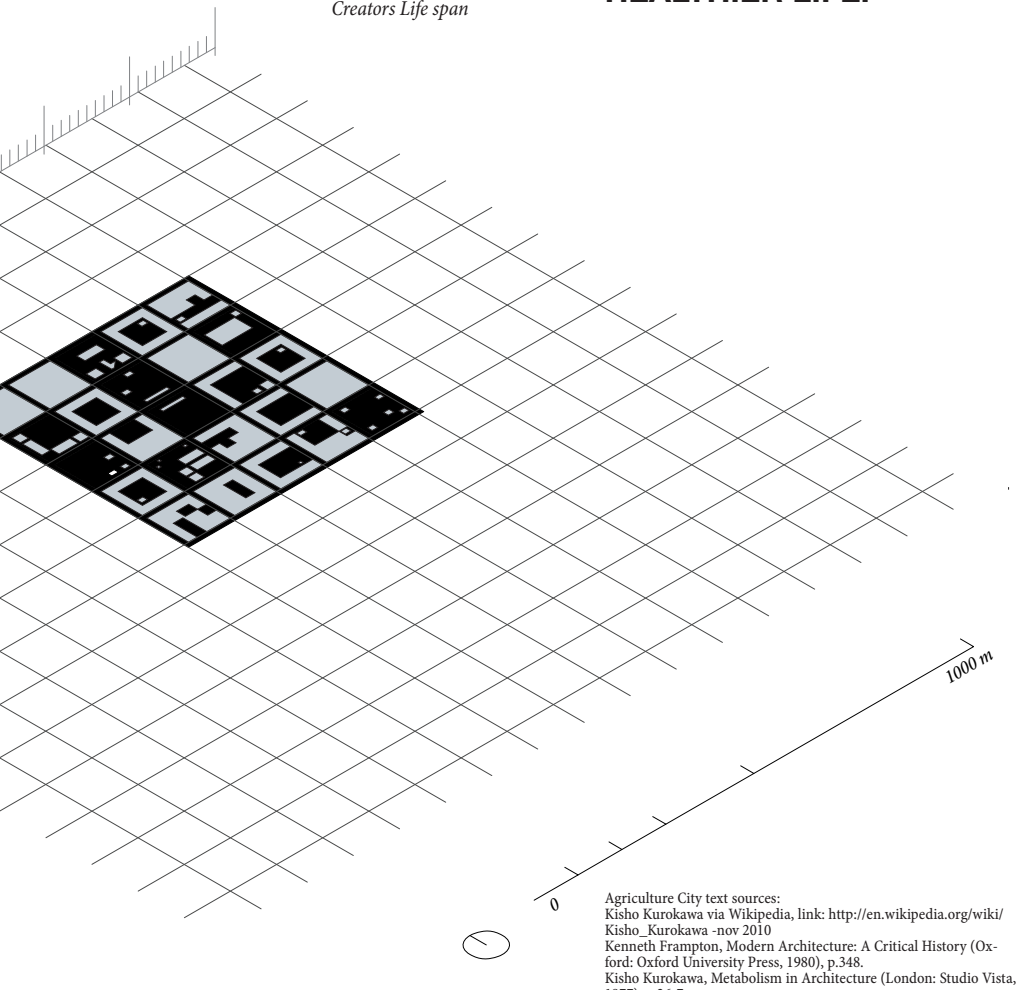


Creators Life span

QUALITIES & CRITIQUES

CONTROLLED GROWTH AROUND A GRID WITH FIXED SIZED COMMUNITIES.
BASIC RURAL UNIT COMING FROM A CENTRE AROUND TEMPLE, SHRINE AND GRAMMAR SCHOOL.
INFRASTRUCTURE ABOVE AGRICULTURAL USE.

INTEGRATING AGRICULTURE WITHIN URBAN THEORIES SHOW'S THE NECESSITY OF FOOD PRODUCTION, EDUCATION FOR THE NEXT GENERATIONS AND A HEALTHIER LIFE.



Agriculture City text sources:
Kisho Kurokawa via Wikipedia, link: http://en.wikipedia.org/wiki/Kisho_Kurokawa -nov 2010
Kenneth Frampton, Modern Architecture: A Critical History (Oxford: Oxford University Press, 1980), p.348.
Kisho Kurokawa, Metabolism in Architecture (London: Studio Vista, 1977), p.26-7.

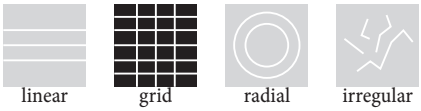
DATE OF ISSUE

Theory	*1960*	*Proposals of a New Urbanism*
Project	*1960*	*Agricultural City*

HISTORICAL CONTEXT

Politics	*1949*	*NATO established*
	1956	*Pakistan becomes Republic*
Wars	*1950 - 1953*	*Korean War*
	1955 - 1975	*Vietnam War*
Inventions	*1958*	*NASA founded*
	1958	*Laser developed*

CITY SYSTEM

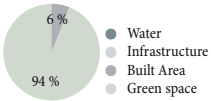


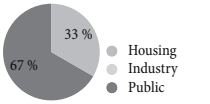
EXPENDABILITY

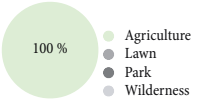


FACTS

Land Use 2d		
Water	0 %	
Infrastructure	0 %	
Built Area	6 %	
Housing		2 %
Industry		0 %
Public		4 %
Green space	94 %	
Agriculture		94 %
Lawn		0 %
Park		0 %
Wilderness		0 %
Total	100 %	







Density p/km2	**4341**
Climate	humid subtropical
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

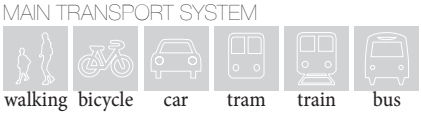
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

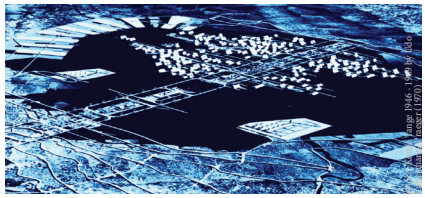


FUNDING

	public	private
Investor	○	ⓧ

A PLAN FOR TOKYO

1960





THEORY

Structuralism - 1959

"Structuralism as a movement in architecture and urban planning evolved around the middle of the 20th century. It was a reaction to CIAM-Functionalism (Rationalism), which had led to a lifeless expression of urban planning that ignored the identity of the inhabitants and urban forms.
Two different manifestations of Structuralist architecture exist. Sometimes these occur in combination with each other. On the one hand, there is the Aesthetics of Number, formulated by Aldo van Eyck in 1959. This concept can be compared to cellular tissue. The "Aesthetics of Number" can also be described as "Spatial Configurations in Architecture". On the other hand, there is the Architecture of Lively Variety (Structure and Coincidence), formulated by John Habraken in 1961. This second concept is related to user participation in housing."[1]

"Theoretical Origins
- Built structures corresponding in form to social structures, according to Team 10 (Working group for the investigation of interrelationships between social and built structures) .
- The archetypical behaviour of man as the origin of architecture (cf. Anthropology, Claude Lévi-Strauss). Different Rationalist architects had contacts with groups of the Russian Avant-Garde after World War I. They believed in the idea that man and society could be manipulated.
- Coherence, growth and change on all levels of the urban structure. The concept of a Sense of place. Tokens of identification (identifying devices). Articulation of the built volume.
- Polyvalent form and individual interpretations (compare the concept of langue et parole by Ferdinand de Saussure). User participation in housing. Integration of "high" and "low" culture in architecture (fine architecture and everyday forms of building). Pluralistic architecture."[2]

A Plan for Tokyo - Toward a Structural Reorganization - 1960

Influenced by TeamX's ideas, the whole project "Toward a structural reorganisation", had a lot of calculation and theoretical thoughts behind which are not clearly visible by just looking at the plans

1 *Structuralism via Wikipedia, link: http://en.wikipedia.org/wiki/Structuralism_(architecture) -accessed nov 2010*
2 *Ibid.*

PROJECT

A Plan For Tokyo - 1960

"The massively scaled plan for expanding Tokyo along Metabolist principles centred on creating an enormous central, infrastructural spine jutting into Tokyo Bay. This spine would contain a civic axis of governmental and business districts and would grow the city in a line out from the existing urban agglomeration. The spine would be flanked by high-speed roads without intersections, and the islands themselves would feature buildings on pilotis, to allow the ground plane to be used communally. Housing branches would extend at 90 degree angles from the central spine, and be connected to the core by a monorail system. Industrial areas would be created on landfill near the existing shoreline. Like most other Metabolist project, the Tokyo Bay expansion could accommodate the addition of both individual units and large sectors in a "tree" -like manner."[1]
A plan for Tokyo investigates a lot in the transportation system of a city. "... the transportation system is a the basic physical foundation for the functional city."[2]

"This civic centre, once formed, grows larger and larger. At the same time, the people who perform the functions spread out into the suburbs in an effort to find cheap land. The city therefore assumes a form that is centripetal and radial. This has been the typical urban pattern since the Middle Ages, and the natural pattern that a city will follow if let to grow freely."[2]

It's probably already clear where Kenzo Tange made his point. If a transport system for 10.000.000 should work the radial city must fail since everyone would have to commute to the centre. But:

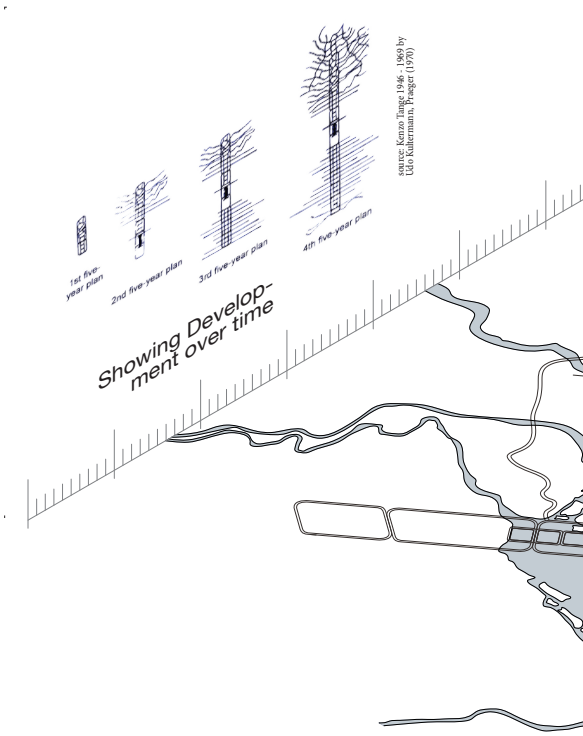
"We are not trying to reject the Tokyo that exists and build an entirely new city. We wish instead to provide the city with a revised structure which will lead to its rejuvenation."[3]
The basic aims of his proposal were:
- shift from a radial to a linear system
- an organic unity with city structure, transportation system and urban architecture
- new urban special order, open organization, spontaneous mobility"
Down to the twentieth century, the city grew out in all directions from a core . Neither accentuated expansion nor the garden-city or satellite-city plans proceeded from this principle. Kenzo Tange searched for a new conception. He was no longer interested in the expansion of the city as such, but rather in the modification of the very nature of the city.

1 *49 cities, WORKac, Storefront for Art and Architecture*
2 *Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger, 1970*
3 *Ibid.*

DESIGNER

Name	***Kenzo Tange***
Nationality	*Japanese*
Born	*September 4, 1913*
Died	*March 22, 2005*
Profession	*Architect, Urbanist, Writer*

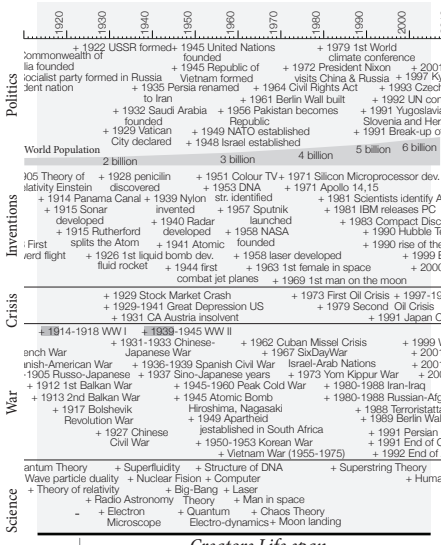
Kenzo Tange combined traditional Japanese styles with modernism. As one of the supporter of Structuralism outside of Team X, he was very influential to the further development known as Metabolism.
One of the major figures that influenced Tange was the Swiss modernist Le Corbusier. "It was, I believe, around 1959 or at the beginning of the sixties that I began to think about what I was later to call structuralism" (Kenzo Tange, 1982, Amsterdam)





COM-PARATIVE VALUES

HISTORICAL CONTEXT



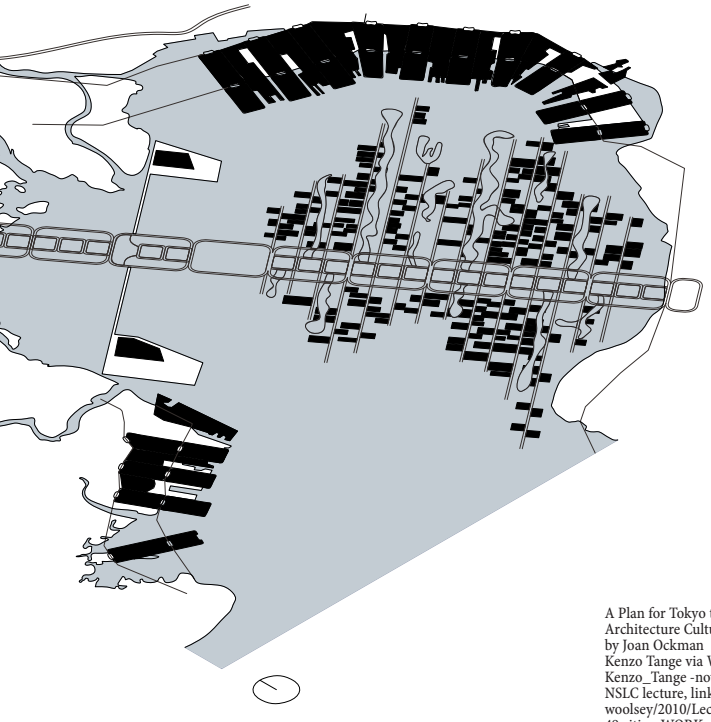
Creators Life span

QUALITIES & CRITIQUES

THE PROJECT CLEARLY SHOWS THE PROBLEMS WITH RADIAL SYSTEMS.

TANGE IS ALREADY ONE STEP AHEAD OF THE CLEAR LINEAR CONCEPT.

CYCLE TRANSPORTATION IS STILL A CONCEPT WHICH WOULD ALLOW BETTER CONNECTIONS FROM CITY TO CITY.
THE INFLUENCE OF METABOLISM TO SEE THE TRANSPORT SYSTEM AS A NATURAL SYSTEM CLEARLY SHOWS IT'S ADVANTAGES.
WORTH TO MENTION ARE TANGE'S ACCURATE CALCULATIONS, LETTING IT APPEAR A LOT MORE REAL THAN OTHER UTOPIAN IDEAS.



A Plan for Tokyo text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman
Kenzo Tange via Wikipedia, link: http://en.wikipedia.org/wiki/Kenzo_Tange -nov 2010
NSLC lecture, link: http://www.nslc.wustl.edu/courses/bio3411/woolsey/2010/Lecture15/Lin%202007.pdf - jan 2011
49 cities, WORKac, Storefront for Art and Architecture

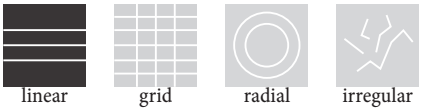
DATE OF ISSUE

Theory	*1959*	*Structuralism*
Project	*1960*	*A Plan for Tokyo*

HISTORICAL CONTEXT

Politics	*1949*	*NATO established*
	1956	*Pakistan becomes Republic*
Wars	*1950 - 1953*	*Korean War*
	1955 - 1975	*Vietnam War*
Inventions	*1958*	*NASA founded*
	1958	*Laser developed*

CITY SYSTEM



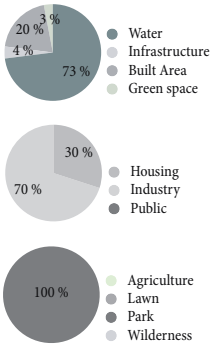
EXPENDABILITY



FACTS

Land Use 2d		
Water	73 %	
Infrastructure	4 %	
Built Area	20 %	
Housing		6 %
Industry		14 %
Public		0 %
Green space	3 %	
Agriculture		0 %
Lawn		0 %
Park		3 %
Wilderness		0 %
Total	100 %	
Density p/km2	**4774**	
Climate	humid subtropical	
Elevation	flat	

data source: 49 cities, WORKac, Storefront for Art and Architecture



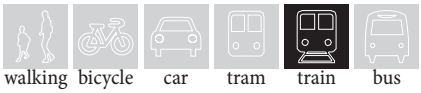
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

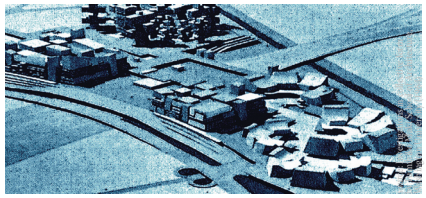


FUNDING

	public	private
Investor	○	ⓧ

SHINJUKU RESTO-RATION

1964





source: Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964)

THEORY

Toward Group Form - 1960

"In the spring of 1960, Masato Ohtaka and I published an article called "Group-Form" in the first issue of "Metabolism." Since then, the idea has further been developed and become recently "Collective Form." The study on "Linkage" followed in collaboration with Jerry Goldberg. Methodological investigation on collective forms has seldom been done until very recently. What is needed is not just observation and critical comment, but utilization of the observation to develop strategic tools in making our physical environment. Together with illustrative works, these papers are intended to discuss why, what, and how we should design. These are open-ended discussions, to be polemical rather than definitive. They represent, however, only the beginning of vast inquiry on the collective form. Group-Form is the last of the three approaches in the collective form. It is form, which evolves from a system of generative elements in space. Some of the basic ideas of the group-form can be recognized in historical examples of town buildings. Urban designers and architects have recently become interested in them because they appear to be useful and suggestive examples in making large scale form. For instance, medieval cities in Europe, towns in Greek Islands, villages in Northern Africa are a few examples. The spatial and massing quality of these towns is worth consideration.[1]

In the Article Towad Group Form Maki and Ohtaka found clear words for their ideas:
"Our idea of group form stands firmly against the image we have had in architecture for thousands of years; the image of a single structure, complete in itself - for example, the Pyramids, the Parthenon, a Gothic church - or the Seagram building by Mies van der Rohe."[2]

"In city planning the concept of "master planning" has been often criticized for the following shortcomings: First, the whole plan cannot be comprehended until it is completed. Second, when completed, it may well become socially obsolete. Then, at the worst, the plan is never completed. A master plan is basically a static concept, whereas the concept of master form we are proposing there is dynamic. Master form is an entity that is elastic and enduring through any change in society."[2]

PROJECT

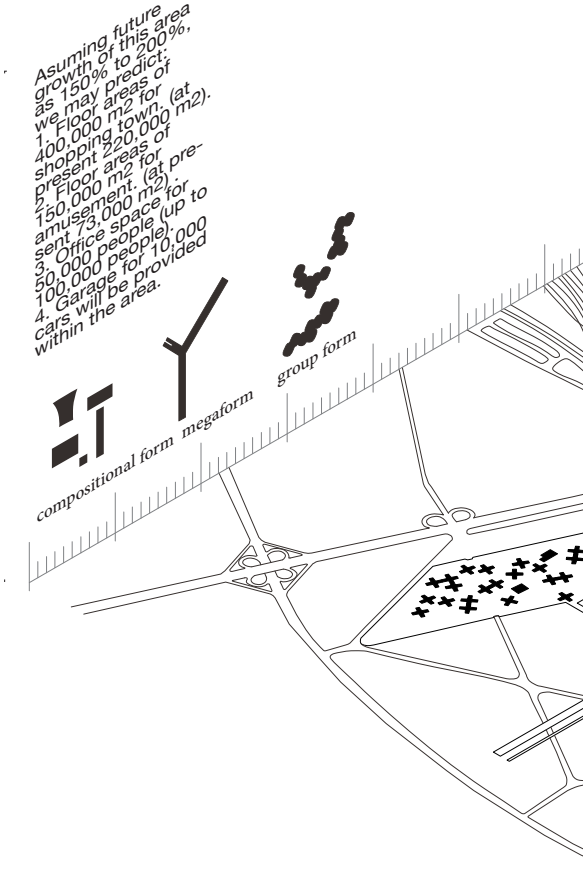
Shinjuku Restoration -1964

"Everyday more than a million people use the Shinjuku Terminal, at which point several subways and transit systems converge. The land value around the terminal is one of the highest in Tokyo, yet without intensive use proportional to the value. Most of the existing structures are either one or two stories, rarely more than three. Recently, however, more and more high-rise office buildings are being built at the west side of the terminal. This is a proposal to reorganize existing chaotic traffic situations around the terminal into a more orderly pattern and at the same time suggest new shopping, amusement, and office blocks under more intensive land use, thus relieving a certain amount of land for recreation and high rise residential Structures.
The area taken for this proposal runs approximately one mile from west to east. Two major highways, which connect downtown Tokyo with one of the most densely settled commuter zones, are north and south boundaries. They are one third of a mile apart at the centre of the area.
...
The rail terminal is strategically located at the centre of the area. Through multi- level platforms for rapid transit systems, subways, trains, buses, and automobiles, the flow of people will be spread in four directions. Except for approaches to the terminal through underground tunnels, all automobiles will be parked in parking structures along the major highways, thus making the inside area completely free from vehicular traffic.
In this project the concept of the collective form is applied as follows: In the amusement squares, for instance, gathering is a main theme. The plaza forms a centre about which opera houses, theatres, concert halls, movie theatres, variety theatres, etc, radiate like petals of a flower.
Several plazas are linked together and form the amusement area. We think that this is a kind of form which retains the total image, even if individual elements were designed differently by several architects.
...
This is an attempt to create an image through grouping of elements that is a reflection of growth and decay in our life process-a metabolic process. This is to conceive a form in relationship to an ever-changing whole and its parts. This is also an attempt to express the energy and sweat of millions of people in Tokyo, of the breath of life and the poetry of living. "[1]

DESIGNER

Name	***Fumihiko Maki***
Nationality	*Japanese*
Born	*September 6, 1928*
Died	
Profession	*Architect, Urbanist, Writer*

Fumihiko Maki studied at the University of Tokyo and at the Harvard Graduate School of Design.
1960 Maki returned to Japan and was a key figure for the Metabolism movement.
His office, Maki and Associates, opened in 1965.



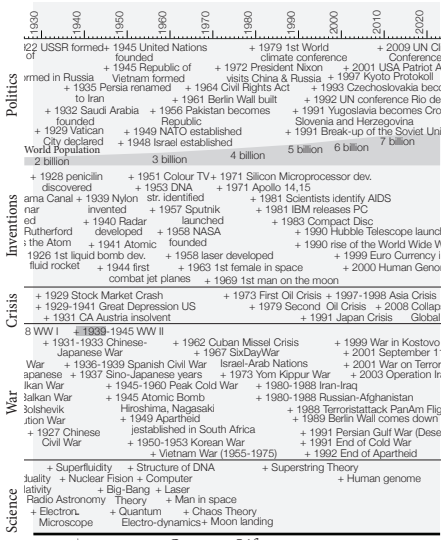
1 Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964)
2 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 323

1 Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964)



COM-PARATIVE VALUES

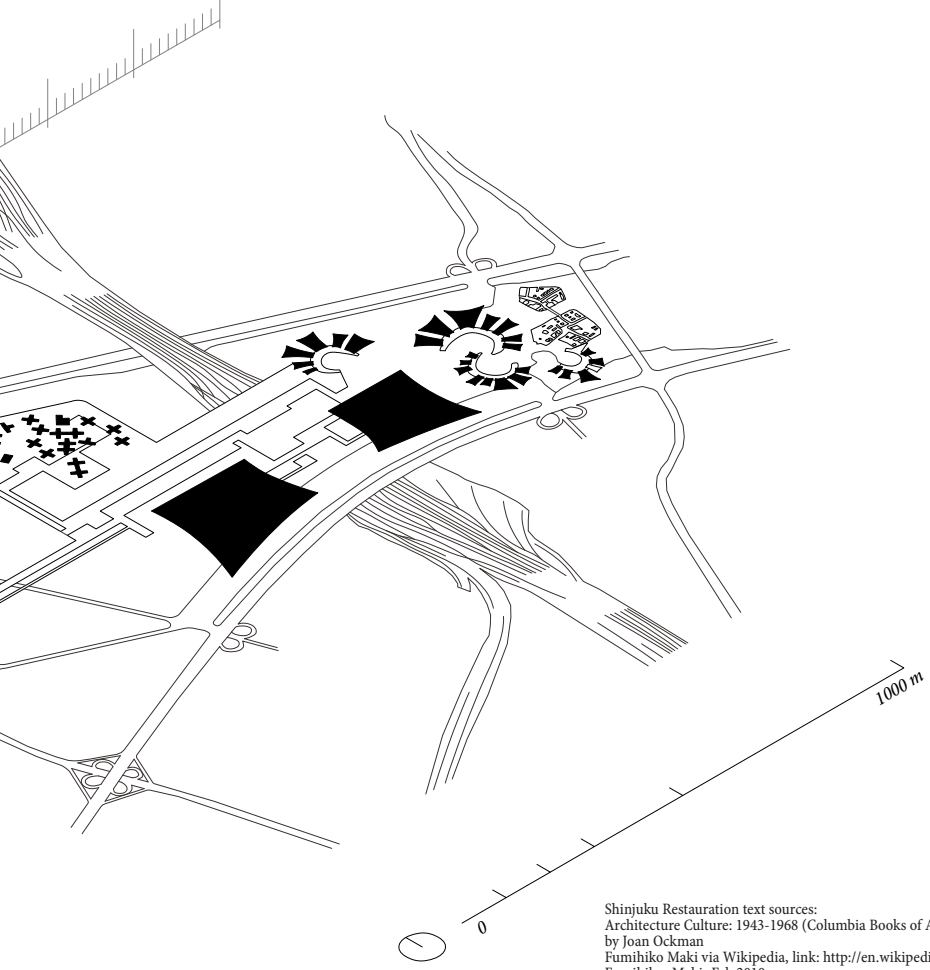
HISTORICAL CONTEXT



Creators Life span

QUALITIES & CRITIQUES

IN MAKI'S WORDS: "SEVERAL PLAZAS ARE LINKED TOGETHER AND FORM THE AMUSEMENT AREA. WE THINK THAT THIS IS A KIND OF FORM WHICH RETAINS THE TOTAL IMAGE, EVEN IF INDIVIDUAL ELEMENTS WERE DESIGNED DIFFERENTLY BY SEVERAL ARCHITECTS."
THIS IS THE CONCEPT HOW A MASTERPLAN SHOULD BE DESIGNED TO BE BUILT OVER GENERATIONS.



Shinjuku Restauration text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture)
by Joan Ockman
Fumihiko Maki via Wikipedia, link: http://en.wikipedia.org/wiki/Fumihiko_Maki -Feb 2010

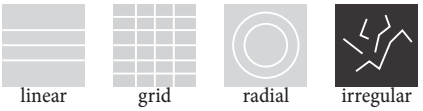
DATE OF ISSUE

Theory	*1960*	*Toward Groupform*
Project	*1964*	*Shinjuku Restoration*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missel Crisis*
Inventions	*1958*	*Laser developed*
	1963	*First female in Space*

CITY SYSTEM

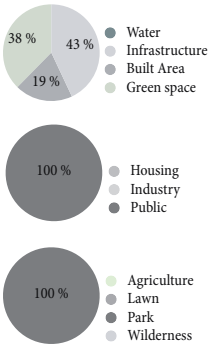


EXPENDABILITY



FACTS

Land Use 2d		
Water	0 %	
Infrastructure	43 %	
Built Area	19 %	
Housing		0 %
Industry		0 %
Public		100 %
Green space	38 %	
Agriculture		0 %
Lawn		0 %
Park		100 %
Wilderness		0 %
Total	100 %	
Density p/km2	**53763**	
Climate	humid subtropical	
Elevation	flat	



data source: estimated from reproduced plans

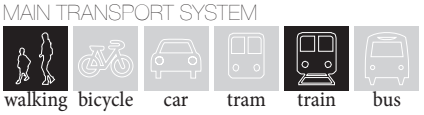
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

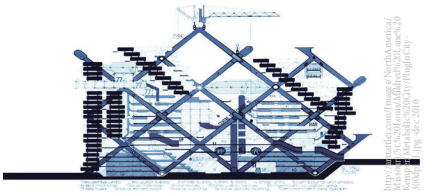


FUNDING

	public	private
Investor	○	ⓧ

PLUG-IN CITY

1964

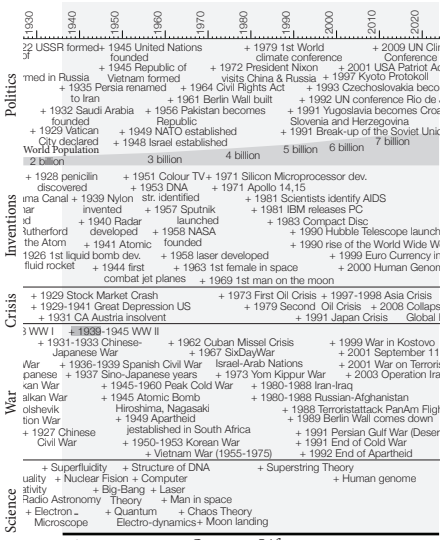


http://www.mattlefler.com/Image/North%20America/USA%20-%20East%20Mid-Atlantic%20-%20Pittsburgh/Pittsburgh%20City%20Skyline%20-%20Panorama%20-%20Mid-Atlantic%20-%20USA%20-%20East%20-%20Pittsburgh%20-

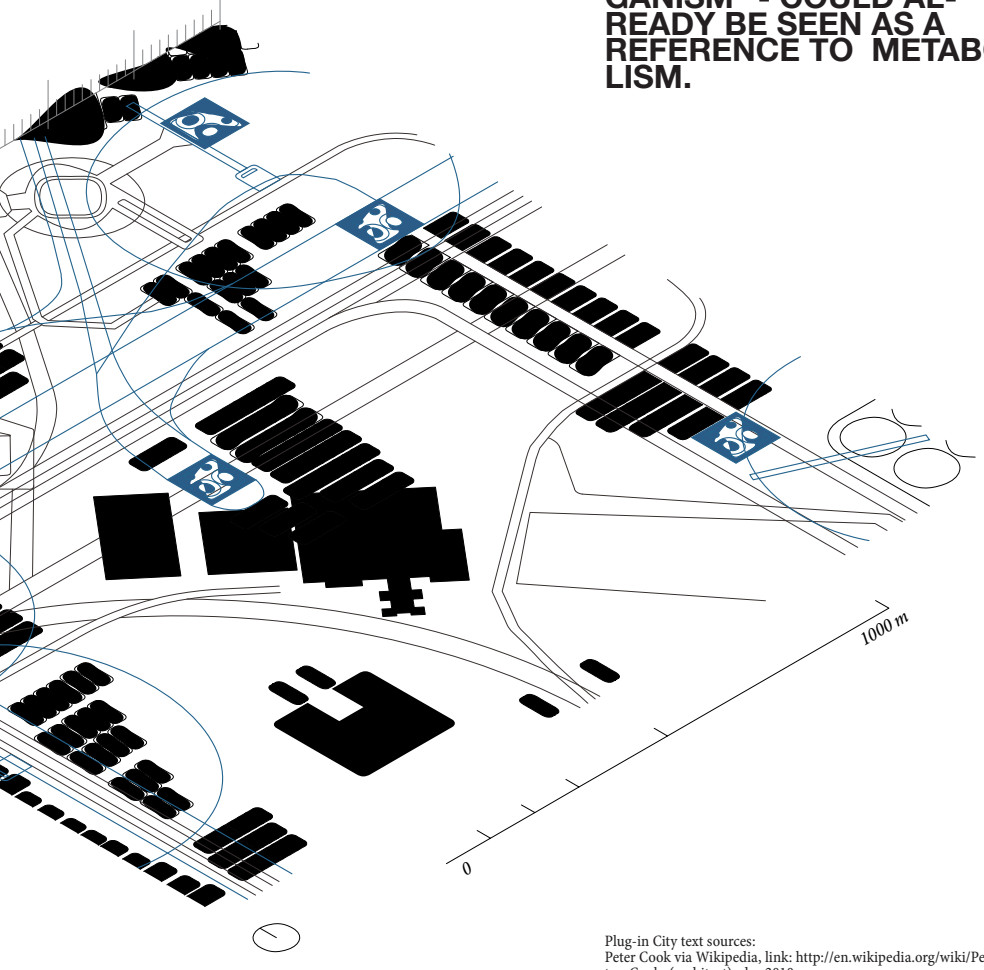


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

MEGA-STRUCTURE AS A HUGE FRAME, EVEN STREETS AND DIFFERENT FUNCTIONS COULD BE EASILY MOVED AND EXCHANGED.

USING MEDIA LIKE COMICS TO PROMOTE IDEAS. MAYBE THE "NEW COMIC" COULD BE THE WEB AND SOCIAL NETWORKS.

ALSO THE LATEST BOOK FROM BIG APPEARS JUST LIKE A COMIC, COMICS SEEM TO HAVE A REVIVAL.

"CITY AS A LIVING ORGANISM" - COULD ALREADY BE SEEN AS A REFERENCE TO METABOLISM.

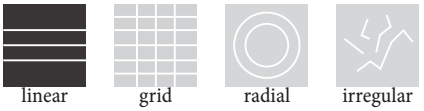
DATE OF ISSUE

Theory	*1964*	*Zoom and "Real" Architecture*
Project	*1964*	*Plug-In City*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missel Crisis*
Inventions	*1958*	*Laser developed*
	1963	*First female in Space*

CITY SYSTEM



linear grid radial irregular

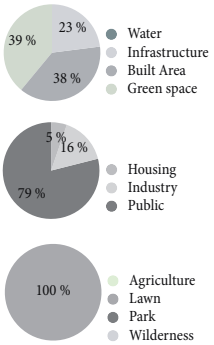
EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d		
Water	0 %	
Infrastructure	23 %	
Built Area	38 %	
Housing		2 %
Industry		6 %
Public		30 %
Green space	39 %	
Agriculture		0 %
Lawn		39 %
Park		0 %
Wilderness		0 %
Total	100 %	



Density p/km2	**98904**
Climate	temperate marine
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

DISTANCE TO PUBLIC TRANSPORT



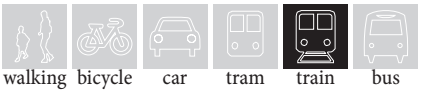
walkable inaccessible

BASE



context tabula rasa

MAIN TRANSPORT SYSTEM



walking bicycle car tram train bus

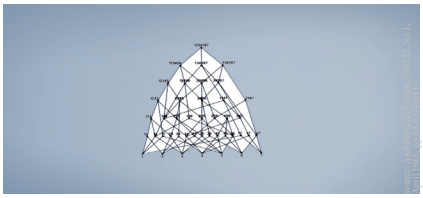
FUNDING

	public	private
Investor	○	ⓧ

Plug-in City text sources:
Peter Cook via Wikipedia, link: http://en.wikipedia.org/wiki/Peter_Cook_(architect) -dec 2010

A CITY IS NOT A TREE

1965





http://www.livinganeighborhoods.org/pics/farmerChris2004.jpg
dec 2010

THEORY

Notes on the Synthesis of Form - 1964

"These notes are about the process of design: the process of inventing things which display new physical order, organization, form, in response to function." This book, opening with these words, presents an entirely new theory of the process of design.

In the first part of the book, Mr. Alexander discusses the process by which a form is adapted to the context of human needs and demands that has called it into being. He shows that such an adaptive process will be successful only if it proceeds piecemeal instead of all at once. It is for this reason that forms from traditional unself-conscious cultures, moulded not by designers but by the slow pattern of changes within tradition, are so beautifully organized and adapted. When the designer, in our own self-conscious culture, is called on to create a form that is adapted to its context he is unsuccessful, because the preconceived categories out of which he builds his picture of the problem do not correspond to the inherent components of the problem, and therefore lead only to the arbitrariness, wilfulness, and lack of understanding which plague the design of modern buildings and modern cities.

In the second part, Mr. Alexander presents a method by which the designer may bring his full creative imagination into play, and yet avoid the traps of irrelevant preconception. He shows that, whenever a problem is stated, it is possible to ignore existing concepts and to create new concepts, out of the structure of the problem itself, which do correspond correctly to what he calls the subsystems of the adaptive process. By treating each of these subsystems as a separate subproblem, the designer can translate the new concepts into form. The form, because of the process, will be well-adapted to its context, non-arbitrary, and correct.

The mathematics underlying this method, based mainly on set theory, is fully developed in a long appendix. Another appendix demonstrates the application of the method to the design of an Indian village."[1]

PROJECT

A city is not a Tree - 1965

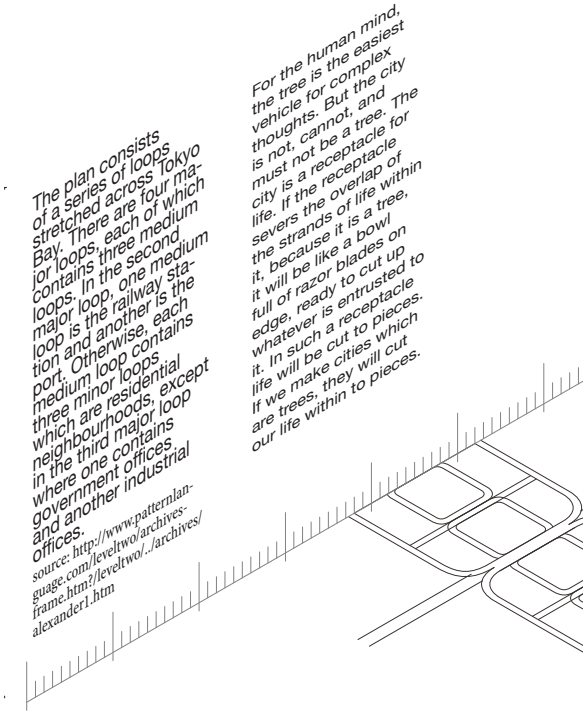
"Alexander's first opportunity to put his theories into action came in 1964 when the San Francisco Bay Area Rapid Transit system invited him to program its new subway stations at the University of California at Berkeley. Alter identifying 390 different functional requirements for the stations, Alexander realized that his stem and tree diagrams contained the same flaw as traditional organisational methodologies in that they could not account for accident, overlap, or continuity. Moreover, as critics had already pointed out with respect to his Notes, no matter how specific and multiple the parameters, such diagrams were ultimately arbitrary. This realization led him to following essay, a self-critique of his earlier analyses, in which he postulated the "semilattice," a concept adapted from set theory, as a more complex model."[1]
He writes:
"Take the separation of pedestrians from moving vehicles, a tree concept proposed by Le Corbusier, Louis Kahn, and many others. At a very crude level of thought this is obviously a good idea. It is dangerous to have sixty-mile-an-hour cars in contact with little children toddling. But it is not always a good idea. There are times when the ecology of a situation actually demands the opposite. Imagine yourself coming out of a Fifth Avenue store; your wife is limping. Thank God taxis."
... "How can a child become filled with his surroundings in a fenced enclosure? He cannot."
... "The isolated Campus", "What is the reason for drawing a line in the city so that everything within the boundary is university, and everything outside is non-university? Certainly it is not the structure which occurs in non-artificial university cities."
"There will always be many systems of activity where university life and city life overlap: pub crawling, coffee drinking, the movies, walking from place to place..." "The total separation of work from housing, started by Tony Garnier in his industrial city, then incorporated in the 1929 Athens Charter, is now found in every artificial city and accepted everywhere zoning is enforced. Is this a sound Principle?"[1]

"Now, why is it that so many designers have conceived cities as trees when the natural structure is in every case a semilattice? ... The tree is accessible mentally, and easy to deal with. The semilattice is hard to keep before the mind's eye, and therefore hard to deal with."[1]

DESIGNER

Name	***Christopher Alexander***
Nationality	*Austrian American*
Born	*October 4, 1936*
Died	
Profession	*Architect, Theorist, Writer,*

Christopher Alexander studied mathematics and architecture at Cambridge and Harvard. Beside Notes On The Synthesis Of Form, he also wrote the books, A patter Language or The Timeless Way of Building and many more.



1 Notes on the Synthesis of Form by Christopher Alexander via Harvard University press, link: http://www.hup.harvard.edu/catalog.php?isbn=9780674627512 - accessed Jan 2011

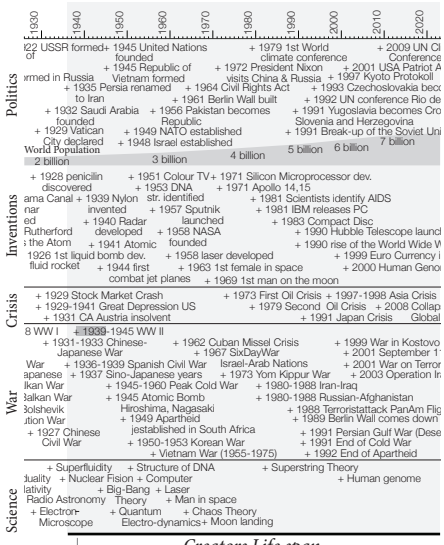
1 Architectural Forum, Vol 122, No 1, April 1965, pp 58-62

Further reading: Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman



COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span

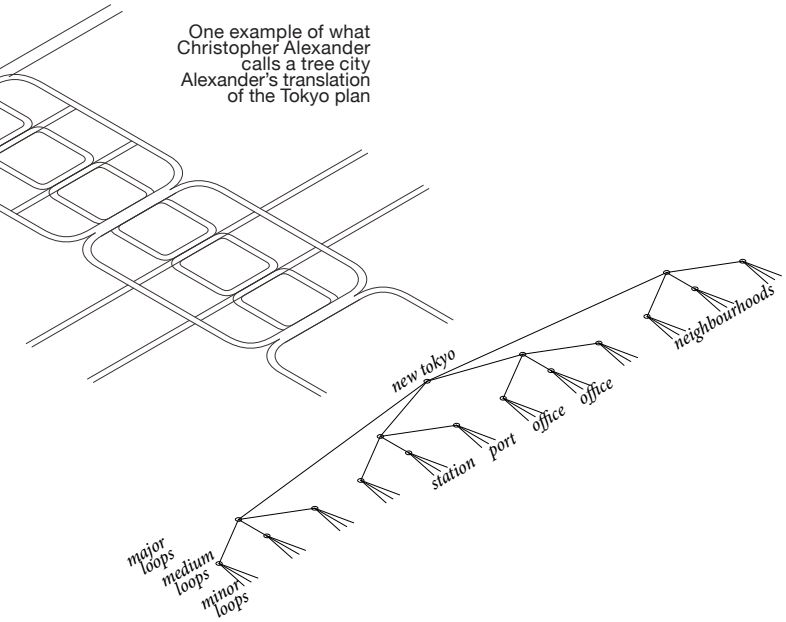
QUALITIES & CRITIQUES

ALEXANDER ANALYSED CITIES AND UTOPIAS LIKE THE TOKYO PLAN IN A WAY THAT THEY GIVE A CLEAR IDEA ON HOW THESE IDEAS FUNCTION.

ZONING LIKE THE ATHENS CHARTER ASKED FOR WAS NOT THE RIGHT SOLUTION AND THE WAY IT COULD WORK BETTER WOULD BE A SEMLIATTICE SYSTEM. A SYSTEM THAT'S MUCH MORE COMPLEX TO UNDERSTAND THAN A TREE LIKE SYSTEM.

MIXING FUNCTIONS INSTEAD OF SEPARATION.

One example of what Christopher Alexander calls a tree city Alexander's translation of the Tokyo plan



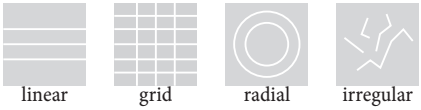
DATE OF ISSUE

Theory	*1964*	*Notes on the Synthesis of Form*
Project	*1965*	*A city is not a tree*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missel Crisis*
Inventions	*1958*	*Laser developed*
	1963	*First female in Space*

CITY SYSTEM



linear grid radial irregular

EXPENDABILITY



closed limited unlimited

FACTS

Land Use 2d
Water
Infrastructure
Built Area
- Housing
- Industry
- Public

Green space
- Agriculture
- Lawn
- Park
- Wilderness

Total

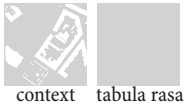
Density p/km2
Climate
Elevation

DISTANCE TO PUBLIC TRANSPORT



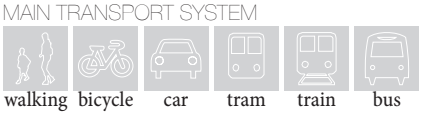
walkable inaccessible

BASE



context tabula rasa

MAIN TRANSPORT SYSTEM



walking bicycle car tram train bus

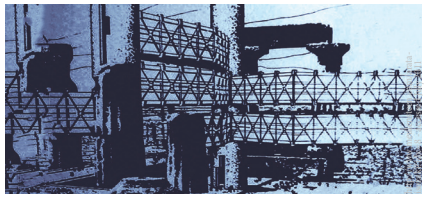
FUNDING

	public	private
Investor	○	ⓧ

A city is not a tree text sources:
Christopher Alexander via Wikipedia, link: http://en.wikipedia.org/wiki/Christopher_Alexander -dec 2010
Architectural Forum, Vol 122, No 1, April 1965, pp 58-62

JOINT CORE SYSTEM

1966





http://www.dorothyalexander.com/assets/architects/Arata%20Isozaki/Isozaki500px.jpg-dec 2010

THEORY

Invisible City - 1966

"During the fifty years that have passed since then, an absolute change in appearance has taken place before us. Rapid technological developments have fundamentally altered the urban situation and our ways of conforming to it.

...

Ever something fixed, like a work of architecture, when set down in the constantly metamorphosing city, is part of growth, change and metabolism. All design methods posit understanding of the section revealed by the severance (decision) at a certain point in time. They are all, therefore, related to concrete acts. The designer must attempt to foresee from the present moment the ultimate form of the object he is designing. The ultimate condition is the point of origin to which all things return.

...

Some of the most important visionary plans of the time include Antonia Sant' Elia's Citta Nuova; Bruno Taut's Alpine Architecure, gleaming like crystal on the tops of the Alps; Frederick Kiesler's Space City, with its infinite development possibilities; the immense horizontal and vertical structures of the constructivist city by Iakov Chernikhov and others;

...

The course of urban design, according to my system, can be classified into four stages:

1. The substantial stage, in which direct connections are made between architectural forms and urban planning; 2. The functional stage, based on abstract principles developed by CIAM; 3. The structural stage, which we first began to notice in the 1950s; 4. The semiotic, or symbolic, stage, which we are only beginning to develop now.

...

The conditions below must be developed as future design themes, but they can be found existing in the city right now.

1. The environment will be enveloped in a protective membrane for the sake of preserving definite, balanced conditions;
2. Spaces will be extensively interchangeable;
3. The environment will include a wide variety of movable equipment;
4. A man-machine system will be developed;
5. This system will possess a self-instructing feedback channel.

Although, in the invisible city, the value of human sight will diminish, the five senses will be more greatly stimulated than they are in the city today. "[1]

PROJECT

Joint Core System - 1966

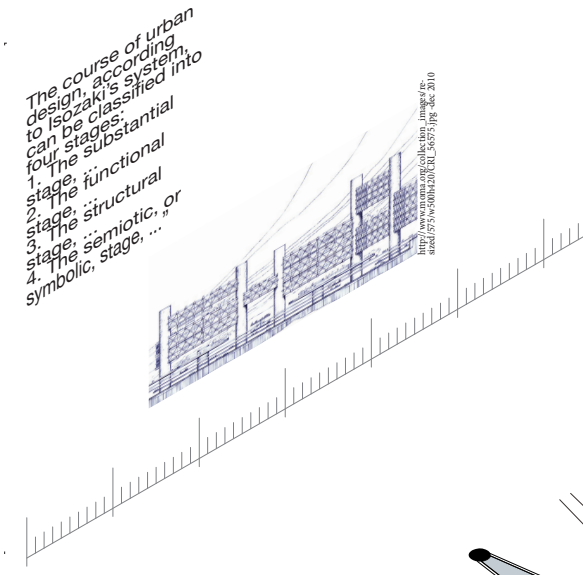
"The Shinjuku Project is better known as the City in the Air because it's joint core system. This project was design as a counterproposal for was dominate the skyline in Tokyo today. Their purpose for the design was to divide the district into rectangular sections and erect sheer vertical structures on them (joint core system). What the clients saw the proposal as was that Tokyo need a new metropolitan look that only could be accomplished by putting the city in the air."[1]

"In Arata Isozaki's unbuilt design for the Joint Core System, spatial construction, massive pylons support elevated transportation, housing and office systems as well as parks and walkways, suspended above the existing city. This scheme was undertaken a time when Kenzo Tange and a group of five young architects working in his office, known as the Metabolists, were creating radial solutions for restructuring Tokyo's rapid and uncontrolled postwar growth. As a member of Tange's office, Isozaki was inspired by Tange's proposal for a multilevel urban construction above the city. But, unlike Tange's plan, in which a square support system limits expansion to four directions, Isozaki's round columns permit growth in any direction."[2]

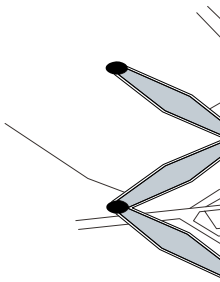
DESIGNER

Name	***Arata Isozaki***
Nationality	*Japanese*
Born	*July 23, 1931*
Died	
Profession	*Architect, Designer, Urbanist, Writer*

Arata Isozaki graduated at the University of Tokyo in 1954, gained working experience while working for Kenzo Tange and the Tokyo and established his office in 1963.
His projects are situated all around the world.



http://www.moma.org/collection_images/resized/575/w500h420/CRL_56575.jpg -dec 2010



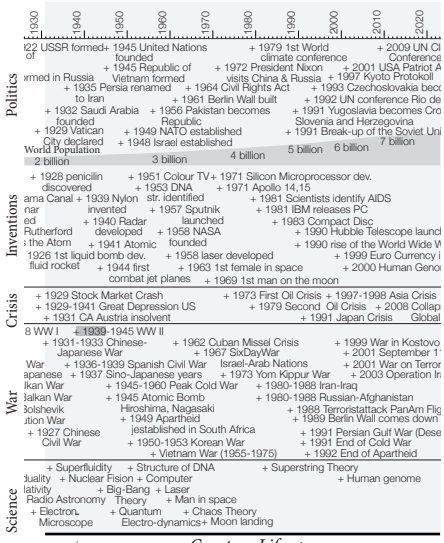
1 *Architecture Culture: 1943-1968 by Joan Ockman, Columbia Books of Architecture, p. 402-407*

1 *Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991*
2 *The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art*

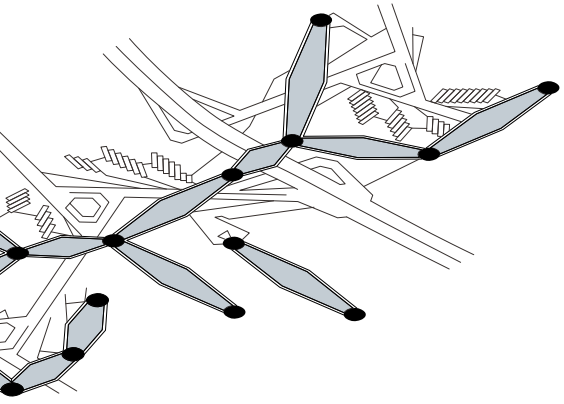


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

THE LINEAR SYSTEM OF TANGE HAD IT'S LIMITS IN TERMS OF DIRECTIONS. A ROUND CORE AND BRIDGES FROM CORE TO CORE MADE IT POSSIBLE TO EXPAND IN ALL DI-RECTIONS.

"THE CONDITIONS BE-LOW MUST BE DEVEL-OPED AS FUTURE DESIGN THEMES, BUT THEY CAN BE FOUND EXISTING IN THE CITY RIGHT NOW.
1. THE ENVIRONMENT WILL BE ENVELOPED IN A PROTECTIVE MEMBRANE FOR THE SAKE OF PRE-SERVING DEFINITE, BAL-ANCED CONDITIONS;
2. SPACES WILL BE EXTENSIVELY INTER-CHANGEABLE;
3. THE ENVIRONMENT WILL INCLUDE A WIDE VARIETY OF MOVABLE EQUIPMENT;
4. A MAN-MACHINE SYS-TEM WILL BE DEVEL-OPED;
5. THIS SYSTEM WILL POSSESS A SELF-IN-STRUCTING FEEDBACK CHANNEL"

Joint Core System text sources:
Arata Isozaki web page, link: http://www.isozaki.co.jp/ -dec 2010
Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991
The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art

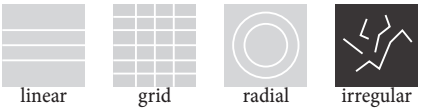
DATE OF ISSUE

Theory	*1966*	*Invisible city*
Project	*1966*	*Joint Core System*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missel Crisis*
Inventions	*1958*	*Laser developed*
	1963	*First female in Space*

CITY SYSTEM

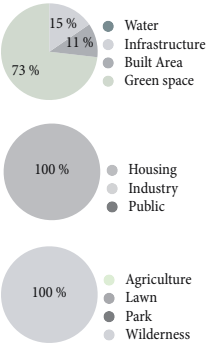


EXPENDABILITY



FACTS

Land Use 2d		
Water	0 %	
Infrastructure	17 %	
Built Area	12 %	
Housing		0 %
Industry		0 %
Public		0 %
Green space	79 %	
Agriculture		0 %
Lawn		0 %
Park		0 %
Wilderness		100 %
Total	108 %	
Density p/km2		
Climate	humid subtropical	
Elevation	flat	



data source: estimated from reproduced plans

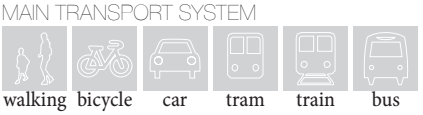
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



FUNDING

	public	private
Investor	ⓧ	◯

CONTINUOUS MONUMENT

1969





THEORY

Superarchitettura - 1966

"Superarchitettura is a theoretical & conceptual framework, whose physical definition has been given at the homonymous 1966 exhibition, held at Jolly2, an art gallery of Pistoia, Italy. According to the Radical Manifesto, "Superarchitettura is the architecture of superproduction, superconsumption, superinduction to consume, the supermarket, the superman, super gas".
Superarchitettura is the overcoming of centuries of constant and consistent art vision. It is the overtaking of ancient artistic practices in favour of new avant-gardes, the Sixties so-called "neo avant-gardes".
Superarchitettura's movement combined the inventiveness of Pop Art with the dynamics of mass production (for the latter, see its definition according to Mackintosh' ideas and conceptions).

The Superarchitettura theoretical framework, part of the Radical Design movement, after its beginning, got split up in two main philosophical entities and interpretations, the first incarnated by Archizoom, the second by Superstudio. Archizoom and Superstudio held the Exhibition. Such event represented a milestone in the Italian Radical Design."[1]

"Quoting Karl Marx, the father figure of communism, and Guy Debord, the theoretician of the society of the spectacle, Superstudio were at once esoteric, youthful, and exuberant. Lying on the border of science fiction, their work was a quintessential product of the imagination and ideology of the period, and still surprises and inspires radical architects today. Paola Antonelli"[2]

PROJECT

The Continuous Monument - 1969

Was a architectural model for "Total Urbanisation", a critique of the Megastructure.
"The Continuous Monument was a reaction to the Pop-culture and hyper-saturated projects of the 1960s by the Italian "radical architecture" group Superstudio. The earth-spanning gridded network made of indeterminate material was to contain the entire human population and to connect the key expressions of humanity around the world-large monuments like the Colosseum, the Kaaba and the Taj Mahal. In a flippant retort to both Modernism and megastructural architecture, the infinite grid extends and undermines the supposedly rational systems of Le Corbusier and the International Style. Here, as the grid runs through Manhattan, bits of the existing city are surrounded and treated as historical artifacts in a Museum-like setting."[1]

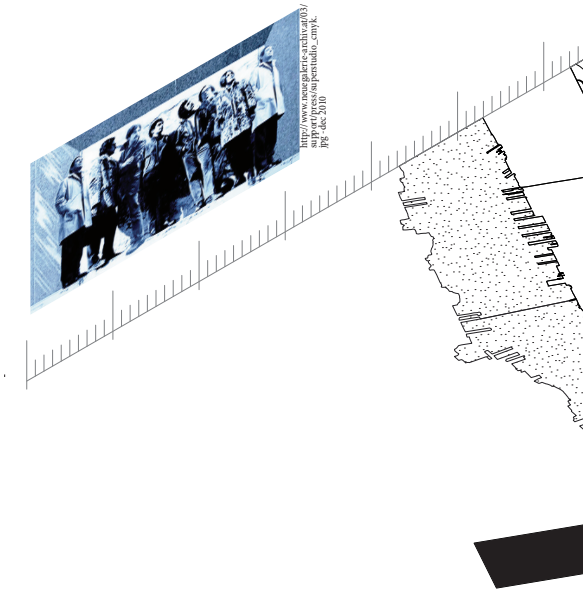
Paola Antoelli described the Project as:
"This image depicts a Manhattan "by the yard," a monumental extrusion of the city scape's profile. In Natalini's words, the Continuous Monument is "a single piece of architecture to be extended over the whole world. Its static perfection moves the world through the love that it creates, through serenity and calm, and through its sweet tyranny."[2]

DESIGNER

Name	***Superstudio***
Nationality	*Italian*
Born	*1966*
Died	
Profession	*Architect, Designer, Urbanist, Writer*

Superstudio was based in Florence and founded by Adolfo Natalini and Chritiano Toraldo di Francia.
Natalini and di Francia went to school with Archizoom founder Andreas Branzi.
"The members of Superstudio, like many of their architect contemporaries, were searching for a new paradigm for the city. They had an optimistic take on urban sprawl, which today is viewed as simultaneously inevitable, unsustainable, and largely negative but at the time seemed part of a global movement toward urbanization that appeared to many as a glorious model for the future."[1]

1 Matilda McQuaid, ed., Envisioning Architecture: Drawings from The Museum of Modern Art, 2002, p. 156



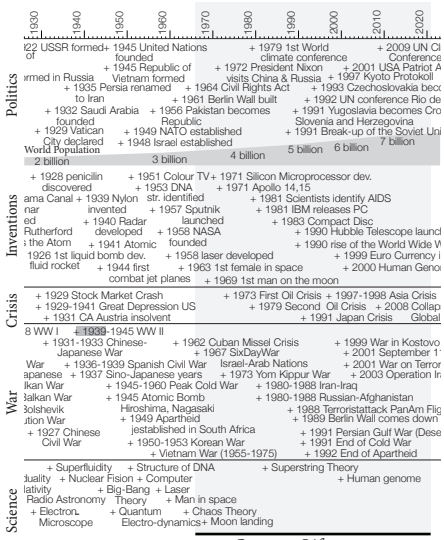
1 Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010
2 Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156

1 49 cities, WORKac, Storefront for Art and Architecture
2 Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156

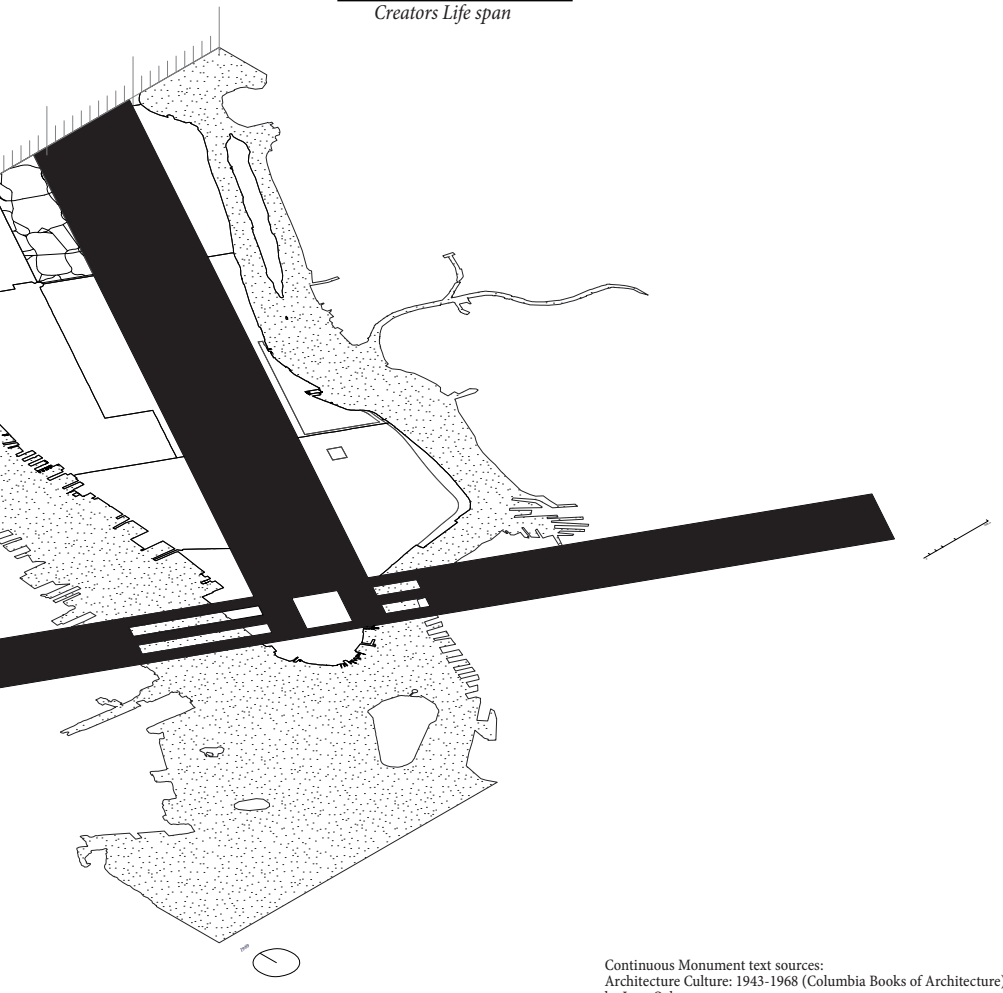


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

CONTINUOUS MONUMENT IS A CRITIQUE ON THE GRID OF THE MODERNISM MOVEMENT. AT THIS TIME EVERYTHING HAD TO BE DESIGNED FROM THE CITY TO THE FURNITURE AND NOTHING WAS OPEN TO THE INDIVIDUAL.

SUPERSTUDIO GAVE EVERYONE IT'S PLACE ON EARTH WHERE EVERYONE COULD DECIDE WHAT HE WOULD WANT TO DO INSIDE HIS PLACE.

Continuous Monument text sources:
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman

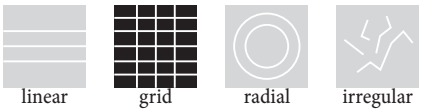
DATE OF ISSUE

Theory	*1966*	*Superarchitectura*
Project	*1969*	*Continuous Monument*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missile Crisis*
	1967	*SixDayWar Israel-Arab N.*
Inventions	*1963*	*First female in space*
	1969	*First man on the moon*
Crisis	*1973*	*First Oil Crisis*

CITY SYSTEM

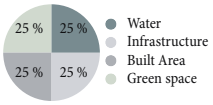


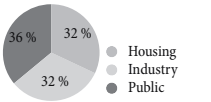
EXPENDABILITY

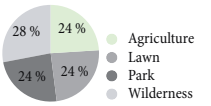


FACTS

Land Use 2d		
Water	25 %	
Infrastructure	25 %	
Built Area	25 %	
Housing		8 %
Industry		8 %
Public		9 %
Green space	25 %	
Agriculture		6 %
Lawn		6 %
Park		6 %
Wilderness		7 %
Total	100 %	







Density p/km2	**84342**
Climate	humid subtropical
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

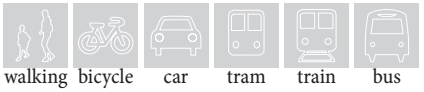
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

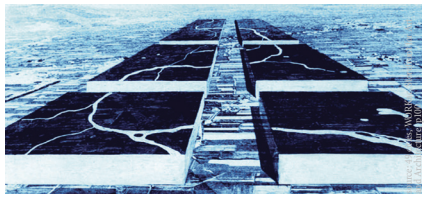


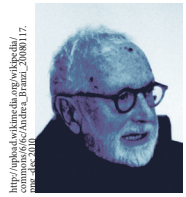
FUNDING

	public	private
Investor	○	ⓧ

NO-STOP-CITY

1969





http://upload.wikimedia.org/wikipedia/commons/6/64c/Andrea_Branzi_20080117.jpg - dec 2010

THEORY

Superarchitettura - 1966

"Superarchitettura is a theoretical & conceptual framework, whose physical definition has been given at the homonymous 1966 exhibition, held at Jolly2, an art gallery of Pistoia, Italy. According to the Radical Manifesto, "Superarchitettura is the architecture of superproduction, superconsumption, superinduction to consume, the supermarket, the superman, super gas".
Superarchitettura is the overcoming of centuries of constant and consistent art vision. It is the overtaking of ancient artistic practices in favour of new avant-gardes, the Sixties so-called "neo avant-gardes".
Superarchitettura's movement combined the inventiveness of Pop Art with the dynamics of mass production (for the latter, see its definition according to Mackintosh' ideas and conceptions).

