BUCHAREST 2025

A NEW PARADIGM

12 TOOLS
3 CONJECTURES
1 VISION
1 STRATEGY

Matei Bogoescu, Master Thesis, 2010
FOREWORD

I would like to thank a number of people that have helped me to arrive at the end of this Master Thesis. I would like first to address my gratitude to my partner Maria Sheherazade Giudici that has always been there for me in the most difficult times (always an inspiration and a great mind). Your criticism was very important for this thesis.

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After the 1989 revolutions eliminated the ‘infamous’ Iron Curtain that divided Europe for over 40 years, the Eastern European block started an accelerated development to match the economies of Western Europe. This process unraveled very fast, under the immense pressure of free market, culminating with the European Union enlargement in two stages (2004 and 2007), transforming a geographical and historical evidence into a spatial reality. Called the biggest enlargement ever, this event propelled ex-socialist countries with different levels of development into a vast spatial complexity of networks concerning both rural and urban settlements. Coming from decades of centralized planning and political-based top-down approach, the new European territories present numerous management problems.

The Eastern European capitals represent not only the main economic and investment gateways for their respective countries, but they are also arenas where ideology, super-fast development, and extreme spatial changes are manifested. After 1989, centrifugal forces generated by rapid privatization, suburbanization and shrinking of public space, have fragmented the centralized hierarchy of these cities; a transition phase between two very different models of urban development started, and in many cases a new paradigm for further development and growth has yet to appear.

The aim of this thesis is to evaluate how infrastructure and open-space can contribute to steer development within this type of urban setting, by re-creating a coherent image of the city and becoming reference frameworks for future evolution. The testing ground of this thesis will be Bucharest, capital city of Romania.

Among eastern European capital cities, Bucharest is possibly one of the most controversial examples of post-socialist metropolis. Being the centre of national representation in the years previous to the second world war, the spatial core of the ideological change from capitalism to socialism during 40 years of communist regime, and playground for chaotic neo-liberal development after 1989, Bucharest is hardly present within the European urban debate due to lack of information regarding its transformation and weak long-term planning strategies.

Bucharest is an urban palimpsest, its spatial characteristics bearing the trace of all ideological changes within its urban fabric. Its accelerated development in two stages (1850s-1930s and 1950s-1989) generated a superposition of fragmented urban projects (signs of various stages of modernity) that were never finished. These stages in its evolution were generated by advances in technology and therefore the reformulation of the infrastructural framework, and changes in the perception of open-spaces as main arenas of publicness.

After 1989, the inability of the City to produce a new infrastructural paradigm and its careless treatment of the open-space through market speculation produced chaotic development, extreme fragmentation, lack of public space, and last but most important, the lack of public thrust in planners.

With this problem setting in mind there are a few questions that become the backbone of this thesis:

- How could we use infrastructure and open-space to describe the future of Bucharest?
- Can they act as frameworks to produce a new paradigm for the city?
- Can Bucharest become a testing ground for conjectures that become relevant at a wider scale?

These are the main questions to which this thesis research should be able to answer. By developing conjectures illustrating how Bucharest could be shaped around infrastructure and open-space, the ambition of this work is to produce guidelines and tools for an isotropic and permeable Bucharest.

0.1 PREMISE

The monumental axis and the cardboard urbanism

"The People’s House and Unirii Boulevard" (source: Bucuresti 2000 International Competition)
WHY BUCHAREST? WHY THE POST-SOCIALIST CITY?

Twenty years after the fall of the Iron Curtain, the post-socialist city is seen on its way to successfully transform into its European capitalist counterpart. Urban studies have analyzed in depth how this transition affects both society and built environment, and, beyond some twinning problems, the post-socialist city appears indeed to be today almost all right. Once the testing ground of extreme sociallems, the post-scarist city appears indeed to be today a place of transition, the threshold between East and West, Christianity and Ottoman empire, Latin culture and Slavic spirituality. The post-socialist city is somehow undergoing the same transformation of the Western cities, only in a much shorter time span—and, surely, starting from a very different ideological framework. However, the decay of industry, the dissolution of the nuclear family, and the rise of car-based mobility had enormous influence on both Western and post-socialist cities, with the notable difference that behind the Iron Curtain there were no issues appearing suddenly and thus generated very visible results on the morphology of the city itself. Bucharest is today an archipelago of mismatched fragments where the large-scale housing estate of the socialist Golden Age clash with a proliferation of office clusters, gated communities and shopping malls. This situation is commonly seen as ‘bad but unavoidable’, and, quite simply, totally uninteresting. But the paradigmatic value of the post-socialist city in the contemporary context lies precisely in the juxtaposition of the clichés of capitalist urban space and the environments produced by the project of ideology.

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self-sufficient enclaves are extremely successful in such an unstable scenario; as it provides investors with a product that does not depend too much on external conditions. However, the thesis will try to argue that other solutions can exploit the existing potential to generate new urban intensity rather than merely securing clear perimeters to defend certain activities from a city that is sinking into chaos.

As much as we would like to believe that the Western city is immune from the rise of the enclave and the dissolution of traditional urban anatomy, all signs point to the contrary. Therefore, the capitals of the Iron Curtain can become the laboratory for contemporary paradigms that might apply to Western cities as well.

Thought-provoking proposals can emerge precisely from the gray areas that are considered to be too unstable or too chaotic that are actually undergoing crucial transformations in an extreme post-dish-like condition.

Post-socialist cities lie today at the periphery of the Empire, and between them, Bucharest is surely one of the most peripheral—not only because of its struggling economy, but also because it has been from the start an extraordinary place of transition, the threshold between East and West, Christianity and Ottoman empire, Latin culture and Slavic spirituality. In its liminal position, Bucharest will be assumed as paradigmatic case of post-socialist laboratory to expose the potential of the contemporary urban condition.
The post-socialist city is the place where the dormant conflicts of the current condition become visible, as such it can become a possible testing ground for alternative spatial and infrastructural solutions. Between the Iron Curtain capital, the thesis will focus on Bucharest as exemplary case of the general condition.

The choice of Bucharest is not casual, because of its mixed blood characters, in lack of strong territorial features and its fragmented urban morphology, Bucharest has prevailed to several major urban reorganizations in the last two centuries, and will therefore serve as a case study for the development of new strategic tools.

The thesis will be divided in a preliminary research and a strategic proposal for the city of Bucharest. Both the research and the proposal are structured around three main themes that reflect the conflicts of the post-socialist city that will uncover also its hidden potential and underline the paradigmatic value of Bucharest’s case in a wider scenario.

First, a reading of the conflicts of the post-socialist city that will be treated as crucial aspects of an urban condition in transition, therefore addressing the contemporary city at large through Bucharest as specific extreme case of democratic, post-industrial, neo-liberal capital.

While this might seem a paradoxical definition for an East European city, Bucharest is all of these things. It is a European capital – only it has been produced in less than two decades rather than through a gradual process of hundreds of years, a fact that causes all of its conflicts to be all the more violent, all of its failures all the more evident.

The project will therefore develop a new take on the three main urban themes that the research has outlined, and put forward alternatives to the proliferation of enclaves that is shaping the city today. While one can argue that there is nothing wrong in industrial areas to the production of services, and the public open space and its potential in the era of enclaves.

With these three aspects as leitmotiv of the whole thesis, the research will be structured in three steps:

1. A preliminary research that will uncover also its hidden potential and underline the paradigmatic value of Bucharest’s case in a wider scenario.

2. A strategic proposal for the city of Bucharest that will try to put forward possible conjectures related to the city today. While one can argue that there is nothing wrong in industrial areas to the production of services, and the public open space and its potential in the era of enclaves

3. A final retelling of the urban grammar of Bucharest, a grammar that is hardly understandable in the extremely complex and chaotic canvas the city presents today.

The discourse on housing, public housing and living density is of course present throughout the thesis as the basis of the strategic proposal are structured around three main themes that reflect Bucharest’s case in a wider scenario.

First, a reading of the conflicts of the post-socialist city that will uncover also its hidden potential and underline the paradigmatic value of Bucharest’s case in a wider scenario.

Secondly, an analysis of the territorial condition of Bucharest aimed at understanding its main characteristics; namely, high density and structural fragmentation.

Lastly, a synthetic retelling of the genealogy of mobility, public open space and productive space in the last two centuries of Bucharest’s history.

Through the genealogy of the three main themes, the thesis seeks to reconstruct the urban grammar of Bucharest, a grammar that is hardly understandable in the extremely complex and chaotic canvas the city presents today.

Bucharest is apokalypsin; a remodeling of its history can have a proactive value only if it is aimed at building a vocabulary for the city and at establishing a continuity of sorts between the evolution of the city and the proposal of future interventions. This continuity should not be considered in a literal or historical way; it is a matter of letting the existing anatomy of the city emerge rather than overlapping another superfluous layer.

As to how this anatomy can emerge, in the second part of the thesis, I will try to put forward possible conjectures related to the project will therefore develop a new take on the three main urban themes that the research has outlined, and put forward alternatives to the proliferation of enclaves that is shaping the city today. While one can argue that there is nothing wrong in industrial areas to the production of services, and the public open space and its potential in the era of enclaves.
Chapter 1: Bucharest as Post-Socialist City

INTRODUCTION AND METHODOLOGY

This chapter is dedicated to the effects produced in Eastern Europe and particularly in Bucharest by the transition from a centralized socialist structure to a capitalist neoliberal organization.

URGENCIES AND CONFLICTS are the two categories that are studied following the triad: mobility/production/openspace at different scales.

Firstly we will quickly pass through a series of URGENCIES common to all the Post-Socialist Capital Cities in Eastern Europe. A series of 12 cities was chosen for this comparative analysis.

Secondly we will review the mobility, production and openspace related CONFLICTS that were generated by the post-socialist condition, focusing on Bucharest as a case study.

Thirdly we will arrive to conclusions regarding the ability of the present planning tools to cope with these URGENCIES and CONFLICTS.

