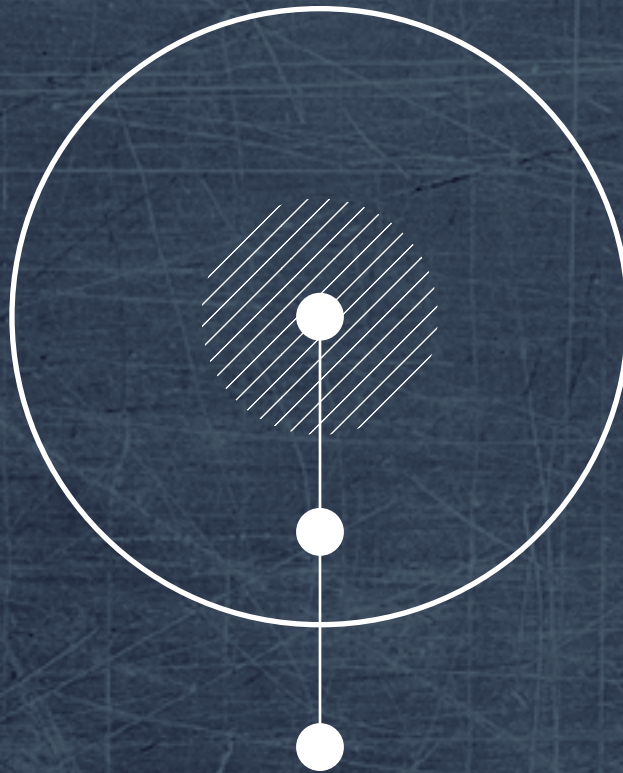


Yordan Vakarelov - Simone Fracasso

URBAN VOIDS UNPACKED

Master Thesis | Msc04 | Urb15



AALBORG UNIVERSITY

Yordan Vakarelov - Simone Fracasso

URBAN VOIDS UNPACKED

A thesis submitted to the Aalborg University in partial fulfilment of the
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PREFACE

This Master thesis' report was written by group 8, in the 4nd semester of the master programme in Urban Design, at Aalborg University.

The theme of the project is Unpucking Urban Voids. Before to go in depth with the design phase we went through a research phase composed by the study of four different theories : *Cities for People* by Jan Gehl (2010), *Staging Mobilities* by Ole B.Jensen (2010), *Re-thinking a Lot: The Design and Culture of Parking* by Eran Ben-Joseph (2012) and *Urban Catalyst: The Power of the Temporary Use* by P.Oswalt, K.Overmeyer, P.Misselwitz (2013).

These theories, together with the case study UDP in Milan, formed the theoretical and practical foundation of the main project and the starting point for the definition of the analytical method.

ABSTRACT

The urban fabric of contemporary cities is changing at a fast pace. In order to meet the needs of modern society, a new vision of how urban design is perceived is needed. The Urban Voids are a vital component in the context of the built environment. With enormous but hidden potentials, it has the capacity of becoming the corner stone of the city of tomorrow.

This Master Thesis project aims to create a concept of how these Urban Voids can be used as a catalyst for the development of their environment. Combining analyses with a pragmatic design, this project uses a solid theoretical background as well as a functional case study, to conceptualize the unpacking of the potentials of Urban Voids.

Mixing practicality, economic feasibility and creativity, the design of this project aims to create a realistic understanding of the site it examines and deliver an interesting and thought stimulating project, not only in an aesthetic aspect, but also as an inspiration for the further implementation of Urban Voids within urban design.

The result is made up by a beautiful, atmospheric mental image of Urban Voids as a catalyst for urban development, combined with technical information to further the evident feasibility of such a project.

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Thesis Preamble

Introduction

Urban Voids Unpacked

Research Design

Research Question

Case Study

Urban Development Plan

Theoretical Foundation

Cities For People ①

Staging Mobilities ②

Re-thinking a Lot ③

Urban Catalyst ④

Choice of the Site

Prenestina 64

Concept Phase

Manifesto

Design Strategies

Wake them up!

Educational Design

Design Phase

Re-design of the Traffic

Re-design of Parkings

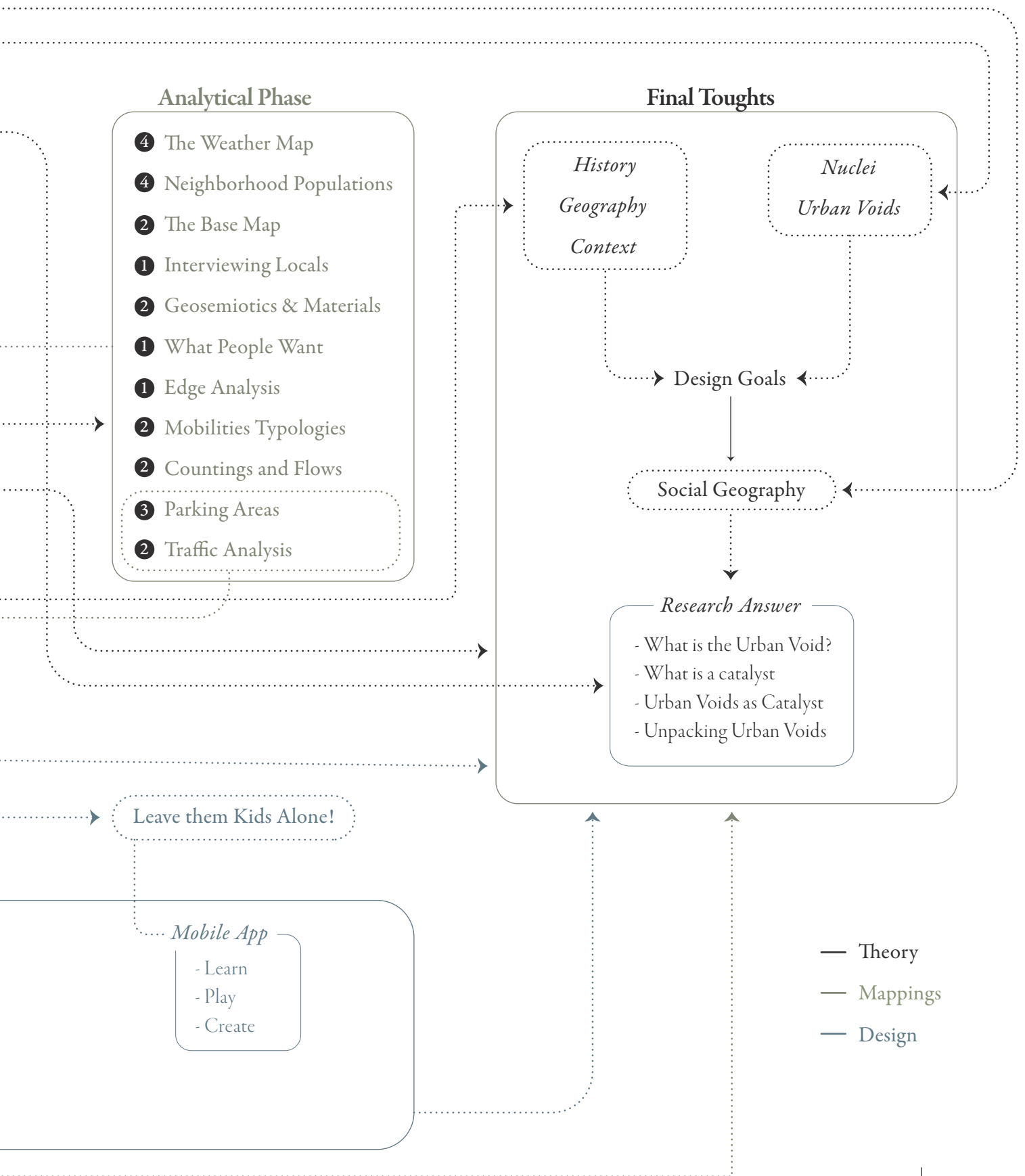
New Traffic Scenarios

Parkings Check

Masterplan of Interventions

- New Market
- Mixed Parking Areas
- Urban Connection
- Pedestrian Terraces
- Mirror Wall

- Working with the Edge
- Staging Tribune
- Illumating Pillars
- LED Screen
- Sharing Pillars







Introduction
Urban Voids Unpacked
Research Design

Thesis Preamble

Definition Phase



1
INTRODUCTION



Historically urban design is a discipline which deals with the architectural outlook and planning of the city structure in which we dwell. The contemporary face of the discipline however deals with much more than the simplistic economic and aesthetic factors of urban space, but also with their cultural, environmental and sociological impacts.

“Contemporary urban design exists at a crossroads of architecture, landscape architecture and city planning. It functions as a collaborative, creative process between several disciplines and results in three dimensional urban forms and space, enhancing the life of the city and its inhabitants (Wall

& Waterman, 2010). Urban design is concerned with how places function, not just how they look. “

During the past decades different movements within the discipline have set standards, most of which did not consider the human factor in their design, leaving a lot of unused spaces within the urban context. Relying on solid theoretical framework, references and case studies as well as analysis and mappings, this Master Thesis aims to take on this problem which major modern cities have, dealing with a specific kind of not functioning parts of the built urban environment, the urban voids.



As discussed in the introduction, this Master Thesis deals with the neglected or either forgotten spaces of contemporary cities. Such spaces could be unused not only because of their limited functionality, but also because of the fact that the public eye does not perceive them at all. Urban voids can be seen as spaces which disrupt the urban tissue, without belonging to a private or public realm. They are seen as out of context and incoherent with their surroundings. Often without function, due to the fact that they were rendered obsolete, by new urban plans or social and commercial factors; or due to poor design both contemporary or the mono-ideology of past urban design movements, these spaces live up to the definition of the very word they bear – “without content; ineffectual; vain; useless; empty.” (dictionary.reference.com)

“The usual process of urban development treats buildings as isolated objects and sites in the landscape, not as part of the larger fabric of streets, squares and viable open spaces. Decisions about growth patterns are made from two-dimensional land-use plans, without considering the three-dimensional relationships between buildings and spaces and without a real understanding of human behaviour.”

Taking this quote from Roger Trancik’s book *“Finding Lost Space: Theories of Urban Design”* published in 1986, we can understand why people do not perceive such spaces. Designed on a simple two-dimensional plan, staged from below, these spaces have no consideration for the quality of public life and accommodate no real requirements for the users of the urban fabric. However the users understand in a completely different way spaces, opposed to designers, who see their many hidden potentials, which can be unfolded and developed in such voids.

According to Trancik, there are:

“Five types of urban voids (with different degrees of openness and enclosure) play a part in the exterior city.”

“The first is the entry foyer space that establishes the important transition, or passage, from personal domain to common territory.”

“The second type is the inner block void – the enclosed “hole in a doughnut” – a semiprivate residential space for leisure or utility or a midblock shopping oasis for circulation or rest.”

“A third type of void is the primary network of street and squares, a category that corresponds to the predominant field of blocks and that contains the active public life of the city.”

“Public parks and gardens are the fourth type of larger voids that contrast with architectural urban forms.”

“The final type of urban void is the linear open space system, commonly related to major water features such as rivers, waterfronts, and wetland zones.”

In our contemporary cities, many spaces are left neglected and unseen. For example the urban fabric beneath and around the flyovers of massive transport arteries, are spaces almost always not perceived by citizens. Even though the amount of people passing next to them is significant, they are completely invisible to their eyes. They are right there, but people aren’t able to see them. These spaces are the main focus of our Master Thesis and their characteristics as well as the way we want to unload their potential within the context urban fabric around are why we defined the topic as “Urban Voids Unpacked”.

Bringing people to the accomplishment of the senso-

rimotor stage of the development of their urban consciousness, through our project design we aim to make the users of the urban fabric aware of these spaces. Not only to be perceived as the physical structures they are intended to be, our purpose is to make people see and experience these spaces in a way that is usually reserved only by designers. They have the potential of

being places of “unexpected and unknown” outcomes, places with cultural, social and empowering functions.

Our main focus is to locate, describe, problematize and find solutions for these spaces, which we have defined unseen for the public city eye, answering the main research question of our Master Thesis project:

*{ How can we unpack the catalysing potential
of urban voids in contemporary cities? }*



RESEARCH DESIGN



Our research design is comprised of a methodological plan for the execution of the Master Thesis project including the following steps described below:

- **Research Field:** our research field extends from Theoretical foundations by urban designers concerning the quality of public spaces and their usage, to a practical case study that are in line with our goals and thoughts.

- **Methods:** the methods we plan to use for our Master Thesis are a solid theoretical background; site analysis and mappings; interviews; 3D modelling; Peer-to-peer review.