The Superarchitettura theoretical framework, part of the Radical Design movement, after its beginning, got split up in two main philosophical entities and interpretations, the first incarnated by Archizoom, the second by Superstudio. Archizoom and Superstudio held the Exhibition. Such event represented a milestone in the Italian Radical Design."[1]

"Quoting Karl Marx, the father figure of communism, and Guy Debord, the theoretician of the society of the spectacle, Superstudio were at once esoteric, youthful, and exuberant. Lying on the border of science fiction, their work was a quintessential product of the imagination and ideology of the period, and still surprises and inspires radical architects today. Paola Antonelli"[2]

PROJECT

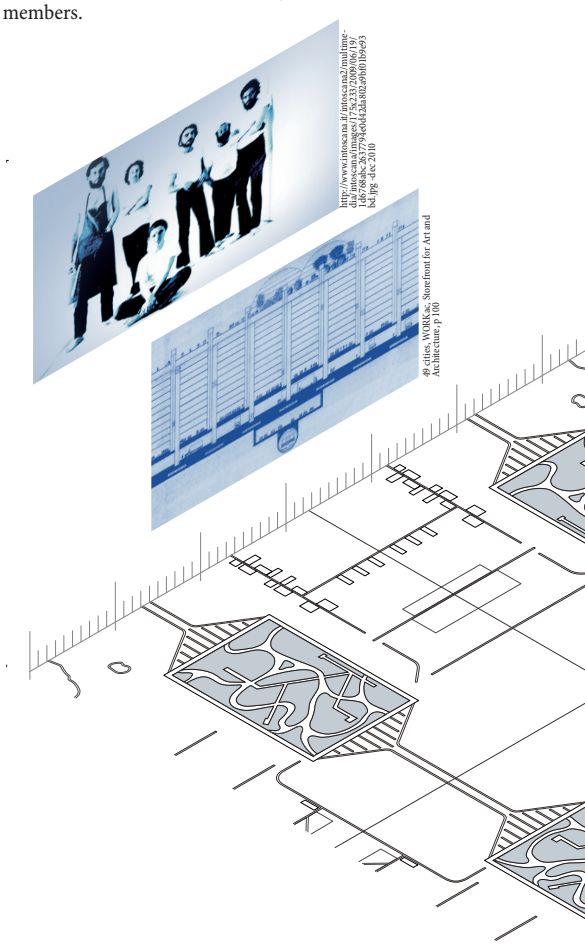
No-Stop-City - 1969

"1969, the Archizoom group, while carrying out an experimental work in the field of design, also undertook a research on environment, mass culture and the city, which led to the project No-Stop City. For the first time, a book presents this work which coincides with the zenith of the Italian Radical movement. Gathering all the texts and drawings, this book reveals to us the "Endless City" intertwining architecture with objects and the triumphant consumer society, giving an interpretation where the repetition of a single central element, a building or a group of objects makes up, through a play of mirrors, a catatonic environment, a boundless supermarket, a now reached future to be composed. No-Stop City is a qualityless city in which individual can achieve his own housing conditions as a creative, freed and personal activity. The theoretical project was first published in the review Casabella in 1970, under the title: "City, assembly line of social issues, ideology and theory of the metropolis". As Andrea Branzi puts it, this projects implements "the idea of the fading away of architecture within metropolis". No-Stop City is a critical Utopia, a model of global urbanization where design is the essential conceptual instrument used in the mutation of living patterns and territories. This "endless city" is organized the same way as a factory or a supermarket. It presents an iterative pattern with multiple centres and a neutral, even and unbroken. No-Stop City offers itself as a kind of car park fitted out with inhabitable furniture whose use can be adapted to the circumstances. Interior spaces, air- conditioned and artificially lit, allow the organisation of new inhabiting typologies, open and unbroken, intended for new forms of association and community life. "Considering architecture as an intermediate stage of urban organization that has to be overstepped, No-Stop City establishes a direct link between metropolis and furnishing objects: the city becomes a series of beds, tables chairs and cupboards; the domestic and urban furniture fully coincide. To qualitative utopias, we oppose the only possible utopia: that of Quantity"
(Andrea Branzi) *Archizoom Associati(Andrea Branzi, Gilberto Corretti, Paolo Deganello, Massimo Morozzi, Dario & Lucia Bartolini), first group of the Italian Radical Architecture movement (1966-1974)."[1]

DESIGNER

Name	***Andrea Branzi***
Nationality	*Italian*
Born	*1938*
Died	
Profession	*Architect, Designer, Urbanist, Writer,*

Andrea Branzi founded with Paolo Deganello, Massimo Morozzi and Gilberto Coretti the Archizoom associates. Branzi promotes the Superarchitectura theoretical framework, which led to Anti-Design.
1983 Domus Academy was founded and Branzi was one of the founding members.



http://www.intoscana.it/intoscana2/multimedia/intoscana/images/175x233/2009/06/19/1d6c7f4d8c2577947e6d42da802e9b0109e95b4.jpg - dec 2010

#9 cities, WORK.sc, Storefront for Art and Architecture, p 100

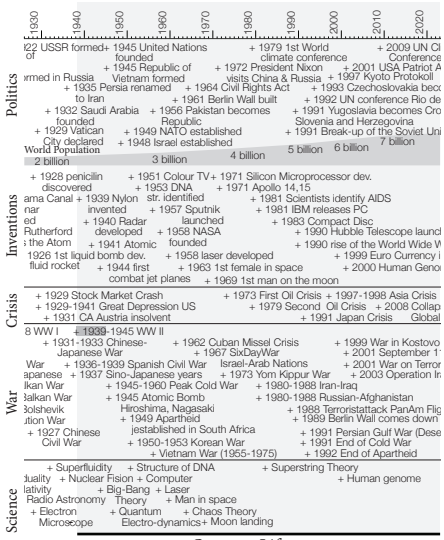
1 Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010
2 Envisioning Architecture: Drawings from The Museum of Modern by Matilda McQuaid, Art, 2002, p. 156

1 No-Stop City by Archizoom, link: http://arttorrents.blogspot.com/2007/04/no-stop-city-by-archizoom-associati.html - July 2011



COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span

QUALITIES & CRITIQUES

APPLYING FUNCTIONS TO EVERY PART OF A BUILDING OR A CITY TAKES AWAY FREEDOM.

JUST QUANTITY OF SPACE, NOT QUALITY WOULD GIVE THE FREEDOM TO ADAPT SPACE THE WAY IT IS NEEDED FOR.

THE PROJECT IS ALSO A CRITIQUE ON LOOSING IDENTITY - THE ONLY IDENTITY IF EVERYTHING LOOKS THE SAME IS THE IDENTITY THROUGH CONSUMPTION.



No Stop City text sources:
Andreas Branzi via Wikipedia, link: http://en.wikipedia.org/wiki/Andrea_Branzi -dec 2010
Medienkunstnetz, link: http://www.medienkunstnetz.de/werke/no-stop-city/ -may 2011

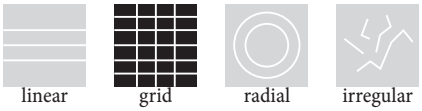
DATE OF ISSUE

Theory	*1966*	*Superarchitectura*
Project	*1969*	*No-Stop City*

HISTORICAL CONTEXT

Politics	*1961*	*Berlin Wall built*
	1964	*Civil Rights Act*
Wars	*1955 - 1975*	*Vietnam War*
	1962	*Cuban Missile Crisis*
	1967	*SixDayWar Israel-Arab N.*
Inventions	*1963*	*First female in space*
	1969	*First man on the moon*
Crisis	*1973*	*First Oil Crisis*

CITY SYSTEM

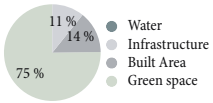


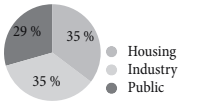
EXPENDABILITY

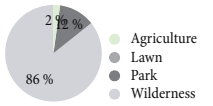


FACTS

Land Use 2d		
Water	0 %	
Infrastructure	13 %	
Built Area	17 %	
Housing		6
Industry		6
Public		5
Green space	91 %	
Agriculture		2 %
Lawn		0 %
Park		11 %
Wilderness		78 %
Total	121 %	







Density p/km2	**41801**
Climate	temperate marine
Elevation	flat

data source: 49 cities, WORKac, Storefront for Art and Architecture

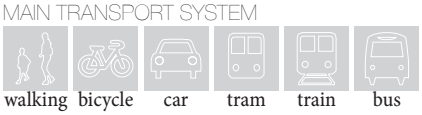
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

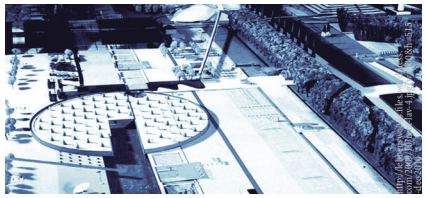


FUNDING

	public	private
Investor	○	ⓧ

PARK DE LA VIL-LETTE

1982



http://www.eikongraphia.com/wordpress/wp-content/Rem_Koolhaas_Small.jpg - accessed dec 2010



http://www.eikongraphia.com/wordpress/wp-content/Rem_Koolhaas_Small.jpg - accessed dec 2010

THEORY

Delirious New York - 1978

"Unlike books which look at the architectural growth in Manhattan in terms of the skyscraper, Rem Koolhaas looks at it in terms of Coney Island (a "foetal" Manhattan), and as a world of illusion brought to life, but still lacking a sense of the real. The processes he proposes are not those of the invention of the elevator and steel frame construction but rather the cardboard of Coney Island mixed with the block grid that is Manhattan.

The block grid was conceived of in 1807, breaking the island into 2028 blocks, totally indifferent to topography. It was the imposition of the mental over the real that forms the basis of Manhattan. Like Coney Island, the form the city took overlaid on that grid shifted out of the real into the fantastic with the advent of the skyscraper. In Koolhaas's terms, the architecture of Manhattan became lobotomized. The external presenting the illusion of what a proper and monumental urban structure was, the internal being divorced entirely from the external and being only what it was, be it fantasy or the mundaneness of everyday life. Entering a building in Manhattan, even changing floors, could become an act of moving between worlds. The entire conception of the skyscraper was a shell housing layers of reality, each spanning an urban island of the city block, each layer virgin in relation to those around it.

What keeps Manhattan running, in his view, is congestion, a world constantly on the edge of total gridlock. The reason Le Corbusier could not conquer Manhattan is that his urban form removed the congestion. This congestion, in a realm divorced from reality, forces the metropolis ever upward into the speculative, into a world of towers filled with, built on, and peopled with human desires.

Some salient quotes:

Manhattan is an accumulation of disasters that never happen. [p.20]

[...] a new routine that is, in a sense, a record of the crisis: a systemization of the concept of "lack of inspiration"; variations on the theme of "no content", founded on a process, a display of inhuman coordination that relies on frenzied synchronization, an exhilerating surrender of individuality to the automatism of a synthetic year-round rite of spring. [p.184]

Dali's 'discovery' of an anti-modern Manhattan has been strictly verbal, its conquest therefore complete. Without tampering with its physique he has recast the Metropolis as an anti-functional accumulation of atavistic monuments engaged in a process of continuous poetic reproduction. [p.224]"[1]

1 DAAG web page, link: http://www.daaq.net/folio/bibliography/b_koolhaas.html -dec 2010

Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997

PROJECT

Park de la Villette - 1982

"OMA's proposal for Parc de La Villette has been studied to a great extent because of its clever manifestation of Rem Koolhaas' theories, particularly those explored in his book Delirious New York. In this book Koolhaas is fascinated with the idea of congestion. For him the skyscraper, particularly the Downtown Athletic Club, encapsulates the Culture of Congestion. He argues that the American skyscraper works as a Social Condenser: "A machine to generate and intensify desirable forms of human intercourse. This idea is translated into Parc de La Villette almost literally. Koolhaas aims at producing a Social Condenser by organizing the floor plan of the park basically as that of the section of a skyscraper. He describes it as "a catalog of 40 or 50 different activities, arranged like floors... In this way we could realize the congestion or density of the skyscraper without referring to building or to architecture in any way.

Congestion is important to Koolhaas because it describes the contemporary metropolitan lifestyle. Urban activities are unstable, uncertain, they overlap and mutate. Therefore to provide potential space for ever-changing and unprecedented activities Koolhaas strategy is to "combine architectural specificity with programmatic indeterminacy. By juxtaposing and superimposing different layers of the composition, programs exchange and extend creating a horizontal congestion."[1]

The idea comprises 5 steps:

1. The major programmatic components are distributed in horizontal bands across the site, creating a continuous atmosphere in its length and perpendicular, rapid change in experience.
2. Some facilities - kiosks, playgrounds, barbecue spots are distributed mathematically according to different point grids.
3. The addition of a "round forest" as architectural elements.
4. Connections
5. Superimpositions

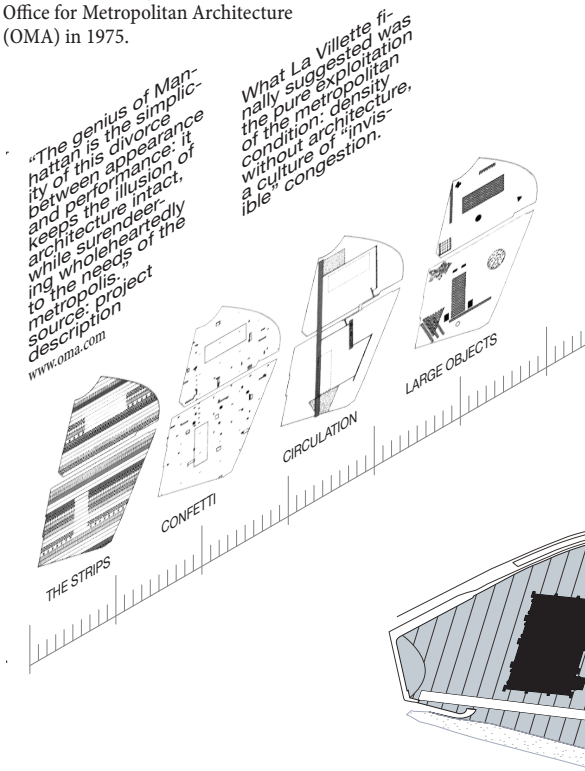
1 Park de la Villette web page, link: www.parcdelavillette.wikispaces.com/file/.../Parc+de+la+Villette,+Rem+Koolhaas.pdf

DESIGNER

Name	***Rem Koolhaas***
Nationality	*Dutch*
Born	*November 17, 1944*
Died	
Profession	*Architect, Architectural Theorist, Urbanist, Writer*

Rem Koolhaas first studied at the Film and Television Academy before he changed to architecture. After his education at the Architecture Association London he worked for Oswald Mathias Ungers at the Cornell University.

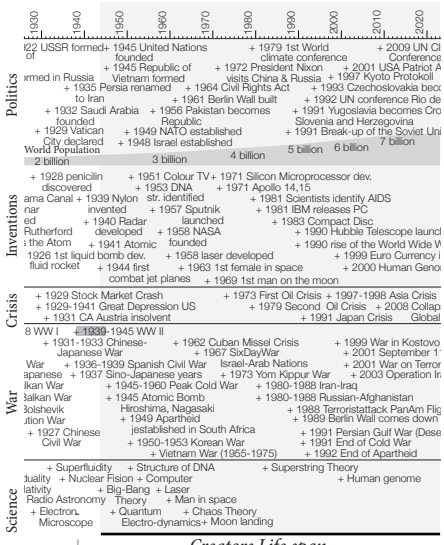
With Madelon Vriesendorp, Elia Zenghelis and Zoe Zenghelis he founded the Office for Metropolitan Architecture (OMA) in 1975.





COM-PARATIVE VALUES

HISTORICAL CONTEXT



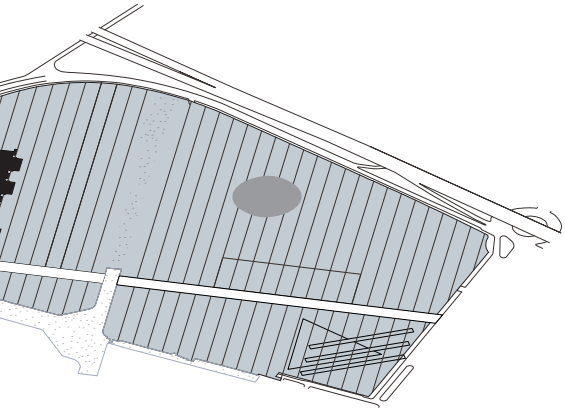
Creators Life span

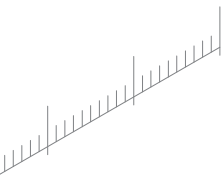
QUALITIES & CRITIQUES

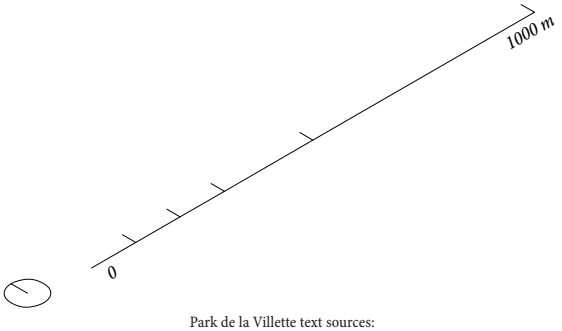
TRANSFORMING A THEORY OF MANHATTAN INTO A NEW PROJECT. HORIZONTAL CONGESTION THROUGH THE TRANSLATION OF VERTICAL CONGESTION, A METHOD TO TRANSLATE THE URBAN ACTIVITIES FROM A SKYSCRAPER IN NEW YORK, THE DOWNTOWN ATHLETIC CLUB, WHICH KOOLHAAS DESCRIBES AS "UNSTABLE AND UNCERTAIN", INTO THE DENSE PROGRAM OF THE COMPETITION FOR A NEW PARK IN PARIS.

USING STRIPS TO ORGANIZE THE MAJOR PROGRAM CREATED A CONTINUOUS ATMOSPHERE LIKE THE OPEN FLOOR PLAN OF A SKYSCRAPER.

DISTURBING THE PROGRAM WITH KIOSKS, PLAYGROUNDS, ... THE CONNECTION OF VERY DIFFERENT PROGRAMS WAS ACHIEVED.







Park de la Villette text sources:
Rem Koolhaas via Wikipedia, link: http://en.wikipedia.org/wiki/

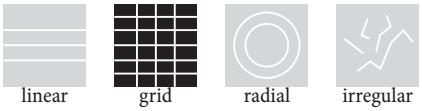
DATE OF ISSUE

Theory	*1978*	*Delirious New York*
Project	*1982*	*Park de la Villette*

HISTORICAL CONTEXT

Politics	*1979*	*1st World Climate Conf.*
Wars	*1980-1988*	*Iran-Iraq War*
Inventions	*1969*	*First man on the moon*
	1981	*AIDS identified*
	1981	*IBM releases 1st PC*
Crisis	*1973*	*1st Oil Crisis*
	1979	*2nd Oil Crisis*

CITY SYSTEM

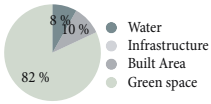


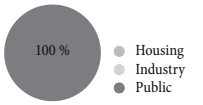
EXPENDABILITY

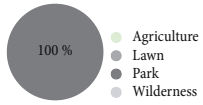


FACTS

Land Use 2d		
Water	8 %	
Infrastructure	0 %	
Built Area	10 %	
Housing		0 %
Industry		0 %
Public		100 %
Green space	82 %	
Agriculture		0 %
Lawn		0 %
Park		100 %
Wilderness		0 %
Total	100 %	
Density p/km2	**44914**	
Climate	oceanic	
Elevation	flat	







data source: estimated from reproduced plans

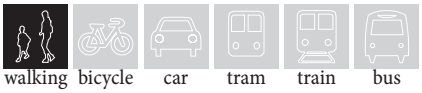
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



FUNDING

	public	private
Investor	ⓧ	○

FRESH KILLS PARK

2004





THEORY

Terra Fluxus - 1993

In the essay entitled "Terra Fluxus," James Corner describes the main qualities of Landscape Urbanism:

"Process in time:
Urbanization is a dynamic process characterized more by terms like fluidity, spontaneous feedback, and non-linearity, than stability, predictability, or rationality. Ecology and systems theory are concepts inherent to the city.
Surface, not form:
Horizontality and sprawl in places like Los Angeles, Atlanta, Houston, San Jose, and the suburban fringes of most American cites is the new urban reality. As many theories of urbanism attempt to ignore this fact or retrofit it to new urbanism, landscape urbanism accepts it and tries to understand it. Traditional notions of program and structure are not useful in this diffuse urban condition - their scope is small and limiting. Landscape urbanism uses 'territories' and 'potential' instead of 'program' to define a place's use; it finds thinking in terms of adaptable 'systems' instead of rigid 'structures' as a better way to organize space.
Form:
The traditional character of the city; formlessness characterizes nature, that which has been untouched by human intent. This city/nature duality is critical to most theories of the city and nature. Landscape urbanists argue that this is duality is naive and argue for a conflation of landscape and building."[1]

Some quotes from Terra Fluxus:
"Today, however, it is not merely interest in vegetation, earthworks, and site planning that we see espoused in various school of design and planning, but also a deep concern with landscape's conceptual scope; with it's capacity to theorize sites, territories, ecosystems, networks, and infrastructures, and to organize large urban fields."

"A most canonical instance of this, of course, is Olmsted's Central Park, intended as relief from the relentless urban fabric of Manhattan – even though the catalytic effect that Central Park exerted on surrounding real estate developments links it more closely with landscape urbanist model. In this instance, landscape drives the process of city formation."[2]

PROJECT

Fresh Kills Park - 2004

"45% of the 2,200-acre site is composed of four landfill mounds, which range in height from 90 feet to 225 feet. The remaining 55% of the site is made up of creeks, wetlands and dry lowland. These flatter areas and open waterways host many things from precisely engineered landfill monitoring infrastructure to intact wetland and wildlife habitats. The land types will affect the programming of the park. Before it became a landfill in 1948, Fresh Kills was much like the rest of northwest Staten Island; that is, most of the land was low lying with creeks and marsh. Fresh Kills has since developed its own unique ecology."[1]

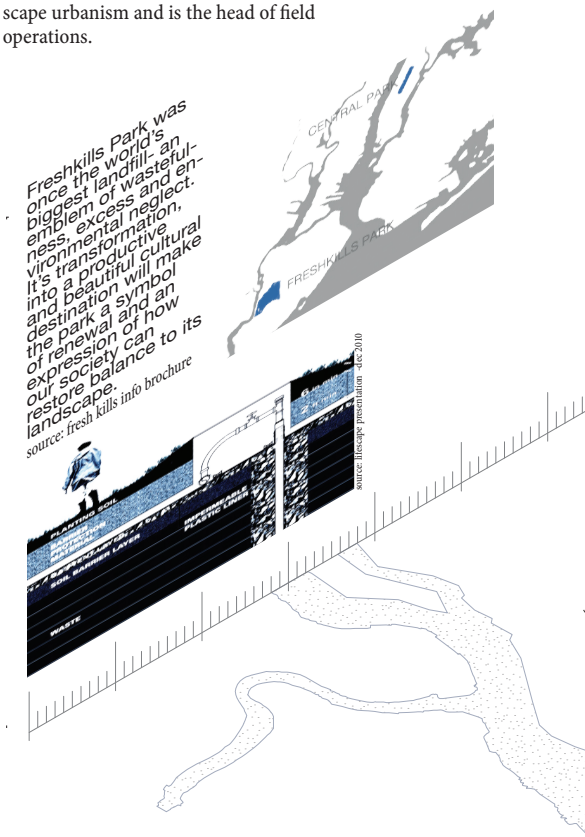
"Programming:
Freshkills Park will host an incredible variety of public spaces and facilities for social, cultural and physical activity, for learning and play. The site is large enough to support many sports and programs that are unusual in the city, possibilities of which include horseback riding, mountain biking, nature trails, kayaking, and large–scale public art."[2]

"Freshkills Park will have five main areas:
- The Confluence is the cultural and waterfront recreation core of the park including, Creek Landing which will be designed for waterfront activities and the Point is designed to accommodate sports fields, event spaces, lawns, artwork and educational programming. A long promenade along the water's edge will support restaurants, a banquet facility and an open–air market roof.
- North Park will be characterized by simple, vast natural settings—meadows, wetlands and creeks.
- South Park will provide large natural settings and active recreational spaces, including soccer fields, an equestrian facility and mountain biking pathways.
- East Park will be defined by the park road.
The Richmond Avenue side of East Park has been conceptualized as a nature education area with specially designed wetlands, boardwalks and exhibits and public art installations.
- West Park hosts the site's largest mound. An enormous earthwork monument is envisioned atop the mound in remembrance of the September 11 recovery effort that occurred in this location. Set on a vast hilltop wildflower meadow, the earthwork would be open to the sky and offer spectacular 360–degree views of the region, including a direct line of sight to lower Manhattan."[2]

DESIGNER

Name	***James Corner***
Nationality	*British*
Born	*1961*
Died	
Profession	*Architect, Landscape architect. Designer, Urbanist, Writer*

James Corner graduated at Manchester Metropolitan University and received a Master in Landscape Architecture at the University of Pennsylvania. Corner develops theories about Landscape urbanism and is the head of field operations.



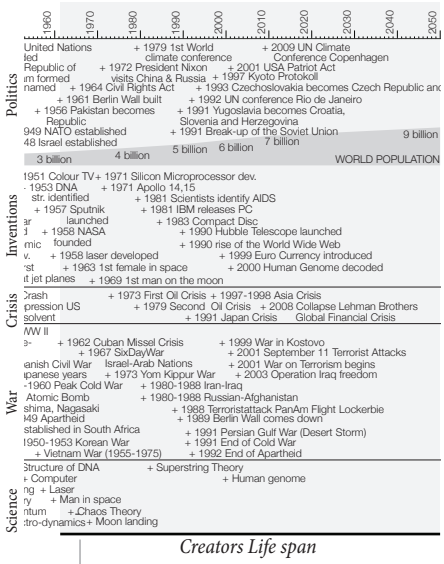
1 *Landscape Urbanism via Wikipedia, link: http://en.wikipedia.org/wiki/Landscape_urbanism*
2 *The Landscape Urbanism Reader, Charles Waldheim, editor, Princeton Architectural Press, New York 2006, Terra Fluxus by James Corner*

1 *NYC Government web page, link: http://www.nyc.gov/html/dcp/html/fkl/fkl_index.shtml - may 2011*
2 *NYC Government park web page, link: http://www.nycgovparks.org/sub_your_park/fresh_kills_park/html/fresh_kills_park.html - may 2011*

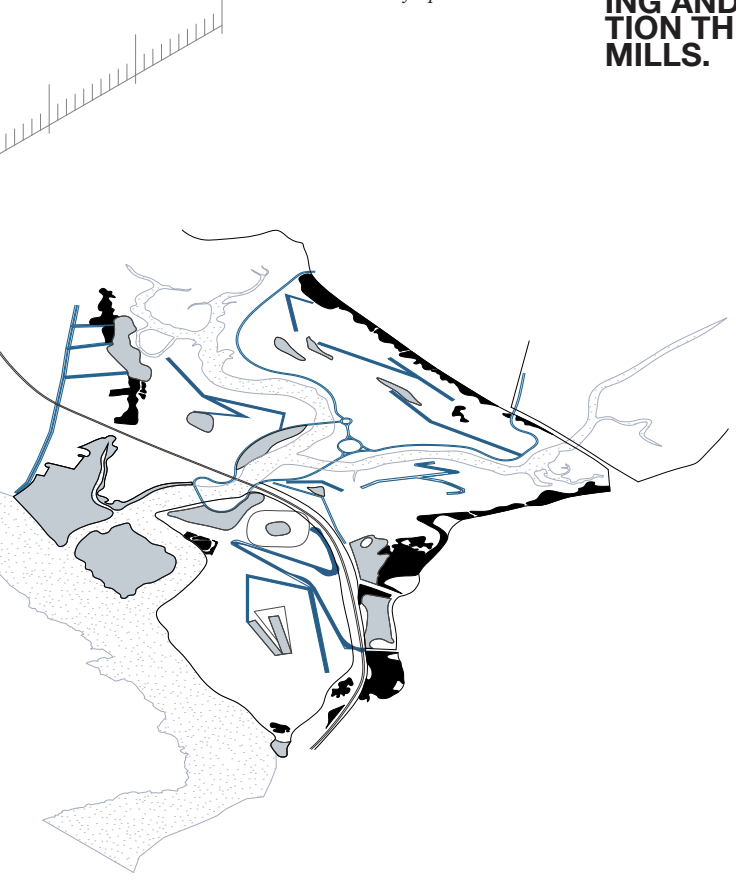


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

TRANSFORMING THE OLD LANDFILL SITE INTO A PARK WHICH SERVES AS AN EDUCATOR FOR SOCIETY AND RELAXING PLACE IS A NOT SO COMMON COMBINATION BUT ABSOLUTELY POSSIBLE.

PROGRAMMING IN COMBINATION WITH NATURE WORKS BUT IS IT ENOUGH? THE BIGGEST ISSUE IS, THAT THE PARK JUST SEEMS TO BE TOO FAR OFF MANHATTAN.

INTERESTING SIDE ASPECTS OF THE PARK ARE THE ENERGY HARVESTING AND ENERGY CREATION THROUGH WINDMILLS.

Fresh Kills Park text sources:
Fiel Operations web page, link: http://www.fieldoperations.net/ - feb 2011

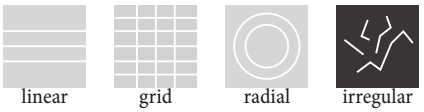
DATE OF ISSUE

Theory	*1993*	*Terra Fluxus*
Project	*2004*	*Fresh Kills Park*

HISTORICAL CONTEXT

Politics	*1991*	*Break-up Soviet Union*
Wars	*1991*	*End of Cold War*
	2001	*War on Terrorism begins*
Inventions	*1990*	*Rise of the WWW*
	1990	*Hubble Telescope launched*
Crisis	*1991*	*Japan Crisis*
	1997-1998	*Asia Crisis*

CITY SYSTEM



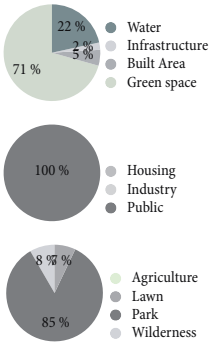
EXPENDABILITY



FACTS

Land Use 2d		
Water	22 %	
Infrastructure	2 %	
Built Area	5 %	
Housing		0 %
Industry		0 %
Public		100 %
Green space	71 %	
Agriculture		0 %
Lawn		7 %
Park		84 %
Wilderness		8 %
Total	100 %	
Density p/km2	**22471**	
Climate	humid subtropical	
Elevation	flat	

data source: estimated from reproduced plans



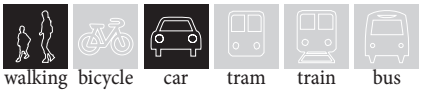
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM

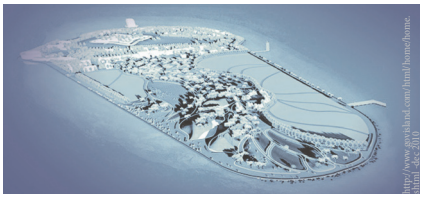


FUNDING

	public	private
Investor	ⓧ	◯

GOVERNORS ISLAND

2006





THEORY

Accelerating Darwin - 1993

In Mutations we find this quote:
"In his programmatic text "Accelerating Darwin", landscape architect Adriaan Geuze states that the difference between city and nature no longer actually exists. The new city is, in his words, "an airy metropolis with villages, urban centres, suburbs industrial areas, ports, airports, woods, lakes, beaches, reserves and the monoculture of the high-technology agricultural areas" The city has become an outstretched urban landscape."[1]

The project Schouwburgplein is one of the first outcomes of this ideas:

The essay advocates a
"sensation of spontaneous culture which the city dweller creates."
"The new public space will manipulate its users so much that they suddenly become aware of their behaviour that they are no longer able to drop back in a pre-programmed behaviour."
"This room is transformed into anonymity exhibitionism, spectators into actors. This is not actually a matter of design, beauty, dimensions, materials and colours, but a matter of sensation, an abstract culture, brought forth from the city context"[2]

PROJECT

Governors Island - 2006

"Bringing the Island Back to Life: 4 Key Strategies
1 Expanded public access, signature early uses
-Increasing number of visitors, - 31% of Governors Island's Manhattan visitors are from Lower Manhattan neighbourhoods, - Popularity of programs: Family Festival, City of Water Day, concerts, art festivals and installations, dance performances, - Car-free family biking "Free Bike Fridays" - Active recreation and sports
2 Public investment in operations, stabilization and infrastructure, - Historic Preservation: stabilizing 52 buildings, 1.4M square feet, - Transportation: ongoing work on slips, ferry, dock, - Infrastructure: Water, sewer, electrical, gas
3 Multi- phase, mixed-use development, - Island as public amenity, - Mixed-use development, - LMCC Artist Studio Program – opening May 2009 ,- 1st tenant: New York Harbor School – under construction, opening 2010
4 Early creation of a new world-class park, - An extraordinary park unlike any other in the world, - A compelling destination with signature experiences, - Magnet for repeat visitors from the City, State, and beyond, - Innovative design, - Set standards and framework for development

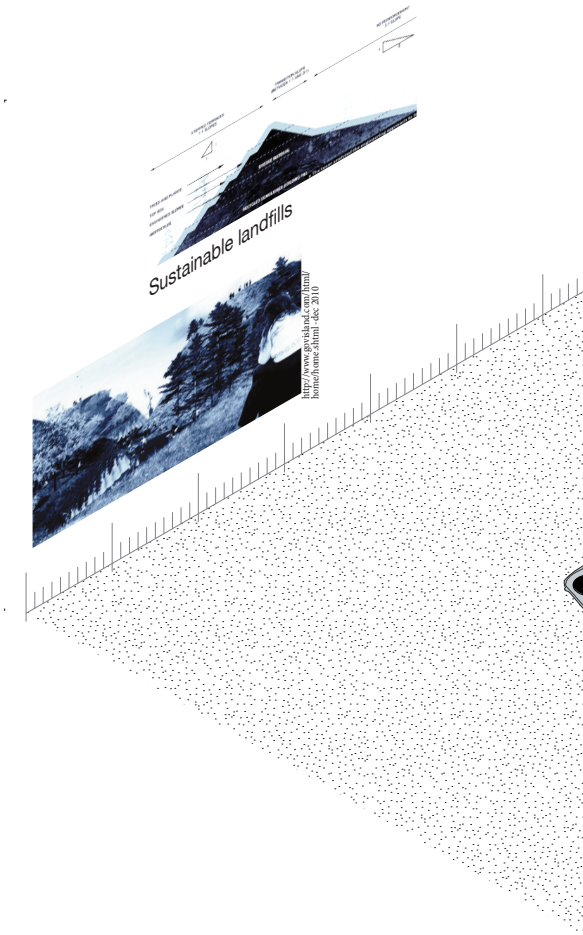
Guiding principles for Park design
- Create a compelling destination to visit over and over again
- Offer unique experiences: What does New York City need that this park could provide?
- Provide opportunities for common activities in an uncommonly wonderful setting
- This is a park for ALL New Yorkers
- Keep a special focus on children, families, the arts, and water"[1]

"Creating and preserving 87 acres of open space on Governors Island and making them accessible to millions of urban dwellers of course addresses larger goals for the livability and sustainability of cities. But sustainability means more than green space. These spaces must be designed to thrive for generations to come, taking into account the effects of climate change and taking advantage of environmentally sound, site-specific strategies and practices. The holistic approach of the Park and Public Space Master Plan results in new open spaces that will perform in an environmentally progressive way."[2]

DESIGNER

Name	***Adriaan Geuze***
Nationality	*Dutch*
Born	*October 28, 1960*
Died	
Profession	*Architect, Designer, Urbanist, Writer*

Adrian Geuze received a Masters degree in Landscape Architecture at the University of Wageningen. Together with Paul van Beek he founded West8 in 1987.



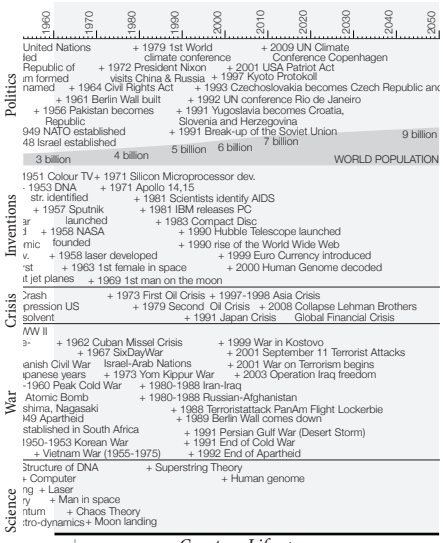
1 Mutations by Rem Koolhaas, Harvard Project on the City, Stefano Boeri, Multiplicity, Sanford Kwinter, Nadia Tazi, Hans Ulrich Obrist, Actar, 2001, p 466
2 Accelerating Darwin by Adriaan Geuze, Scroope: Cambridge architecture journal 1996-1997, p.80-84

1 Governors island webpage, link: http://www.govisland.com/PDFs/CB1_part1.pdf -dec2010
2 Governors island park webpage, link: http://www.govislandpark.com/design-principles/sustainabledesign/ -dec 2010



COM-PARATIVE VALUES

HISTORICAL CONTEXT

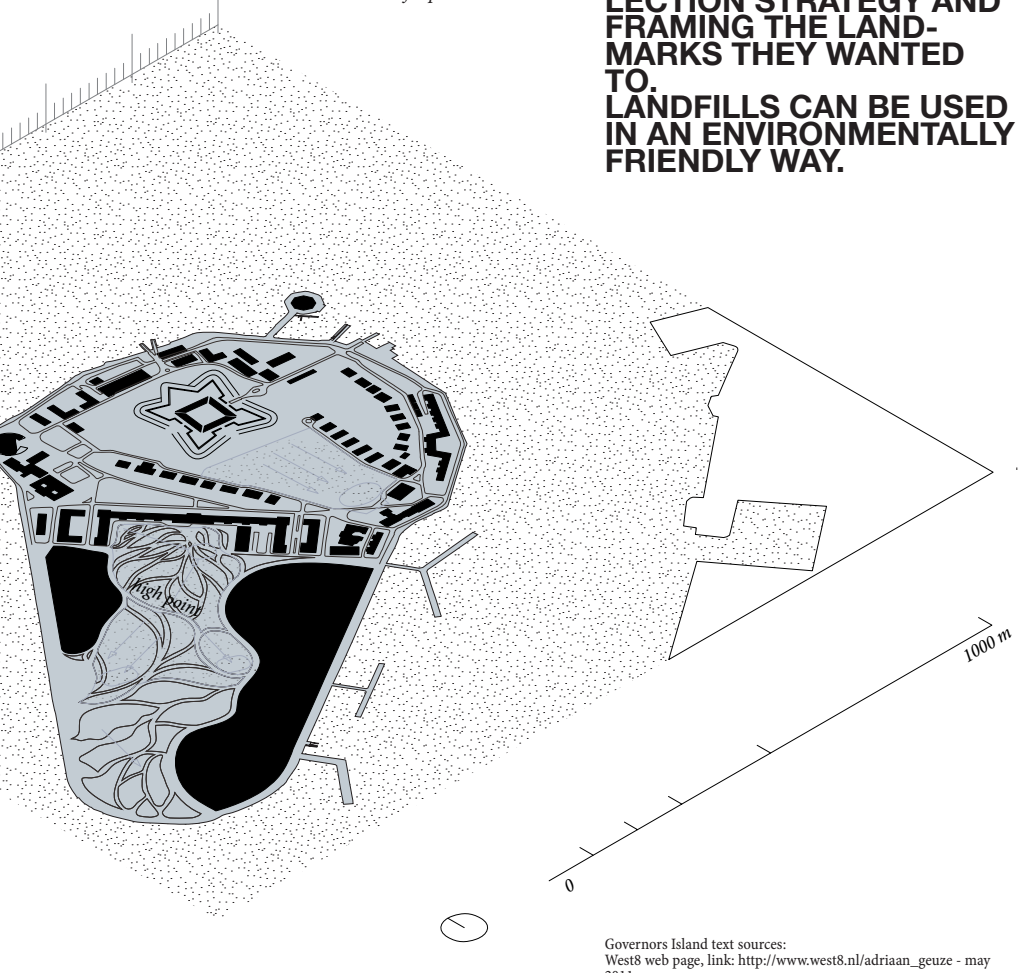


Creators Life span

QUALITIES & CRITIQUES

**KEY STRATEGY FOR THE REVITALISATION OF THE ISLAND:
EXPANDING PUBLIC ACCESS, HISTORIC PRESERVATIONS, MIXED USE DEVELOPMENT AS ARTIST STUDIOS AND SCHOOLS AND A PUBLIC PARK.**

**WEST 8 ARE USING A CLEVER WAY TO WORK WITH THE EXISTING BY USING THE DEMOLISHED BUILDINGS AS THE MATERIAL FOR SUSTAINABLE LANDFILLS.
THIS WILL PROVIDE ENOUGH MATERIAL FOR A STORM WATER COLLECTION STRATEGY AND FRAMING THE LANDMARKS THEY WANTED TO.
LANDFILLS CAN BE USED IN AN ENVIRONMENTALLY FRIENDLY WAY.**



Governors Island text sources:
West8 web page, link: http://www.west8.nl/adriaan_geuze - may 2011

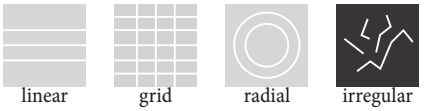
DATE OF ISSUE

Theory	*1993*	*Accelerating Darwin*
Project	*2006*	*Governors Island*

HISTORICAL CONTEXT

Politics	*1991*	*Break-up Soviet Union*
Wars	*1991*	*End of Cold War*
	2001	*War on Terrorism begins*
Inventions	*1990*	*Rise of the WWW*
	1990	*Hubble Telescope launched*
Crisis	*1991*	*Japan Crisis*
	1997-1998	*Asia Crisis*

CITY SYSTEM



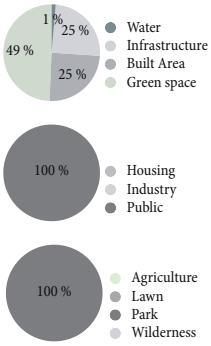
EXPENDABILITY



FACTS

Land Use 2d		
Water	1 %	
Infrastructure	25 %	
Built Area	25 %	
Housing		0 %
Industry		0 %
Public		100 %
Green space	50 %	
Agriculture		0 %
Lawn		0 %
Park		100 %
Wilderness		0 %
Total	101 %	
Density p/km2	**6366**	
Climate	humid subtropical	
Elevation	flat	

data source: estimated from reproduced plans



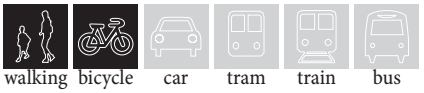
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



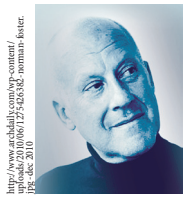
FUNDING

	public	private
Investor	ⓧ	○

MASDAR CITY

2006





http://www.archdaily.com/wp-content/uploads/2010/06/1275426382-norman-foster.jpg -dec 2010

THEORY

Hight Tech Architecture - 1970

"High Tech is a 20th-century attitude to industrial materials which influenced architecture and design. The name was a 1970s invention for fashionable attitudes to designing buildings and objects for the home, and the cult was the title of a best-selling 1978 book by Joan Kron and Suzanne Slesin, High Tech: The Industrial Style and Source Book for The Home. This book illustrated how to integrate into the home industrial products such as warehouse shelving systems and factory floor coverings. It sparked off a fashion for such products all over the world. The roots of High Tech can be traced back to the ideals of the Modern Movement during the 1920s. In the 1920s, for example, the French architect Pierre Chareau used industrial glass bricks and shop steel ladders in several of his buildings; in the 1930s the Museum of Modern Art in New York put on exhibitions showing the public the beauty of industrial products such as laboratory glass. Later examples include Charles Eames's house in Santa Monica, built using off-the-peg factory components, and the 1970s Pompidou Centre in Paris (by Renzo Piano and Richard Rogers), which revealed heating ducts and utility conduits as decorative features for the outside of the building. In the 1980s, High Tech became part of the language of postmodernist design."[1]

PROJECT

Masdar City - 2006

"Masdar is a project in Abu Dhabi, in the United Arab Emirates. Its core is a planned city, which is being built by the Abu Dhabi Future Energy Company, a subsidiary of Mubadala Development Company, with the majority of seed capital provided by the government of Abu Dhabi. Designed by the British architectural firm Foster + Partners, the city will rely entirely on solar energy and other renewable energy sources, with a sustainable, zero-carbon, zero-waste ecology. The city is being constructed 17 kilometres east-south-east of the city of Abu Dhabi, beside Abu Dhabi International Airport.
It will host the headquarters of the International Renewable Energy Agency (IRENA)."[1]

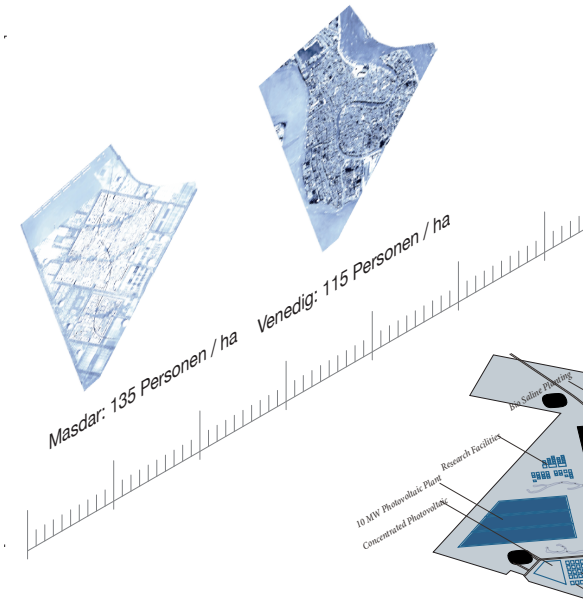
A presentation at the USEA shows the goals of the project:[2]
-To emerge as the global hub for Cleantech education, research, development and production
-To partner with global leaders and innovative companies in the Cleantech industry
-To diversify the Abu Dhabi economy with a focus on renewable energies
-To develop a sustainable city that incorporates the highest quality of life with the lowest environmental footprint
-To create a city which is carbon-neutral, uses only renewable energies and produces zero waste

- 50'000 inhabitants
- 6 mio m2
- 100% renewable energy
- CO2 neutral
- 'zero waste'
- latest infrastructure
- latest facility management
- carfree, innovative transportsystem

DESIGNER

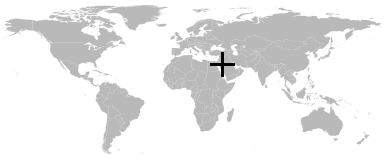
Name	***Norman Foster***
Nationality	*British*
Born	*June 1, 1935*
Died	
Profession	*Architect, Designer, Urbanist*

Norman Foster graduated at the Manchester School of Architecture and won the Henry Fellowship which brought him to Yale.
1936 he started the office Team4 with Richard Rogers, Georgie Cheesman and Wendy Cheesman.
The office is know known as Foster & Partners.



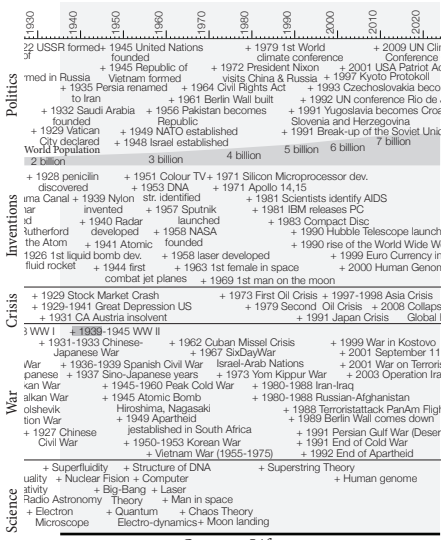
1 Archpedia, link: http://web.archive.org/web/20060318172141/http://www.archpedia.com/Styles-High-Tech.html - accessed Jan 2011

1 Masdar city via Wikipedia, link: http://en.wikipedia.org/wiki/Masdar_City -dec 2010
2 USEA, link: http://www.usea.org/Programs/CFFS/CFFSDubai/DOE_Masdar_DevelopmentOverview_Feb09.pdf

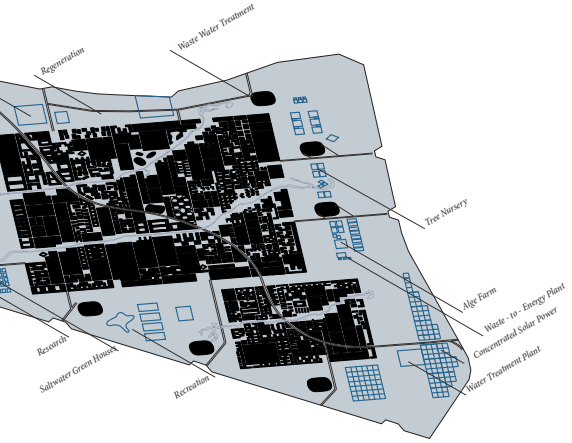


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & CRITIQUES

RELY ENTIRELY ON SOLAR ENERGY AND OTHER RENEWABLE ENERGY SOURCES, WITH A SUSTAINABLE, ZERO-CARBON, ZERO-WASTE ECOLOGY.

THE KNOW HOW IS COMING FROM OUTSIDE BUT NATIONS WITH THIS KNOW HOW SEEM TO IGNORE THE FACT THAT THEY WILL LOOSE IT IF THEY DON'T START EXPERIMENTS LIKE MASDAR ON THEIR OWN GROUND.

REFERENCE PROJECTS LIKE MASDAR ARE FACTORS FOR EXPORT OF INDUSTRY PRODUCTS INSTEAD OF KNOWLEDGE. EXPORT IMPLIES BETTER ECONOMY.



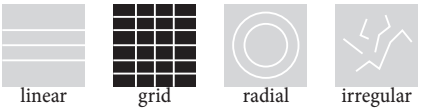
DATE OF ISSUE

Theory	*1970*	*High Tech Architecture*
Project	*2006*	*Masdar City*

HISTORICAL CONTEXT

Politics	*1991*	*Break-up Soviet Union*
	1997	*Kyoto Protocol*
Wars	*1991*	*End of Cold War*
	2001	*War on Terrorism begins*
Inventions	*1990*	*Rise of the WWW*
	1990	*Hubble Telescope launched*
Crisis	*1991*	*Japan Crisis*
	1997-1998	*Asia Crisis*

CITY SYSTEM

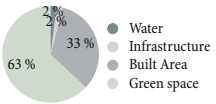


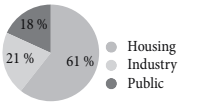
EXPENDABILITY

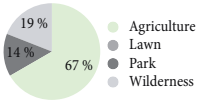


FACTS

Land Use 2d		
Water	2 %	
Infrastructure	2 %	
Built Area	33 %	
Housing		20 %
Industry		7 %
Public		6 %
Green space	63 %	
Agriculture		42 %
Lawn		0 %
Park		9 %
Wilderness		12 %
Total	100 %	
Density p/km2	**14541**	
Climate	hot & dry	
Elevation	flat	







data source: 49 cities, WORKac, Storefront for Art and Architecture

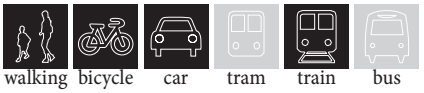
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



FUNDING

	public	private
Investor	ⓧ	◯

ROAD MAP 2050

2010





THEORY

Copenhagen Climate Conference - 2009

"The 2009 United Nations Climate Change Conference, commonly known as the Copenhagen Summit, was held at the Bella Center in Copenhagen, Denmark, between 7 December and 18 December. The conference included the 15th Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change and the 5th Meeting of the Parties (MOP 5) to the Kyoto Protocol. According to the Bali Road Map, a framework for climate change mitigation beyond 2012 was to be agreed there.

European Union Goals:
To cut greenhouse gas emissions by 30% (including LULUCF) below 1990 levels by 2020 if an international agreement is reached committing other developed countries and the more advanced developing nations to comparable emission reductions.
To cut greenhouse gas emissions by 20% (excluding LULUCF) below 1990 levels by 2020 unconditionally."[1]

"Land use, land-use change and forestry (LULUCF) is defined by the UN Climate Change Secretariat as "A greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities."[2]

PROJECT

Roadmap Two thousand and fifty - 2010

"Roadmap 2050 breaks new ground by outlining plausible ways to achieve an 80% reduction target from a consultancy firms, research centres and In addition, a wide range of companies, broad European perspective, based on the best available facts elicited from industry players and academia, NGOs have provided various forms of and developed by a team of recognized experts rigorously applying established industry standards.

Roadmap 2050 is a practical guide to a prosperous, low-carbon Europe has two primary objectives:

a) to investigate the technical and economic feasibility of achieving at least an 80% reduction in greenhouse gas (GHG) emissions below 1990 levels by 2050, while maintaining or improving today's levels of electricity supply reliability, energy security, economic growth and prosperity; and

b) to derive the implications for the European energy system over the next 5 to 10 years. Roadmap 2050 addresses at a high level GHG emissions across all sectors of the economy, and it analyses the power sector in depth. The approach taken stipulates the minimum desired 2050 outcome as expressed by European leaders, and then derives plausible pathways from today to achieve them.

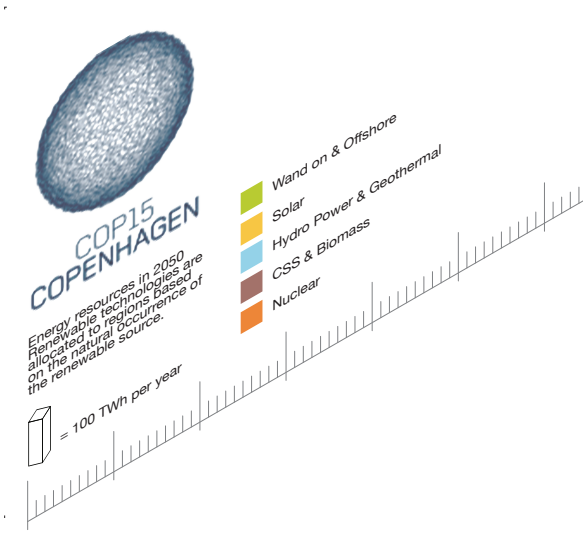
The methodology is known as "back-casting," to differentiate it fundamentally from forecasting: the end-state is stipulated, that is, rather than derived. A back-casting approach can help to highlight where momentum must be broken and re-directed in order to achieve future objectives, while forecasting tends to extend current trends out into the future to see where they might arrive.

This study is funded by ECF, which itself is funded solely by private hilanthropic organizations1. ECF does to be consulted in the course of this not have financial ties to EU political bodies, nor to business. Representatives of the European Commission work should not be taken to mean that each of them agrees with all of its and its services have provided strong encouragement for the development of this undertaking and have assumptions or conclusions."[1]

DESIGNER

Name	*AMO*
Nationality	*Dutch*
Born	*1998*
Died	
Profession	*Architect, Designer, Urbanist, Writer*

AMO was founded in 1998 by Rem Koolhaas. It is meant to be the counterpart and the think tank of his architectural practice OMA. By having a different "brand" AMO can do projects like branding campaigns, special events, or publishing without having the architectural reputation which sometimes confuses clients.



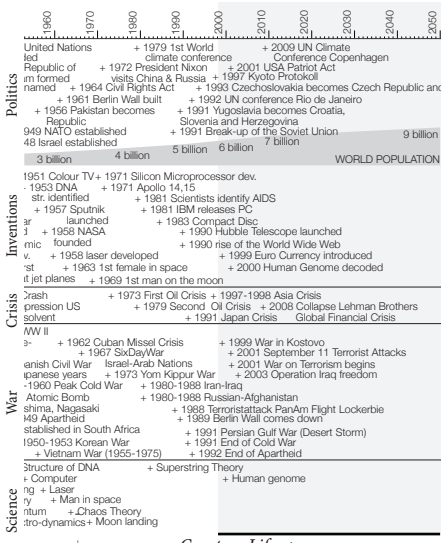
1 United Nations Climate Change via Wikipedia, link: http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference - accessed dec 2010
2 Land use, land-use change and forestry via Wikipedia, link: http://en.wikipedia.org/wiki/LULUCF - accessed dec 2010

1 Roadmap 2050 by AMO, link: www.roadmap2050.eu - accessed dec 2010



COM-PARATIVE VALUES

HISTORICAL CONTEXT

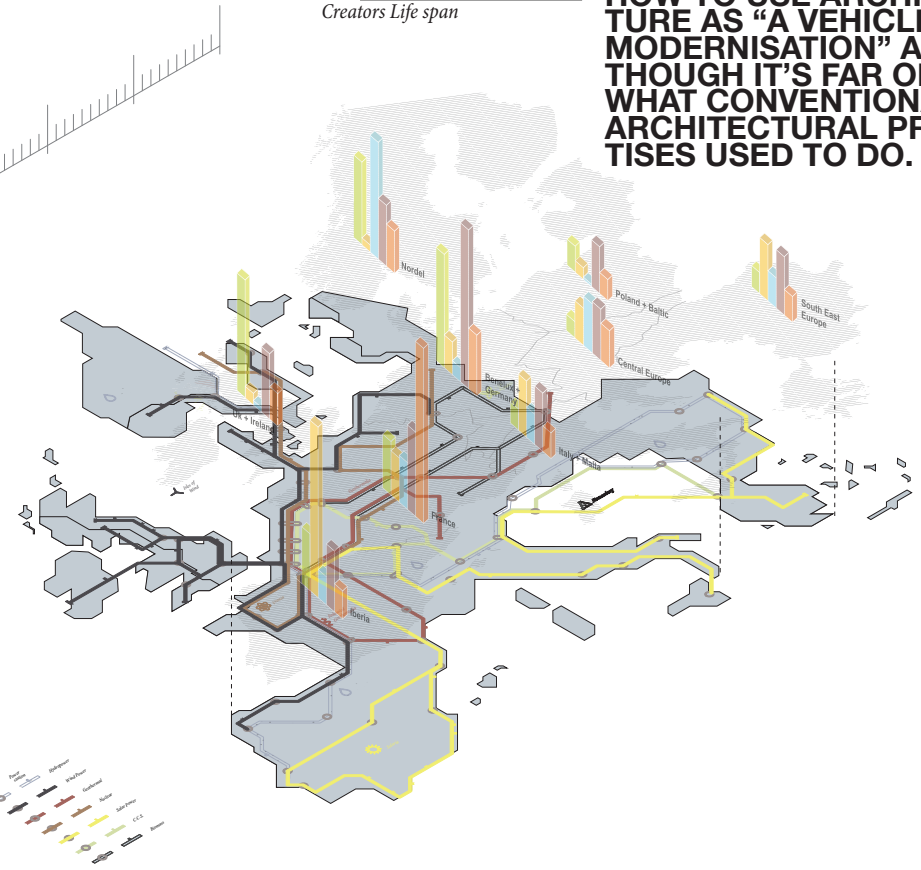


Creators Life span

QUALITIES & CRITIQUES

LOWER ENERGY COSTS PER UNIT OF OUTPUT AND MORE STABLE AND PREDICTABLE ENERGY PRICES.
NEW ECONOMIC GROWTH AND JOB CREATION THROUGH INNOVATION,
INCREASED SECURITY OF ENERGY SUPPLY AND MORE ECONOMIC STABILITY.
MORE SUSTAINABLE ENERGY AND FEWER EMISSIONS.

ROADMAP 2050 IS A CLEVER EXAMPLE ON HOW TO USE ARCHITECTURE AS "A VEHICLE OF MODERNISATION" ALTHOUGH IT'S FAR OFF WHAT CONVENTIONAL ARCHITECTURAL PRACTISES USED TO DO.



Roadmap 2050 text sources:
http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference
www.roadmap2050.eu -dec 2010

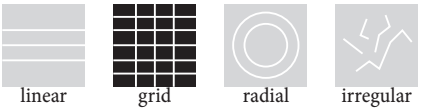
DATE OF ISSUE

Theory	*2009*	*Climate Conference Kopenhagen*
Project	*2010*	*Roadmap 2050*

HISTORICAL CONTEXT

Politics	*1997*	*Kyoto Protocol*
	2009	*UN Climate Conference*
Wars	*2001*	*War on Terrorism begins*
	2003	*Operation Iraq freedom*
Inventions	*1999*	*Euro Currency introduced*
	2000	*Human Genome decoded*
Crisis	*2008*	*Collapse Lehman Brothers*
	2008	*Global Financial Crisis*

CITY SYSTEM



EXPENDABILITY



FACTS

Land Use 2d
Water
Infrastructure
Built Area
- Housing
- Industry
- Public

Green space
- Agriculture
- Lawn
- Park
- Wilderness

Total

Density p/km2
Climate
Elevation

data source: estimated from reproduced plans

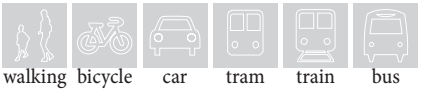
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



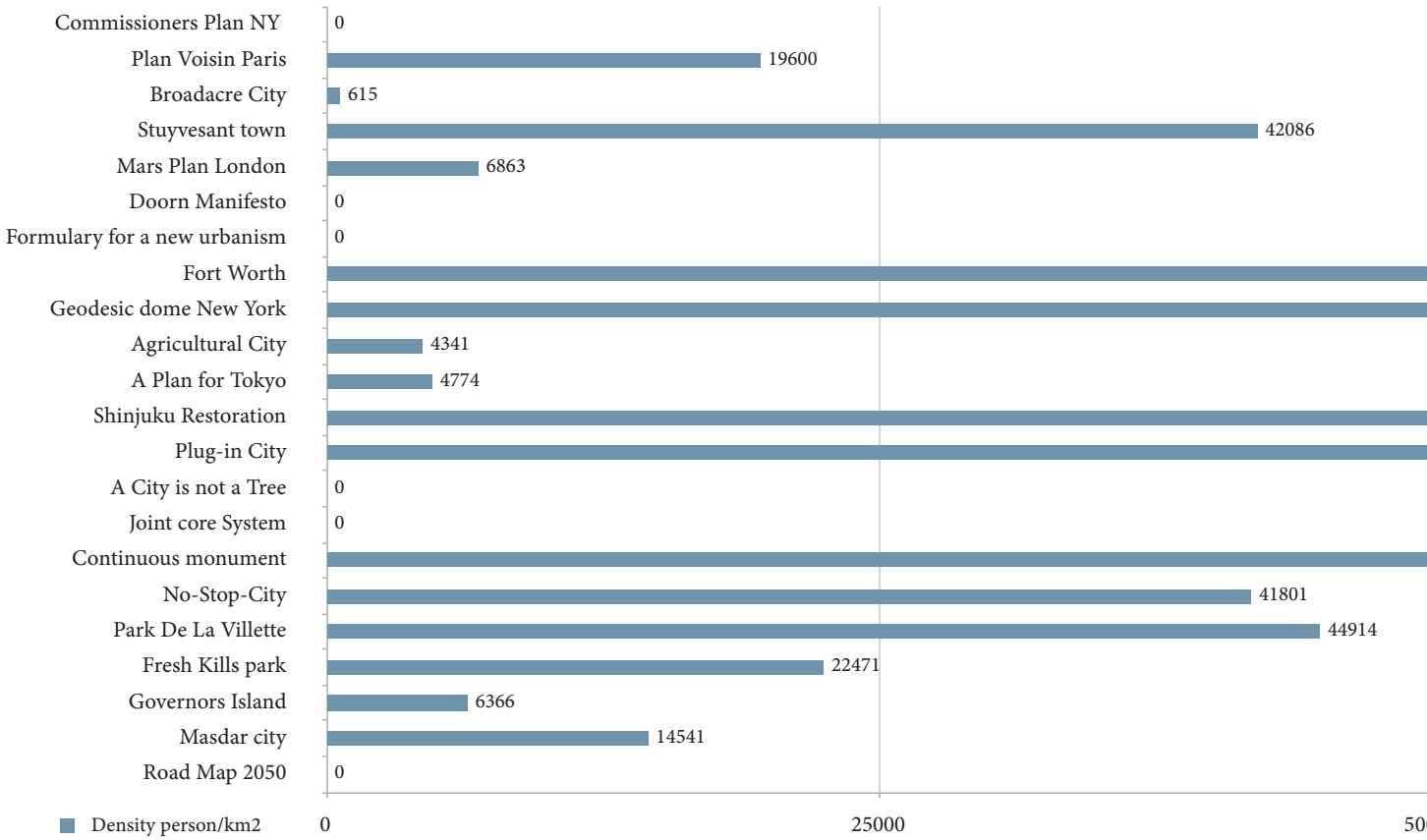
FUNDING

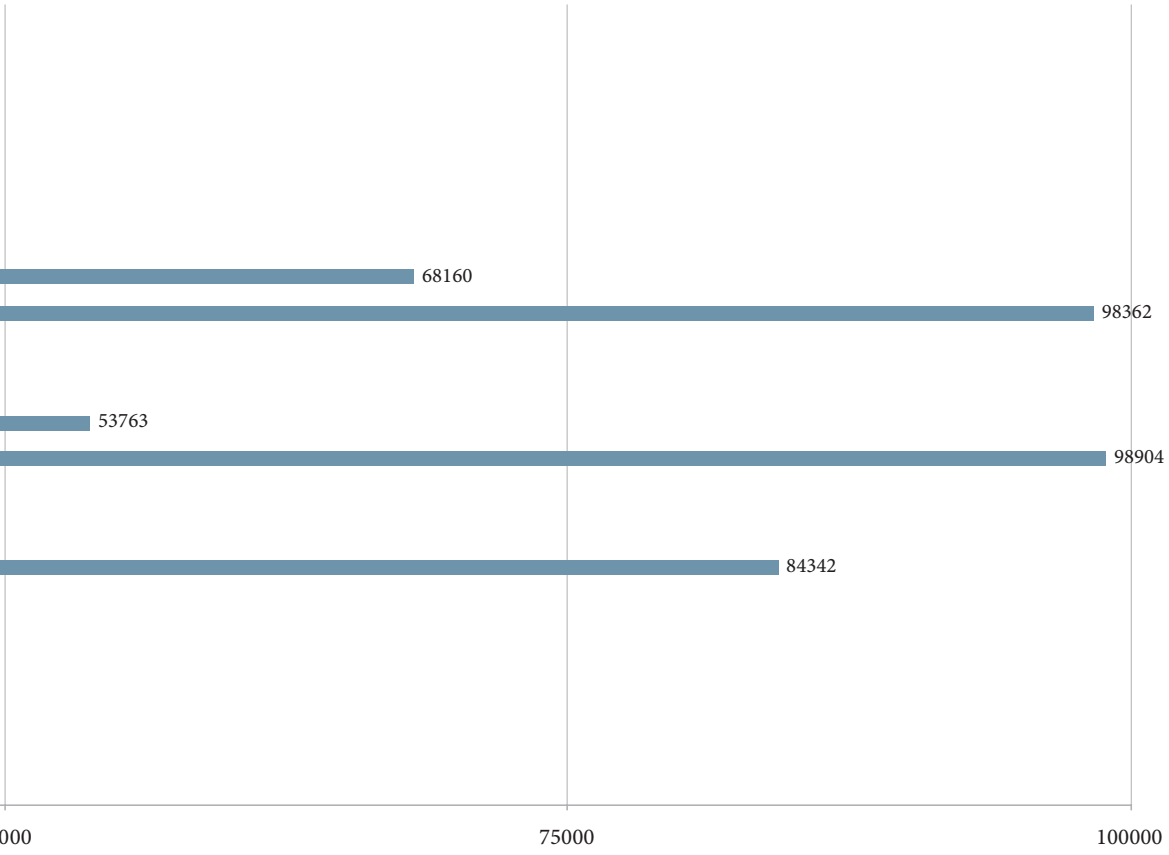
	public	private
Investor	○	ⓧ

DENSITY

PROJECTS DENSITY IN PERSON / KM²

For Projects with 0 p/km² density either no data could be measured, found or the project was on a theoretical base.