The maps and the data were produced using the following sources:

URGENCIES:
- European Commission: Mobility and Transport division - Pan European Corridors
- European Union - CIA - The World Factbook
- ESPON: European Observation Network, Territorial Development and Cohesion

CONFLICTS:
- National Institute of Statistics
- Urban Audit

While the built environment is constantly evolving, the dynamics of urban change vary in speed and character. Some periods are characterized by a continuation of existing trends and traditions, accumulating slow evolutionary changes. Others are marked by turbulence, conditioning a radical transformation in a relatively short stretch of time. The latter are known as periods of paradigm shifts and revolutionary changes, and there is no clear consensus on how long these transitions last. The years since 1989 mark such a period in the history of Central and Eastern Europe.

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1.1 TWELVE POST-SOCIALIST CAPITALS

Urban changes brought by the collapse of communist regimes in the former socialist countries are as important as changes induced by the establishment of those regimes. They seem to be even more intensive, due to the fact that they comprise two simultaneously happening transformations. One is the complex of transitions towards a democratic and pluralistic society and from a centrally planned economy to a market economy. The other are changes brought by globalization processes: "All West, East socialist and post socialist cities are important for forward looking urban studies, 2005"

1.1.1 URGENCY #1

CONNECTION [MOBILITY]

One of the urgencies to which post-socialist capital cities must respond today is the connection to Western Europe and a general improvement of the accessibility in order to attract direct foreign investment. At european scale an answer to this imperative is the project of the Pan-European Corridors. However, it is critical to investigate what spatial effects will these pan european corridors generate at the smaller levels of the metropolitan area or city scale.

"The important role of transport infrastructure for spatial development in its most simplified form implies that areas with better access to the locations of input materials and markets will be more productive, more competitive and hence more successful than more remote and isolated areas (see Linneker, 1997). This relationship has been taken up in the European Spatial Development Perspective which gives improvements in accessibility a high priority as a policy target: ‘Good accessibility of European regions improves not only their competitive position but also the competitiveness of Europe as a whole’ (ESDP 1999, 69)." (Klaus Spiekermann, Jörg Neubauer, European Accessibility and Peripherality: Concepts, Models and Indicators, 2002)
The post-socialist capital cities are development engines for their countries. Their higher accessibility and relevance at national level make them a prime target for direct foreign investment and therefore subject to an extreme change in production patterns from an industry based economy to a service economy.

In Europe, capital cities as well as other big cities play a decisive role as engines of development for the regions surrounding them and, in some cases, the whole country. They offer important potentials to solve problems of these regions. The stronger their problem solving capacity is, the better they function as development engines for regions lagging behind and for urban areas within the cities. Investing in the problem-solving capacity of capital cities and other big cities means creating better opportunities for enhancing the development of urban areas in difficulties within the cities.

The rate of the post-socialist urban changes is striking, leading to radical transformations in the character of the Central and Eastern European cities. From high-density, monocentric settlements, dominated by high-rise public housing and communal modes of transportation, the CEE cities are being transformed into sprawling, multi-nodal metropolitan areas reaching extreme levels of privatization of housing, services, transportation, and public space. Privatization has become ‘the leitmotiv of post-socialist urban change’ (Bodnar, 2001).

Large chunks of the post-socialist city have been designed to work in closed circuit, especially through the construction of the large housing estates, that are not adapted to the mobility and flexibility requirements of the contemporary city. The public openspaces of the socialist society are as obsolete today as the those of the bourgeois society that preceded it.

### 1.1.2 URGENCY #2
**ECONOMY [PRODUCTION]**

The post-socialist capital cities are development engines for their countries. Their higher accessibility and relevance at national level make them a prime target for direct foreign investment and therefore subject to an extreme change in production patterns from an industry based economy to a service economy.

### 1.1.3 URGENCY #3
**RE-CONVERSION [OPENSPACE]**

The rate of the post-socialist urban changes is striking, leading to radical transformations in the character of the Central and Eastern European cities. From high-density, monocentric settlements, dominated by high-rise public housing and communal modes of transportation, the CEE cities are being transformed into sprawling, multi-nodal metropolitan areas reaching extreme levels of privatization of housing, services, transportation, and public space. Privatization has become ‘the leitmotiv of post-socialist urban change’ (Bodnar, 2001).

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Warsaw, Bucharest and Sofia are the post-socialist capital cities with the largest share of population housed in monofunctional neighbourhoods of prefabricated blocks.

Approximately 70% of Bucharest’s inhabitants live in large housing estates built during the communist regime. The public authorities have proceeded to a shameful retreat from the management of these urban territories and owners associations do not have the capacity to deal with all the problems related to the collective living conditions. The communities are characterized by non-functional mixity and do not form a true community of interest and values. Atomization of plattenbauten living can lead to family tragedies and architectural disasters. [...] Urban policies are needed to improve the quality of collective living conditions. We must keep social mixity and improve accessibility in order to prevent the segregation and ghetto-isation through active measures. 

(Declaration for Bucharest – Urban policies chart 2007)

Of all post-socialist capitals, Bucharest has the smallest urban area, the highest density and the largest population, which makes it a critical case study for post-1989 transformations.

The urban policies of the communist regime have produced an extreme densification in most part of Bucharest’s neighborhoods. Unfortunately, the urban evolution during the transition has worsened the situation leading to an abrupt decrease in the quality of urban life due to further densification in those areas that were untouched by communist transformations.

With a large population compressed in a small urban area, living space is too little. We have the right to a healthy and ecologic environment. Pollution reduces our lifespan and affects severely the quality of life of the city. We must plant back the one and a half million trees cut in the last eighteen years.

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(Declaration for Bucharest – Urban policies chart 2007)
An essential point of this preliminary research is to establish which are the common patterns of development and the conflicts that post-socialist capital cities share.

From the brief analysis of these conflicts (that correspond to the three main layers of spaces: mobility, production and openspace), the thesis underlines certain problems which become starting points for the development of conjectures and strategies aimed at the improvement of the post-socialist city.

In this chapter, Bucharest is used as a paradigm to illustrate these assumptions.
1.2.1 CONFLICT #1
PUBLIC TRANSPORT /vs/ CAR-BASED DEVELOPMENT

The major part of the post-1989 developments in Bucharest are totally car-based and therefore poorly or not at all connected to the existing public transport system. This situation generates total meltdown of the traffic system and reduces accessibility within city limits.

(a new public mobility plan should balance the total car dependency with an intermodal isotropic public transport system)

In the area of transportation, while personal mobility has increased with the explosion of automobile ownership, the level of public transportation services has decreased considerably. This has resulted in significantly higher levels of congestion and sharp increases in air and noise pollution. The situation has been worsened further by the suburbanization of housing, offices, and retail with all negative environmental, fiscal, and social consequences, well-known from the experience of the Western cities with such patterns of urban growth.

(Kiril Stanilov, 2007)

Left:
Daily traffic jam on one of the radial thoroughfares
source: Traffic Control Centre, Bucharest

Growing car ownership > number of licensed vehicles

Decreasing traffic speed > average car speed in the urban area (km/h)

Right:
Public transport coverage with respect to post-1989 developments
source: Matei Bogoescu
1.2.2 CONFLICT #2
INNER BROWNFIELDS /vs/ GREENFIELDS

While large industrial areas close to the center are decaying, new tertiary activities drive the post-1989 developments that proliferate in the openspaces and greenfields of the city. This dynamic produced an abrupt decrease of public greenery and therefore a fall of general living standards.

The invigoration of the post-socialist urban fabric with garish new structures and a mosaic of various activities has not affected all areas equally. Much of the real estate investors’ attention has been concentrated in the city centers, the prestigious neighborhoods, and, most of all, in the suburban periphery where rampant commercial and residential construction has obliterated the landscape. The legacy of the communist period – the industrial zones covering up to a third of the territory of the socialist towns – have been lying vacant or underutilized, forming large patches of dead tissue in the urban fabric.

Kiril Stanilov, 2007

Left: Abandoned brownfield close to the center of Bucharest
Source: Bukres Blog, http://bukres.blogspot.com

Right: The disposition of brownfields in Bucharest (black) and the position of post 1989 developments (red)
Source: Matei Bogoescu
The extensive population of the periphery with one family houses, big boxes of retail and services, led to a depopulation of the center and a decay of previous forms of public open space. As a result, the built environment became increasingly difficult to read and to manage. (a new form of public open space is needed to re-create structure within sprawl and fragmentation)

While the market has diversified individual choices in terms of the available types of dwellings, work environments, shopping and leisure opportunities, many neighborhoods have witnessed the closure of community facilities and the disappearance of playgrounds and open space. Many of the new suburban developments lack basic public services. (Kiril Stanilov, 2007)

Left: Pipera, one of the richest sprawling suburbs north of Bucharest
Source: www.bloombiz.ro

Right: Suburban sprawl and radial traffic arteries Bucharest
Source: Matei Bogoescu
1. As the case of Bucharest demonstrates, even in the absence of real population growth, the city is expanding horizontally at exceptional speed due to general changes in wealth, lifestyle and productive activities. The standardized development of the previous regime was replaced by a generic emulation of Western models.

2. The 5 year masterplan inherited from the past is unable to cope with the very rapid ‘wild west’ style development of the neo-liberal city. As consequence new planning tools are required to address mobility, production and open space.

3. Conjectures and flexible strategies based on the use of guidelines are more effective instruments to define a new anatomy for the post-socialist city.
This chapter is placing Bucharest in the larger framework of its surrounding territory in order to set a limit and scale for the subsequent analysis and project.

The particular way in which Bucharest grew, creating a dense and concentrated urban environment imposed over a fragile linear structure of the surrounding built landscape, generates the specific character of this relationship.

The chapter is composed as a sequence of zoom-ins trying to scale up the city with regards to the national level, regional level and finally the metropolitan level.

