RICE UNIVERSITY

Static Urbanism

By

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REQUIREMENTS FOR THE DEGREE

Master of Architecture

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STATIC URBANISM
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The project investigates the urban dynamics of post-socialist Bucharest and develops a design framework for transforming the collective housing neighborhoods. Home to 73% of urban dwellers, they struggle with the aging urban fabric, the declining quality of public space and community disengagement. In addition, unplanned sprawl, traffic and parking issues pose additional challenges and have a direct impact on their attractiveness.

Static Urbanism is a call for compact growth through the preservation and transformation of existing resource. This requires a paradigm shift towards reading opportunities among the existing challenges. This design calls for the creation of static space - a physical disturbance of the urban grid and the existing patterns of movement, meant to disrupt the state of distraction in which these neighborhoods are experienced. This intervention is critical in shaping active communities, lively public spaces and place identity, thus unlocking the hidden potential of the socialist-era collective housing neighborhoods.
To my advisor, Mark Wamble, for believing in my vision, for his steady support and for helping me find the balance between research and design;

To Scott Colman and Dawn Findley for providing clarity and structure when we needed it most, for guiding us through the entire thesis process;

To my Rice friends who inevitably became my architecture family, for your friendship, support, coffee runs and delightful company during late studio nights;

To my loved ones for always being by my side;

Thank you!
TABLE OF CONTENTS

ABSTRACT

I. ANALYSIS OF URBAN DEVELOPMENT IN BUCHAREST
   1. HISTORIC GROWTH
      LATE XIXth CENTURY
      INTERWAR PERIOD
      EARLY COMMUNIST PROJECT
      POST ’77 COMMUNIST AGENDA
   2. POST-SOCIALIST DEVELOPMENT
      AGING URBAN FABRIC
      THE DISPARITY OF JOB / HOUSING / LEISURE LOCATION
      SUBURBANIZATION
      TRAFFIC CONGESTION POINTS
      QUALITY OF LIFE AND SOCIO DEMOGRAPHIC SHIFTS

II. DESIGN FRAMEWORK
   3. STATIC URBANISM
   4. SITE ANALYSIS
   5. MASTERPLAN STRATEGY
   6. DESIGN SCENARIOS
HISTORIC GROWTH
URBAN CONTEXT AND THE COLLECTIVE HOUSING NEIGHBORHOOD

POST SOCIALIST DEVELOPMENT
DESTINATION URBANISM | SUBURBANIZATION | CONGESTION

STATIC URBANISM
UNLOCKING THE HIDDEN POTENTIAL OF COLLECTIVE HOUSING NEIGHBORHOODS
INTRODUCTION

Urban growth is imminent, but there is a clear distinction between smart growth and sprawl and unfortunately, uncontrolled sprawl has been the default form of growth for many decades now. Due to the imminent fuel crisis and climatic threat, we find ourselves at a key moment in time, in need of a change of paradigm in urbanism. Static Urbanism is a response to these global trends, and while this proposal is focused on the preservation of existing resources – housing in particular, the overarching argument is for compact or ‘static’ growth, one component of a sustainable form of urbanism.

The investigation looks at the effects of sprawl on the urban residential neighborhoods, focusing on the post-war housing ensembles. Bucharest, the Romanian capital, is a revealing case study for the typology, yet it also deals with contextual challenges posed by the historical and socio-economic particularities. Dense, walkable and diverse communities can have a major contribution towards a sustainable form of urbanism and these post-war neighborhoods were intrinsically planned to meet these criteria, thus they should be perceived as a resource, rather than a problem, as they are commonly perceived nowadays by authorities and to some extent by the population. The quality of life is a critical component of a performant city, a competitive asset and a priority for people in choosing where to live (World Bank, Magnet Cities), therefore policy and administrative efforts should be concentrated accordingly.