68160
98362
53763
98904
84342
000
75000
100000

FACT SHEETS

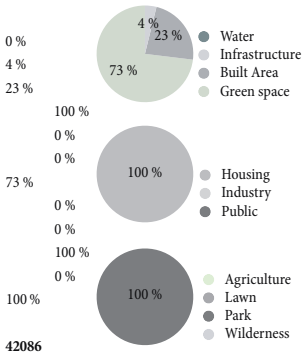
2D AREA CHARTS

Land Use 2d	Commissioners Plan NY	Plan Voisin Paris	Broadacre City
Water	31 %	0 %	2 %
Infrastructure	23 %	32 %	7 %
Built Area	43 %	6 %	4 %
Housing	33 %	43 %	1 %
Industry	33 %	57 %	1 %
Public	33 %	0 %	2 %
Green space	3 %	62 %	87 %
Agriculture	0 %	0 %	53 %
Lawn	0 %	0 %	7 %
Park	100 %	100 %	15 %
Wilderness	0 %	0 %	12 %
Total	100 %	100 %	100 %
Density p/km2		**19600**	**615**
Climate	humid continental	oceanic	humid continental
Elevation	flat	flat	flat
	data source: estimated from reproduced plans	data source: estimated from reproduced plans	data source: 49 cities, WORKac, Storefront for Art and Architecture

Land Use 2d	Fort Worth	Geodesic dome New York	Agricultural City
Water	0 %	0 %	0 %
Infrastructure	18 %	36 %	0 %
Built Area	50 %	55 %	6 %
Housing	0 %	22 %	2 %
Industry	0 %	29 %	0 %
Public	50 %	4 %	4 %
Green space	32 %	9 %	94 %
Agriculture	0 %	0 %	94 %
Lawn	0 %	2 %	0 %
Park	32 %	8 %	0 %
Wilderness	0 %	0 %	0 %
Total	100 %	100 %	100 %
Density p/km2	**68160**	**98362**	**4341**
Climate	humid subtropical	humid subtropical	humid subtropical
Elevation	flat	flat	flat
	data source: 49 cities, WORKac, Storefront for Art and Architecture	data source: 49 cities, WORKac, Storefront for Art and Architecture	data source: 49 cities, WORKac, Storefront for Art and Architecture

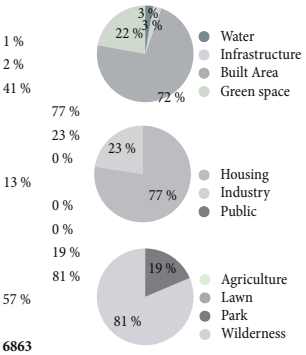
Land Use 2d	Joint core System	Continuous monument	No-Stop-City
Water	0 %	25 %	0 %
Infrastructure	17 %	25 %	13 %
Built Area	12 %	25 %	17 %
Housing	0 %	8 %	6
Industry	0 %	8 %	6
Public	0 %	9 %	5
Green space	79 %	25 %	91 %
Agriculture	0 %	6 %	2 %
Lawn	0 %	6 %	0 %
Park	0 %	6 %	11 %
Wilderness	100 %	7 %	78 %
Total	108 %	100 %	121 %
Density p/km2		**84342**	**41801**
Climate	humid subtropical	humid subtropical	temperate marine
Elevation	flat	flat	flat
	data source: estimated from reproduced plans	data source: 49 cities, WORKac, Storefront for Art and Architecture	data source: 49 cities, WORKac, Storefront for Art and Architecture

Stuyvesant town



42086
humid continental
flat
data source: estimated from reproduced plans

Mars Plan London

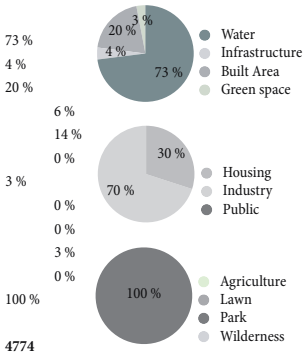


6863
temperate marine
hilly
data source: estimated from reproduced plans

Doorn Manifesto

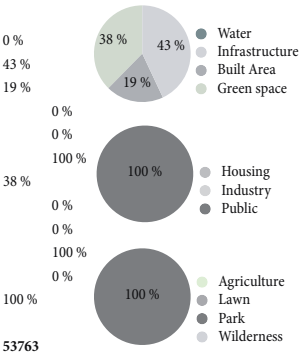
Formulary for a new urbanism

A Plan for Tokyo



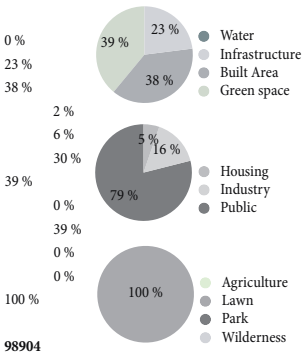
4774
humid subtropical
flat
data source: 49 cities, WORKac, Storefront for Art and Architecture

Shinjuku Restoration



53763
humid subtropical
flat
data source: estimated from reproduced plans

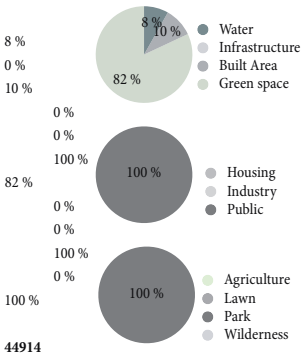
Plug-in City



98904
temperate marine
flat
data source: 49 cities, WORKac, Storefront for Art and Architecture

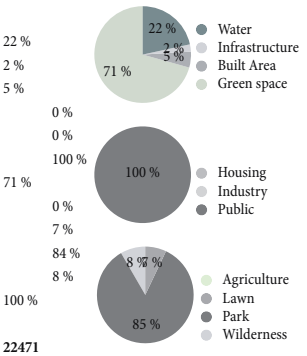
A City is not a Tree

Park De La Villette



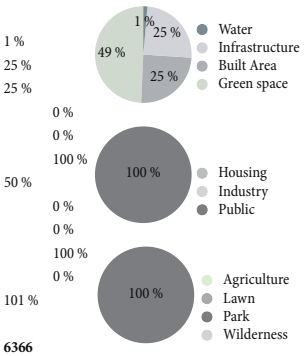
44914
oceanic
flat
data source: estimated from reproduced plans

Fresh Kills park



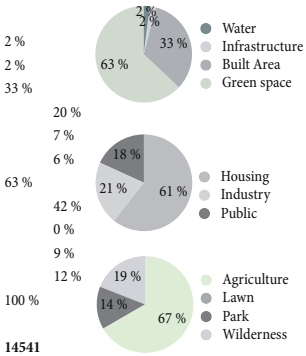
22471
humid subtropical
flat
data source: estimated from reproduced plans

Governors Island



6366
humid subtropical
flat
data source: estimated from reproduced plans

Masdar city



14541
hot & dry
flat
data source: 49 cities, WORKac, Storefront for Art and Architecture

PRINCI-
PLES

QUALITIES & GRIEVANCE

200 Years ago the idea of urbanism was not that different to the ideas today, but if someone wants to improve the current ideas he must get the overview of and the connections of one project to another, of one context to the next context, no matter if we talk about physical or historical context.

1925

TALL TOWERS AND DENSE HOUSING PROJECTS WOULD CREATE EMPTY SPACE FOR PARKS AND LAWNS, LET THE CITY "BREATHE" AGAIN AND, GIVE THE CITY SOME LIFE QUALITY BACK. THROUGH CREATING MORE DENSITY OLD MONUMENTS AND LISTED BUILDINGS COULD BE PRESERVED WHILE GETTING THE CITY READY FOR THE NEXT CENTURY.

1934

WRIGHT'S IDEAS RESULTED FROM ECONOMIC PROBLEMS, TECHNICAL PROGRESS AND NEW WAY'S OF MOBILISATION - ORGANIC, - DECENTRALIZATION, -INTEGRATION, - DEMOCRATIC WHAT'S INTERESTING IS THAT THIS TOPICS COME UP AFTER EVERY BIGGER FINANCIAL CRISIS BUT ARE FORGOTTEN AS SOON AS PEOPLE CAN LIVE THEIR OLD LIFE AGAIN. THE TYPOS OF THE NOMAD WOULD DEVELOP A DECENTRALISED, ORGANIC AND DEMOCRATIC ARCHITECTURE.

1944

MOSES WAS VERY CRITICAL ABOUT FOREIGN ARCHITECTS BUT IT HAT NOTHING TO DO WITH RACISM. IT WAS HIS WAY OF SAYING WE DO IT DIFFERENT OVER HERE. THE STUYVESANT PROJECT WAS THE GREATEST RESETTLEMENT EVER DONE IN NEW YORK. RELOCATING 11000 PEOPLE SEEMS TO BE IMPOSSIBLE TODAY - AT LEAST IN EUROPE.

1951

PLANS AS CONCEPTIONAL SOLUTIONS NOT AS CONCRETE PLANNING. THE MARS PLAN WAS A THEORETICAL RESEARCH BUT THE WAY IT GOT TRANSLATED INTO A PLAN LED PEOPLE TO MISUNDERSTAND IT. A LINEAR CONCEPT CONNECTED WITH A RING-TRANSPORT SYSTEM.

1953

ONE CRUCIAL SENTENCE FROM THE MANIFESTO: "URBANISM CONSIDERED AND DEVELOPED IN THE TERMS OF THE CHARTE D'ATHENS ENDS TO PRODUCE "TOWNS" IN WHICH VITAL HUMAN ASSOCIATIONS ARE INADEQUATELY EXPRESSED." THE RECONSIDERATION OF THE HUMAN WAS AN IMPORTANT TURNAROUND SINCE THE VISIONS AT THE TIME SEEMED ALREADY TO ABSTRACT TO LIVE IN.

1953

ART, POLITICS & CULTURE ALTHOUGH CHTCHEGLOV WASN'T REALLY A MEMBER OF THE GROUP HIS TEXT WAS ESSENTIAL TO THEM. TAKING IDEAS AND TURNING THEM INTO A PROJECT. IN THIS WAY A WRITTEN PROJECT. THE WEAKNESS IS THAT THERE IS NO SOLUTION TO THE CORE PROBLEM, IT'S ONLY CRITICISM, IT'S ONLY WORDS. " ARCHITECTURE IS THE SIMPLEST MEANS OF ARTICULATING TIME AND SPACE, OF MODULATING REALITY, OF ENGENDERING DREAMS."

1955

CAR-FREE PEDESTRIAN ZONE DESIGNED TO MAKE THE STREETS MORE LIVELY AND WALKABLE.

VICTOR GRUEN REALISED LATER IN HIS LIFE THAT HIS PLANS WOULDN'T WORK IF ONLY HALF OF THE PROPOSED SYSTEM WOULD BE CONSTRUCTED. BUT THE WAY HE UNDERSTOOD HOW TO WORK WITH A CITIES DATA IS REMARKABLE.

DETESTING CARPARKS BROUGHT HIM TO THE IDEA OF PLACING THE CARPARK ON THE ROOF.

1960

REDUCE THE WASTEFUL NATURE OF THE URBAN ENVIRONMENT THROUGH A DOME.
NO MORE SNOW PROBLEMS, RAIN, COLD OR TOO WARM WEATHER.

THE THEORY ABOUT MASS-PRODUCTION IS ONLY DISTANTLY RELATED IN TERMS OF CONSTRUCTING THE DOMES.

THESE DAYS SOMEONE WOULD RATHER FOCUS ON THE RISING SEA LEVELS THAN NEVER CHANGING CLIMATE. INSTEAD OF A DOME THE NEVER CHANGING CLIMATE BECAME REAL IN SHOPPING CENTRES.

1960

CONTROLLED GROWTH AROUND A GRID WITH FIXED SIZED COMMUNITIES. BASIC RURAL UNIT COMING FROM A CENTRE AROUND TEMPLE, SHRINE AND GRAMMAR SCHOOL. INFRASTRUCTURE ABOVE AGRICULTURAL USE.

INTEGRATING AGRICULTURE WITHIN URBAN THEORIES SHOW'S THE NECESSITY OF FOOD PRODUCTION, EDUCATION FOR THE NEXT GENERATIONS AND A HEALTHIER LIFE.

1961

THE PROJECT CLEARLY SHOWS THE PROBLEMS WITH RADIAL SYSTEMS.

TANGE IS ALREADY ONE STEP AHEAD OF THE CLEAR LINEAR CONCEPT.

CYCLE TRANSPORTATION IS STILL A CONCEPT WHICH WOULD ALLOW BETTER CONNECTIONS FROM CITY TO CITY. THE INFLUENCE OF METABOLISM TO SEE THE TRANSPORT SYSTEM AS A NATURAL SYSTEM CLEARLY SHOWS IT'S ADVANTAGES. WORTH TO MENTION ARE TANGE'S ACCURATE CALCULATIONS, LETTING IT APPEAR A LOT MORE REAL THAN OTHER UTOPIAN IDEAS.

1964

IN MAKI'S WORDS: "SEVERAL PLAZAS ARE LINKED TOGETHER AND FORM THE AMUSEMENT AREA. WE THINK THAT THIS IS A KIND OF FORM WHICH RETAINS THE TOTAL IMAGE, EVEN IF INDIVIDUAL ELEMENTS WERE DESIGNED DIFFERENTLY BY SEVERAL ARCHITECTS." THIS IS THE CONCEPT HOW A MASTERPLAN SHOULD BE DESIGNED TO BE BUILT OVER GENERATIONS.

A SYSTEM WHICH IS EASY TO CONTROL, EASY TO CLEAN, EASY TO SELL, EASY ON TRAFFIC AND EASY TO UNDERSTAND - OF COURSE THE GRID. BUT BESIDE OF BEING CLEAN THE QUALITY OF LIFE WAS STILL LOW - ALMOST NO PARKS, SINCE THE CREATORS ARGUED THAT THE PLAN IS SURROUNDED BY SEA ANYWAY.

1811

1964

MEGA-STRUCTURE AS A HUGE FRAME, EVEN STREETS AND DIFFERENT FUNCTIONS COULD BE EASILY MOVED AND EXCHANGED.

USING MEDIA LIKE COMICS TO PROMOTE IDEAS, MAYBE THE "NEW COMIC" COULD BE THE WEB AND SOCIAL NETWORKS.

ALSO THE LATEST BOOK FROM BIG APPEARS JUST LIKE A COMIC, COMICS SEEM TO HAVE A REVIVAL.

"CITY AS A LIVING ORGANISM" - COULD ALREADY BE SEEN AS A REFERENCE TO METABO-LISM.

1965

ALEXANDER ANALYSED CITIES AND UTOPIAS LIKE THE TOKYO PLAN IN A WAY THAT THEY GIVE A CLEAR IDEA ON HOW THESE IDEAS FUNCTION.

ZONING LIKE THE ATHENS CHARTER ASKED FOR WAS NOT THE RIGHT SOLU-TION AND THE WAY IT COULD WORK BETTER WOULD BE A SEMLIAT-TICE SYSTEM. A SYSTEM THAT'S MUCH MORE COMPLEX TO UNDERSTAND THAN A TREE LIKE SYSTEM.

MIXING FUNCTIONS INSTEAD OF SEPARATION.

1966

THE LINEAR SYSTEM OF TANGE HAD IT'S LIMITS IN TERMS OF DIRECTIONS. A ROUND CORE AND BRIDGES FROM CORE TO CORE MADE IT POSSIBLE TO EXPAND IN ALL DIREC-TIONS.

"THE CONDI-TIONS BELOW MUST BE DEVELOPED AS FUTURE DESIGN THEMES, BUT THEY CAN BE FOUND EXISTING IN THE CITY RIGHT NOW. 1. THE EN-VIRONMENT WILL BE EN-VELOPED IN A PROTECTIVE MEMBRANE FOR THE SAKE OF PRESERVING DEFINITE, BALANCED CONDITIONS; 2. SPACES WILL BE EXTENSIVELY INTER-CHANGE-ABLE; 3. THE ENVIRON-MENT WILL INCLUDE A WIDE VARIETY OF MOVABLE EQUIPMENT; 4. A MAN-MACHINE SYSTEM WILL BE DEVEL-OPED; 5. THIS SYSTEM WILL POSSESS A SELF-IN-STRUCTING FEEDBACK CHANNEL"

1969

CONTINUOUS MONU-MENT IS A CRITIQUE ON THE GRID OF THE MODERNISM MOVEMENT. AT THIS TIME EVERYTHING HAD TO BE DESIGNED FROM THE CITY TO THE FURNITURE AND NOTH-ING WAS OPEN TO THE INDIVIDUAL.

SUPERSTU-DIO GAVE EVERYONE IT'S PLACE ON EARTH WHERE EVERYONE COULD DE-CIDE WHAT HE WOULD WANT TO DO INSIDE HIS PLACE.

1969

APPLYING FUNCTIONS TO EVERY PART OF A BUILDING OR A CITY TAKES AWAY FREEDOM.

JUST QUANTI-TY OF SPACE, NOT QUAL-ITY WOULD GIVE THE FREEDOM TO ADAPT SPACE THE WAY IT IS NEEDED FOR.

THE PRO-JECT IS ALSO A CRITIQUE ON LOOSING IDENTITY - THE ONLY IDENTITY IF EVERYTHING LOOKS THE SAME IS THE IDENTITY THROUGH CONSUMP-TION.

1982

TRANS-FORMING A THEORY OF MANHATTAN INTO A NEW PROJECT. HORIZONTAL CONGESTION THROUGH THE TRANS-LATION OF VERTICAL CONGESTION. A METHOD TO TRANSLATE THE URBAN ACTIVITIES FROM A SKYSCRAPER IN NEW YORK, THE DOWNTOWN ATHLETIC CLUB, WHICH KOOLHAAS DESCRIBES AS "UNSTA-BLE AND UNCERTAIN", INTO THE DENSE PRO-GRAM OF THE COMPETI-TION FOR A NEW PARK IN PARIS.

USING STRIPS TO ORGANIZE THE MAJOR PROGRAM CREATED A CONTINUOUS ATMOSPHERE LIKE THE OPEN FLOOR PLAN OF A SKYSCRAPER.

DISTURBING THE PRO-GRAM WITH KIOSKS, PLAY-GROUNDS, ... THE CONNECTION OF VERY DIF-FERENT PRO-GRAMS WAS ACHIEVED.

2004

TRANSFORM-ING THE OLD LANDFILL SITE INTO A PARK WHICH SERVES AS AN EDUCATOR FOR SOCIETY AND RELAX-ING PLACE IS A NOT SO COMMON COMBINA-TION BUT ABSOLUTELY POSSIBLE.

PROGRAM-MING IN COMBINA-TION WITH NATURE WORKS BUT IS IT ENOUGH? THE BIGGEST ISSUE IS, THAT THE PARK JUST SEEMS TO BE TOO FAR OFF MANHATTAN.

INTEREST-ING SIDE ASPECTS OF THE PARK ARE THE ENERGY HARVESTING AND ENERGY CREATION THROUGH WINDMILLS.

2006

KEY STRAT-EGY FOR THE REVITALISA-TION OF THE ISLAND: EXPAND-ING PUBLIC ACCESS, HIS-TORIC PRES-ERVATIONS, MIXED USE DEVELOP-MENT AS ART-IST STUDIOS AND SCHOOLS AND A PUBLIC PARK.

WEST 8 ARE USING A CLEVER WAY TO WORK WITH THE EXISTING BY USING THE DEMOLISHED BUILDINGS AS THE MATE-RIAL FOR SUSTAINABLE LANDFILLS. THIS WILL PROVIDE ENOUGH MATERIAL FOR A STORM WATER COL-LECTION STRATEGY AND FRAMING THE LAND-MARKS THEY WANTED TO. LANDFILLS CAN BE USED IN AN ENVI-RONMENTAL-LY FRIENDLY WAY.

2006

RELY ENTIRELY ON SOLAR ENERGY AND OTHER RENEWABLE ENERGY SOURCES, WITH A SUSTAIN-ABLE, ZERO-CARBON, ZERO-WASTE ECOLOGY.

THE KNOW HOW IS COM-ING FROM OUTSIDE BUT NATIONS WITH THIS KNOW HOW SEEM TO IGNORE THE FACT THAT THEY WILL LOOSE IT IF THEY DON'T START EXPERI-MENTS LIKE MASDAR ON THEIR OWN GROUND.

REFERENCE PROJECTS LIKE MASDAR ARE FACTORS FOR EXPORT OF INDUSTRY PRODUCTS INSTEAD OF KNOWLEDGE. EXPORT IMPLIES BETTER ECONOMY.

2010

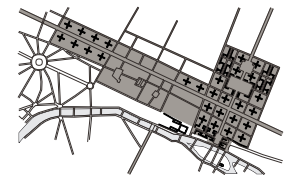
LOWER EN-ERGY COSTS PER UNIT OF OUTPUT AND MORE STABLE AND PREDICT-ABLE ENERGY PRICES. NEW ECONOMIC GROWTH AND JOB CREATION THROUGH IN-NOVATION, INCREASED SECURITY OF ENERGY SUPPLY AND MORE ECONOMIC STABILITY. MORE SUS-TAINABLE ENERGY AND FEWER EMIS-SIONS.

ROADMAP 2050 IS A CLEVER EXAMPLE ON HOW TO USE ARCHITEC-TURE AS "A VEHICLE OF MODERNI-SATION" ALTHOUGH IT'S FAR OFF WHAT CON-VENTIONAL ARCHITEC-TURAL PRAC-TISES USED TO DO.

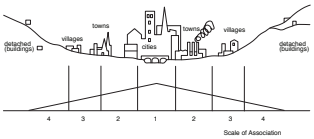
2050

?

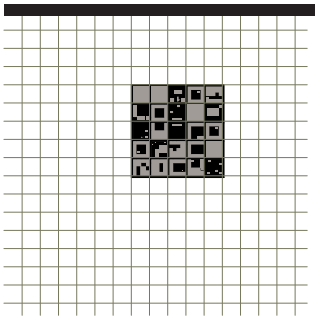
PROJECTS SUMMARY



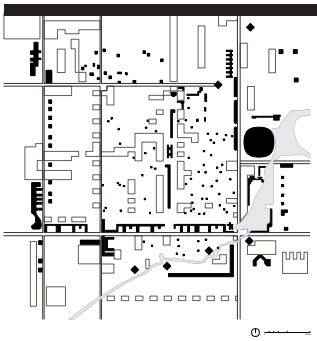
1925



1953



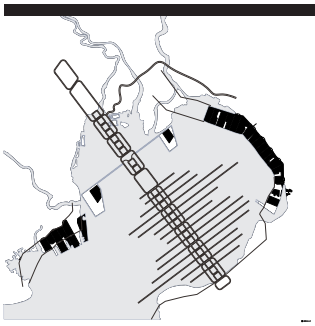
1960



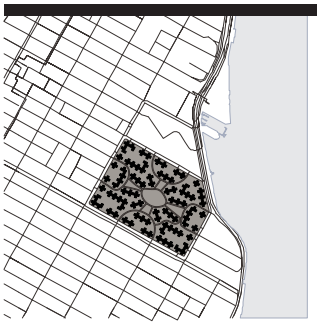
1934



1955



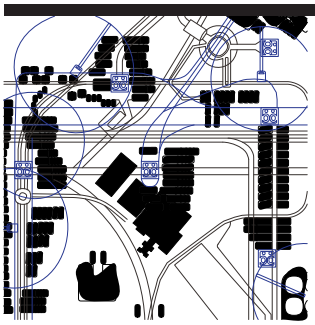
1961



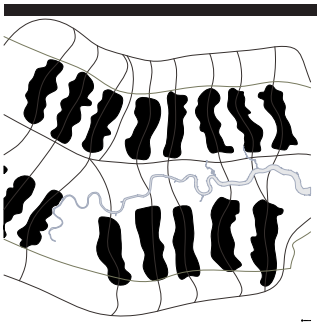
1943



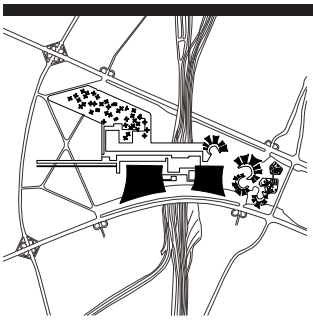
1960



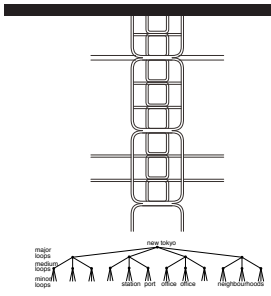
1964



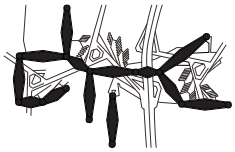
1951



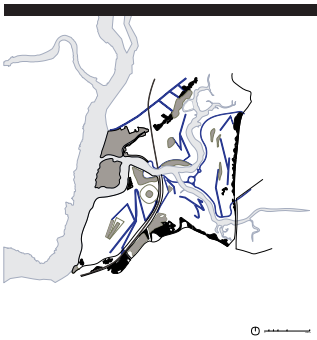
1960



1965



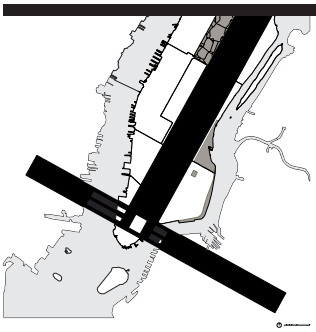
1966



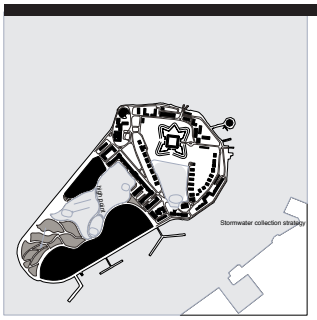
2001



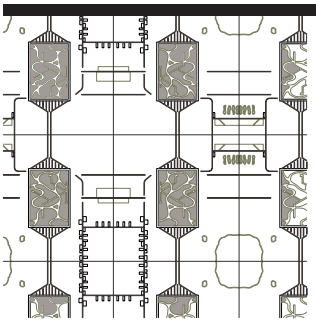
2011



1969



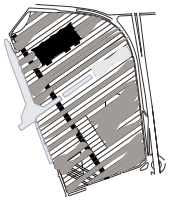
2001



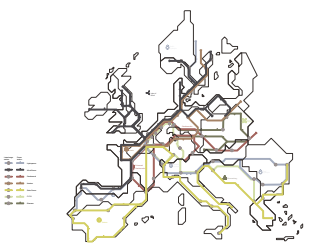
1969



2006



1982

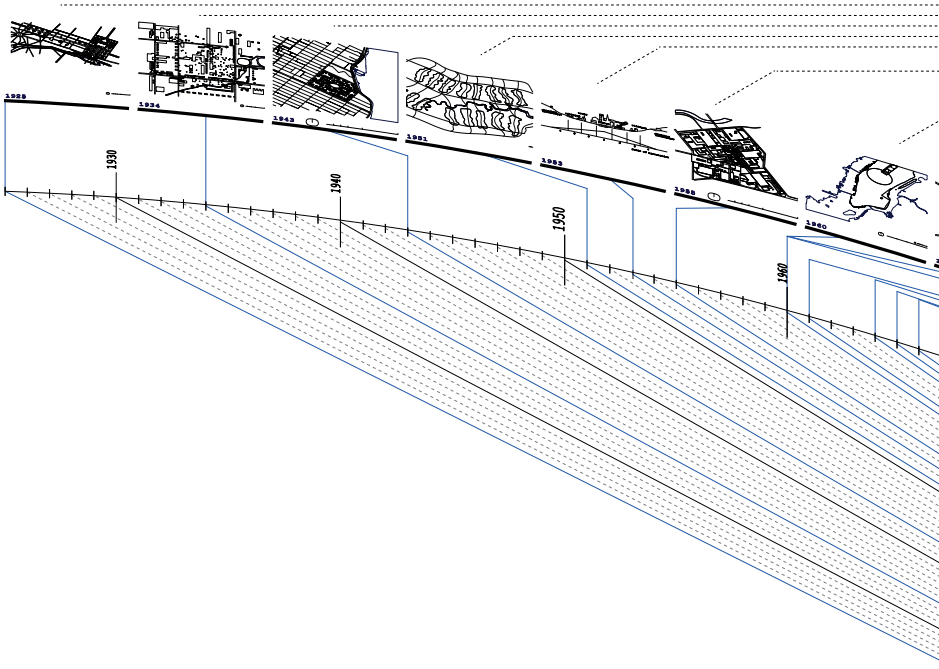


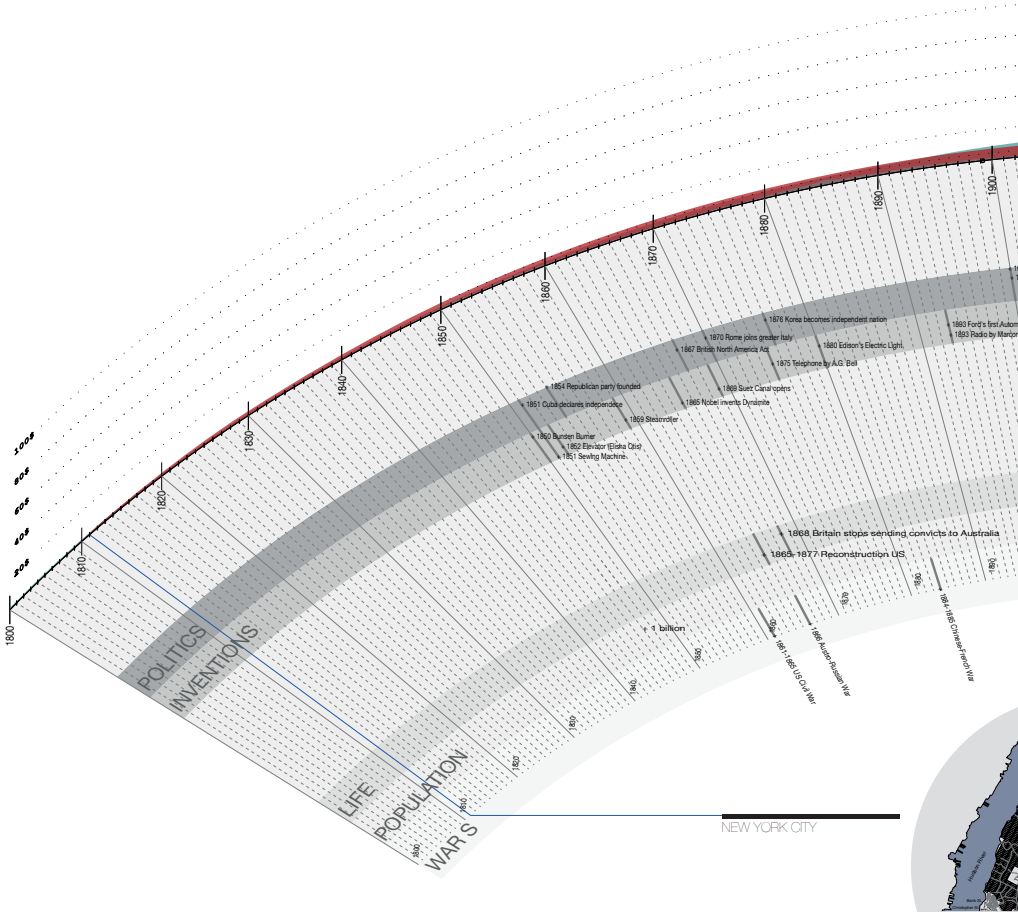
2010

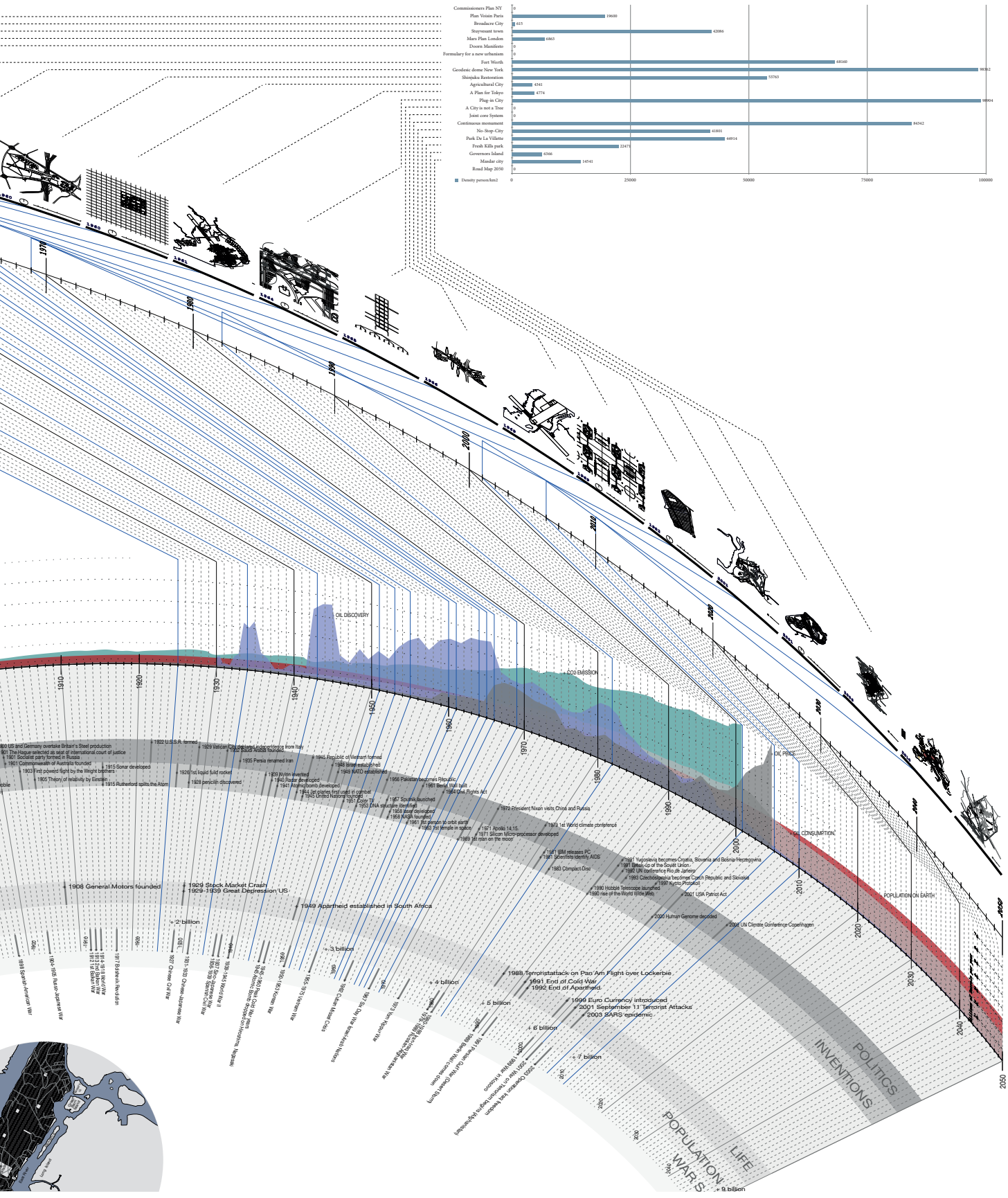
CONNEC-
TIONS

TIME LINE

The drawing gives an overview on how wars, inventions, politics, crisis are set in time to the analysed projects.
Resulting fear or enthusiasm from this fields, might has influenced the proposals.
It also compares the time lines with current problems like oil consumption, oil discovery, oil price, CO^2 emissions in comparison with population growth.



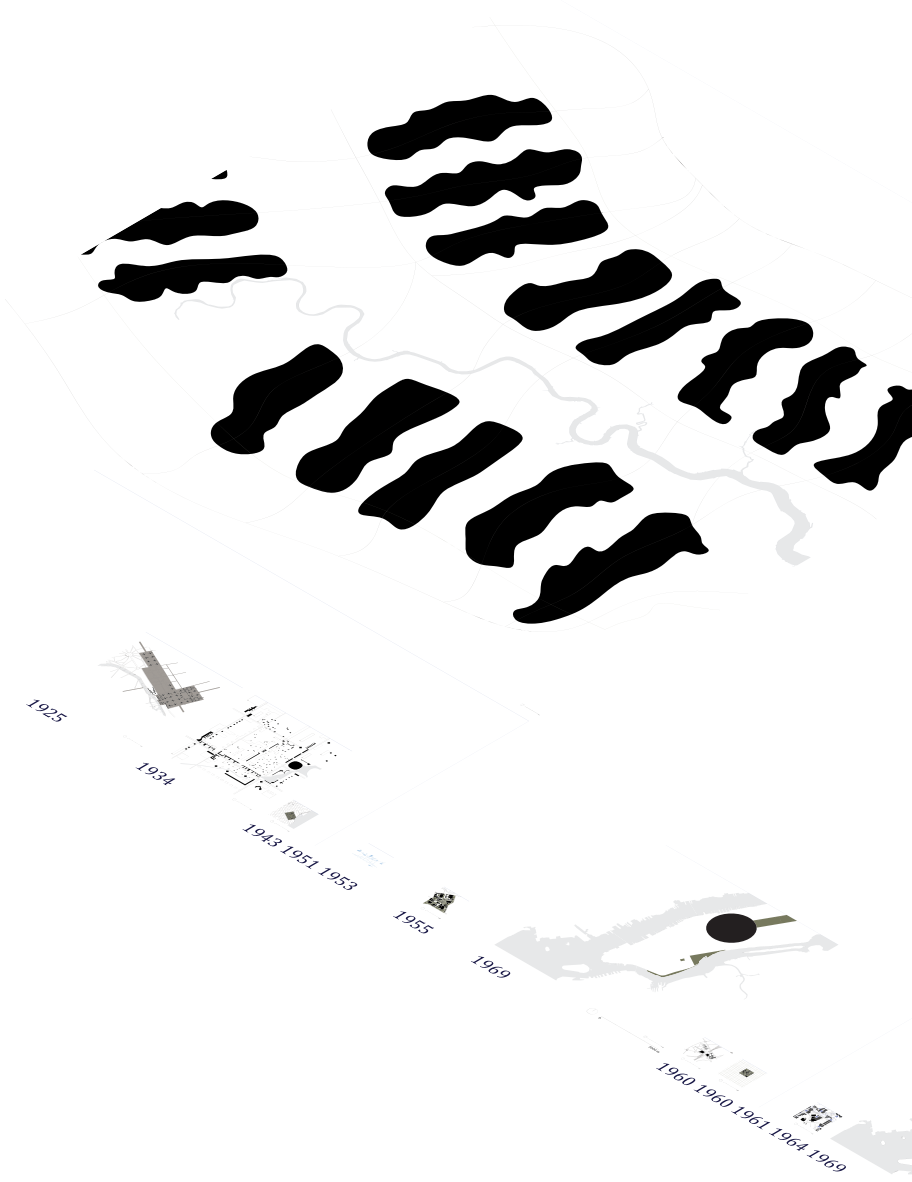



Commissioners Plan NY 0
Plan Voisin Paris 19600
Broadacre City 615
Stuyvesant town 42086
Mars Plan London 6863
Doorn Manifesto 0
Formulary for a new urbanism 0
Fort Worth 68160
Geodesic dome New York 98362
Shinjuku Restoration 53763
Agricultural City 4341
A Plan for Tokyo 4774
Plug-in City 98804
A City is not a Tree 0
Joint core System 0
Continuous monument 84342
No-Stop-City 41801
Park De La Villette 44914
Fresh Kills park 22471
Governors Island 6366
Masdar city 14541
Road Map 2050 0
Density person/km2
0
25000
50000
75000
100000
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
OIL DISCOVERY
CO2 EMISSION
OIL PEAK
OIL CONSUMPTION
POPULATION ON EARTH
1908 General Motors founded
1929 Stock Market Crash
1929-1939 Great Depression US
1949 Apartheid established in South Africa
2 billion
3 billion
4 billion
5 billion
6 billion
7 billion
9 billion
1988 Terroristattack on Pan Am Flight over Lockerbie
1991 End of Cold War
1992 End of Apartheid
1999 Euro Currency introduced
2001 September 11 Terrorist Attacks
2003 SARS epidemic
POLITICS
INVENTIONS
POPULATION
LIFE
WARS

PROJECTS SCALE

SCALE

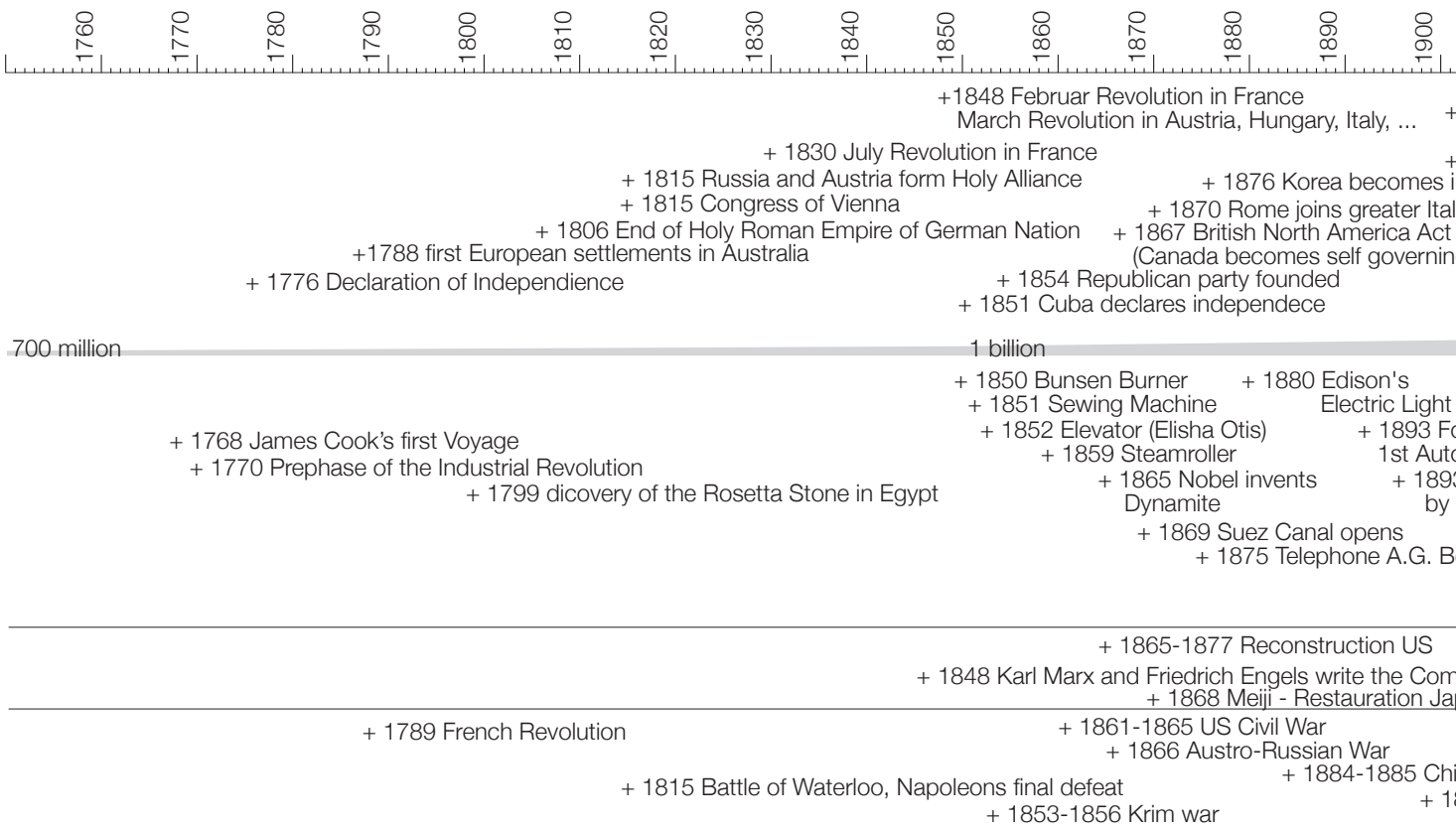
No matter how abstract the project is, to be able to compare one project to another it became obvious, that working with scalable plans was absolutely necessary which made it ineluctable to redraw all of the projects.

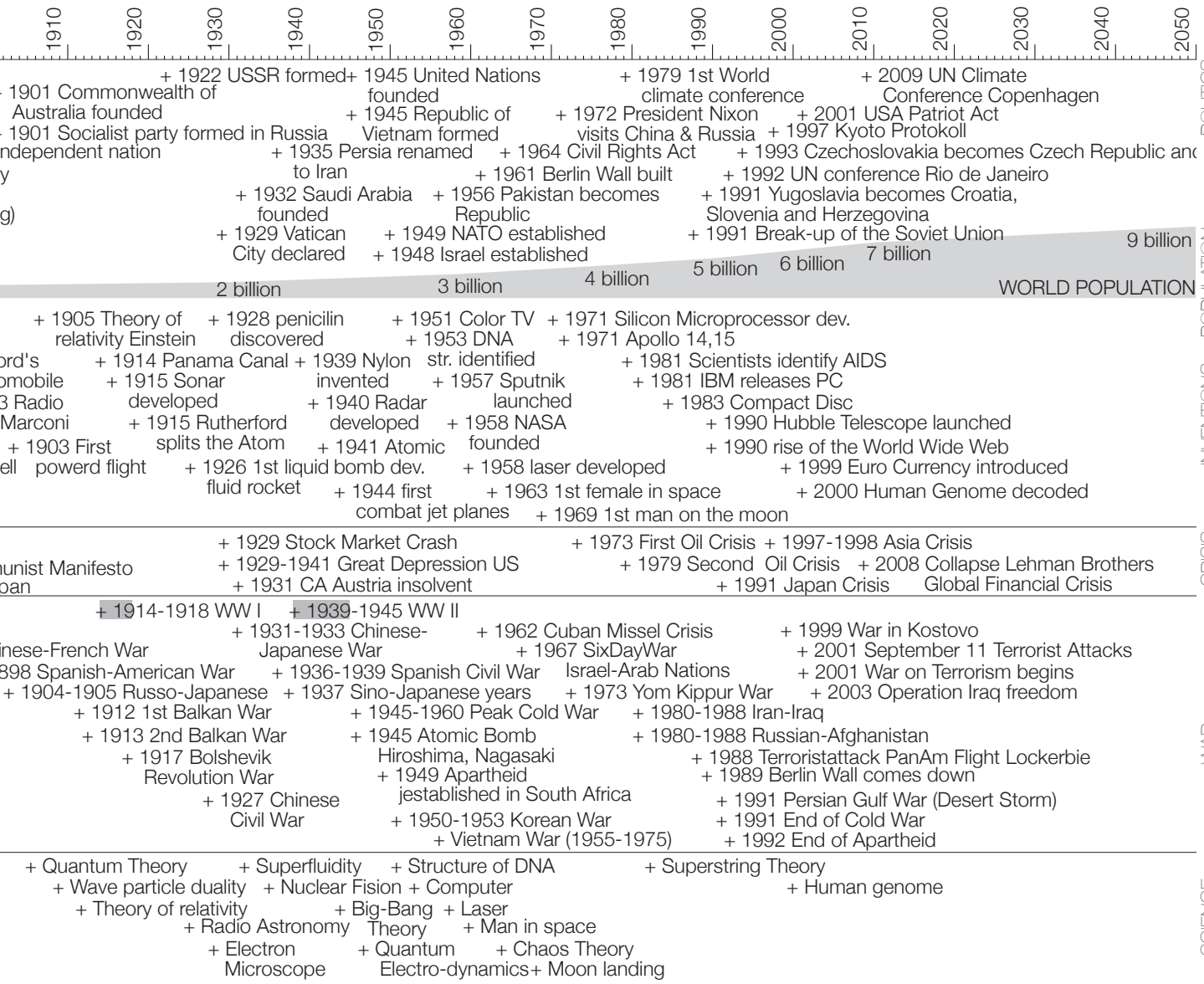



1965 1966
1969 1982 2001
2001
2006
2010

INFLUENCES

TIME LINE

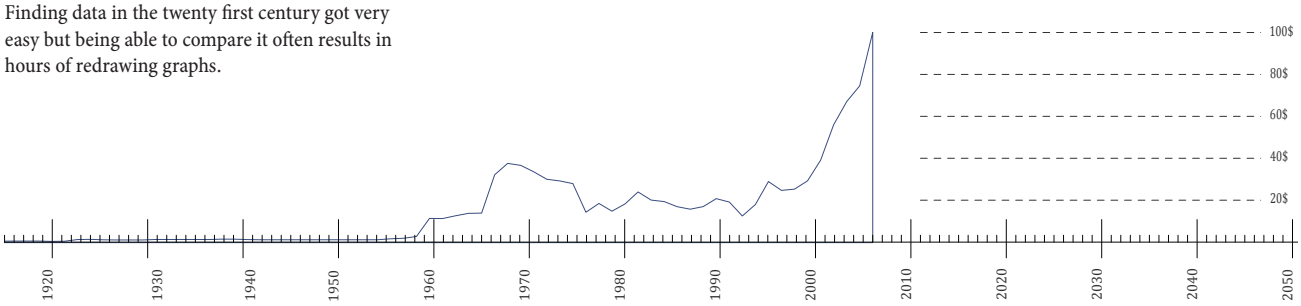



1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
POLITICS
+ 1922 USSR formed
+ 1945 United Nations founded
+ 1979 1st World climate conference
+ 2009 UN Climate Conference Copenhagen
+ 1901 Commonwealth of Australia founded
+ 1945 Republic of Vietnam formed
+ 1972 President Nixon visits China & Russia
+ 2001 USA Patriot Act
+ 1901 Socialist party formed in Russia
+ 1997 Kyoto Protokoll
ndependent nation
+ 1935 Persia renamed to Iran
+ 1964 Civil Rights Act
+ 1993 Czechoslovakia becomes Czech Republic and
y
+ 1961 Berlin Wall built
+ 1992 UN conference Rio de Janeiro
g)
+ 1932 Saudi Arabia founded
+ 1956 Pakistan becomes Republic
+ 1991 Yugoslavia becomes Croatia, Slovenia and Herzegovina
+ 1929 Vatican City declared
+ 1949 NATO established
+ 1948 Israel established
+ 1991 Break-up of the Soviet Union
POPULATION
9 billion
7 billion
6 billion
5 billion
4 billion
3 billion
2 billion
WORLD POPULATION
INVENTIONS
+ 1905 Theory of relativity Einstein
+ 1928 penicilin discovered
+ 1951 Color TV
+ 1953 DNA str. identified
+ 1971 Silicon Microprocessor dev.
+ 1971 Apollo 14,15
ord's
+ 1914 Panama Canal
+ 1939 Nylon invented
+ 1981 Scientists identify AIDS
omobile
+ 1915 Sonar developed
+ 1957 Sputnik launched
+ 1981 IBM releases PC
3 Radio
+ 1940 Radar developed
+ 1983 Compact Disc
Marconi
+ 1915 Rutherford splits the Atom
+ 1958 NASA founded
+ 1990 Hubble Telescope launched
+ 1903 First powerd flight
+ 1941 Atomic
+ 1990 rise of the World Wide Web
ell
+ 1926 1st liquid fluid rocket
+ 1958 laser developed
+ 1999 Euro Currency introduced
+ 1944 first combat jet planes
+ 1963 1st female in space
+ 2000 Human Genome decoded
+ 1969 1st man on the moon
CRISIS
+ 1929 Stock Market Crash
+ 1973 First Oil Crisis
+ 1997-1998 Asia Crisis
unist Manifesto
+ 1929-1941 Great Depression US
+ 1979 Second Oil Crisis
+ 2008 Collapse Lehman Brothers
oan
+ 1931 CA Austria insolvent
+ 1991 Japan Crisis
Global Financial Crisis
WAR
+ 1914-1918 WW I
+ 1939-1945 WW II
+ 1931-1933 Chinese-Japanese War
+ 1962 Cuban Missel Crisis
+ 1999 War in Kostovo
inese-French War
+ 1967 SixDayWar
+ 2001 September 11 Terrorist Attacks
898 Spanish-American War
+ 1936-1939 Spanish Civil War
Israel-Arab Nations
+ 2001 War on Terrorism begins
+ 1904-1905 Russo-Japanese
+ 1937 Sino-Japanese years
+ 1973 Yom Kippur War
+ 2003 Operation Iraq freedom
+ 1912 1st Balkan War
+ 1945-1960 Peak Cold War
+ 1980-1988 Iran-Iraq
+ 1913 2nd Balkan War
+ 1945 Atomic Bomb Hiroshima, Nagasaki
+ 1980-1988 Russian-Afghanistan
+ 1917 Bolshevik Revolution War
+ 1988 Terroristattack PanAm Flight Lockerbie
+ 1949 Apartheid jestablished in South Africa
+ 1989 Berlin Wall comes down
+ 1927 Chinese Civil War
+ 1991 Persian Gulf War (Desert Storm)
+ 1950-1953 Korean War
+ 1991 End of Cold War
+ Vietnam War (1955-1975)
+ 1992 End of Apartheid
SCIENCE
+ Quantum Theory
+ Superfluidity
+ Structure of DNA
+ Superstring Theory
+ Wave particle duality
+ Nuclear Fision
+ Computer
+ Human genome
+ Theory of relativity
+ Big-Bang Theory
+ Laser
+ Radio Astronomy
+ Man in space
+ Electron Microscope
+ Quantum Electro-dynamics
+ Chaos Theory
+ Moon landing

INFLUENCES

DATA

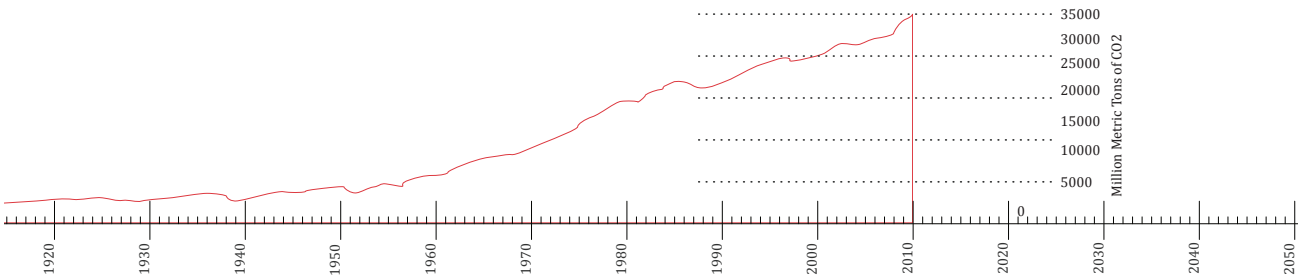
Finding data in the twenty first century got very easy but being able to compare it often results in hours of redrawing graphs.



Nominal oil price

NOMINAL OIL PRICE

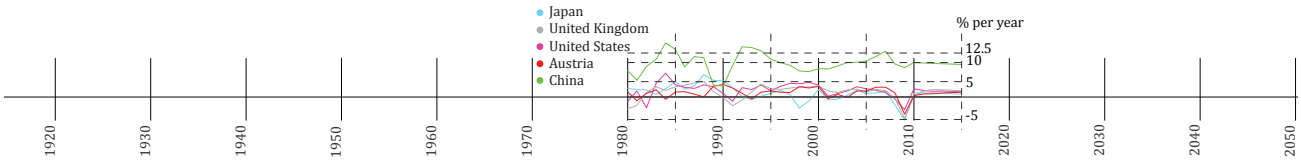
source: http://www.economicshelp.org/uploaded_images/800px-Oil_Prices_1861_2007.svg-727503.png



Global CO2 emissions

GLOBAL CO^2 EMISSIONS

source: http://www.pewclimate.org/docUploads/images/Historical-Emissions.preview.JPG



Real GDP growth (Annual percent change)

GDP GROWTH

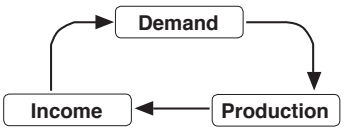
source: http://www.imf.org/external/datamapper/index.php

IMF

"The International Monetary Fund (IMF) is an organization of 186 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world."[1]

GDP DEFINITION

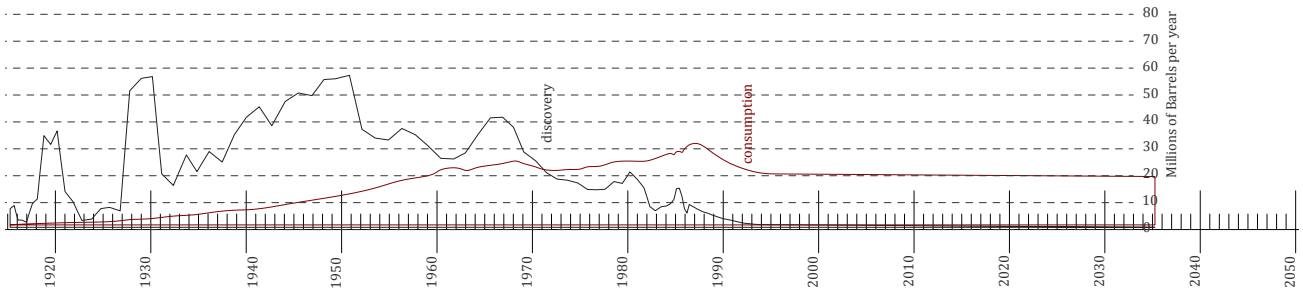
"Gross Domestic Product. The total market value of all final goods and services produced in a country in a given year, equal to total consumer, investment and government spending, plus the value of exports, minus the value of imports. The GDP report is released at 8:30 am EST on the last day of each quarter and reflects the previous quarter. Growth in GDP is what matters, and the U.S. GDP growth has historically averaged about 2.5-3% per year but with substantial deviations. Each initial GDP report will be revised twice before the final figure is settled upon: the "advance" report is followed by the "preliminary" report about a month later and a final report a month after that. Significant revisions to the advance number can cause additional ripples through the markets. The GDP numbers are reported in two forms: current dollar and constant dollar. Current dollar GDP is calculated using today's dollars and makes comparisons between time periods difficult because of the effects of inflation. Constant dollar GDP solves this problem by converting the current information into some standard era dollar, such as 1997 dollars. This process factors out the effects of inflation and allows easy comparisons between periods. It is important to differentiate Gross Domestic Product from Gross National Product (GNP). GDP includes only goods and services produced within the geographic boundaries of the U.S., regardless of the producer's nationality. GNP doesn't include goods and services produced by foreign producers, but does include goods and services produced by U.S. firms operating in foreign countries."[2]



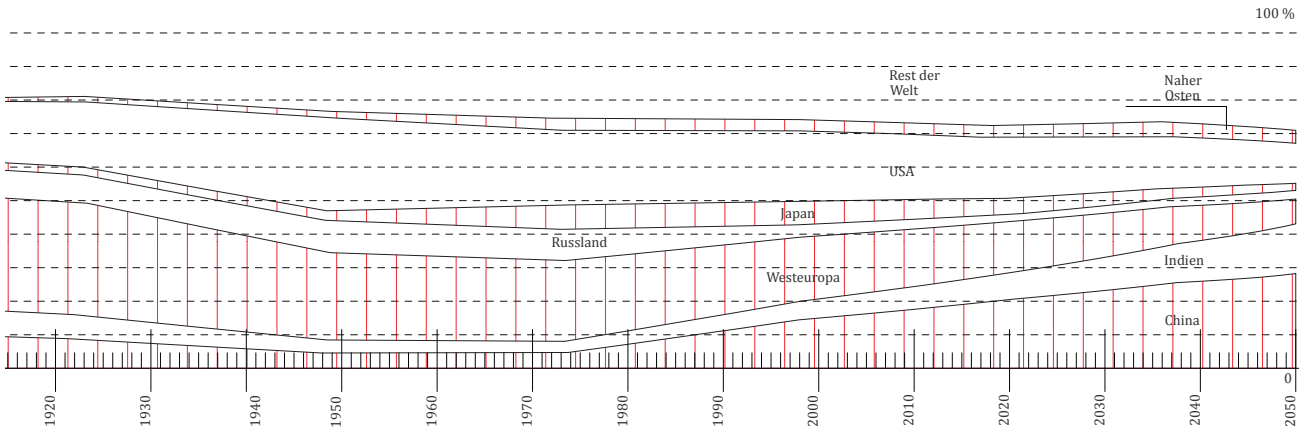
"To measure economic activity, one needs a meaningful aggregation of all kinds of productions. The territory's productions are the crossing result of 1) effective demand, 2) production capabilities, and 3)

1 IMF, link: http://www.imf.org/external/datamapper/ - accessed dec 2010

2 GDP, link: http://www.investorwords.com/2153/GDP.html - accessed dec 2010



OIL DISCOVERY - CONSUMPTION



WORLD ECONOMY RATIO

Weltwirtschaftsanteile Regionen
source: Die Zeit, Nr. 22/2008

income. Income arises from payments distributed to production factors and it provides the necessary finance for demand.

Impact on other variables

GDP can manifest manyfold interactions with its components, giving rise to positive and negative loops. One of the most important is the link between consumption and income. Other feedback loops are included in this interactive map.

Movements in GDP have a number of effects on specific markets. For instance, energy consumption and greenhouse gases' emissions can be linked to it, unless proper strategies are undertaken.

Long-term trends

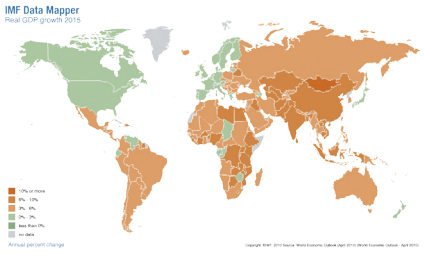
Never is GDP at the same level year after year. The most common GDP trend is a continuous growth with periods of acceleration and deceleration. Some episodes of absolute fall are afterwards overwhelmed by further growth. Decades can be quite different in terms of average rate of GDP growth.

In many countries, especially small and in the Third World, growth is hectic and irregular, with frequent and deep absolute falls and booms.

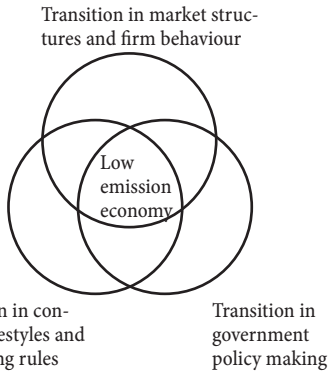
Wars are a distinctive source of GDP sinking.

Oil crises have exerted recessionary pressure all over the world (with the partial exception of oil producer countries).

On a global scale, the distance between the richest and the poorest countries is increasing, whereas locally there exist "convergence clubs" in which distances are getting smaller. A few developing countries have taken off and reached a high development stage."[3]



Graphically one could express in an operational way the transition in the economic system (which in turn is connected, as seen before, with other systems) in this way:

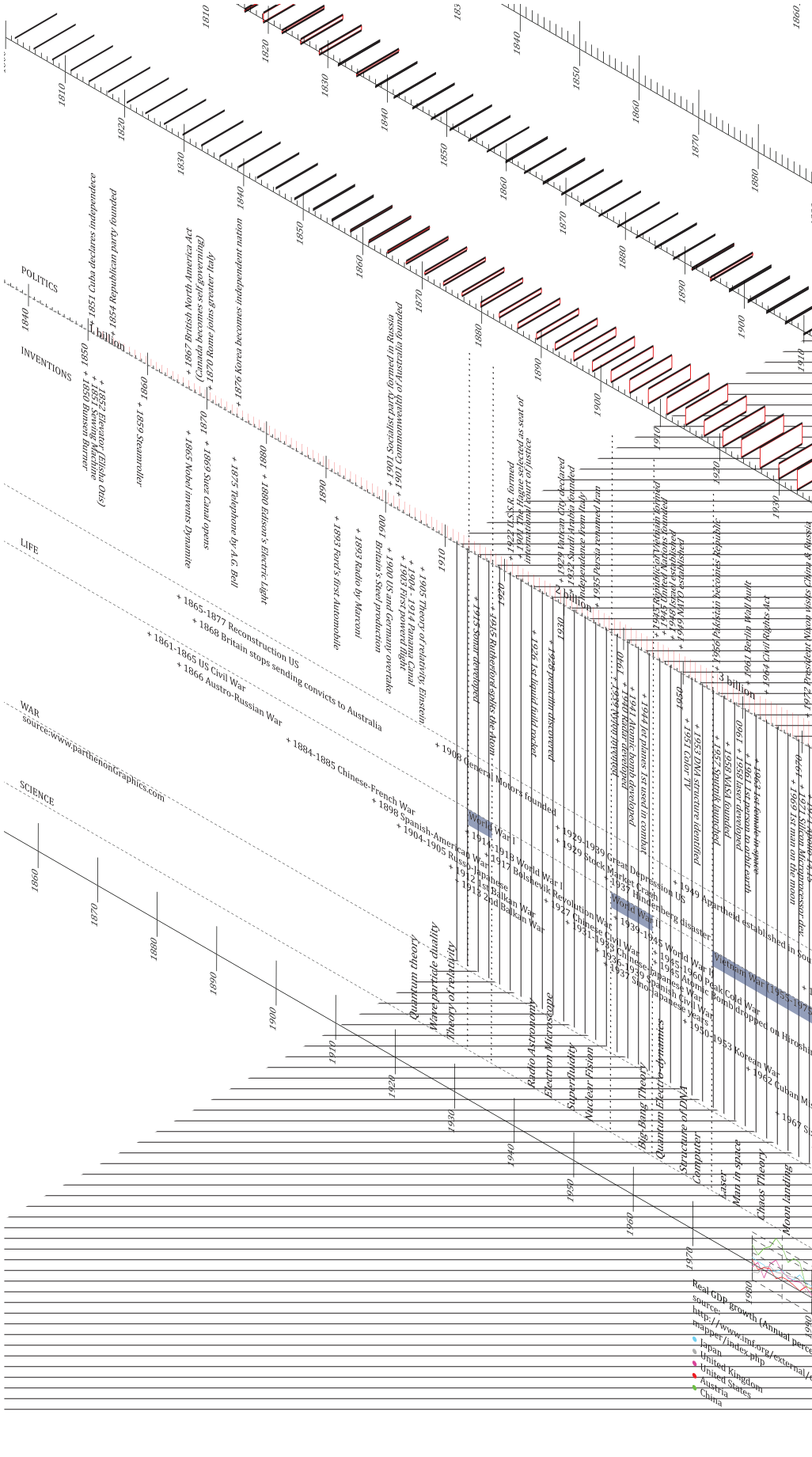


3 *GDP via Economics Web Institute, 2010, link: http://www.economicswebinstitute.org/glossary/gdp.htm - accessed dec 2010*

INFLUENCES

TIME SPAN

A test drawing of the time span comparison clearly shows how difficult it is to compare the overload of data someone can access.