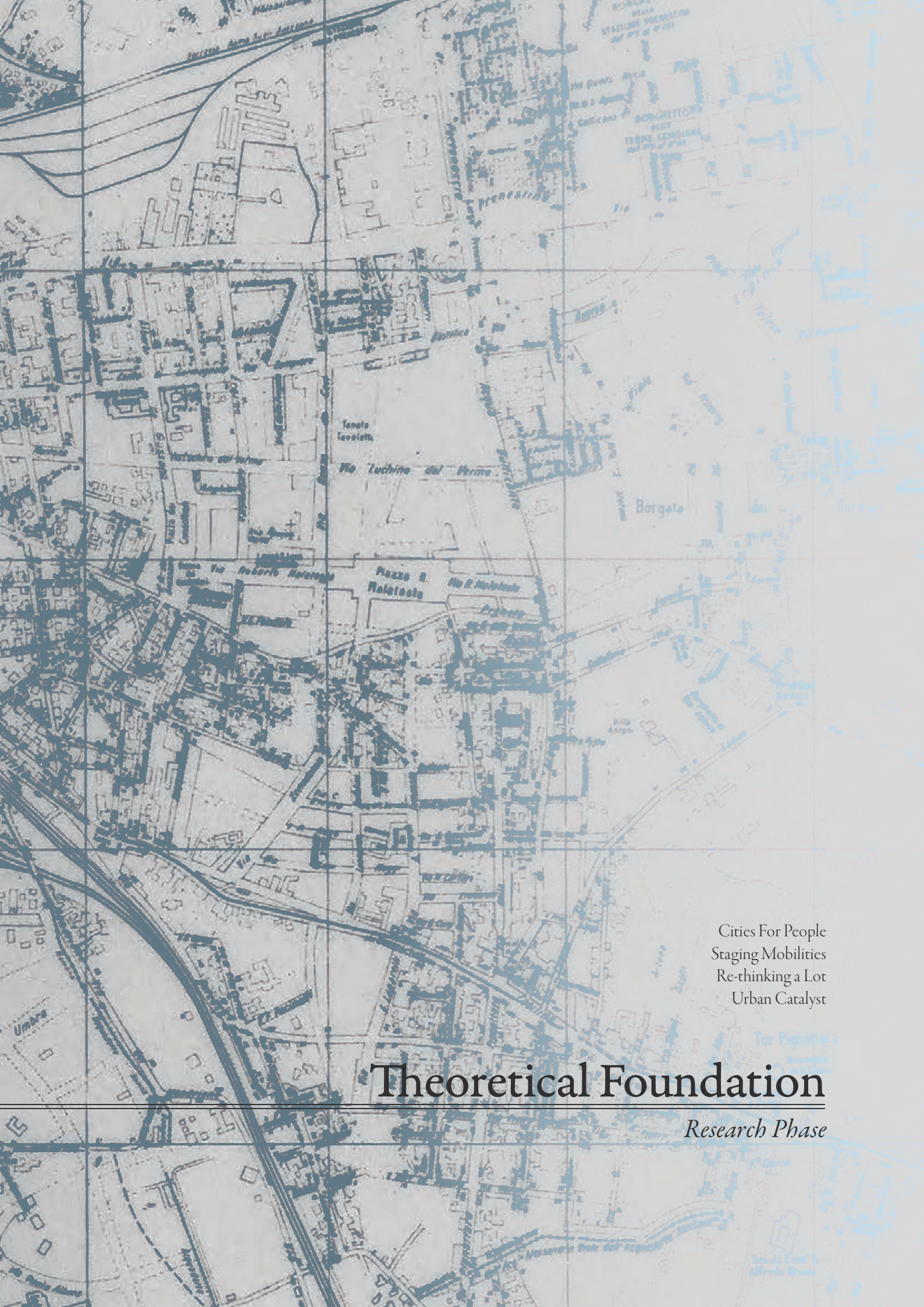
- **Step by step Development:** theory research – theoretical framework – research question formulation – revising the theoretical frame work – theory research

- site analysis and mappings – initial design proposals – finalized design proposals – conclusions and further development.

- **Design Outcomes:** our aim is to propose a design that has the ability to be functional in any similar location to the one described in our Master Thesis and able to evolve to serve the specific characteristics of the particular urban fabric of each new site.

- **Demarcation:** our Master Thesis project will be focused on a particular kind of “urban void”, which are smaller in scale and positioned at vital mobility nodes throughout cities, in which we will seek to “unpack”. Thus the demarcation will leave out larger scaled spaces and what can be the next step in the development of our project – the backbone connection of the entirety of “urban void” spaces within a contemporary city.





Cities For People
Staging Mobilities
Re-thinking a Lot
Urban Catalyst

Theoretical Foundation

Research Phase

The theories listed below constitute the basis for the development of our master thesis. Some of them are going to be useful for the analytical stages and some will be used in the design stages of the project.

Cities for People by Jan Gehl (2010)

Staging Mobilities by Ole B. Jensen (2010)

Re-thinking a Lot: The Design and Culture of Parking by Eran Ben-Joseph (2012)

Urban Catalyst: The Power of the Temporary Use by P.Oswalt, K.Overmeyer, P.Misselwitz (2013)

Both Cities for People and Staging Mobilities strongly orient our design interest on the human perception of the city. We'll use the key concepts of these theories during the analytical phase of the work, during which the site is scrutinized in different ways; resulting in mappings, registrations and a general understanding of the use of space at the sites in question. The theory from the Eran B. Joseph's book instead is helpful in understanding one particular type of urban void: the parking lot. Seen the actual use of our selected sites is oriented to illegal parking, this books helps us to see in these spaces beyond the simplistic parking lot solution, opening up our eyes to new potentials. Urban Catalyst instead serves as an inspirational tool in dealing with the task of designing and formulating a concept of design. Our sources of inspiration and information while working on the project have been many, relating to different challenges and tasks throughout the thesis development, but the ones discussed and paraphrased here represent the main core of the theoretical foundation.

Jan Gehl

CITIES FOR PEOPLE



Jan Gehl's book brings the urban design and planning issues of our nowadays cities to the human scale. The modern urban planning is dramatically changed in the last decades and what before was the main focus, the city life, now it appears to be completely forgotten. Looking at the cities as they were thought before, for instance Venice, it is clear that the urban scale was the human one. An higher priority was given to activities such as walking, sitting, standing or more simply interacting with the public space.

In the last years, with the increasing number of cars and traffic, the human dimension phased out and the conditions necessary for the people to engage the city life are being eroding.

First we shape cities, then they shape us

Looking at the history of our cities, we can clearly see that the urban structure and the way cities are planned has always affected the people's behaviours. For instance, the compact urban fabric of the medieval cities with their short distance, their cozy squares and

marketplaces sustained their function as centres of trade and craftsmanship.

There seems to be a mutual influence between the city and the people. Bringing the matter to the present day, the issue moves to the growing demand for traffic in our cities. The most immediate reaction was to fill all possible spaces with moving and parked cars and then the construction of new roads. Unfortunately, as a direct consequence, the effect was a further increase of the number of cars in the city. We can say that more roads means more traffic, can we say less roads, less traffic?

Consequently to the damages of an earthquake, San Francisco in the 1989 closed one of the biggest traffic arteries of the city to cars. The effect was that car drivers found an alternative route, but being the capacity lower, the traffic paradoxically diminished. So the damaged double-decker freeway was converted into a city boulevard with trolley cars, trees and wide sidewalks.

The same argument can be made regarding the public

spaces of the city. The better their quality and better it will be the quality of city life. ¹*"If better city space is provided, use will increase."* Physical planning can greatly influence the pattern of use in individual regions and city areas, what matters to entice people to walk around and stay in city space is very much an issue of working with the human dimension and issuing a tempting invitation.

The lively, safe, sustainable and healthy city

¹*"The quality in the city is a self-reinforcing process."* Attracting cities need closely designed public spaces to sustain those processes empowering city life. Basically people are naturally attracted by activity and the presence of other people. As the common saying says: ¹*"People come where people are"*. For instance watching outside the window other children playing, a child hurry to join them. Concerning a lively city is important to work with the right scale, the right dimensions, density alone doesn't necessarily produce life in the streets. Important features for lively cities are soft edges. The edge in this case is the border between buildings and the city. Lower floors have a considerable affection on the street life and their treatment deserves an higher priority in the urban design policies. They are exchanges areas where approximately the 70% of city life happens. To have façades with several doors and openings, for instance shops, and maybe also with vertical relief, helps a lot in creating a soft edge. Vertical lines are more coherent with the human 5km/h scale, instead of the 60km/h scale that works more for drivers on the move

and that creates boring and passive space for pedestrian.

The safe city concept deals with another paradox. A more liveable city derives also from the safe conditions. At the moment in the majority of our cities traffic lanes and pedestrian sidewalks are pretty much separated each other. Having dedicated lanes make people to feel more protected, but paradoxically this lead to less awareness of pedestrians and drivers. Mixed traffic street are a solution for this problem, and even if having shared spaces seems to be less safe, people are more aware of the other type of traffic passing by so there are less accident and the street results to be safer.

Talking about sustainability instead, walking and cycling are two important factors. Giving to people the right conditions to walk and to cycle, doesn't just remove cars and traffic from the city, but gives the opportunity to implement new public transport systems, such as LRT and BRT. This leads not just to an environmental sustainability, with the reduction of pollution, but also to the more important social sustainability that gives various groups in society equal opportunities for accessing common city spaces and getting around town.

Direct consequence of being able to experience the city by walking or cycling is that people make physical activity. Benefits are substantial not just for a positive spin-off of the quality of the city life, but also to reduce the health-care costs.





According to this theory Mobility is a cultural phenomenon. We carry flows and move across places: John Urry proclaims that “*Societies are not static ‘things’ and ‘places’, but dynamic relations and networks!*”. Moreover he argues that mobilities research should concern itself with five different kinds of mobilities: corporeal travel, movements of objects, imaginative travel, virtual travel and communicative travel. These key points express a view of mobility as a physical travel that involves embodied, sensed and performed practices, with all the psychological implications that occur before, during and after a travel. All the factors mentioned above contribute to the change of the view of our cities from mono-centric to complex networks of multiplicities. Nowadays a ‘mobility turn’ is necessary to better understand the relationship between ‘problems’ and ‘potentials’ of the network city using an interdisciplinary approach that goes from sociology to urban design.

Features of the theory

The main theoretical features of the network city are as follows: New technologies and Performative Urban Spaces, Staging Mobilities, Critical Points of Contact and Geosemiotics. The relationships between human beings were once a matter of face to face interactions, but today with the advent of new technologies they have become more abstract, they are invisible and mobile social networks, with a reduced necessity for physical contact. Technology in this respect can be seen as a way to enhance interactions and experiences in urban transit spaces: examples of these digital infrastructures are the WiFi, rain/wind detectors, air pollution sensors and so on. The implementation of these digital systems obviously needs to be regulated by a protocol, but there is certainly also a need for designers to take decisions.

Staging Mobilities

‘Staging Mobilities’ is an understanding of the mobile situation. Mobilities do not ‘just happen’ or simply ‘take place’. Mobilities are carefully and meticulously

designed, planned, and ‘staged’ (from above).

However, they are equally importantly acted out, performed and lived as people are ‘staging themselves’ (from below). Staging Mobilities is a dynamic process between ‘being staged’ (...) and the ‘mobile staging’ of interacting individuals³. Different actors play different roles in this dramaturgical metaphor, depending on if they are staging from above or from below. Concerning the staging from above we can consider the following: Planning (documents, procedures, plans etc.), Design (design manuals, design codes, architecture etc.), Regulations (legal frameworks, laws etc.) and Institutions (policy arenas, economic interests and actors). In regards to the staging from below: Consociates in interaction (the meeting and passing by on the everyday street), Individual performances (the body and its movements) and The mobile self-presentation (social dynamics of interaction on the move)⁴. In the Staging Mobilities framework the two important elements are the metaphors of ‘the river’ and ‘the ballet’. The former is based on the bird’s eye view analysis of urban spaces, it sees the flow of people as water in a river. The latter regards bodily interactions and situational dynamics of situational mobilities and it’s based on gestures, gazes, and embodied negotiations and interactions that take place in urban spaces.

Critical Points of Contact

In the cities of today the social issues and the multiple systems are overlaid and constantly convergent, in parallel and in conflict. What is Interesting in these layered networks of physical dynamics, people, advertisement posters, deliveries of goods to the shops and so on is to analyze how they are connected or not connected to one another. In this framework the Critical Points of Contact are defined as the clashes between these layers, they start to be critical when a determined system changes and affects the other ones implied in the ‘meeting’. In addition to this the city can also be seen as a complexity of processes in which one finds our everyday practices, we are co-constituents in re-creating and

re-shaping the city. We have a multiple perception of this 'object', depending on who we are (social hierarchy, mood, age etc.), but as we are also reshaping the city, it does the same to us with its physical materiality and the affection of its spaces on our urban behaviors. Said that we should be aware that a CPC could be everything, it doesn't just concern the physical elements, but it could be composed of more abstract characters as anthropological or sociological factors.

Geosemiotics

Sociological factors (e.g. a determined place in a neighborhood could be the meeting point of different cultures). Last but not least, the fourth feature of the network cities is Geosemiotics. The origin of this academic discipline has to be found in the Semiotics studies by the American philosopher Charles Sanders Peirce (1839-1914). He defined semiotics as the science of the meaning of signs. We can sum up the interpretations of this 'meaning' into three parts: the Icon which is based on the similarity of the sign with something conventional and well known, the Symbol, that represents habits and conventions of a specific local culture and lastly the Index in which the meaning is based on the physical placement of the sign within a determined context, from this last point geosemiotics develops its concepts. The definition of geosemiotics in the Scollon & Scollon's book 'Discourses in Place: Language in the Material World' is: The study of the social meaning of the material placement of signs and discourses and of our actions in the material world⁵ From this quote is clearly visible what's the focus of geosemiotics, the strong importance of the placement of a sign and the dialogue of this with other more or less reflected messages within the same semiotic aggregate. In contemporary cities the understanding of the meaning of signs gains even more relevance when, for instance in the graffiti/murals case, that is an expression of urban subcultures, a voice that can no longer be ignored but and has to be heard and conscientiously used in the design of the city.



RE-THINKING A LOT



Eran Ben-Joseph's book analyzes the surface parking lots issue in the contemporary city. The "*Urban Voids Unpacked*", object of our master thesis project, are being used as parking lots in the majority of cases. Common feature of these spaces is their state of neglect, but what makes them special is their huge unexpressed urban potential.

²*"Parking lots could be significant public places, contributing as much to their communities as great boulevards, parks, or plazas. For all the acreage they cover, parking lots have received scant attention. It's time to change that; it's time to rethink the lot!"*

Parking lots have a lot in common, they can affect more than we think the way we experience the city. They are the first and the last thing we see when we arrive to our destination.

They can be a fertile ground for artistic, cultural and social uses, there is much more beyond the simple parking. In the U.S.A. for instance, before football games these parking lots are used for eating, drinking and having fun before the match starts. During this so called "*Tailgating*", people set up BBQs, tables and chairs transforming the parking lots in a new common space where temporary communities can develop. These spaces are also a fertile ground for mobile food shops. ²*"Food trucks and parking lots enjoy a symbiotic relationship. From traditional hot dogs to the*

sophisticated ethnic cuisine, one can enjoy a quickly served fresh meal in a convenient location." Talking about the social realm, they can also serve as playground for children, or during the off hours, when stores are closed, they can be a meeting point for young people that show off their cars and socialize.

Being they part of the urban landscape they also have a huge impact concerning to the environmental issue and in the way we perceive the atmosphere of the city we live in. Even if their life reason is unavoidably linked to the constant need of new space for car, they can be seen in a different perspective, closer to the way we design public spaces.