Overall, this project is a comprehensive proposal for the urban renewal of a typical socialist-era neighborhood from Bucharest but the Static Urbanism strategy speaks directly to the increasing disengagement from public life. While the public administration has tolerated uncontrolled and poorly planned sprawl, which now requires costly public investment in infrastructure and services, the neglected existing neighborhoods have been losing their attractiveness. After a comprehensive analysis of the urban context, I am proposing an urban strategy meant to address the issues of land use, traffic and aging built form and to lay the groundwork for the Static Urbanism design framework. This last layer of intervention is critical in shaping active communities, lively public spaces and a clear identity, thus unlocking the hidden potential of the socialist-era collective housing neighborhoods.
Bucharest is a place of contradictions and contrasts. Once known as the little Paris of Eastern Europe, Bucharest has been the capital of the United Principalities of Romania since 1861 and from 1877, when Romania gained independence from the Ottoman Empire, the capital of the nation-state as well as the cultural and political center of the country. Located in Southeast Europe and long under socialist rule imposed by Soviet domination, Romania has been part of the European Union since 2007.

Bucharest has been considered by historians the transition city between Eastern and Western Europe, geographically and culturally. While its history has been influenced by the Byzantines, the Ottoman-Turks, the Habsburg Empire and later by the rise of USSR, it has also been shaped by strong links to the West. The language, just as the origins of the people, is a Romance language even if surrounded and dominated by Germanic, Turkish and Slavic neighbors. Just like the culture, the early architectural landscape of the city is best defined as eclectic with a predominance of the neo-classical and early modernist styles layered on top of the scattered Byzantine and Ottoman reminiscences.
At the end of the XIXth century, the urban footprint of Bucharest was roughly contained into its historic core and its architectural style was influenced by both Western and Eastern European forces, thus shaping an eclectic architectural landscape. Nevertheless, before the end of the century, the Neo-Romanian Architecture emerges, drive by the search for the national spirit and identity. The turn of the century is representative for the completion of several cultural, academic and administrative institutions, all concentrated in the historic core.

At the same time the city developed its basic infrastructure and laid the base for a radial system of boulevards, connecting the core to the countryside. Today, the historic core is the most active part of the city, due to the healthy mix of functions. Recent urban regeneration efforts focused on reactivating the Old Town and its historic commercial streets. Consequently, it is now the city’s main concentration of leisure and entertainment destinations.

The interwar period is arguably Romania’s most prosperous era, as the city managed to align and even compete with the European architecture and its innovations. During these prolific decades, the population and urban footprint continued to grow in a concentric circle outside the historical core and along the main boulevards. The preferred architectural styles were Art – Deco and Modernism, while a network of parks and lakes was created to surround the city.
Bucharest is considered the capital of Eastern Europe with the highest number of buildings in the modernist style, representative of a time when the city reached its economic and cultural peak. Interwar Bucharest was a cosmopolitan cultural center and a significant percentage of the upper-class population was educated in Paris. This gave Bucharest the nickname of Paris of the East or Little Paris.

After 1945, Bucharest’s development evolved under the political agenda of the Communist Party: rapid demographic growth, massive collective-housing projects and industrial platforms – also known as socialist reconstruction. This first phase lasted until 1977 and can be further divided into Socialist-Realism or Stalinist Architecture of the 50s and Brutalist – Modernism of the 60s and 70s.

Mass-housing ensembles rapidly changed the landscape from one of a vernacular city, into a concrete utopia. Nicolae Ceausescu’s goal, set in his early years of dictatorship, was that by 1990 about 90-95% of Bucharest’s population should live in apartment buildings (Zahariade, 42). The Communist regime aimed to reconstruct urban environments as a form of political dominance, often attempting to create a physical and historical tabula rasa condition through the physical erasure of the existing fabric. In addition, the focus shifted from the individual onto the collective through a process of uniformization.
For example, in Bucharest, large areas of the city were expropriated for single family houses to be replaced with residential mega-blocks. Through the creation of new urban forms, the communist regime attempted to impose a new urban lifestyle and to construct a new set of social relationships, all meant to be under supervision of the state. Nevertheless, people coming from the rural culture of small communities, challenged these efforts, appropriated space and managed to transform the mega scaled concrete utopia into a dynamic social environment.