It will analyze the urban pattern, the landscape and the infrastructural layout of the city with respect to these different scales.

Finally it will conclude setting the scale of the project and the limits of the study area.

The maps and materials presented in this chapter were produced using the following sources:

- Google Earth and Google Maps: maps.google.com
- Zona Metropolitana Bucuresti (Bucharest Metropolitan Area): www.zmb.ro

INTRODUCTION AND METHODOLOGY

REGIONAL PATTERNS

METROPOLITAN AREA

RADIAL STRUCTURE

2/ BUCHAREST AS COMPACT CITY
Bucharest is tolerated as capital of Wallachia by the Ottoman rulers because it is virtually impossible to defend due to its unfavorable topographic condition. Lying in the middle of a plain dominated by the Danube, it is a weak capital of the eighteenth century rapidly develops into a thriving centre of trade as the commercial connections improve during the first half of the nineteenth century.

The city is from the start a morphologic accident in a clearly defined urban structure, Bucharest is an intense punctual agglomeration; its character of exception in a clearly defined urban ecology is not only a key condition of its foundation and early development; still today, the city struggles to negotiate a relationship with the landscape. But this relationship has never really existed, partly because the Ottomans prevented Bucharest from becoming a real managing element of its territory in order to protect their political interests.

In the real estate boom of the past decade, the fragility of the relationship between Bucharest and its territory has become dramatically visible on several levels. First of all, on an administrative point of view the metropolitan area is impossible to manage as it does not form a single juridical entity - the City of Bucharest proper and is burdened by extreme density and covers too small an area to be able to enforce large-scale policies. As the peripheries have developed without a plan and with extreme social and economical differences, no consensus is ever reached on any kind of regional plan.

The analysis of the regional scale therefore underlines the backbone the city needs, the introduction of a large- scale strategy of open spaces could eventually provide a much needed public layer able to negotiate the balance between city expansion, rural areas and nature.

Finally, if we accept that the ring of fortification has become an asset at level of the city, it is of primary importance to consider for the surrounding landscape.

The ring of fortifications, in fact, is the largest - and the only complete element - of a series of three ring roads that are still readable as street framework of Bucharest. The fact that the inner ring roads are not complete generates an increase of traffic in the radial thoroughfares that link an overcongested centre with the quasi-rural linear settlement network of the periphery. The situation is both problematic in terms of traffic, and unclear in terms of urban anatomy.

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The radial system fail to manage a situation that becomes increasingly difficult due to the ever-growing importance of private car transport compared to the dwindling budget of the public transport agency.

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A strategy for Bucharest should therefore consider both the potential and the issues of such a street structure, while the radial system could be reinforced and finally become the physical limit of Bucharest and, as such, its only interface with the surrounding landscape.

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2.2 REGIONAL PATTERNS

Situated in the Romanian Plain, Bucharest is a high intensity / high density urban agglomeration in an urbanized carpet structured by low density linear settlements following the water courses. (even if today it is rapidly expanding outwards through suburbanization, Bucharest can still be considered a compact city)
The rivers act as ecological corridors linking the Carpathian Mountains to the Danube. The forests, like the linear urbanization patterns, are concentrated along the rivers, sometimes creating buffer zones within the built areas. Bucharest is situated on 2 of these ecological corridors that have had significant impact on the structure of the city. (Any important open space project for Bucharest must consider the 2 corridors).

The regional infrastructure follows a radial pattern connecting the capital city with the major urban centers. This layout is opposed to the pattern of the small centers that are organized as linear developments. (A new strategy for the city should try to reconcile this two opposing anatomies).
An analysis of the Bucharest Metropolitan Area reveals a high difference between the inner city and its surroundings with the capital concentrating the major part of the built mass and density while the surrounding territory serves as an ecological buffer zone and support for rural activities. (It is too early to talk about a regional area of Bucharest since the density difference is so radical and functional integration is low)

The radial structure of the city creates a fragile flow situation overdependent on the city center. Public transportation (tram and metro) is strictly limited to the inner areas of the city and is not connected to the external ring road.

(a project for the city’s mobility structure must overcome the dependence on the radial roads and link public transport to the external ring road)
Although the city sprawled significantly during the last two decades, the major part of this spillover has occurred within the external ring road and therefore Bucharest remains a compact agglomeration in contrast with its surrounding urbanized territory.

The high difference in density between Bucharest’s city area and its surroundings supports the assumption that the real project at this stage is the city itself, as defined by the external ring road.

The radial structure which introduces an enormous fragility in the system due to its rigidity must be challenged through a new infrastructural project which will enhance the flexibility and the flow capacity within the city.

Public transport has to be extended and connected to the external ring road acting as a transfer point between the city and its territory.

The choice of a specific area as target of this thesis’ analysis and design proposal, has been made according to the characteristics of Bucharest with respect to its region. Even if there is a growing exchange between the capital and the surrounding settlements, most of the conflicts and issues related to mobility, unequal urban development and social dynamics are concentrated within the outer ring of the city.

Taking the outer ring as limit of this project is also justified by its physical appearance as filter and exchange device between the capital and its territory.

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1. The high difference in density between Bucharest’s city area and its surroundings supports the assumption that the real project at this stage is the city itself, as defined by the external ring road.

2. The radial structure which introduces an enormous fragility in the system due to its rigidity must be challenged through a new infrastructural project which will enhance the flexibility and the flow capacity within the city.

3. Public transport has to be extended and connected to the external ring road acting as a transfer point between the city and its territory.
The aim of this chapter is to follow the way in which Bucharest was built over time following different rationalities, politics of space and mentalities and to extract a series of tools (urban images, spatial devices and urban components) that will serve as guidelines and images for the projection of possible futures of the city. After the depiction of generic urgencies and conflicts challenging Bucharest as a Post-Socialist City in the first chapter and their more or less specific effects, it is important to highlight the peculiarities embedded in the construction of this particular city, in order to be able to think a follow-up to its story.

Bucharest, as many other European cities has seen an accumulation and superposition of political-technological spaces (Read, 2010) which have produced particular places. The collection of these places and their spatial effects provide the toolkit that we will use to re-think the future of the city. Places produced by different political-technological spaces become tools used to re-semantize the city.

In this chapter the analysis will follow the reader through six periods in the evolution of the city, presenting four images for each period together with a written description and tool definition:

- an urban extension map which will highlight the way in which the city grew.
- a mobility map revealing which parts of the city are integrated or isolated at each point in time, and which image of the city was created through transport technologies.
- a production map which shows the evolution of production patterns from craftsmanship to heavy industry and services and their spatial effects within the city.
- an openspace of public appearance map which is an attempt to render the visible city - the urban representation of publicness at each period in time.

The maps are drawn following historical maps and archive materials with the exception of the openspace map which is a spatial interpretation of the writings, pictures, maps and movies related to each period, in which parts of the city become visible while others disappear.

The choice of the triad mobility / production / openspace is coherent to the focus of the previous chapters and to the conjectures of the fourth chapter.

3/ BUCHAREST AS PALIMPSEST
3.0 STREET NETWORK EVOLUTION

1800 - 2005
3.1 THE OTTOMAN CITY

The commercial routes linking the German Towns to Constantinople (equivalent of today’s Pan-European Corridors) have contributed to the growth of Bucharest between 1700 and 1820. Source: Dana Harhoiu: București, un oraș între Orient și Occident.
3.1.1 MAIDAN AND ULITZA
ORGANIC NETWORK

The Ottoman Bucharest is an agglomeration of ‘mahalale’ (small centralities grouped around churches and maidans) linked by a circulation structure that serves as traffic space, gathering place and sometimes workspace. The complex street lattice resulted through a spontaneous, not planned development of pathways and links is still visible today in the road structure of Bucharest’s city center.

Bucharest is also known, in its pre-modern structure, as a place articulated around irregular public spaces, more located in the proximity of Orthodox churches as spaces for the gathering of various guilds. These spontaneous spaces are called MAIDAN (a term derived from Ottoman). (Augustin Ioan, O (noua) ‘Estetica a Reconstruirii’, 2002).

The MAIDAN as urban space (not planned, irregular, spontaneous) is an archetype of what we could call today the emergent informal public space or ‘commons’ space of use. With the continuous control, restrictions and erosion of traditional formalized public spaces undergoing today the concept of MAIDAN re-emerges as an interesting tool for the urbanist.

The MAIDAN is a spatial device that supports the unplanned, the unpredictable social activities - a social condenser. ‘Programmatic layering upon vacant terrain to encourage dynamic coexistence of activities and to generate through their interference, unprecedented events.’

Left: Image of premodern Bucharest – a low density, low height green super-village with churches as points of intensity expressed vertically
Above: street structure Bucharest 1890 articulated by MAIDAN spaces
Above: larger streets where carriages can pass through

Above right: street structure Bucharest 1890 articulated by MAIDAN spaces

Bucharest 2025: a new paradigm
3.1.2 PARISHES AND SUPERVILLAGE

POLICENTRISM

The policentric organization in parishes concentrated around churches, creates almost isolated environments of life and work that compose a loose agglomeration centered on main commercial routes. The city is in fact a supervillage, perforated by huge voids of vegetable gardens and orchards. The concept of formalized public space appears for the first time with the construction of the central garden.

**TOOL #2 CONSTELLATION - DEFINITION**

It is still possible today, after the ravages of the last age of the Communist regime, to identify in Bucharest’s structure a cosmological order in the disposition of its numerous small orthodox churches. The churches acted as centers for local communities (MAHALALE) which composed the city. The first image of Bucharest - The city as an ARCHIPELAGO - comes from the spatial configuration of multiple centralities that was specific to the premodern city.

**TOOL #3 VALLEY - DEFINITION**

Born as a green city, a supervillage, Bucharest was spread north of a large river valley. The valley was in the past a productive and recreational landscape, but the regulation of the river (Dambovita) and the subsequent growth of the city, have occluded the once powerful landscape that crossed the city from one side to the other.