²*"Parking lots with or without parked vehicles can be fine space, even great spaces. Lots can be integrated into their surroundings with little or no environmental disruption. They can be social and cultural assets, a stage for open, less controlled behaviours where multiuse and multifunction can be achieved. Lots can be productive places that do environmental work, clean water runoff, generate oxygen, and produce energy. They can also be well designed with attention paid to details, materials, and architectural composition. The options are limitless. It is time to shift from modest and lackluster attitudes about parking lots towards attitudes that celebrate and acknowledge the great potential of these spaces."*



URBAN CATALYST: THE POWER OF THE TEMPORARY USE

Urban planning was initially interpreted as an act of colonization, primarily based on the designation and development of city's areas, and after for the construction of new buildings. However, now things are changing, and the matter it's more about addressing what has already been built and how it evolves in a long time perspective.

³*"The built environment is no longer the goal, but the starting point".*

With this changing trend regarding the development of the city, also a different perception raised up in citizen consciousness. Urban Catalyst book is dedicated to all urban areas whose future is vague, the ones in a state of no longer or not yet. Temporary urban areas with a huge unfulfilled potential.

The Temporary Use

Temporary use is unplanned, but concerning to the city's public and cultural life as well as in its urban development it is very important. Unfortunately it has been almost completely shrugged off in the urban policies of our cities. Below are listed 9 different typologies of temporary uses explored in the book:

- **Stand in:** The stand-in has no lasting effect on the place. It merely uses gap between the last use and the next. Such a low-impact approach makes realization easier at the cost of transitoriness.

- **Free Flow:** The use continues indefinitely by moving to new locations as the opportunity arises. This approach skilfully combines the pragmatism of the stand-in with long-term development, as it also uses the change of location to update its own activity.

- **Impulse:** In-between use can decisive impulses for the programmatic profiling of its location: it establishes a new activity profile that is carried on in a new form even after it ends.



- **Consolidation:** Former temporary use becomes established and turns into long-term use. Informal arrangements are replaced by long-term leases and regular permits

- **Co-Existence:** Even after the appearance of new commercial uses, the informal temporary use continues to exist on a smaller scale. A niche existence makes co-existence possible.

- **Parasite:** The temporary use exploits the potential of an existing long-term use by operating next to it.

- **Pioneer:** Hitherto unused territory is at first temporarily appropriated by the simplest means and used in a transient manner. With the success of the temporary use, the activities continue indefinitely and take on increasingly permanent forms.

- **Subversion:** The temporary use strategically occupies the spaces of a long-term use in order to disturb and transform it. Although such occupations and sit-ins are usually short-lived, they often effect a marked transformation of the institutions concerned.

- **Displacement:** Permanent uses are temporarily displaced and continue in an improvised fashion until they are able to return to their permanent location. The temporary displacement can generate impulses for the reinvigoration of the program.

The importance of temporary uses stay also in their affection on the future development of the urban life.

³*"Their influence continues to be felt even after their end...temporary uses change the image of their location and attract other uses to settle there...they also have an impact on the biography of the initiators. Even if in most cases temporary uses only exist for a limited time, they may have lasting and long-term effects on the development of locations, economic sectors, and cultural fields."*

Patterns of the Unplanned

Vacant spaces as the unplanned ones occupied and used by temporary users have to be considered a resource for the city. The lack of specific uses has to be seen as the

"lie fallow" period in agriculture. It's a time usable to regenerate and to let the space to become fertile again.

In this perspective people whose lives close to these areas play an important role. They can be an active part of the catalysing reaction, with their amount of social and cultural capital. We can define the temporary user in three main groups:

- **Young Entrepreneurs:** People that use these urban spaces as a springboard for the realization of an idea. Usually they are young well-educated people between school and career.

- **Hobbyists:** People who undertake the temporary use as an hobby. These urban actors search to enrich their cultural experience seeking the freedom to follow experimental life styles.

- **Opportunists:** These temporary users are usually people searching for opportunities to pull back from society and changing drastically their life habits.

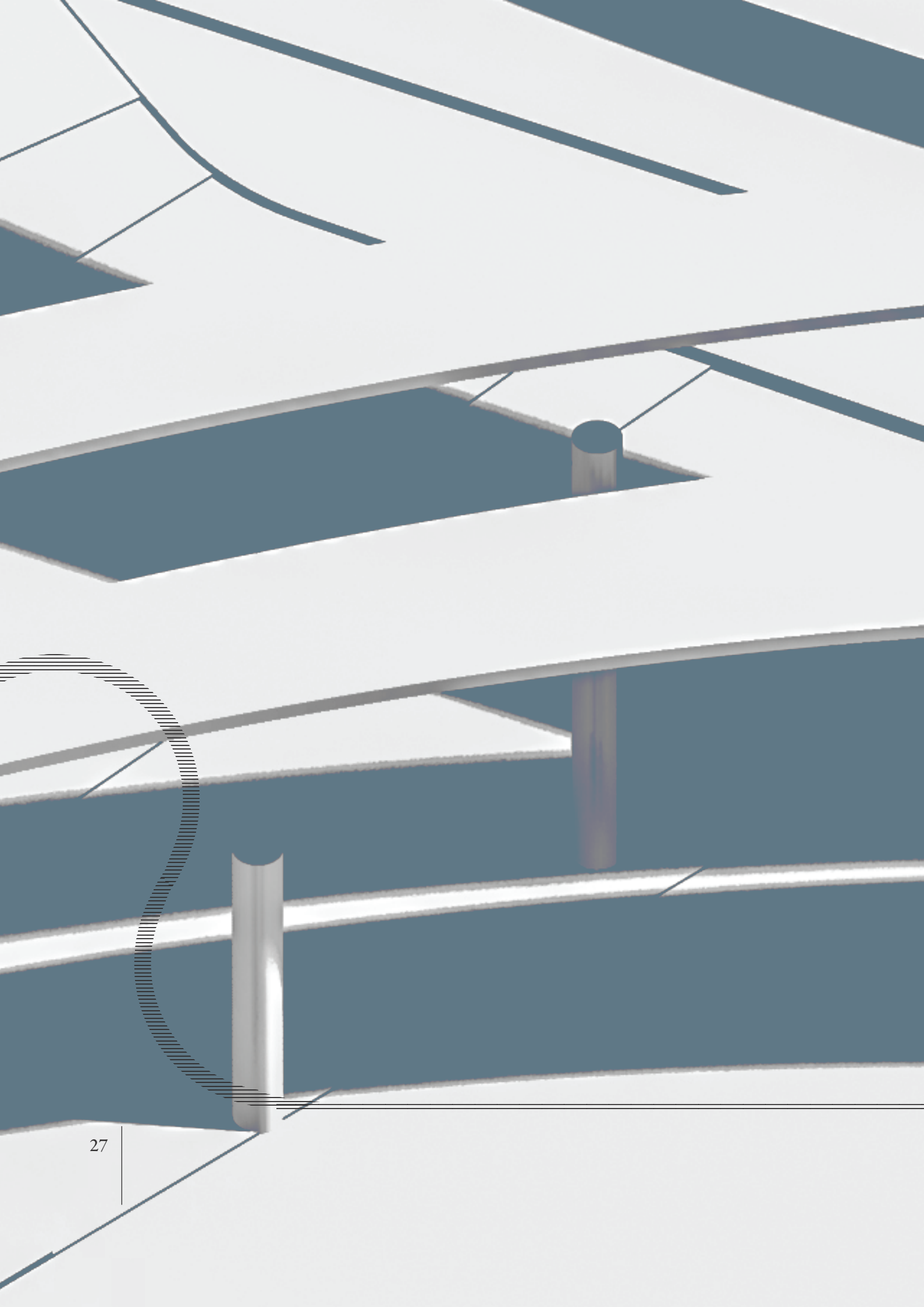
Temporary users discover urban architectural potentials, have a flair for unusual locations, and worry very little about the existing image of the site. ³*"Temporary users do not expect a site to meet established standards of structure, they understand the importance of the unknown and the unexpected."*


It is important when we analyze a good place where test a temporary use to build a *"Weather Map"* composed by traffic connections, available area and density of young people. In general a good location for a temporary use is a place with intact infrastructure, very accessible and with a dense network of potential actors.

³*"Characteristic and also visible to the visitor is an easily readable multilayeredness: the site is overlaid with a series of interventions that decidedly belong, aesthetically, to the present, and culturally to contexts different from that of the site."*

To build a strong identity compensates the instability of the temporary use.







Why this case study
Our Theories and the Milan UDP
Unpacking the “Urban Voids”
Describing the Milan UDP Case Study

UDP Milan

Case Study

NEW URBAN DEVELOPMENT PLAN IN MILAN (UDP)

Why this case study

The reason why we have found this case study interesting in regards to our Master Thesis is because it is a recent urban development plan for the city of Milan, which is like where our sites are based is a big metropolitan city in Italy. Apart from the solely geographical similarities, this case study offers a really interesting perspective upon a new urban proposal for the city based on the following goals and sub goals.

The attractive city

The metropolitan network; Synergies between urban development and infrastructure organisation; A house for everyone; Encouraging creativity and a pro-active tertiary sector; Safeguarding neighbourhood identities, the historic city and landscape.

The liveable city

Permeable environmental systems; Efficient use of agricultural areas; Remediation of contaminated or decommissioned areas; Water, an essential element; The new energy policy.

The efficient city

Evenly allocated services; Focus on neighbourhoods and local-scale green areas; Free-flow time; Management and upkeep of green public spaces; Subsidiarity to link public and private

Most of these goals can directly correlate to the formulation of our theoretical background and more specifically to the “Cities for People” by Jan Gehl and “Staging Mobilities” by Ole B. Jensen.

Our Theories and the Milan UDP***“Cities for People” by Jan Gehl:***

As described in our theoretical background this book emphasises on the importance of the quality of the urban space as a liveable place for the people. It also emphasises on the human scale factor as a tool when designing and perceiving the quality of an urban space. As stated in the title of the book a city for people is a

“lively, safe, sustainable and healthy city”. These qualities which Jan Gehl searches for and describes are also many of the main focus points of the New Urban Development Plan for the city of Milan (UDP). Found as sub goals to the main focus points, the case study of Milan’s prospect for the future is a valuable insight into a more practical rather than theoretical approach towards the urban fabric in a modern setting and also with geographical similarities to our Master Thesis’s aims.

“Staging Mobilities” by Ole B. Jensen:

One of the focus points of the Milan UDP is the design approach through the analysis of the *“urban voids”*. These spaces can derive from different causes, but often they are a product of a missed convergence between urban planners, staging from *“above”*, and the real human dimension of the people’s city life, staged from *“below”*. They are areas full of potential, because they are frequently located in urban Critical Points of Contact, where the city expresses its multilayered nature. Mobility is a cultural phenomenon, according to Ole B. Jensen and according to the new UDP of Milan, one of the main aims of the governmental bodies is to put emphasis not on a big scale city urban development masterplan, but rather gives regard to small neighbourhood communities and their cultural significance. This can be seen in the quote from the interview between Nicola Leonardi and the Studio of Metrogramma; Andrea Boschetti & Alberto Francini, published in the 2010 edition of THE PLAN Magazine *“Milan, The Dense City”*.

⁴*“It’s a bit like the metaphor of the tree and its fruit: the branches are the urban structure; the fruit is the individual neighbourhoods; each of whose particular characteristics are closely connected to the city’s overall identity.”*

⁴*“The whole mobility issue is a delicate one. Let’s start from one prerequisite: that a city should have a far-reaching efficient public transport network. None-*



theless it would be completely utopian to attempt to deprive a community of private cars. “

⁴“This approach entails enhancing the specific identities of the various neighbourhoods and districts”

The interesting aspects of this new UDP are that they are treating the large scale environment of the city of Milan on a more local basis, putting emphasis on culture and communities but also giving regard to the big infrastructural nodes and arteries that serve the mobility aspect of every modern metropolitan city.

Unpacking the “Urban Voids”

This new urban development plan also has two main areas of activity, the first of which presents a particular interest to us as it is the main theme in our Master Thesis the “urban voids”. Quotes from the magazine article regarding these areas can be found below.

⁴“The collective or public structure of the city. This is the pattern of “void” separating the built volumes and is an unchanging feature, especially when these voids connect the city’s monumental buildings. This weave of open areas is the blueprint for the future city, framing the concrete action plans to be implemented at the different scales”

The built fabric or “solids” making up Milan’s many neighbourhoods that contribute to the city’s multiple identities. This built fabric will be the object of a rolling series of optimisation projects.

Treating the urban fabric and generalizing it into two more concrete sides – the void and the solid – is maybe a simplistic way of perceiving a city but the notion of the “urban void” is an interesting term, because it could be correlated to our idea of the “Urban Voids Unpacked”.

The aim is to use these “void” spaces and their huge potential as a corner stone for the future development of the city, an interesting perspective which we, in our Master Thesis, share with this strategy, having chosen to view these spaces as a huge potential for the revitalization and redevelopment of the urban fabric of the city.

⁴“A pillar of Milan’s sustainable Urban Plan is what is known as the “urban voids”. These will be turned into truly collective places for socialisation, flexible



spaces that relate to their immediate urban surrounds.

The proposed extensive and intensive service provision delivered by these “urban voids” is key to the city’s future development. “Urban voids” will constitute the green backbone of the new urban vision, a varying scale series of pedestrian walkways, squares, open public spaces, cycle paths, circulation routes (for collective and private traffic), new services provision centres for the local and wider communities, neighbourhood shops and so on.

The backbone structure confirms the overall strategy of the development plan whose underlying objective is to create greater service density that will in turn raise the overall quality of the people’s lives. As the new Milan Urban Plan is rolled out, service quality standards should rise from 18 sq m to 36 sq m per inhabitant in just a few years.”

Connecting the concept of the urban “void” to our concept of “Unpacking” them, we see a lot of potentials. These spaces are a left over, a result of superficial urban planning policies. Although different in scale, the “Urban Voids Unpacked” shares the same problems and possibilities but in a smaller capacity than most urban “voids”, as described and pointed out in THE PLAN magazine article and according to the new UDP of Milan.

“Urban Voids Unpacked” are not perceived by people as urban spaces or in the cases they do, it is simply born by a primary temporary necessity of parking space for their increasing number of cars. Here comes in help another theory we are working with: “Re-thinking a lot: The Design and Culture of Parking” by Eran Ben-Joseph. Often people use these areas as surface parking lot, this behaviour is dictated by a need of space, but this choice implicitly encloses the potential multi-functional nature regarding the uses of parking lots.

New possible temporary uses can grow autonomously on site in many ways, the book “Urban Catalyst”, part of our theoretical framework, describes how this happens. It also serves as a toolbox, filled of different methods of implementation of new temporary uses in these vacant areas of the city.