At first, the collective housing ensembles were conceived as self-sufficient neighborhoods built around a school district. For each community there was planned a farmer’s market, pocket parks, sport facilities and service spaces located at the ground floor of the boulevard facing building. However, in the context of an austere economy caused by the communist leader’s decision to quickly pay off the country’s external dept, a shift from quality to quantity happened in the architectural field, leading to the densification of residential buildings and therefore the loss of some initial qualities of the public realm. Even when public infrastructure was not replaced by more residential blocks, many facilities never got built due to budgeting. Nevertheless the majority of apartments was planned to have good access to light and some shared amenities, such as laundry rooms, trash shoots or storage rooms.
The decade following 1977 marked a turning point in the transformation of Bucharest and a shift towards "an authoritarian anti-historic setback" (G. Cina). Bucharest is located in an area of seismic risk and 1977 was the year of the most significant earthquake in the country’s recent history - 7.2 magnitude that affected much of the historic core and even a few of the collective housing ensembles.

This sparked a megalomaniac political project for an urban identity and chaotic demolitions that cut deep into the historic fabric, in order to clear land for the Civic Center and for the House of the Republic, currently the Palace of Parliament, the heaviest and the second largest administrative building in the world. It is a common opinion that this project was “Bucharest’s most important urbanistic error of all times, one that irreversibly contaminated the city.” (Serban Tiganas, former President of the Order of Architects of Romania).

The austerity and scarcity of resources only grew deeper, as most efforts were concentrated towards the number one priority – the House of the Republic. Consequently, as the city continued to grow, many existing neighborhoods were over densified at the expense of public spaces, while the new collective housing buildings were poorly executed. Consequently, the 1989 Revolution that led to the fall of communism in Romania, left Bucharest in a critical state.
In the long transition period that followed the fall of the communist regime, the quality of the buildings and public realm in the residential neighborhoods decreased significantly. Development can be characterized as chaotic and heavily market driven and the data collected and mapped in this chapter reveals that most retail and business developments deliberately skip the socialist era residential neighborhoods, being concentrated on the periphery or in the city center.

There was little development of the cultural and leisure infrastructure, concentrated on improving the large parks and on the Old Town rehabilitation project – the only pedestrian oriented leisure and entertainment district. The only sector that developed within the collective housing neighborhoods is a volatile retail and service market, along the main boulevards and in repurposed ground floor apartments. Despite an extensive transit system, there has been an overwhelming growth in the number of cars. Since the administration had a passive attitude, this problem grew out of control, resulting in a city suffocated by cars. The parking and traffic issue puts most pressure on the residential neighborhoods, sandwiches between the new destinations - suburbs and the city center, with a significant impact on their quality of life. As both a cause and an effect, the city is facing uncontrolled sprawl, and the new developments often lack basic infrastructure and public services.

The indicators above show that the lack of coordinated planning has shaped this form of destination urbanism and a mismatch between the location of housing and that of jobs, cultural and leisure facilities. These dynamics fuel the ‘pit-stop neighborhood effect,’ driving the city into destinations people commute to and ‘dormitory’ neighborhoods where they return at night.
PRE ’89 COLLECTIVE HOUSING IN NEED OF SEISMIC RETROFIT

Bucharest has the highest seismic risk out of the European capitals, and it is the 10th most vulnerable city in the world. (World Bank) The majority of the socialist-era apartment buildings have been to some extent affected by the major earthquake of ’77 and need immediate attention in order to achieve seismic resilience.

After 1989, the facades of collective apartment buildings have undergone uncoordinated renovations of individual apartments, resulting in a chaotic image. A complete facade retrofit is necessary, and tactful negotiation between individuality and collectivity could help define the local urban identity.

Buildings are one of the main energy consumers, and while these buildings might be technically outdated, it is far more sustainable to retrofit older buildings than build new ones. More than reducing the amount of energy used for heating/cooling, buildings can even give back to the energy grid.

The repetitive grey concrete blocks give a dull image to the built environment, reminding of the lack of intervention from the last decades. While at the time they were meant to shape a uniform society, the socio-cultural and demographic variety today calls for change. Therefore, carefully designed contemporary architectural elements could transform the urban image.
Visualizing the investments on the office and retail market over the post-socialist decades, we observe a number of clusters located along the periphery, especially in the north of the city - over older industrial sites or underdeveloped areas, as well as in the city center - in repurposed historic buildings or as high density infill. The miss-match between the location of jobs and housing negatively impacts the quality of life, through the unequal access to jobs and increasing travel times.