POLITICS
INVENTIONS
LIFE
WAR
source:www.parthenongraphics.com
SCIENCE
+ 1851 Cuba declares independence
+ 1854 Republican party founded
+ 1867 British North America Act (Canada becomes self-governing)
+ 1876 Korea becomes independent nation
+ 1901 Socialist party formed in Russia
+ 1901 Commonwealth of Australia formed
+ 1859 Steamroller
+ 1869 Suez Canal opens
+ 1875 Telephone by A.G. Bell
+ 1880 Edison's Electric Light
+ 1893 Ford's first Automobile
+ 1903 Wright Brothers Airplane
+ 1905 Theory of relativity, Einstein
+ 1914 Panama Canal
+ 1920 Vatican City declared
+ 1932 South Arabia founded
+ 1945 United Nations founded
+ 1946 Israel established
+ 1949 NATO established
+ 1961 Berlin Wall built
+ 1964 Civil Rights act
+ 1865-1877 Reconstruction US
+ 1868 Britain stops sending convicts to Australia
+ 1861-1865 US Civil War
+ 1866 Austro-Russian War
+ 1884-1885 Chinese-French War
+ 1898 Spanish-American War
+ 1904-1905 Russo-Japanese War
+ 1908 General Motors founded
+ 1914-1918 World War I
+ 1917 Bolshevik Revolution
+ 1912-1913 1st Balkan War
+ 1913 2nd Balkan War
+ 1927 Chinese Civil War
+ 1929-1939 Great Depression
+ 1931 Japanese invasion of Manchuria
+ 1933 Nazi party in power
+ 1935 Italian invasion of Ethiopia
+ 1936-1939 Spanish Civil War
+ 1937 Second Chinese-Japanese War
+ 1939-1945 World War II
+ 1941 Japanese attack on Pearl Harbor
+ 1945 Atomic Bomb dropped
+ 1945 United Nations founded
+ 1947 Cold War
+ 1948 Arab-Israeli War
+ 1949 Apartheid established in South Africa
+ 1950-1953 Korean War
+ 1954-1975 Vietnam War
+ 1959 Cuban Revolution
+ 1962 Cuban Missile Crisis
+ 1967 Six-Day War
+ 1973 Yom Kippur War
+ 1979 Islamic Revolution in Iran
+ 1980-1988 Iran-Iraq War
+ 1982 Falklands War
+ 1986 Perestroika becomes Keywords
+ 1989 Tiananmen Square protests
+ 1990 Reunification of Germany
+ 1991 Gulf War
+ 1991 Dissolution of the USSR
+ 1991 Yugoslavian Wars (Serbia & Croatia)
+ 1994 Rwandan Genocide
+ 1994 Palestinian Authority established
+ 1997 Kyoto Protocol
+ 1998 Indian nuclear tests
+ 1999 Kosovo War
+ 2001 September 11 attacks
+ 2001 War in Afghanistan
+ 2003 Iraq War
+ 2004 Indian Ocean earthquake and tsunami
+ 2005 London bombings
+ 2006 Israel-Lebanon conflict
+ 2008 Russo-Georgian War
+ 2008 Global financial crisis
+ 2010 Arab Spring
+ 2011 Japanese earthquake and tsunami
+ 2011 Libyan civil war
+ 2011 Occupy movement
+ 2011 Syrian civil war
+ 2011 Egyptian revolution
+ 2011 Yemeni civil war
+ 2011 Bahraini uprising
+ 2011 Norway attacks
+ 2011 Iraq War ends
+ 2012 Gaza War
+ 2013 Crimean crisis
+ 2014 Ebola outbreak
+ 2014 War in Donbass
+ 2014 Russian annexation of Crimea
+ 2014 Islamic State of Iraq and the Levant
+ 2015 Nepal earthquake
+ 2015 Refugee crisis in Europe
+ 2015 Paris attacks
+ 2016 Brexit
+ 2016 Turkish coup d'état attempt
+ 2016 Nice attack
+ 2016 Berlin truck attack
+ 2016 Turkish military operation in Syria
+ 2016 Russian military intervention in Syria
+ 2016 Bastille Day attack
+ 2016 Normandy church attack
+ 2016 Saint-Étienne-du-Rouvray attack
+ 2016 Rouen attack
+ 2016 Orlando nightclub shooting
+ 2016 Dallas police shooting
+ 2016 Baton Rouge police shootings
+ 2016 Minnesota police shooting
+ 2016 Louisiana floods
+ 2016 Alton Sterling shooting
+ 2016 Philando Castile shooting
+ 2016 Dallas police shooting
+ 2016 Nice truck

DISCOVERY
CONSUMPTION
CO2 EMMISSION
OIL PRICE
Russland
Rest der Welt
Japan
USA
Westeuropa
Naher Osten
Indien
China
%
100
Million Metric Tons of CO2
Millions of Barrels per year
oil energy timeline
source:http://bigpicture.typepad.com/comments/files/xtralargeposter2-g
Nominal oil price
source:
http://www.economicshelp.org/wp-content/uploads/2008/03/800px-Oil_Prices_1861_2007.svg
Global CO2 emissions
source:
http://www.pewclimate.org/docUploads/images/Historical-Emissions.preview.JPG
9 billion people
Population
Source: The Timetables of History, Grun, 1991; Kingfisher Encyclopedia of History, 1999; Encyclopedia Britanica, 15 ed 1993
1 billion
2 billion
3 billion
4 billion
5 billion
6 billion
7 billion
1979 1st World climate conference
1988 Intergovernmental Panel on Climate Change established
1990 Fall of the Soviet Union
1991 Czechoslovakia becomes Czech Republic and Slovakia
1992 Czechoslovakia becomes Czech Republic and Slovakia
1993 Czechoslovakia becomes Czech Republic and Slovakia
1994 Czechoslovakia becomes Czech Republic and Slovakia
1995 Czechoslovakia becomes Czech Republic and Slovakia
1996 Czechoslovakia becomes Czech Republic and Slovakia
1997 Kyoto Protokoll
1997 Kyoto Protocol
1998 Kyoto Protocol
1999 Kyoto Protocol
2000 Kyoto Protocol
2001 Kyoto Protocol
2002 Kyoto Protocol
2003 Kyoto Protocol
2004 Kyoto Protocol
2005 Kyoto Protocol
2006 Kyoto Protocol
2007 Kyoto Protocol
2008 Kyoto Protocol
2009 Kyoto Protocol
2010 Kyoto Protocol
2011 Kyoto Protocol
2012 Kyoto Protocol
2013 Kyoto Protocol
2014 Kyoto Protocol
2015 Kyoto Protocol
2016 Kyoto Protocol
2017 Kyoto Protocol
2018 Kyoto Protocol
2019 Kyoto Protocol
2020 Kyoto Protocol
2021 Kyoto Protocol
2022 Kyoto Protocol
2023 Kyoto Protocol
2024 Kyoto Protocol
2025 Kyoto Protocol
2026 Kyoto Protocol
2027 Kyoto Protocol
2028 Kyoto Protocol
2029 Kyoto Protocol
2030 Kyoto Protocol
2031 Kyoto Protocol
2032 Kyoto Protocol
2033 Kyoto Protocol
2034 Kyoto Protocol
2035 Kyoto Protocol
2036 Kyoto Protocol
2037 Kyoto Protocol
2038 Kyoto Protocol
2039 Kyoto Protocol
2040 Kyoto Protocol
2041 Kyoto Protocol
2042 Kyoto Protocol
2043 Kyoto Protocol
2044 Kyoto Protocol
2045 Kyoto Protocol
2046 Kyoto Protocol
2047 Kyoto Protocol
2048 Kyoto Protocol
2049 Kyoto Protocol
2050 Kyoto Protocol
1881 + 1904 IBM releases the Scientists identify AIDS
1961 + 1990 Rise of the World Wide Web
1964 + 1990 Hubble Telescope launched
1983 Compact Disc
2000 + 2000 Human genome decoded
2001 + 2001 September 11 Terrorist Attacks
2001 + 2001 War on Terrorism begins (Afghanistan)
2002 + 2002 Euro currency introduced
2003 + 2003 SARS Epidemic
2003 + 2003 Operation Iraq freedom
1988 Terrorstattack of Pan Am Flight over Lockerbie
1988 Iran-Iraq War
1988 Russian Afghanistan War comes down
1989 Berlin Wall Comes down
1990 Persian Gulf War (Desert Storm)
1991 End of Cold War
1992 End of Apartheid
1993 Kosovo
1973 Yom Kippur War
1973 Israel Arab Nations
1973 Oil Crisis
1970 Students killed at Kent State University
1945 Hiroshima, Nagasaki
1945 End of World War II
1939 End of Great Depression
1939 World War II
1914 World War I
1900 Titanic
1900 Zeppelin
1900 Airplane
1900 Automobile
1900 Radio
1900 Electricity
1900 Telephone
1900 Phonograph
1900 Light Bulb
1900 Motion Picture
1900 Bicycle
1900 Typewriter
1900 Sewing Machine
1900 Steam Engine
1900 Railroad
1900 Telegraph
1900 Photography
1900 Steamboat
1900 Steamship
1900 Steel
1900 Iron
1900 Gasoline
1900 Petroleum
1900 Coal
1900 Canal
1900 Dynamite
1900 Rubber
1900 Cotton
1900 Gun
1900 Compass
1900 Printing Press
1900 Paper
1900 Gunpowder
1900 Clock
1900 Glass
1900 Lens
1900 Steel Plow
1900 Wheel
1900 Sailing Ship
1900 Rudder
1900 Oar
1900 Boat
1900 Fishing Net
1900 Bow and Arrow
1900 Spear
1900 Axe
1900 Knife
1900 Fire
1900 Stone Tools
1900 Agriculture
1900 Pottery
1900 Domestication of Animals
1900 Writing
1900 Money
1900 Weaving
1900 Wheel
1900 Sailing Ship
1900 Rudder
1900 Oar
1900 Boat
1900 Fishing Net
1900 Bow and Arrow
1900 Spear
1900 Axe
1900 Knife
1900 Fire
1900 Stone Tools
1900 Agriculture
1900 Pottery
1900 Domestication of Animals
1900 Writing
1900 Money
1900 Weaving
annual growth rate
%
15
10
5
0
-5
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
1881
1861
1841
1821
1801
1781
1761
1741
1721
1701
1681
1661
1641
1621
1601
1581
1561
1541
1521
1501
1481
1461
1441
1421
1401
1381
1361
1341
1321
1301
1281
1261
1241
1221
1201
1181
1161
1141
1121
1101
1081
1061
1041
1021
1001
981
961
941
921
901
881
861
841
821
801
781
761
741
721
701
681
661
641
621
601
581
561
541
521
501
481
461
441
421
401
381
361
341
321
301
281
261
241
221
201
181
161
141
121
101
81
61
41
21
1
-19
-39
-59
-79
-99
-119
-139
-159
-179
-199
-219
-239
-259
-279
-299
-319
-339
-359
-379
-399
-419
-439
-459
-479
-499
-519
-539
-559
-579
-599
-619
-639
-659
-679
-699
-719
-739
-759
-779
-799

LOCAL-ISING

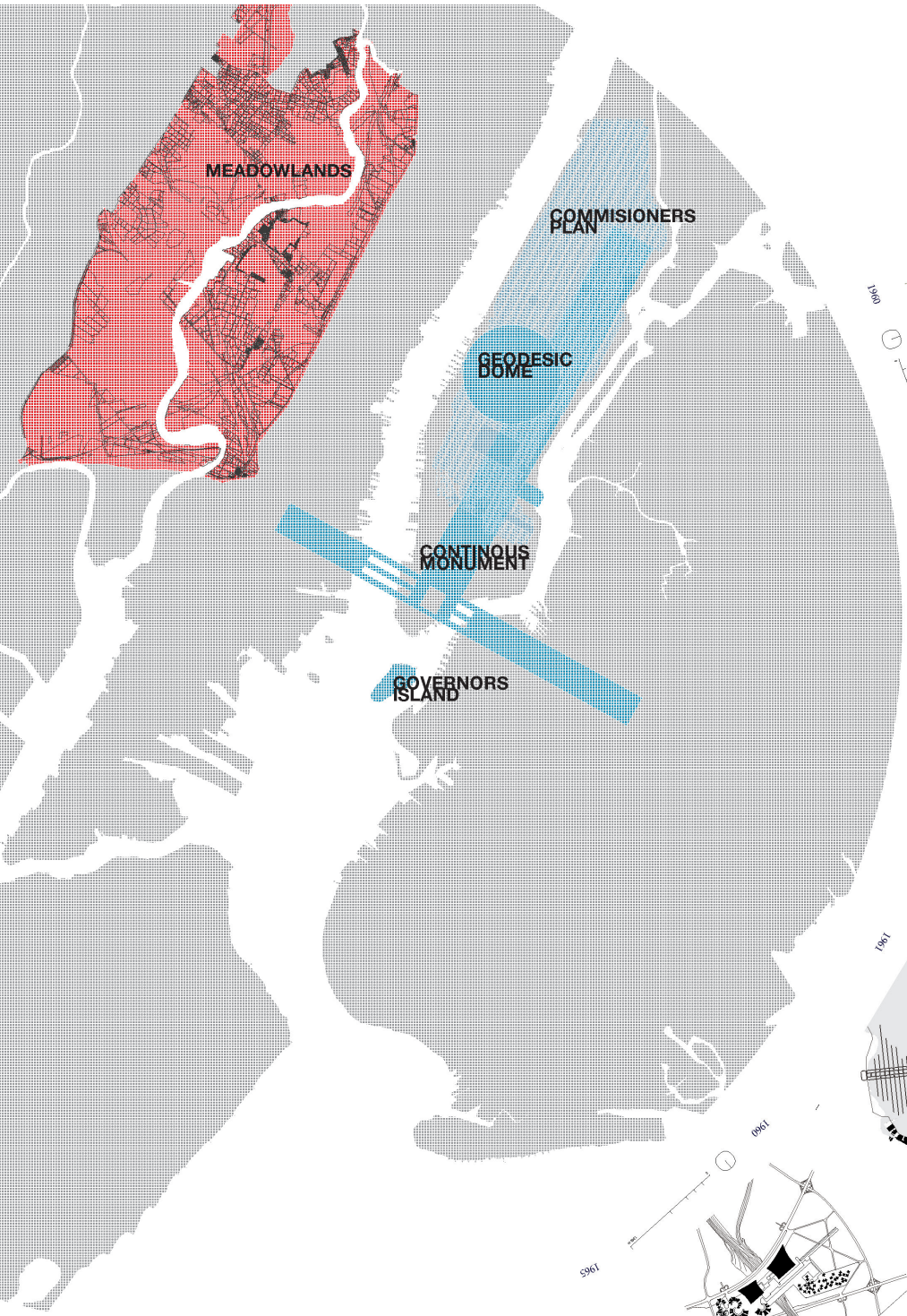
COLLAGE & CONTRADICTIONS?

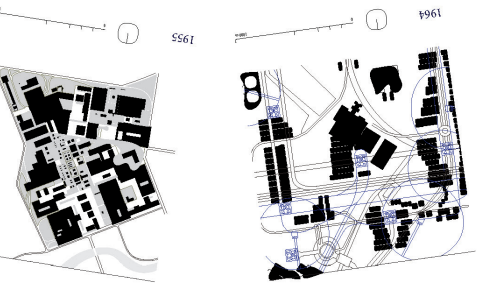
Manhattan has always been surrounded by proposals. Every Architect in the world wants to design a bit of the metropolis and in this research only 5 of them were analysed.
Even if there would be so many more proposals located in Manhattan to discuss, it was necessary to look at New York City the way it's perceived - one of the most international cities in the world.
This means New York has always been influenced by international ideas, in a way surrounded, that's why the visions are drawn around it beside of the one's which are actually located in New York.

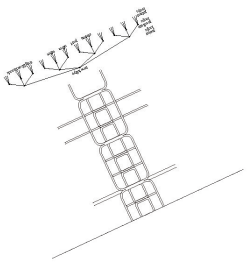
LEFT OUT?

Just off the melting point Manhattan, lies a for years almost forgotten place, the size of two times the area of Manhattan. Compared to it's counterpart Manhattan it looks more like an industrial wasteland.
Although the Meadowlands are far off Manhattan it would be interesting if this place got influenced through the many visions Manhattan had to absorb over 200 years, since the first big vision was born.

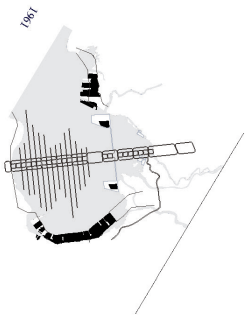


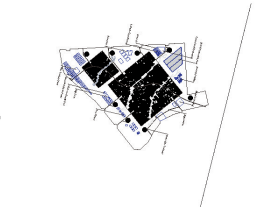

MEADOWLANDS
COMMISIONERS PLAN
GEODESIC DOME
CONTINOUS MONUMENT
GOVERNORS ISLAND

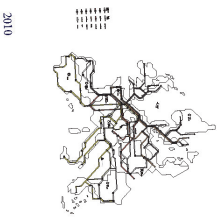

1955
1964

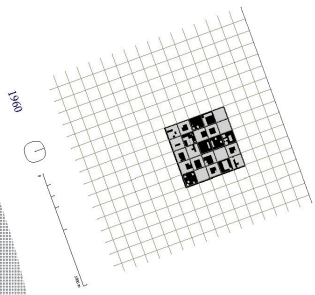


1960
1965


1961


2006


2010


1960

SOURCES

SOURCES BLUEPRINTS

DIPLOMA THESIS 3

INTRO 5

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 199 7

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 229 7

INTRO 7

TABLE OF CONTENT 8

PLANS 10

All Maps from: Early Town Planning in New York State Author(s): Turpin C. Bannister Source: The Journal of the American Society of Architectural Historians, Vol. 3, No. 1/2, The History of City Planning (Jan. - Apr., 1943), pp. 36-42 Published by: University of California Press on behalf of the Society of Architectural Historians Stable URL: http://www.jstor.org/stable/901254 . Accessed: 08/06/2011 04:40 11

CITY SYSTEMS 14

Image source: Loop City from BIG byAndreas Huemer 15

Image source: Arch Daily, Big Loop City, 2010, link: http://www.archdaily.com/76482/loop-city-big/ - Accessed July 2011 15

Image source: Loop New York by Andreas Huemer 15

COMMISSIONERS PLAN NY 16

Encyclopedia results for Commissioners' Plan of 1811: Stable URL: http://www.glossary.com/reference.php?q=Commissioners'+Plan+of+1811 Accessed: 08/06/2011 16

Rationalizing the Landscape: Superimposing the grid upon the island of Manhattan Author(s): Reuben Skye Rose-Redwood Source: 16

The Pennsylvania State University, The Graduate School ,Department of Geography, 2002, Reuben Skye Rose-Redwood , p. 71 Stable URL: http://geotest.tamu.edu/userfiles/72/Rationalizing_the_Landscape_FINALCOPY.pdf Accessed: 08/06/2011 04:40 16

Quotation in quote by DeWitt, Simeon (1813), The Elements of Perspective, Albany: H.C. Southwick. 16

Ibid. p144 16

Ibid p182 16

Image source: Making way for the "path of progress," looking north up 2nd Avenue from 42nd Street in 1860 (Source: Spann, 1988) link: jhttp://upload.wikimedia.org/wikipedia/commons/2/28/Second_Avenue_Manhattan_1861.jpg - oct 2010 16

Designing the City of New York: The Commissioners' Plan of 1811 by Artis Wright, Stephen A. Schwarzman Building, Map Division July 30, 2010, visited Jan 2011 <http://www.nypl.org/blog/2010/07/30/designing-city-new-york-commissioners-plan-1811> 16

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 16

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 16

Image source: Oil Portrait of Simeon De Witt by Ezra Ames, about 1804, Link: source: www.americanhistory.si.edu/documentsgallery/images/content/starmap/portrait.jpg -oct 2010 16

Das Raster für die Zukunft New Yorks by Alexander Kulpok Published by: Spiegel Online Stable URL: http://www.spiegel.de/wissenschaft/mensch/0,1518,592937,00.html Accessed: 08/06/2011 04:40 16

Grid plan from Wikipedia, the free encyclopedia Stable URL: http://en.wikipedia.org/wiki/Grid_plan Accessed: 08/03/2011 16

Ibid. 16

Ibid. 16

Graphic source: All Graphics drawn by Andreas Huemer 17

Commissioners Plan text sources: 17

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 17

DeWitt, Simeon (1813), The Elements of Perspective, Albany: H.C. Southwick. 17

DeWitt, Simeon (1819), Considerations of the Necessity of Establishing an Agricultural College, and having more of the Children of Wealthy Citizens Educated for the Profession of Farming, Albany: Websters and Skinners 17

Early Town Planning in New York State Author(s): Turpin C. Bannister Source: The Journal of the American Society of Architectural Historians, Vol. 3, No. 1/2, The History of City Planning (Jan. - Apr., 1943), pp. 36-42 Published by: University of California Press on behalf of the Society of Architectural Historians Stable URL: http://www.jstor.org/stable/901254 . Accessed: 08/06/2011 04:40 17

PLAN VOISIN PARIS 18

Source: Le Corbusier: Towards a New Architecture. Dover Publications, 1985 18

Summary by: Toward an Architecture by Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Toward_an_Architecture -oct 2010 18

Image source: Plan Voisin - Le Corbusier 1925, link: http://aftercorbu.com/wordpress/wp-content/uploads/2007/08/plan_voison_paris.jpg -oct 2010 18

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 18

Image source: Le Corbusier link: http://www.parkhillflats.co.uk/lecorbusier.jpg -oct 2010 18

Graphic source: All Graphics drawn by Andreas Huemer 19

Plan Voisin text sources: 19

Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Le_Corbusier -oct 2010 19

BROADACRE CITY 20

Wright, Frank Lloyd: The living City, New American Library, New York, 1958 20

Ibid. 20

Ibid 20

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 20

Further Reading: 20

49 cities, WORKac, Storefront for Art and Architecture 20

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman ISBN-10: 0847815226 20

Frank Lloyd Wright via Wikipedia, link: http://en.wikipedia.org/wiki/Frank_Lloyd_Wright - oct 2010 20

Broadacre City via Wikipedia, link: http://en.wikipedia.org/wiki/Broadacre_City -oct 2010 20

Image source: Broadacre - Frank Lloyd Wright 1934, ARCH+ Zeitschrift für Architektur und Städtebau 196/197 : Post Oil City, Aachen, Arch+ Verlag, Jan 2010 p. 134 20

ARCH+ Zeitschrift für Architektur und Städtebau 196/197 : Post Oil City, Aachen, Arch+ Verlag, Jan 2010 p. 134 20

Image source: Frank Lloyd Wright 1954, link: http://www.parkhillflats.co.uk/lecorbusier.jpg -oct 2010 20

Graphic source: All Graphics drawn by Andreas Huemer 21

STUYVESANT TOWN 22

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 22

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y. 22

Image source: Stuyvesant Town, 1944, link: http://la.curbed.com/uploads/2010-01-stuy.jpg-oct 2010 22

summary by Wikipedia, link: http://en.wikipedia.org/wiki/Stuyvesant_Town—Peter_Cooper_Village -oct 2010 22

source: Design Observer, link: http://places.designobserver.com/entry.html?entry=12687 22

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y. 22

Image source: Robert Moses, 1939, with model of proposed Battery Bridge. [Image credit: Library of Congress. New York World-Telegram & Sun Collection. Photographer: C.M. Stieglitz] Right: Frank Lloyd Wright, with model of the Guggenheim Museum, circa 1947. [Image Credit: Library of Congress. Photographer: Margaret Carson, link: http://places.designobserver.com/media/images/Moses-Wright.jpg -oct 2010 22

Graphic source: All Graphics drawn by Andreas Huemer 23

Stuyvesant town text sources: 23

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 23

Robert Moses via Wikipedia, link: http://en.wikipedia.org/wiki/Robert_Moses -oct 2010 23

Robert Moses, Master Builder, is Dead at 92 by Paul Goldberger, link: http://www.nytimes.com/learning/general/onthisday/bday/1218.html -oct 2010 23

MARS PLAN LONDON 24

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136 24

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton 24

Image source: CIAM 8, 1951, Architecture Culture: 1943-1968 (Columbia Books of Architecture) von Joan Ockman, p 136 24

Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46 24

Team10 webpage, link: http://www.team10online.org/research/papers/delft1/welter.pdf - accessed oct 2010 24

Image source: collage of images by Andreas Huemer 24

Graphic source: All Graphics drawn by Andreas Huemer 25

Mars Plan London text sources: 25

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136 25

MARS Group via Wikipedia, link: http://en.wikipedia.org/wiki/MARS_Group - accessed oct 2010 25

Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46 25

DOORN MANIFESTO 26

Aix-en-Provence (France) 19-26 July 1953 by Annie Pedret, http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010 26

Image source: Alison & Peter Smithson, CIAM Grille, 1953 link: http://s3.amazonaws.com/data.tumblr.com/tumblr_lhauj1c69Q1qe0nlvo1_1280.jpg?AWSAccessKeyId=AKIAJ6IHWSU3BX3X7X3Q&Expires=1309782878&Signature=ArZLCksrsBttacSx9zKr34rE88Js%3D -oct 2010 26

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183 26

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton, link: http://www.team10online.org/colophon/index.html -oct 2010 26

Image source: Alison Smithson; Peter Smithson by Godfrey Argent, 1969, link: http://images.npg.org.uk/790_500/2/3/mw72323.jpg -oct 2010 26

Graphic source: All Graphics drawn by Andreas Huemer 27

Doorn Manifesto text sources: 27

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 27

Peter Smithson via Wikipedia, link: http://en.wikipedia.org/wiki/Alison_and_Peter_Smithson - accessed oct 2010 27

http://www.team10online.org/colophon/index.html -oct 2010 27

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183 27

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton 27

Team10 webpage, link: http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010 27

FORMULARY FOR A NEW URBANISM 28

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167 28

Ibid. p. 167 28

Image source: Ivan Chtcheglov, La Prison ou La Mort pour les Jeunes 1950 link: http://www.notbored.org/prison-or-death.jpg - accessed oct 2010 28

Published in Guy Debord, Correspondance, Volume 2, 1960-1964. Footnotes by Alice Debord.Translated from the French by NOT BORED! April 2005. http://www.notbored.org/debord-April1963.html Page 2 of 2 -oct 2010 28

Image source: Ivan Chtcheglov, link: http://images.npg.org.uk/790_500/2/3/mw72323.jpg -accessed oct 2010 28

source: http://members.chello.nl/j.seegers1/situationist/bib_debord.html -oct 2010 28

Graphic source: All Graphics drawn by Andreas Huemer 29

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167 29

Formulary for a new urbanism text sources: 29

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 29

Ivan Chtcheglov via Wikipedia, link: http://en.wikipedia.org/wiki/Ivan_Chtcheglov -oct 2010 29
Guy Debord web page, link: http://www.notbored.org/debord-April1963.html Page 2 of 2 - accessed oct 2010 29

FORT WORTH 30

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 194 - 199 30
Ibid. p 194 - 199 30
Image source: Victor Gruen, Fort Worth, 49 cities, WORKac, Storefront for Art and Architecture, p56 30

49 cities, WORKac, Storefront for Art and Architecture 30
Mall Maker: Victor Gruen, Architect of an American Dream by M. Jeffrey Hardwick, 2004, University of Pennsylvania Press, link: http://www.landmarksociety.org/pdfs/55.pdf - accessed oct 2010 30
Image source: Victor Gruen, link: http://media-2.web.britannica.com/eb-media/75/126875-003-F92E2BCF.gif -accessed oct 2010 30

James Corner in Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006 30
Graphic source: All Graphics drawn by Andreas Huemer 31

Fort Worth text sources: 31
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 31
Victor Gruen via Wikipedia, link: http://en.wikipedia.org/wiki/Victor_Gruen -oct 2010 31
49 cities, WORKac, Storefront for Art and Architecture 31
Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006 31

GEODESIC DOME NEW YORK 32

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p. 87 - 92 32
Ibid. p. 87 - 92 32
Ibid. p. 87 - 92 32
Image source: Buckminster Fuller, Geodesic Dome New York, 49 cities, WORKac, Storefront for Art and Architecture, p66 32

49 cities, 2010, WORKac, Storefront for Art and Architecture, p. 66 32
Geodesic Domes via Buckminster Fuller web page, link: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes - Accessed July 2011 32
Ibid. 32
Image source: Buckminster Fuller, link: http://www.toxicocultura.com/blog/wp-content/uploads/2009/05/bucky-float_o.jpg -accessed nov 2010 32

source: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes -nov 2010 32
Graphic source: All Graphics drawn by Andreas Huemer 33

Geodesic Dome New York text sources: 33
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 33
Buckminster Fuller via Wikipedia, link: http://en.wikipedia.org/wiki/Buckminster_Fuller -nov 2010 33

AGRICULTURAL CITY 34

Proposals of a New Urbanism via Artnet, link: http://www.artnet.com/library/05/0573/t057373 - accessed nov 2010 34
Proposals of a New Urbanism via Jstor, link: http://www.jstage.jst.go.jp/article/jaabe/3/2/3_357/_article - accessed nov 2010 34
Image source: Kisho Kurokawa, Agricultural City, 49 cities, WORKac, Storefront for Art and Architecture, p62 34

Agricultural city via Parole, link: http://parole.aporee.org/work/hier.php3?spec_id=3999&words_id=304 - accessed nov 2010 34
Ibid. 34
Image source: Kisho Kurokawa, link: http://www.kisho.co.jp/pageimg/00071_01s.JPG - accessed nov 2010 34

49 cities, WORKac, Storefront for Art and Architecture 34
Graphic source: All Graphics drawn by Andreas Huemer 35

Agriculture City text sources: 35
Kisho Kurokawa via Wikipedia, link: http://en.wikipedia.org/wiki/Kisho_Kurokawa -nov 2010 35
Kenneth Frampton, Modern Architecture: A Critical History (Oxford: Oxford University Press, 1980), p.348. 35
Kisho Kurokawa, Metabolism in Architecture (London: Studio Vista, 1977), p.26-7. 35

A PLAN FOR TOKYO 36

Structuralism via Wikipedia, link: http://en.wikipedia.org/wiki/Structuralism_(architecture) -accessed nov 2010 36
Ibid. 36
Image source: Kenzo Tange, A Plan For Tokyo, 1946 - 1969 by Udo Kultermann, Praeger (1970) 36

49 cities, WORKac, Storefront for Art and Architecture 36
Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger, 1970 36
Ibid. 36
Image source: source: Kenzo Tange, in Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger (1970) 36

Graphic source: All Graphics drawn by Andreas Huemer 37

A Plan for Tokyo text sources: 37
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 37
Kenzo Tange via Wikipedia, link: http://en.wikipedia.org/wiki/Kenzo_Tange -nov 2010 37
NSLC lecture, link: http://www.nslc.wustl.edu/courses/bio3411/woolsey/2010/Lecture15/Lin%202007.pdf - jan 2011 37
49 cities, WORKac, Storefront for Art and Architecture 37

SHINJUKU RESTORATION 38

Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 323 38
Image source: Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38
Image source: source: Fumihiko Maki, Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Graphic source: All Graphics drawn by Andreas Huemer 39

Shinjuku Restauration text sources: 39
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 39
Fumihiko Maki via Wikipedia, link: http://en.wikipedia.org/wiki/Fumihiko_Maki -Feb 2010 39

PLUG-IN CITY 40

Architecture Culture 1943-1968 by Joan Ockman, Columbia Books of Architecture, 2005, p 366 40
Image source: Peter Cook, Plug-In City, link: http://arttattler.com/Images/NorthAmerica/Missouri/St.%20Louis/Mildred%20Lane%20Kemper/Metabolic%20City/PlugInCity-300dpi_1.jpg - accessed dec 2010 40

49 cities, WORKac, Storefront for Art and Architecture 40
Megastructures Reloaded, link: http://www.megastructure-reloaded.org/archigram/ - accessed feb 2011 40
Image source: Peter Cook, link: http://www.arquinauta.com/foros/attachment.php?attachmentid=52769&d=1268241326 - accessed dec 2010 40

Graphic source: All Graphics drawn by Andreas Huemer 41

Plug-in City text sources: 41
Peter Cook via Wikipedia, link: http://en.wikipedia.org/wiki/Peter_Cook_(architect) -dec 2010 41

A CITY IS NOT A TREE 42

Notes on the Synthesis of Form by Christopher Alexander via Harvard University press, link: http://www.hup.harvard.edu/catalog.php?isbn=9780674627512 - accessed Jan 2011 42
Image source: Christopher Alexander, A city is not a tree, link: source: Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 (Part I) 42

Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 42
Further reading: Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 42
Image source: Christopher Alexander, Photo by Maggie Moore, link: http://www.livingneighborhoods.org/pics/farmerchris2004.jpg - accessed dec 2010 42

source: http://www.patternlanguage.com/leveltwo/archivesframe.htm?/leveltwo/../archives/alexander1.htm 42
Graphic source: All Graphics drawn by Andreas Huemer 43

A city is not a tree text sources: 43
Christopher Alexander via Wikipedia, link: http://en.wikipedia.org/wiki/Christopher_Alexander -dec 2010 43
Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 43

JOINT CORE SYSTEM 44

Architecture Culture: 1943-1968 by Joan Ockman, Columbia Books of Architecture, p. 402-407 44
Image source: Arata Isozaki, City in the air - Shinjuku Tokyo, Shinjuku Project 1/10 1961-91, link: http://www.meulensteen.com/arata-isozaki?idx=8 - accessed July 2011 44

Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991 44
The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art 44
Image source: Arata Isozaki, Photo by Dorothy Alexander, link: http://www.meulensteen.com/arata-isozaki?idx=8 - accessed July 2011 44

Graphic source: All Graphics drawn by Andreas Huemer 45

Joint Core System text sources: 45
Arata Isozaki web page, link: http://www.isozaki.co.jp/ -dec 2010 45
Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991 45
The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art 45

CONTINUOUS MONUMENT 46

Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010 46
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 46
Image source: Continous Monument, Superstudio, 1969, link: http://www.neuegalerie-archiv.at/03/support/press/superstudio_cmyk.jpg - accessed dec 2010 46

49 cities, WORKac, Storefront for Art and Architecture 46
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 46
Image source: Adolfo Natalini & Chritiano Toraldo di Francia, Collage by Andreas Huemer 46

Matilda McQuaid, ed., Envisioning Architecture: Drawings from The Museum of Modern Art, 2002, p. 156 46
Graphic source: All Graphics drawn by Andreas Huemer 47

Continuous Monument text sources: 47
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 47

NO-STOP-CITY 48

Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010 48
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 48
Image source: No-Stop City, Archizoom, 49 cities, WORKac, Storefront for Art and Architecture, p. 100 48

No-Stop City by Archizoom, link: http://arttorrents.blogspot.com/2007/04/no-stop-city-by-archizoom-associati.html - July 2011 48
Image source: Andrea Branzi, 2008, Wikipedia by EdoM link: http://upload.wikimedia.org/wikipedia/commons/6/6c/Andrea_Branzi_20080117.png - accessed dec 2010 48

Graphic source: All Graphics drawn by Andreas Huemer 49

No Stop City text sources: 49
Andreas Branzi via Wikipedia, link: http://en.wikipedia.org/wiki/Andrea_Branzi -dec 2010 49
Medienkunstnetz, link: http://www.medienkunstnetz.de/werke/no-stop-city/ -may 2011 49

PARK DE LA VILLETTE 50

DAAG web page, link: http://www.daaq.net/folio/bibliography/b_koolhaas.html -dec 2010 50
Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997 50
Image source: Park de la Villette, 1982, by Rem Koolhaas, link: http://lebbeuswoods.files.wordpress.com/2009/10/rem-lav-4.jpg?w=600&h=515 - accessed dec 2010 50

Park de la Villette web page, link: www.parcdelavillette.wikispaces.com/file/.../Parc+de+la+Villette,+Rem+Koolhaas.pdf 50
Image source: Rem Koolhaas, Photo by Eikonographia, link: http://www.eikongraphia.com/wordpress/wp-content/Rem_Koolhaas_Small.jpg - accessed dec 2010 50

www.oma.com 50
Graphic source: All Graphics drawn by Andreas Huemer 51

Park de la Villette text sources: 51
Rem Koolhaas via Wikipedia, link: http://en.wikipedia.org/wiki/

SOURCES

51

FRESH KILLS PARK 52

Landscape Urbanism via Wikipedia, link: http://en.wikipedia.org/wiki/Landscape_urbanism 52

The Landscape Urbanism Reader, Charles Waldheim, editor, Princeton Architectural Press, New York 2006, Terra Fluxus by James Corner 52

Image source: Fresh Kills Park, 2004, by Fieldoperations link: http://farm4.static.flickr.com/3611/3471822702_972c69eb4d_b.jpg - accessed dec 201052

NYC Government web page, link: http://www.nyc.gov/html/dcp/html/fkl/fkl_index.shtml - may 2011 52

NYC Government park web page, link: http://www.nycgovparks.org/sub_your_park/fresh_kills_park/html/fresh_kills_park.html - may 2011 52

Image source: James Corner, Photo by AA School, link: http://www.aalog.net/James-Corner.jpg - accessed dec 2010 52

source: fresh kills info brochure 52

Graphic source: All Graphics drawn by Andreas Huemer 53

Fresh Kills Park text sources: 53

Fiel Operations web page, link: http://www.fieldoperations.net/ - feb 2011 53

GOVERNORS ISLAND 54

Mutations by Rem Koolhaas, Harvard Project on the City, Stefano Boeri, Multiplicity, Sanford Kwinter, Nadia Tazi, Hans Ulrich Obrist, Actar, 2001, p 466 54

Accelerating Darwin by Adriaan Geuze, Scroope: Cambridge architecture journal 1996-1997, p.80-84 54

Image source: Governors Island, 2006, by WEST8, link: http://www.govisland.com/html/home/home.shtml - accessed dec 2010 54

Governors island webpage, link: http://www.govisland.com/PDFs/CB1_part1.pdf -dec2010 54

Governors island park webpage, link: http://www.govislandpark.com/design-principles/sustainabledesign/ -dec 2010 54

Image source: Adriaan Geuze, Photo by NRC Handelsblad, link: http://weblogs.nrc.nl/whosnext/files/Aankondigingen/geuze.jpg - accessed dec 2010 54

Graphic source: All Graphics drawn by Andreas Huemer 55

Governors Island text sources: 55

West8 web page, link: http://www.west8.nl/adriaan_geuze - may 2011 55

MASDAR CITY 56

Archpedia, link: http://web.archive.org/web/20060318172141/http://www.archpedia.com/Styles-High-Tech.html - accessed Jan 2011 56

Image source: Masdar City, 2006, by Norman Foster, link: http://upload.wikimedia.org/wikipedia/en/c/c8/Masdar_City.jpg - accessed dec 2010 56

Masdar city via Wikipedia, link: http://en.wikipedia.org/wiki/Masdar_City -dec 2010 56

USEA, link: http://www.usea.org/Programs/CFFS/CFFSDubai/DOE_Masdar_DevelopmentOverview_Feb09.pdf 56

Image source: Norman Foster, Photo by Archdaily, link: http://www.archdaily.com/wp-content/uploads/2010/06/1275426382-norman-foster.jpg - accessed dec 2010 56

Graphic source: All Graphics drawn by Andreas Huemer 57

ROAD MAP 2050 58

United Nations Climate Change via Wikipedia, link: http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference - accessed dec 2010 58

Land use, land-use change and forestry via Wikipedia, link: http://en.wikipedia.org/wiki/LULUCF - accessed dec 2010 58

Image source: Solaria Roadmap 2050, 2010, by AMO link: http://www.oma.asia/contentimages/projects/2010-ROADMAP-2050/images-stories-Roadmap-2050-roadmap-solaria_big.jpg - accessed July 2011 58

Roadmap 2050 by AMO, link: www.roadmap2050.eu - accessed dec 2010 58

Image source: AMO, 2011, collage by Andreas Huemer 58

Graphic source: All Graphics drawn by Andreas Huemer 59

Roadmap 2050 text sources: 59

http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference 59

www.roadmap2050.eu -dec 2010 59

DENSITY 60

Graphic source: Density Graph by Andreas Huemer 60

FACT SHEETS 62

Graphic source: 2d Area Charts by Andreas Huemer, Data various sources below Charts. 62

PRINCIPLES 64

PROJECTS SUMMARY 66

Graphic source: Project Summary by Andreas Huemer 66

CONNECTIONS 68

Graphic source: Connections by Andreas Huemer 68

PROJECTS SCALE 70

Graphic source: Projects in Scale by Andreas Huemer 70

INFLUENCES 72

Graphic source: Influences by Andreas Huemer 72

INFLUENCES 74

IMF, link: http://www.imf.org/external/datamapper/ - accessed dec 2010 74

GDP, link: http://www.investorwords.com/2153/GDP.html - accessed dec 201074

Graphic source: Graphs drawn by Andreas Huemer various sources below graphs 74

GDP via Economics Web Institute, 2010, link: http://www.economicswebinstitute.org/glossary/gdp.htm - accessed dec 2010 75

Graphic source: Graphs drawn by Andreas Huemer various sources below graphs 75

INFLUENCES 76

Graphic source: Influences Test 01by Andreas Huemer 76

LOCALISING 78

Graphic source: Localising by Andreas Huemer 78

SOURCES 82

NEW YORK NOW

AFTER THE COMMISSIONERS PLAN

200 years after the Commissioners Plan New York is one of the biggest cities in the world and still the biggest in the US. The way New York is developed is very well documented in Delirious New York by Rem Koolhaas but two major moments of change since the original Commissioners Plan are worth to be

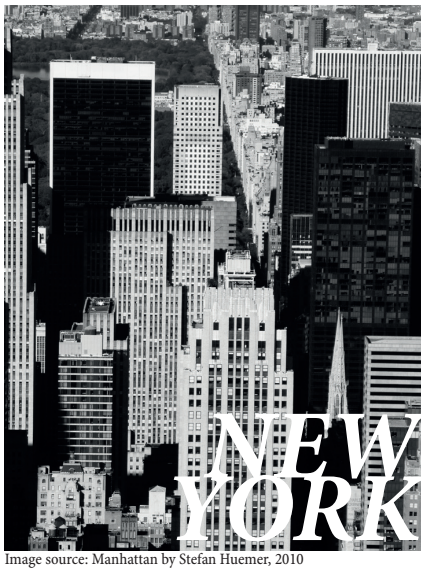


Image source: Manhattan by Stefan Huemer, 2010

mentioned here as well.

Beside of the changing some streets the first really major change was the introduction of Central Park in 1857 and it's improvement through a design competition won by Frederick Law Olmsted and Calvert Vaux.

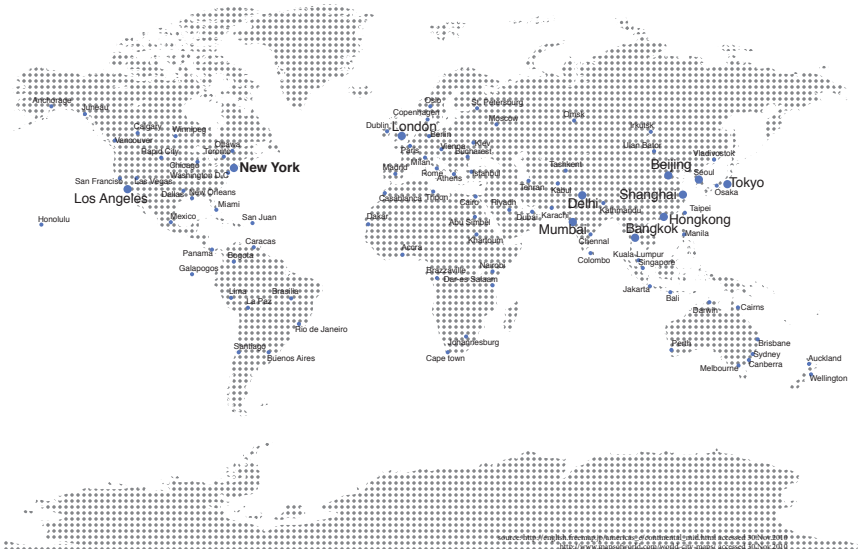
As said before the original Plan was laid out in the way that the commissioners at the time decided that the islands surrounding sea would be enough leisure space for a cities inhabitants.

Everything in this great park is engineered, in the way it was designed. Rem Koolhaas describes this very well:

CARPET

"By 1850, the possibility that New York's exploding population could engulf the remaining space in the Grid like a freak wave seems real. Urgent plans are made to reserve sites that are still available for parks, but "while we are discussing the subject the advancing population of the city is sweeping over them and covering them for our reach .... "

In 1853 this danger is averted with the appointment of the Commissioners of Estimate and Assessment, who are to acquire and survey land for a park in a



designated area between Fifth and Eighth avenues and 59th and 104th (later 110th) streets.

Central Park is not only the major recreational facility of Manhattan but also the record of its progress: a taxidermic preservation of nature that exhibits forever the drama of culture outdistancing nature. Like the Grid, it is a colossal leap of faith; the contrast it describes - between the built and the unbuilt- hardly exists at the time of its creation.

"The time will come when New York will be built up, when all the grading and filling will be done, and the picturesquely-varied, rocky formation of the island will have been converted into formations of rows and rows of monotonous straight streets, and piles of erect buildings. There will be no suggestion left of its present varied surface, with the exception of a few acres contained in the park. "Then the priceless value of the present picturesque outlines of the ground will be distinctly perceived, and its adaptability for its purpose more fully recognized. It therefore seems desirable to interfere with its easy, undulating outlines, and picturesque, rocky scenery as little as possible, and, on the other hand, to endeavour rapidly, and by every legitimate means, to increase and judiciously develop these particularly individual and characteristic sources of landscape effects .... "

"To interfere as little as possible," but on the other hand "to increase and develop


Image source: Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 22

landscape effects ": if Central Park can be read as an operation of preservation, it is, even more, a series of manipulations and transformations performed on the nature "saved" by its designers. Its lakes are artificial, its trees (trans)planted, its accidents engineered, its incidents supported by an invisible infrastructure that controls their assembly. A catalogue of natural elements is taken from

its original context, reconstituted and compressed into a system of nature that makes the recti linearity of the Mall no more formal than the planned informality of the Ramble.
Central Park is a synthetic Arcadian Carpet."[1]
The second, and also very influential

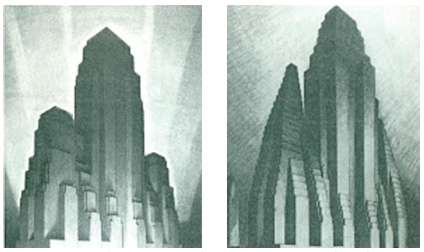
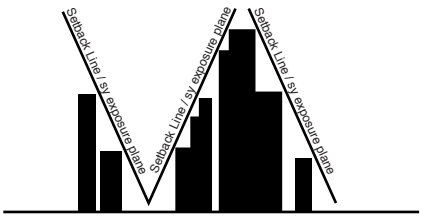


Image source: Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 112



adaption was the introduction of the first Zoning Law for vertical structures in 1916.

ZONING LAW

The Zoning Law as enacted in response to the Equitable Building. The still existing skyscraper and "the most expensive office building" [2] at the time (42 storeys), prevented almost all light to come down on street level.
Rules: Buildings are allowed to cover 100% of it's lot but prescribed through a series of formulas 25% of a lot would have to remain empty. By allowing to rise this 25% to any height desirable the city did not limit the height of skyscrapers but unintentionally created a new kind of architecture.

"In 1922 the skyscraper architect Harvey Wiley Corbett commissioned Ferriss to draw a series of four step-by-step perspectives demonstrating the architectural consequences of the zoning law. These four drawings would later be used in his 1929 book, The Metropolis of Tomorrow."[3]



source: http://english.freemap.jp/americas_e/continental_mid.html accessed 30.Nov.2010
http://www.census.gov/popest/metro/CBSA-est2009-annual.html 30.Nov.2010

BIGGEST CITIES USA BY INHABITANTS

1. New York, New York - 8,214,426
2. Los Angeles, California - 3,849,378
3. Chicago, Illinois - 2,833,321
4. Houston, Texas - 2,144,491
5. Phoenix, Arizona - 1,512,986
6. Philadelphia, Pennsylvania - 1,448,394
7. San Antonio, Texas - 1,296,682
8. San Diego, California - 1,256,951
9. Dallas, Texas - 1,232,940
10. San Jose, California - 929,936

His renderings clearly show how very simple laws can have major influence in architectural expression. It's results were building like the Empire States Building.

1 Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 21-23

2 Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 83

3 http://en.wikipedia.org/wiki/Hugh_Ferriss - accessed July 2011

MANHAT-TAN HISTORY

DEVELOPMENT

In order to understand the Meadowlands development, also the development of the Commissioners Plan, Manhattans "prehistorical facts", before the "Megacity", is worth to have a look at. Manhattan, now covered with skyscrapers is built on marsh, forest and farmland.

"The island has been the site of a Dutch trading port, a British outpost during the Revolutionary War, and the first capital city of the United States."

Discovered by Henry Hudson in 1607. Hudson was employed by the Dutch East India Company.

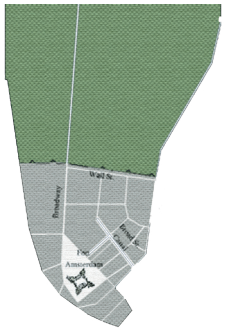
Purchased from the Lenape Indians in 1626 for sixty guilder which would be approximately $500 in today's currency.

Since the company was Dutch they named the city after their home capital and called it New Amsterdam.

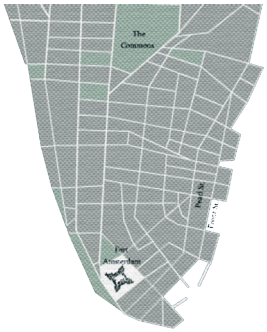
In 1664 the British took over the strategically well located island and renamed it New York, after the Duke of York.

1788 - 1791 New York became the capital of the US.

1660



1766



1803



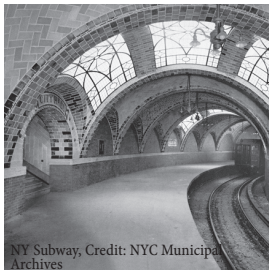
Year: 1788

HISTORY OF NEW YORKS INFRASTRUCTURE



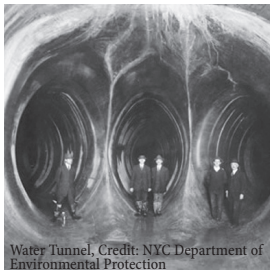
Brooklyn Bridge, Credit: The New York Times Photo Archive

1883 The Brooklyn Bridge becomes the first bridge across the East River



NY Subway, Credit: NYC Municipal Archives

1904 The first subway line begins service in New York City



Water Tunnel, Credit: NYC Department of Environmental Protection

1917 The city's first water tunnel is completed



Verazano Bridge, Credit: Getty Images

1964 The Verrazano - Narrows Bridge becomes the last significant bridge built in New York city

1842 Croton Water Supply System opens, the city's first comprehensive water system

1882 Thomas Edison switches on the world's first commercial electric light system in Lower Manhattan

1920s Utility companies begin putting New York's electrical grid underground; parts are still in service today

1932 The city's last major subway expansion opens; parts of the original signalling system are still used today

1936 The city's second water tunnel is completed

1944 The Delaware Water Supply System opens; it is the city's last major water supply expansion

1970 Work on the city's third water tunnel begins; the second of four stages will be done by 2012

Graphic source: Transport history by NYPlan, link: http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml - accessed July 2011 edited by Andreas Huemer

1825 The opening of the Erie Canal connects the Great Lakes with the Hudson River and turns New York City into a booming commercial centre.

"New York history indicates that life before unions and taxes was a distinct two-class system, with a few very wealthy men, such as John D. Rockefeller and J.P. Morgan, controlling the fates of tens of thousands of poor workers."[1]

"Manhattan today is a vibrant metropolis, composed of distinct New York neighbourhoods that still retain a taste of the city's rich ethnic heritage. Manhattan is home to the world's largest theatre district (Broadway), the world's largest and most important financial markets, is the fashion capital of the United States, and is home to important museums, cultural events, concert venues and some of the greatest New York City hotels on offer. The city is still a mecca of all sorts of travellers and fortune-seekers, from around the United States and the world."[2]

1 New York Journey Website, 2011, link: http://www.newyorkjourney.com/new_york_city_history.htm

2 Ibid.

1834



2004

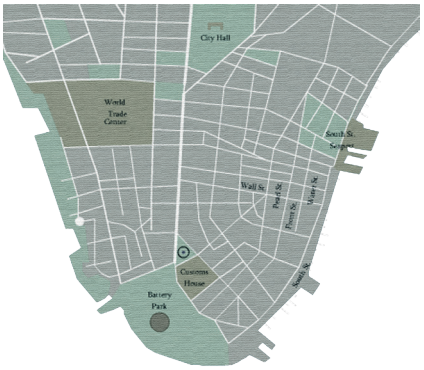




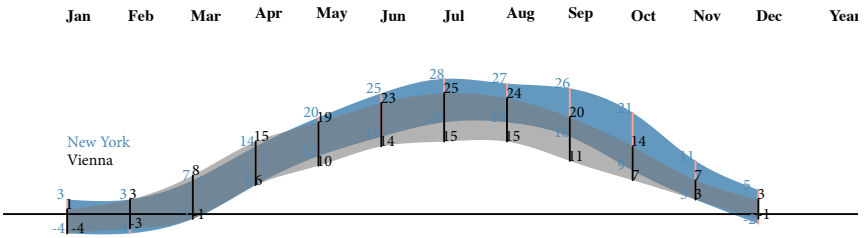
Image source: Manhattan by Andreas Huemer, 2010

CLIMATE

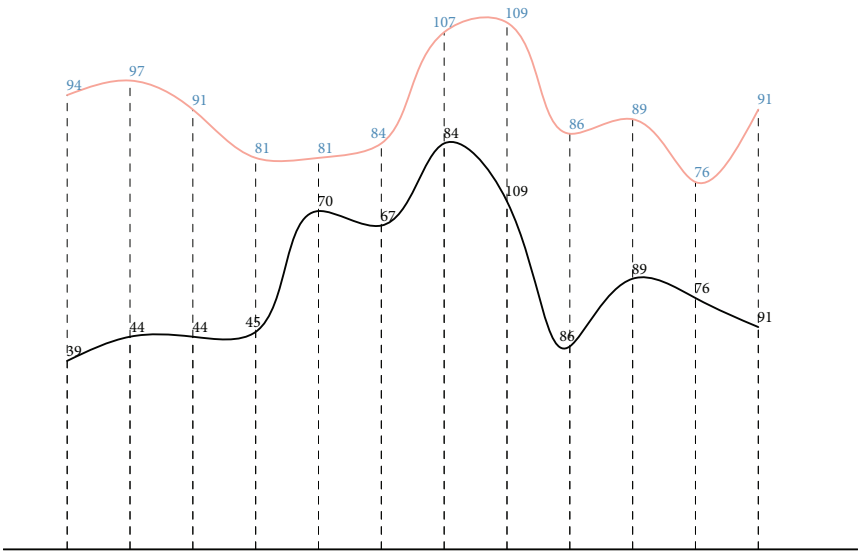
TEMPERATURE NYC VS. VIENNA

Each country teaches it's own way of constructing buildings and even cities. The reason behind this is not only the cultural difference, simple facts as climate force us to build in different ways.
In order to see if the central European construction would be applicable in New York City a comparison of climate charts informs about conditions.

Temperatures in both cities are very similar so applying technology, for example the way Central Europeans insulate houses or how they are forced to insulate them by law, would change living in the metropolis completely.

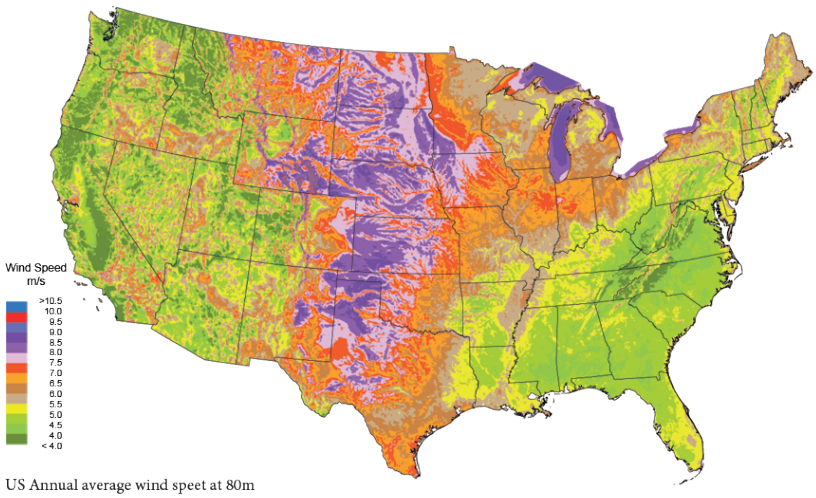


average max. and min. temperatures in °C

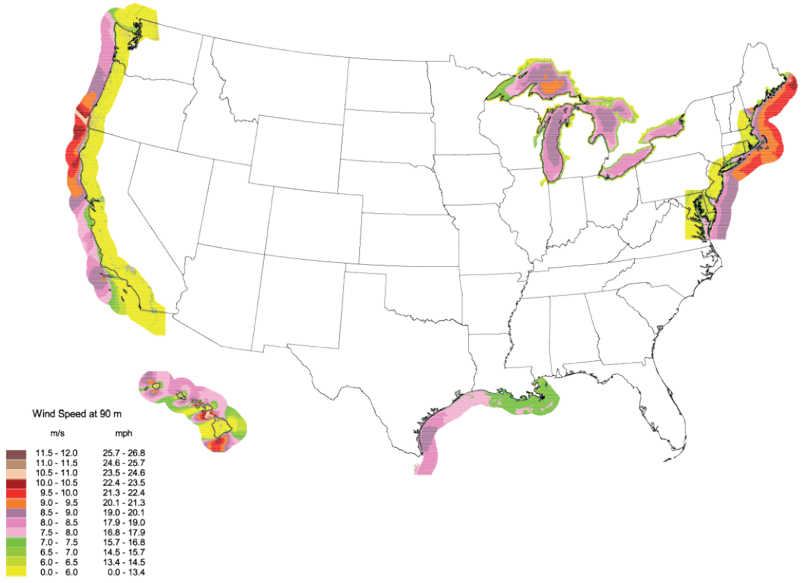


precipitation totals in mm

source: November 2010 http://www.bbc.co.uk/weather/world/city_guides



US Annual average wind speet at 80m



US Offshore wind resource

source: http://www.windpoweringamerica.gov Jan 2011

PROBLEMS

THE AGE PROBLEM

Within the next 20 years all western countries will have to face that their societies will become a lot older.
The research about New York City commissioned by the government of NYC clearly commissions planners to search for solutions about where and how this generation could live in New York.



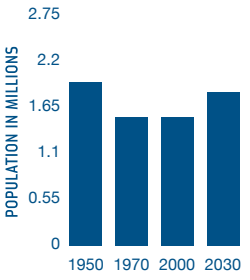
This collage uses a picture from a neighbourhood in Brooklyn. It visualizes the fact that these beautiful structures are no good for a society where people might have to use a wheelchair in their older days. Someone in that situation can't even visit a friend or go for grocery shopping without someone helping him down the stairs.

MANHATTAN

Manhattan's population peaked in 1910, when its 2.33 million residents were piled into tiny apartments with extended relatives creating densities in the range of 600 to 800 persons per acre. Today, even the most crowded high-rise block can claim densities at just one-half that level. As a result, while Manhattan may experience the second-highest growth rate of any borough through 2030, it's 1.83 million residents in 2030 will fall far short of its record high.
A significant portion of that growth will come from residents over 65, who will increase by nearly 60%.

YEAR	POPULATION	% CHANGE	MEDIAN AGE	% UNDER 18	% OVER 65
1950	1.96 MIL	-	37	19.7	8.7
1970	1.54 MIL	-21.5	35	21.7	14.0
2000	1.54 MIL	-0.1	36	17.2	12.2
2030	1.83 MIL	18.8	40	15.2	16.1

Population

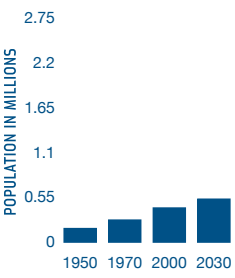


STATEN ISLAND

With abundant open space and relatively low density, Staten Island has the smallest population of any borough,. But it is the only borough that has experienced growth each decade between 1950 and 2000. This trend will continue, although at slower pace that between 1970 and 2010. By 2030, the population will reach a historic peak of 552,000 people, a 24.4% increase over 2000. As residents stay longer and settle, the population will age dramatically. In 1970, Staten Island was the city's youngest borough; by 2030, it will be the oldest. These older residents will push the borough's median age to nearly 40 years in 2030, a 12-year increase from 1970.

YEAR	POPULATION	% CHANGE	MEDIAN AGE	% UNDER 18	% OVER 65
1950	191,555	-	32	27.9	8.1
1970	295,443	54.2	28	34.4	8.7
2000	443,728	50.2	36	25.4	11.6
2030	551,906	24.4	40	22.0	18.7

Population



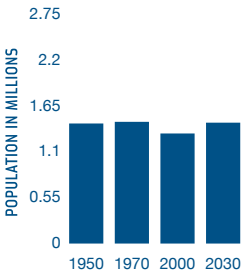
THE BRONX

While the population of the Bronx peaked in 1970, the following decade saw disinvestment in housing, rising crime, and the growing appeal of the suburbs. These conditions precipitated a crisis that resulted in the loss of more than 300,000 people. While New York has largely rebounded from the desolation of that decade, the Bronx was most deeply affected.

By 2030 the borough is projected to pull almost even with its 1970 historical high of 1.47 million.
Higher-than-average birth rates will compensate for the out-migration to other boroughs and the suburbs Larger families will also help the Bronx remain New York's youngest borough, with a median age of 33 years.

YEAR	POPULATION	% CHANGE	MEDIAN AGE	% UNDER 18	% OVER 65
1950	1.45 MIL	-	34	25.6	7.3
1970	1.47 MIL	1.4	30	31.6	11.6
2000	1.33 MIL	-9.4	31	29.9	10.1
2030	1.46 MIL	9.3	33	27.2	11.8

Population

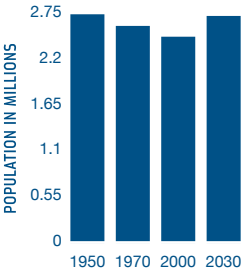


BROOKLYN

Brooklyn will near its 1950 population peak of 2.74 million, growing 10.3% to reach 2.72 million people. Prior to its merger with Manhattan, Brooklyn was the third largest city in America and continued to grow until 1950. But the Long Island suburbs, the construction of the Verrazano Narrows Bridge to Staten Island, and the devastation of the 1970s drained the borough's population. Now resurgent, Brooklyn will likely remain the city's largest borough in 2030.

YEAR	POPULATION	% CHANGE	MEDIAN AGE	% UNDER 18	% OVER 65
1950	2.74 MIL	-	33	26.2	7.4
1970	2.60 MIL	-5.0	30	31.3	11.1
2000	2.47 MIL	-5.3	33	26.8	11.5
2030	2.72 MIL	10.3	37	23.0	15.1

Population

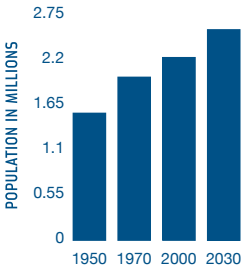


QUEENS

Over the past 30 years, Queens has captured an ever-increasing share of the city's population in 1950, this number is projected to climb to over 28% by 2030, when 2.57 million of the city's 9.12 million residents will reside in Queens. The consistent growth in Queens will result in a new peak population for the borough by 2030. This growth is fueled by a mix of immigrants from more than 100 countries. As a result, the median age in Queens from 2000 to 2030 is expected to increase by just over three years.[1]

YEAR	POPULATION	% CHANGE	MEDIAN AGE	% UNDER 18	% OVER 65
1950	1.55 MIL	-	34	25.5	7.1
1970	1.99 MIL	28.1	36	26.1	12.4
2000	2.23 MIL	12.2	35	22.8	12.7
2030	2.57 MIL	15.1	38	20.5	14.5

Population



1 Age Problem by NYPlan, 2010, link: http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml - Accessed Jan 2011

FEARS

GLOBAL WARMING

New York City is surrounded by sea and the question is what would happen if the sea level would rise and what would get destroyed if a hurricane would hit New York City? It would clearly end with a big disaster and this means it's time to take that facts serious!



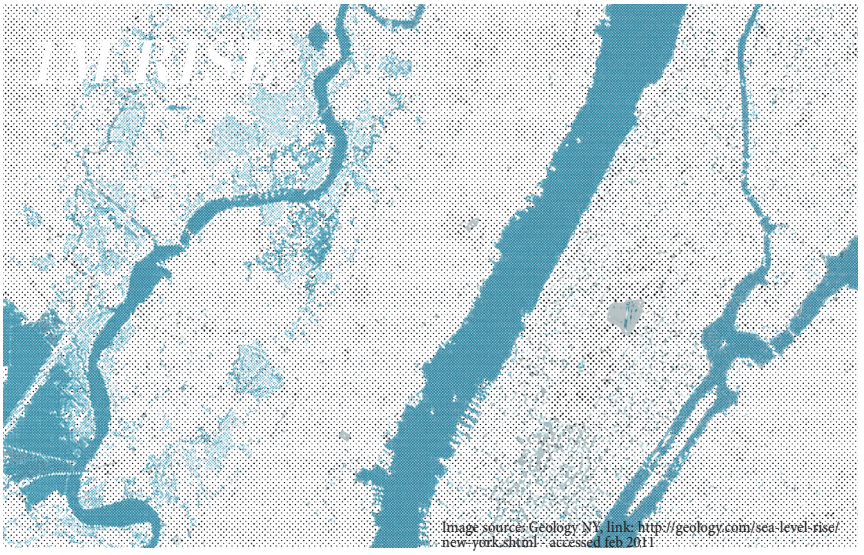
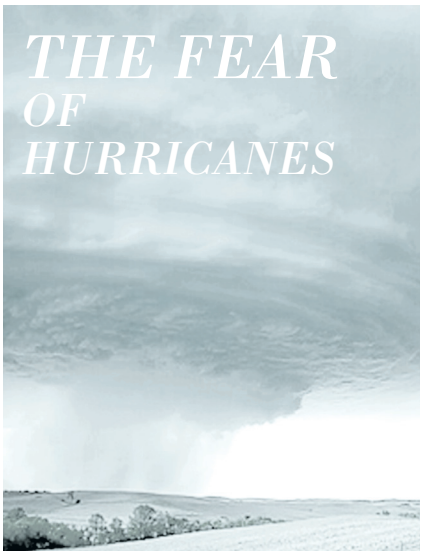
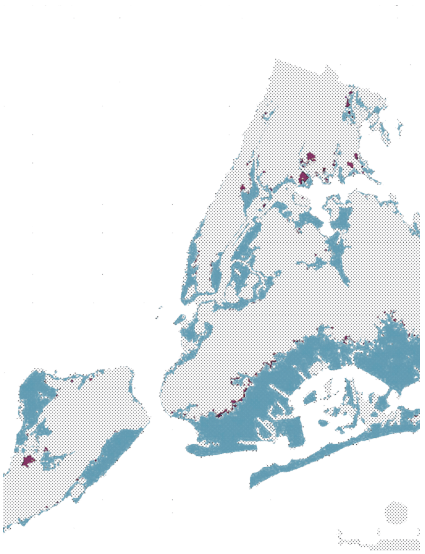


Image source: Geology NY, link: http://geology.com/sea-level-rise/new-york.shtml - accessed feb 2011





Comparing Inundation with Current and Projected (2050's) Sea Level Estimates
Case Study: Category 3 Hurricane (Draft)[1]

- Projected Inundation Zone Estimates (current sea level)
- Projected Additional Inundated Area IPee 81 (37.5 cm sea level rise)
- Projected Incremental Additional Inundated Area IPPC A 1 B (47.2 cm sea level rise)

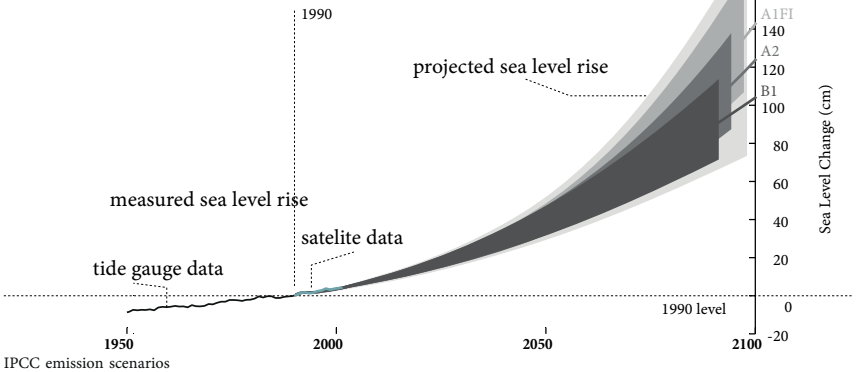
1 Graphic source: Storm Surge Data Source U.S Army Corps of Engineers; FEMA; National Weather service; NY/NJ/CT State Emergency Management Metro New York Hurricane Transport Study; Sea level rise estimates based upon Goddard Institute of Space Studies Atmospheric Ocean Model using International Panel on Climate Change greenhouse gas emissions for 2050's. link: http://www.physorg.com/news81007489.html - accessed feb 2011



Image source: Whats up with that, 2010, link: http://wattsupwiththat.files.wordpress.com/2010/11/newyork-submerged_google_earth.jpg feb 2011

PROJECTION OF SEALEVEL RISE

from1990to2100,basedonIPCCtemperatureprojection.



IPCC emission scenarios

Scenario	Temperature range, °C above 1980–2000	Model average, °C above 1980–2000	Sea-level range, cm above 1990	Model average, cm above 1990
B1	1.4–2.9	2.0	81–131	104
A2	2.9–5.3	3.9	98–155	124
A1FI	3.4–6.1	4.6	113–179	143

Sources: RAAS; Martin Vermeer, Aalto University; Stefan Rahmstorf, Potsdam Institute for Cimate Impact Research; NASA; CNES

€cology

$ustainability

to make ecological Urbanism attractive to New Yorkers
it has to look like they can earn money with it
-- that's my personal impression of New York

INTER-VIEWS

IS THERE ANYTHING MISSING IN NEW YORK? COULD REALLY BE ANYTHING?

Blake A connection to the resources which we consume is definitely missing. There is just city and industry and buildings but no real connection to the raw materials and resources, such as agricultural land. Also, there is not a lot of geography. When you think of great cities, often you are mesmerized by some natural feature, such as Tokyo to Mt. Fuji. The only natural feature would be Central Park. The last thing missing from New York, mostly just Manhattan, would be the middle class. There is hardly anything for anyone who is not ridiculously wealthy, concerning living. There is tourism, points of interest, entertainment, and power, but there seems a lacking of places for the middle class.

Frank The fact that it has taken me over a minute to think of an answer means, no.

Fusako A motive to de-accelerate the high speed of the urban actions.

Martin There is a lot of things missing but I think it always depends on the individual. For me it is the accessibility of nature, not a park.

WHAT IS THE GENERAL IDEA OF NEW JERSEY?

Blake New Jersey is sort of the bastard child. A huge portion of people commute from there on a daily basis. It lacks the luster of the big Apple, has a reputation of being that void of the middle class talked about in the statement above and is viewed more as a bread basket community of the bigger city.

Frank Without having lived in New Jersey, my notion of New Jersey has three sides: 1. Well-to-do suburban areas close to Manhattan 2. Industrial wasteland (what most Americans would associate the state with, I assume) 3. Princeton and green areas in the southern part of the state

Fusako The original/appropriate place to live for the true NYers.

Martin It is NY's small brother, kind of boring.

HOW'S THE CONNECTION TO NEW JERSEY?

Blake I have never taken the any. I have only flown or taken Amtrak.

Frank I know there are buses and trains to/from Manhattan. Not sure how effective they are.

Fusako Connection from where? NY-NJ is too limited in terms of traffic transportation.

Martin Not that good.

HAVE YOU EVER, OR WHAT HAVE YOU HEARD ABOUT THE MEADOWLANDS?

Blake I just know that it is a barren post-industrial dross space.

Frank Yes, in relation to the football stadium.

Fusako Quiet wetland with residential areas.

Martin The only thing I know is the sports complex. Never been there.

WHAT COULD GIVE YOU A REASON TO TRAVEL TO THE MEADOWLANDS?

Blake Open spaces, view, nature trails, learning experiences for a family, something you cannot get anywhere else.

Frank Giants/Jets games?

Fusako Bird-watching, fishing, cycling, those kinds of nature activities.

Martin Not very much. Maybe a show or sports event.

COULD YOU IMAGINE LIVING IN NEW JERSEY BUT WORKING IN MANHATTAN?

Blake I personally would not wish to. I would view it as something I would do only if I had to, but there are other options such as Brooklyn or Harlem.

Frank My brother worked in Manhattan while living in Jersey City for a couple of years. I believe this is a growing trend.

Fusako Most people do that which I think is the reasonable way of living around the area, financially + environmentally speaking.

Martin No.

WOULD YOU GO ON A BICYCLE TRIP THROUGH THE MEADOWLANDS?

Blake It depends on how long the trail was. If it would require me to have to use a car to get there, I might choose somewhere based on convenience, whereas, if I could go on bike from my home, it would be a more enjoyable destination, granted it became that.

Frank Have never thought of this notion, but this is something I would be interested in.

Fusako Yes.

Martin Possible but not very likely. I would probably go to Queens or Long Island first.

DOES NEW YORK NEED A CHANGE TO AVOID STORMS LIKE THE RECENT ONE?

Blake I am not sure what this question is asking… I think New Yorkers are more worried about rising sea level than about storm water problems; however, the city should look to other cities like Chicago in order to better manage stormwater, such as a city-wide green-roofing policy.