The second image of Bucharest - The city as a LANDSCAPE - is based on the strong spatial and ecological importance that the river valley had within the premodern city.

Left: River Dambovita 1837

A natural landscape crossing the city from west to east

Source: aquerelle by Auguste Raffet

Above: church distribution Bucharest 1800

Reflect the policentric organization of the city

Back to 2023: A new paradigm

PRODUCTION AND OPENSPACE
3.2 PARIS OF THE EAST

The Paris of the East represents a significant urban development in Bucharest during the period between 1859 and 1918. The image illustrates the dense urbanization and the growth of the city's center, as well as the areas that were transformed into new institutional centers and administrative hubs.

Victoriei Boulevard, for instance, shows the French influence that is clear in this urban space, which became an attractor for new institutions and a center of representation of the capital city. The densification and gentrification of the center and the working-class periphery were key aspects of this transformation.

The diagram highlights the spatial layers of Bucharest, emphasizing the political-technological space and the governance events that shaped the city's development.
The new role as capital of a nation state imposes a shift from the previous policentric organization to a linear redefinition of the city center through the construction of boulevards and a new streetcar system.

These new mobility spaces introduce a hierarchy in the isotropic premodern circulation lattice. The dialectic center-periphery is born once the extension of the city goes beyond the external urban ring.

**Tool #4 Boulevard - Definition**

The concept of Boulevard was introduced in the planning of Bucharest in the second part of the 19th century. The urban space was used as a political and spatial manifest of Bucharest's transition to another age, inspired by Western and especially French urban models and was often accompanied by a streetcar or tram line. After being imported from Paris, the typical Bucharest Boulevard mutates into a specific local form: it represents a sequence of important landmarks: institutions, museums, palaces, or a display of new architectural paradigms in the form of private villas. Although some rules were built to ensure the architectural and urban coherence of the Boulevard, the main spatial characteristic of its local declination is the Sequence and not the Unity. Therefore, the Bucharest Boulevard is like a window, and this becomes a crucial characteristic which makes the contemporary reinterpretation of this spatial tool interesting.

The Boulevard is a spatial device that articulates sequences of centralities at different scales (from the singular building to the cluster).

**Tool #4 Boulevard**

![Image of Boulevard](source: Calea Victoriei Foundation)

Left: The new streetcar infrastructure defines areas of higher intensity within the urban fabric.

Below: System of boulevards introducing hierarchy in the city center and spontaneous growth of periphery.

**Boulevard 2025: a new paradigm**

Bucharest 2025: a new paradigm.

**Tool #4 Boulevard Extension**

![Image of Boulevard Extension](above: tram and railway development. The railway starts to create a powerful limit to the growth of the center, while the tram redefines the intensities in the center.

Source: Calea Victoriei Foundation)
3.2.2 DEFINING THE CITY LIMITS
RING CONCENTRATION

Both industries and gardens being built in this period are located on the urban ring, highlighting the limits of the city center, detaching it from the growing periphery. While the industry is concentrated on constructing a new dense and durable city with its brick factories, the garden is representing the new space of public appearance for a growing bourgeoisie.

![growing industry on the ring starts to isolate the city center from the newborn periphery](above)

### TOOL #5 RING - DEFINITION

Born in the premodern era as an infrastructure connecting the commercial gates of the city, the concept of RING was reinforced by two main planning decisions of the late XIX century and early XX century:

- The placement of production areas on the limits of the inner city (that becomes at this point the city center) along the old gates road (INDUSTRIAL RING).
- A plan from 1906 which establishes a series of gardens articulated by a green ring around the city center, creating a circular recreational openspace (GARDEN RING).

The RING concept is restated in later periods (see chapter 3.3.1 - the forts ring built to protect Bucharest (FORT RING) and 3.4.1 - the boulevard articulating the large housing estates developments (BOULEVARD RING)).

The third image of Bucharest - The city as a RING - comes from this latent project that aims at the organization of the city through circular infrastructures at different scales and with different purposes.

![the space of public appearance is the new system of landmarks and gardens which became symbols for the new city](above)
3.3 EUROPEAN MODERNITY

BUCHAREST SPATIAL LAYERS
THE POLITICAL-TECHNOLOGICAL SPACE

European Modernity

Paris of the East

The Ottoman City

[1918......1947]

Left: Regina Elisabeta - a representation of technology and modernity influenced by Bauhaus urban composition principles
Source: Calea Victoriei Foundation

Central interventions on existing boulevards
Poor undeveloped colonies
Rural colonies
Working class colonies
Clercs, teachers, bankers, bourgeois communities
Veteran colonies

Events
Governance

60 61
3.3.1 MAHALA AND BOURGEOIS CITY CENTER vs PERIPHERY

The interwar period is a moment of double growth:
1. the extension of a bourgeois city of clerks, public servants, bankers and industrialists to the north through the use of the axis and the new tram technology.
2. the proliferation of autonomous rural and working class colonies concentrated in strategic points on the main thoroughfares and not connected to the overall mobility system.

**Tool #5: Colony - Definition**

The concept of COLONY appears after the Great War, when Bucharest doubles in surface following a atypical pattern. Instead of a large plan for the city extension as was usual at the time, Bucharest’s growth is managed through the establishment of a series of COLONIES (suburban compact areas of low high-density housing).

These COLONIES are independent from the inner city and centered on different economies like farming or industry while the center is concentrated on banking, finance and knowledge production.

**Tool #7: Fort - Definition**

The FORTS RING is built little before the Great War as a defensive system for the city.

The FORT is a component that was used in Bucharest for the control of the surrounding territory and the defense of the city.

![Image](https://via.placeholder.com/150)

**Tool #6: Colony (High Density, Low Rise Areas)**

**Tool #7: Fort**

**Extension and Mobility**

The interwar period is a moment of double growth:
1. the extension of a bourgeois city of clerks, public servants, bankers and industrialists to the north through the use of the axis and the new tram technology.
2. the proliferation of autonomous rural and working class colonies concentrated in strategic points on the main thoroughfares and not connected to the overall mobility system.
3.3.2 CELEBRATION OF TECHNOLOGY

EVENT PARK

Both industry and openspace of this period are promote the advance of modernity and new technologies. While the industry builds the new mobility machines, the birth of the exhibition park is offering a stage on which the urban evolution can be introduced to the masses. While the new industrial strips along the railway isolate the center from periphery, the extension of the openspace of public appearance is limited to the rich northern suburbs.

The concept of EVENT PARK is created in 1930’s with the creation of the largest green openspace of Bucharest: Herastru Park. Built as recreational space for the new bourgeois class of the capital the park soon becomes the ideal stage for the main EVENT happening in the city: LUNA BUCURESTIOR, an exhibition of the city itself, with the declared purpose of promoting the great urban projects of the time and the technological advances within the capital.

An early attempt to BRAND the city, the exhibition was not casually related to the main park of the Capital - the ambition of Bucharest was to become a modern, green and aerated city so the marvel of Herastru Park created out of dirty marshes was a demonstration that such an ambition was possible. The EVENT PARK is a component that was used in Bucharest to mix recreational openspace with events in order to potentiate both. The event gave identity to the park and the park offered an enjoyable environment to the event. (It is to remember that the first public space of Bucharest was a garden so publicness and greenery are often associated in the mentality of the population).

The exhibition of modernity and urban identity takes place in Herastru park, newly created event space on the northern river.
3.4 PROGRESSIVE COMMUNISM

PROGRESSIVE COMMUNISM

EUROPEAN MODERNITY

PARIS OF THE EAST

THE OTTOMAN CITY

[1947 … 1974]

Left: The communist thoroughfare and alley system creating a city within a park populated by high density housing slabs. Source: Proiect Bucuresti, Raport de activitate, 1973.
In the 1960s, the city’s population doubles through colonization with a rural population converted in workers. The new social and political paradigm generates a new concept of city in the form of the large housing estates.

Crossed by large green thoroughfares and structured by alleys, the new living areas are inspired by socialist urban models of the same period (particularly western rather than soviet). Public transport evades for the first time the inner city, becoming a structuring element for the whole urban area.

**TOOL #5 RING - VARIANT**

In this period the latent project of the RING is resumed under the form of a partially completed circular boulevard connecting the new large housing estates placed EAST, SOUTH and WEST of the capital. The boulevard was conceived as a modernization of the previous infrastructure that allowed the new socialist colonies to be linked according to the city center that was considered to be a decadent example of urban environment.

**TOOL #6 COLONY - VARIANT**

The large housing estates built in this period following the soviet examples of raion and microraion were conceived as self-sufficient autonomous urban environments where living, work and leisure areas were provided. Their independent character and their freshly new population brought from the countryside gave the large housing estates the character of urban COLONY.

The tram system has become isotropic covering equally all the areas of the city; the tram lines end near the huge industrial areas attached to each large housing estate.

**Extended Mobility**

The tram system has become isotropic covering equally all the areas of the city.

**Ring System**

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**Isotropy Extension and Mobility**

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The tram system has become isotropic covering equally all the areas of the city; the tram lines end near the huge industrial areas attached to each large housing estate.
3.4.2 THE PROJECT OF ISOTROPY
INDUSTRIAL CLUSTERS AND GARDENS

The huge growth of industrial areas is placed with a double rationale:
1. along the railway axes for efficient connection to the rail transport system
2. close to the new large housing estates to limit the mobility demand of the workers.

Production areas start to create brown belts around areas of the city that work in closed circuit. The separate system of institutions, parks and boulevards is extended to the whole city becoming isotropic.

**TOOL #6 COLONY [INDUSTRIAL]**

**TOOL #10 GARDEN**

**TOOL #9 RIVER**

**TOOL #11 COMMUNITY PARK**

The potential of the water landscapes in Bucharest is realized in the 1960’s when the northern part of the capital (Solelarea) becomes an attractor for recreational green spaces.