In the last decades, the retail development has also incorporated a growing leisure component. These privately owned public spaces are substituting the need to spend time in the public realm and for social interaction, typically fulfilled by public squares, parks and other community spaces. This is a good indicator of the lack of pedestrian infrastructure at the city level and matches the hypothesis made on the dissolution of public life within the neighborhood. Shopping malls are intrinsically places of inequality, they are not accessible to all age groups (i.e. due to distance, prices) and are not planned to give back to the city. Community engagement is critical for a place to grow and prosper, and since our neighborhood are losing their sense of community and place of the neighborhoods, there is no bottom up initiative to address the challenges long neglected by the administrator. While privately owned public spaces are a healthy alternative, they shouldn’t be the only form of public space available.
In the last decades, due to lack of planning at the metropolitan level, Bucharest has sprawled uncontrollably. Development often happened not only in areas without access to schools, hospitals and sometimes even the necessary road, water and sewage infrastructure. While there are examples of good practices, the spatial quality - light, unit size, materials, is often lower than that of older buildings. In addition, there is no metropolitan public transit system in place - a few lines have started to emerge. Nevertheless the low price, flexible layouts and the amenities available within these residential ensembles makes them an attractive option - green space, terraces, gyms, community spaces.
PRESSURE ON EXISTING TRANSPORTATION INFRASTRUCTURE

The lack of diversity within the collective housing neighborhoods, distance to jobs available, the aging building fabric and overall the low quality of life, puts a constant pressure on the transportation infrastructure. Furthermore, these are also located between the suburban developments and city center, adding additional pressure on the main boulevards. Traffic, congestion and a critical parking situation are characteristic for the city, yet within the residential neighborhoods, this situation has a great impact on the quality of life. Parked cars are suffocating every piece of unclaimed land, including underdeveloped green areas, open public spaces and even the sidewalks. However, the number of officially registered and paid lots is very low, thus the residents waste considerable amounts of their day struggling to find parking spaces, while the municipality misses on this financial resource.

The radial system of boulevards connecting the city center to the periphery is also cutting deeply through the urban fabric of the city and produces noise and CO₂ pollution. The boulevards are active places due to the commercial activity at the ground level which generates high pedestrian flows. However, these are not captured and there is little to no static activity, due to the lack of pedestrian infrastructure and diversity in services provided - i.e. coffee shops, restaurants with outdoor seating. Some boulevards have good tree coverage and generous easements which need to be activated.
Most of Romanian urban population lives in collective housing ensembles, data showing 73% at a national level and 80% in Bucharest (World Bank). The majority of the collective housing ensembles were built in the socialist era and a significant amount before the ‘77 earthquake, therefore this aging urban fabric is undergoing a process of physical decay. Traffic congestion, the suffocating parking problem, the lack of green areas, public space and diversity in the land use have a significant impact on the quality of life, which ranks 53 out of 64 EU cities surveyed.

While 96% of the population lives in an owner-occupied home, the highest percentage in the EU, yet 47% of the population lives in an overcrowded dwelling, the highest rate in the EU; 21m² living area per capita for Bucharest (not including suburbs), Europe avg. 31-36 m²; 2.4 rooms per dwelling in Bucharest, while in 35% of households live more than 3 people; 10% projected population decrease for Bucharest for 2060; 49% projected increase of Bucharest’s suburban area (216,700);

Consequently, by 2050, in Bucharest there is a projected population decrease of 10% for the areas built before 1989 and a 49% increase of the suburban population.
### ANNEX 1: NEW RESIDENTIAL DEVELOPMENT - COMPARATIVE ANALYSIS