Concerning our mobility theoretical framework, we

think that the “*Urban Voids Unpacked*” is similar to the ones described in Milan’s new Urban Development Plan, which is our case study, but more concerned with mobility, because of their location and connection with vital transport hubs. Also the way they can be seen as staged from above and below. Connecting Ole B. Jensen’s work with Jan Gehl’s one, these spaces are maybe well designed from above to execute purely mobility functions, but poorly designed from below. It’s like urban planners staging from above the model of the new designed flyover, get distracted by their “bird view” perspective and they forget about the space beneath. They do not consider the human factor, the functionality of the urban fabric and the context around our “Urban Voids Unpacked” regarding their usage by people.

Also the concept of the “urban void” directly correlates not only to the mobility issues that our “Urban Voids Unpacked” faces, but also to Jan Gehl’s theory about a city for people. A “void” for us can be considered as a space deprived of qualities, thus being empty not in the literal sense of the word but metaphorically speaking about the quality of the space (scale, dimensions, density, etc). Concerning the factors that Jan Gehl sets in his book “*Cities for People*”, these places are neither lively nor safe or sustainable and healthy.

According to our understanding of the theoretical framework and the case study that we found, we think that there is a direct link between the so-called “urban void” described in THE PLAN Magazine and our “Unpacking” of those “voids” and, concerning the New Urban Development Plan for the city of Milan. Deriving from this, we have chosen to highlight certain points in the article as well as quotes that would further our understanding of such spaces and also give us new ideas about their potential development.

Describing the Milan UDP Case Study

Important points and quotations from THE PLAN Magazine, dedicated to the new urban development plan of Milan. From these points we can also derive some important ideas for the future development of our own project and the Master Thesis in general. This case also serves as a tool for the elaboration of our Research question. These elaborations of the points are just like examples or food-for-thought, resulting in the re-reading of the theories; looking at them with a differ-

ent perspective; looking for more theoretical background; sometimes also coinciding with our viewpoints.

New Urban Development Plan in Milan – includes the public spaces and their organisation , certain fundamental services, roads, public transport etc.

The UDP Plan of Milan is a huge venture that includes every aspect of that a modern city should look and be contemplated as such, providing a better standard of living for its population. We believe that our sites are located in such a way that they tie into the transport system of the city but their unfulfilled potential can also be developed and designed with functionality for the people.

Redistribution of urban loads

This concept of the UDP of Milan ties in with our idea of the redistribution of the urban components around our sites and their actual connection to the urban fabric.

Underlying idea of an open-ended plan that will continue to evolve

This method of a progressing plan that can set a foundation but continue to evolve is similar to our Iceberg Method – we create the bottom of the iceberg but the top of it that is above water will be designed specifically for each case, enhancing the particular cultural identity of the urban neighbourhood around or the design purpose of the site in question.

Flexible and abreast of the times

We believe that our design proposal should be flexible as we are aiming for creating a blueprint, model, matrix that can be applied to different sites around the world similar to ours here in Rome.

This development must be two-way. Definitely the idea is not so much to be set in as a plan but a work-in-progress, a blueprint, also aimed to interact with the citizens of the city

Our aim is to create a design proposal that is influenced as much from our point of view as planners or “staging from above” as it is from the people which are going to use it or “staging from below”

Once the structure – the backbone of the collective spaces has been established, densification of the services will be necessary to ensure these

areas become the drivers of transformation.

A very interesting point of view upon the urban fabric was discussed in THE PLAN Magazine concerning the methods with which the governmental urban bodies discuss the topic of the “void” spaces. They have constructed a model showing all of these spaces with the heights of the voids correlating to the surrounding built urban fabric. See picture below:

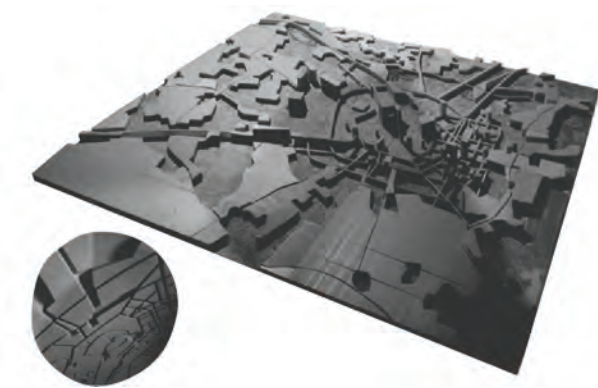


Image courtesy of THE PLAN Magazine

This model clearly demonstrates the magnitude of such “void” spaces and why they can be seen as a backbone of the city. They connect the urban tissue together and remain unutilized in their potential to become urban catalysts. This is the potential that we want to explore in our Master Thesis’s design but in a smaller detail, as we cannot deal with all the various types of such voids, focusing on the ones that are closely connected to the transport system of the city – the flyover spaces.

The whole mobility issue is a delicate one

By our opinion we transfer this point to our project in regards that mobility is not easy to stimulate and maintain in places such as ours, because of the simple fact that people do not perceive them as public, well-designed or as spaces in general. This is one the main difficulties that our design proposals must answer, because to create a successful design we must work with the mobility issue in such a manner, which will implement these spaces into the urban fabric in a coherent and functional way.

The metaphor of the tree and its fruit; the branches are the urban structure; the fruit is the individual neighbourhoods; each of whose particular charac-

terises are closely connected to city’s overall identity

This metaphor can be correlated to our Iceberg idea as well. The branches are the solid foundation design which could be applied to similar locations while the fruit is the specific site location “custom” development design, which of course depends on the location, cultural and commercial scene, surrounding urban fabric etc. Also we feel like we could use another metaphor regarding our particular Master Thesis project. The branches can be seen as the urban fabric of the city, spreading around everywhere, being mobility networks; social networks; cultural networks etc. These branches are connected to the fruits which are represented by our PaBS or the urban voids in such a sense as these fruits are something beneficial, spaces where there is unutilized potential for the future development of the city.

Interventions that can be put in place immediately at a local level and broader-scale projects whose complex structural nature makes them long-term

With our design development we will be looking to create a sort of intervention that could become permanent over time or change in some way but still be a part of the transformation of these spaces.

The pattern of “voids” separating the built volumes/environment is an unchanging feature, especially when these “voids” connect the city’s public spaces, transport hubs, monumental buildings

This issue deals with the fact that these urban “voids” are a part of the urban fabric. Separating urban volumes they serve no other function or purpose, which leaves their potentials unutilized.

Correlate economic, creative, social, cultural and urban resources into a strategic system

One of the main points with which the new UDP deals with is the practical redistribution of the resources and the creation of a system which provides new services – commercial, economic, cultural and residential – based on a local “need and provide” system

By encroaching on the inner city, regional areas will impact the centre’s morphology and its inhabitants lifestyles

⁴“Until recently, urban voids were considered simply as left-over pieces of land between buildings, not as an

essential “material” resource with which to create quality urban space. By showing all the urban voids on the city map as an architectural volume, one gets a clear understanding of the vital importance of these spaces and the enormous opportunities they hold”

Some ideas that came up after this quote regarding our projects are to:

- Create a model showing our “Urban Voids Unpacked”
- Create a hierarchy of “void” spaces within the city and classify them
- Show why we are interested in working with the “fly-over spaces” in particular
- Create a map showing all of the “void” or “fly-over spaces”

Enhance the quality of city life

One of the beneficial factors of developing places like these urban “voids” is the fact that they will improve the quality of city life within the urban fabric for they will be converted into different functional spaces, which serve best the needs of the particular location they are in, being able to adapt to the changing situation and also decreasing the urban sprawl expansion, providing densification without sacrificing new land for construction

“A network city is the antithesis of a city composed of juxtaposed enclaves or one conceived as a central hub with surrounding outskirts. Rethinking the city as a vast regional network of connections and flows also means better, more balanced service designation based on a series of “quality densification nodes”. Better service distribution allows previously underserved peripheral areas to acquire greater autonomy and efficiency.”

“Today it is imperative to improve connections between the inner parts of the city and its outlying districts, rethinking the infrastructure network, enhancing interconnections and increasing the level of autonomy and efficiency of the suburban areas.”

“Increasing density means compacting the urban fabric, consolidating especially the city’s more fragile areas or reinforcing key infrastructure and service nodes, i.e. the “epicentres”. A key tenet of enacting a sustainable urban plan is the principle of not consuming green field sites but rather building the new components of tomorrow’s city on brown fields.”



Introducing the Site



Prenestina64

The site of Prenestina 64, is the ideal example for the concept of Urban Voids, because although problematic due to its large scale and complex social context, it possess to turn those problems into potentials and become a solid case study for further development of the subject.

Whenever we are speaking in the context of a big scale contemporary urban development, we can no longer apply the now outdated principles of central expansion. As practically shown in our case study example in the city of Milan, modern urban plans aim to “encroach” on the inner city, thus creating a mutually beneficial two-way connection which impacts their morphologies. Furthermore the contemporary vision for our cities must include a social and cultural touch. Enhancing the cultural identity of each small neighbourhood, this method creates strong links in-between different epicentres of the city, like a backbone structure. With the main focus put on the unpacking of the urban void potentials as a means to catalyse urban life and improve the quality of life for people, our Master thesis emphasises the urban voids connected to the flyover structure, because of their unique multi-layered nature.

Important hubs, neglected and full of potentials, these spaces are placed in key areas where usually we have a lack of urban life. In the case of our project, our site is located in-between four regulatory administrative neighbourhoods, making it a unique connection point. The problem with the site is mainly its lack of urban life. Due to the high level of transitional traffic, which although is not vital to the city’s infrastructure, is staged from above in such a way, that it deprives the site of important factors needed for a vibrant public space.

Having studied the urban context fabric around our site and realizing its huge potential as a linking epicentre, our concept idea revolves around several points:

1. Everyday living places

Aiming to improve the quality of life and influence the current tendency of the decreasing of the population within the context area

2. Developing a contemporary identity

Taking notice to the small cultural neighbourhoods within districts, it is important to take into consideration their needs and wants, in order to create a well working and integrated plan

3. Creating a system of linked void epicentres

As mentioned earlier, we believe that creating a system of all the void spaces and an hierarchy of epicentres will create a solid backbone structure, which can serve as a literal or metaphorical path for cultural and urban development

4. Increasing the green areas

Due to the very heavily concrete and cold nature of our area, the goal is to increase the recreational green public areas within the limits of the site, rejuvenating public life and its quality

5. Functional and social mix

Our area presents a lack of many cultural, commercial and recreational activities, which has proven to be the main factor in the lack of public life. Creating a mix of these functions correlated with the needs of the area, similar to the “service provision” plan of Milan, will create a more detailed and well-functioning neighbourhood

6. Redistribution of traffic

The traffic in the area is a huge problem for the pedestrian life and therefore for the public one. Redirecting main traffic arteries, redistribution of the predominant parking and also creating entirely pedestrian zones will further enhance the impact of the functional and social mix implementations and generate a lot of vibrant urban life

7. Pedestrian connections

Our aim is to create pedestrian zones and connections between the urban void epicentres, as well as connect them to the centre of the city. Using public transport and improving the edges of the area from currently being hard to soft ones, will create better sensorial experiences for the people in the area, thus more public life