Frank I am in the belief that natural disasters happen and cannot be avoided.

Fusako In terms of minimizing the damages caused by the storms, I think many large urban cities do need a lot of systems such as providing enough shelters for the residents in case of these catastrophes, storing adequate food and fabric, and preparing all the network system. Avoiding is not what the large cities need.

Martin How could you prevent that from happening in a city this size, that is broke on top of it? Maybe avoidable in Manhattan but not the entire city.

WHAT IS THE POLITICAL RESPOND TO SUSTAINABILITY?

Blake In the northeast and mid-Atlantic and in the Pacific Northwest, it is very good. New York is one of the most efficient places in the earth, and in so, it is one of the most sustainable. True, taller buildings use more energy, but considering the footprint of New Yorkers as opposed to someone in the mid-west, it is much

smaller due to less need for cars, which leads to more walking and being healthier, etc. In New York also is a constant push to be the biggest and the newest, so, buildings, fashion, etc are using it as a mode of flaunting success. "We make our handbags from 'x' % recycled…" or "Our tower is the most green in the world because…" are new trends. The way the city was put together always reflected sustainability, except for during the 1880's-1920's due to the push of industrialization and the birth of the skyscraper. During this time, the cities were dark, cavernous and less habitable than they are now. Certain measures have been instilled to promote healthy environments and to preserve green space and historic areas, as well.

Frank Perhaps each politician differs on his/her stance on the issue of sustainability? I do think there is an increasing awareness to the issue.

Fusako It is getting more like a fashion. It's not that they want to do, but they have to do.

Martin They are starting to try but still way behind in most parts of the country.

WHAT IS YOUR PERSONAL FEELING ABOUT SUSTAINABILITY?

Blake I think it is the logical step in our human evolution, to become more efficient makers of the world in our will. It is unfortunately happening slower than it needs to, and instead of hope fueling the movement; it is now a matter of survival for the planet.

Frank I think this is a very important issue going forward, but I do little in my daily life to help.

Fusako The necessity is case by case. Sometimes it regulates other flexibilities to construct swifter shift of urban developments.

Martin Sustainability is a great thing and I would love to see more companies and people try to make smarter choices.

IS HOUSING AFFORDABLE IN NEW YORK? WHERE?

Blake No. Places where one could afford to live they may not wish to, such as the Bronx. If I had to search for affordable housing in the city, I would look in Harlem, as there are a great deal of developments there, and the neighborhood has cleaned up its act quite a lot.

Frank Housing is very expensive in New York, everyone knows this. However, this will certainly not stop people from moving to the city.

Fusako NY is large… You can buy a huge plot of land in the state. If "your NY" refers to Manhattan, then probably affordable in the old area of Chelsea or northern part.

Martin Not really, there are still some places left over but not very many. Most of the ones affordable are too far out or in bad neighborhoods but you can sometimes find good deals if you're willing to put some work into a place.

DO YOU SEPARATE WASTE? DO YOU THINK IT MAKES SENCE?

Blake Yes. We use comingling, which only separates rubbish from that which is recyclable: newspaper, cardboard, glass, metal, etc. It makes perfect sense and is not difficult at all, unless you are in the city where there are fewer options.

Frank Yes. At times, I wonder how much difference it makes but I think it is very important to recycle.

Fusako Depends. Splitting recyclable and large stuff is necessary, but not flammable and non-flammable isn't. But the latter also depends on the facility each district has from the environmental point of view.

Martin Yes I do separate it and think it makes sense.

WHERE DO YOU THINK ALL THE TRASH OF THAT CITY GOES TO?

Blake I would imagine the recyclables go to be further separated and distributed, and I have no idea about the landfill bound rubbish.

Frank A centralized location outside the city? Perhaps the Meadowlands?

Fusako Disposal facilities + landfills

Martin Not sure but my guess would be either Jersey or Connecticut or somewhere like that.

IF YOU ONLY HAVE 2 WEEKS OF HOLIDAY WOULD IT MEAN ANYTHING TO YOU IF YOUR PLACE OF WORK OFFERS YOU SOME HOLIDAYS IN YOUR LUNCHTIME? FOR EXAMPLE A PARK WITH CAFÉ,

Blake These places make coming to work much more enjoyable. There is a huge difference in working in a place with no views or natural light versus having amenities. It promotes getting out during breaks, walking, and reflection. These become recruiting tools, and part of my workplaces' strategy is to flaunt our location within the city as being fun and convenient.

Frank Not sure if I understand the question. But yes, coffee in the park sounds fantastic!

Fusako I don't get the question…

Martin It would be nice but still no compensation for such a limited amount of vacation time.

HOW IMPORTANT IS ORGANIC OR LOCAL FOOD FOR YOU?

Blake I would like to have better access to more of this; however, it is not my personal mission to only eat organic/local. It is generally more expensive where I am located.

Frank Not as important as it is to others, I often buy more affordable produce even if it is not organic or locally sourced.

Fusako Domestic means a lot, but not so much with locality. Organic is also just a boom.

Martin Very important. I try to buy as much organic and locally grown food as possible because I want to get good healthy food and I rather support small farmers versus big corporations.

THANKS TO

Blake Jackson lives and works as an architect in Boston at TK&A Kobus&Associates Architects Stainability Practise Leader

Frank Lee used to live in New York, now lives and works in London in finance.

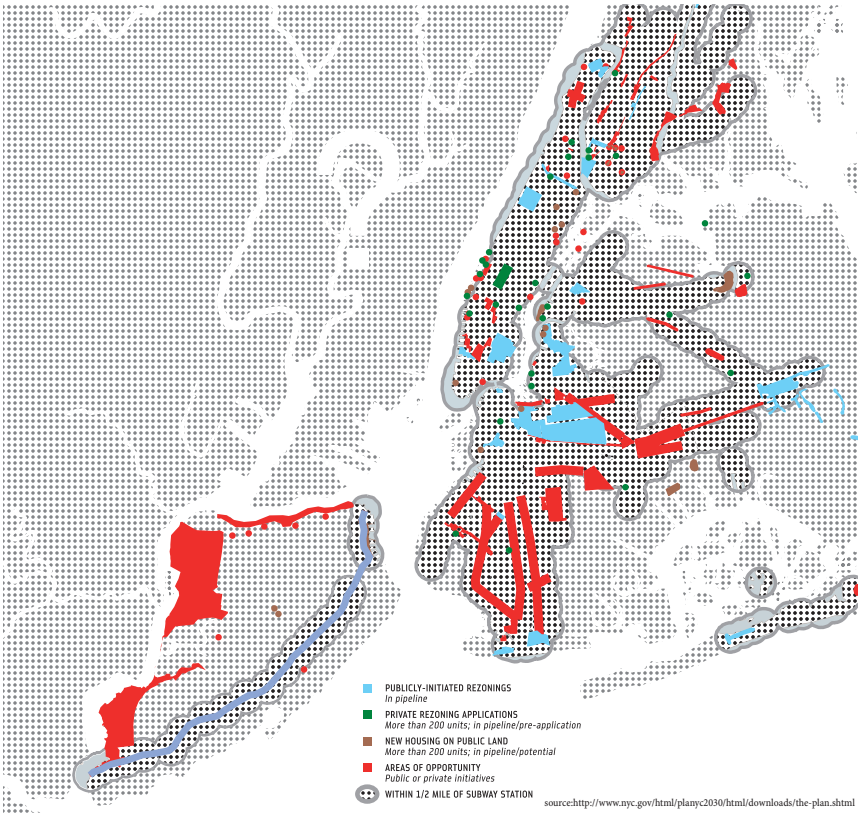
Fusako Ishikawa used to work on a project in New York now lives and works as an architect in Tokyo.

Martin Modl lives and works as a carpenter in New York .

POTEN-
TIAL

RESIDENTIAL GROWTH

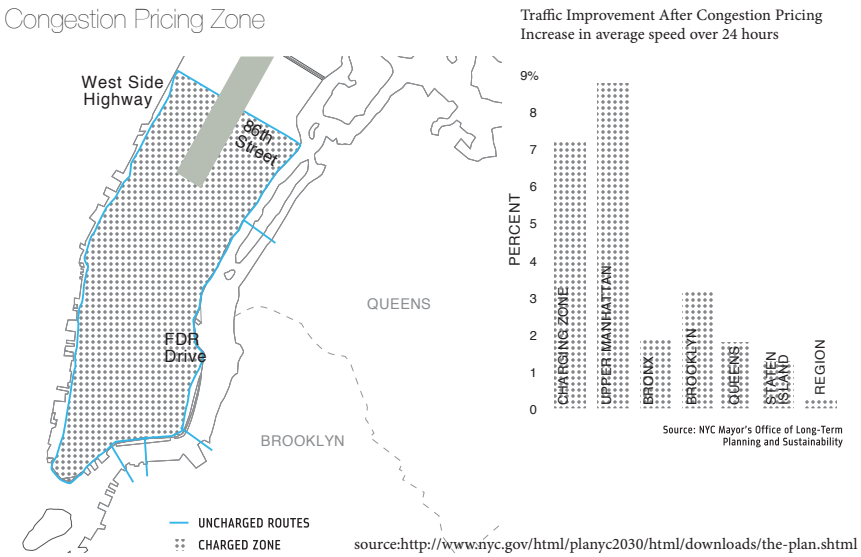
plaNC[1] did a fantastic job on illustrating where in this dense populated area is still space to live in.
The biggest concern about such political oriented research is to forget about the potential and the need of the whole region.
Just because the Meadowlands are already located in New Jersey it's not even considered as valuable land. It's clear that every State has to look at it's own household but wouldn't a close link help both States?



source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml

CONGESTION CHARGE AS A CHANCE FOR OTHERS

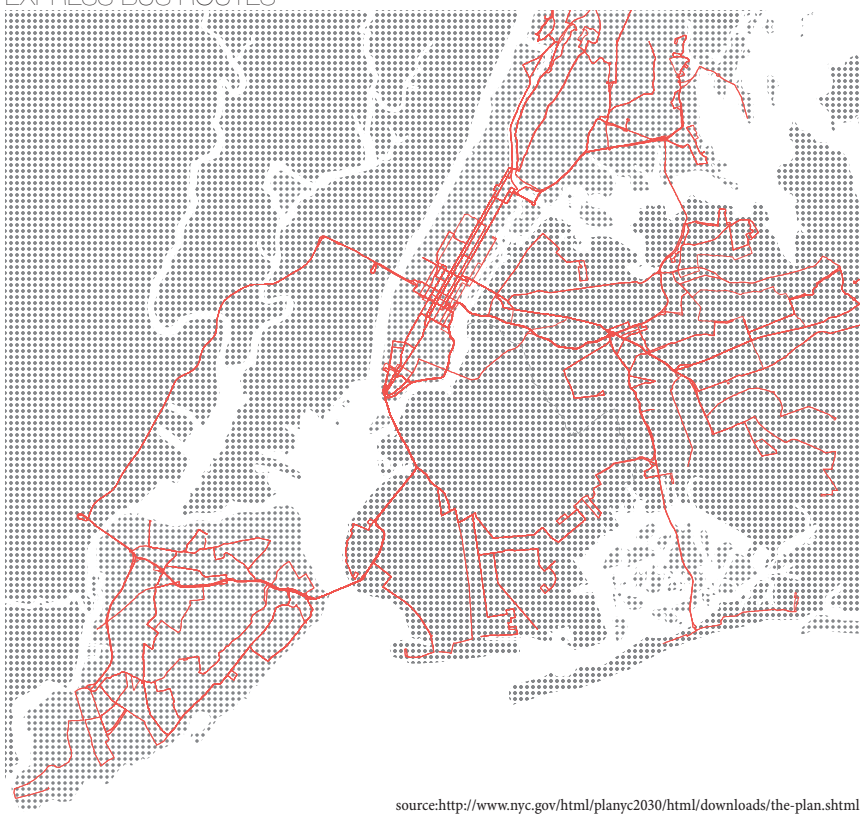
The second map on this page shows the area which Manhattan charges its drivers to get through. It asks people to stay outside of Manhattan with their cars which opens the potential to park and ride facilities.
If this congestion would be expanded outside to New Jersey the tunnels from New Jersey to New York would get relieved, New Jersey would earn on Park and Ride incomes and New York would have less congestion, means cleaner air.



source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml

1 Homes by NYPlan, link: http://www.nyc.gov/html/planyc2030/html/home/home.shtml - accessed July 2011

EXPRESS BUS ROUTES



source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml

PUBLIC TRANSPORT

Express Bus Service Routes are the only public transport connecting the whole region in a circular way.
Maybe there would be a potential for residential expansion around this route or even thinking about other ways of transport along that route?

TRANS-PORT

TRANSIT CAPACITIES EXPANSION

The map on the right shows in which way New York City wants to expand it's transit capacities.
One interesting aspect is the in New Jersey located expansion called "Access to the Region's Core. This expansion goes right into the heart of the Meadowlands and is only about 11 Kilometre away from Downtown Manhattan.

Expanding transit routes could also be the chance to improve a cities infrastructure.

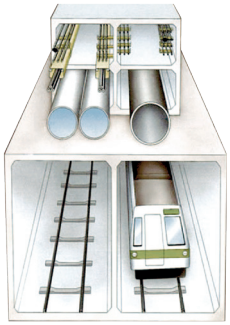
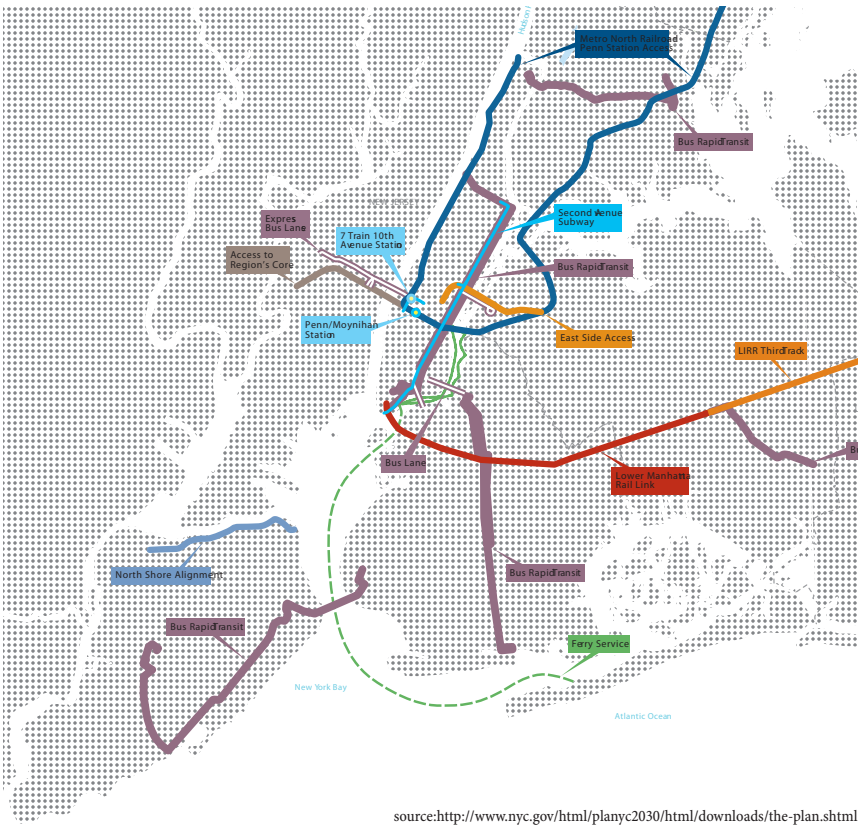
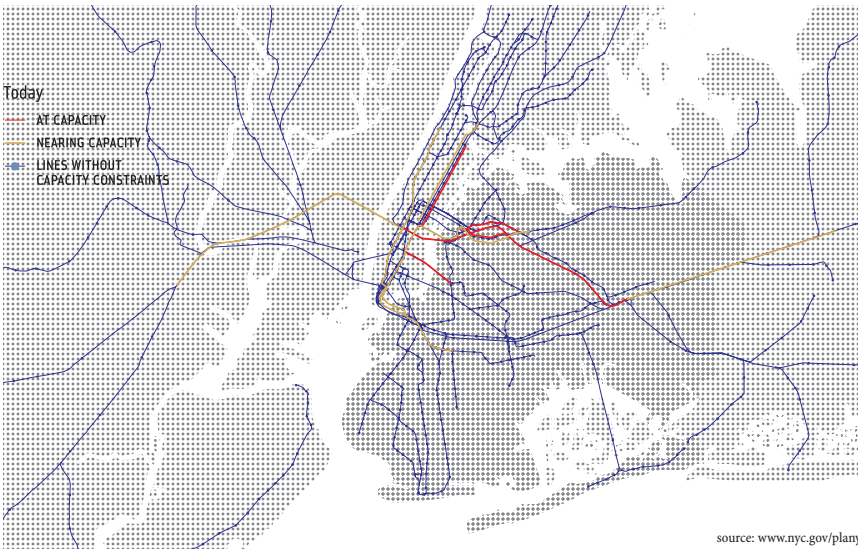


Image source: Railway System by TEPCO, Tokyo, 2010

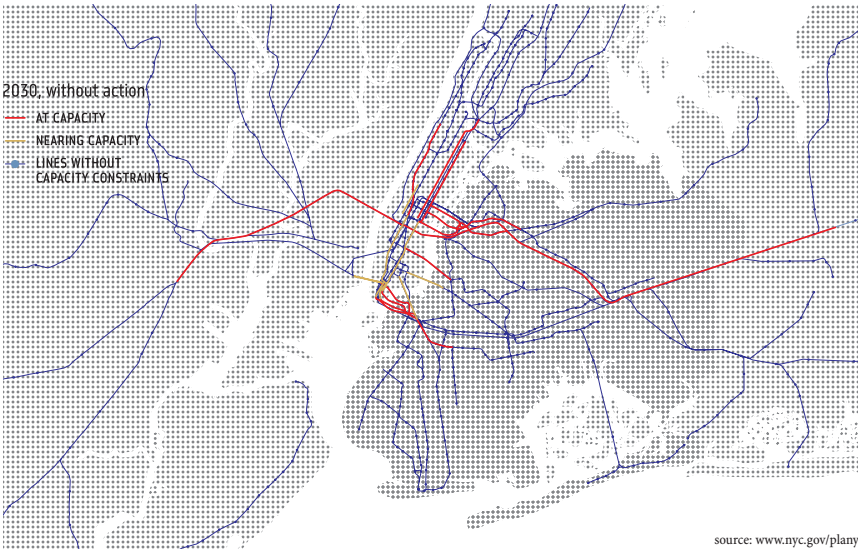
The plans "Today", "2030 without action", and "2030 with improvements" are placed here as a reminder that the states will be forced to act. This means the chance for a change in todays poorer regions will be for real.



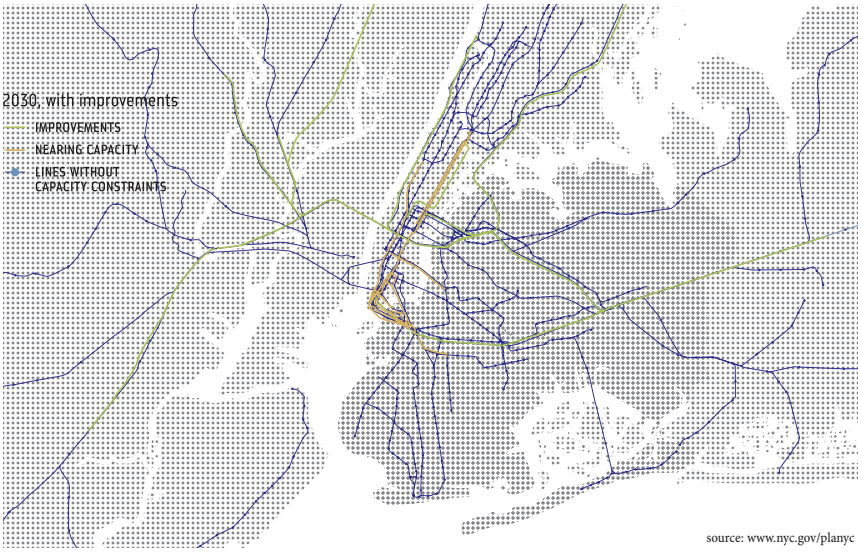
source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml



source: www.nyc.gov/plany

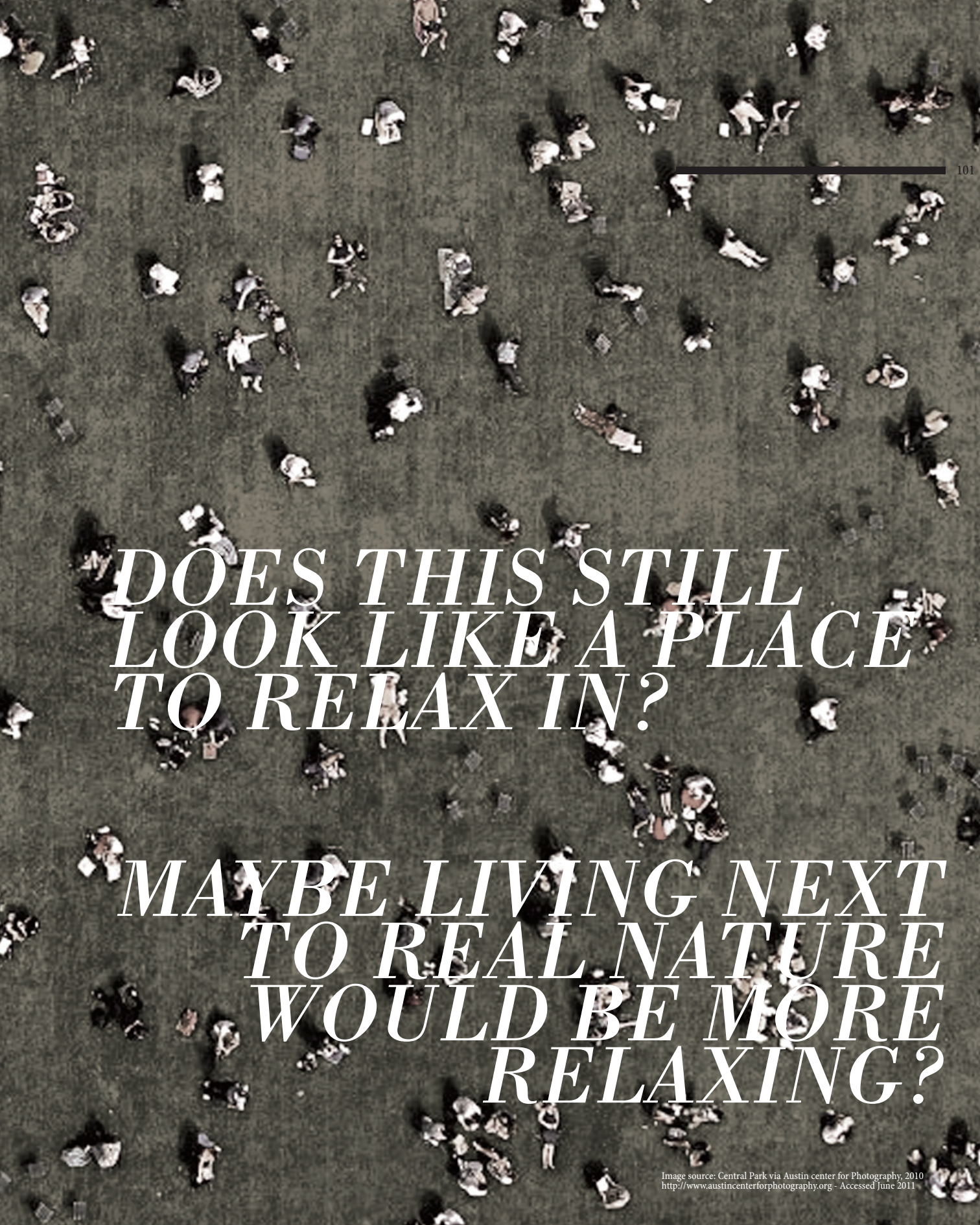


source: www.nyc.gov/plany



source: www.nyc.gov/planyc


CENTRAL
PARK



DOES THIS STILL LOOK LIKE A PLACE TO RELAX IN?

MAYBE LIVING NEXT TO REAL NATURE WOULD BE MORE RELAXING?

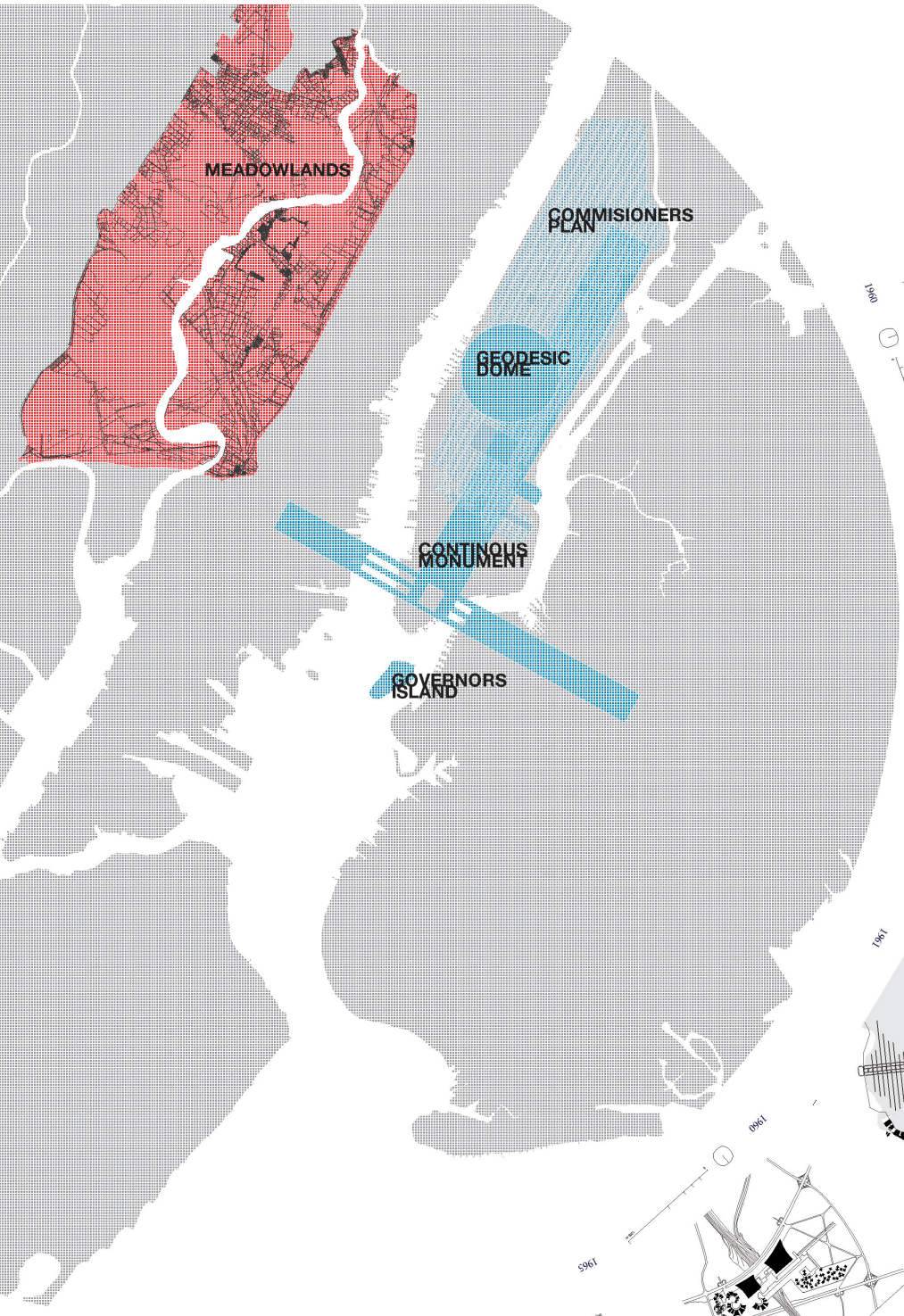
Image source: Central Park via Austin center for Photography, 2010
http://www.austincenterforphotography.org - Accessed June 2011

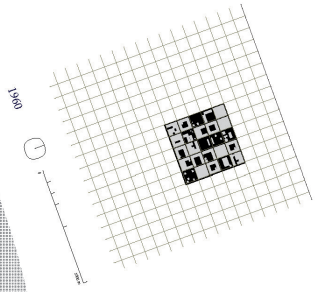
MEADOW-LANDS

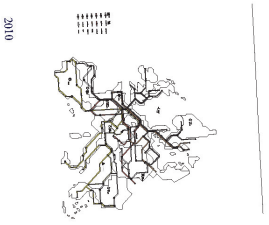
VISIONS

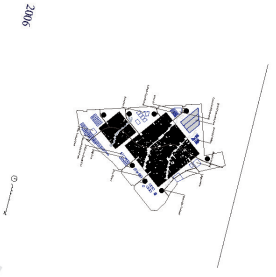
New York city expands and will change the Meadowlands but is there a need for a change? Is there a need for all those visions around Manhattan? Or are many of the qualities architects, designers, urbanists, politicians are looking for already in place just not in use?
A deep research about the whole area and specific sites should give the answer to that questions.

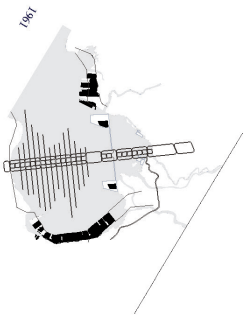



MEADOWLANDS
COMMISIONERS PLAN
GEODESIC DOME
CONTINOUS MONUMENT
GOVERNORS ISLAND

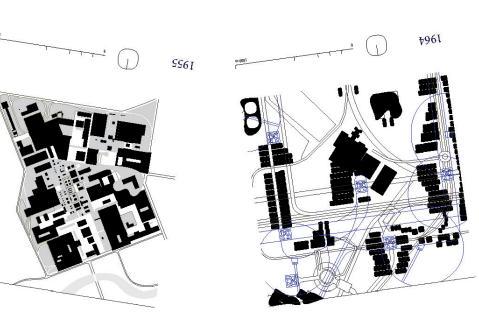

1960


2010


2006


1961

1960
1965

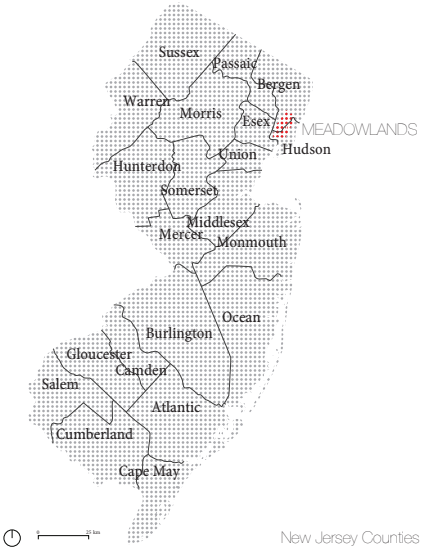

1955
1964

FACTS

SITE

The are measures about 78,74 km^2.
Located in New 2 counties of New Jersey
- Bergen & Hudson County

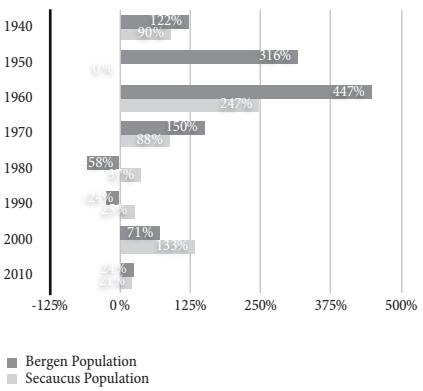
10 municipalities in Bergen County:
Carlstadt, East Rutherford, Little Ferry, Lyndhurst, Moonachie, North Arlington, Ridgefield, Rutherford, South Hacken-



sack, Teterboro and 4 in Hudson County: Jersey City, Kearny, North Bergen, Secaucus.

Home to more than
10.000 residents and
8.000 jobs

POPULATION



The population of the county Bergen and the municipality Secaucus are still growing but a lot less than in the former years.

PROBLEMS

- old landfills
- polluted waterbodies
- public transport to New York City[1]

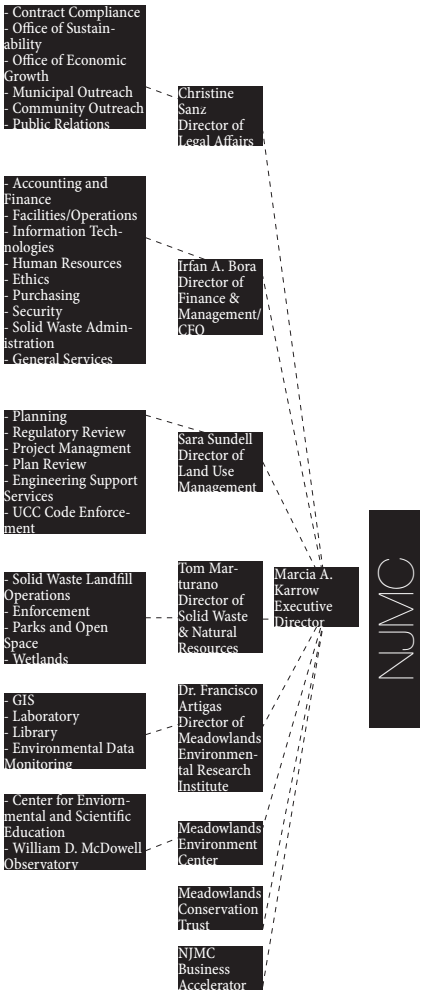
NJMC

In 1969, NJ State Legislature established the NJMC, charging the agency to regionally plan the Meadowlands District with these three mandates:
- Protect the delicate balance of nature
- Provide for orderly development
- Provide facilities for the disposal of solid waste

"The Hackensack Meadowlands Reclamation and Development Act (N.J.S.A. 13:17-1 et seq), effective Jan. 13, 1969, recognizes the importance of the Meadowlands as a unique place for new jobs, thriving communities and recreational opportunities in New Jersey. The Act created the Hackensack Meadowlands Development Commission (HMDC). The agency was renamed the New Jersey Meadowlands Commission on Aug. 27, 2001."[2]

"The Meadowlands District is bordered by Route 46 on the north, Routes 1 and 9 (also known as Tonnelle Avenue) and the freight lines owned by Norfolk Southern and CSX Corp. on the east, the Port Authority of New York and New Jersey's Trans-Hudson (PATH) commuter rail lines and the Pulaski Skyway on the south, and Route 17, the Pascack Valley rail line and the Kingsland rail line on the West."[3]

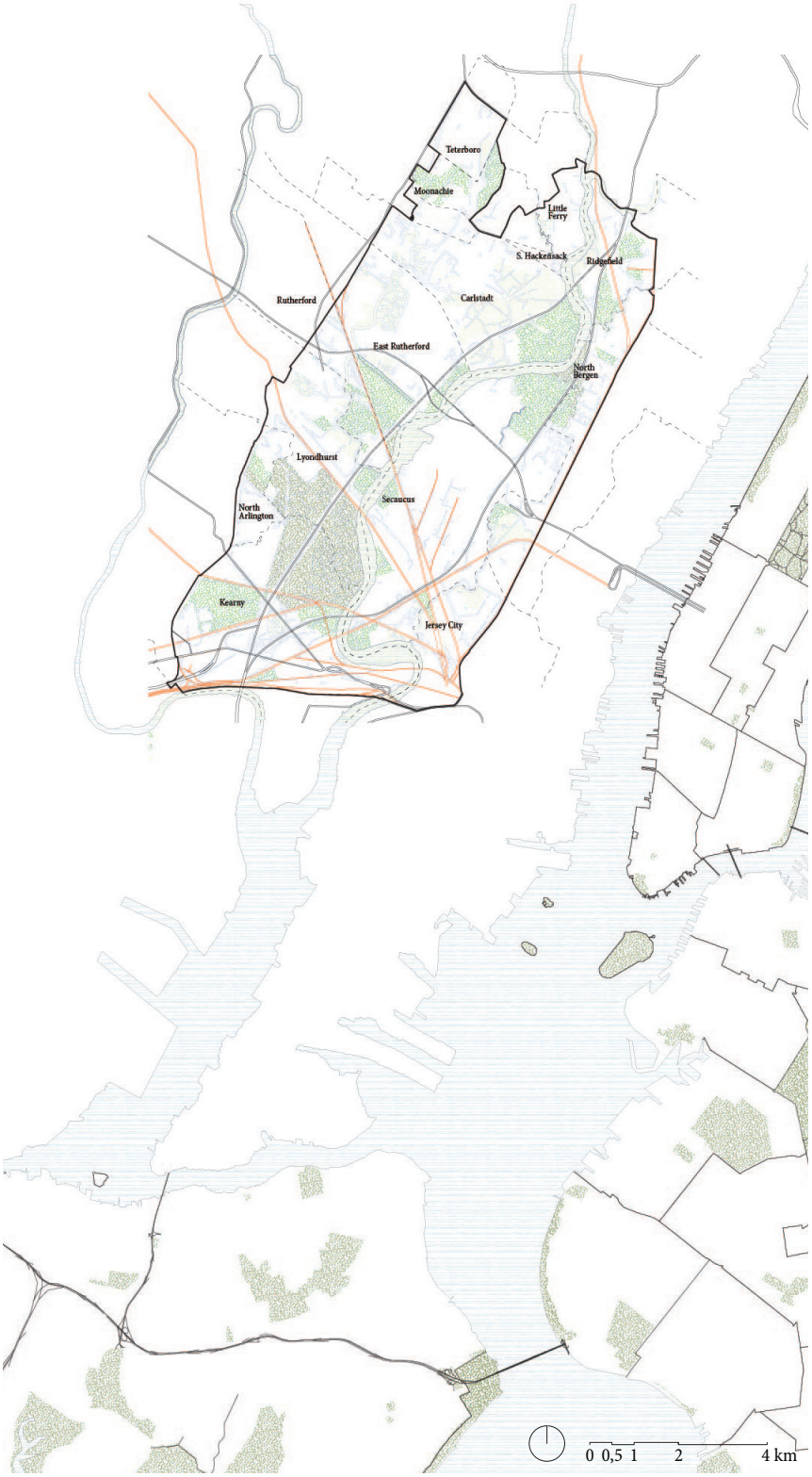
STRUCTURE OF THE NEW JERSEY MEADOWLANDS COMMISSION[4]



TURNAROUND

"The Hackensack Meadowlands Development Commission changed its name to the New Jersey Meadowlands Commission in August, 2001. This change better represented the agency's role to serve as trustee of the natural resources of the

1 Intergovernmental webpage, link: http://intergovernmental.homestead.com/presentations/The_New_Meadowlands-Working_the_Regional_Plan.pdf - accessed Jan 2011
2 NJMC Webpage, link: http://www.njmeadowlands.gov/about/about.html - accessed July 2011
3 NJMC web page, link: http://www.njmeadowlands.gov/about/about.html - accessed July 2011
4 NJMC web page, link: http://www.njmeadowlands.gov/about/structure.html - accessed July 2011



Meadowlands District and to foster a sustainable regional economy.

Once written off as a wasteland, the Meadowlands is now experiencing a renaissance thanks to the conservation efforts of the NJMC. As a result, more than 260 species of birds are attracted to these diverse habitats. In January 2004, the NJMC committed to preserving 8,400 acres of wetlands and open space through a new Master Plan. Later that year, a conservation plan covering the entire Meadowlands District was launched to cement the progress in the ecological recovery of the Meadowlands and chart a course for further rehabilitation."[5]

5 *NJMC 2010 link: http://www.njmeadowlands.gov/about/timeline/history_F.html - accessed July 2011*

RENEWABLE RESOURCE

WIND & RESOURCE POTENTIAL

This New Jersey wind map shows the wind resource at 80 meters. The chart shows the potential megawatts of rated capacity above a given gross capacity factor (without losses) at 80-m and 100-m heights above ground.

"The Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) published a wind resource map for the state of New Jersey. The wind resource map shows the predicted mean annual wind speeds at 80-m height. Presented at a spatial resolution of 2.5 km (interpolated to a finer scale for display). Areas with annual average wind speeds around 6.5 m/s and greater at 80-m height are generally considered to have suitable wind resource for wind development."[6]

The chart to the right shows the wind resource potential of NJ and the Meadowlands at an annual wind speed of 5.5 m/s meaning that there's not there is no resource for wind development.

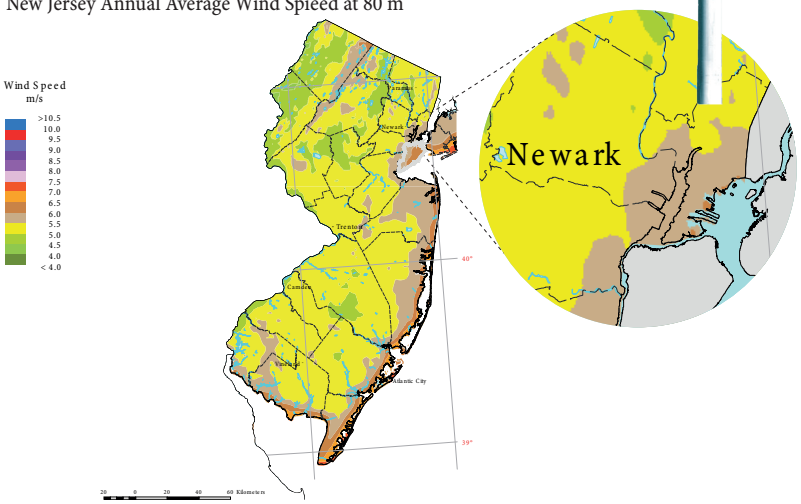
ENERGY MASTER PLAN

"New Jersey is extremely reliant on nuclear energy, with almost half of the electric power generated in New Jersey coming from nuclear power plants and about 44 percent of total electricity consumed in the state, due to imports from the PJM Interconnection (PJM), coming from nuclear energy.6,7 Coal power accounts for more than one quarter of the electricity consumed in the state, which accounts for about 18 percent of in-state generation. Natural gas power makes up a majority of the remainder for electricity, with only a small portion of electric power provided by renewable resources (primarily solar, wind, or biomass). Natural gas in New Jersey is also used in other processes and is consumed primarily for heating and cooking. The residential sector consumed 38 percent of natural gas in 2005 and the commercial sector consumed 28 percent. Eighty-nine percent of motor gasoline and diesel consumed in New Jersey is consumed in the transportation sector, but less than 1 percent of petroleum in New Jersey is used for electricity generation.



NOT ENOUGH WIND FOR WIND DEVELOPMENT

New Jersey Annual Average Wind Spieed at 80 m



Source: Wind resource estimated developed by AWS Truepower, LLC for windNavigator. Web: http://www.windnavigator.com | http://www.awstruepower.com. Spatial resolution of wind resource data: 2.5 km. Projection: UTM Zone 17 WGS84.

NJMC Energy Master Plan, July 2008
Adopted November 24, 2008
The goals of the New Jersey Meadowlands Commission Energy Master Plan are:
- Maximize the Meadowlands District's energy conservation and efficiency to achieve reductions in energy consumption of at least 20 percent by 2020.
- Reduce Peak Demand for electricity by 2020.
- Install 20 megawatts (MW) of Renewable Energy in the Meadowlands District by 2020.
- Invest in innovative clean energy technologies and businesses to stimulate the industry's growth in the Meadowlands District.
- Complete energy efficiency audits throughout the Meadowlands District, beginning with audits of Municipal buildings.
- Continue to encourage Green Building Codes for all new construction in the Meadowlands.
- Install between 5 and 20 MW of photovoltaics throughout the Meadowlands District, beginning with a 700 kW array on the NJMC property.
- Explore the feasibility of small-scale wind in the Meadowlands District and continue to track other potential renewable energy technologies.
- Request state legislation to create a Renewable Energy Economic Zone.
- Continue and enhance the promotion of the New Jersey Meadowlands Business Accelerator.

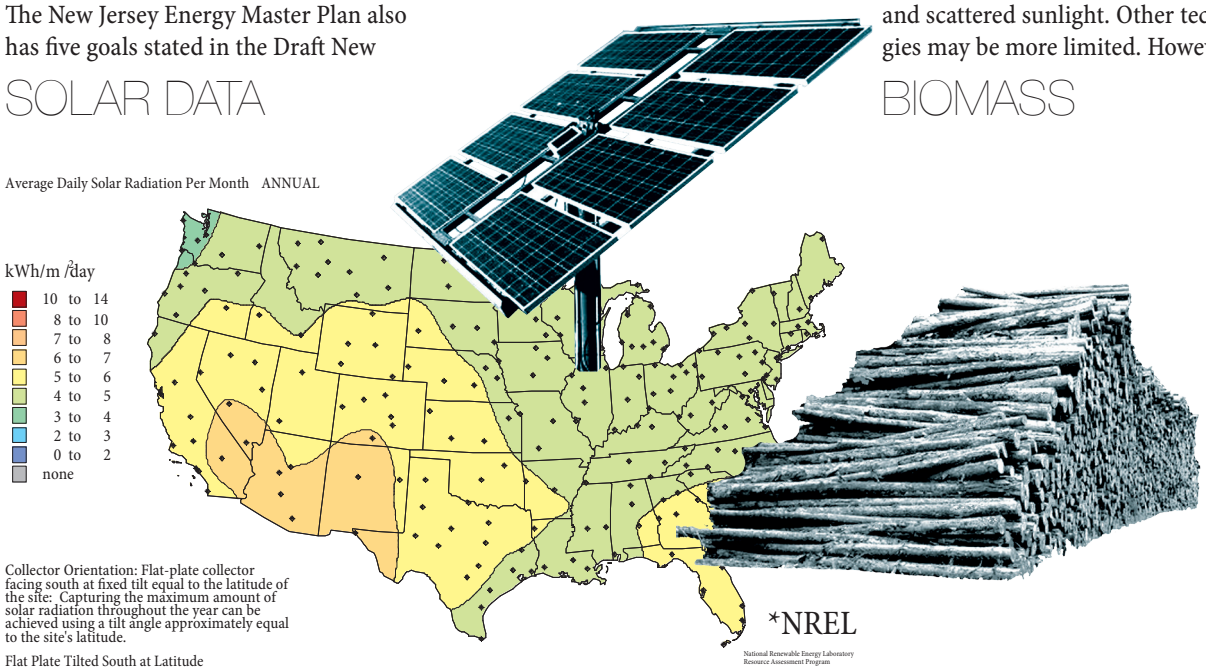
6 US department of energy, 2010, link: http://www.windpoweringamerica.gov/wind_resource_maps.asp?stateab=nj - accessed jan 2011

- Establish a Meadowlands District Energy Advisory Board.

The New Jersey Energy Master Plan also has five goals stated in the Draft New Jersey Energy Master Plan:

1. Maximize the state's energy conservation and energy efficiency to achieve reductions in energy consumption of at least 20 percent by 2020.
2. Reduce peak demand for electricity by 5,700 MW by 2020.
3. Meet 22.5 percent of the State's electricity needs from renewable sources by 2020.
4. Develop new low-carbon-emitting, high-efficiency power plants and close the gap between electricity supply and demand.
5. Invest in innovative clean energy technologies and businesses to stimulate the industry's growth in New Jersey."[7]

SOLAR DATA



source: Energy Efficiency and Renewable Energy, 2010, link: http://www.energysavers.gov/pdfs/208.pdf

SOLAR POWER

"The solar resource across the United States is ample for photovoltaic (PV) systems because they use both direct and scattered sunlight. Other technologies may be more limited. However, the amount of power generated by any solar technology at a particular site depends on how much of the sun's energy reaches it. Thus, solar technologies function most efficiently in the southwestern United States, which receives the greatest amount of solar energy."[8]

BIOMASS

BIOPOWER

"Biopower is the production of electricity or heat from biomass resources. With 10 gigawatts of installed capacity, biopower technologies are proven options in the United States today."[9]

7 New Jersey Meadowlands Commission Energy Master Plan, link: http://www.njmeadowlands.gov/doc_archive/NJMC%20Doc%20Archive/econgrow_docs/office_sustain_docs/Final%20NJMC%20Energy%20Master%20Plan%20adopted%2011-24-08.pdf - accessed July 2011

8 Energy Efficiency and Renewable Energy, 2010, link: http://www.eere.energy.gov/basics/renewable_energy/solar_resources.html - accessed July 2011

9 Energy Efficiency and Renewable Energy, 2010, link: http://www.eere.energy.gov/basics/renewable_energy/biopower.html - accessed July 2011

AERIAL VIEW




109
0
6000 feet
0
500
1000
2000 m

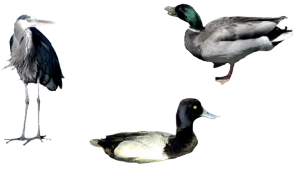
HISTORY MEADOW-LANDS



15 000 BC
retreat of the glaciers



Red Cedar
The Lakota Native American name is Chansha, "redwood" or Hante'. In its native range, it is commonly called "cedar" or "red cedar," names rejected by the American Joint Committee on Horticultural Nomenclature as it is a juniper, not a true cedar. (source: wikipedia.org -nov 2010)

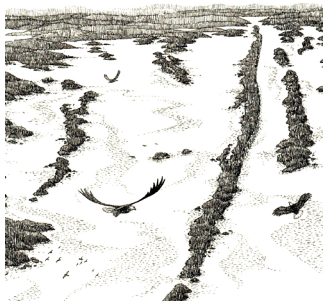


Scaup, Mallard, Blue Heron



The Water was still sweet and the grass lush which made it possible to raise cattle.

As the land rose more and more Cedar trees grew.



Wetlands coexisted with cedar forests and large colonies of Seabirds like blue herons, scaup ducks, mallards, coots, egrets, marsh hawks, gulls, ... arrived.



1630
The Dutch purchase Land from the Hackensack Indians for ten gallons of rum.

1664
The British Empire takes over the New Netherlands and renames it New Jersey.





18th century
The burning of the great cedar forest which once covered a large part of the meadows.
It's conveyed that pirates and highwaymen who stole goods used it as a hide-out which let the colonial government decide to burn down the forest.



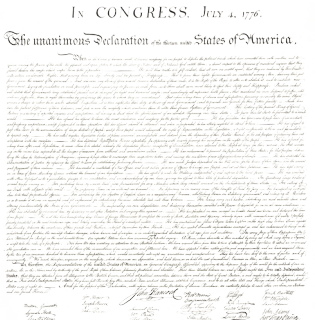
The burned down forest and sinking iron dikes turned the freshwater marsh into a brackish one as the land level sank down below the hackensack river.



Mehrhof Pond and Mehrhof Road, Little Ferry . During the late 19th century, Little Ferry was the second-largest brick making center in the U.S., producing 100 million bricks annually. One of the Mehrhof Brothers clay pits remain - Mehrhof Pond, a freshwater pond at the end of Mehrhof Road. The pond is a great birding site, and the winter home of hundreds and hundreds and hundreds of Ruddy Ducks. (Reference: The Hackensack Meadowlands -- Kevin W. Wright)

1917
On a bitter cold January 11, 1917, a fire started in Building 30. In four hours, probably 500,000, three-inch-high explosive shells were discharged. The entire plant was destroyed.

1870 - 1950's
Production of up to 100 million bricks per year.


IN CONGRESS, JULY 4, 1776.
The unanimous Declaration

1776 July 4
United States Declaration of Independence



1867
Spenser Driggs and Samuel Pike devised a reclamation plan that involved building stronger, iron-cored or plated dikes to prevent damage from the tides and the muskrat population. Several miles of these dikes were constructed in the meadows, including locations along Sawmill and Kingsland creeks. Although the project was successful in diking nearly 4,000 acres, the crops grown on the land reportedly failed. Partly as a result of an agricultural depression in the 1870's, financial support was withdrawn following Pike's death in 1872.
http://www.njmeadowlands.gov/about/timeline/history_C.html

March 1916
An enormous factory was constructed in the meadowlands, which was then referred to as Kingsland



Source: NJMC History, link: http://www.njmeadowlands.gov/about/history.html - accessed July 2011

Google image search

HISTORY MEADOW-LANDS

GENERAL HISTORY

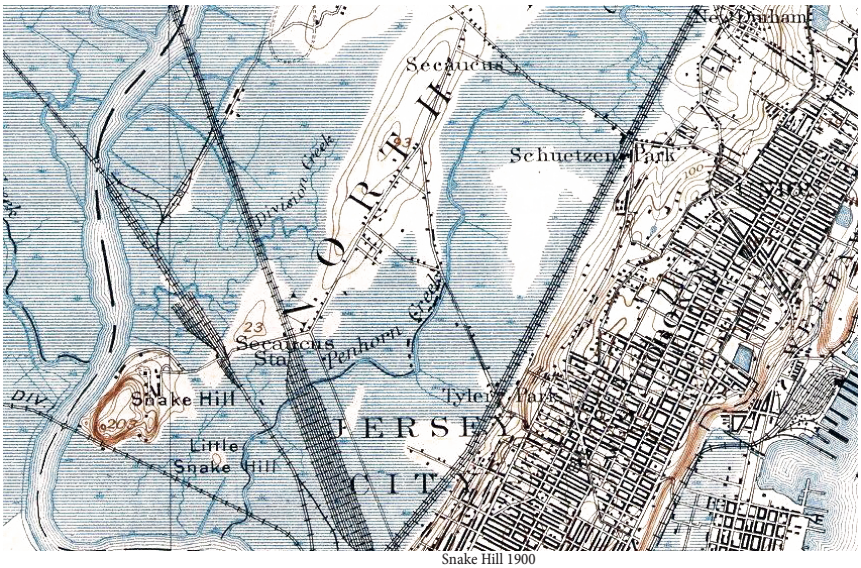
The Wisconsin glacier carved out a basin between the Watchung Mountains and the Palisades leaving behind the so-called "Lake Hackensack".
This happened about twenty thousand years ago and the lake then almost existed for three thousand years.
About ten thousand years ago the area began to drain leaving the only water behind what's now known as the Hackensack River.
Rising sea levels from still melting glacial ice exposed the river to the tides and the salt marsh environment started to emerge.

This mixture of fresh water and salt water is what's called brackish[10] water.
Not many plants survived this change but the special salt marsh cord grass (Spartina alterniflora) began to grow along the estuaries riverbanks.
The first humans arrived about eleven thousand years ago but it took another ten thousand years until the first Native Americans established permanent settlement in the Meadowlands.

The first European settlers did not arrive until the early 1600's but the Dutch soon realized the reedy landscape with it's forest after colonizing Manhattan.
1644 the English took over and during the 17th and 18th centuries the Meadowlands turned into a fishing and hunting area where more and more land was needed for harvesting hay salt.
At this time (1805) a cedar forest as big as Midtown Manhattan covered the Meadowlands in Kearney.
Scientists estimate that one third to half of the Meadowlands were covered by cedars.

Later a new potential of the area was discovered, the soil was perfect for the brick industry, which led to a peak of production in 1895 where about a hundred million bricks per year were produced.

In 1902 the Hackensack River was dammed upstream, which increased the saltwater level involving a change of flora and fauna.



Snake Hill 1900

About a hundred years later, the next and probably worst change reached the meadowlands. In the Northwest, located at the small River called Berry's Creek in Wood-Ridge used to be a huge mercury dump. In the 90's it was still possible to discover shiny silvery stuff after digging a hole in the ground. Unimaginable three hundred tons of mercury polluted about 40 acres (0,16 km2) of land and water including the Meadowlands' fishes.
Today the rest of the mercury is settled deep down in the earth and not seen as a threat anymore.

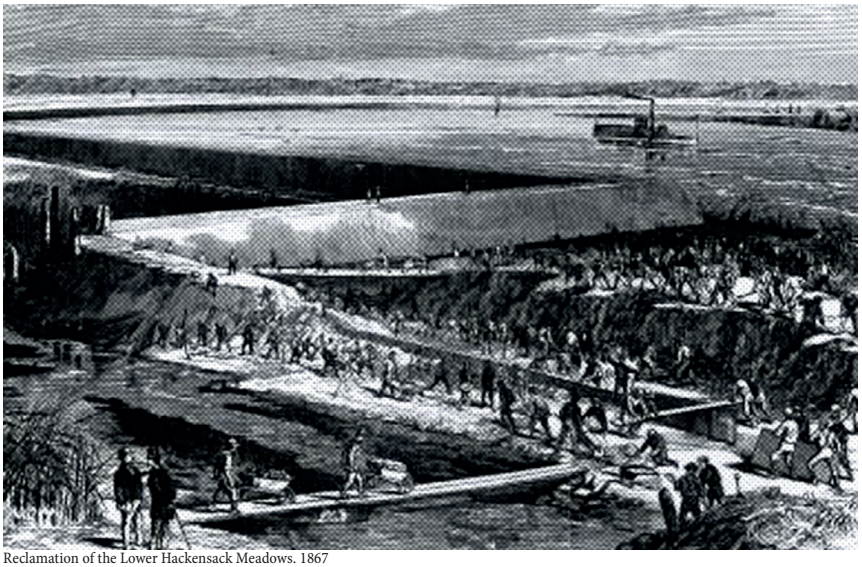
Beside of the really bad mercury pollution, the Meadowlands still struggle from once being the world's biggest garbage dump.
Most of the hills that can be seen when walking through this artificial nature are actually hills of trash covered with a bit of soil.
Only in 1968, the state realized that it had to do something about this uncontrolled pollution of its landscape.
It was the year where the Hackensack Meadowlands Development Commission (HMDC) was founded which later in 1997 adopted the first "Open Space Goals" to save about 8400 acres (44 km2) of undeveloped land.

Beside the history that really happened the Meadowlands also has a history of dreams:
From reclaiming land for a racetrack, to a new industrial city bigger than New York, to an American Venice and even a New York theme park but reality showed that none of these plans were possible.

Back in the 17th century the first settlers began dumping all kinds of refuse and building dikes in Hackensack Meadowlands to make agriculture possible. These early landfills can be considered to have minor effects on nature due to the lack of hazardous material.
In the second half of the 19th century population grew rapidly, also leaving

10 Brackish water, link: http://en.wikipedia.org/wiki/Brackish_water - accessed July 2011

more trash. The companies of the early industrialisation used new production methods, materials and substances, toxic materials increasingly end up in the dumps. From the early 20th century on greater amounts of trash were carried into the Meadowlands with trucks, dumped, compressed and heaped with dredges creating giant, smelly landfills. These could be toxic for human beings and wildlife around and pollute the groundwater, sometimes the generated methane was burning for years, polluting the air too.



Reclamation of the Lower Hackensack Meadows. 1867
Source: Frank Leslie's Illustrated Newspaper, November 16, 1967

Sources:

Teterboro-online, link: www.teterboro-online.com/boro/riser/riser2.shtml - accessed Jan 2011

The Meadowlands History Blog, link: http://www.meadowpast.net/ - Jan 2011

Robert Sullivan, The Meadowlands: Wilderness Adventure on the Edge of a City , Anchor Books/Scribner, New York, 1998

Institut für Architektur und Landschaft, Case02, Lowlands: Meadowlands New Jersey, TU Graz, 2010

LANDFILLS

"After World war II sanitary landfills became common in the US. From now on the dumped material was covered with earth, the former dump got a new name: sanitary landfill, unfortunately often leaching and burning underground. Also due to the environmental activist movements of the late 1960's engineers began developing improvements: In a secure sanitary landfill has perimeter liners under and over it, the generated landfill-gases and leached are collected, the trash is compacted to create more space. These methods even today are state of the art, when recycling, composting or incinerating is not possible."[11]

11 Urban Habitats, link: http://www.urbanhabitats.org/v02n01/urbanhabitats_v02n01_pdf.pdf - accessed Jan 2011

PRESER-
VATION

WHAT TO PRESERVE

The Masterplan from 2005 lists a lot of historic resources. Every country has it's own idea on how to handle listed buildings, structures or even landscapes. In the particular case of the Meadowlands, preservation looks more like a way to keep the very young history alive compared to a European approach of list-



Source: NJMC, SHPO various hirstoric resource
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

ing the very old structures.
None of the buildings below is on the UNESCO world heritage list although some structures would maybe be worth to mention there.
Criteria of UNESCO selection:
"To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. These criteria are explained in the Operational Guidelines for the Implementation of the World Heritage Convention which, besides the text of the Convention, is the main working tool on World Heritage. The criteria are regularly revised by the Committee to reflect the evolution of the World Heritage concept itself.
Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the adoption of the revised Operational Guidelines for the Implementation of the World Heritage Convention, only one set of ten criteria exists."[12]

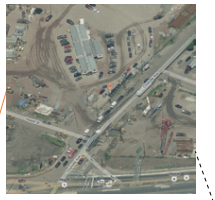
If it's good or bad to be on that list is something to argue about, fact is that it would be desirable for getting more visitors to the Meadowlands and therefore wind up tourism in the region.



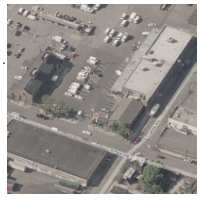
















1 Outwater Cemetery W. side Washington Ave./S. of Commerce Rd. Carlstadt
2 Canadian Car & Foundry Company East of Valley Brook & Polito avenues Lyndhurst
3 Kingsland Railroad Repair Shops S. of Valley Brook Ave., e. of Orient Way Lyndhurst
4 (unnamed) 10 Berger Street Moonachie
5 Phillip Mehrhof House 29 Riverside Avenue (Mehrhof Lane) Little Ferry
6 Ferry Landing & Trading Post Site Foot of Riverside Avenue (Mehrhof Lane) Little Ferry
7 Jared De Peyster House 17 Riverside Avenue (Mehrhof Lane) Little Ferry
8 J. De Peyster Stagg House 21 Riverside Avenue (Mehrhof Lane) Little Ferry
9 (unnamed) 37 Riverside Avenue (Mehrhof Lane) Little Ferry
10 (unnamed) 41 Treptow St. corner Washington Ave. Little Ferry
11 Roika House 113 Washington Avenue Little Ferry
12 (unnamed) 141 Washington Avenue Little Ferry
13 (unnamed) 113 Mehrhof Road Little Ferry
14 (unnamed) 34 Lafayette Street Little Ferry
15 (unnamed) 16 Lincoln Street Little Ferry
16 (unnamed) 26 Lincoln Street Little Ferry
17 (unnamed) 30 Lincoln Street Little Ferry
18 (unnamed) 22 Dietrichs Street Little Ferry
19 Inactive Railroad Track Bridge New Jersey Transit Harrison Branch Over NJ7 Kearny
20 Bridge for East Bound NJ 3 NJ 3 East Bound Over Hackensack/Grace St.
21 Clay Pits of Brick Making Industry Little Ferry
21 Airport Tower & Hanger, 1945 (now Aviation Hall of Fame & Museum) Teterboro Airport Near Industrial Avenue Teterboro
22 Atlantic Aircraft Factory, 1930's Teterboro Airport Near Industrial Avenue Teterboro
23 Bendix Factory Complex US Route 46 & Industrial Avenue Teterboro
24 (unnamed) North Arlington
25 Viaduct, 6-lane divided highway NJ 3 Over Berry's Creek East Rutherford
26 2-lane collector road and sidewalls Ridgefield
27 Public Service Gas and Electric Company 57-31 Charlotte Avenue Jersey City
28 (unnamed) 18-20a Lewis Avenue Jersey City
29 Jacob Stouff Property 32 Lewis Avenue Jersey City
30 Peoples Gas and Light Company 444-500 St. Pauls Avenue Jersey City
31 Public Service Energy and Gas Corp. 460-468 St. Pauls Avenue Jersey City
32 (unnamed) 472-518 St. Pauls Avenue Jersey City
33 (193) Kingsland Tunnel Newark Ave. & Orient Way Lyndhurst
34 Covert/Larch Historic District Jersey City
35 Portal Bridge, Pennsylvania, New Jersey and New York Railroad Co. Northeast Corridor Rail Line across Hackensack R. Kearny
36 Erie Marion Main Line Historic District Jersey City
37 West End Interlocking Tower Jersey City
38 Portal Tower Secaucus
39 HX Drawbridge Bergen County Line E. Ruth./Secaucus
40 Pulaski Skyway/U.S. Routes 1 & 9 Jersey City
41 Lower Hack\\ Draw Bridge NJ Transit Morristown Line, Milepost 2.52 thru 2.64 Jersey City
42 Old Main Line of the Delaware, Lackawanna & Western Rail Road Historic District Jersey City
43 Hudson Tower Kearny
44 (unnamed) Kearny

12 UNESCO, link: http://whc.unesco.org/en/criteria - accessed July 2011

LAND OF BRIDGES

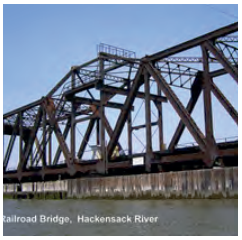
HACKENSACK RIVER BRIDGES



































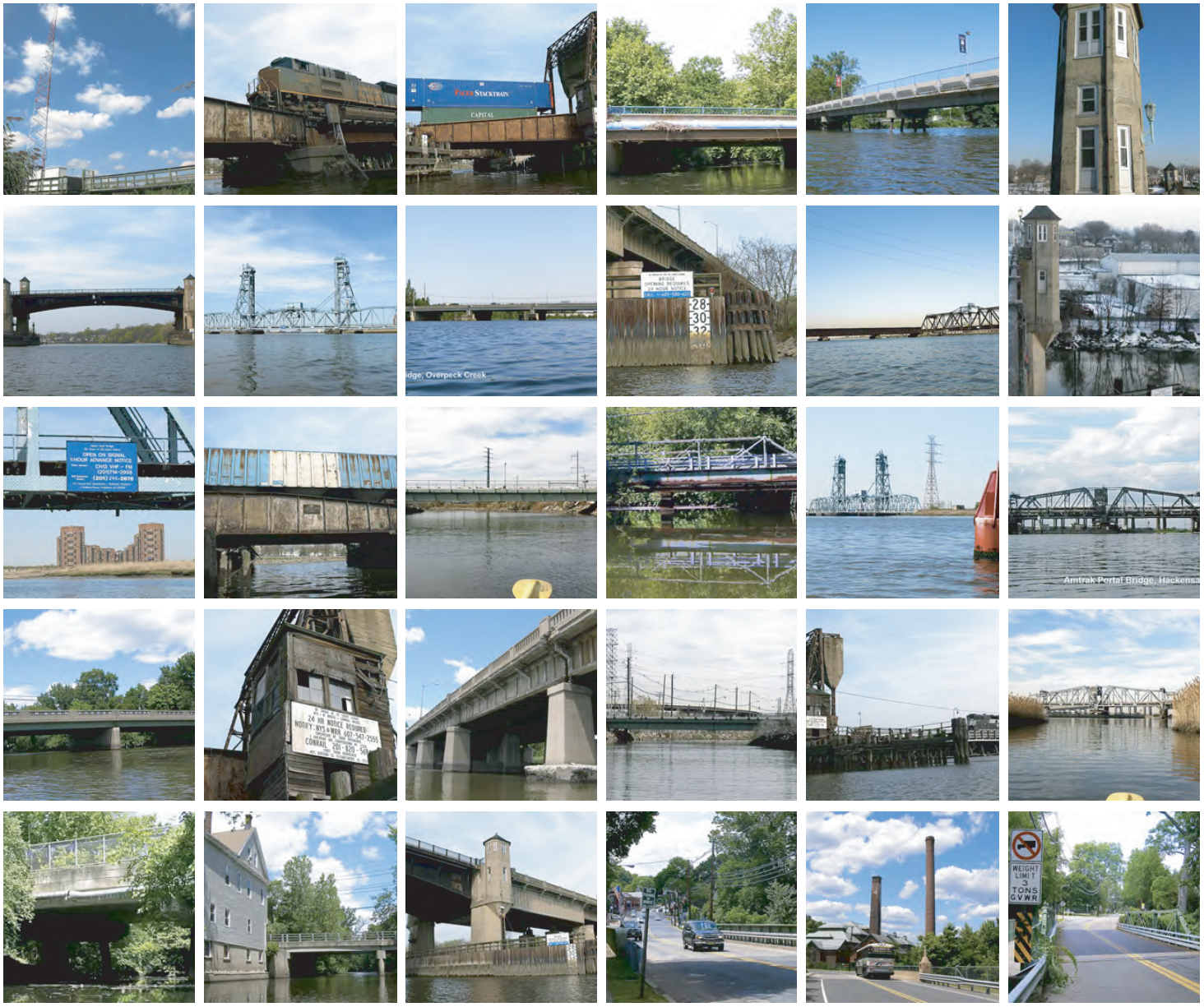



image source: User: jag9889 via Flickr, link: http://www.flickr.com/photos/jag9889/sets/72157601571715932/ - accessed July 2011

MAP-PING THE AREA

MUNICIPALITIES

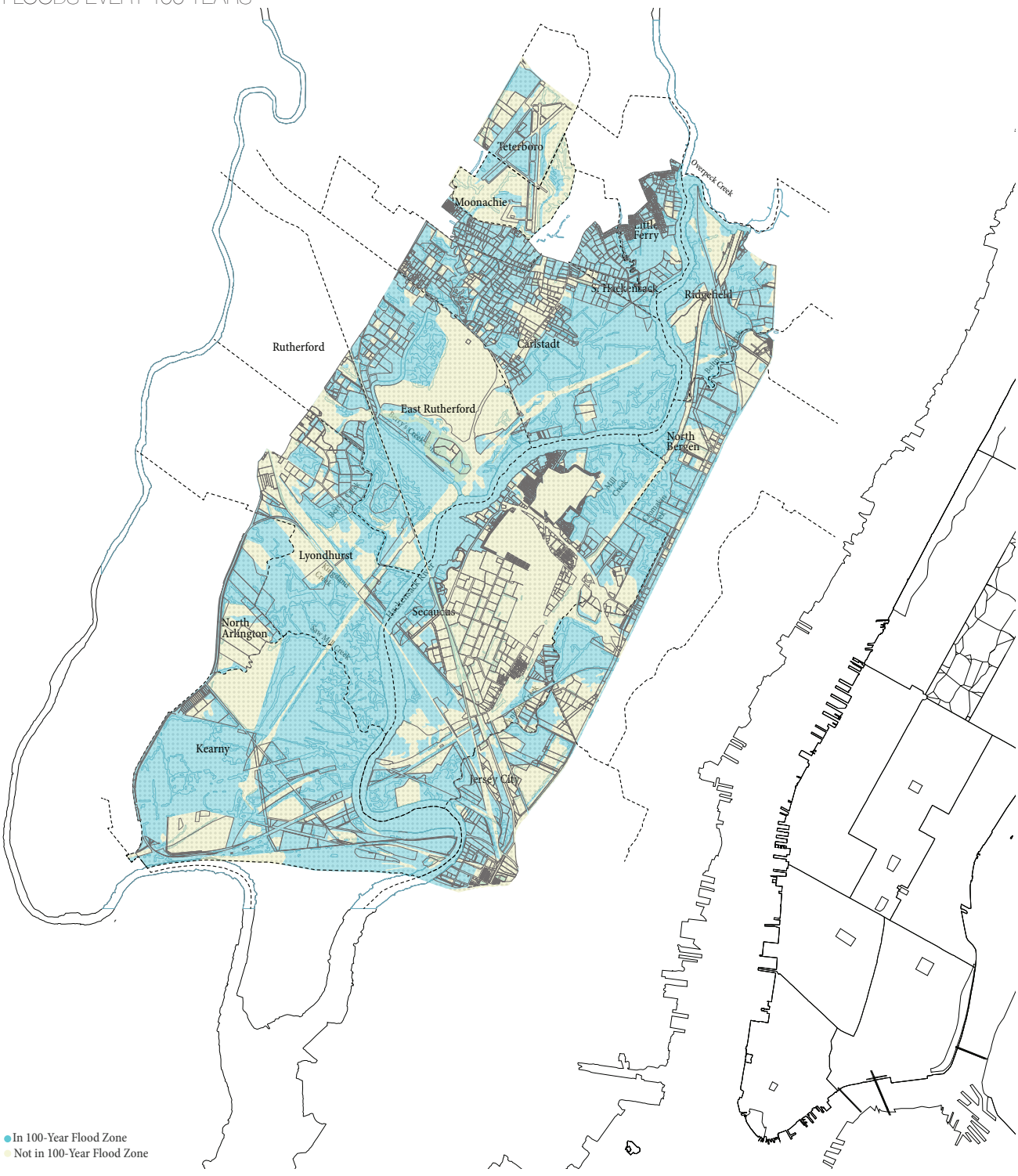




Source: NJMC, NJDEP
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

FLOOD DIAGRAM

FLOODS EVERY 100 YEARS

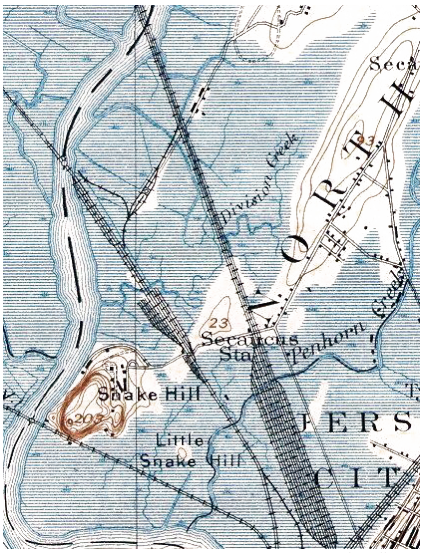


Source: NJMC,NJDEP

This map was created using the New Jersey Meadowlands Commission Meadowlands Environmental Research Institute's Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

FLOODS

The plan below from around 1900, showing the area around snake hill, gives a clue about what most of the Meadowlands used to be. A huge area of marshes and swamps.
Since a great part of the Meadowlands is covered with Landfills and did not evolve naturally, floods are a well known problem. The map on the left explains a worst case scenario which could happen every 100 years.