<table>
<thead>
<tr>
<th>Greenfield</th>
<th>Cosmopolis</th>
<th>Militari Residence</th>
<th>Stejarii Country Club</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban/Suburban</strong></td>
<td>Peri-urban Gated Community</td>
<td>Suburban Gated Community</td>
<td>Peri-urban Complex</td>
</tr>
<tr>
<td><strong>Distance to Center</strong></td>
<td>19.1 km</td>
<td>24 min. drive</td>
<td>20 km</td>
</tr>
<tr>
<td><strong>Walking Score</strong></td>
<td>No</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td>680</td>
<td>751</td>
<td>850</td>
</tr>
<tr>
<td><strong>Tylopology</strong></td>
<td>Apartment Buildings (P+5)</td>
<td>Apartment Buildings (P+5, 10)</td>
<td>Apartment Buildings (P+5, 7)</td>
</tr>
<tr>
<td><strong>Price Range</strong></td>
<td>68 000 - 112 000 € + VAT</td>
<td>50 000 - 110 000 € + VAT</td>
<td>25 000 - 55 000 € + VAT</td>
</tr>
<tr>
<td><strong>Average Surface / Pers.</strong></td>
<td>n/a</td>
<td>40 sq. m.</td>
<td>40 sq. m.</td>
</tr>
<tr>
<td><strong>Studio</strong></td>
<td>57-65 sq. m.</td>
<td>70-82 sq. m.</td>
<td>125-140 sq. m.</td>
</tr>
<tr>
<td><strong>2 Rooms</strong></td>
<td>60-75 sq. m.</td>
<td>82-100 sq. m.</td>
<td>110-125 sq. m.</td>
</tr>
<tr>
<td><strong>3 Rooms</strong></td>
<td>85-95 sq. m.</td>
<td>110-125 sq. m.</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>4 Rooms</strong></td>
<td>n/a</td>
<td>n/a</td>
<td>Duplex: 238-319 sq. m.</td>
</tr>
<tr>
<td><strong>Villa/Penthouse</strong></td>
<td>85-95 sq. m.</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Balconies / Terraces</strong></td>
<td>All: 6.2 - 13 mp balconies; Villas: 17-13 sq. m.</td>
<td>All: 3.5 - 8 sq. m. balconies; Villas: 17-13 sq. m.</td>
<td>Playground, Basketball</td>
</tr>
<tr>
<td><strong>Community Spaces</strong></td>
<td>Playground</td>
<td>Playground, Basketball</td>
<td>Apartment</td>
</tr>
<tr>
<td><strong>Outdoor Swimming Pool</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Wellness (indoor pool)</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Gym</strong></td>
<td>Yes - pay to access</td>
<td>Yes - pay to access</td>
<td>Yes - pay to access</td>
</tr>
<tr>
<td><strong>Kindergarten</strong></td>
<td>11 min. drive</td>
<td>Private - in the community</td>
<td>Private - in the community</td>
</tr>
<tr>
<td><strong>Mixed Use</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Parking</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>24/7 Surveillance</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Marketing Strategy</strong></td>
<td>Green spaces, child friendly,</td>
<td>Green spaces, child friendly,</td>
<td>Fast access to office and shopping</td>
</tr>
<tr>
<td><strong>Public Transit</strong></td>
<td>No - private bus</td>
<td>Yes: bus</td>
<td>Yes: 15 min walk to bus</td>
</tr>
<tr>
<td><strong>Distance to Center</strong></td>
<td>12 km</td>
<td>35 min drive</td>
<td>25 km</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>35</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td><strong>Price Range</strong></td>
<td>68 000 - 112 000 € + VAT</td>
<td>50 000 - 110 000 € + VAT</td>
<td>25 000 - 55 000 € + VAT</td>
</tr>
</tbody>
</table>