**TOOL #10 GARDEN - DEFINITION**

The GARDENS mixed with educational or cultural facilities are used in the 1960’s as a tool to balance the city’s social disparities, as they are by definition the first public spaces of the capital. The GARDEN is a component used in Bucharest to create an isotropic social condition and generate quality public spaces.

**TOOL #11 COMMUNITY PARK - DEFINITION**

The community park was created together with the large housing estates as the green heart and main public space of the new community.

The potential of the water landscapes in Bucharest is realized in the 1960’s when the northern part of the capital (Solelarea) becomes an attractor for recreational green spaces.

**TOOL #9 RIVER - DEFINITION**

The RIVER is a spatial device that articulates a sequence of public spaces.

**TOOL #6 BOULEVARD [INDUSTRIAL]**

The community park was created together with the large housing estates as the green heart and main public space of the new community.
Three important moments in the 70’s have had a huge impact on the evolution of Bucharest generating a new paradigm shift:

1. The state visit of president Ceausescu in DPR of Korea and the PR of China in 1971, when the idea of a new form of totalitarian power is born (signs the passage from progressive communism to a form of nationalist dictature following the Kim Il Sung model and the Chinese cultural revolution)

2. The presentation of a new concept for the city through the new systematization plan of 1974. The plan was permeated with postmodern ideas imported from the west of which 2 concepts became crucial:
   - the re-development of urban areas instead of new extensions
   - the return to the urban block as opposed to the stand alone modernist slab

3. The 1977 earthquake showing the fragility of old structures, giving the perfect excuse to demolish and rebuild the inner city

[1971 / 74 / 77]
3.6 URBICIDE

Left: Victoria Boulevard (today Unirii Boulevard): an archetype of the communist cardboard boulevard and a tool for the development of a new city within the existing city.
3.5.1 COREOGRAPHIES OF POWER
DE-CONSTRUCTION OF THE CENTRE

The re-formulation of the inner city during the 1980’s is meant to create a city within a city, to generate a new coreography of power.

The birth of the cardboard boulevard and the physical split introduced by the great axis of Cen-tru Civic was aimed at de-stabilizing and hiding the existing urban fabric, considered representa- tion of an obsolete bourgeois mentality.

The interruption of the public tram system in the inner city and the metro construction are also parts of a plan for the deconstruction of the city as it was previously known, in order to prepare a new image approved by the regime.
3.5.2 WHITE ELEPHANT / URBAN STAGE

INDUSTRIAL DECAY & CARDBOARD URBANISM

As the extensive areas of production created in the previous stage become inefficient (and their maintenance and upgrade too costly), they transform into ‘escaping brownfields’, dividing the city along the railway. These productive wastelands (in fact white elephants of a wannabe European scale economy) are areas of enormous potential and powerful spatial borders within the city. The openspace implodes within the cardboard boulevards which represent the urban stage for a new political and social paradigm.

Above: huge areas of non-performant industries creating strips of wastelands along the railways (represent today the biggest reserve of developable land in the capital).

Source: xxxx

Above: the communist cardboard boulevards - the openspace of the city within the city.

Left: The construction of the communist cardboard boulevards and the translation of the past cultural signs behind the new urban curtains.
3.7 TRANSITION

The political-technological space

The clash of scale and style between the traditional face of Bucharest and the global corporate models that proliferate today is a recurrent image of the fragmented transformation of the urban landscape.

[1989....?]
A common pattern to all other post-socialist capital cities is the concentration of post 1989 development in the periphery, where suburban sprawl, retail and entertainment decentralization occur. The limited mobility demand of the previous stages is turned upside down by the new rationales centered on car flexibility. New exclusively car-based developments occur within the outer ring, creating pressure on the belt and radial road system leading to increased (im)mobility of people and goods.

**DROSSCAPES** are waste landscapes produced by de-industrialization and rapid horizontal urbanization through sprawl — this concept has been explored by Alain Benero in Drosscape, Charles Waldheim (edited by), The Landscape Urbanism reader (New York: Princeton Architectural Press, 2006), pp. 197-217.

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![Baneasa Shopping City](image1)

*Baneasa Shopping City*

*a new retail and entertainment cluster on the north outskirts of the capital, huge attractor of car-based commuters*

![A1 highway](image2)

*The new belt of sprawl and the punctual developments in the consolidated city and the new motorway infrastructure*

![A2 highway](image3)

*The public transport coverage and the disposition of the post 1989 extensions*

![A3 highway](image4)

*The sprawling areas are completely outside of the covered area*

---

*EXTENSION AND MOBILITY*
The space of production and the openspace of public appearance are exiled in this stage within iconic landmarks and big boxes of mass entertainment as the car traffic has taken possession of roads, boulevards and thoroughfares.

Car parking requirements, in a city that was not designed for extensive car mobility, have completely consumed the sidewalks leaving the pedestrian with no solution of continuity in his drift between urban pockets and enclaves of publicness.

The mall is the new street, it even replaces recreational functions specific to the park.

** TOOL #6 COLONY - VARIANT**

The newest typology of production - the BUSINESS PARK - adopts the typology of the COLONY, sometimes by reformulating abandoned industrial clusters, other times by creating new clusters from ideal contemporary examples of the COLONY component.

** TOOL #12 BIG BOX - DEFINITION**

Since the end of the 1990’s public openspace shrunk dramatically in Bucharest due to traffic conditions and land privatization. The typology of the shopping mall was imported from the West but introduced in an american fashion in central areas of the city, often contributing to the final failure of street life and small commerce.

The BIG BOX is a component (a heterotopy) that is used in Bucharest as ‘public’ space with an extreme concentration of activities, recreation and entertainment.

The newest typology of production - the BUSINESS PARK - adopts the typology of the COLONY, sometimes by reformulating abandoned industrial clusters, other times by creating new clusters.

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3.8 FORMA URBIS EVOLUTION
BUCHAREST 1800-2005

1800 - POLICENTRIC AGGLOMERATION
1900 - MONOCENTRIC URBAN CENTER
1925 - ARCHIPELAGO WITH DIFFERENT INTENSITIES
1965 - DONUT (DE-CENTRALIZED) CITY
1985 - CARDBOARD (STAGE) CITY
2005 - URBAN GALAXY
3.9 12 TOOLS PREVIOUSLY USED TO STRUCTURE BUCHAREST AND THEIR CONTEMPORARY INTERPRETATION

TOOL #1: MAIDAN
THE CITY AS AN ARCHIPELAGO
A DEVICE GENERATING POINTS OF HIGH PUBLIC INTENSITY

TOOL #2: CONSTELLATION
A COMPONENT USED TO CREATE EXTREME CONGESTION AND INHABITABILITY

TOOL #3: VALLEY
THE BIG BOX
A DEVICE GENERATING SEQUENCES OF CENTRALITIES AT DIFFERENT SCALES

TOOL #4: RING
THE GREEN AREA
A COMPONENT USED TO STRUCTURE THE PUBLIC SPACE OF THE ARCHIPELAGO

TOOL #5: BOULEVARD
THE CITY AS A RING
A DEVICE GENERATING SEQUENCES OF CENTRALITIES

TOOL #6: COLONY (CLUSTER)
THE REFORMED CLUSTER
A COMPONENT USED TO REINTEGRATE ISOLATED COLONIES (CLUSTERS)

TOOL #7: FORT
A COMPONENT USED TO MANAGE THE CITY EDGE

TOOL #8: EVENT PARK
THE INDUSTRIAL HERITAGE PARK
A COMPONENT USED TO ATTRACTION EVENTS

TOOL #9: RIVER
COMMUNITY PARK
A COMPONENT USED TO CREATE LOCAL IDENTITY

TOOL #10: GARDEN
THE BIG BOX
A COMPONENT USED TO CREATE EXTREME CONGESTION AND MIXITY

TOOL #11: RESERVOIR
THE CITY AS A RIVER
A DEVICE GENERATING SEQUENCES OF RECREATIONAL OPENSPACE
chapter 4

chapter 5

chapter 6

3.10 TOOLS GENEALOGY

3.11 TOOLS MATRIX & TEST CASES - NEW TOOLS GENERATION

[DEVICES + COMPONENTS]

6 NEW DEVICES

6 CASE STUDIES

chapter 5

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Matei Bogoescu EMU Final Thesis Bucharest 2025: a new paradigm
3 urban images

1. CONSTELLATION
2. RING
3. VALLEY

3 conjectures

1. ARCHIPELAGO CITY [MOBILITY]
2. RING CITY [PRODUCTION]
3. PARK CITY [OPENSSPACE]
The three conjectures that will be presented in this chapter are possible spatial interpretations of the future Bucharest starting from the three history-derived images of the city, using the devices and components specific to the evolution of the city (see chapter 3):

**CONSPESTATION** → **ARCHIPELAGO CITY**

**RING** → **RING CITY**

**VALLEY** → **PARK CITY**

They have a different relationship with the previous spatial layers of Bucharest presented in chapter 3:

- **THE ARCHIPELAGO CITY** is an ADDITION to the previous layers.
  - form: a set of small centralities disposed in isotropic form within the city.
  - spatial structure: the MAIDAN device combined with the two components of the GARDEN and the BIG BOX.

- **THE RING CITY** is a CONTINUATION of the latent ring project present in the previous layers.
  - form: three infrastructural rings that repolarize the production areas within the city.
  - spatial structure: the BOULEVARD device combined with the two components of the COLONY (CLUSTER) and the FORT.

- **THE PARK CITY** is a CONNECTION and integration of openspaces created in the previous layers.
  - form: a pedestrian and cyclable strip linking green, cultural, industrial spaces with the river, creating a public openspace section through the city.
  - spatial structure: the RIVER device combined with the components of COMMUNITY PARK and EVENT PARK.
CONJECTURE: a conjecture is a proposition that is unproven but appears correct and has not been disproven.

ROAD SYSTEM TODAY
Highly hierarchized towards the city center and concentrated on radial thoroughfares.