Snake Hill 1900

In order to prevent flooding disasters the NJMC commissioned Rutgers School of Environmental and Biological science:
"Stormwater Management in the Hackensack Meadowlands District
The Meadowlands District is subject to frequent flooding events as the result of decades of alterations in the natural water flow patterns of the Hackensack River estuary. Flooding in the District results in negative impacts on the general public and the Hackensack River when Combined Sewer Overflows (CSOs) discharge untreated sewage into the River, as well as financial losses to local businesses when major roadways become impassable. The New Jersey Meadowlands Commission (NJMC) has acquired an extensive data set related to water flows and flooding events within the District. To address the District's current flooding issues, the NJMC has commissioned Rutgers Environmental Research Clinic to review this existing data set and to recommend solutions to the NJMC for management of stormwater flows within the District."[13]

WETLANDS

On the National Geographic webpage the following definition is found:
"Wetland: an area that, at least periodically, has waterlogged soils or is covered with a relatively shallow layer of water. Bogs, freshwater and saltwater marshes and freshwater and saltwater swamps are examples of wetlands."[14]
In order to plan in that area it is very important to understand the quality of wetlands.

13 Rutgers CUES, link: http://cues.rutgers.edu/hackensack/index.html - accessed July 2011
14 National Geographic, link: http://www.pbs.org/strangedays/glossary/W.html - accessed July 2011

WET-LANDS

ENHANCEMENT & CONSERVATION



Source: NJMC, NJDEP, DOT
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

WHY THEY ARE VALUABLE

"Wetlands are recognized as important features in the landscape that provide numerous beneficial services for people and for fish and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters, and maintaining surface water flow during dry periods. These beneficial services, considered valuable to societies worldwide, are the result of the inherent and unique natural characteristics of wetlands."[15]

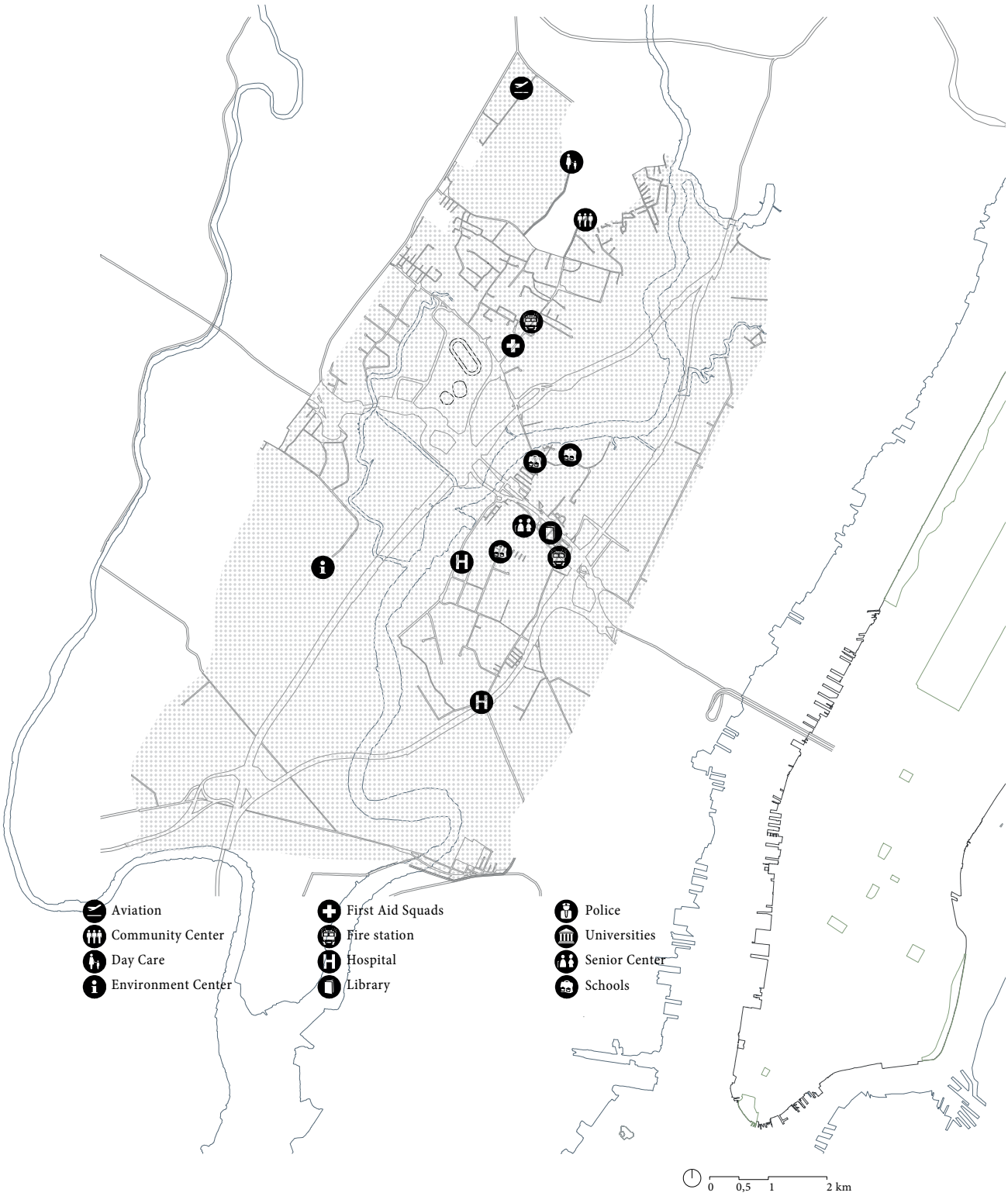
The reason why even New York City cares about this wetlands is clear, "improving water quality and storing floodwater" is crucial to the City.

PLANYC

"PlaNYC recognizes that wetlands play a critical role in maintaining water quality and provide important wildlife habitat and recreation opportunities. The current regulatory structure does provide some protection for certain wetlands in New York City. The somewhat overlapping Federal, State, and local regulatory regimes, however, contain gaps that may leave critical remaining wetlands vulnerable to a variety of direct and indirect pressures. This white paper identifies those gaps and suggests general approaches to filling them. Before the City can determine the costs and benefits of alternative policy approaches, however, the City must first develop basic information about the number, size, and value of the remaining unprotected wetlands. There are several ongoing efforts to develop that information. In the meantime, the City will continue the implementation of several ongoing initiatives that are related to wetlands, and will launch targeted efforts related to mitigation and stewardship."[16]

15 EPA United States Environmental Protection Agency, link: http://water.epa.gov/type/wetlands/index.cfm - accessed July 2011
16 NY Wetlands, NYC Wetlands Policy Paper, January 2009, link:

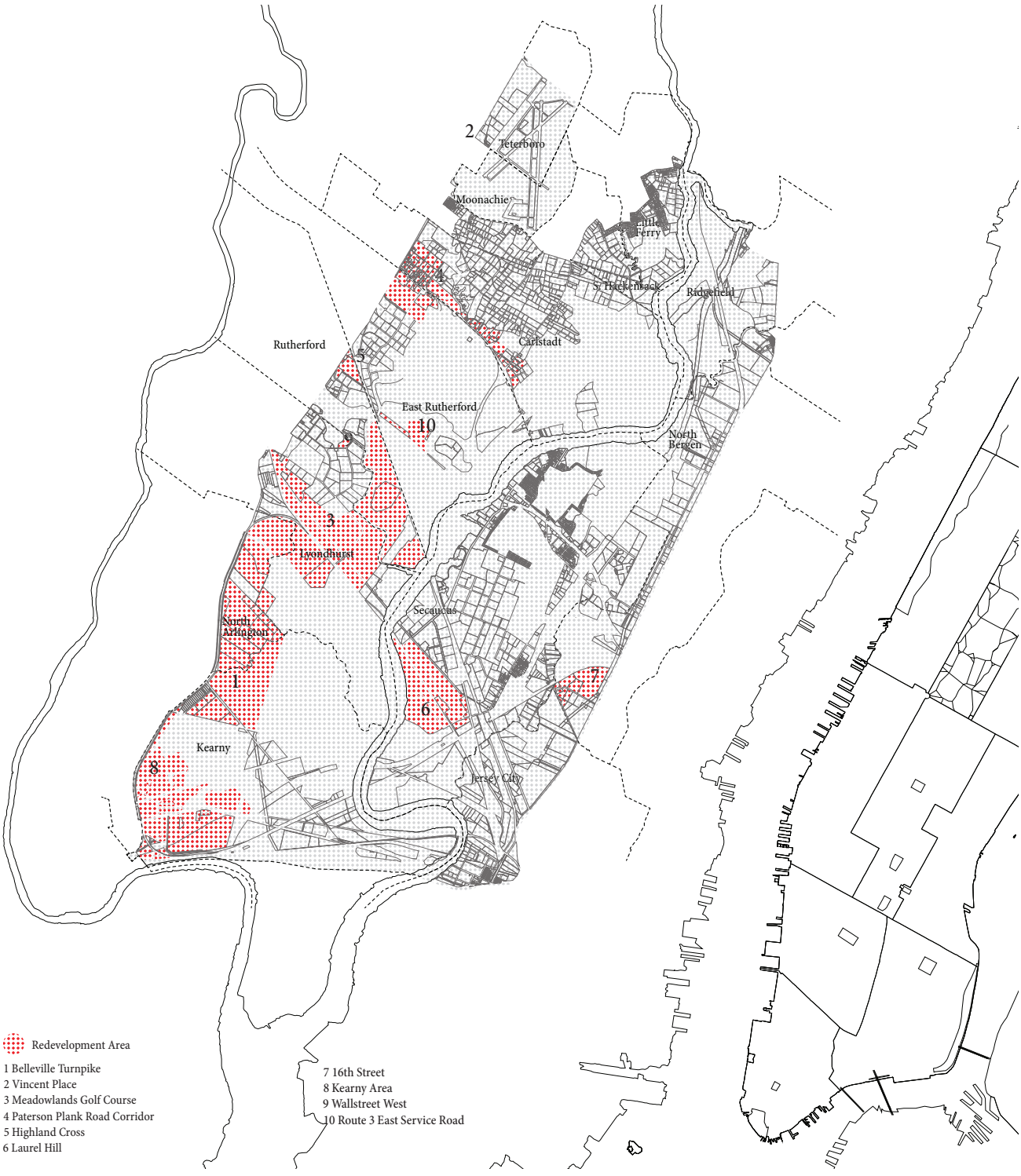
COMMU-
NITY FA-
CILITIES



COMMUNITY FACILITIES

This map shows the major community facilities of the Meadowlands.
These Organisations are public or publicly-funded facilities, such as police and fire protection, emergency medical response, hospitals, schools, and libraries, as well as private facilities such as hospitals and schools.
Community Facilities are indicating areas which already have potential for specific groups of people.
For example a school could indicate families to move close to it or a police station that the are is a safe place to live.

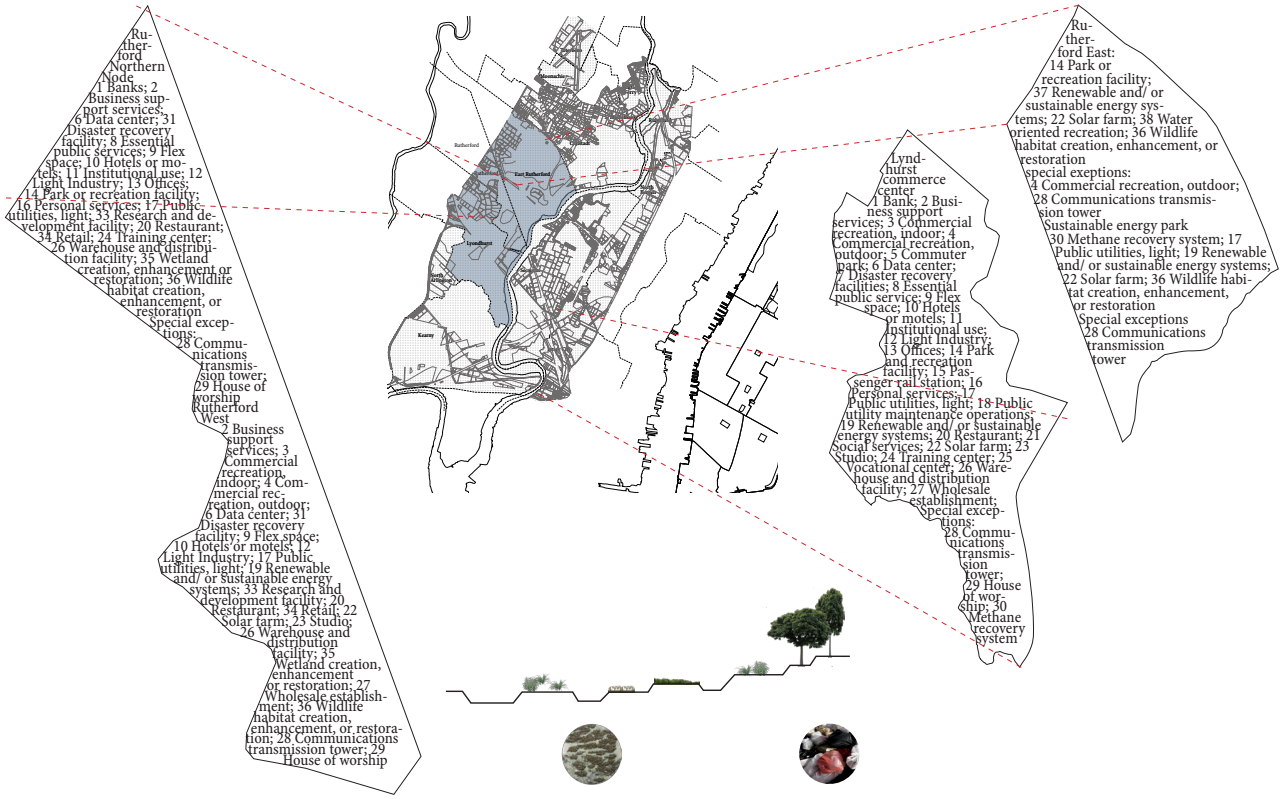
REDEVEL-
OPMENT



Source: NJMC
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

DEVELOPABLE SITES

The 2005 Masterplan suggests the sites on the left to be redeveloped.
A more recent Document lists more specific landuse proposal for Kingsland shown in the diagram on the right.
The document was received from the NJMC as a draft and might be changed by now. In October 2010 the following



uses were listed:

Lyndhurst commerce centre

1 Bank; 2 Business support services; 3 Commercial recreation, indoor; 4 Commercial recreation, outdoor; 5 Commuter park; 6 Data centre; 7 Disaster recovery facilities; 8 Essential public service; 9 Flex space; 10 Hotels or motels; 11 Institutional use; 12 Light Industry; 13 Offices; 14 Park and recreation facility; 15 Passenger rail station; 16 Personal services; 17 Public utilities, light; 18 Public utility maintenance operations; 19 Renewable and/ or sustainable energy systems; 20 Restaurant; 21 Social services; 22 Solar farm; 23 Studio; 24 Training centre; 25 Vocational centre; 26 Warehouse and distribution facility; 27 Wholesale establishment; Special exceptions: 28 Communications transmission tower; 29 House of worship; 30 Methane recovery system

Rutherford Northern Node

1 Banks; 2 Business support services; 6 Data centre; 31 Disaster recovery facility; 8 Essential public services; 9 Flex space; 10 Hotels or motels; 11 Institutional use; 12 Light Industry; 13 Offices; 32 Park or recreation facility; 16 Personal services; 17 Public utilities, light; 33 Research and development facility; 20 Restaurant; 34 Retail; 24 Training centre; 26 Warehouse and distribution facility; 35 Wetland creation, enhancement or restoration; 36 Wildlife habitat creation, enhancement, or restoration
Special exceptions: 28 Communications transmission tower; 29 House of worship

Rutherford West

2 Business support services; 3 Commercial recreation, indoor; 4 Commercial recreation, outdoor; 6 Data centre; 31 Disaster recovery facility; 9 Flex space; 10 Hotels or motels; 12 Light Industry; 17 Public utilities, light; 19 Renewable and/ or sustainable energy systems; 33 Research and development facility; 20 Restaurant; 34 Retail; 22 Solar farm; 23 Studio; 26 Warehouse and distribution facility; 35 Wetland creation, enhancement or restoration; 27 Wholesale establishment; 36 Wildlife habitat creation, enhancement, or restoration; 28 Communications transmission tower; 29 House of worship

Rutherford East

32 Park or recreation facility; 37 Renewable and/ or sustainable energy systems; 22 Solar farm; 38 Water oriented recreation; 36 Wildlife habitat creation, enhancement, or restoration
Special exceptions: 4 Commercial recreation, outdoor; 28 Communications transmission tower
Sustainable energy park
30 Methane recovery system; 17 Public utilities, light; 19 Renewable and/ or sustainable energy systems; 22 Solar farm; 36 Wildlife habitat creation, enhancement, or restoration
Special exceptions: 28 Communications transmission tower

REDEVEL-
OPMENT
AREAS

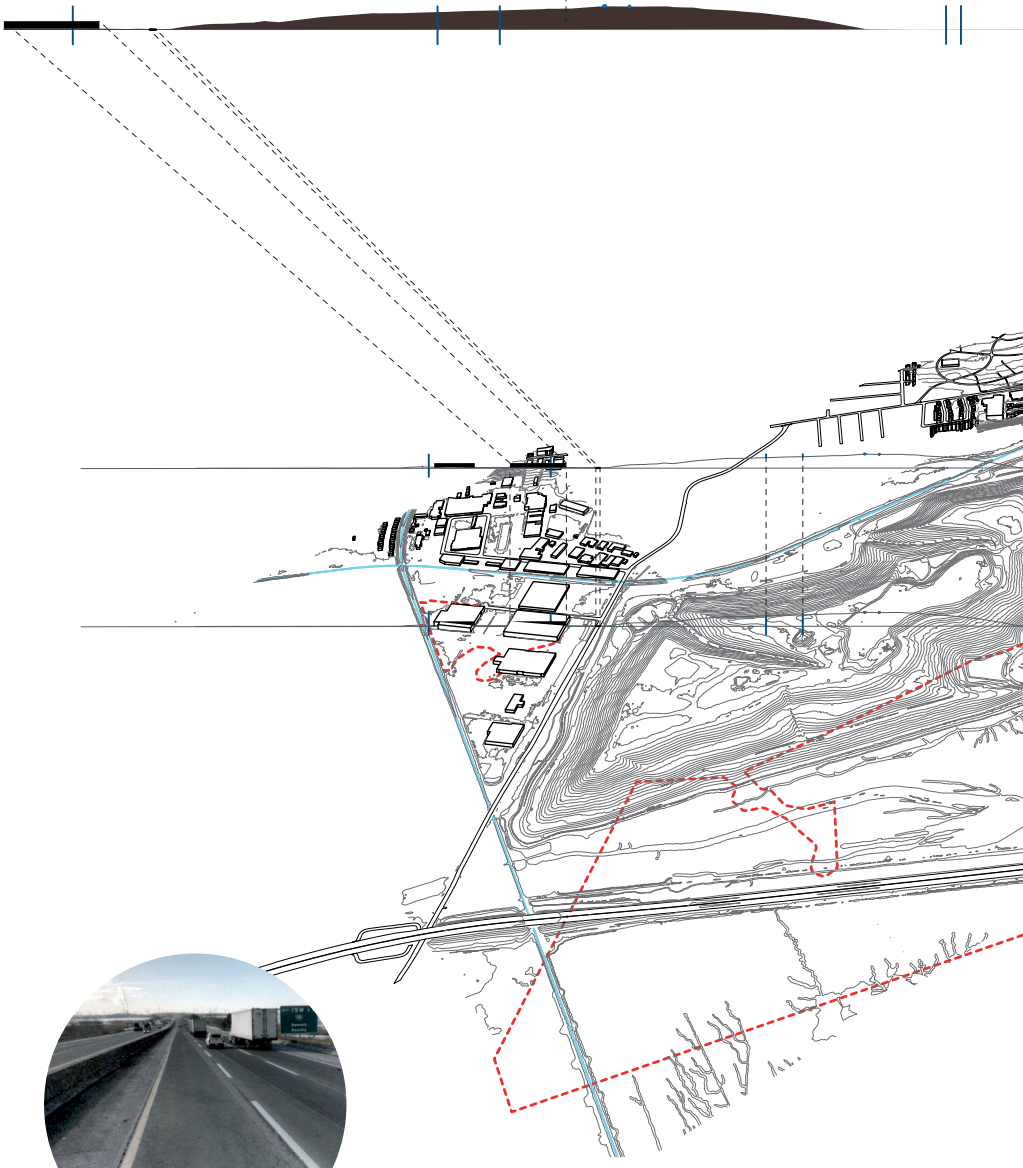
RUHTERFORD



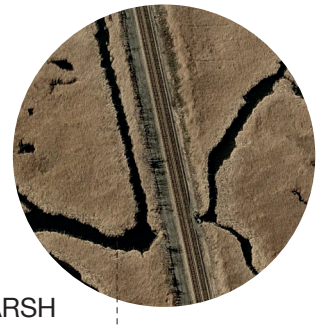


LANDFILL

TRAIN THROUGH M



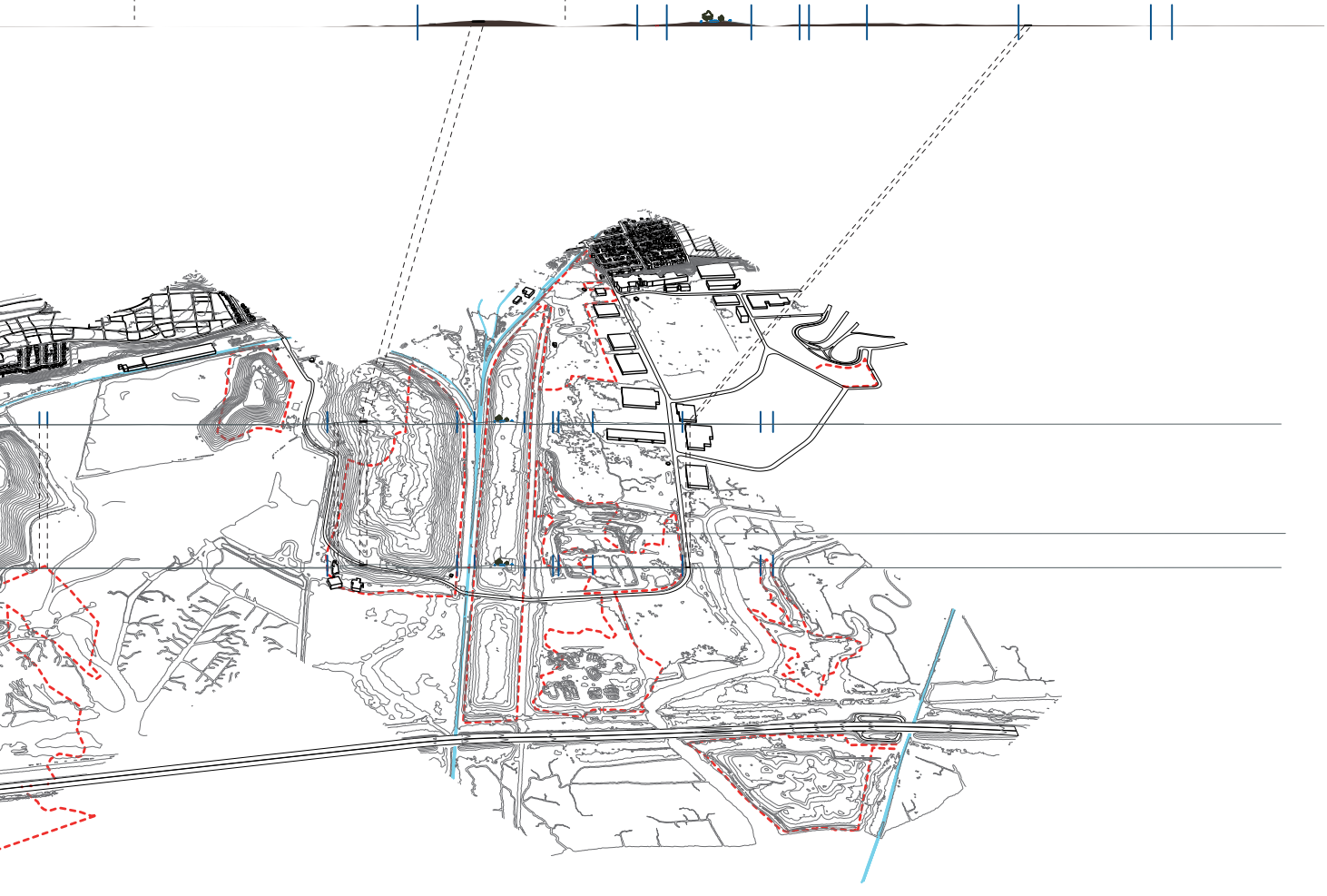
NJ TURNPIKE



MARSH



WETLAND

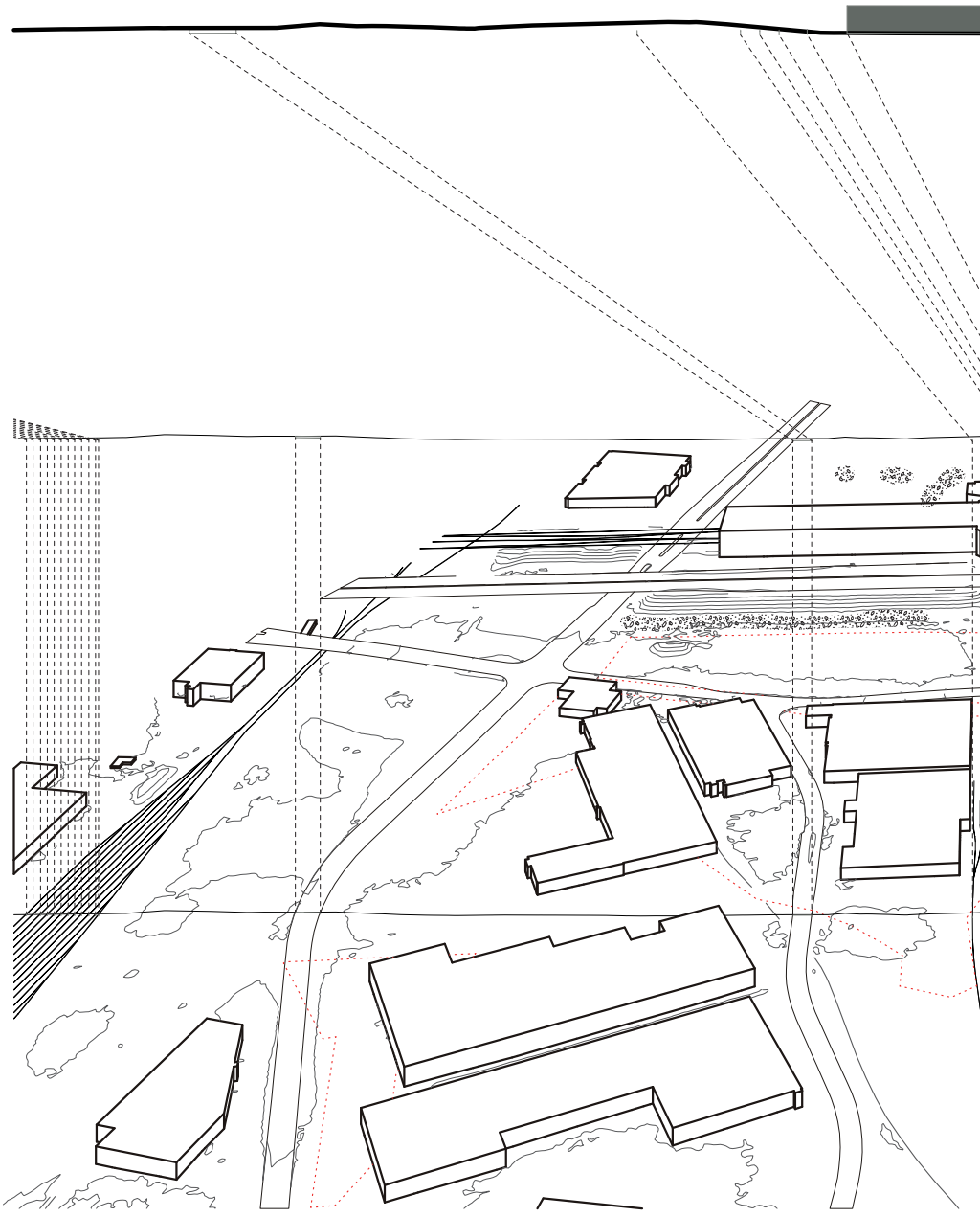


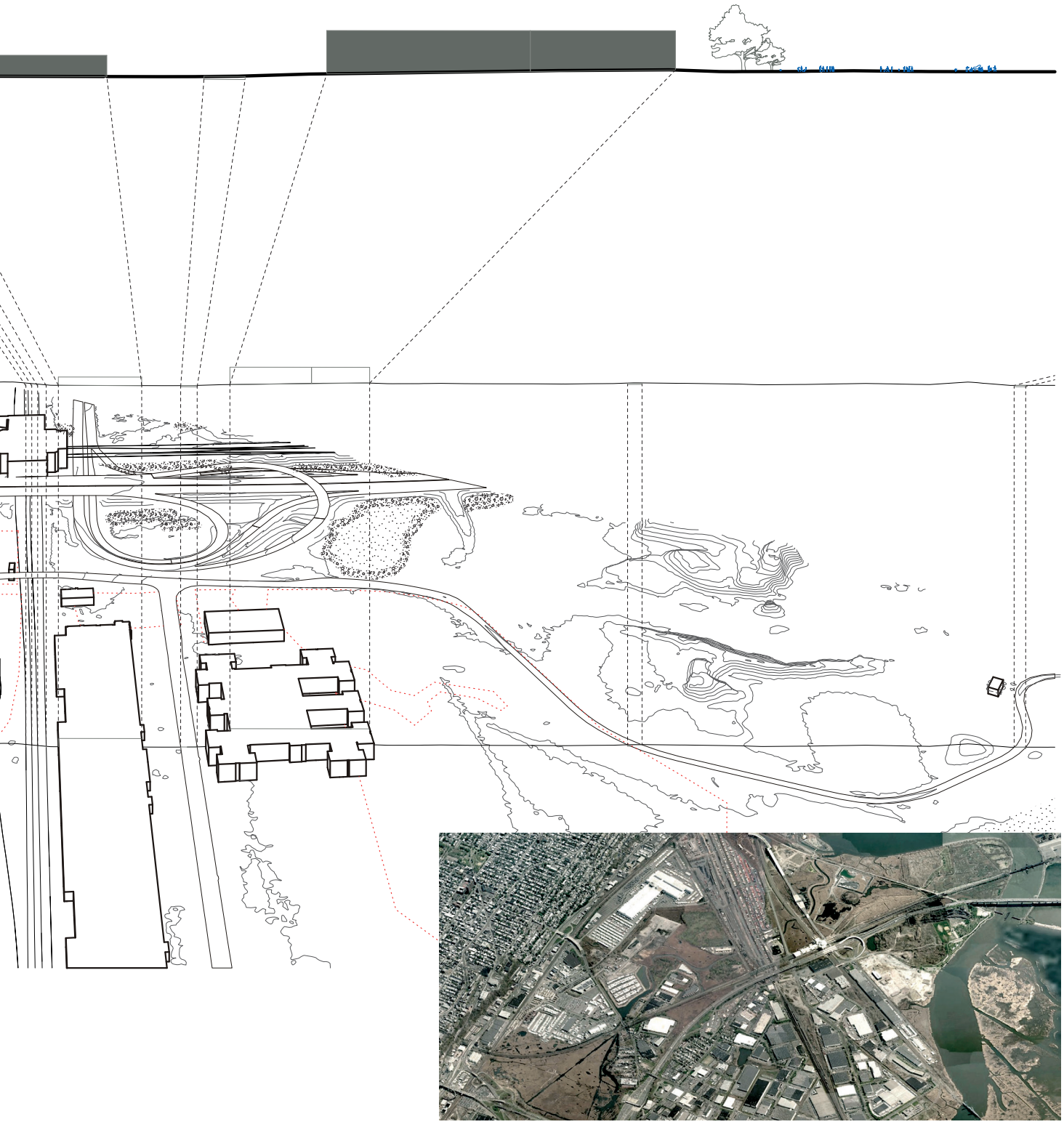


REDEVEL-
OPMENT
AREAS

SECAUCUS JUNCTION



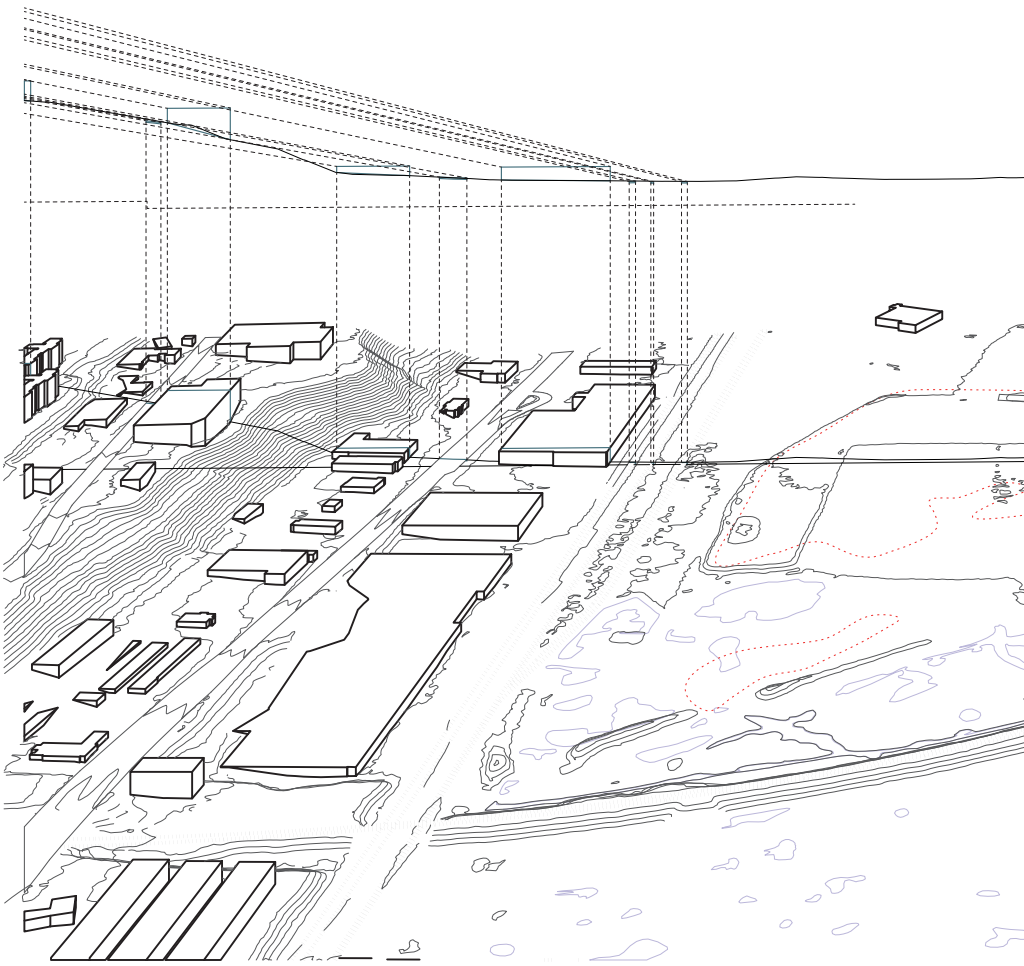


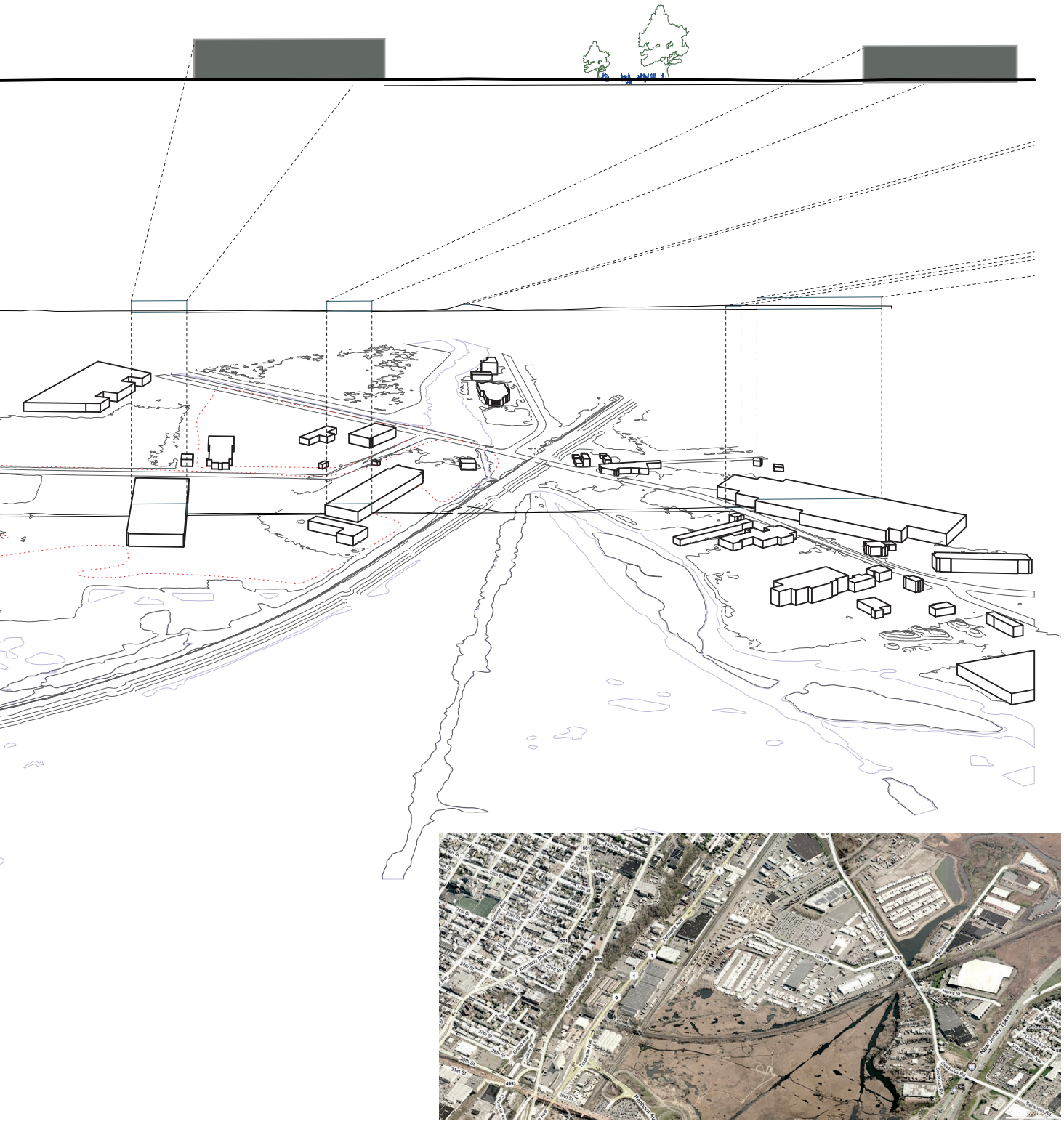


REDEVEL-
OPMENT
AREAS

HUDSON

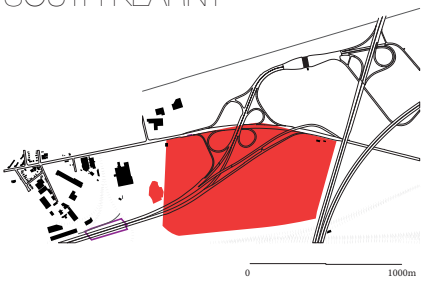


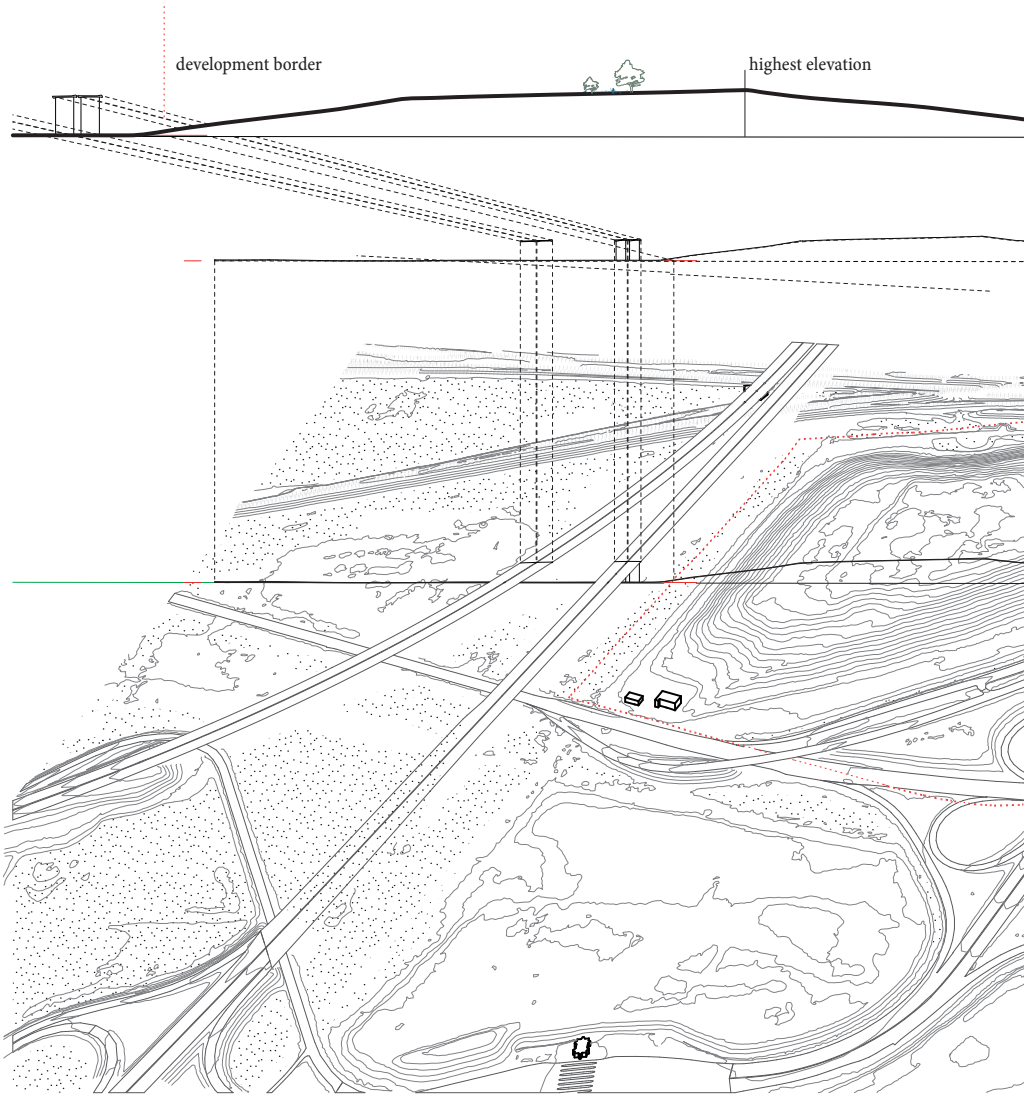




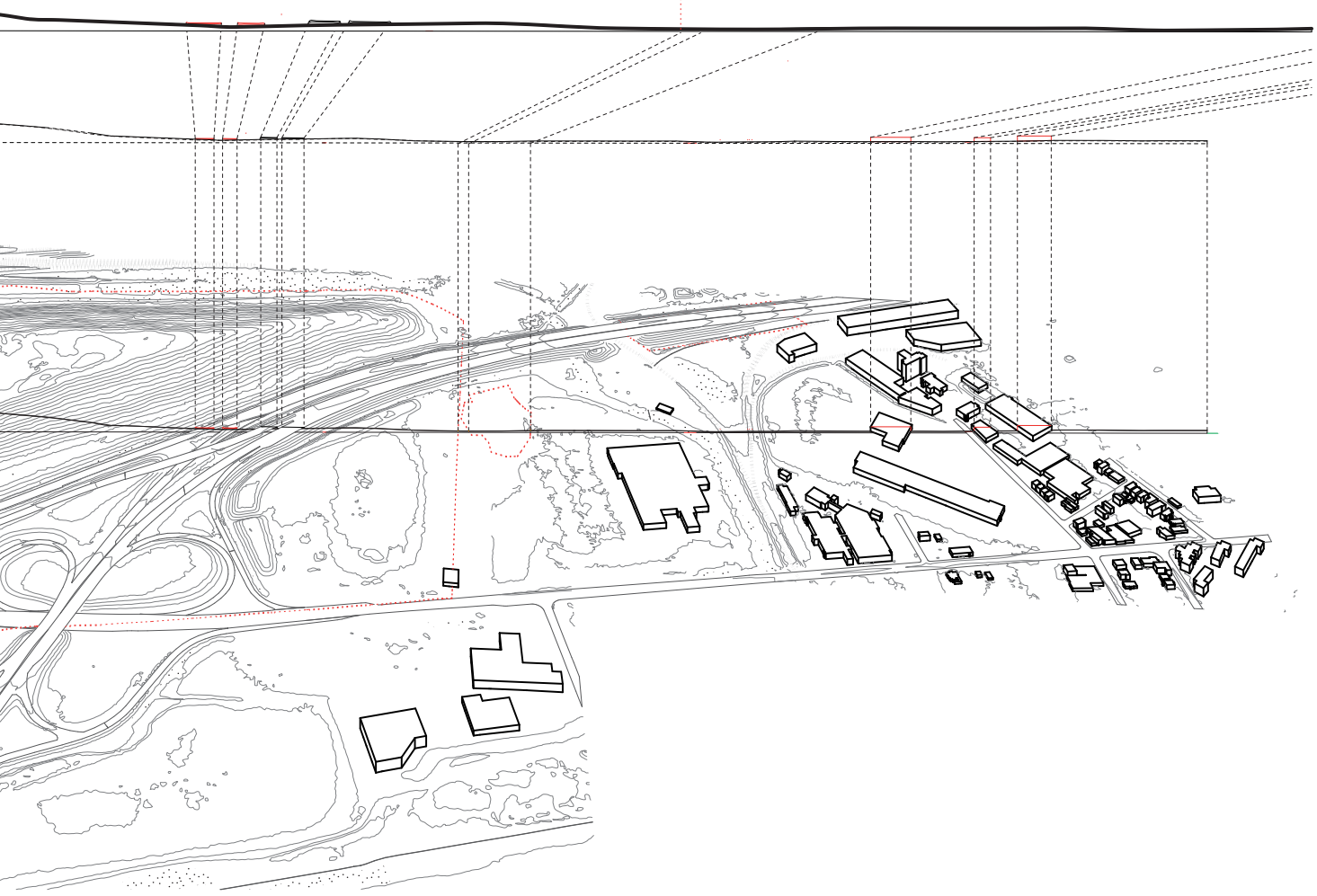
REDEVEL-
OPMENT
AREAS

SOUTH KEARNY



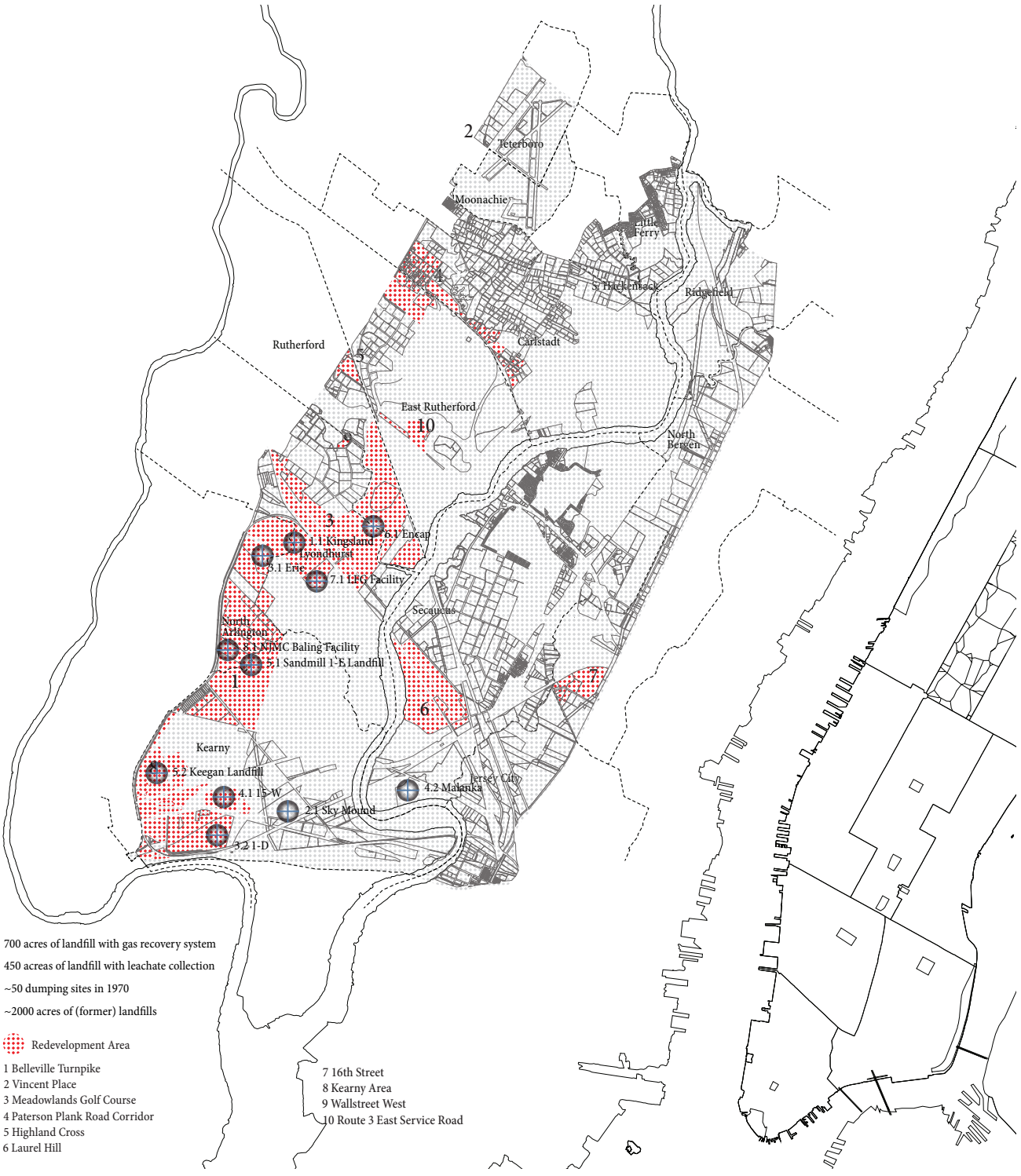


development border





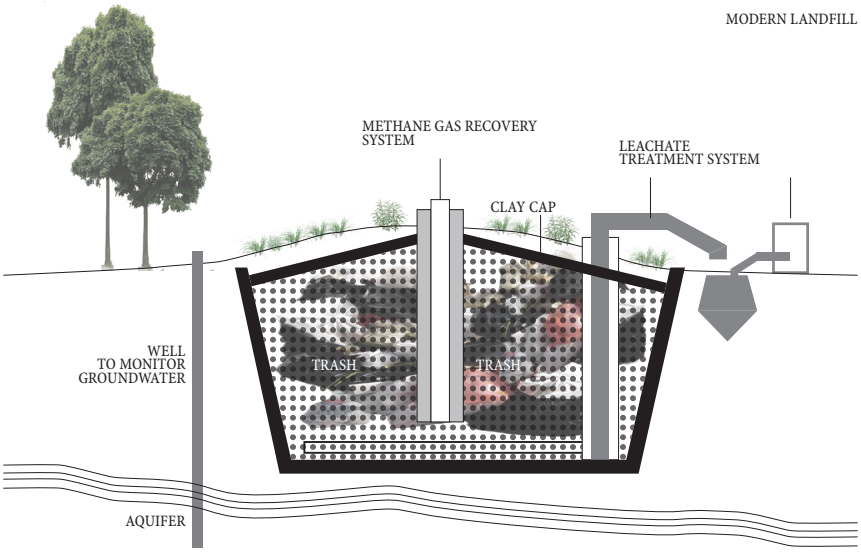
LAND-FILLS



Source: NJMC
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

LANDFILL SITES

Most of the redevelopment areas are on Landfill sites. Some of them are about to get closed with some still open but it's necessary to gain some fundamental knowledge about Landfill sites.
The section below shows a modern Landfill. More information was found on the IPPTS webpage.



IPPTS Associates provides a landfill & landfill gas related design service, and in the construction of buildings on landfills. On the organisations web page (http://www.landfill-site.com) advice about how to treat or even build on landfill sites can be found.
"Solutions are easiest if the landfill is not deep e.g. 3-4m thick where digging out the waste locally to structures, followed by replacement by inert fill may be both the safest against explosion in case landfill gas seeps into the property, and be economically the most viable. An interceptor trench is often then required to prevent gas migrating from the remaining waste into the inert fill.
If it is not practical to remove the waste, then buildings are normally erected on base slabs which are themselves supported on piles driven into firm ground below the base of the landfill. The use of this construction technique will overcome subsidence problems. The problem remains of preventing landfill gas present underneath the base slab from entering the building above. The simplest approach is to build an air space under the slab; the void is then ventilated naturally or artificially. This technique has been used in the construction of many warehouses, supermarkets, and sports facilities. The normal practice has been to provide an air space of 300mm to 500mm depth, but some have been constructed as much as 1-1.5 m high to encourage dissipation of the gas by natural convection over large areas. Clearly, the use of natural air currents to vent the gas to the atmosphere is inherently safer than to rely on electrically driven fans, which may gas to the atmosphere is inherently safer than to rely on electrically driven fans, which may fail for many reasons.
Covering the ground underneath the slab with impervious material or a plastic membrane may help to minimise odour/gas emissions. Another approach is to again use piles but to lay the slab on a layer of porous rock on the landfill surface. Horizontal perforated pipes are placed in the porous material and are continuously pumped under a suction pressure, so that 1-2 air changes per hour are maintained under the slab, in some designs. However, the airflow rates required do vary greatly and need to be set by experts, in the knowledge of the rates of possible ingress at the site, under the maximum gas generation periods (normally during the highest rates of falling atmospheric pressure). This system has been successfully used in many properties, however, any system of forced ventilation will require to be maintained for many years, and the owner and future purchasers will have to commit to the cost of this.
These systems are often backed up by incorporation of a plastic membrane below the slab itself. Attempts to render concrete slabs impervious to gas by painting them with sealants have met with little success.
However, if the structure is above waste, this will settle over time, and piling is required to overcome subsidence, then one is faced with getting a good seal between the membrane and the piles which will remain intact after settlement. Attempts are often necessary to avoid trapping gas in pockets between cross-members under the slab, especially if groundwater level rises might push the gas upwards under pressure at any time.
It is also essential that if services such as electricity, gas, water, drainage, telecoms related etc, penetrate the slab (or raft) that they are also sealed in a satisfactory, and truly permanent, fashion.
As a final precaution it is suggested that rooms at risk in buildings on landfills are fitted with audible gas detection devices or that monitoring for methane is carried out regularly both during the construction phase and after the building is occupied."[17]

17 Landfill site, link: http://www.landfill-site.com/html/building_on_l andfill_sites.html - accessed Feb 2011

WHAT IF





WASTE COULD GET USEFUL

WASTE-LAND

WASTE

Closing a Landfill used to include opening another one somewhere else but how can this be avoided?

WASTE MANAGEMENT

"An Effective Waste Mangement Process. Environment has great influence in the life of all the living things on this earth. When it comes to wastage and its treatment, one of the very oldest effective waste treatments is waste incineration."[18]

WASTE INCINERATION

"It is basically a process where the domestic and industry waste materials are burnt. In this process, the waste materials turn into ash, flue gas and heat. On the basis of the type of waste materials, the incineration can of various scales, such as: small scale, medium scale and large scale.

Though some people think that waste management or waste treatment is not a very big issue, but in reality it is a serious matter of concern. In waste incineration method, waste materials or organic substances are burnt which incorporate households, hazardous and also medical wastes equipment. As the method of incineration involves combustion, therefore it is also known as thermal treatment. These days, the incinerations help in saves energy from being wasted.

Moreover, the method of incineration has a lot of benefits over other types of waste treatment system. While treating the waste materials, such as clinical and hazardous materials, waste incineration has proved to be more effective in this regard. By using this waste treatment method, the harmful pollutant and pathogens can be burnt completely in high temperature. This method of waste treatment has become extremely popular in countries having scarcity of lands.

However, while going for waste incineration, one should also keep in mind that this process can have some negative effects on our health due to environmental pollution. Production of ashes, flue gases and other releases of incineration can also lead to some serious consequences on mankind as well as on our natural atmosphere. In incineration, the waste materials get reduced in its amount and also get transformed into ashes that consist of some of the most venomous substances like: dioxins and heavy metals. These substances are difficult to destroy.

As we all know that waste materials can be of various kinds, therefore in order to manage various kinds of waste materials, various types of incinerator plants are designed, such as: moving grate, fixed grate, rotary-kiln, and fluidised bed. The best thing about the modern incinerators is that they have pollution mitigation equipment such as flue gas cleaning in them."[19]

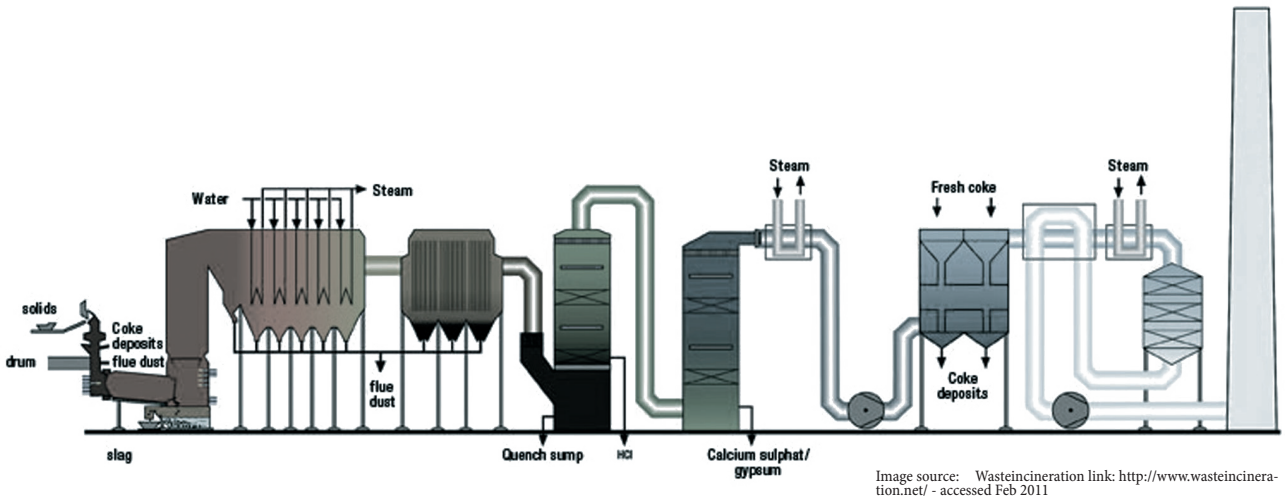


Image source: Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011

18 *Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011*

19 *Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011*

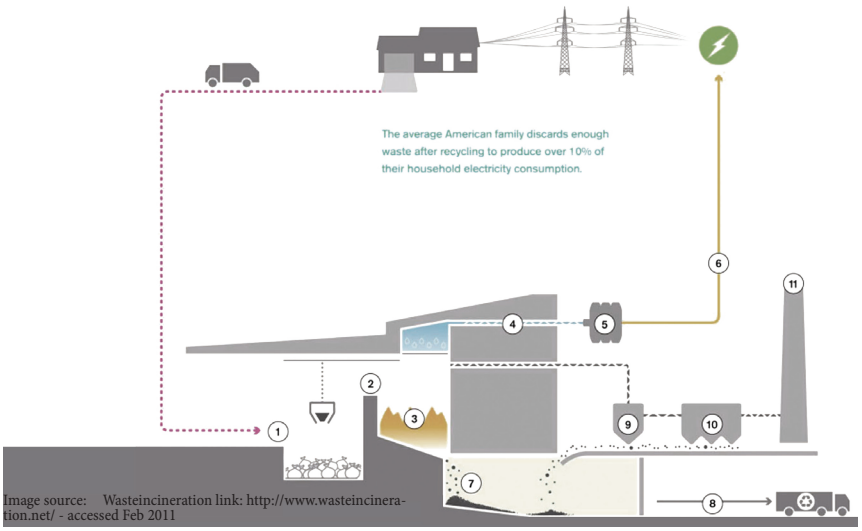


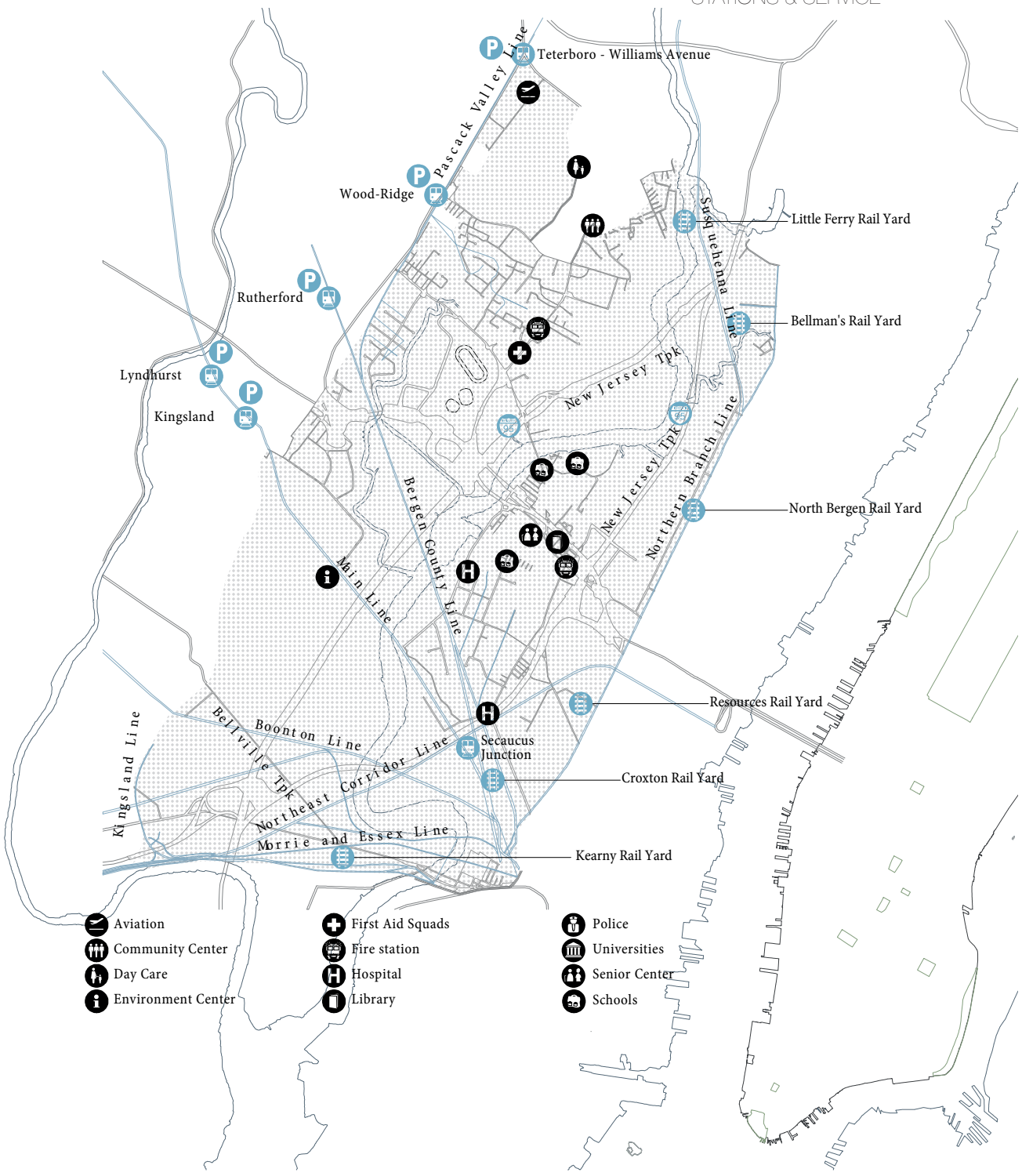
Image source: Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011

TRANS-PORT

RAIL & ROAD



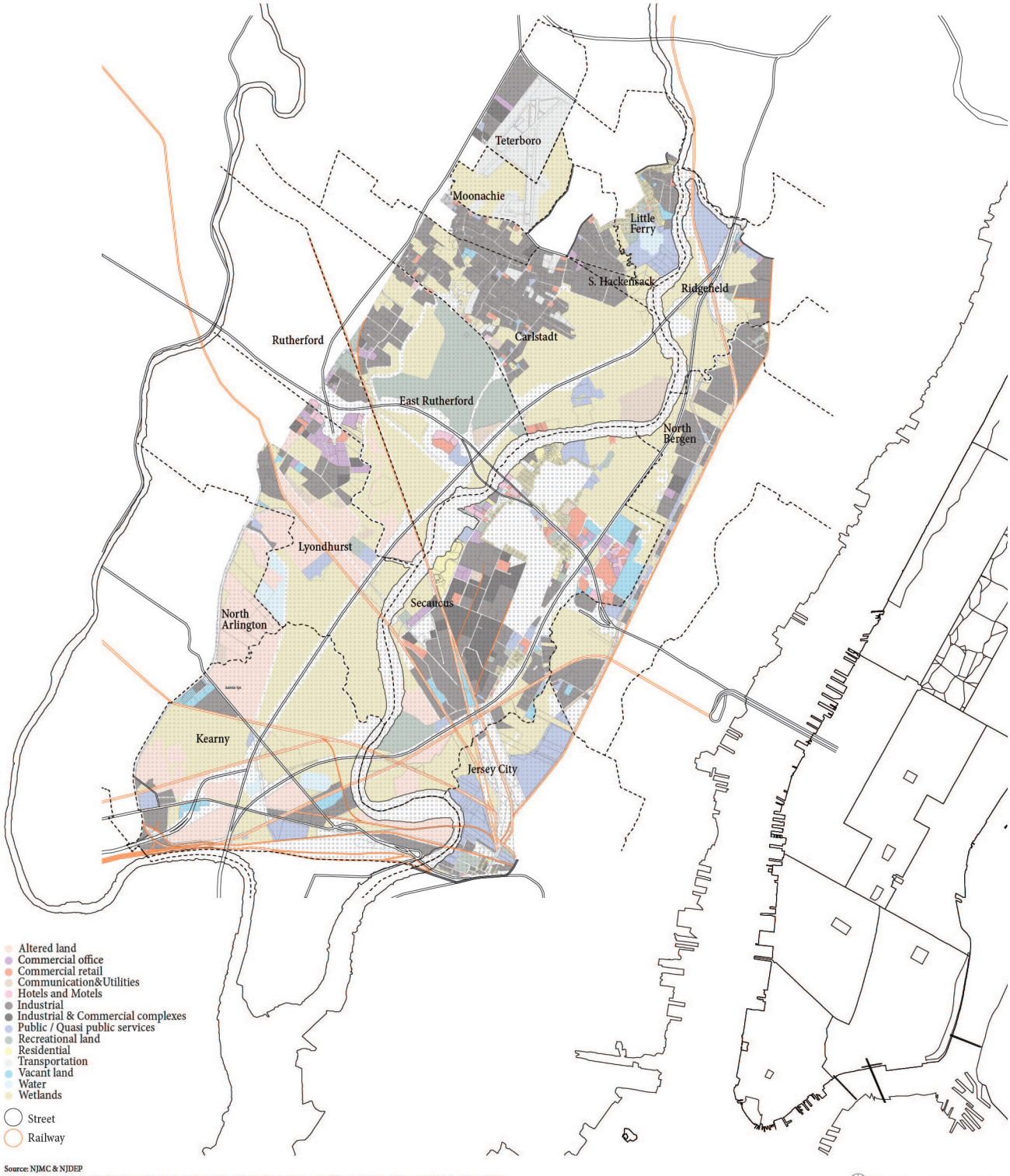
Source: NJMC & NJDEP
This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."