### Mixed Use Towers (P+24)

<table>
<thead>
<tr>
<th>Asmita Garden</th>
<th>Doamna Ghica Plaza</th>
<th>Orhideea Gardens</th>
<th>Green City</th>
<th>American Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Residential Towers</td>
<td>Urban Residential Complex</td>
<td>Urban Residential Complex</td>
<td>Suburban Single-Family Housing</td>
<td>Peri-Urban Gated Community</td>
</tr>
<tr>
<td>3.5 km</td>
<td>10 min. drive</td>
<td>6.6 km</td>
<td>24 min drive</td>
<td>20 km</td>
</tr>
<tr>
<td>20 min public transit</td>
<td>Yes: bus, tram</td>
<td>30 min public transit</td>
<td>Yes: regional bus</td>
<td>10 min drive (Private)</td>
</tr>
<tr>
<td>Yes: bus</td>
<td>Yes: bus, tram</td>
<td>Yes: bus, metro</td>
<td>Yes: bus, metro</td>
<td>Yes: bus, metro</td>
</tr>
<tr>
<td>24</td>
<td>73</td>
<td>64</td>
<td>44</td>
<td>29</td>
</tr>
<tr>
<td>788</td>
<td>616</td>
<td>78</td>
<td>400</td>
<td>620-300</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td>520</td>
<td>300</td>
<td>616</td>
<td>400</td>
</tr>
<tr>
<td><strong>Price Range</strong></td>
<td>62 000 - 350 000 € + VAT</td>
<td>42 000-81 000 € + VAT</td>
<td>140 000 - 325 000 € + VAT</td>
<td>90 000 - 145 000 € + VAT</td>
</tr>
<tr>
<td><strong>Community Amenities</strong></td>
<td>Playground, Basketball</td>
<td>Apartment, Tennis</td>
<td>Apartment, Tennis</td>
<td>Playground, Park, Promenade</td>
</tr>
<tr>
<td><strong>Proximity to center, quiet area, luxury finishes</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Outdoor Space</strong></td>
<td>All: 6.2 - 13 mp balconies; Villas: 17-13 sq. m.</td>
<td>All: 3.5 - 8 sq. m. balconies; Villas: 17-13 sq. m.</td>
<td>Penthouse: 233 sq. m. (mult.)</td>
<td>Green areas, 'urban beach'</td>
</tr>
<tr>
<td><strong>Utility</strong></td>
<td>10 min drive</td>
<td>2 min drive</td>
<td>2 min drive</td>
<td>2 min drive</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Buying Price</strong></td>
<td>75-80 sq.</td>
<td>75-80 sq.</td>
<td>153,44 sq.</td>
<td>136 (proj. 2000)</td>
</tr>
</tbody>
</table>
ANNEX 2: HOUSING MARKET DATA

Values

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Private</th>
<th>State Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Private Funding

Public Funding

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 room</td>
<td>19%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>2 rooms</td>
<td>36%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>3 rooms</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>4 rooms</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>5 rooms</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>6 rooms</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>7 rooms</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
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Gamification
3. STATIC URBANISM
UNLOCKING THE HIDDEN POTENTIAL OF THE SOCIALIST ERA NEIGHBORHOODS

Beyond the challenges, the socialist era residential neighborhood is an urban model filled with opportunities. The urge to focus on these areas should come not only from the overwhelming percentage of the population who lives at seismic risk, the low quality of life and their decreasing attractiveness on the real estate market but also from their numerous strengths, merging the qualities sought in suburban and peri-urban living with those of new urban developments.

Static Urbanism aims to combine access to green spaces, sport facilities and community spaces - specific for suburban living, with the resources, diversity and social dynamics organically emerging in an urban setting. Therefore Static Urbanism is seeking to (re)engage the always-on-the-go residents with their immediate surrounding and local community, in order to provide faster and more equitable access to culture, leisure and community facilities and consequently reduce dependency on cars. These qualities were to some extent embedded in the original socialist residential model, therefore these sites have intrinsic strengths that should be better emphasized. Therefore the life and quality of public space is the primary asset, which would organically attract demand and thus the refurbishment of the built environment.

At the moment, uncontrolled automobile usage is a major threat suffocating the ‘public’ realm. For ‘Static Urbanism’ to begin acting towards its social aspirations, one has to first address the parking problem and prioritize the pedestrian experience. This will clear out space for public life to unfold.

Next, the question of ‘publicness’ needs to be addressed. Rather than treating all open space evenly as ‘public’ space, it is helpful to define a public-private hierarchy. Hierarchy is a tool for breaking down the mega-scale at which the buildings and the in-between space were originally designed. There is a large gap between the individual and the collective which makes it difficult for any design intervention to spark the sociality of human scale environments.