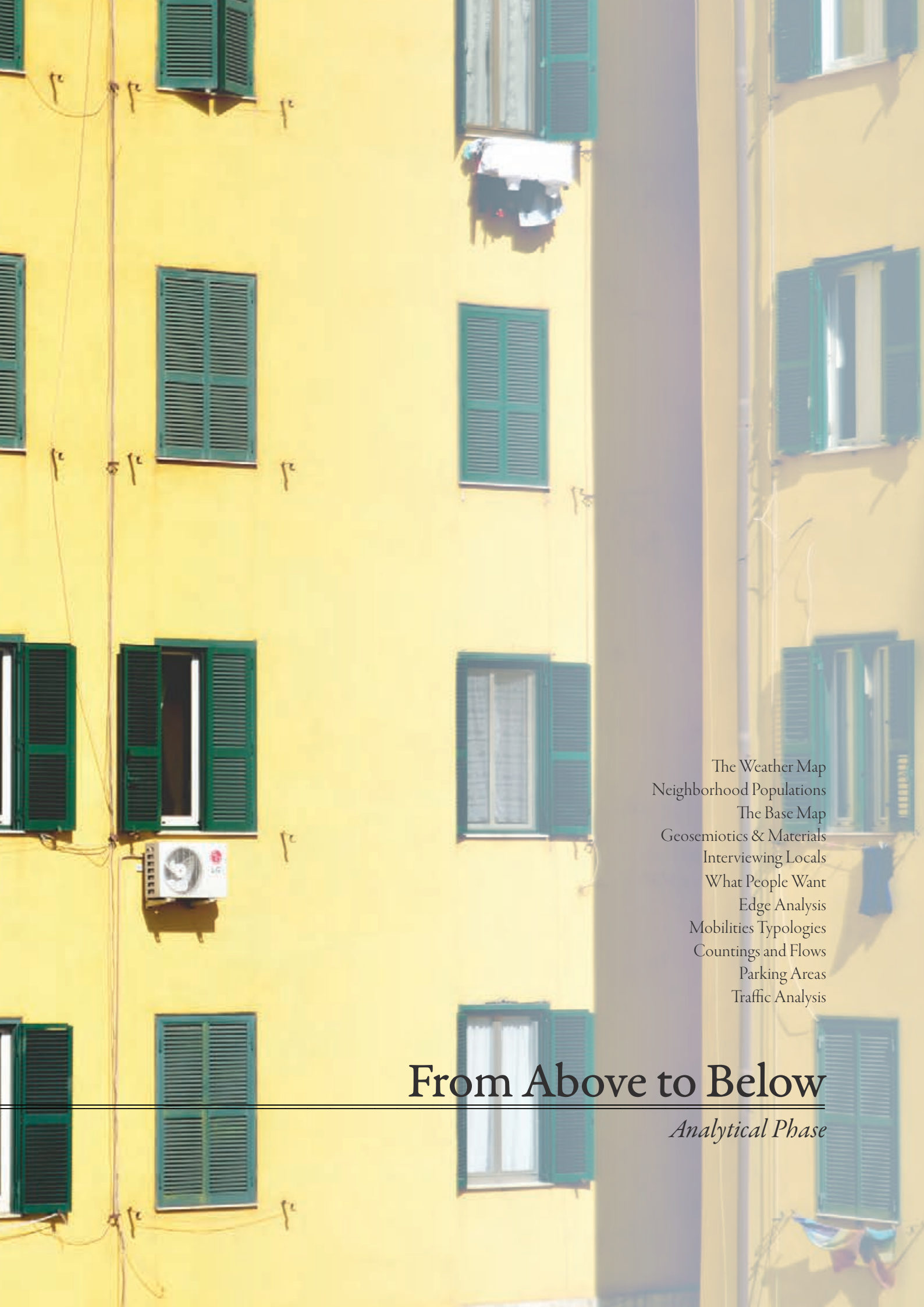








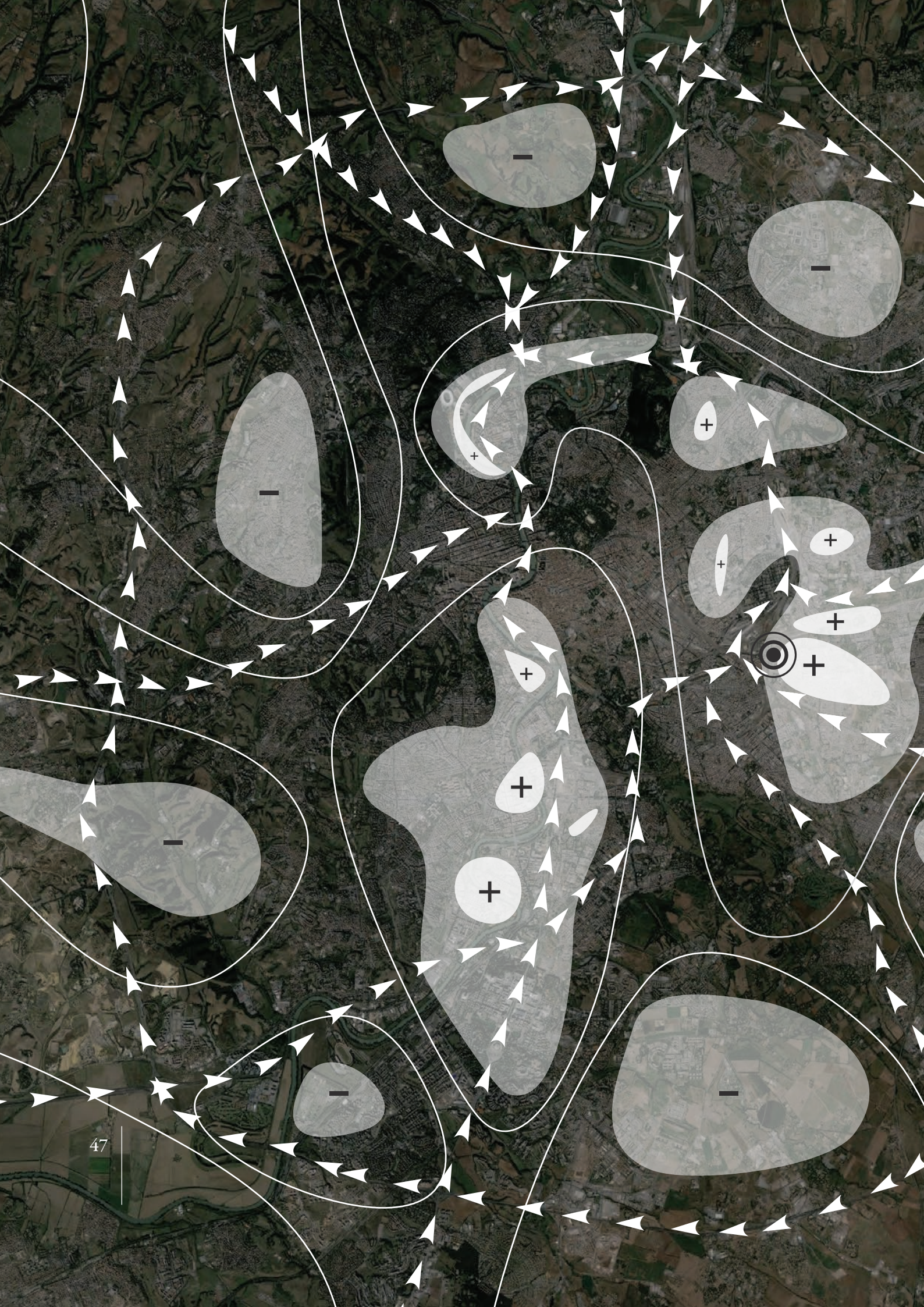




The Weather Map
Neighborhood Populations
The Base Map
Geosemiotics & Materials
Interviewing Locals
What People Want
Edge Analysis
Mobilities Typologies
Countings and Flows
Parking Areas
Traffic Analysis

From Above to Below

Analytical Phase



THE WEATHER MAP

Analysing the potential areas in Rome, where implementation of temporary uses is more probable, the Weather Map takes in account existing mobility flows, density of the built environment and concentration of younger people. Located at the edge of one of the highlighted zones, the site of this Master Thesis, Prenestina 64, is positioned at a vital node.

Our site is essential, not only for its close proximity to the centre of the city, but also because its adjacent relation to the main flows that go through it. Also visible from the Weather Map, the built environment directly affects the concentration of positive areas for temporary use. This is so because of the unique connection between the built fabric and the Urban Voids. With the potential of creating a diverse and interesting system of programming, temporary use can be implemented with this connection in mind.

- ◀ Main Flows
- ⊙ Thesis 's Project Site
- + Suitable Areas for Temporary Uses
- Not Suitable Areas for Temporary Uses



0 2km 4km

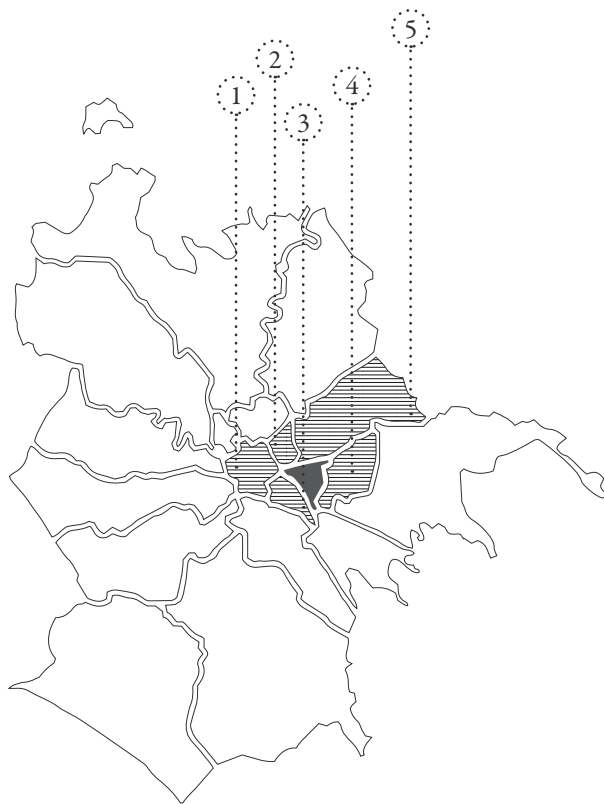
2 NEIGHBORHOOD POPULATIONS

Linked to the Weather Map, the surrounding neighbourhoods of the site were important to analyse, because of their impact upon our area. Gathering data for the current demographics in those neighbourhoods, as well as the future trend, a clearer picture could be painted for the social and cultural contexts.

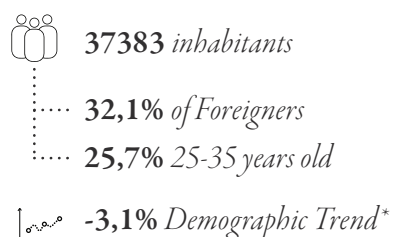
What was interesting to observe was that these neighbourhoods were composed by a large number of young people as well as people with different cultural backgrounds. Such

a rich context creates an unique area, where the possibility of temporary use is greatly augmented.

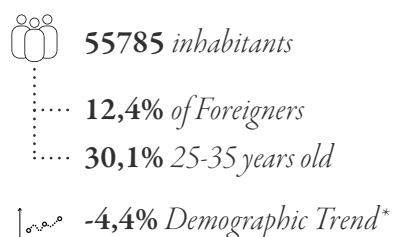
Although the possibility to make use of such a socially diverse situation, the Demographical trends for these neighbourhoods showed a decrease in population, which mean that the requirements of their inhabitants were not met. As our site is centrally positioned in-between, it was the ideal place to stimulate urban regeneration by implementing temporary use thought the enormous potentials of the Urban Voids.



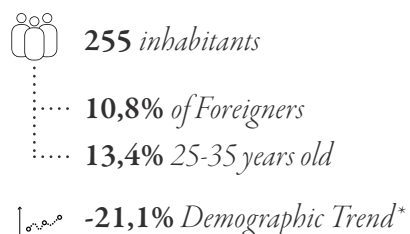
1 MUNICIPIO I (Esquilino)



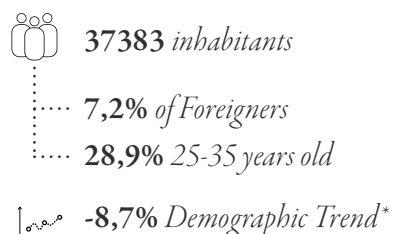
4 MUNICIPIO VII (Centocelle)



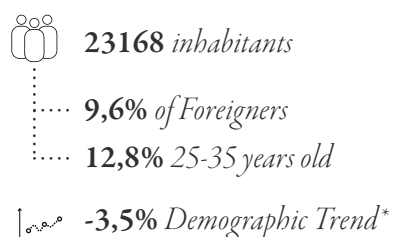
2 MUNICIPIO III (Verano)



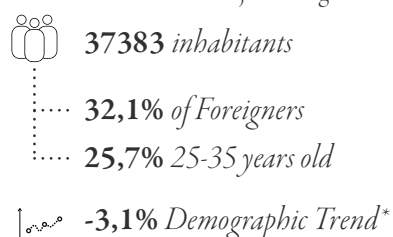
5 MUNICIPIO V (Casal Bertone)



3 MUNICIPIO IX (Tuscolano N.)



MUNICIPIO VI (Casilino) Project's Neighborhood



* The Demographic Trend is calculated through the relationship between the population in 2001 and 2010.





Data Source: Municipality of Rome

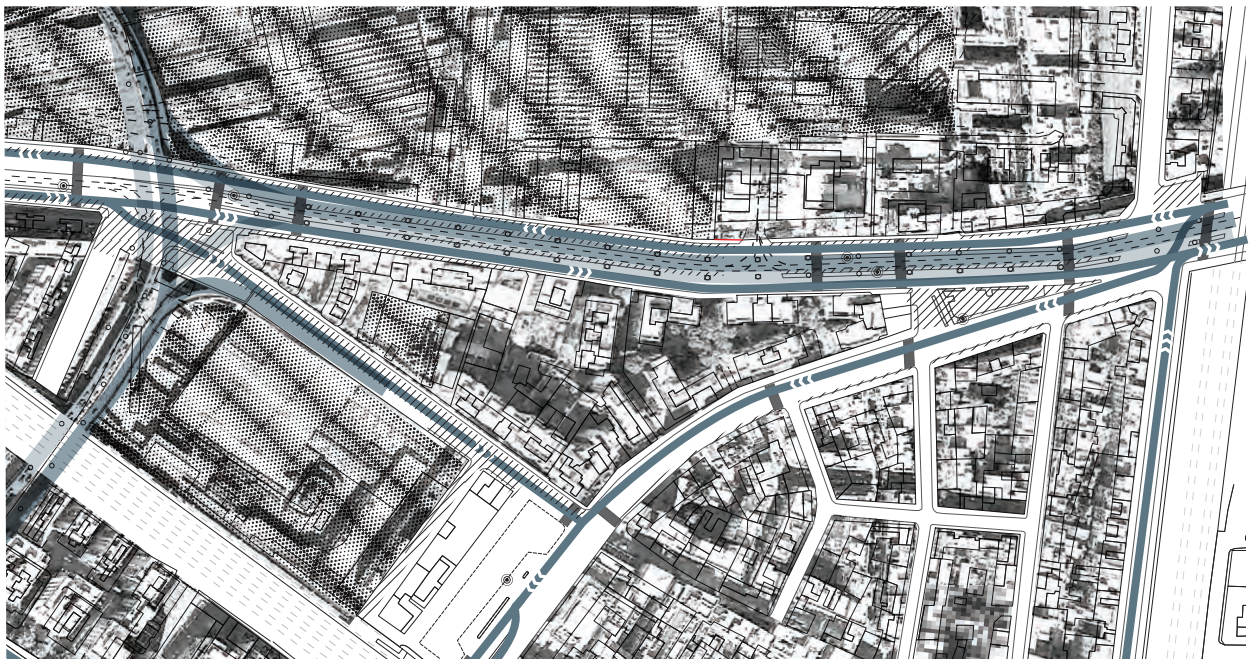
3 THE BASE MAP

A graphical representation of the current staging from above at Prenestina 64, The Base Map indicates the mobility situation of the area, as well as the typology of its context surroundings. A mix between industrial and residential, the site is located in a central for Rome neighbourhood with good mobility connections towards it. As seen from The Base Map, one of the predominant usages of the site is as a parking lot, which not only obstructs the flows going through it, but physically takes up most of the spatial environment. An important flow to note is the public transport systems going through and around the site, which are busy and regularly used. This means that there is a steady traffic of people experiencing the site as a transit zone at a daily basis, but currently no

real reason to stay there, which leave the question:

How can the design of the site be changed to attract the attention of people towards its potential?

- Industrial and Dismissed Areas 
- Tram and Bus Stops 
- Traffic Directions 
- Parkings 



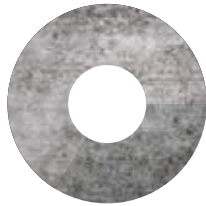
GEOSEMIOTICS AND MATERIALS

As a modern skeletal ruin of the industrial period, the huge Fly Over structure in the site along with its context is made up mostly by cold and neutral materials like Steel, Concrete and Asphalt. Symbolical to the industrial surroundings however these materials combined create a magnificent image, and a strong distinctive atmospheric presence.