Source: NJMC & NJDEP
This map was created using the New Jersey Meadowlan ds Commission/ Meadowlands Environmental Research Institute Geographical Information System **digital data, but this is a secondary product and h**as not been verified and is not authorized by the NJMC/MERI GIS."

CURRENT LAND USE

LAND USE



Source: NJMC & NJDEP

This map was created using the New Jersey Meadowlands Commission/ Meadowlands Environmental Research Institute Geographical Information System digital data, but this is a secondary product and has not been verified and is not authorized by the NJMC/MERI GIS."

ALTERED LAND



Altered land is mainly known as the old Landfills as described before.

COMMERCIAL OFFICE



Commercial offices manly located in Lyndhurst and Secaucus but very rare.

LAND USE

The plan on the left subdivides the site into the following sections:

Altered land
Commercial office
Commercial retail
Communication&Utilities
Hotels and Motels
Industrial
Industrial & Commercial complexes
Public / Quasi public services
Recreational land
Residential
Transportation
Vacant land
Water
Wetlands

The smaller diagrams visualize the different functions separately for a better understanding.

COMMUNICATION & UTILITIES



Communication utilities like radio towers use the water surface to strengthen the signal.

HOTELS & MOTELS



Hotels & Motels are located mainly along the State RT 3 which leads through the Lincoln tunnel right into Manhattan.

CURRENT LAND USE

INDUSTRIAL



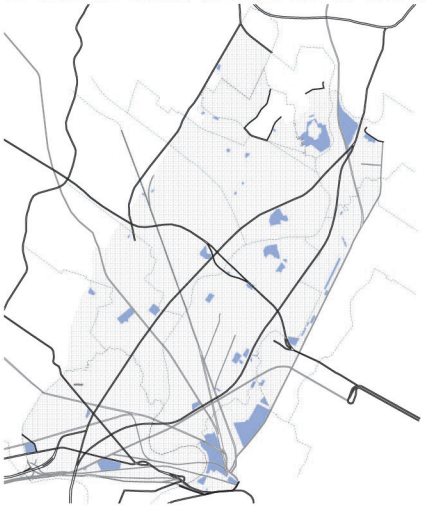
Industry is accumulated in two bigger blocks and on the edges of the Meadowlands. The block in Secaucus has very good connectivity to New York City already.

INDUSTRIAL & COMMERCIAL



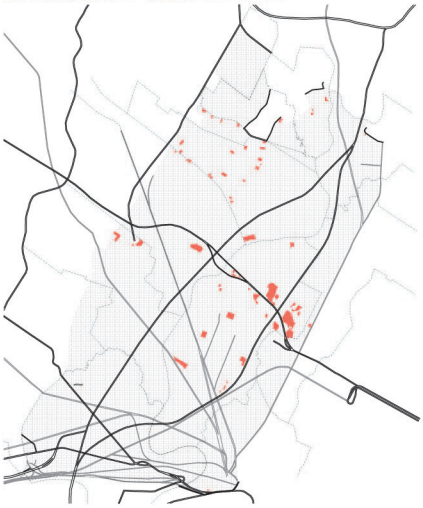
The location of Industrial and Commercial shows the special role of the part of Secaucus in between the turnpike.

PUBLIC & QUASI PUBLIC SERVICES



On the other Hand the “heart” of the Meadowlands appears to have almost no public services. They are located a bit off the industrial commercial zones.

COMMERCIAL RETAIL



Main retail stores are located along State RT 3 with a few smaller ones spread all around the Meadowlands.

TRANSPORTATION



Main transportation in the are is Teterboro Airport, the oldest airport area around NYC and home to many private aviation charters.

VACANT LAND



Vacant Land is mostly located on very difficult situations, corners of streets, in between railways.

RECREATIONAL LAND



Recreational Land could expand the public zone in a needed area but is difficult to reach without a car.

RESIDENTIAL



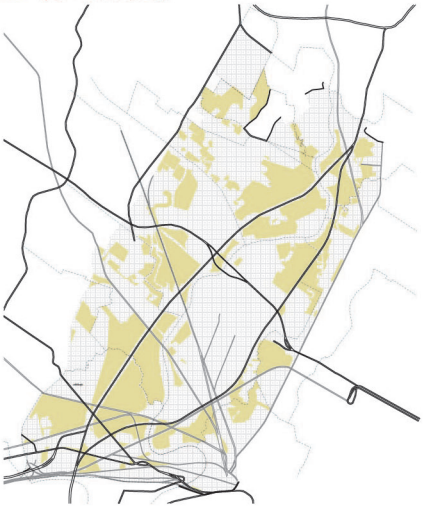
Residential zones are on the edge of the industrial zone with the direct link to Manhattan but surrounded by the loud Turnpike.

WATER



The pond in the north is called Clay Pits, a relict from the Meadowlands past.

WETLANDS



The plan clearly shows what makes up the major part of the area.

LAND USE

But what could all this information be used for? What qualities are already existing beside of the functional division. Can a few simple shifts give the Meadowlands a reputation that even the biggest New York fans would come for a visit?

MEADOW-
LANDS

SECAUCUS



VISIONS

New York city expands and will change the Meadowlands but is there a need for a change? Is there a need for all those visions around Manhattan? Or are many of the qualities architects, designers, urbanists, politicians are looking for already in place just not in use?

LOCATION

Secaucus has the biggest residental area of the Meadowlands and would have very good connections to New York. It is in the heart of the Meadowlands and worth to have a closer look at it.



QUALITIES

HOW TO?
Learning how to describe a places qualities through other projects.
Setting a places criteria by using some of the most remarkable projects throughout the last century.

IN ORDER TO DESCRIBE A SITES QUALITY IT'S CRUCIAL TO KNOW WHAT TO LOOK FOR. ALMOST EVERY CRITIQUE IN ARCHITECTURE IS VERY SUBJECTIVE. HOWEVER THE WRITER ALWAYS EXPLAINS HIS CRITIQUE IN A VERY NEUTRAL WAY, WHEN IT COMES BACK TO FACTS, THEY ARE SUBJECTIVELY CHOSEN. WHAT IF THE OBSERVER USES THE QUALITIES OR CRITIQUES FROM THE CREATORS ITSELF AND TRIES TO FIND THEM ON AN EXISTING SITE? IT'S STILL SUBJECTIVE SINCE THE FACTS TO LOOK FOR ARE CHOSE BY ONE SUBJECT BUT THE COLLECTION OF PROJECT IN THE END COULD BE SEEN AS A COLLECTIVE CRITIQUE AND NOT SUBJECTIVE ANYMORE.

SEEKING A WAY TO ESCAPE DATA OVERLOAD.



Branzi calls Parc de la Villettte “super-imposed Urbanism” and Broadacre “anti Urbansim” - and says each discipline is of limited value in responding to the range and diversity of contemporary Urban issues like Environmental Planning, Landscape Ecology or Biodiversity. (Branzi - Agriculture as operative and temporal way.)

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

RESEARCH

This Collection of qualities comes from a very intense research. A not so common one in terms of its targets. The research tries to lead through a way of understanding architectural history bonded to it's historical context as a whole.
The researches starting point was one of the greatest cities in the world, a place so full of life that still more and more people want to move there although it is already such dense place. But how could it turn into that place and what ideas were maybe forgotten over time?

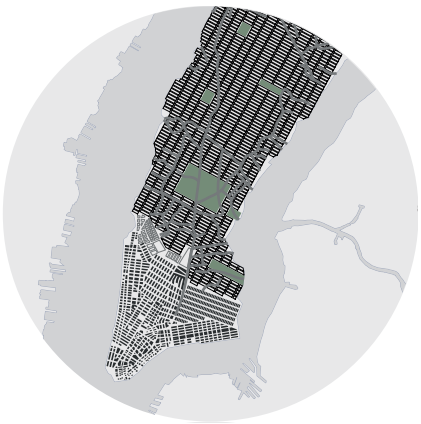
NEW YORK CITY

The research on New York now and then gave an overview but of course it is just a tiny bit of its history.
The outcome of the research was a way to evaluate and compare projects to another, a way to quickly get an overview of the projects and its ideas on one double page of a book, including a personal statement about the quality and problems of the proposal.
These statements will be used for a critical look at New York Cities suburbs. An area the myth of NYC doesn't stand for but a very important area to keep the city alive.

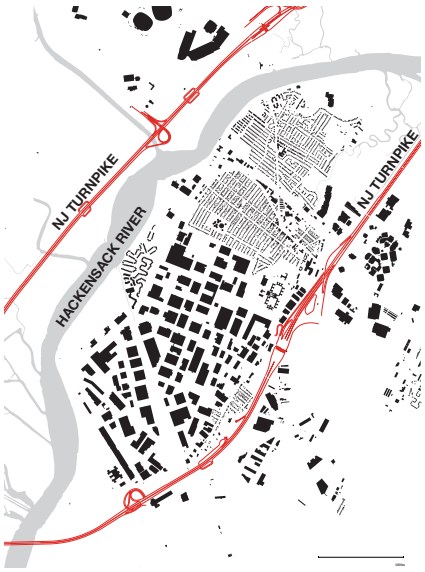
COMMISSIONERS PLAN

The Commissioners Plan has been a very rational plan. A system which is easy to control, easy to clean, easy to sell, easy on traffic and easy to understand.
But beside of being clean the quality of life was still low - almost NO parks, since the creators argued that the plan is surrounded by water anyway.

For the Meadowlands this idea is more or less the other way around, especially in Secaucus. However it is in the middle of a huge marsh area it is not surrounded by the sea, the more obvious surrounding is the NJ Turnpike, a massive motorway navigating all the major traffic through the Meadowlands.
In terms of density this situation - city enclosed by Motorway and the River - could mean the same for Secaucus as the big rivers for Manhattan.
If a place can not expand in the horizontal direction it has to if needed expand towards its vertical.



THE BORDERS



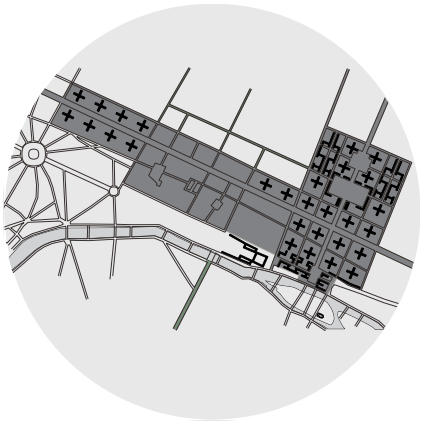
PLAN VOISIN

A big leap forward in time but a reaction to the emergent Manhattan with the problem of important historical context.

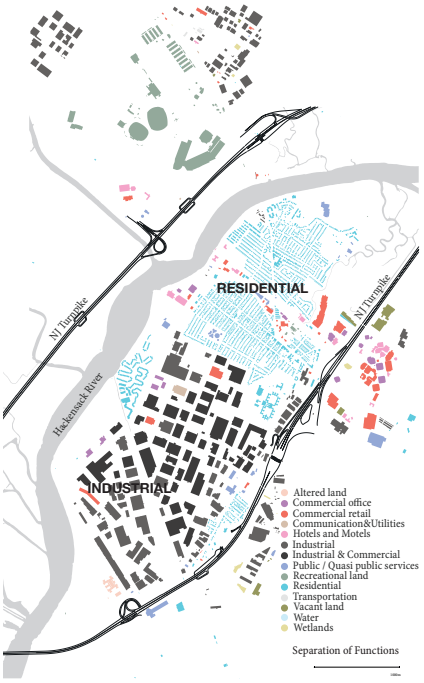
Tall Towers and dense Housing Projects would create empty space for parks and lawns in Paris, let the city "breathe" again, and give the city some life quality back.
Through creating more density old Monuments and listed buildings could be preserved while getting the city ready for the next century.

However the problem of listed buildings in the Meadowlands is more a question of old industrial structures it is still worth to have a look at them.

Another aspect which is similar to Le Corbusier's ideas, is the separation of functions.



SEPARATION OF FUNCTIONS



LISTED INSTITUTIONS VERSES

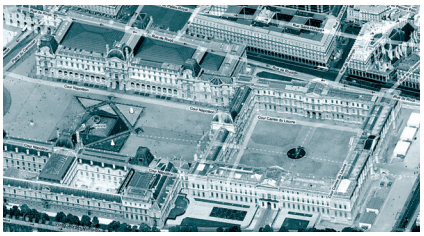


Image source: Bing Maps, accessed July 2011

LISTED STRUCTURE



Image source: flickr, by user hydropeek, link: http://www.flickr.com/photos/hydropeek/2595704268/sizes/l/in/photostream/ - accessed July 2011

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

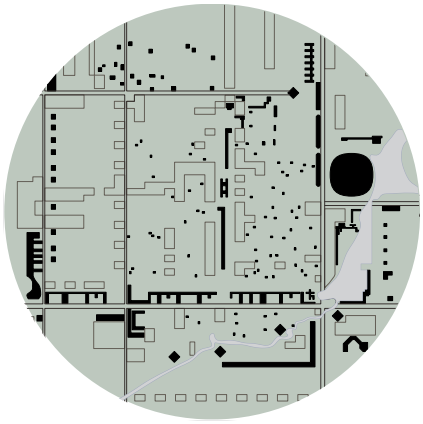
BROADACRE CITY

While Le Corbusier still mourned Manhattan, his American colleague Wright worked already on the counterpart of the "Ville Contemporaine".
In my opinion, Wright's ideas resulted from Economic problems, Technical progress and new way's of mobilisation. Only five years after the 1929 Stock Market Crash, Frank Lloyd Wright's design and theory was a new way of living.

The design principle were: "Organic, Decentralization, Integration, Democratic"[1]

This topics come up after every bigger financial crisis but are forgotten as soon as people can live again the life they were used to.

In the twenty first century this independence could mean local agricultural projects like the Jersey Fresh Farmers' Market which is open from July through October at Buchmuller Park, every Friday from 12 to 7 pm.



JERSEY FARMERS' MARKET





STUYVESANT TOWN

"First, let's have a general look at the "Beiunskis." A Beiunski is usually a refugee whose critical faculties outrun his gratitude to the country which has given him a home. He is convinced that we are pretty backward people and doesn't mind saying that they ordered things better in the old country."[2]

Moses was very critical about foreign architects but in my opinion it had nothing to do with racism. It was his way of saying we do it different over here.

The Stuyvesant project was the greatest resettlement ever done in New York. Relocating 11000 people seems to be impossible today - at least in Europe.

But what is needed and can be found are smaller developments which come from that idea of affordable housing.
Such a projects was built by the Secaucus Affordable Housing Board.
The project was called Riverside Court and is located at 11 Mallard Place at the north end of the Meadowland Parkway.
In order to get permission for building luxury homes the investor had to include afforable homes within the proposal.

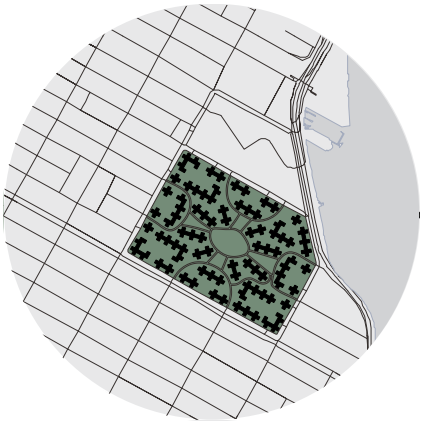
The 12 new affordable homes being constructed for low- and moderate-income which would mean:

"For example, in order for a three-person family to qualify as a "low-income," that family must have an income of below $33,509 a year. For that same family to qualify as "moderate-income," the yearly income must be below $53,614."[3]

1 A history of architectural theory: from Vitruvius to the present by Hanno-Walter Kruft, Princeton Architectural Press; 1 edition January 1, 1996, p 426

2 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 156

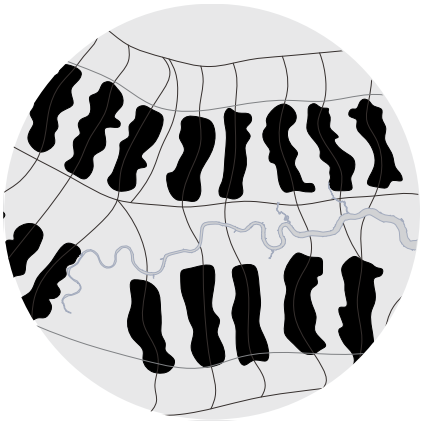
3 Hudson Reporter.com, New affordable housing Developer, board to build lower-income homes by Nicholas J. Zitelli link: http://hudsonreporter.com/view/full_story/2403017/article-New-affordable-housing-Developer--board-to-build-lower-income-homes - accessed July 2011



MARS PLAN LONDON

A Linear Concept connected with a ring-transport system.
If New York and New Jersey would start to see the area as whole, Secaucus would already act as one of those hubs.

The chapter about New York Cities Plans for 2030 already shows that the whole railways system will work on its capacity without improvement and possible extensions.
This improvement would mean a much faster way into New York and therefore make the area around Secaucus even more interesting.
Pushing this further would be mean building a “Regional Loop” which would turn the existing cities like for example Secaucus or Jersey City into similar hubs like Manhattan.



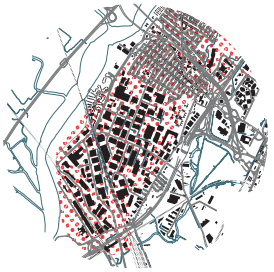
AFFORDABLE HOMES

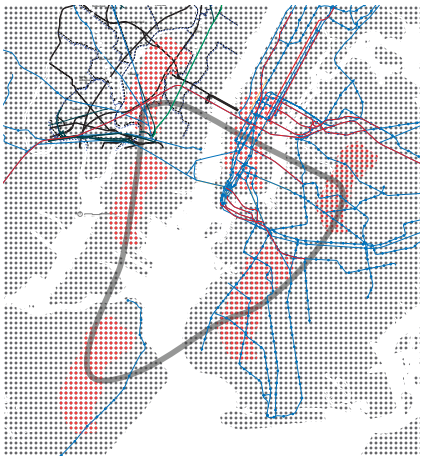




Image Source: Riverside court projects webpage, link: http://www.riversidecourt.net/images/home/main.jpg - accessed July 2011

THE REGION LOOP





COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

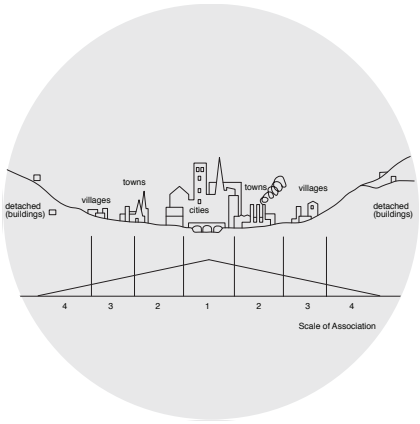
DOORN MANIFESTO

One Crucial sentence from the manifesto:
"Urbanism considered and developed in the terms of the Charte d' Athens ends to produce "towns" in which vital human associations are inadequately expressed."[4]

The reconsideration of the human was an important turnaround since the visions at the time seemed already to abstract to live in.
Without writing another Doorn Manifesto, I would also criticise the human scale of the built environment.

Not in terms of building heights but the consideration of living without a car.
What used to be a symbol of independency, everyone's dream to own a car, could also become everyone's nightmare.
Congestion all the way into Manhattan, charges for passing through it and not enough space for parking.
Considerations of stations in walkable distances or simple bicycle ways would be an alternative.
Rutherford already works on that dream!

But field trip clearly demonstrated the boundary some of the massive motorways are for hiking or cycling through the area.



CYCLING THE MEADOWS

SOUTH BERGEN
www.southbergenite.com
CARLSTADT RUTHERFORD LYNDHURST THE PEOPLE'S NEWSPAPER

Bike path could wind its way through Rutherford

Green Team applies for National Parks study

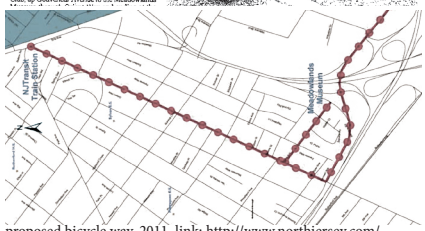
BY JAIMIE JULIA WINTERS
Editor

Rutherford could be joining the ranks of Amsterdam. Imagine taking a train to Rutherford, grabbing a bike and accessing the entire town, the Meadowlands, the rivers and the sports complex by bicycle. That's what John Hughes of the Green Team imagines. He just applied for assistance from the National Park Services (NPS) to begin a study on the feasibility of the "Rutherford Bike Ring."

What he envisions is bike paths completely encircling Rutherford in a five-mile radius down Erie, hooking up to the Rails to Trails project in East Rutherford, connecting to a leisure lane in Memorial Field, crossing Union Avenue behind the Hastings Village, winding through residential streets to Jackson Avenue past the Nereid Boat Club, up Gouverneur Avenue to the Meadowlands

Inside
Update on Rails to Trails bike path
A9





proposed bicycle way, 2011, link: http://www.northjersey.com/news/125546958_Town_looks_for_funds_to_get_first_phase_of_bike_path_moving.html - accessed July 2011



Image: Crossing Meadowroad by Andreas Huemer 2010

FORT WORTH

Gruen created car-free pedestrian zones designed to make the streets more lively and walkable. This idea resulted from his European background but more than ever this ideas would create a much more sustainable environment.

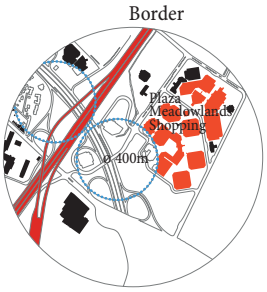
Clearly Gruen was not talking about a car free city at that time but a combination of Gruen's idea with public transport would be a solution for traffic problems nowadays.
A reasonable walking distance from station to station

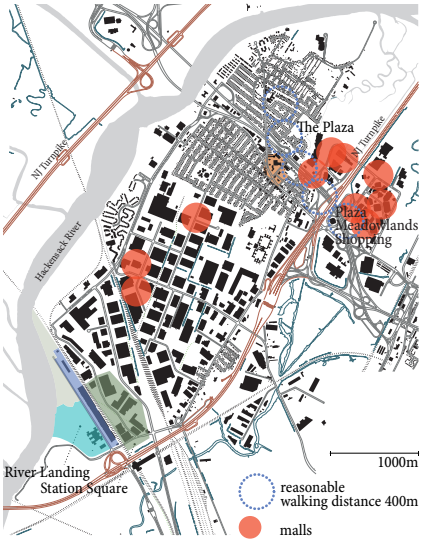
Victor Gruen realised later in his life that his plans wouldn't work if only half of the proposed system would be constructed.

4 Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183



WALKING DISTANCE - SHOPPING





GEODESIC DOME NEW YORK

Time showed that a domes were not the solution for having less toxic emissions but the problem of urban environments being very wasteful did not get much better yet.
Using the potential of the sun, reducing the production of waste, or to use less drinking water are common things everybody can influence and in sum it will also influence greenhouse gas and global warming.
Global warming will rise the sea levels and the chapter of the New York City research clearly describes what that would mean for New York City and the Meadowlands.

Fuller was concerned about snow problems, rain, cold or too warm weather, the only place where this "Dome" became real was the Shopping Mall.

As already described before Secaucus has many Malls and however that connects it to the Domes, the more interesting influence of Fuller is an Energy Masterplan the NJMC is working on.

"The goal of developing a 20 MW renewable energy system in the Meadowlands by 2020 could provide the region with a vision for renewable energy development."[5]

5 The Renewable Energy Report for the New Jersey Meadowlands Commission - A Proposal for the Creation of a Hackensack Meadowlands Regional Renewable Energy District, 2005, link: www.njmeadowlands.gov - accessed October 2010





ENERGY PLANS



Energy Conservation
- Replace light bulbs with energy efficient bulbs
- Install programmable thermostats
- Install lighting occupancy sensors
- Turn off computers and printers at end of workday/week
- Replace appliances with Energy Star rated appliances
- Replace windows and doors with higher efficiency models
- Weatherproof buildings/properly insulate
- Convert to an alternative energy source - solar panels, wind turbines
- Install a green roof
- Install an energy efficient HVAC system



Water Conservation
- Install low-flow faucets and toilets
- Install waterless urinals
- Landscape with native plants/natural materials that require less water (xeroscape)
- Recycle graywater



Reduce/Recycle/Reuse
- Increase the variety and amount of materials that your company recycles
- Purchase used office furniture
- Use recycled building products
- Install a plastic bag drop off bin near entrance (retail and public buildings)
- Offer reusable shopping bags (retail buildings)
- Implement a double-sided copy policy



Commuting Alternatives
- Install bicycle racks
- Encourage carpooling/vanpooling/use of mass transit
- Arrange for shuttle service to/from mass transit locations
- Provide commuting subsidy to employees using mass transit/carpools
- Provide pretax payroll deduction for carpool commuting costs
- Provide preferential carpool parking spots
- Offer in-house "Emergency Ride Home" program
- Offer telecommuting/compressed work week/flextime



Other Sustainable Actions
- Implement a green purchasing policy
- Utilize green cleaning products /create a green housekeeping protocol
- Use low VOC paints
- Use Forest Stewardship Council (FSC) certified wood

source: www.meadowlands.org/mrcc/meadowlandschallenge.html

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

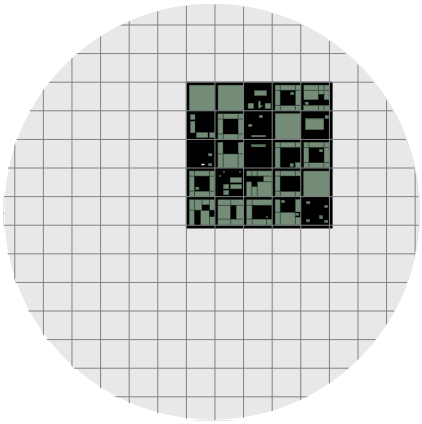
2004 — 2005 — 2006 — 2007

AGRICULTURAL CITY

Agricultural city was about controlled growth on a grid with fixed sized communities.
The basic rural UNIT was coming from a centre around a temple, shrine and grammar school.
The systems infrastructure was above agricultural use.

In the Meadowlands most land is constructed land. Landfills, as the historical chapter of this research shows.
"The initial efforts, during the 19th century, were land-reclamation projects involving dikes and drains that left the reclaimed acreage below the high-tide level. Later, in the 20th century, land-making projects resulted in new upland above the high-tide level. Both types of projects were aimed at "improving" wetlands by transforming them into dry upland suitable for agricultural, commercial, and industrial uses."[6]

In that sense agriculture was the starting point for the communities in the New Jersey Meadowlands but it also destroyed the biodiversity of the place.
In an abstract way the NJ Turnpike still runs above ground like infrastructure would have ran above the agricultural grid of Kurokawa's design.
Just the ground became useless for agriculture. The idea of having local food production is very welcome but in the case of the Meadowlands someone will have to look for other locally produced goods.



THE COMMUNITY IN-BETWEEN THE TURNPIKE





Underneath the NJ Turnpike by IA&L, 2009

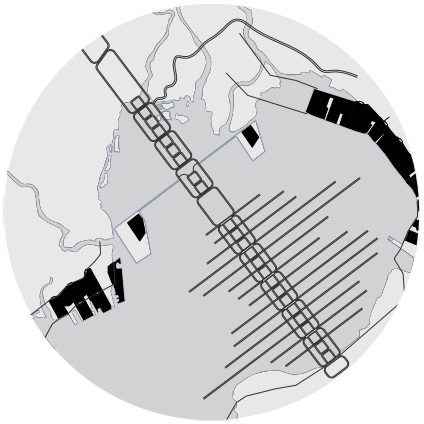
A PLAN FOR TOKYO

Kenzo Tange's plan for Tokyo analysed the problem of a radial megacity like Tokyo or New York City.
His project is already one step ahead of a linear concept proposed by others before the Tokyo Plan.
The main structure still approaches the linear city, this also allowed Tange do get very precise calculations of construction time and cost, but the structure is already expanded to their normal linear core.

The main transportation worked in a cycle which is still a concept that would allow better connections from city to city.

A direct scale comparison shows secaucus would be about the size of one "core". The linear connection to the next "core" would connect it to manhattan as described in the Mars Plan section before.

6 Urban Habitats, The Meadowlands Before the Commission: Three Centuries of Human Use and Alteration of the Newark and Hackensack Meadows by Stephen Marshall, 2004, link: http://urban-habitats.org/v02n01/3centuries_full.html - accessed July 2011

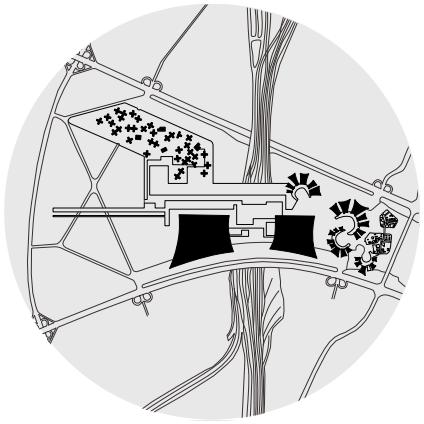


SHINJUKU RESTORATION

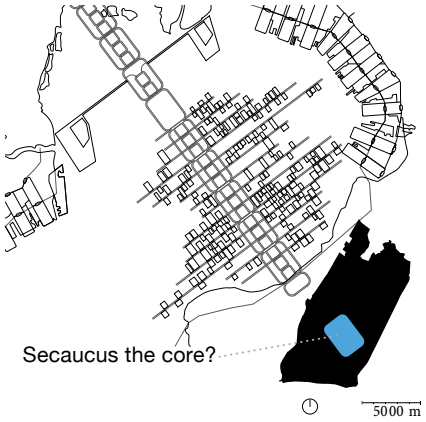
In Maki's Words: "Several plazas are linked together and form the amusement area. We think that this is a kind of form which retains the total image, even if individual elements were designed differently by several architects."[7]

In the very southern part of Secaucus the new Station plaza will get developed in front of Secaucus station, including a housing development close to the river. Laurel hill park will get connected to the square.
The Station and the Square, the overall setting, will be a similar situation like the one in Shinjuku but with less frequency, at least for the meanwhile but with the potential for further developments since it is so well connected to Manhattan and in my opinion a starting point for the whole Meadowlands region.

The comparison doesn't show parts of Maki's project but it makes clear that such a strategy will be needed.



SECAUCUS THE NEW CORE?



NEW PLAZAS



7 Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964)

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

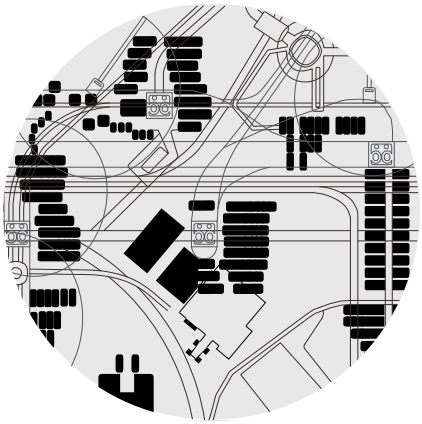
PLUG-IN CITY

The Projet appears as a mega-structure built on a huge frame. Even streets and different functions could be easily moved and exchanged.

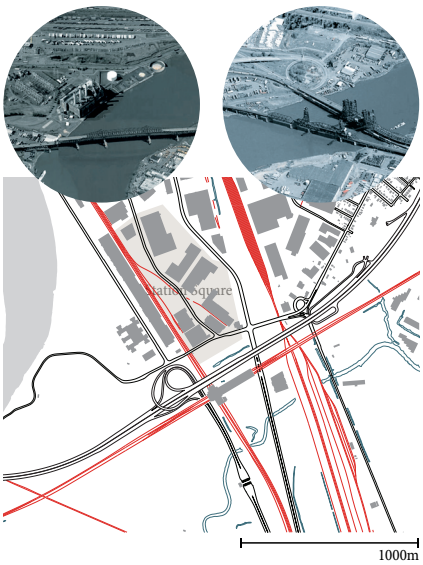
Peter Cook and Archigram imagined very complex structures but when it comes back to the built projects the variety of functions is mostly narrowed down to rather simple ones.

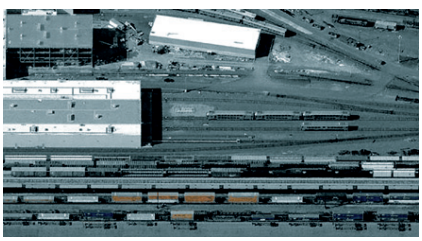
Some of this narrowed down concepts in the Meadowlands can be found in bridges.
Another abstract image of the construction is visible when the infrastructure of the Meadowlands comes into place. A picture from above shows almost as many train trusses than the Plug-In City and maybe the transported containers could contain the flexible system Cook was talking about.

Beside of the project Archigram used a very unique way to promote their ideas. The comical style of their papers was not much used in architectural publications before. Recently a book from Bjarke Ingels seemed to be a little homage on Archigram.



PLUG-INS SECAUCUS





Secaucus Railway by GoogleMaps, 2011, edited by Andreas Huemer

A CITY IS NOT A TREE

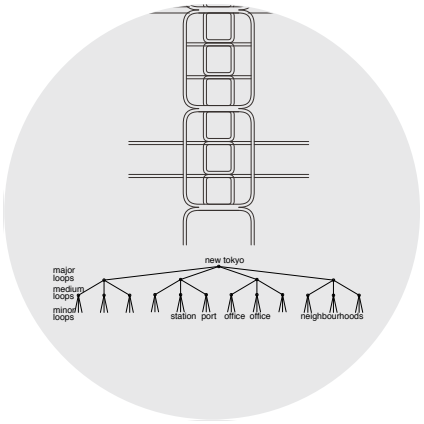
Christopher Alexander analysed cities and utopias like the Tokyo plan in order to clarify that cities from designers are thought through in a very different way then a naturally grown city.

"I want to call those cities which have arisen more or less spontaneously over many, many years "natural cities". And I shall call those cities and parts of cities which have been deliberately created by designers and planners "artificial cities". Siena, Liverpool, Kyoto, Manhattan are examples of natural cities. Levittown, Chandigarh, and the British New Towns are examples of artificial cities."[8]

The "natural cities" were described as a semliattice system. A system that's much more complex to understand than a tree like system and therefore not used for translating abstract plans to a laymen.

Therefore the translation of Secaucus into one of Alexander's systems was completely impossible. Just a network of trains and streets looked like one of his semilatice drawings.
Our society very often shows hierarchies in tree like systems. For example it could have been shown as a tree to take the Meadowlands, next level its boroughs, it's towns and so on.
This is how administration works but not the city itself.

8 A city is not a tree by Christopher Alexander, 1966, Reprint from the magazine Design, London: Council of Industrial Design, N° 206



JOINT CORE SYSTEM

Arata Isozaki was convinced that the linear system of Tange had too many limits in terms of directions.
He developed a round core and bridges between cores made it possible to expand in all directions above the existing environment.

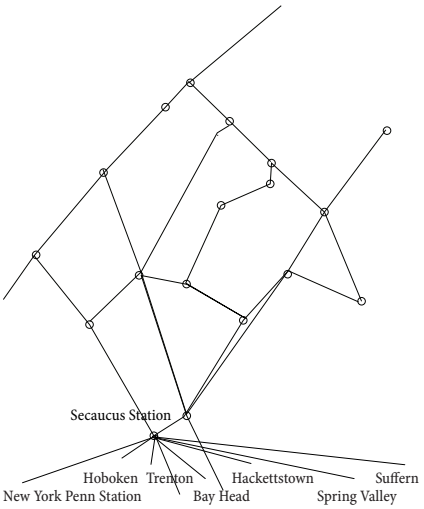
Some of the existing transport system in the Meadowlands is very similar to that idea.
Assuming that there is an untouchable layer, like the existing city of Tokyo or in this case the marshes and meadows, the Joint Core System above can be found in the transportation system.
Similar to the Agricultural City the ground level has a different function than the ones above.

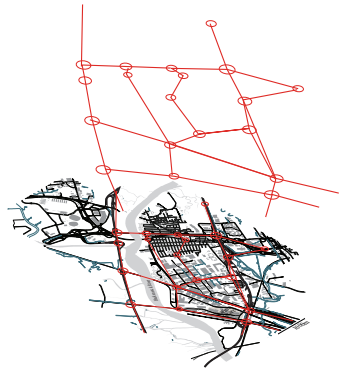
As one of Isozakis design themes, "The environment will be enveloped in a protective membrane for the sake of preserving definite, balanced conditions"[9], points out, the marshes can be seen as the protective membrane, preserving the balance of nature and avoids flooding.

This membrane in a way forced the construction to be built in the air.

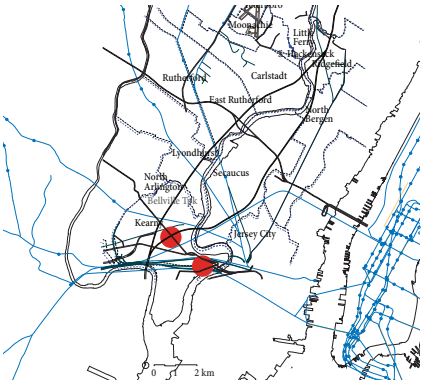


SECAUCUS IS NOT A TREE





JOINT TRANSPORT SYSTEM





Underneath the NJ Turnpike by IA&L, 2009



Pulaski Skyway by IA&L, 2009

9 Architecture Culture: 1943-1968 by Joan Ockman, Columbia Books of Architecture, p. 402-407

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

CONTINUOUS MONUMENT

"The point was exaggerated but well made: Superstudio were commenting on the way globalization was swamping the world. Given the way the world was developing, we might as well all live in one anonymous megastructure, with local cultures stripped away."[10]
Superstudio was concerned about the loss of identity. They proposed what could become the extreme of when globalization would continue as it just started at the time.
The place looked as what Marc Augé described as Non-Places in 1994.
Spaces like mono-functional, urban and suburban used places for example Shopping Malls, highways, train stations and airports.
Places without history, relations and identity. Places with a neglect in communication.

Globalization of course was not stoppable and it didn't get as worse as proposed by Superstudio but the loss of identity is visible, however in another scale.

Secaucus used to have the identity of having pig farms and junk yards, meaning to smell so bad that nobody would want to move there and of course this kind of identity is something everyone would want to lose.
Superstudio was trying to show another identity in my opinion. To keep it on a small scale we just have to imagine sitting in a Starbucks in London and then in another Starbucks in New York, it could be anywhere. There is no identity than the Companies Brand. No more local cafes or bars with unique furnishing or music, it is just the same anywhere, it is the Continuos Monument. And of course there are many more global brands just like Starbucks.

10 Anti-matter - Italy's Superstudio hated both the bland future and the twee past by Jonathan Glancey The Guardian, Monday 31 March 2003, link: http://www.guardian.co.uk/artanddesign/2003/mar/31/architecture.artsfeatures - visited July 2011



SECAUCUS - SAME EVERYWHERE



Starbucks Secaucus by Stay in the Meadowlands, link: http://www.stayinthemeadowlands.com/client_docs/312_r_New%20Image.JPG - accessed July 2011



Starbucks London by The Telegraph, 2010, link: http://i.telegraph.co.uk/multimedia/archive/01004/460-starbucks_1004359c.jpg - accessed July 2011



Starbucks Harlem New York by Gazettnet, 2009, link: http://www.gazettenet.com/files/images/20080430-050453-pic-961947677.display.jpg - accessed July 2011

NO-STOP CITY

"No-Stop City" (1969) is an ironic critique of the ideology of architectural modernism taking onto its absurd limits: "The real revolution in radical architecture is the revolution of kitsch: mass cultural consumption,pop art, an industrial-commercial language. There is the idea of radicalizing the industrial component of modern architecture to the extreme."[11]

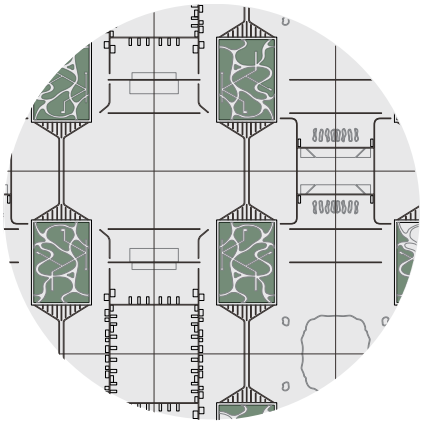
Applying functions to every part of a building or a city takes away freedom. Just quantity of space is left, not quality. Quality would give the freedom to adapt space the way it is needed for.
The Project is also a critique on losing identity - the only identity if everything looks the same is the identity through consumption.

No-Stop city is very similar to the ideas of Superstudio but with a very different approach of translating these ideas into a project.
Branzi says he is not interested in "Architecture as the Art of building but as a much more articulated form of thought."[12]

Secaucus does of course not look like a huge ware house but if someone would try to find qualities in the industrial area it turned out that this might be this place without qualities.
The area has no identity if everything around is blanked out, since every warehouse is built with the same cheap materials. The only variety can be found in the size of the warehouses. I assume this is what the "Warehouse Villages" would have looked like from the outside.

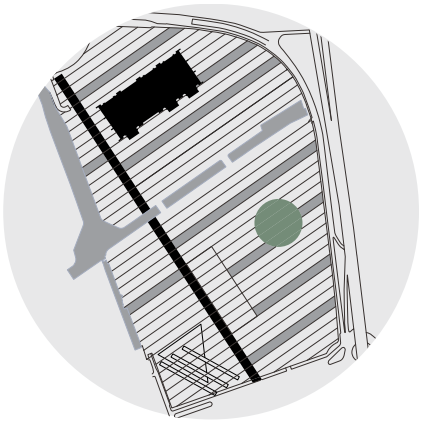
11 No-stop city by Archizoom Accociati, Andrea Branzi, 1969, published by Hyx June 1, 2006

12 Interview with Andrea Branzi on Designboom, 2003, link: http://www.designboom.com/eng/interview/branzi.html - accessed July 2011

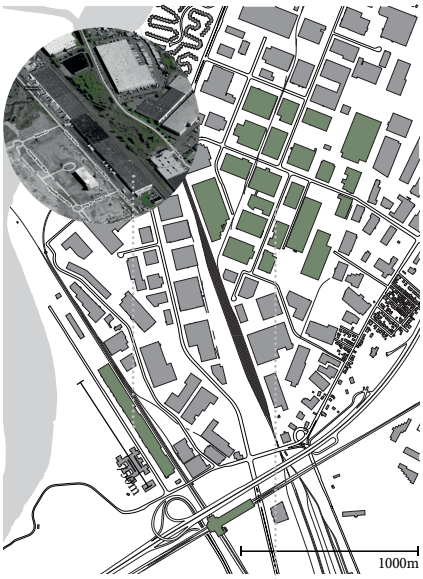


PARK DE LA VILLETTE

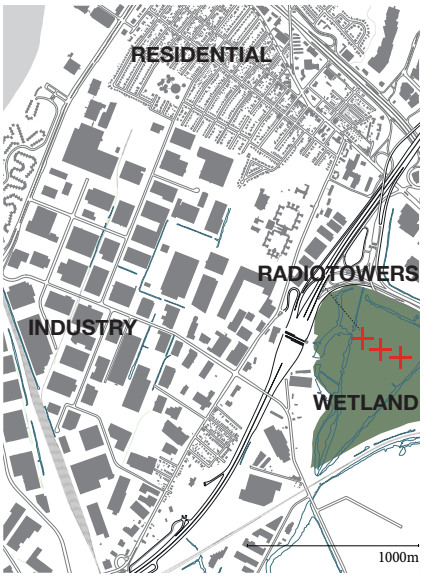
Rem Koolhaas explains on his website: "What La Villette finally suggested was the pure exploitation of the metropolitan condition: density without architecture, a culture of "invisible" congestion."[13]
The project converted the urban activities from a skyscraper in New York (The Downtown Athletic Club) into the dense program of a competition in Paris.
"In this analogy, the bands across the site were like the floors of the tower, each program different and autonomous, but modified and "polluted" through the proximity of all others. Their existence was as unstable as any regime would want to make them. The only "stability" was offered by the natural elements – the rows of trees and the round forest – whose instability was ensured simply through growth."[14]
By disturbing the program with elements like kiosks, playgrounds, etc. the connection from one program to another was achieved. In disturbing the program with various elements, Koolhaas idea of cross-programming can also be found in the Park de la Villette.



NO-STOP INDUSTRY



CROSS-PROGRAM SECAUCUS



Cross-programming in Secaucus is difficult to find since the grown environment is separated in very clear zones. Residential, industrial, shopping, etc. but very in-depth research showed a Cross-program in nature.
Of course the program in a Marsh can not be as dense as in the Park de la Villette but maybe as controversial.
The research revealed the connection of the radio towers to the marshes. Marshes are cross-programmed with radio towers and because of the radio towers they have to stay undeveloped as they are, since the towers need that space to be able to transmit clear signals.



Image source: Secaucus by BingMaps edited by Andreas Huemer

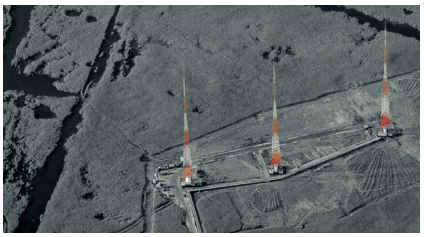


Image source: Secaucus by BingMaps edited by Andreas Huemer

13 Project description for Park de la Villette by OMA, link: http://www.oma.eu/index.php?option=com_projects&view=project&id=644&Itemid=10 - accessed July 2011
14 Ibid.

COLLAGE

+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 — 2005 — 2006 — 2007

FRESH KILLS PARK

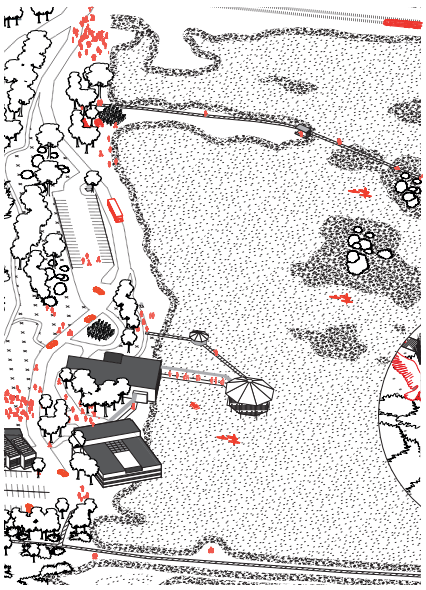
Field Operations is transforming the once largest landfill in the world, into a park. This park will serve society as an educator and relaxing place.
Other interesting strategies are energy harvesting from the former landfills and other sustainable energy projects but the Park has one very big issue. It is very far off Manhattan and exactly the same themes and even more can be found in the already existing and every month improving Meadowlands. It is great that New York City finally improves the situation on Staten Island but if it would come to facts for what to visit first the Meadowlands have to offer even more today than the final version of the Park in thirty years.

First of all, the Meadowlands used to be a dumping site as well but most of its landfill sites are already closed and some are already getting redeveloped.
Second, the education centre in the Meadowlands already exists since 1982 and is therefore very experienced. This means the educator for society is there just not as well advertised as Fresh Kills.
In terms of Sustainable Energy the chapter about Fuller's Geodesic Dome already explained the regions ambitious targets. Furthermore as mentioned in the Doorn Manifesto bicycle-tracks are planned and will be constructed.
The huge sport parking are could easily be transformed into a solar energy park.

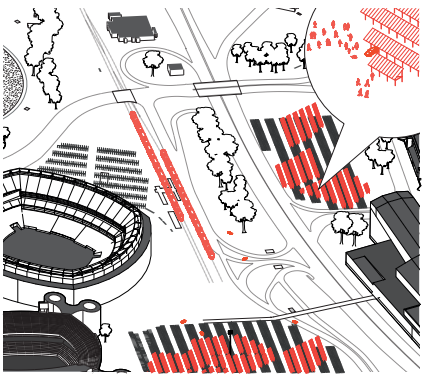
Concluding this the only things missing are the right image or maybe identity for the place and a more attractive connection to New York.
If the Meadowlands wants to promote ecotourism the idea of a car-free Meadowlands has to come into place next.



THE EDUCATOR



NJMC Centre & The Meadowlands Stadion



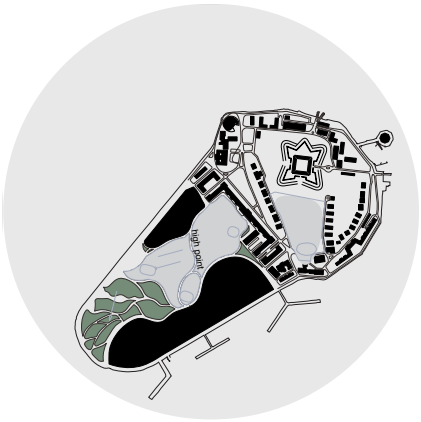
GOVERNORS ISLAND

The projects key strategy for the revitalization of the Island is very similar to Fresh Kills Park but with some major differences.
First of all, there is of course a huge scale difference.
Second, it's so much closer to Manhattan that people can quickly use that place to escape the city.
And third, the island has historical context which will be adapted to preserve the islands special atmosphere, an atmosphere that does not exist in Fresh Kills.

The Key strategies for Governors Island were: expanding public access, historic preservations, mixed use development as artist studios and schools and a public park.

West8 managed to combine this program with a storm water collection strategy that will be built mainly from the demolished building material of run down structures.

As already mentioned, the Meadowlands already offer education and the whole marsh is in a way a natural storm water strategy but what have not been said in the Fresh Kills section but before is the fact that the Meadowlands also preserves structures and buildings which can serve as hotspots for tourists.



MASDAR CITY

The project city Masdar gets criticized for being situated at the wrong place on earth by many Europeans. But where would be the right place for a city with a sustainable, zero-carbon, zero-waste ecology which entirely relies on solar energy and other renewable energy sources?

In my Opinion the Western world should invest in such a project, otherwise the current know how will be produced somewhere else and I mean a "knowledge city" like Masdar.

The Meadowlands would be a perfect playground for such a project. Situated so close to the megacity New York, a city with lots of investors and good universities plus having a lot of space for redevelopment as shown in the chapters before.

As said before, elements of masdar are already in the works in the Meadowlands region but not as consequent as a city planned from scratch.

What Masdar also does is taking references from the old Arabian culture in terms of shading. Learning from the past in the Meadowlands is more referenced to flood problems and the understanding of the necessity of marshes.



THE PRESERVER



Image Source: The Pennsylvania, New Jersey and New York Railroad Co. Portal Bridge along the Northeast Corridor Railroad line in an undated photo, looking south towards the Pulaski Skyway. The swing bridge is open to permit the passage of a barge. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer

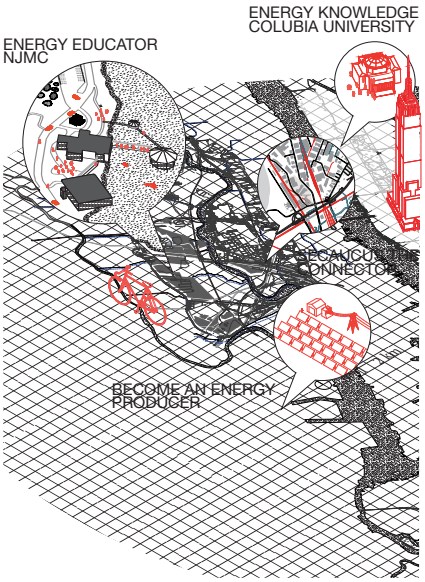


Image Source: A 1930 view of the former Paterson Plank Road swing bridge crossing Berry's Creek, with people swimming on the south side. The adjoining plank roadway, built about 1856, had already been replaced. Paterson Plank Road was the longest plank road ever built in New Jersey. The wood planks came from the cedar forests that once covered significant areas of the Meadowlands. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer



Image Source: The People' s Gas Light Company/ Public Service Electric & Gas Company Marion Office Historic District in Jersey City. The oldest portion was erected in 1870. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer

ENERGY EDUCATOR



+ 2003 Operation Iraq freedom

+ 2004 Enormous tsunami devastates Asia; 200,000 killed

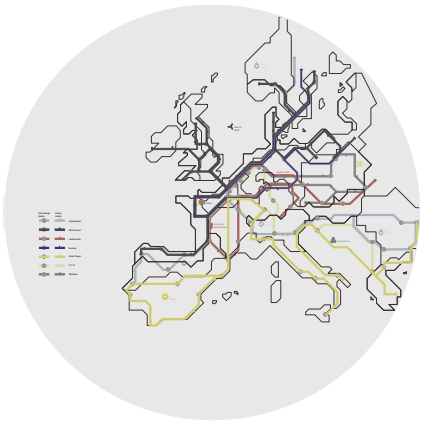
+ 2005 London hit by Islamic terrorist bombings, killing 52 and wounding about 700. (July 7)

+ 2006 After weeks of crippling student-led protests, French president Jacques Chirac repeals a new labor law that would have made it easier for employers to fire workers under the age of 26 (Apr. 10)

2004 2005 2006 2007

ROADMAP 2050

Roadmap is a vision for a better, independent and also united Europe.
"Lower energy costs per unit of output and more stable and predictable energy prices.
New economic growth and job creation through innovation.
Increased security of energy supply and more economic stability.
More sustainable energy and fewer emissions."[15]



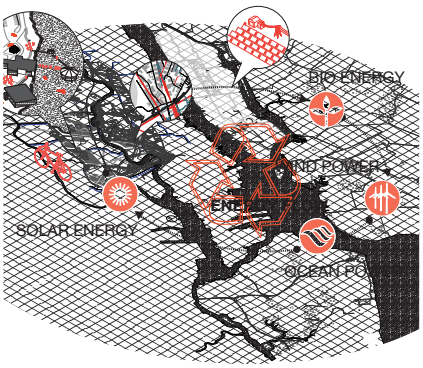
Four points every mayor would, or at least should like to hear, but where are the actions?
NJMC works on its plan, NY works on its plan but what I criticize again is the missing global or at least statewide look at the problems.

It is time to work together on the big idea.

Roadmap 2050 is a clever example on how to use architecture as "a vehicle of modernization"[16] although it's far off what conventional architectural practices used to do.

The New Jersey Meadowlands Commission should be inspired by such a project and become a vehicle of modernization themselves.

ENERGY FLOWS



15 AMO - Roadmap 2050
16 Bigness by Rem Koolhaas, link: http://caad.arch.ethz.ch/teaching/nds/ws97/exercises/text/nds9708/Bigness.html - accessed July 2011

+ 2007 Romania and Bulgaria join the European Union, bringing the number of member nations to 27

2008

+ 2008 Collapse Lehman Brothers Global Financial Crisis

2009

+ 2009 UN Climate Conference Copenhagen

2010

+ 2009 An explosion on a BP oil drilling rig off the coast of Louisiana kills 11 people and injures 17. Experts estimate that 19 000 gallons of crude oil per hour are pouring into the Gulf of Mexico.