The quality of built environment is also a major component of preserving the attractiveness of a place. The age of the buildings as well as the changing demographics and evolving living preferences call for the refurbishment of the residential blocks:

- structural retrofit to meet contemporary standards of seismic safety;
- building envelope refurbishment for energy efficiency and aesthetics;
- reorganization of the unit layout to allow for new types of living, flexibility and generous green spaces;
The second part of this project explores in detail how ‘static urbanism’ could look like in such a neighborhood. The site of where this scenario is played out is Militari, a typical collective housing neighborhood built between 1950 - 1985. It is an area of roughly 1 km² and over 15,000 residents, divided by an 8 lane boulevard. (~40 m)

An analysis of the land use confirms the hypothesis made at the city level as this area has little functional diversity. It is well connected to the transit system, with multiple bus and metro options within 10 min. walking distance, yet it has almost 40% of the surface suffocated by parking and little options for spending free time - no cultural institutions, 3 pocket parks, no community / public space. The only interventions of the last decades happened organic and were driven by the market: it involved repurposing and diversifying the commercial spaces of the ground floor and converting ground floor apartments into additional commercial or service spaces. This generates a lot of pedestrian movement but does not stimulate people to spend time outside and interact with each other.
The first priority for these aging neighborhoods to remain a feasible and economically attractive option on the residential market in the long run is to seismic rehabilitation. Many collective housing areas are seismic vulnerable and need structural consolidation. As this intervention requires temporal evacuation of the building, this could be an opportunity for architectural interventions such as creatively rethinking the facade or carving public spaces.
One strength is the generous amount of open space - 51.8%, a major resource in redeveloping and diversifying the neighborhood. At the moment, these open spaces are spatially undefined and consequently, they are either treated as residual space, in the form of fenced, overgrown gardens or they are appropriated as surface parking.

To take control of how space is utilized and managed, we should establish a clear public-private hierarchy for the open space, defining a ‘front’ and a ‘back’ facade for each block. At the moment, most buildings lack an orientation, unless they are facing the boulevard, thus have commercial activity at the bottom. The front can be opened to the general public and parking, service, office and even public spaces can be added along the facades. Some representative examples of adding onto the facades can be studies in the work of Lacaton & Vassal. The ‘back’ of the block should be reserved for the residents, thus the threshold between the two is also key component.
The first step in the zoning strategy is to cluster buildings into semi-private courtyards, which would then be further developed in collaboration with the community. In addition, it is possible to further develop the area containing two schools and their playing fields into a pedestrian oriented green band. The existing building layouts and entrance orientations (Annex 3) allow us to easily form these semi-open courtyards.

This involves closing general traffic onto some small streets which are now connecting to parking located within the courtyards, yet are still heavily circulated. The remaining streets are to be developed as connecting corridors with parking, services and leisure spaces along the edges. The building frontage can also incorporate additional terraces or extensions for the apartments.
5. URBAN STRATEGY: ZONING - TRAFFIC MANAGEMENT

Pragmatically, it is a long way before Bucharest will be able to significantly reduce car ownership and larger urban challenges, make drastic changes unrealistic. As a first step, boulevard parking should be pushed out onto the secondary streets to transform the boulevard to become an active, pedestrian friendly spine of the neighborhood. Additional parking structures should be built in key areas within each neighborhood.
The last step is the architectural transformation of the existing build environment at key points of intervention located along edges, streets and the two spines - boulevard and green band. The ambition is to create spaces meant to attract and concentrate public life, further referred to as STATIC SPACES. Aesthetically, the design interventions aim to diversify the gridded, repetitive and monolithic mega-bloks.

A static space is as a physical disturbance of the urban grid and the existing patterns of movement, meant to disrupt the state of distraction in which these neighborhoods are experienced. The design technique is facade delamination. Thus the resulting architectural form and unpredictable circulation paths are stimulating people to slow down and engage with their surroundings, establishing a spatial framework for social interaction - a key quality differentiating lively public spaces from open space.
6. DESIGN SCENARIOS

In the design scenarios, three site distinct conditions are explored, employing the same design technique of facade delamination to generate form and challenge the prescribed circulation paths and urban thresholds - the traditional facade, sidewalk, street order.
6. DESIGN SCENARIOS: EDGE

CIRCULATION PATHS

SURFACE TREATMENT

FACADE DELAMINATION - CARVING SPACE
6. DESIGN SCENARIOS: STREET

CIRCULATION PATHS

SURFACE TREATMENT

FACADE DELAMINATION - CARVING SPACE
6. DESIGN SCENARIOS: BOULEVARD

CIRCULATION PATHS

SURFACE TREATMENT

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