The Geosemiotics in the site can mainly be divided in two parts: Informative signs (in the form of transport, private/public indications, and commercial advertisements) or Cultural (mainly represented by the numerous street art in the area). These Geosemiotics show the great aspiration for ownership over the site by the people that inhabit it.



45% of *Steel*



35% of *Concrete*



20% of *Asphalt*



5
INTERVIEWING LOCALS



1. ***Antonietta, Concetta and Angelina***

Age: 79, 72, 81 Sex: female Transport user: pedestrian

Travel: coming from the shop, on their way home

The experience: *"We don't like this place, when we were younger, before the construction of the highway, the atmosphere was pretty and clean (I think they were talking about the air pollution). When we have to cross the street we don't feel safe."*

2. ***Stefano***

Age: 24 Sex: male Transport user: none

Travel: studying in his flat

The experience: *"I've been living here for 5 years now. At the beginning the traffic noise was a problem, I couldn't get that much concentration during, but now I got used to it. The light rail is very useful, even if I don't have a car I'm very well connected with the rest of the city."*

3. ***Dadzie***

Age: 35 Sex: male Transport user: pedestrian

Travel: getting off from work, on his way home

The experience: *"I work very close to here (bike shop where he fixed our bike during the mappings). I never hang around this place when I'm not at work, I don't see nothing interesting in it."*

4. ***Sabrina***

Age: 28 Sex: female Transport user: cyclist

Travel: biking from the park to her place

The experience: *"Rome is not a city for cyclists, wherever I go I don't feel safe riding a bike. Especially this place seems to be designed just for cars. Too grey and few green. It's a stressing environment to pass by."*

5. ***Massimo***

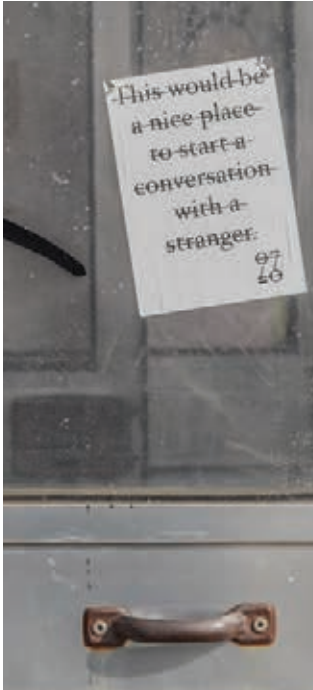
Age: 56 Sex: male Transport user: tram

Travel: taking the tram, in his way home

The experience: *"I work in this tram depot since 1991, this place hasn't changed at all. I don't pay that much attention on what's going on in this space, there is nothing interesting to see. It's just a place with traffic jams, noise and pollution."*

6
WHAT PEOPLE WANT

“This would be a nice place to start a conversation with a stranger”. A very interesting and informative slogan found on the site, printed as informal Geosemiotics. This piece of paper manages to capture all the embodiment desires of the inhabitants that were observed during the analysis phase of the Master Plan. The photographic material shows a clear aspiration to communicate, socialize and explore the space. But what is also visible is the enormous amount of cars dominating the area which obstruct such possibilities.





1

2

3

1

2

3

0 50m 100m

7 EDGE ANALYSIS



Studying/Reading the boundaries of the site of Prenestina 64 showed a significant predominance of a hard edge, opposed to a more human friendly soft one. Lacking atmosphere, crude and unable to sustain or evoke public life, these hard edges facilitate only the fast pace traffic present in the area, giving little to no regard to the human dimension. A concrete example reflection of these observations can be found in the absence of life in the area, and its unfortunate use as only a transit zone.

As shown on graph to the left, it is clearly visible how strong the hard edge is, creating a rigid border between the built environment of the city and urban voids beneath the flyover structure in the site. The photographic exemplifications of these edges however show an existent desire for a public life and human interactions.

How do we facilitate the need for public life?

Although the dimensions of the site are set in “concrete”, the hard edge of its boundaries can be translated into a more human dimension, by extending the public space in front of the facades, as well as introducing the notion of vertical relief, taken from Jan Gehl’s “Cities for People”

How does creating soft edges out of the present hard ones effect the design and the spatial environment?

Soft Edge

Hard Edge

8 MOBILITIES TYPOLOGIES

Fluctuating in type and predominant usage, modern metropolises have a variety of modes of transport intertwined in a complex mobility network. Many big contemporary cities put emphasis on their public transport system, paving the way for a more human friendly environment. However after observing the mobility typology system in the site, the dominance of car transport was evident, pushing aside other manners of transport.

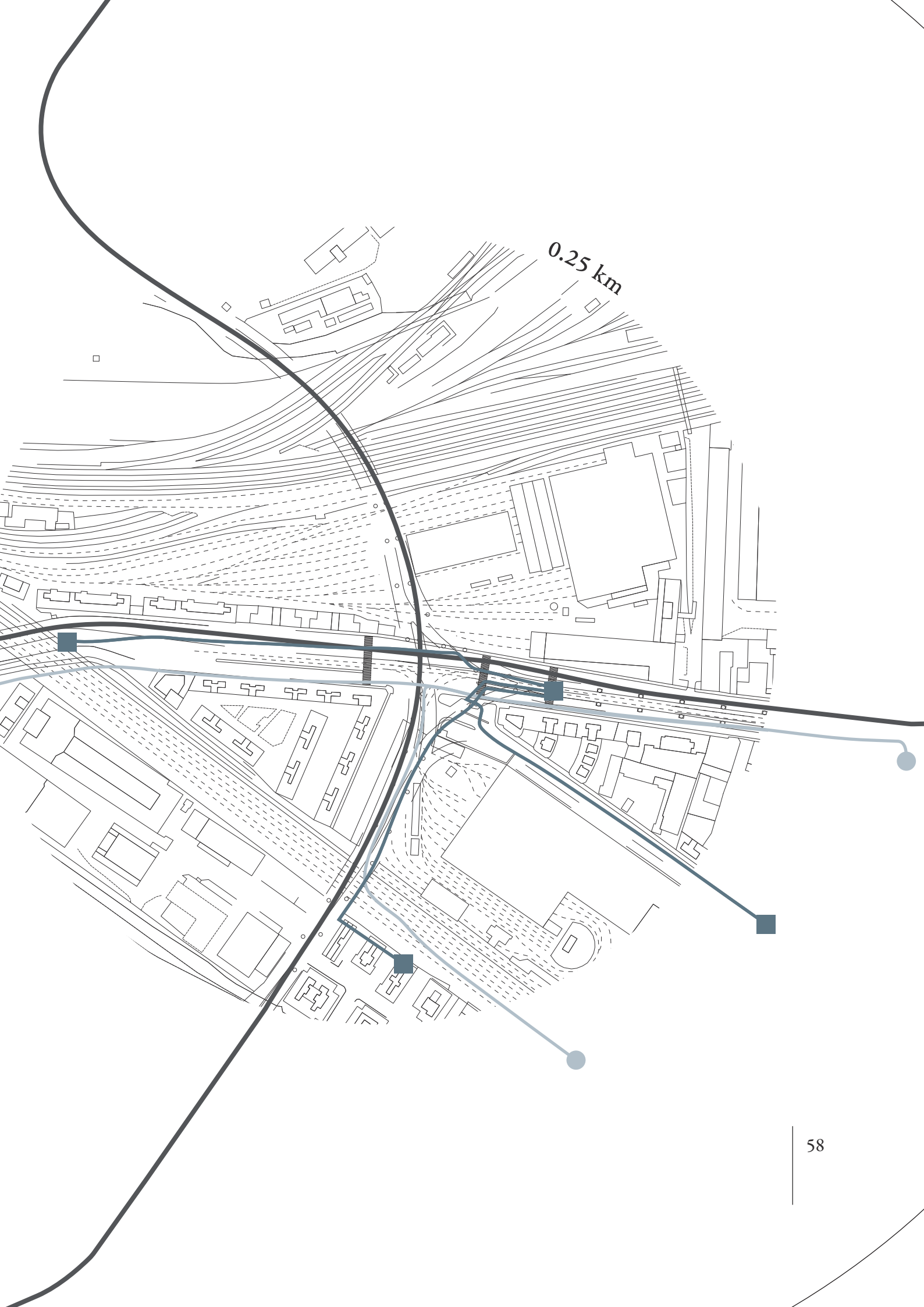
Dealing with typologies of mobility, it is important to note the functionality of a certain system. Even though the design of the site was made for a predominant car usage, times have changed, perceptions evolved, which has left this concept old-fashioned and impractical. Mobilities are meticulously designed and staged from above, but the contemporary understanding of the term incorporates the awareness that there is more to the simple travel from point A to point B, the in-between matters.

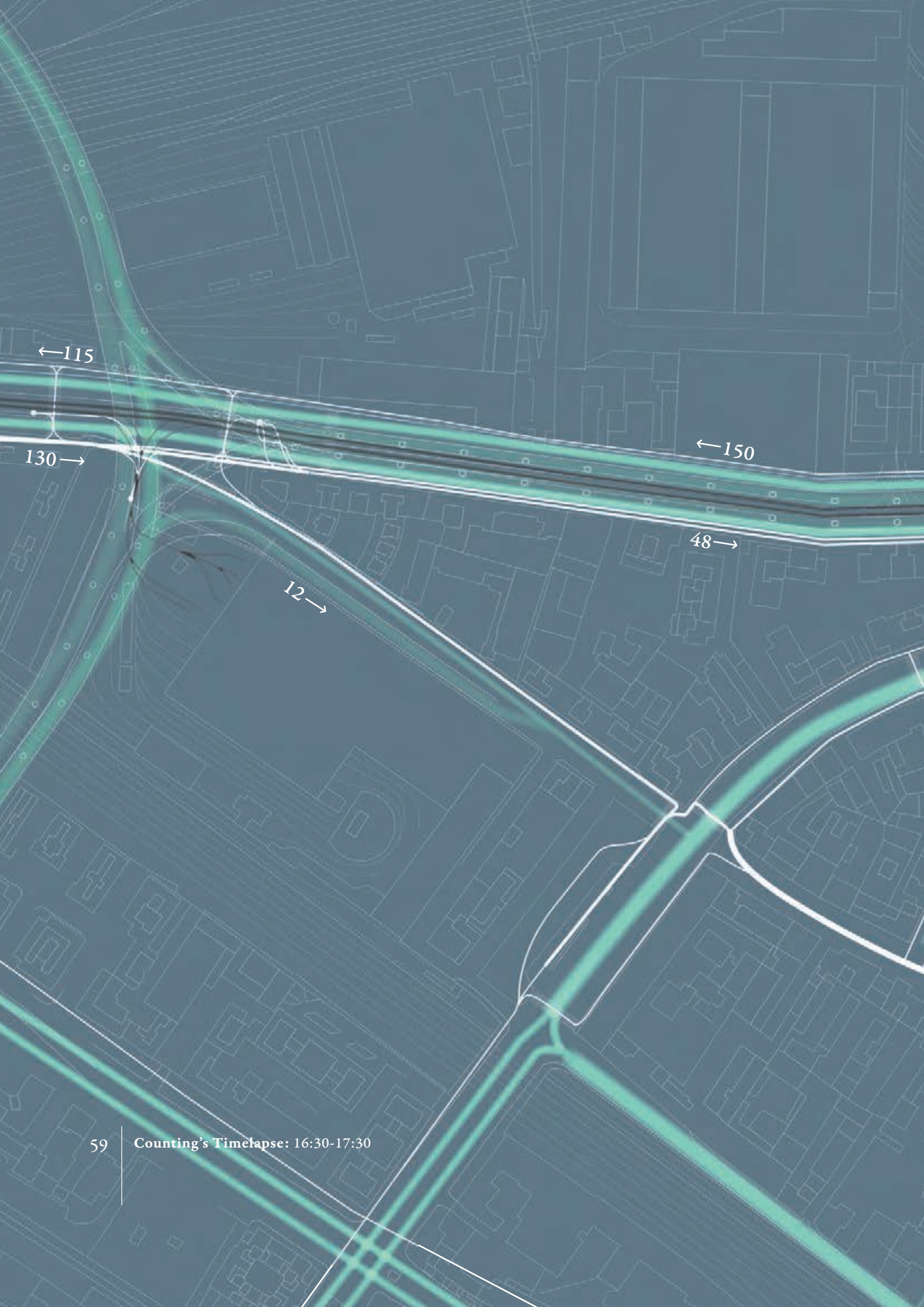
How does mobility link to the concept of public life?

Public life is vital for a prosperous city. People attract people; our cultures are not inert and set in stone, but a network of dynamic relations and grids. All of these interactions, visible and invisible are part of mobility. Creating a successful public domain means understanding not only the physical environment but also the flows that go through it.

Pedestrians ■
Cars ▲
Bikes ●

0.5 km








COUNTINGS AND FLOWS



In order to get a more complete scope of the mobility system in place at our/the site, the flows through it were observed, recorded and represented in a visual way. The dominance of car traffic was clear, apart from the predisposal of the staging from above or the context built environment, but by simple volume in numbers.

A not so surprising observation, due to the fact that a heavy car traffic flow interrupts normal pedestrian/public interactions, still the numeric volume of cars in the area was surprisingly high. Providing additional negative effects upon the area, pollution and noise other factors that need consideration except the simple physical presence of traffic, which left the question?

How should the traffic system in the site be improved?