ROAD SYSTEM PROPOSED
Balanced through a series of rings that discourage car access to the city center and absorb flow on different levels through park & ride facilities connected to public transport (see annex 1 for details).

CONJECTURE: a conjecture is a proposition that is unproven but appears correct and has not been disproven.

4.1 ARCHIPELAGO CITY [MOBILITY]

The first conjecture, based on the image of the city as an ARCHIPELAGO, focuses on the issue of MOBILITY as a strategic framework for the evolution of the city. As Bertolini & Dijst notice, ‘The lives of people and the workings of organizations are increasingly independent of urban physical and administrative boundaries, no matter how these are defined. People typically live in one place, work in a second and recreate in a third. Organizations are typically dependent on a range of places of production and consumption scattered across extensive regions’ (Bertolini & Dijst, 2003) and this phenomenon is even more aggressive in the case of the Post-Socialist City that was thought in such a way as to limit the need of mobility by creating independent working-living-leisure areas.

From the previous study we see that Bucharest has a very fragile radial structure that has been put under pressure by all the colonizations that have been made since 1918. The system is even more weak today, since it seems that public transportation due to its inflexibility and inadaptability has lost the competition to the private car. Bucharest’s present immobility makes the city unfit for the contemporary requirements of a dynamic population and new production patterns.
This conjecture proposes a isotropic extension of the public transport system connected to a series of parke&ride facilities, encouraging multimodal travel. This strategy would encourage the citizens to use the public transportation rather than rely on the use of the private car. Commuting time would decrease significantly improving the quality of life and the efficiency of working hours.

The ambition of this conjecture is to build a new image of the city (mobile ARCHIPELAGO) overlapping a series of public transport gates (points of intensity) over the fragmented and dishomogeneous urban landscape of the city.

Again citing Bertolini & Dijst:

‘Physical places still fulfill an essential role in our open urban systems. In particular, places where mobility flows in interaction – such as airports, railway stations, and also motorway service areas or urban squares and parks – have the potential for granting the diversity and frequency of human contacts that are still essential for many urban activities.’ (Bertolini & Dijst, 2003)
The second conjecture, based on the image of the city as a RING, focuses on the issue of new areas for PRODUCTION as strategic environments for the economy and growth of the city.

"The strong priority placed by centrally planned economies on rapid development of industry has given rise to a counterpart process in transition: de-industrialisation" (J.S. Earle 1997)

"The economic growth, as a characteristic of our era, is considered not only a dynamic process but also a structural one being deeply influenced by the basic components of the national economy. A rational strategy of timing economic-social development should consider the services as a strategic sector able to develop and restructure the Romanian economy in the context of its integration in the European Union" (Maniu, 2009)

With the development of new production patterns and the progressive abandon of old industrial platforms, Bucharest is challenged today to a large size transformation. This metamorphosis from an Industrial City to a International Service City has failed until now to produce a fresh urban image, a new spatial paradigm of the contemporary productive city.

The new basic spatial unit of the changed production system - the office building - has followed in Bucharest patterns similar to those in other Post-Socialist Cities. From center high-rise buildings to business parks situated on top of ex-industrial platforms, the proliferation of new work environment failed to produce until now spatial quality and identity.
This conjecture takes into analysis the previous spatial disposition of productive areas and the new mobility networks in order to build an image of how the contemporary productive city should look like. Based on the tool of the RING as spatial structure of the city created since the premodern era and reinforced during the incipient phases of the socialist era, the RING CITY describes Bucharest as an urban environment structured by three different production rings with different vocations:

- the STAGE RING is the limit of the premodern city, a place where historical gardens, abandoned industrial areas of the interwar period, communist cardboard urbanism and new landmarks of contemporary multinational firms are displayed. The main vocation of this ring to become a congested display window of urban transformation, a bridge between different ages of the city.

- the CORPORATE RING is the space that contains most of the large industrial platforms of the 1960s and 1970s. Its challenge is to produce a new form of global production cluster: a place of main infrastructures: urban boulevard, tram ring strategy: CONGESTION

- the EDGE RING is where the city exhibits most of its urban paradigms: a place where historical gardens, abandoned industrial areas of the interwar period, communist cardboard urbanism and new landmarks of contemporary multinational firms are displayed. The main vocation of this ring to become a congested display window of urban transformation, a bridge between different ages of the city.

The functional structure of the RING CITY is formed of two main infrastructures: an urban boulevard and a tram ring system, where forts become centralities and interfaces between the inner city and the metropolitan area.
work, living and leisure, plugged in to the rest of the city (see chapter 5 - POLARIZED CLUSTER).

- the EDGE RING is the limit environment between the inner city and the growing suburbs. Based on a large scale re-conversion of the defensive FORTS of the city as centralities, this ring tries to absorb the progressive development of the EDGE CITY - the growth of retail, residential communities, and business-logistics areas in the vicinity of the expressway belt of the city. (see chapter 5 - FORT(RESS))

- the strategy: INTEGRATION

- main infrastructures: parkway, park&ride areas

- new landmarks: HISTORIC GARDENS

- new colonization: BOULEVARD, MULTINATIONAL FIRMS

- edge ring

- strategy: CONCENTRATION

- main infrastructures: expressway, s-bahn

- new landmarks: SOCIALIST CARDBOARD

- new colonization: NEw PRODUCTION
The third conjecture, based on the image of the city as a landscape, tackles the problem of the openspace in contemporary Bucharest. With the (still unfinished) privatization of land and the frenzy of real estate development, the parks planned are the only ones that can be envisioned for public use which is now the stage of aggressive private invasion with the active and dubious involvement of the city hall (Augustin, Ioan, O (noua) ‘Estetica a Reconstrucției’, 2002). In 1989 Bucharest had 3,470 hectares of green areas. In 2004 only 1,710 hectares survived. Although there is no official data for 2007, the current number is probably around 1,400-1,500 hectares. Instead of buying back from the lawful owners the parks and other estates on which green areas could have been developed in the community service, the City Government has rushed to approve property restoration claims for parks and green areas without any legal constraints on this issue (Save Bucharest Association, 2008). The aggressive speculative development of the last years has produced a drastic reduction of urban greenery and greenfields in Bucharest. The City Government and planners have been unable to define a public openspace at the larger scale of the metropolitan area. No vision for the openspace structure of the city has been produced in 20 years of reform and now, more than ever, a coherent plan for the recovery of Bucharest’s landscape and openspaces as public spaces at regional scale is needed.
This conjecture takes into analysis the recovery of two important ecological corridors crossing the capital in the East-West direction. The PARK CITY is an image of Bucharest as a green, eco-balanced city expressed in two strips of green landscape dividing the city in 3 areas: the drosscape specific to the transition period in the north (SPRAWL SUBURBIA), the continuous urbanized area in between the strips (METROPOLITAN CORE) and the poor areas in the south (SOCIALIST COMPACT CITY).

Based on the tool of the VALLEY as spatial structure and the device of the RIVER as main backbone of this ecological system, the two strips are designed as public OPENSPACES at the scale of the entire city (metropolitan area).

The north strip has been consolidated since the Socialist era through the realization of a series of recreational parks and protected areas.

The south strip of the PARK CITY that represents the focus of this project, is a collection of different green and cultural environments connected by a bycicle network at the metropolitan scale and the river Dambovita (see image to the right). Two park typologies of this strip are detailed as case studies through exploratory projects: the WATERPARK and the INDUSTRIAL HERITAGE PARK (see chapter 5 WATERPARK and INDUSTRIAL HERITAGE PARK)

4.3 PARK CITY (OPENSPACE)
5/ BUCHAREST - 6 CASE STUDIES (TESTS)
This exploratory project investigates how the new mobility patterns of the ARCHIPELAGO CITY trigger the transformation of residual areas previously used by infrastructure. The study area is concentrated on the two main train stations in the north of Bucharest: the new High-Speed Station (main station of the city) and the old North Station (Gara de Nord) which becomes the Central North Station. These highly congested nodes of public transport are also the two most important gates of the city.

The tools used for this project are the MAIDAN (social condenser) which is repeated three times in three different typologies (the courtyard, the bridge and the front square), the BIG BOX which is represented mainly by the two stations as attractors for a large diversity of services and activities, and finally the GARDEN that here takes the shape of a linear park situated along the railways, connecting the two train stations.

The opportunity created by shifting the new main train station to the north opens the possibility to create a public park with amenities in place of the old bundle of railways cutting the urban fabric along 3.5 km.

On the north and the south sides of the linear park, old areas occupied by industry related to the railways are transformed into new urban environments with different characteristics: a chunk to the north that is built following the typology of the block and a chunk to the south that adopts a low-rise high density typology similar to its surroundings.

This two new centralities are related to the transport nodes as they become working/living environments for the freshly created class of service workers embedded in a mobile and international environment.
5.1 THE LINEAR PARK

[ARCHIPELAGO CITY]

The High-Speed station is conceived as a ring of commercial and entertainment areas (BIG BOX) connecting four main platforms at different levels around a Courtyard (MAIDAN). The use of this courtyard is free, and numerous events and temporary activities can take place here due to its exceptional connectivity.

The Bridge of Culture (MAIDAN) is conceived as a link connecting the right and the left side of the railways. While the roof (the actual bridge) is a free surface ready for spontaneous events or weekly markets (like a raised stage), at the park level there are some public cultural buildings as described in the nearby schemes. The name of this device has symbolic value since it connects parts of the city that have different cultural backgrounds and character. The physical bridge is also a temporal link between different ages of the city.

The Central Station is a filter of commercial areas and services (BIG BOX) between the train platforms and the Front square (MAIDAN) which is mainly a young people’s park where urban sport activities can take place.
5.2 THE PLINTH

[ARCHIPELAGO CITY]

This exploratory project tries to re-define the concept of a regular transfer node of the ARCHIPELAGO CITY. The study area is focused in a place of particular historical significance for Bucharest. One of the oldest MAIDANs in the capital since the premodern era, and its most important market place, this site is today a residual space where informal markets and squatter stand next to high class shopping areas and the City Hall of the second district of the city.