2011

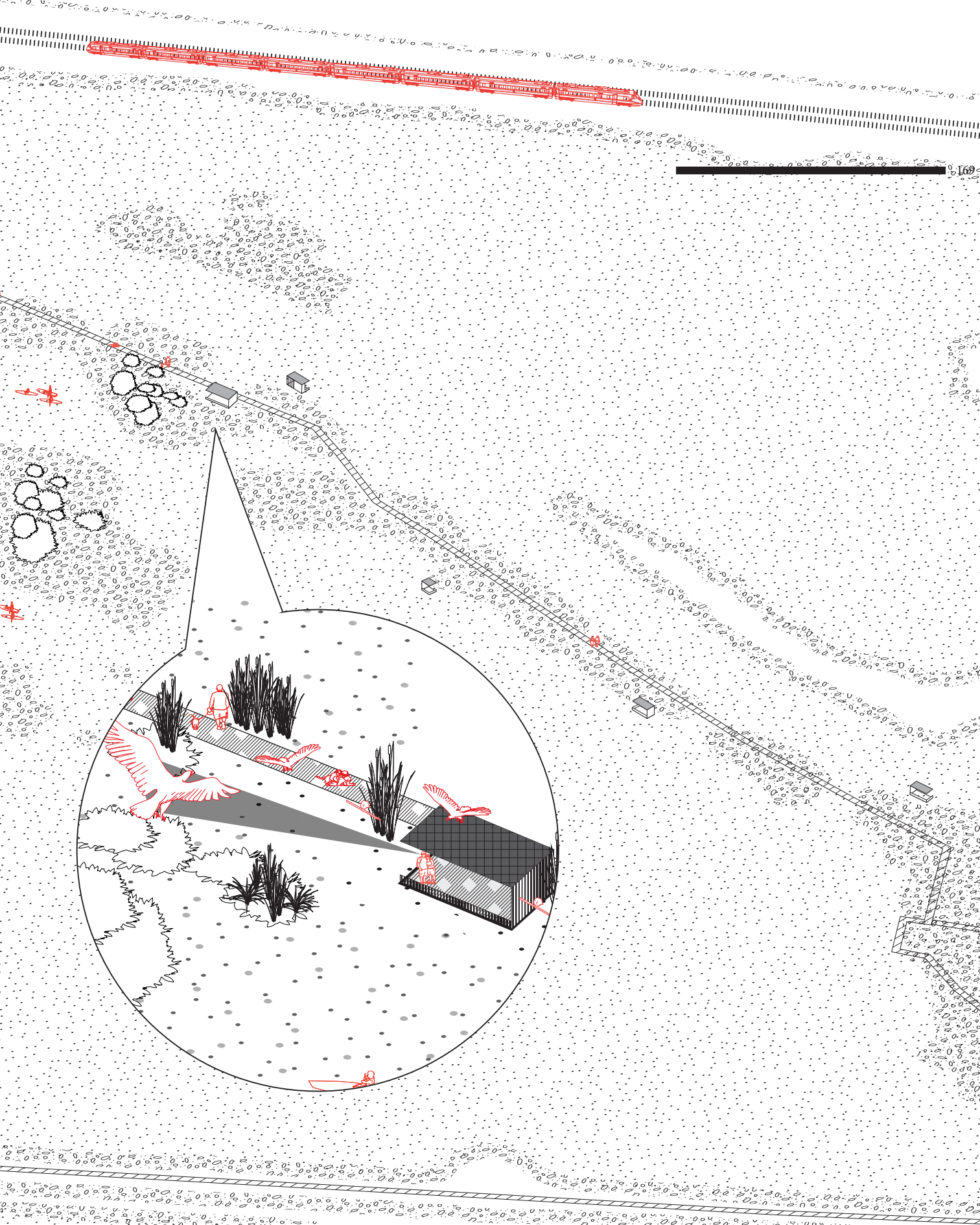
+ 7 billion people on earth

+ 2011 Greek close to broke

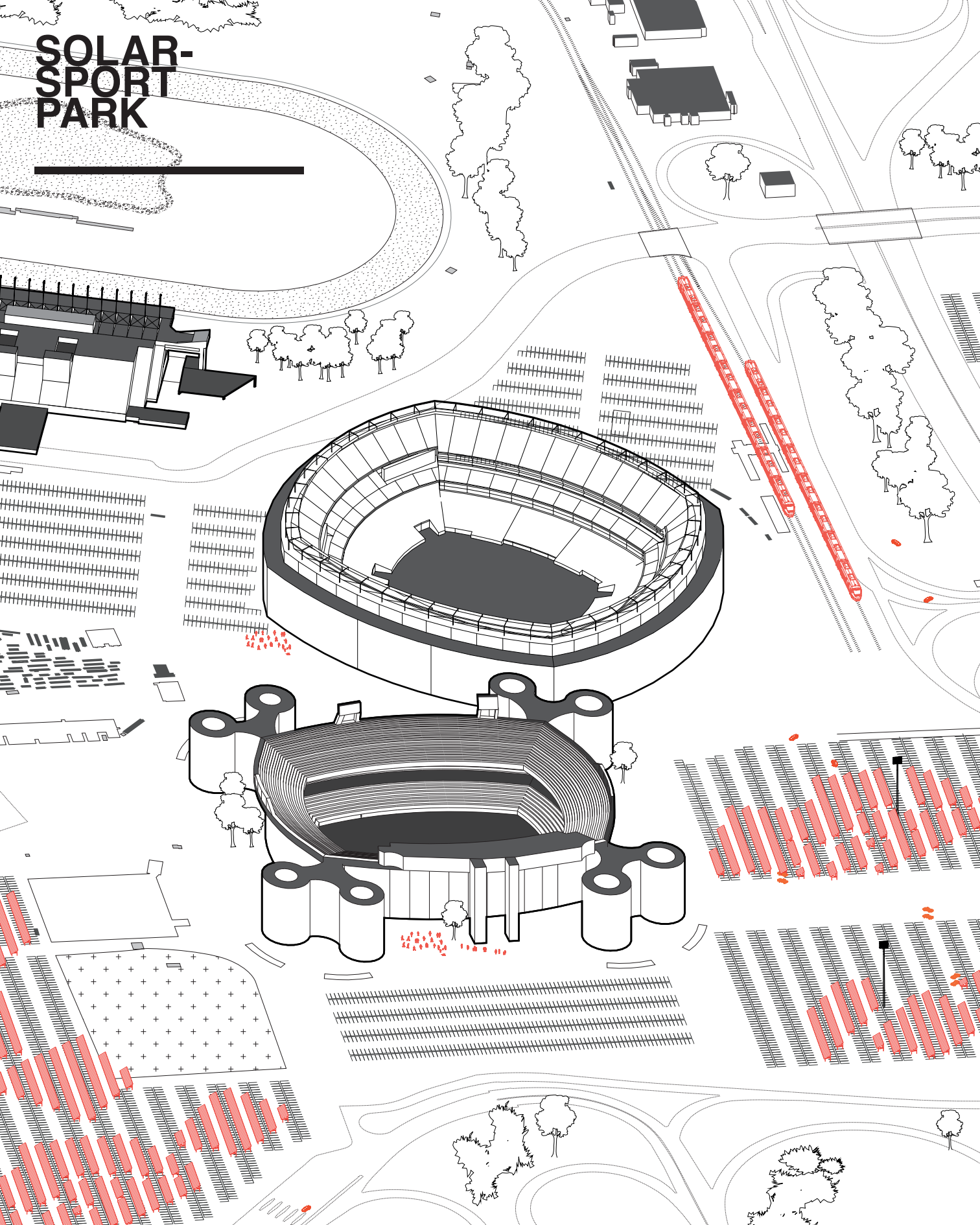
2012

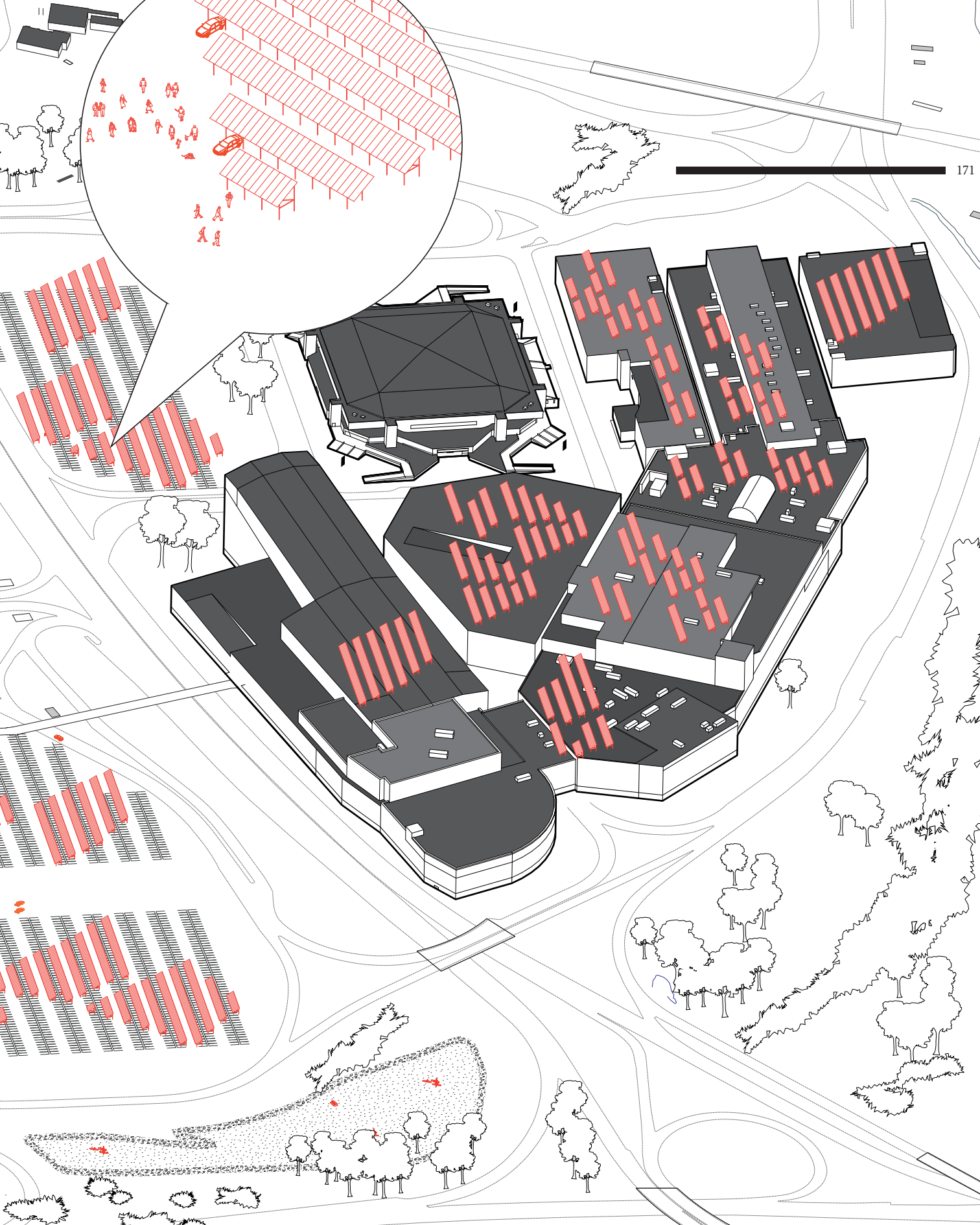
THE EDU-CATOR





SOLAR-SPORT PARK





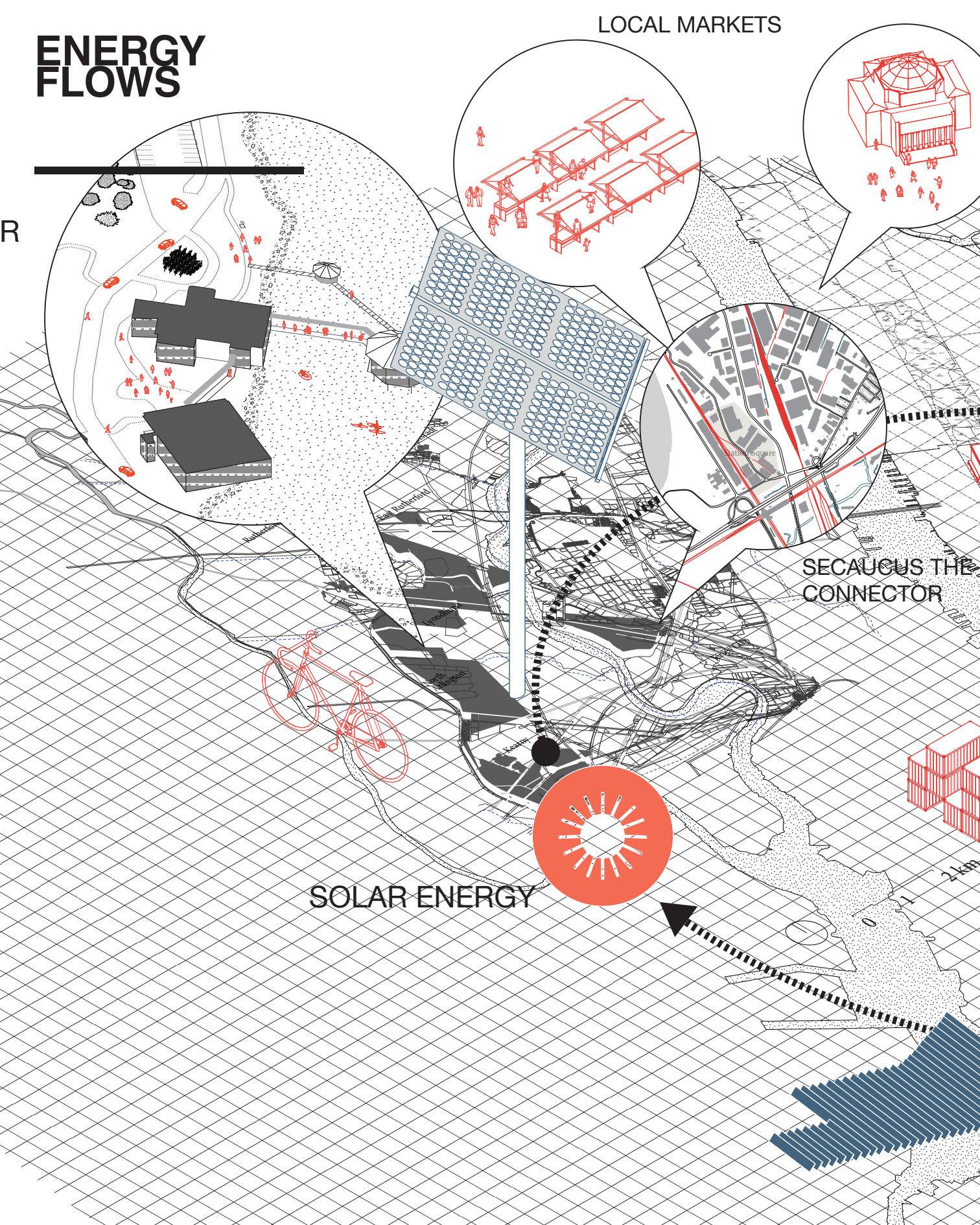
ENERGY FLOWS

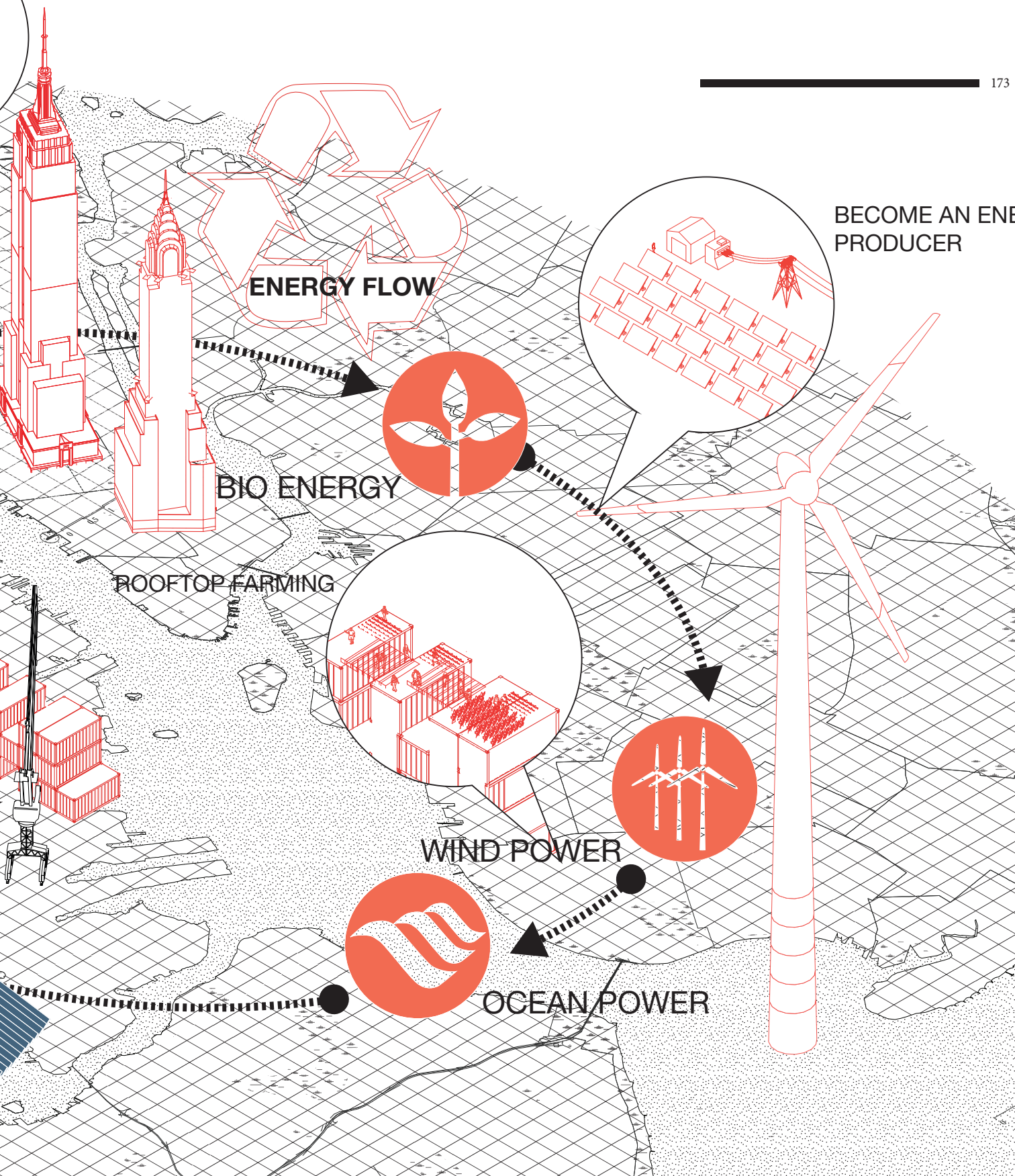
R

LOCAL MARKETS

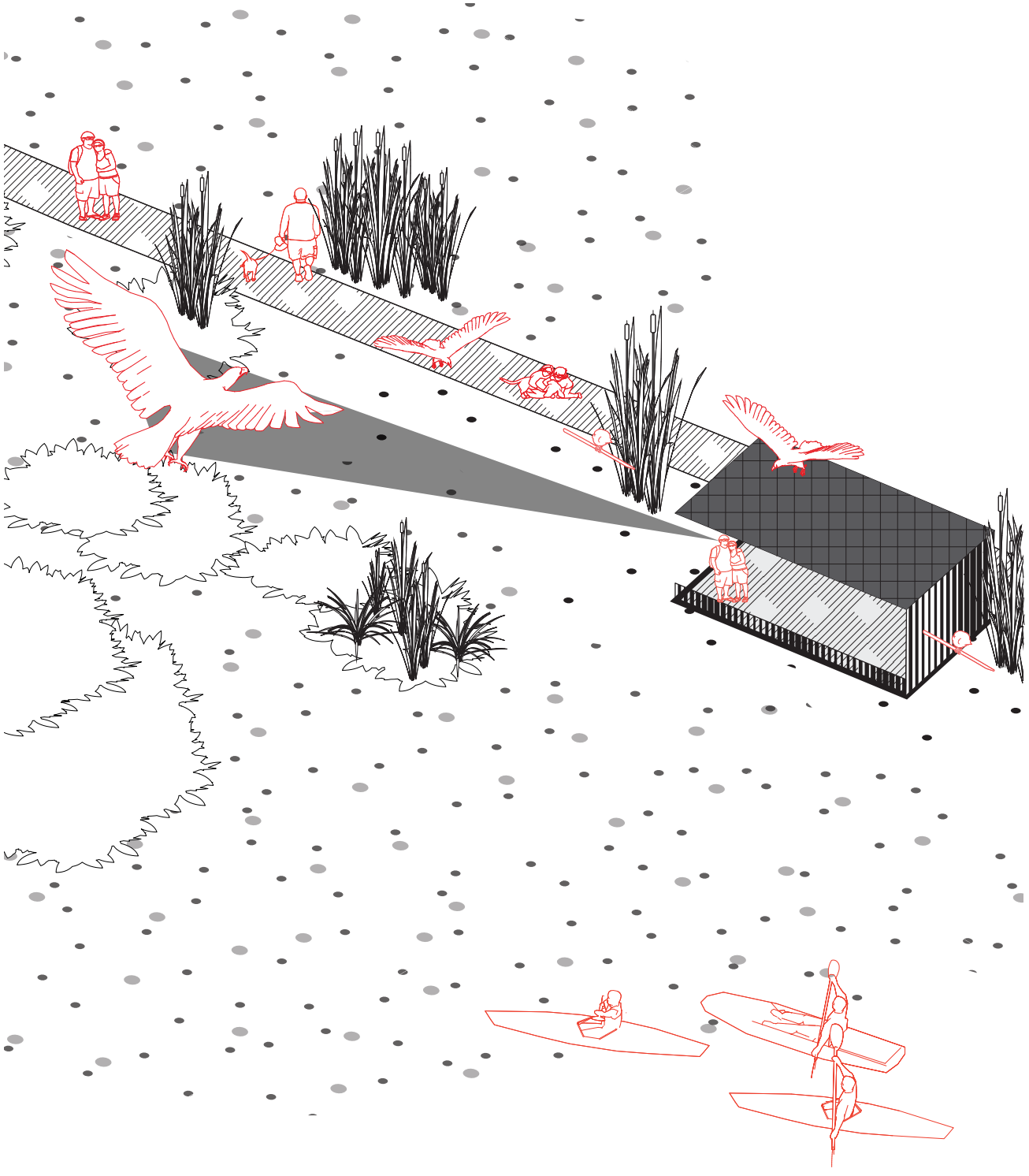
SECAUCUS THE CONNECTOR

SOLAR ENERGY




ENERGY FLOW
BIO ENERGY
ROOFTOP FARMING
BECOME AN ENE
PRODUCER
WIND POWER
OCEAN POWER

EDUCATOR



MEADOW-LANDS

2011





http://www.archdaily.com/wp-content/uploads/2010/06/1275426382_norman-foster.jpg- dec 2010

THEORY

Collage & Contradictions - 2010

Collage & Contradictions is a collection of urban Projects. The analyses and drawings of Utopias will help to inform future projects and guide the reader towards different directions.
It should help for not being "stuck" at one point of the project or the career.

The overall Context of the projects is Manhattan but the Collage itself is a far more Global one.

PROJECT

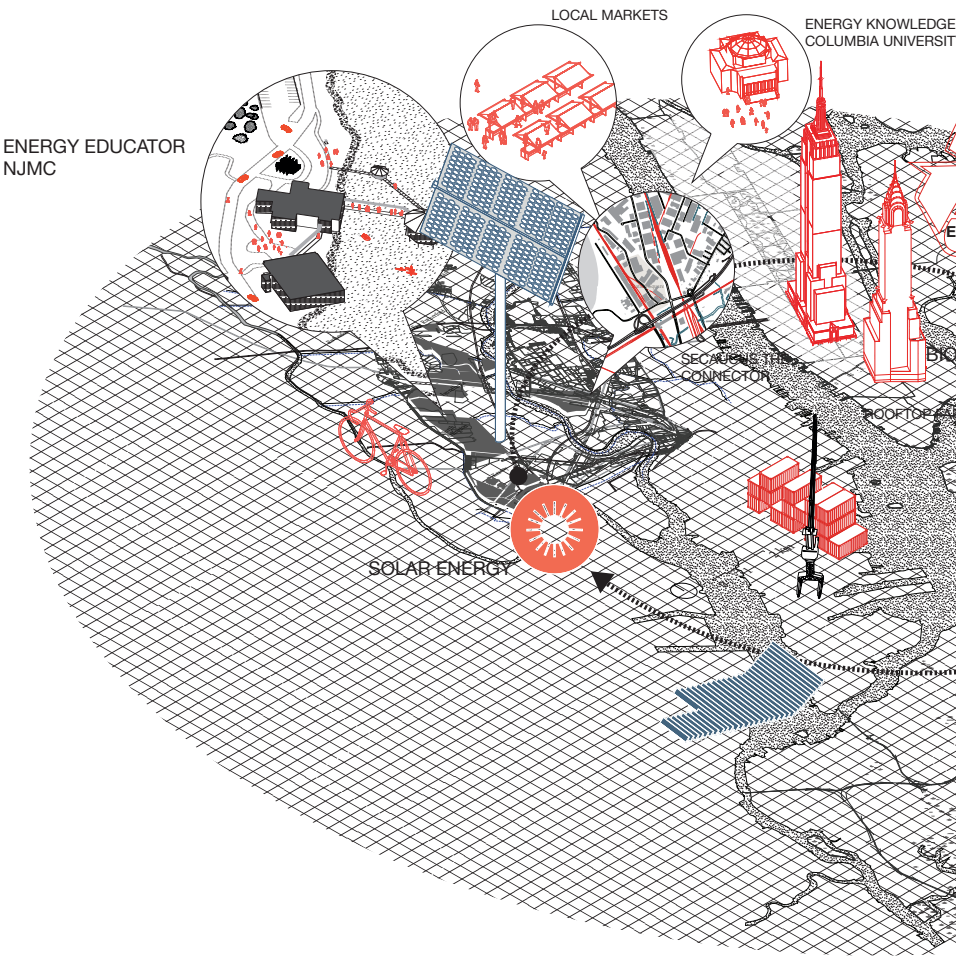
Collage & Contradictions - 2011

The collage is not a proposal to immediately start building in the meadowlands.
It is rather a research on what could be built or developed.
A theoretical approach which handles the scale of almost two sizes of Manhattan in a much more appropriate way than a plan would be able to.

DESIGNER

Name	***Andreas Huemer***
Nationality	*Austrian*
Born	*January 12, 1984*
Died	
Profession	*Architect, Designer, Urbanist*

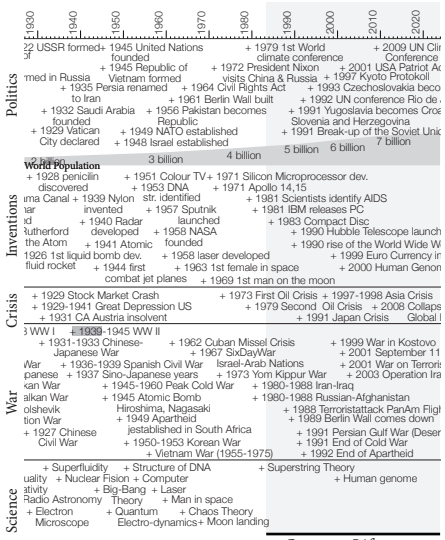
Andreas Huemer was educated at the HTBLA Hallstatt as an inerior designer. He started his studies at the TU Graz, left in his third year to do his RIBA Part 1 at the Architectural Association School of Architecture and is currently working on his Master Thesis back at the TU Graz.



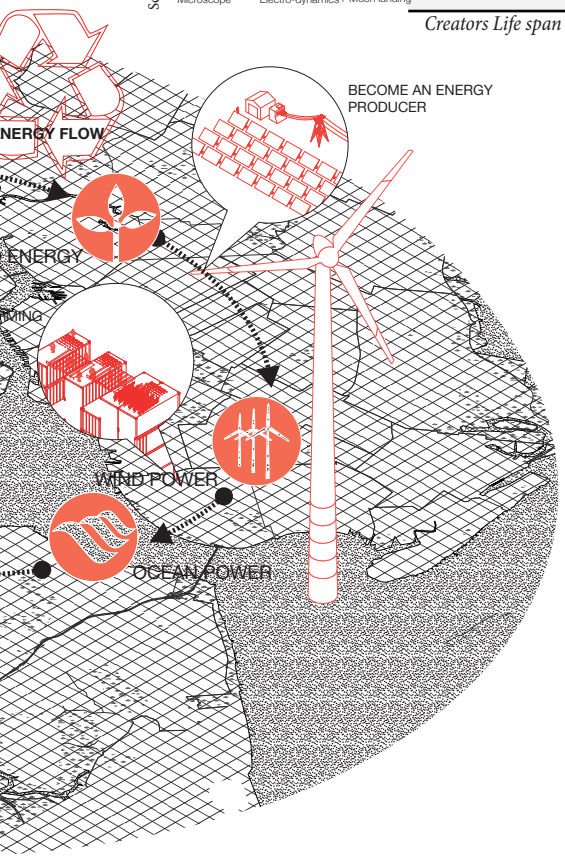


COM-PARATIVE VALUES

HISTORICAL CONTEXT



Creators Life span



QUALITIES & GRIEVANCE

IN ORDER TO DESCRIBE A SITES QUALITY IT'S CRUCIAL TO KNOW WHAT TO LOOK FOR. ALMOST EVERY CRITIQUE IN ARCHITECTURE IS VERY SUBJECTIVE. HOWEVER THE WRITER ALWAYS EXPLAINS HIS CRITIQUE IN A VERY NEUTRAL WAY, WHEN IT COMES BACK TO FACTS, THEY ARE SUBJECTIVELY CHOSEN. WHAT IF THE OBSERVER USES THE QUALITIES OR CRITIQUES FROM THE CREATORS ITSELF AND TRIES TO FIND THEM ON AN EXISTING SITE? IT'S STILL SUBJECTIVE SINCE THE FACTS TO LOOK FOR ARE CHOSE BY ONE SUBJECT BUT THE COLLECTION OF PROJECT IN THE END COULD BE SEEN AS A COLLECTIVE CRITIQUE AND NOT SUBJECTIVE ANYMORE.

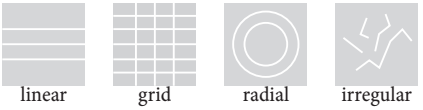
DATE OF ISSUE

Theory	*1970*	*High Tech Architecture*
Project	*2006*	*Masdar City*

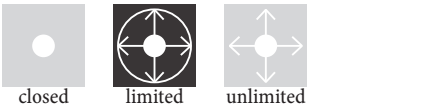
HISTORICAL CONTEXT

Politics	*1991*	*Break-up Soviet Union*
	1997	*Kyoto Protocol*
Wars	*1991*	*End of Cold War*
	2001	*War on Terrorism begins*
Inventions	*1990*	*Rise of the WWW*
	1990	*Hubble Telescope launched*
Crisis	*1991*	*Japan Crisis*
	1997-1998	*Asia Crisis*

CITY SYSTEM

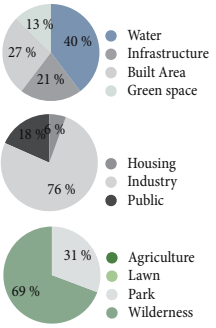


EXPENDABILITY



FACTS

Land Use 2d		
Water	40 %	
Infrastructure	21 %	
Built Area	27 %	
Housing		6 %
Industry		76 %
Public		18 %
Green space	13 %	
Agriculture		0 %
Lawn		0 %
Park		31 %
Wilderness		69 %
Total	100 %	



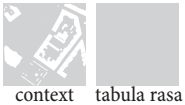
Density p/km²	**207**
Climate	humid continental
Elevation	hilly

data source: New Jersey Meadowlands Commission, 2002; New Jersey Meadowlands Commission, 2004. + redrawn plans

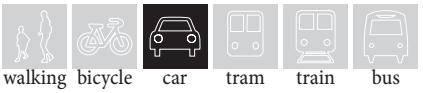
DISTANCE TO PUBLIC TRANSPORT



BASE



MAIN TRANSPORT SYSTEM



FUNDING

	public	private
Investor	ⓧ	◯

EPILOGUE

CONCLUSION

Collage & Contradictions is a journey through two hundred years of architecture history and theory. A collection of projects and its theories. Collected, set in historical context, evaluated, and concluded as a whole to describe a fictional project somewhere else.
This somewhere was extracted from projects around Manhattan, an area pretty unknown for New Yorkers called the Meadowlands.

Through the historical projects, a kind of language was developed to describe a site in different ways. By linking it to more than twenty very different projects, the site can be seen from various angles.
This angles are not only defined by the writer, they are the ideas of some of the most remarkable architects and therefore not founded on just one subject, they are a collage of characteristics.

The results are notes on the site about what kind of qualities are already visible, which ones are there but not seen by the average and advices about in what direction projects should get developed further.
For these notes, Collage & Contradictions works with the various ways of visualizations used in the shown projects.

Collage & Contradictions showed a way how to deal with history and theory in a new approach. Collecting the most important data of a project, its theory, the designers CV's and its historical context on one double page was a challenge but the result was profound knowledge about how architectural and urbanist projects are interweaved with each other.

Also the revising structure of this project revealed different levels of understanding an idea.
First the collection of data, then the drawing exercise, the analyses, the qualities and in the end the test if some of the former projects idea can be found on a new site.

Collage & Contradictions chose the Meadowlands in connection with Manhattans history but is not trying to explain the history of New York. Therefore some sections in this book like the research about New York were added for a general understanding of the place.

This book should also be a guide for other sites than the Meadowlands and help to look at places from different angles before judging them.

THANKS

THANK YOU

Many thanks to my parents Ingrid and Wolfgang for giving me the chance to study and supporting me whenever I needed them.
Thanks to my brother Stefan for support and the fantastic trip to New York, Washington, Boston and the Meadowlands.
Thanks to all my family.

Thank you Klaus Loenhart for guiding me through this topic and all your supporting words.

Thanks to Brian Aberback and the NJMC for the talk at the Meadowlands Commission Centre and sending me planning material.

Thanks to Blake, Frank, Fusako and Martin for taking their time, to answer my questions and sharing their opinions about New York City and the Meadowlands with me.

Special thanks to Klemens and Tom and all my friends.

And thank you Kathi for your support and waiting, now I will have more time again.

SOURCES

CITATION

DIPLOMA THESIS 3

INTRO 5

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 199 7

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 229 7

INTRO 7

TABLE OF CONTENT 8

PLANS 10

All Maps from: Early Town Planning in New York State Author(s): Turpin C. Bannister Source: The Journal of the American Society of Architectural Historians, Vol. 3, No. 1/2, The History of City Planning (Jan. - Apr., 1943), pp. 36-42 Published by: University of California Press on behalf of the Society of Architectural Historians Stable URL: http://www.jstor.org/stable/901254 . Accessed: 08/06/2011 04:40 11

CITY SYSTEMS 14

COMMISSIONERS PLAN NY 16

Encyclopedia results for Commissioners' Plan of 1811: Stable URL: http://www.glossary.com/reference.php?q=Commissioners'+Plan+of+1811 Accessed: 08/06/2011 16

Rationalizing the Landscape: Superimposing the grid upon the island of Manhattan Author(s): Reuben Skye Rose-Redwood Source: 16

The Pennsylvania State University, The Graduate School ,Department of Geography, 2002, Reuben Skye Rose-Redwood , p. 71 Stable URL: http://geotest.tamu.edu/userfiles/72/Rationalizing_the_Landscape_FINALCOPY.pdf Accessed: 08/06/2011 04:40 16

Quotation in quote by DeWitt, Simeon (1813), The Elements of Perspective, Albany: H.C. Southwick. 16

Ibid. p144 16

Ibid p182 16

Designing the City of New York: The Commissioners' Plan of 1811 by Artis Wright, Stephen A. Schwarzman Building, Map Division July 30, 2010, visited Jan 2011 <http://www.nypl.org/blog/2010/07/30/designing-city-new-york-commissioners-plan-1811> 16

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 16

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 16

Das Raster für die Zukunft New Yorks by Alexander Kulpok Published by: Spiegel Online Stable URL: http://www.spiegel.de/wissenschaft/mensch/0,1518,592937,00.html Accessed: 08/06/2011 04:40 16

Grid plan from Wikipedia, the free encyclopedia Stable URL: http://en.wikipedia.org/wiki/Grid_plan Accessed: 08/03/2011 16

Ibid. 16

Ibid. 16

Commissioners Plan text sources: 17

Remarks of the Commissioners for laying out streets and roads in the city of New Yojrk, under the act of April 3, 1807, accessed 10 Oct 2010, <http://www.library.cornell.edu/Reps/DOCS/nyc1811.htm> 17

DeWitt, Simeon (1813), The Elements of Perspective, Albany: H.C. Southwick. 17

DeWitt, Simeon (1819), Considerations of the Necessity of Establishing an Agricultural College, and having more of the Children of Wealthy Citizens Educated for the Profession of Farming, Albany: Websters and Skinners 17

Early Town Planning in New York State Author(s): Turpin C. Bannister Source: The Journal of the American Society of Architectural Historians, Vol. 3, No. 1/2, The History of City Planning (Jan. - Apr., 1943), pp. 36-42 Published by: University of California Press on behalf of the Society of Architectural Historians Stable URL: http://www.jstor.org/stable/901254 . Accessed: 08/06/2011 04:40 17

PLAN VOISIN PARIS 18

Source: Le Corbusier: Towards a New Architecture. Dover Publications, 1985 18

Summary by: Toward an Architecture by Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Toward_an_Architecture -oct 2010 18

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 18

Plan Voisin text sources: 19

Le Corbusier via Wikipedia, link: http://en.wikipedia.org/wiki/Le_Corbusier -oct 2010 19

BROADACRE CITY 20

Wright, Frank Lloyd: The living City, New American Library, New York, 1958 20

Ibid. 20

Ibid 20

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 20

Further Reading: 20

49 cities, WORKac, Storefront for Art and Architecture 20

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman ISBN-10: 0847815226 20

Frank Lloyd Wright via Wikipedia, link: http://en.wikipedia.org/wiki/Frank_Lloyd_Wright - oct 2010 20

Broadacre City via Wikipedia, link: http://en.wikipedia.org/wiki/Broadacre_City -oct 2010 20

ARCH+ Zeitschrift für Architektur und Städtebau 196/197 : Post Oil City, Aachen, Arch+ Verlag, Jan 2010 p. 134 20

STUYVESANT TOWN 22

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 22

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y. 22

summary by Wikipedia, link: http://en.wikipedia.org/wiki/Stuyvesant_Town—Peter_Cooper_Village -oct 2010 22

source: Design Observer, link: http://places.designobserver.com/entry.html?entry=12687 22

Of His Time, Robert Moses and the Modern City: The Transformation of New York, edited by Hilary Ballon and Kenneth T. Jackson, 2007, W. W. Norton & Co., New York, N.Y. 22

Stuyvesant town text sources: 23

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007 23

Robert Moses via Wikipedia, link: http://en.wikipedia.org/wiki/Robert_Moses -oct 2010 23

Robert Moses, Master Builder, is Dead at 92 by Paul Goldberger, link: http://www.nytimes.com/learning/general/onthisday/bday/1218.html -oct 2010 23

MARS PLAN LONDON 24

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136 24

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton 24

Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46 24

Team10 webpage, link: http://www.team10online.org/research/papers/delft1/welter.pdf - accessed oct 2010 24

Mars Plan London text sources: 25

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 135-136 25

MARS Group via Wikipedia, link: http://en.wikipedia.org/wiki/MARS_Group - accessed oct 2010 25

Perspecta, Vol. 13/14 (1971), pp. 163-173 Published by: The MIT Press on behalf of Perspecta. Stable URL: http://www.jstoLorg/stable/1566974 Accessed: 05/07/2010 09:46 25

DOORN MANIFESTO 26

Aix-en-Provence (France) 19-26 July 1953 by Annie Pedret, http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010 26

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183 26

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton, link: http://www.team10online.org/colophon/index.html -oct 2010 26

Doorn Manifesto text sources: 27

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 27

Peter Smithson via Wikipedia, link: http://en.wikipedia.org/wiki/Alison_and_Peter_Smithson - accessed oct 2010 27

http://www.team10online.org/colophon/index.html -oct 2010 27

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183 27

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton 27

Team10 webpage, link: http://www.team10online.org/team10/meetings/1953-Aix.htm -oct 2010 27

FORMULARY FOR A NEW URBANISM 28

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167 28

Ibid. p. 167 28

Published in Guy Debord, Correspondance, Volume 2, 1960-1964. Footnotes by Alice Debord.Translated from the French by NOT BORED! April 2005. http://www.notbored.org/debord-April1963.html Page 2 of 2 -oct 2010 28

source: http://members.chello.nl/j.seegers1/situationist/bib_debord.html -oct 2010 28

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 167 29

Formulary for a new urbanism text sources: 29

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 29

Ivan Chtcheglov via Wikipedia, link: http://en.wikipedia.org/wiki/Ivan_Chtcheglov -oct 2010 29

Guy Debord web page, link: http://www.notbored.org/debord-April1963.html Page 2 of 2 - accessed oct 2010 29

FORT WORTH 30

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 194 - 199 30

Ibid. p 194 - 199 30

49 cities, WORKac, Storefront for Art and Architecture 30

Mall Maker: Victor Gruen, Architect of an American Dream by M. Jeffrey Hardwick, 2004, University of Pennsylvania Press, link: http://www.landmarksociety.org/pdfs/55.pdf - accessed oct 2010 30

James Corner in Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006 30

Fort Worth text sources: 31

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 31

Victor Gruen via Wikipedia, link: http://en.wikipedia.org/wiki/Victor_Gruen -oct 2010 31

49 cities, WORKac, Storefront for Art and Architecture 31

Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006 31

GEODESIC DOME NEW YORK 32

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p. 87 - 92 32

Ibid. p. 87 - 92 32

Ibid. p. 87 - 92 32

49 cities, 2010, WORKac, Storefront for Art and Architecture, p. 66 32

Geodesic Domes via Buckminster Fuller web page, link: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes - Accessed July 2011 32

Ibid. 32

source: http://www.bfi.org/about-bucky/buckys-big-ideas/geodesic-domes -nov 2010 32

Geodesic Dome New York text sources: 33

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 33

Buckminster Fuller via Wikipedia, link: http://en.wikipedia.org/wiki/Buckminster_Fuller -nov 2010 33

AGRICULTURAL CITY 34

Proposals of a New Urbanism via Artnet, link: http://www.artnet.com/library/05/0573/t057373 - accessed nov 2010 34

Proposals of a New Urbanism via Jstor, link: http://www.jstage.jst.go.jp/article/jaabe/3/2/3_357/_article - accessed nov 2010 34

Agricultural city via Parole, link: http://parole.aporee.org/work/hier.php3?spec_id=3999&words_id=304 - accessed nov 2010 34

Ibid. 34

49 cities, WORKac, Storefront for Art and Architecture 34

Agriculture City text sources: 35

Kisho Kurokawa via Wikipedia, link: http://en.wikipedia.org/wiki/Kisho_Kurokawa -nov 2010 35

Kenneth Frampton, Modern Architecture: A Critical History (Oxford: Oxford University Press, 1980), p.348. 35

Kisho Kurokawa, Metabolism in Architecture (London: Studio Vista, 1977), p.26-7. 35

A PLAN FOR TOKYO 36

Structuralism via Wikipedia, link: http://en.wikipedia.org/wiki/Structuralism_(architecture) -accessed nov 2010 36

Ibid. 36

49 cities, WORKac, Storefront for Art and Architecture 36

Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger, 1970 36

Ibid. 36

A Plan for Tokyo text sources: 37

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 37

Kenzo Tange via Wikipedia, link: http://en.wikipedia.org/wiki/Kenzo_Tange -nov 2010 37

NSLC lecture, link: http://www.nslc.wustl.edu/courses/bio3411/woolsey/2010/Lecture15/Lin%202007.pdf - jan 2011 37

49 cities, WORKac, Storefront for Art and Architecture 37

SHINJUKU RESTORATION 38

Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman, p 323 38

Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Shinjuku Restauration text sources: 39

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 39

Fumihiko Maki via Wikipedia, link: http://en.wikipedia.org/wiki/Fumihiko_Maki -Feb 2010 39

PLUG-IN CITY 40

Architecture Culture 1943-1968 by Joan Ockman, Columbia Books of Architecture, 2005, p 366 40

49 cities, WORKac, Storefront for Art and Architecture 40

Megastructures Reloaded, link: http://www.megastructure-reloaded.org/archigram/ - accessed feb 2011 40

Plug-in City text sources: 41

Peter Cook via Wikipedia, link: http://en.wikipedia.org/wiki/Peter_Cook_(architect) -dec 2010 41

A CITY IS NOT A TREE 42

Notes on the Synthesis of Form by Christopher Alexander via Harvard University press, link: http://www.hup.harvard.edu/catalog.php?isbn=9780674627512 - accessed Jan 2011 42

Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 42

Further reading: Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 42

source: http://www.patternlanguage.com/leveltwo/archivesframe.htm?/leveltwo/../archives/alexander1.htm 42

A city is not a tree text sources: 43

Christopher Alexander via Wikipedia, link: http://en.wikipedia.org/

CITATION

wiki/Christopher_Alexander -dec 2010 43
Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 43

JOINT CORE SYSTEM 44

Architecture Culture: 1943-1968 by Joan Ockman, Columbia Books of Architecture, p. 402-407 44
Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991 44
The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art 44
Joint Core System text sources: 45
Arata Isozaki web page, link: http://www.isozaki.co.jp/ -dec 2010 45
Arata Isozaki Architecture 1960-1990 by David B. Stewart, Rizzoli International Publication. Inc, 1991 45
The changing of the avant-garde: visionary architectural drawings from the Howard Gilman collection: 2002 by Terence Riley, The Museum of Modern Art 45

CONTINUOUS MONUMENT 46

Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010 46
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 46
49 cities, WORKac, Storefront for Art and Architecture 46
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 46
Matilda McQuaid, ed., Envisioning Architecture: Drawings from The Museum of Modern Art, 2002, p. 156 46
Continuous Monument text sources: 47
Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman 47

NO-STOP-CITY 48

Superarchitettura via Wikipedia, link: http://en.wikipedia.org/wiki/Superarchitettura -dec 2010 48
Envisioning Architecture: Drawings from The Museum of Modern bv Matilda McQuaid, Art, 2002, p. 156 48
No-Stop City by Archizoom, link: http://arttorrents.blogspot.com/2007/04/no-stop-city-by-archizoom-associati.html - July 2011 48
No Stop City text sources: 49
Andreas Branzi via Wikipedia, link: http://en.wikipedia.org/wiki/Andrea_Branzi -dec 2010 49
Medienkunstnetz, link: http://www.medienkunstnetz.de/werke/no-stop-city/ -may 2011 49

PARK DE LA VILLETTE 50

DAAG web page, link: http://www.daaq.net/folio/bibliography/b_koolhaas.html -dec 2010 50
Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997 50
Park de la Villette web page, link: www.parcdelavillette.wikispaces.com/file/.../Parc+de+la+Villette,+Rem+Koolhaas.pdf 50
www.oma.com 50
Park de la Villette text sources: 51
Rem Koolhaas via Wikipedia, link: http://en.wikipedia.org/wiki/ 51

FRESH KILLS PARK 52

Landscape Urbanism via Wikipedia, link: http://en.wikipedia.org/wiki/Landscape_urbanism 52
The Landscape Urbanism Reader, Charles Waldheim, editor, Princeton Architectural Press, New York 2006, Terra Fluxus by James Corner 52
NYC Government web page, link: http://www.nyc.gov/html/dcp/html/fkl/fkl_index.shtml - may 2011 52
NYC Government park web page, link: http://www.nycgovparks.org/sub_your_park/fresh_kills_park/html/fresh_kills_park.html - may 2011 52
source: fresh kills info brochure 52
Fresh Kills Park text sources: 53
Fiel Operations web page, link: http://www.fieldoperations.net/ - feb 2011 53

GOVERNORS ISLAND 54

Mutations by Rem Koolhaas, Harvard Project on the City, Stefano Boeri, Multiplicity, Sanford Kwinter, Nadia Tazi, Hans Ulrich Obrist, Actar, 2001, p 466 54
Accelerating Darwin by Adriaan Geuze, Scroope: Cambridge architecture journal 1996-1997, p.80-84 54
Governors island webpage, link: http://www.govisland.com/PDFs/CB1_part1.pdf -dec2010 54
Governors island park webpage, link: http://www.govislandpark.com/design-principles/sustainabledesign/ -dec 2010 54
Governors Island text sources: 55
West8 web page, link: http://www.west8.nl/adriaan_geuze - may 2011 55

MASDAR CITY 56

Archpedia, link: http://web.archive.org/web/20060318172141/http://www.archpedia.com/Styles-High-Tech.html - accessed Jan 2011 56
Masdar city via Wikipedia, link: http://en.wikipedia.org/wiki/Masdar_City -dec 2010 56
USEA, link: http://www.usea.org/Programs/CFFS/CFFSDubai/DOE_Masdar_DevelopmentOverview_Feb09.pdf 56

ROAD MAP 2050 58

United Nations Climate Change via Wikipedia, link: http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference - accessed dec 2010 58
Land use, land-use change and forestry via Wikipedia, link: http://en.wikipedia.org/wiki/LULUCF - accessed dec 2010 58
Roadmap 2050 by AMO, link: www.roadmap2050.eu - accessed dec 2010 58
Roadmap 2050 text sources: 59
http://en.wikipedia.org/wiki/2009_United_Nations_Climate_Change_Conference 59
www.roadmap2050.eu -dec 2010 59

DENSITY 60

FACT SHEETS 62

PRINCIPLES 64

PROJECTS SUMMARY 66

CONNECTIONS 68

PROJECTS SCALE 70

INFLUENCES 72

INFLUENCES 74

IMF, link: http://www.imf.org/external/datamapper/ - accessed dec 2010 74
GDP, link: http://www.investorwords.com/2153/GDP.html - accessed dec 2010 74
GDP via Economics Web Institute, 2010, link: http://www.economicswebinstitute.org/glossary/gdp.htm - accessed dec 2010 75

INFLUENCES 76

LOCALISING 78

SOURCES 82

NEW YORK NOW 84

Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 21-23 85
Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 83 85
http://en.wikipedia.org/wiki/Hugh_Ferriss - accessed July 2011 85

MANHATTAN 86

HISTORY 86

New York Journey Website, 2011, link: http://www.newyorkjourney.com/new_york_city_history.htm 87
Ibid. 87

CLIMATE 88

PROBLEMS 90

Age Problem by NYPlan, 2010, link: http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml - Accessed Jan 2011 91

FEARS 92

INTERVIEWS 94

POTENTIAL 96

Homes by NYPlan, link: http://www.nyc.gov/html/planyc2030/html/home/home.shtml - accessed July 2011 96

TRANSPORT 98

CENTRAL PARK 100

MEADOWLANDS 102

FACTS 104

Intergovernmental webpage, link: http://intergovernmental.homestead.com/presentations/The_New_Meadowlands-Working_the_Regional_Plan.pdf - accessed Jan 2011 104

NJMC Webpage, link: http://www.njmeadowlands.gov/about/about.html - accessed July 2011 104

NJMC web page, link: http://www.njmeadowlands.gov/about/about.html - accessed July 2011 104

NJMC web page, link: http://www.njmeadowlands.gov/about/structure.html - accessed July 2011 104

NJMC 104

NJMC 2010 link: http://www.njmeadowlands.gov/about/timeline/history_F.html - accessed July 2011 105

US department of energy, 2010, link: http://www.windpoweringamerica.gov/wind_resource_maps.asp?stateab=nj - accessed jan 2011 106

RENEWABLE RESOURCE 106

New Jersey Meadowlands Commission Energy Master Plan, link: http://www.njmeadowlands.gov/doc_archive/NJMC%20Doc%20Archive/econgrow_docs/office_sustain_docs/Final%20NJMC%20Energy%20Master%20Plan%20adopted%2011-24-08.pdf - accessed July 2011 107

Energy Efficiency and Renewable Energy, 2010, link: http://www.eere.energy.gov/basics/renewable_energy/solar_resources.html - accessed July 2011 107

Energy Efficiency and Renewable Energy, 2010, link: http://www.eere.energy.gov/basics/renewable_energy/biopower.html - accessed July 2011 107

AERIAL VIEW 108

HISTORY 110

MEADOWLANDS 110

Brackish water, link: http://en.wikipedia.org/wiki/Brackish_water - accessed July 2011 112

HISTORY MEADOWLANDS 112

Sources: 113

Teterboro-online, link: www.teterboro-online.com/boro/riser/riser2.shtml - accessed Jan 2011 113

The Meadowlands History Blog, link: http://www.meadowpast.net/ - Jan 2011 113

Robert Sullivan, The Meadowlands: Wilderness Adventure on the Edge of a City , Anchor Books/Scribner, New York, 1998 113

Institut für Architektur und Landschaft, Case02, Lowlands: Meadowlands New Jersey, TU Graz, 2010 113

Urban Habitats, link: http://www.urbanhabitats.org/v02n01/urbanhabitats_v02n01_pdf.pdf - accessed Jan 2011 113

PRESERVATION 114

UNESCO, link: http://whc.unesco.org/en/criteria - accessed July 2011 115

LAND OF BRIDGES 116

MAPPING THE AREA 118

FLOOD DIAGRAM 120

Rutgers CUES, link: http://cues.rutgers.edu/hackensack/index.html - accessed July 2011 121

National Geographic, link: http://www.pbs.org/strangedays/glossary/W.html - accessed July 2011 121

WETLANDS 122

EPA United States Environmental Protection Agency, link: http://water.epa.gov/type/wetlands/index.cfm - accessed July 2011 123

NY Wetlands, NYC Wetlands Policy Paper, January 2009, link: 123

COMMUNITY FACILITIES 124

REDEVELOPMENT 126

REDEVELOPMENT AREAS 128

REDEVELOPMENT AREAS 130

REDEVELOPMENT AREAS 132

REDEVELOPMENT AREAS 134

LANDFILLS 136

Landfill site, link: http://www.landfill-site.com/html/building_on_l andfill_sites.html - accessed Feb 2011 137

Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011 140

Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011 140

WASTELAND 140

TRANSPORT 142

CURRENT LAND USE 144

CURRENT LAND USE 146

MEADOWLANDS 148

QUALITIES 150

COLLAGE 152

COLLAGE 154

A history of architectural theory: from Vitruvius to the present by Hanno-Walter Kruft, Princeton Architectural Press; 1 edition January 1, 1996, p 426 154

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 156 154

Hudson Reporter.com, New affordable housing Developer, board to build lower-income homes by Nicholas J. Zitelli link: http://hudsonreporter.com/view/full_story/2403017/article-New-affordable-housing-Developer--board-to-build-lower-income-homes - accessed July 2011 154

Image Source: Riverside court projects webpage, link: http://www.riversidecourt.net/images/home/main.jpg - accessed July 2011 155

COLLAGE 156

Architecture Culture: 1943-1968 (Columbia Books of Architecture) by Joan Ockman p. 181-183 156

The Renewable Energy Report for the New Jersey Meadowlands Commission - A Proposal for the Creation of a Hackensack Meadowlands Regional Renewable Energy District, 2005, link: www.njmeadowlands.gov - accessed October 2010 157

157

COLLAGE 158

Urban Habitats, The Meadowlands Before the Commission: Three Centuries of Human Use and Alteration of the Newark and Hackensack Meadows by Stephen Marshall, 2004, link: http://urbanhabitats.org/v02n01/3centuries_full.html - accessed July 2011

CITATION

158

Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 159

COLLAGE 160

A city is not a tree by Christopher Alexander, 1966, Reprint from the magazine Design, London: Council of Industrial Design, N° 206 160

Architecture Culture: 1943-1968 by Joan Ockman, Columbia Books of Architecture, p. 402-407 161

COLLAGE 162

Anti-matter - Italy's Superstudio hated both the bland future and the twee past by Jonathan Glancey The Guardian, Monday 31 March 2003, link: http://www.guardian.co.uk/artanddesign/2003/mar/31/architecture.artsfeatures - visited July 2011 162

No-stop city by Archizoom Accociati, Andrea Branzi, 1969, published by Hyx June 1, 2006 162

Interview with Andrea Branzi on Designboom, 2003, link: http://www.designboom.com/eng/interview/branzi.html - accessed July 2011 162

Project description for Park de la Villette by OMA, link: http://www.oma.eu/index.php?option=com_projects&view=project&id=644&Itemid=10 - accessed July 2011 163

Ibid. 163

COLLAGE 164

AMO - Roadmap 2050 166

Bigness by Rem Koolhaas, link: http://caad.arch.ethz.ch/teaching/nds/ws97/exercises/text/nds9708/Bigness.html - accessed July 2011 166

THE EDUCATOR 168

SOLAR-SPORT PARK 170

ENERGY FLOWS 172

EDUCATOR 174

MEADOWLANDS 176

EPILOGUE 179

THANKS 181

SOURCES 182

RECOMMENDATION 193

GRAPHICS & IMAGES

DIPLOMA THESIS 3

INTRO 5

INTRO 7

TABLE OF CONTENT 8

PLANS 10

CITY SYSTEMS 14

Image source: Loop City from BIG byAndreas Huemer 15

Image source: Arch Daily, Big Loop City, 2010, link: http://www.archdaily.com/76482/loop-city-big/ - Accessed July 2011 15

Image source: Loop New York by Andreas Huemer 15

COMMISSIONERS PLAN NY 16

Image source: Making way for the "path of progress," looking north up 2nd Avenue from 42nd Street in 1860 (Source: Spann, 1988) link: jhttp://upload.wikimedia.org/wikipedia/commons/2/28/Second_Avenue_Manhattan_1861.jpg - oct 2010 16

Image source: Oil Portrait of Simeon De Witt by Ezra Ames, about 1804, Link: source: www.americanhistory.si.edu/documentsgallery/images/content/starmap/portrait.jpg -oct 2010 16

Graphic source: All Graphics drawn by Andreas Huemer 17

PLAN VOISIN PARIS 18

Image source: Plan Voisin - Le Corbusier 1925, link: http://aftercorbu.com/wordpress/wp-content/uploads/2007/08/plan_voison_paris.jpg -oct 2010 18

Image source: Le Corbusier link: http://www.parkhillflats.co.uk/lecorbusier.jpg -oct 2010 18

Graphic source: All Graphics drawn by Andreas Huemer 19

BROADACRE CITY 20

Image source: Broadacre - Frank Lloyd Wright 1934, ARCH+ Zeitschrift für Architektur und Städtebau 196/197 : Post Oil City, Aachen, Arch+ Verlag, Jan 2010 p. 134 20

Image source: Frank Lloyd Wright 1954, link: http://www.parkhillflats.co.uk/lecorbusier.jpg -oct 2010 20

Graphic source: All Graphics drawn by Andreas Huemer 21

STUYVESANT TOWN 22

Image source: Stuyvesant Town, 1944, link: http://la.curbed.com/uploads/2010-01-stuy.jpg-oct 2010 22

Image source: Robert Moses, 1939, with model of proposed Battery Bridge. [Image credit: Library of Congress. New York World-Telegram & Sun Collection. Photographer: C.M. Stieglitz] Right: Frank Lloyd Wright, with model of the Guggenheim Museum, circa 1947. [Image Credit: Library of Congress. Photographer: Margaret Carson, link: http://places.designobserver.com/media/images/Moses-Wright.jpg -oct 2010 22

Graphic source: All Graphics drawn by Andreas Huemer 23

MARS PLAN LONDON 24

Image source: CIAM 8, 1951, Architecture Culture: 1943-1968 (Columbia Books of Architecture) von Joan Ockman, p 136 24

Image source: collage of images by Andreas Huemer 24

Graphic source: All Graphics drawn by Andreas Huemer 25

DOORN MANIFESTO 26

Image source: Alison & Peter Smithson, CIAM Grille, 1953 link: http://s3.amazonaws.com/data.tumblr.com/tumblr_lhauj1c-69Q1qe0nlvo1_1280.jpg?AWSAccessKeyId=AKIAJ6IHWSU3BX3X7X3Q&Expires=1309782878&Signature=ArZLCkrsBttacSx9zKr34rE88Js%3D -oct 2010 26

Image source: Alison Smithson; Peter Smithson by Godfrey Argent, 1969, link: http://images.npg.org.uk/790_500/2/3/mw72323.jpg -oct 2010 26

Graphic source: All Graphics drawn by Andreas Huemer 27

FORMULARY FOR A NEW URBANISM 28

Image source: Ivan Chtcheglov, La Prison ou La Mort pour les Jeunes 1950 link: http://www.notbored.org/prison-or-death.jpg - accessed oct 2010 28

Image source: Ivan Chtcheglov, link: http://images.npg.org.uk/790_500/2/3/mw72323.jpg -accessed oct 2010 28

Graphic source: All Graphics drawn by Andreas Huemer 29

FORT WORTH 30

Image source: Victor Gruen, Fort Worth, 49 cities, WORKac, Storefront for Art and Architecture, p56 30

Image source: Victor Gruen, link: http://media-2.web.britannica.com/eb-media/75/126875-003-F92E2BCF.gif -accessed oct 2010 30

Graphic source: All Graphics drawn by Andreas Huemer 31

GEODESIC DOME NEW YORK 32

Image source: Buckminster Fuller, Geodesic Dome New York, 49 cities, WORKac, Storefront for Art and Architecture, p66 32

Image source: Buckminster Fuller, link: http://www.toxicocultura.com/blog/wp-content/uploads/2009/05/bucky-float_o.jpg -accessed nov 2010 32

Graphic source: All Graphics drawn by Andreas Huemer 33

AGRICULTURAL CITY 34

Image source: Kisho Kurokawa, Agricultural City, 49 cities, WORKac, Storefront for Art and Architecture, p62 34

Image source: Kisho Kurokawa, link: http://www.kisho.co.jp/pageimg/00071_01s.JPG - accessed nov 2010 34

Graphic source: All Graphics drawn by Andreas Huemer 35

A PLAN FOR TOKYO 36

Image source: Kenzo Tange, A Plan For Tokyo, 1946 - 1969 by Udo Kultermann, Praeger (1970) 36

Image source: source: Kenzo Tange, in Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger (1970) 36

Graphic source: All Graphics drawn by Andreas Huemer 37

SHINJUKU RESTORATION 38

Image source: Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Image source: source: Fumihiko Maki, Investigations in collective form by Fumihiko Maki School of Architecture, Washington University (1964) 38

Graphic source: All Graphics drawn by Andreas Huemer 39

PLUG-IN CITY 40

Image source: Peter Cook, Plug-In City, link: http://arttattler.com/Images/NorthAmerica/Missouri/St.%20Louis/Mildred%20Lane%20Kemper/Metabolic%20City/PlugInCity-300dpi_1.jpg - accessed dec 2010 40

Image source: Peter Cook, link: http://www.arquinauta.com/foros/attachment.php?attachmentid=52769&d=1268241326 - accessed dec 2010 40

Graphic source: All Graphics drawn by Andreas Huemer 41

A CITY IS NOT A TREE 42

Image source: Christopher Alexander, A city is not a tree, link: source: Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 (Part I) 42

Image source: Christopher Alexander, Photo by Maggie Moore, link: http://www.livingneighborhoods.org/pics/farmerchris2004.jpg - accessed dec 2010 42

Graphic source: All Graphics drawn by Andreas Huemer 43

JOINT CORE SYSTEM 44

Image source: Ararta Isozaki, City in the air - Shinjuku Tokyo, Shinjuku Project 1/10 1961-91, link: http://www.meulensteen.com/arata-isozaki?idx=8 - accessed July 2011 44

Image source: Ararta Isozaki, Photo by Dorothy Alexander, link: http://www.meulensteen.com/arata-isozaki?idx=8 - accessed July 2011 44

Graphic source: All Graphics drawn by Andreas Huemer 45

CONTINUOUS MONUMENT 46

Image source: Continous Monument, Superstudio, 1969, link: http://www.neuegalerie-archiv.at/03/support/press/superstudio_cmyk.jpg - accessed dec 2010 46

Image source: Adolfo Natalini & Chritiano Toraldo di Francia, Collage by Andreas Huemer 46

Graphic source: All Graphics drawn by Andreas Huemer 47

NO-STOP-CITY 48

Image source: No-Stop City, Archizoom, 49 cities, WORKac, Storefront for Art and Architecture, p. 100 48
Image source: Andrea Branzi, 2008, Wikipedia by EdoM link: http://upload.wikimedia.org/wikipedia/commons/6/6c/Andrea_Branzi_20080117.png - accessed dec 2010 48
Graphic source: All Graphics drawn by Andreas Huemer 49

PARK DE LA VILLETTE 50

Image source: Park de la Villette, 1982, by Rem Koolhaas, link: http://lebbeuswoods.files.wordpress.com/2009/10/rem-lav-4.jpg?w=600&h=515 - accessed dec 2010 50
Image source: Rem Koolhaas, Photo by Eikonographia, link: http://www.eikongraphia.com/wordpress/wp-content/Rem_Koolhaas_Small.jpg - accessed dec 2010 50
Graphic source: All Graphics drawn by Andreas Huemer 51

FRESH KILLS PARK 52

Image source: Fresh Kills Park, 2004, by Fieldoperations link: http://farm4.static.flickr.com/3611/3471822702_972c69eb4d_b.jpg - accessed dec 2010 52
Image source: James Corner, Photo by AA School, link: http://www.aalog.net/James-Corner.jpg - accessed dec 2010 52
Graphic source: All Graphics drawn by Andreas Huemer 53

GOVERNORS ISLAND 54

Image source: Governors Island, 2006, by WEST8, link: http://www.govisland.com/html/home/home.shtml - accessed dec 2010 54
Image source: Adriaan Geuze, Photo by NRC Handelsblad, link: http://weblogs.nrc.nl/whosnext/files/Aankondigingen/geuze.jpg - accessed dec 2010 54
Graphic source: All Graphics drawn by Andreas Huemer 55

MASDAR CITY 56

Image source: Masdar City, 2006, by Norman Foster, link: http://upload.wikimedia.org/wikipedia/en/c/c8/Masdar_City.jpg - accessed dec 2010 56
Image source: Norman Foster, Photo by Archdaily, link: http://www.archdaily.com/wp-content/uploads/2010/06/1275426382-norman-foster.jpg - accessed dec 2010 56
Graphic source: All Graphics drawn by Andreas Huemer 57

ROAD MAP 2050 58

Image source: Solaria Roadmap 2050, 2010, by AMO link: http://www.oma.asia/contentimages/projects/2010-ROADMAP-2050/images-stories-Roadmap-2050-roadmap-solaria_big.jpg - accessed July 2011 58
Image source: AMO, 2011, collage by Andreas Huemer 58
Graphic source: All Graphics drawn by Andreas Huemer 59

DENSITY 60

Graphic source: Density Graph by Andreas Huemer 60

FACT SHEETS 62

Graphic source: 2d Area Charts by Andreas Huemer, Data various sources below Charts. 62

PRINCIPLES 64

PROJECTS SUMMARY 66

Graphic source: Project Summary by Andreas Huemer 66

CONNECTIONS 68

Graphic source: Connections by Andreas Huemer 68

PROJECTS SCALE 70

Graphic source: Projects in Scale by Andreas Huemer 70

INFLUENCES 72

Graphic source: Influences by Andreas Huemer 72

INFLUENCES 74

Graphic source: Graphs drawn by Andreas Huemer various sources below graphs 74
Graphic source: Graphs drawn by Andreas Huemer various sources below graphs 75

INFLUENCES 76

Graphic source: Influences Test 01by Andreas Huemer 76

LOCALISING 78

Graphic source: Localising by Andreas Huemer 78

SOURCES 82

NEW YORK NOW 84

Image source: Manhattan by Stefan Huemer, 2010 84
Image source: Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 22 84
Graphic source: Sunlight Section by Andreas Huemer 85
Graphic source: Map America by Andreas Huemer, link: http://english.freemap.jp/americas_e/continental_mid.html accessed 30.Nov.2010, http://www.census.gov/popest/metro/CBSA-est2009-annual.html 30.Nov.2010l accessed Jan 2011 edited by Andreas Huemer 85
Image source: Delirious New York: A Retroactive Manifesto for Manhattan by Rem Koolhaas, The Monacelli Press, 1997, p. 112 85

MANHATTAN 86

HISTORY 86

Brooklyn Bridge, Credit: The New York Times Photo Archive 86
NY Subway, Credit: NYC Municipal Archives 86
Water Tunnel, Credit: NYC Department of Environmental Protection 86
Graphic source: Transport history by NYPlan, link: http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml - accessed July 2011 edited by Andreas Huemer 86
Verazano Bridge, Credit: Getty Images 86
Graphic source: New York development extracted from an animation, link: http://wattsupwiththat.com/2010/11/28/freaking-out-about-nyc-sea-level-rise-is-easy-to-do-when-you-dont-pay-attention-to-history/ feb 2011 edited by Andreas Huemer 87
Image source: Manhattan by Andreas Huemer, 2010 87

CLIMATE 88

Graphic source: Climate Comparison by Andreas Huemer, source data by BBC, link: November 2010 http://www.bbc.co.uk/weather/world/city_guides - accessed April 2011 88
Graphic source: Windata America, link: http://windpoweringamerica.com accessed feb 2011 edited by Andreas Huemer 89

PROBLEMS 90

Collage source: Age problem, Brooklyn by Andreas Huemer 90
Graphic source: Population Age by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 90

FEARS 92

Image source: Geology NY, link: http://geology.com/sea-level-rise/new-york.shtml - accessed feb 2011 92
Graphic source: Storm Surge Data Source U.S Army Corps of Engineers; FEMA; National Weather service; NY/NJ/CT State Emergency Management Metro New York Hurricane Transport Study; Sea level rise estimates based upon Goddard Institute of Space Studies Atmospheric Ocean Model using International Panel on Climate Change greenhouse gas emissions for 2050's. link: http://www.physorg.com/news81007489.html - accessed feb 2011 92
Collage source: Age problem, Brooklyn by Andreas Huemer 93
Graphic source: Projection of sealevel rise, Sources: PAAS; Martin Vermeer. Aalto University; Stefan Rahmstorf, Potsdam Institute for Cimate Impact Research; NASA; CNES accessed Jan 2011 edited by Andreas Huemer 93
Image source: Whats up with that, 2010, link: http://wattsupwiththat.files.wordpress.com/2010/11/newyork-submerged_google_earth.jpg feb 2011 93

INTERVIEWS 94

POTENTIAL 96

Graphic source: Potential of expansion by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 96
Graphic source: Congestion Pricing Zone by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 96

GRAPHICS & IMAGES

Graphic source: Express Bus Routes by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 97

TRANSPORT 98

Image source: Railway System by TEPCO, Tokyo, 2010 98

Graphic source: Transit Expansion by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 98

Graphic source: Transit Expansion Without Action by NYPlan, link: source:http://www.nyc.gov/html/planyc2030/html/downloads/the-plan.shtml accessed Jan 2011 edited by Andreas Huemer 98

CENTRAL PARK 100

Image source: Central Park via Austin center for Photography, 2010 http://www.austincenterforphotography.org - Accessed June 2011 101

MEADOWLANDS 102

FACTS 104

NJMC 104

RENEWABLE RESOURCE 106

AERIAL VIEW 108

HISTORY 110

MEADOWLANDS 110

Source: NJMC History, link: http://www.njmeadowlands.gov/about/history.html - accessed July 2011 111

Google image search 111

HISTORY MEADOWLANDS 112

Snake Hill 1900 112

Reclamation of the Lower Hackensack Meadows. 1867

Source: Frank Leslie's Illustrated Newspaper, November 16, 1967 113

PRESERVATION 114

LAND OF BRIDGES 116

image source: User: jag9889 via Flickr, link: http://www.flickr.com/photos/jag9889/sets/72157601571715932/ - accessed July 2011 117

MAPPING THE AREA 118

FLOOD DIAGRAM 120

Snake Hill 1900 121

WETLANDS 122

COMMUNITY FACILITIES 124

REDEVELOPMENT 126

REDEVELOPMENT AREAS 128

REDEVELOPMENT AREAS 130

REDEVELOPMENT AREAS 132

REDEVELOPMENT AREAS 134

LANDFILLS 136

WASTELAND 140

Image source: Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011 140

Image source: Wasteincineration link: http://www.wasteincineration.net/ - accessed Feb 2011 141

TRANSPORT 142

CURRENT LAND USE 144

CURRENT LAND USE 146

MEADOWLANDS 148

QUALITIES 150

COLLAGE 152

Image source: Bing Maps, accessed July 2011 153

Image source: flickr, by user hydropeek, link: http://www.flickr.com/photos/hydropeek/2595704268/sizes/l/in/photostream/ - accessed July 2011 153

COLLAGE 154

COLLAGE 156

proposed bicycle way, 2011, link: http://www.northjersey.com/news/125546958_Town_looks_for_funds_to_get_first_phase_of_bike_path_moving.html - accessed July 2011 156

Image: Crossing Meadowroad by Andreas Huemer 2010 156

COLLAGE 158

Underneath the NJ Turnpike by IA&L, 2009 158

COLLAGE 160

Secaucus Railway by GoogleMaps, 2011, edited by Andreas Huemer 160

Pulaski Skyway by IA&L, 2009 161

COLLAGE 162

Starbucks Secaucus by Stay in the Meadowlands, link: http://www.stayinthemeadowlands.com/client_docs/312_r_New%20Image.JPG - accessed July 2011 162

Starbucks London by The Telegraph, 2010, link: http://i.telegraph.co.uk/multimedia/archive/01004/460-starbucks_1004359c.jpg - accessed July 2011 162

Starbucks Harlem New York by Gazettnet, 2009, link: http://www.gazettenet.com/files/images/20080430-050453-pic-961947677.display.jpg - accessed July 2011 162

Image source: Secaucus by BingMaps edited by Andreas Huemer 163

Image source: Secaucus by BingMaps edited by Andreas Huemer 163

COLLAGE 164

NJMC Centre & The Meadowlands Stadion 164

Image Source: The Pennsylvania, New Jersey and New York Railroad Co. Portal Bridge along the Northeast Corridor Railroad line in an undated photo, looking south towards the Pulaski Skyway. The swing bridge is open to permit the passage of a barge. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer 165

Image Source: A 1930 view of the former Paterson Plank Road swing bridge crossing Berry's Creek, with people swimming on the south side. The adjoining plank roadway, built about 1856, had already been replaced. Paterson Plank Road was the longest plank road ever built in New Jersey. The wood planks came from the cedar forests that once covered significant areas of the Meadowlands. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer 165

Image Source: The People' s Gas Light Company/ Public Service Electric & Gas Company Marion Office Historic District in Jersey City. The oldest portion was erected in 1870. Extracted from the NJMC Masterplan 2005 edited by Andreas Huemer 165

THE EDUCATOR 168

SOLAR-SPORT PARK 170

ENERGY FLOWS 172

EDUCATOR 174

MEADOWLANDS 176

EPILOGUE 179

THANKS 181

SOURCES 182

RECOMMENDATION 193

RECOM-
MENDA-
TION

SELECTED BOOKS

Cobbers, Arnt, Miniarchitekturführer. Frank Lloyd Wright: Leben und Werk, Verlag: Ullmann/Tandem, Dezember 2006

Wright, Frank Lloyd: The living City, New American Library, New York, 1958

Wright, Frank Lloyd: The disappearing City, William Farquhar Payson; 1 st edition, 1932

Frampton, Kenneth: Modern Architecture. A Critical History. 4 Auflage. Thames & Hudson, London 2007

Frampton, Kenneth: Le Corbusier, Architect of the Twentieth Century, Thames & Hudson, London 2001

Le Corbusier: Towards a New Architecture. Dover Publications, 1985

Le Corbusier: Städtebau. Stuttgart: Deutsche Verlags-Anstalt, 1979. Übersetzt und Herausgegeben von Hans Hildebrandt - Orginaltitel: Urbanisme, 1925

The CIAM discourse on urbanism, 1928-1960, by Eric Mumford, Kenneth Frampton

Kenzo Tange 1946 - 1969 by Udo Kultermann, Praeger, 1970

Notes on the Synthesis of Form by Christopher Alexander, Harvard University Press, 1964

Corner, James, and Alan, Balfour, Recovering Landscape : Essays in Contemporary Landscape Architecture, New York, NY: Princeton Architectural Press, 1999

Charles Waldheim, The Landscape Urbanism Reader, New York, NY: Princeton Architectural Press, 2006, page 203

E. Mumford, K. Frampton: The CIAM Discourse on Urbanism, 1928–1960, Sept. 2002;(395 Seiten) ISBN 0-262-63263-2

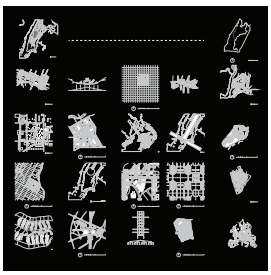
Architecture Culture: 1943-1968 (Columbia Books of Architecture) von Joan Ockman ISBN-10: 0847815226

Architheses: Nachhaltigkeit Sustainability, 2009, November/Dezember Nr.6 ISBN-978-3-7212-0707-1

Shumon Basar: Cities from Zero, 2007 AA Publications, ISBN 978-1-902902-60-9

Kenneth Frampton, Le Corbusier, 2001 Thames & Hudson ISBN 0-500-20341-5

Charles Waldheim, The Landscape Urbanism Reader, 2006, Princeton Architectural Press, ISBN-13: 978-1568984391



by Andreas Huemer