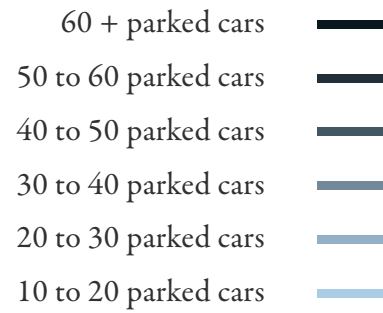
-  Pedestrians
-  Cars
-  Light Rail



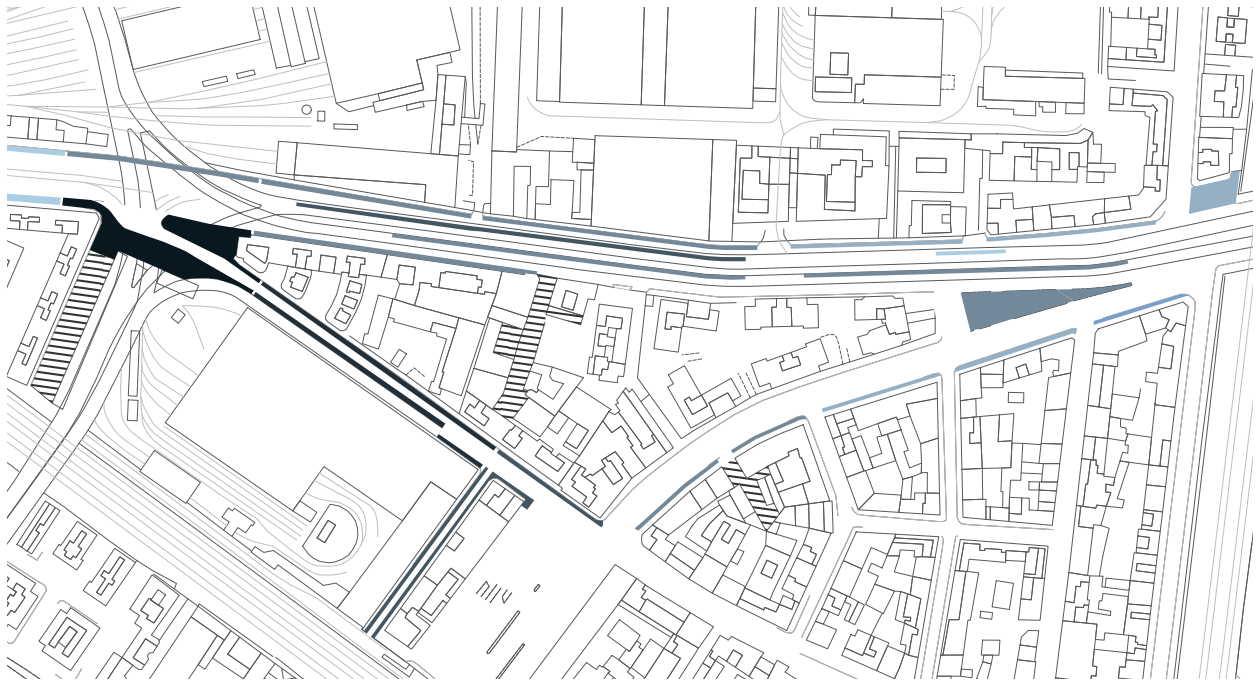
0 50m 100m

10 PARKING AREAS

Besides the dominant traffic flow, cars in the site had an even stronger presence due to the high amount of public parking. Obstructing other flows through and on the site, the numeric countings showed a higher percentage of cars than people. The space was perceived as nothing more than a parking lot, keeping the potentials of the urban voids hidden and unused.



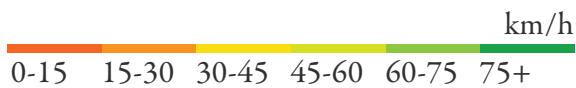
*Are cars obstructing the potentials
of the urban void?*



11 TRAFFIC ANALYSIS

While observing a particular flow it is important to note that besides its volume there is always a certain patterns at place which can reveal a lot of possibility for its redistribution via staging from above. Also the heavier loads of circulation during specific times of the day reveal potential problematic areas, which are functional even for road traffic. Deducing from a low-traffic loaded circulation on the bottom layer of the site the following question arises.

Can the bottom layer traffic be redirected to the top layer in the site?



Times of the day analysed: 1. 9:00 | 2. 17:30 | 3. 21:30 | 4. Average Value

Check the appendix for new traffic scenarios consequent to the design proposal





Manifesto
Design Strategies

People versus Traffic

Concept Phase



1 MANIFESTO

The goals and intentions of this manifesto spring from a theoretical foundation that has its roots firmly embedded in the idea of the human dimension by Jan Gehl and the concepts of temporary use as a catalyst for a development, where the potentials of the urban voids in contemporary cities are realized or as we like to put it “unpacked”, as in opening a box.

The design we envision brings back the humanity to these urban voids, where people have been held hostage to concrete environments and busy traffic for too long. It's time to rebel, against the car domination and the pollution. We want to change the scale of the flows and motions from the prevalent 60km/h and replace/implement them with that of 5km/h.

We want to return the sense of safety and what we believe is the rightful ownership of the area back to people. They no longer have to walk through dull and uninspiring paths, where the composition of space is solely based on the premise of car traffic. It is our goal to create places where you can daily experience and interact with the city, showing people that there is more than going from A to B.

Providing the users with a different experience means to reveal the latent qualities of the urban voids, thus making them understand how they work. Unpacking the potentials through an autonomous process of re-appropriation and own self-expression towards the space and its usage.

We aim at breaking ethnical and cultural barriers and making people more open-minded toward each other. Through a re-design of their urban environment we set up to create conditions for temporary interactions and the activation of space. Our design will stimulate feelings and sensorial experiences that will garner and act as common ground between people, putting their prejudices to sleep for a while.

Uppdon Bawopenob

Simone Traverso

2 DESIGN STRATEGIES

“Worldmaking as we know it always starts from worlds already on hand; the making is a remaking. Just what worlds are to be recognized as actual is quite another question. Even what may seem like severely restrictive views, each may recognize countless versions as equally right.”¹

As urban designers, we directly have the power to influence the way people perceive our spatial surroundings. However that environment is not only physical, but rather far more complex. Just as important as the built setting, urban voids can play an equally big role in the defining of a city's atmosphere, the experiences it offers and its future development.

Rome is made up of various and distinct components, not all of which are coherently connected. The urban fabric at

the moment is torn up by unused spaces, decommissioned areas and most of all, unseen to most – urban voids. Aiming to break apart conventional ways of perceiving the spatial environment, the strategy of this Master Thesis is to develop a plan with which to inform people of the hidden possibilities of their surroundings and help them explore them to their full potential.

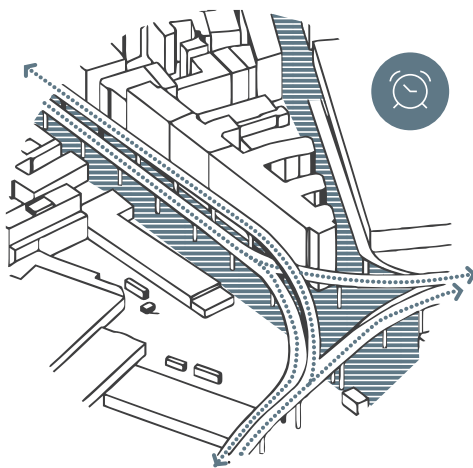
The main goal of this Master Thesis is to relate together and create a balance between several aspects - creative design, economic feasibility and social geography. Similar to the Milan Case Study, this project is based upon three design phases, all of which are accumulated through smaller objectives that the project aims to achieve.

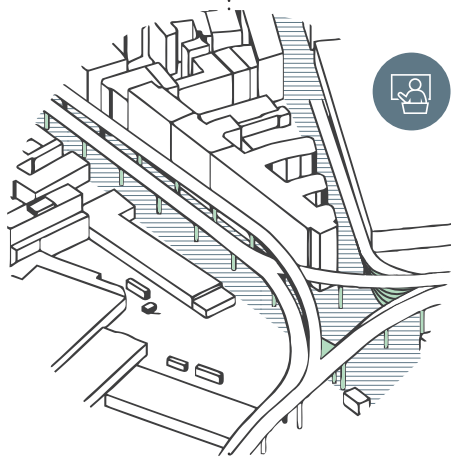
How do these strategies work?

1. Wake them up!

This first phase of the design process is to emphasise the unpacked void spaces within the site. Sometimes the potentials of the urban voids can be obstructed by a physical setting, a barrier that was set by poor or outdated staging from above. Removing these obstacles reveals their connection to the physical setting, creating a bigger “playing field” for both designers and users.

In the case with this project, heavy loaded car traffic obstructs the centrally positioned urban void, thus the first step of the design will be to redirect the flow through the site and remove car traffic. “Liberating” the people, this phase aims to give rightful ownership of the site back to them.

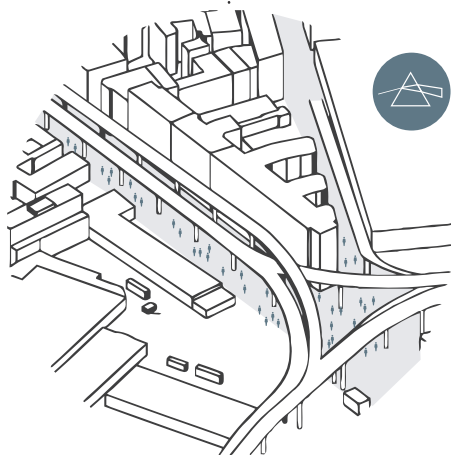




2. Educational Design

The second phase of the design processes is focused on using the catalyst potentials of the Urban Void to stimulate public life in the area. Re-designing the space using the solid theoretical framework of the project, the aim is to combine Jan Gehl's perspective towards a more "lively, safe, sustainable and healthy" city with Ole B. Jensen's mobility networks.

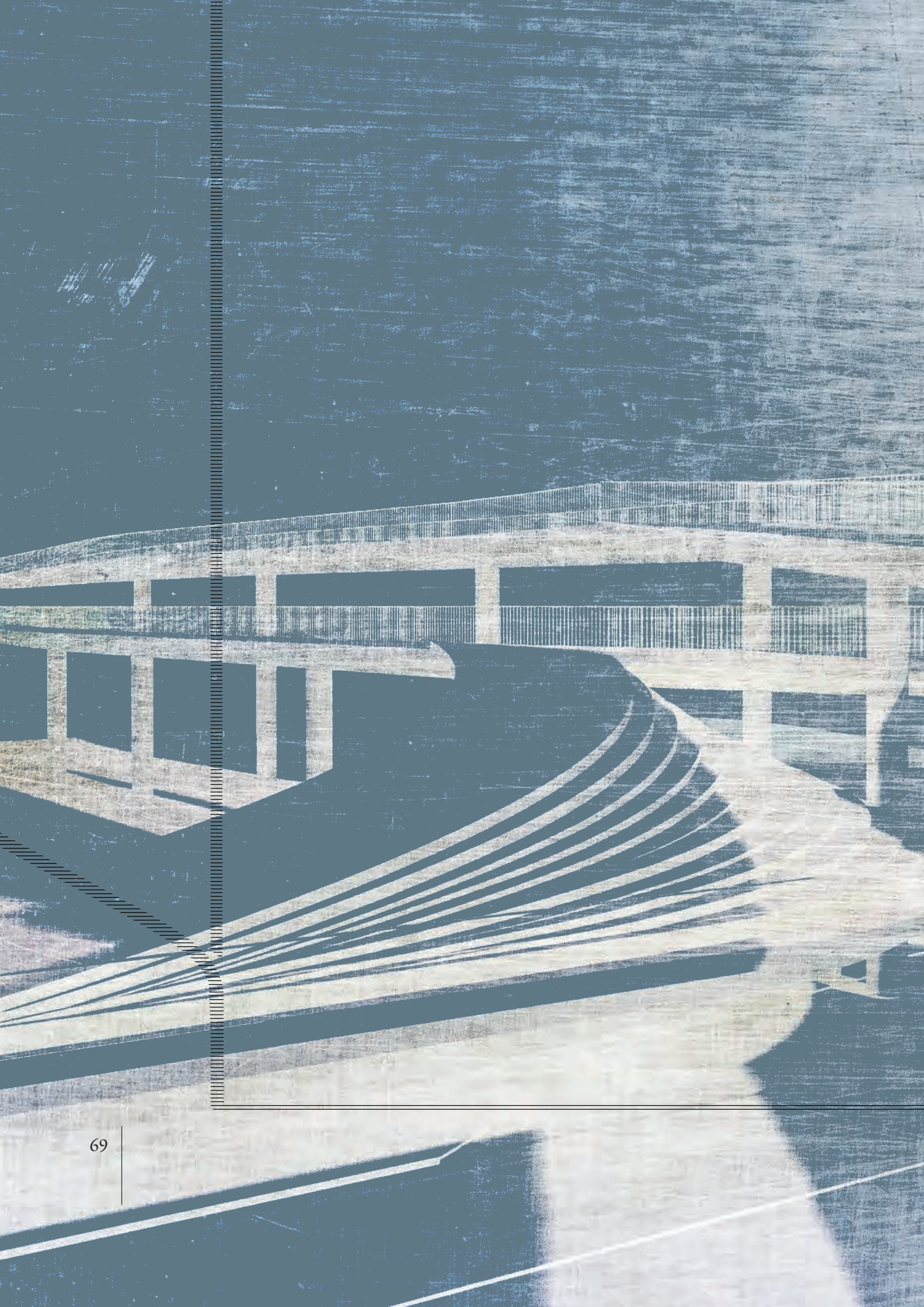
By doing so we want to show the potentials of the urban voids to the users and to "unpack" the voids themselves.