In the new public transport scheme it acquires a very important role as transfer point between car, tram, regional train and metro.

It is an eloquent example of what a transfer station should become as re-invented space in the city: a public plinth that encourages extreme congestion and acts like a social condenser.

The tools used for this project are the MAIDAN which is situated in this case below the ground zero connecting different stations and areas divided by the high affluence traffic on the inner ring. This level is dedicated to commerce, entertainment and culture. The level above is a representation of a GARDEN in various declinations. The ground zero, today suffocated by cars would be available for the setting of a series of public green spaces once the underground parking areas are built.

The resulted green spaces will have different destinations: some of them precise (the orchard and the maze as a memory of the original green spaces of the city), others free like the slope, the traditional garden, the english garden that are simply supports for recreational activities.

MAIDAN

GARDEN
5.2 THE PLINTH

[ARCHIPELAGO CITY]

The concept of the PLINTH is one of a solid mass (material representation of the congestion in the node) which is excavated on different levels creating a base of flows connecting the different transport modes and generating potential for the development of connected activities. The PLINTH becomes the base for the reconfiguration of the ground area which turns into a public GARDEN for pedestrian and cycling use.

In specific points the underground energy contained in the PLINTH surfaces on the ground level where it connects to different parts of the city or creates event spaces like the open air theatre in this case. In the middle of the highly trafficked roundabout of the ring road, the theatre is both an event space and the tram station.

Finally, the PLINTH also capitalises the potential of existing important buildings that do not profit today from easy accessibility or stimulating environment. In the middle of the garden, buildings such as the City Hall, or the Old Market building from the 30’s become actual landmarks adding value to the site itself.
This exploratory project tackles the problem of the typical isolated business cluster. The study area is an ex-industrial platform of high technology that was created in the late 1970’s. Its exceptional position in the north of the city, close to the two airports and next to the richest areas in Bucharest facilitated its transformation that began as early as 1996. Unfortunately there was no coherent plan or strategy to steer the metamorphosis from a gray and polluted industrial site to a creative environment for business and services. The subsequent occupation of land and transformation of old warehouses was carried on with no care for the open spaces in between buildings and the boulevards that cross or border the site.

The tools used for this project are the BOULEVARD which here is interpreted as an instrument of extreme congestion populated by a large variety of programs and the COLONY (CLUSTER), since the area in itself is detached from the rest of the city and not a continuation of it. In the new geography of production, this area is situated on the CORPORATE RING. A series of international companies as well as romanian companies re-located here, but the quality of the environment for such a high-standard tertiary production zone is still very poor.

The aim of the project is to radicalize the very idea of cluster by POLARIZING its contents and creating a hierarchy between the edges and the core areas. This case study becomes a paradigmatic example of the way in which a closed colony or cluster can be re-configured, improving its internal quality and its connection to the city.
5.3 POLARIZED CLUSTER
[RING CITY - CORPORATE RING]

The strategy in this case follows a series of steps:
1. **POLARIZATION** - reinforcement of the edges where the cluster connects to the city - improvement of the public transport on the main crossing boulevard.
2. **EDGE DENSIFICATION** - extreme congestion along the boulevards.
3. New program can be added using 4 different typologies:
   - office blocks in the vacant places
   - towers in the vicinity of the tram stations
   - floating slabs above the existing blocks and warehouses where space is not available
   - service strips of bars, cafes, restaurants, boutiques along the boulevard creating a new front.
4. **CORE EROSION** - the migration of new buildings to the boulevard and the demolition of some abandoned warehouses will allow to grow greenery and parks in the core areas of the cluster. This new green areas will serve both as recreational spaces and energy suppliers through the installation of windmills.
5. **PROGRAM HYBRIDIZATION** - mixing uses and adding new programs besides offices and business along the boulevards will transform them into actual public spaces and social attractors.
This exploratory project is focused on the re-use of the old defense forts of Bucharest as new centralities on the EDGE RING.

The case of the forts is very interesting since they were built at the beginning of the 20th century, but soon after the Great War became obsolete as defense structures. Nevertheless the infrastructure made for their use (a ring railway and a road) were of extraordinary importance for the subsequent evolution of the city. Today this infrastructure is ideally placed at what we can call the limit of the city area, in between Bucharest and the surrounding cities. The forts themselves were abandoned in oblivion and numerous parasite structures corrupted their extraordinary landscape value.

In the mobility conjecture, multimodal transfer nodes are created in the vicinity of the forts linking public transport and park & ride areas. The forts can therefore become (due to their extraordinary accessibility) small centralities on the edge between the inner city and outer suburbs, attracting functions as those described by Joel Garreau in his book EDGE CITIES.

The tools used for this project are the BOULEVARD seen at a larger scale, connecting not important buildings or landmarks but the forts themselves, and the FORT re-interpreted as an attractor instead of a defense mechanism. The FORTRESS becomes a center, but not an island, since each fort has a different urban function. The intention is not to create gated communities, but pieces of city linked by an edge infrastructure.
The forts have a distinct ANATOMY composed by 3 SPACES divided by an avenue linked with parking areas (where cars have access from the underground park&ride) and a promenade which is for pedestrian and cycling use.

The outer ring on the edge of the fort has a direct relationship with the large landscape or the infrastructure.

The middle ring is a transition ring between the avenue and the promenade. Finally the core is the main public space of the fort - generally a park populated by punctual elements.

There are three typologies of FORTS which compose the milieu of this EDGE RING CITY:

The RETAIL FORTS have a program similar to the existent retail clusters in the city. The outer ring is composed of large hypermarket structures, the middle ring hosts commercial galleries under a portico perforated by gardens and the core is destined to the entertainment - cinema, open-air theatre and exhibition pavilion.

The RESIDENTIAL FORTS attract residents which want to evade the inner city or work in the EDGE RING area. Here the outer ring is composed of low-rise high density housing, the middle ring is composed of apartment slabs creating different courtyards (forest or plazas), while the inner ring is destined to the park, the sport field and the mixed-use towers.

Finally the BUSINESS FORT is composed by a logistic area in the outer ring camouflaged under the forest, an area of courtyard blocks in the middle ring and a park space in the core occupied by high-rise towers connected by a raised public promenade.
5.5 WATERPARK

The great lake upstream Dambova river (the central watercourse of Bucharest) was built in the 1980’s to control flooding and regulate water levels in the city. It was a purely utilitarian initiative, and the high dike surrounding the lake (5m) severed the chance of a direct relationship between the water and the city.

This exploratory project investigates how this exceptional piece of fabricated landscape can become a COMMUNITY WATERPARK. The lake is one of the green pieces composing the PARK CITY, the green strip crossing Bucharest from East to West. The presence of the dyke as a powerful physical border gives the lake the appearance of an independent space, extraordinarily natural and artificial at the same time. Given the lake’s protective function the integrity of this border cannot be touched. Bringing Bucharest around this lake therefore means building new water-related urban environments.

The tools used for this project are the RIVER which is reborn here (the sluice between the lake and Dambova river appears as the orifice of the watercourse), and the COMMUNITY PARK which is the urban function and the atmosphere that is intended to be given to this residual lake. Building the city around the lake means creating a series of special living, working and leisure spaces related to the water, connected by the dyke as main infrastructure. The total perimeter of the lake - around 7km - can be covered by bike mobility in less than half an hour which makes this space a possible pilot project for eco-mobility.
Three typologies are proposed as possible archetypes guiding future development of the city around the lake:

1. **THE PEER BLOCK** which is inspired by harbour architectures and by extraordinary water-related environments such as Hamburg HafenCity.

2. **THE WATERHOUSES** which are a re-interpretation of the row-houses of Borneo Sporenburg in a Venice type of spatial configuration around a central CAMPO.

3. **THE FLOATING STRAND** which remembers one of the manifest projects of the early OMA becomes a leisure environment directly related to the lake.

Building on the water is encouraged also in order to prevent future development in the green areas surrounding the lake which are to be preserved intact and become specialized recreational areas - THEME PARKS or NATURAL PARKS.
The central area of Bucharest, particularly near the central river (Dambovita) is filled with industrial sites built around the 1900’s - the first industrialization period. Their exceptional position and availability (since industrial activity ceased in these places after 1989) makes them perfect targets for speculative development which proved to be very destructive in regards to industrial heritage buildings and indifferent to the re-integration of these sites in the public structure of the city.

This exploratory project investigates how these sites could be integrated as pieces of public greenery and historic patrimony in the general structure of the PARK CITY.

The anatomy of these industrial sites is very interesting since it is so different from the industrial clusters of the 1960’s. Here the growth of the production areas occurred in time by (addition) infiltrating itself in between houses and courtyards, creating a second connective tissue overlapping the intricate street network of the old city. Therefore, a re-conversion of these sites into INDUSTRIAL HERITAGE PARKS would generate a new model of public green space permeating the traditional urban fabric. The position of these sites next to the river is to be enhanced connecting the new parks with the water surface, generating points of public intensity on the river. The effect of such a continuous green network integrating the river and industrial heritage would create the potential for the development of new space for CREATIVE activities and grassroots development of EVENT SPACES related to the particular qualities of these sites. This bottom-up generation of IDENTITY would protect these sites from aggressive speculative development.
The transformation process of these sites could follow some simple steps:
1. **Preservation** of the most valuable pieces of industrial heritage within the site and **clearance** from the parasite structures that accumulated in time in order to clear up space for outdoor activities and green spaces.
2. Tracing the new **Heritage Industrial Park** connecting the preserved industrial buildings (courtyards, machines, pavilions, gates) through a series of different archetypal garden spaces (tree-lined alleys, orchards, flower gardens).
3. **Perimeter densification** left to speculative development.
4. **Connection to the river** through light bridges and floating rafts on the watersurface that can host small events, pavilions, cafes and restaurants.

This process would create the basis for the bottom-up **branding** of the site through occupation of the low-rent spaces by creative activities such as: architecture and design offices, artists colonies and workspaces, art schools and exhibition galleries. Some particular spaces like the courtyards could become ideal **event spaces** hosting concerts, outdoor film projections, contemporary theatre and ballet performances.
How would a VISION for Post-Socialist Bucharest 2025 look like?

Could Bucharest become a mobile, isotropic, productive, attractive, green city?

How could we use infrastructure and openspace to describe the future of Bucharest?

These were the recurrent questions of this thesis (implicit and explicit).

A VISION is, of course, (at least from the American perspective) a very complex process involving different practitioners actors and public, culminating in the creation of a desirable future for the city.

In this thesis, the process is much more modest: the VISION becomes a teaser, a provocative statement, built to create a debate subject.

The final VISION is generated through the superimposition of the three conjectures that have been the result of the whole analysis of this thesis, based on the triad: mobility / production / openspace.

Superimposing these three generated images of the city we could answer to the questions mentioned above and therefore satisfy the limited ambitions of this thesis.

Of course the final image resulted by this fusion represents only the ‘grey area’ for a much larger and challenging research.

The combination of the three conjectures produces an image which is deeply referenced in the peculiar way in which the city grew: following agencies and rationalities that were expressed through particular spatial devices like the MAID-

AN (as informal public openspace), the GARDEN (as main formalized public space), the BOULE-

VARD in its local declination, the very interesting (cosmological) presence of the circle of FORTS, or the independent COLONIES which created in time a city of islands - an urban ARCHIPELAGO.

Through this project Bucharest’s diversity is rein-

forced and re-connected through:

- a mobility system that produces a CONSTELLA-

TION of urban gates - supports for public ac-

cessibility and generators of a new quality of place;

- an infrastructure of RINGS producing a new geography for the emerging URBAN LAND-

ARKS, the CORPORATE colonization; and the growing EDGE CITY;

- a reconstructed LANDSCAPE acting as structural element for the city (expressed in the two river valleys that divide the city in three dis-


tinct urban ecologies.)

ARCHIPELAGO CITY RING CITY PARK CITY

6/ BUCHAREST - VISION & STRATEGY
6.1 THE CONSTRUCTION OF THE FINAL VISION

**Problem Statement**

- **3 Layers:** Mobility / Production / Open Space

**Setting the Framework**

- In search of new planning tools

**Setting the Limit of the Research & Project**

- Defining specific planning tools to be used as guidelines
  - End product: Tools Matrix

**Urgencies + Conflicts**

- TERRITORIAL SCALE
  - SPATIAL LAYERS

**Analysis**

- Mapping

**Projects**

- Test Cases
  - End product: 6 Devices

**Contexts**

- Conjecture 1: Archipelago City
- Conjecture 2: Ring City
- Conjecture 3: Park City

**Images of the City**

- Water Park
- Polarized Cluster
- Industrial Heritage Park
- Fort Plinth

**Bucharest Axis**
6.2 SMALL SCALE STRATEGY
THE USE OF THE TOOL MATRIX TO GUIDE INDIVIDUAL PROJECTS

<table>
<thead>
<tr>
<th>UNIT</th>
<th>EXCHANGE PUBLIC TRANSPORT STATION</th>
<th>LANDMARKS, CLUSTERS, PORTS</th>
<th>CULTURE/ WATER/ INDUSTRIAL/AGRO PARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROACH</td>
<td>TOP-DOWN, managed by the City Hall that provides new public spaces that will be concessioned to private operators.</td>
<td>PPP, managed by private investors following the conditions imposed by the City Hall.</td>
<td>BOTTOM-UP, generating strategies encouraging the local initiatives in order to render the future public open spaces attractive.</td>
</tr>
<tr>
<td>ACTORS</td>
<td>CITY HALL, PRIVATE OPERATORS, PUBLIC</td>
<td>PRIVATE INVESTORS, MULTINATIONAL COMPANIES, YOUNG PROFESSIONALS, LOCAL COMMUNITIES</td>
<td>NON-PROFIT ORGANIZATIONS, CREATIVE JOBS, STUDENT ASSOCIATIONS, CULTURAL INSTITUTIONS</td>
</tr>
<tr>
<td>CONSTRAINTS</td>
<td>each station must provide a minimum number of basic services.</td>
<td>Unchanged competition, increased green porosity, high density, mixed uses.</td>
<td>All green or reconverted spaces must become public open spaces, the privatization of green is prohibited, building is allowed under strict conditions (typology, position, height).</td>
</tr>
<tr>
<td>MINIMAL REALIZATION</td>
<td>THE ‘MAIDAN’ (INFORMAL PUBLIC SPACE, SOCIAL CONDENSER)</td>
<td>THE 3 INFRASTRUCTURAL RINGS (BOULEVARD, PARKWAY, MOTORWAY)</td>
<td>THE ‘SLOW’ NETWORK (BICYCLE LANES, RIVER QUAYS, DYES)</td>
</tr>
<tr>
<td>SPIN-OFF</td>
<td>increased accessibility in peripheral areas, good intermodal coordination, increased travel choice, representation of areas around the stations, generation of public intensity, concentration of contemporary mobility environments.</td>
<td>increased public intensity through congestion and mixed uses, efficient connection of business and productive areas, isotropic disposition of development, concentration of sprawling edges.</td>
<td>increased attractivity of waterfronts and existing green areas, integration of cultural activities, events and recreation leading to the renewal of neighbouring areas, re-use of heritage industrial buildings, increased ecological quality of the city.</td>
</tr>
</tbody>
</table>

6.3 LARGE SCALE STRATEGY
APPLICATION OF THE CONJECTURES
Bucharest is not an easy city to work with, but once disentangled from the static and inefficient recipes of the past, the city becomes an accessible archipelago made of layers of research are superimposed generating a unique image where the three conjectures are overlapped. Bucharest is not a new strategy. Underlined by Koolhaas and other urban designers, the MAIDAN as contemporary support for public informal activities, the BOULEVARD as sequence and attractor of events, the People’s Square as a platform for debate, a provocative manifesto for a new approach to the city. The vision is not describing a proposed GOLDEN AGE, an endless accumulation of projects, visions, agencises and cliches, Bucharest’s problem is not a lack of tools, but rather of a new frame of mind. A new set of tools is required to be able to make a genuine and aggressive transformation of the urban landscape.

The tools are able by themselves (through different combinations) to generate complexity and to provide original answers for particular cases.

On top of the tools, Bucharest needs to create a context for debate. A new approach which is focused on the language of public space as a unique urban tool which generates new devices which can act as frameworks for the application of specific tools to answer specific problems.

Therefore the whole system is built on a set of guidelines and contextual tools, coupled to deal with uncertainty and to generate a sensuous image which is able to face the concept of green and aggressive transformation of the urban landscape.

The general conclusion would be the result of the development of a new set of tools that are able to decide on the making, the appropriation, and the use of public place for marches and parades to the absence of any expert decisions. People’s values and beliefs related to their urban environment do not follow. The planning tools of the past (GENERAL URBAN PLAN, LOCAL ZONING PLANS, DETAILED REGULATION PLANS) seem for the unique for the UNESCO’s «The urban planning is one of the present urban development. Instruments of the planning tools are devalued through the development of political and mental frameworks to succeed in their mission and become totally out of date.

This disintegration was manifested at all spatial levels from the mid 1990’s onwards. Bucharest as a city that went from conceptions of public place as empty squares into a European model of urban transformation, a laboratory to test new spatial tools and paradigmatic projects created to deal with uncertainty and to generate new devices which can is extremely flexible and generates new devices which can be reused to answer specific problems. Therefore the whole system is built on a set of guidelines and paradigmatic tools, coupled to deal with uncertainty and to generate a sensuous image which is able to face the concept of green and aggressive transformation of the urban landscape.
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ANNEX 1
FROM A RADIAL ROAD SYSTEM TO A RING ROAD SYSTEM

ROAD SYSTEM TODAY
Highly hierarchized towards the city center and concentrated on radial thoroughfares

ROAD SYSTEM TODAY
Ring fragments and minor

ROAD SYSTEM PROPOSED
Ring completion or modernization by connecting existent fragments

ROAD SYSTEM PROPOSED
New Ring System and proposed hierarchy of access - discouragement of car access through park & ride facilities connected to public transport
ANNEX 2.1 
THE NEW RAILWAY INFRASTRUCTURE PROPOSAL 

RAILWAY SYSTEM TODAY
only 2 important stations (NK) and 3 secondary stations placed in unsuitable positions, only 1 train typology in operation, no coverage for the inner city and the large housing estates.

RAILWAY SYSTEM PROPOSED
using abandoned railway lines in the left map, a new 4-tier railway system is implemented:
- 2 HIGH-SPEED TRAIN LINES (corresponding to the 2 Pan-European corridors), NATIONAL TRAIN LINES, REGIONAL TRAIN LINES, CIRCULAR S-BAHN LINE.
- Coverage is improved in all areas and most of the stations are intermodal exchangers.

ANNEX 2.2 
THE NEW METRO INFRASTRUCTURE PROPOSAL 

METRO SYSTEM TODAY
too much distance between stations (approx. 1.5km), poor coverage, no connection to the external ring of the city.

METRO SYSTEM PROPOSED
reducing distance between stations (approx. 500m) by building new stations, extended coverage in the central, north and west areas, connection to the external ring road for intermodal exchange with train.
above: TRAM SYSTEM TODAY
a series of lines inherited from the past ensuring good coverage but poor exchange options
interruption in the central area with stations too distant from one another
no connection to the external ring road

above: TRAM SYSTEM PROPOSED
completion of the CENTRAL TRAM RING around the INNER CITY.
increased multimodal options, and connection to the park & ride facilities on the second ring
re-connection of lines in the centre and connection of all radial lines to the external ring road
for intermodal exchange with train