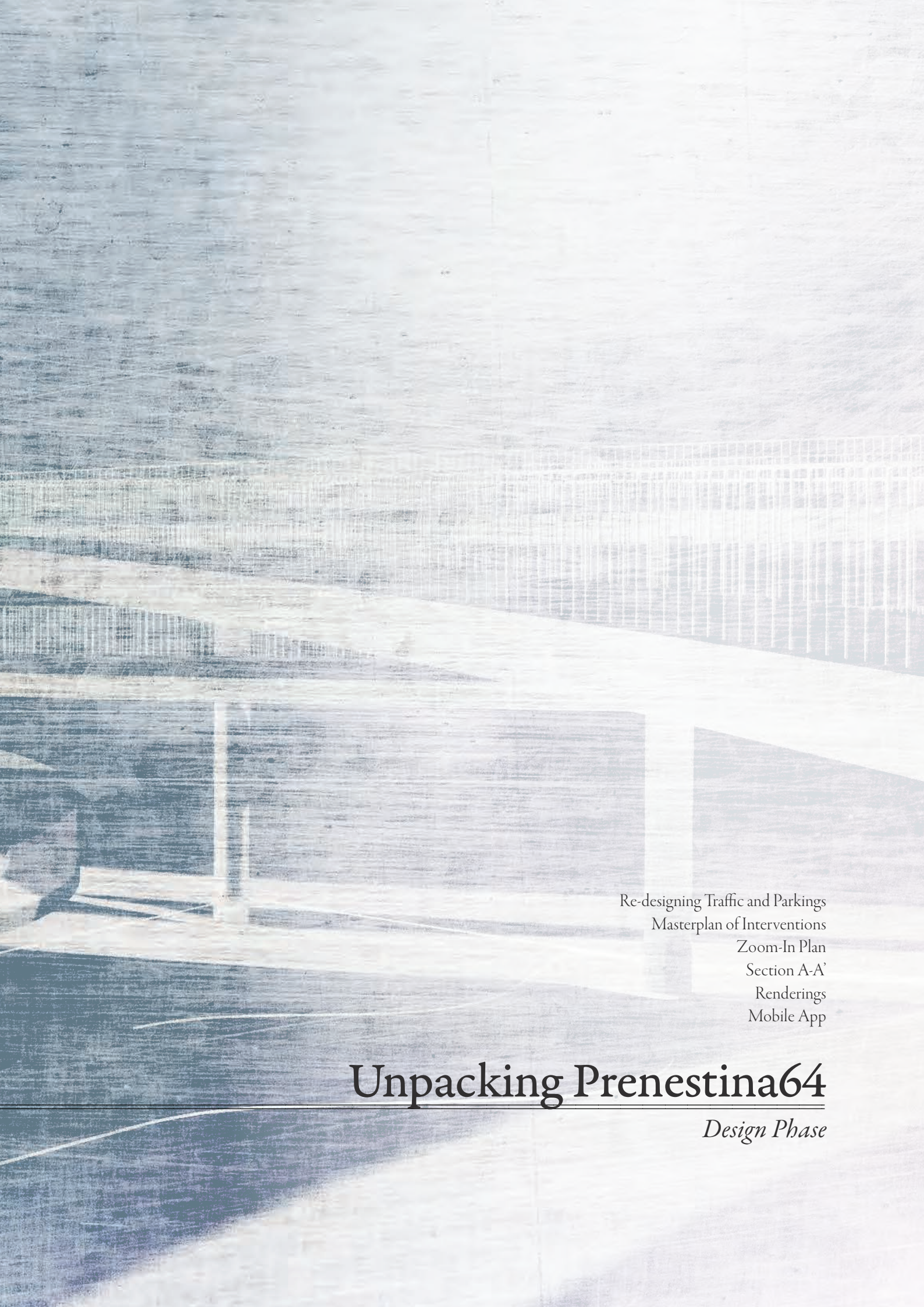


3. Leave them kids alone!

In the final stage of the Master Thesis, having already implemented temporary design solutions as part of the Urban Void and shown the potential of these inert spaces, we aim to create a guiding tool for the users. Something to stimulate and intrigue them, this tool is meant to have the possibility to add an additional dimension into the already complex network of layers.

Serving as a supplementary approach towards activating and programming the space, this tool can be modified in time in various interactive ways.





Re-designing Traffic and Parkings
Masterplan of Interventions
Zoom-In Plan
Section A-A'
Renderings
Mobile App

Unpacking Prenestina64

Design Phase

1 RE-DESIGNING TRAFFIC AND PARKINGS

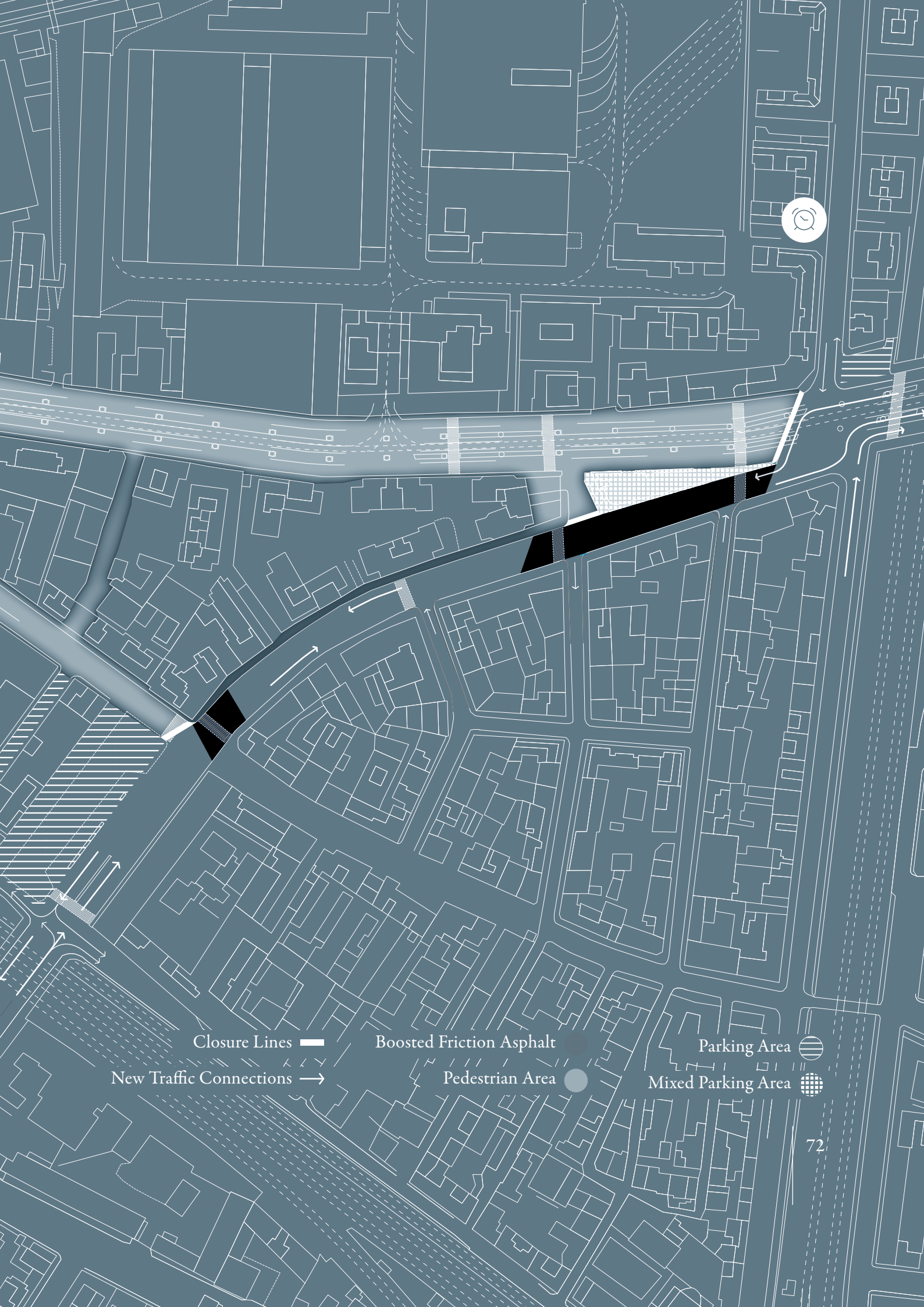
As mentioned in the first design phase, the traffic in the area is to say the least problematic. Cars take up almost all of the spatial area, proving to be an obstacle not only for the inhabitants and users of the site but also to the mobility network.

The traffic plan re-design consists of several steps which aim to accomplish the set goals without having a negative impact on the traffic network in the area in a broader scale. The mobility system in the site is composed on several levels, the main flows of which are carried by the fly over highway structure. By closing the traffic in the lower level, analytical analysis show that that traffic load can be carried by the upper roads as well as the peripheral road system.

The new staging from above will close the roads off at the boundaries of the site, also removing the West parking area and relocating it at the former market square to the South-East. The backyard local traffic lane will also be converted to a pedestrian area, extending the already existing famous “Via del Pigneto”. The West parking zone will be kept but renewed into a Green Parking space, connected to the newly constructed Green Strip within the site. Overall with these interventions the functionality of the whole system will improve while even creating more parking spaces than the already existing staging from above, but removing the negative effects of cars in the area.



Scale 1:2000



Closure Lines



Boosted Friction Asphalt



New Traffic Connections



Pedestrian Area



Parking Area



Mixed Parking Area



MASTERPLAN OF INTERVENTIONS

The Masterplan drawing serves as a tool to comprehend the complete scope of developments planned for the site of Prenestina 64. Working from the edge of the built environment, to the full potential extent of the urban void spaces, this Masterplan aims to create a basis for better understanding the desired atmosphere in the area.

Based on a solid theoretical background, the design of the site was also inspired by personal thoughts and a desire to strive towards a more creative and innovative thinking. Incorporating the different layers present in the area, these interventions work in a 3 dimensional scale. A visual representation of our manifesto, the different parts of this masterplan are further developed and explained in the next pages of the report.

A Flying triangle Square*

B Green Parking Square



Scale 1:2000



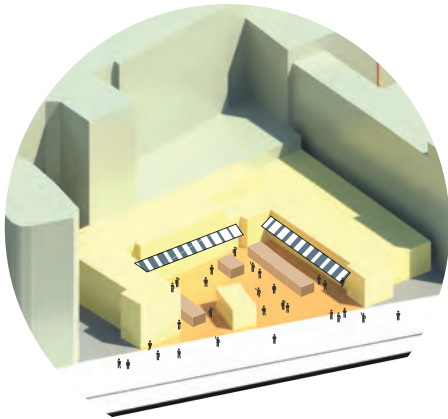
- New Market
- Mixed Parking Area
- Urban Connection
- ▨ Pedestrian Terraces
- ↔ Mirror Wall
- Working with the edge

- ▨ New Parking Areas
- Sharing Pillars
- ▨ Staging Tribune
- Illuminating Pillars
- LED Screen

Interventions (conceptually explained)

Due to the large scale site of this project, the Masterplan is made up by ten main interventions, which however are categorized up in two groups, depending on their level of detailing – conceptual or designed. The aim was to create a system of interventions, which do not alter the existing context, but rather use it and/or blend in with it. The design is made to look familiar and coherent with the spatial environment. Another goal was also to find a way to catalyse the space using the urban voids, but do so in an economically feasible way, thus making this project as realistic as possible.

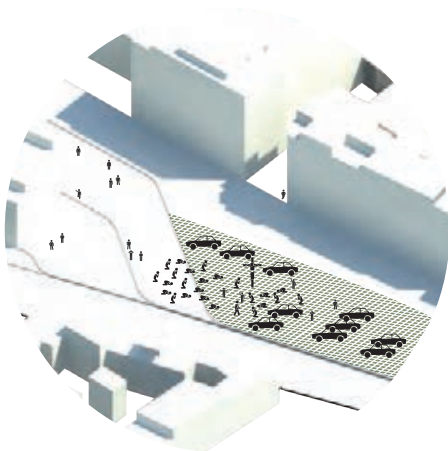
The first group includes: The New Market; Mixed Parking Area; Urban Connection; Pedestrian Terraces; Mirror Wall. The second group comprises of: The Staging Tribune; Illuminating Pillars; Sharing Pillars; The LED Screen.



🕒 *New Market*

Positioned in the “backyard” area of the site, this New Market development replaces an existing warehouse area. Serving several functions, the Market is placed both in the buildings, as well as the square in front, formed by them. Moving the already existing Market to the South-East of the site to this location, the idea is to better utilize this space and bring life to the South edge of the site.

Due to the nature of the neighbourhood, as a vital cultural area in the city of Rome, this space is planned as a culture house/meeting point for different artists to showcase their performances, work and talent. Left to the inhabitants of the site, this urban void has the potential for many activities and programs, although of its planned function.



🌐 *Mixed Parking Area*

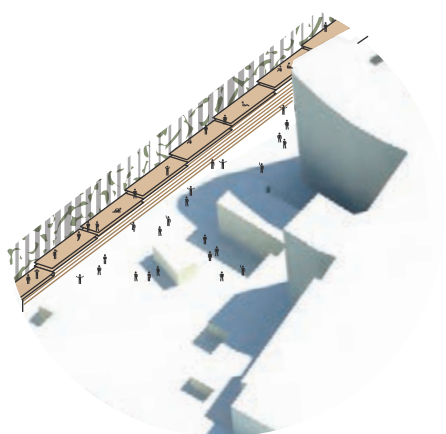
Understanding the needs of the context, the idea for this location is to keep its current functions, but due to its current problematic functionality, to better stage it from above. Bringing it as a part of the new Master Plan development, the North Green Strip extends to this parking space, turning it into a Green Parking area, while keeping a more coherent outlook with the context surroundings.

As an important entrance point to the site, The idea for this Green Parking Area is to be used by people who want to experience the East side of the site, because of the many commercial and recreational programming that surround it.



Urban Connection

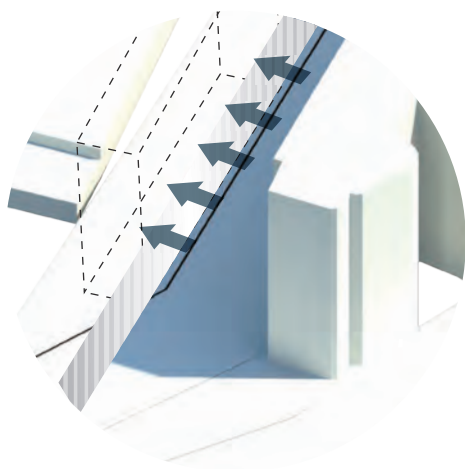
Linking together the different atmospheres of the North and South part of the Master Plan. Positioned close to the New Market/Culture house development, the Urban Connection is seen as an experience link, where the inhabitants of the area can experience shifting programming. Planned as a changing experience and perfect example of the importance of voids in the linking of the built environment. A transitional corridor, the space is ideal for provoking people with different audio/video visualisations at night and/or promoting an exploration feeling during the day.



Pedestrian Terraces

Created as a built up structure on top of the already existing car ramp, this composition of Pedestrian terraces extends beyond a simple human dimension experience as it grows in a 3 Dimensional scale. With many possibilities as for its detailed design, this area is created in the face of the Commercial Street below as well as a viewing point for the Culture house opposite to it.

The idea is to create a contrast between its scaling up as a physical structure and its scaling down as a more slow-paced area, opposed to the lively pedestrian path below, creating a more leisure and isolated environment form the busy city life.



Mirror Wall

This concept was wrapped around the analysis of the area's edges. At the moment the Northern boundary of the site is completely unappealing. The site seems uncompleted. The decision was to create a mirror wall alongside the Northern edge of the site, in order to reflect the one opposite of it, thus creating a cosier atmosphere. In Addition to that a mirrored wall is a rather interesting object, which will attract people to not only go and experience it, but stay there, due to the park-like effect created by the Green Strip.

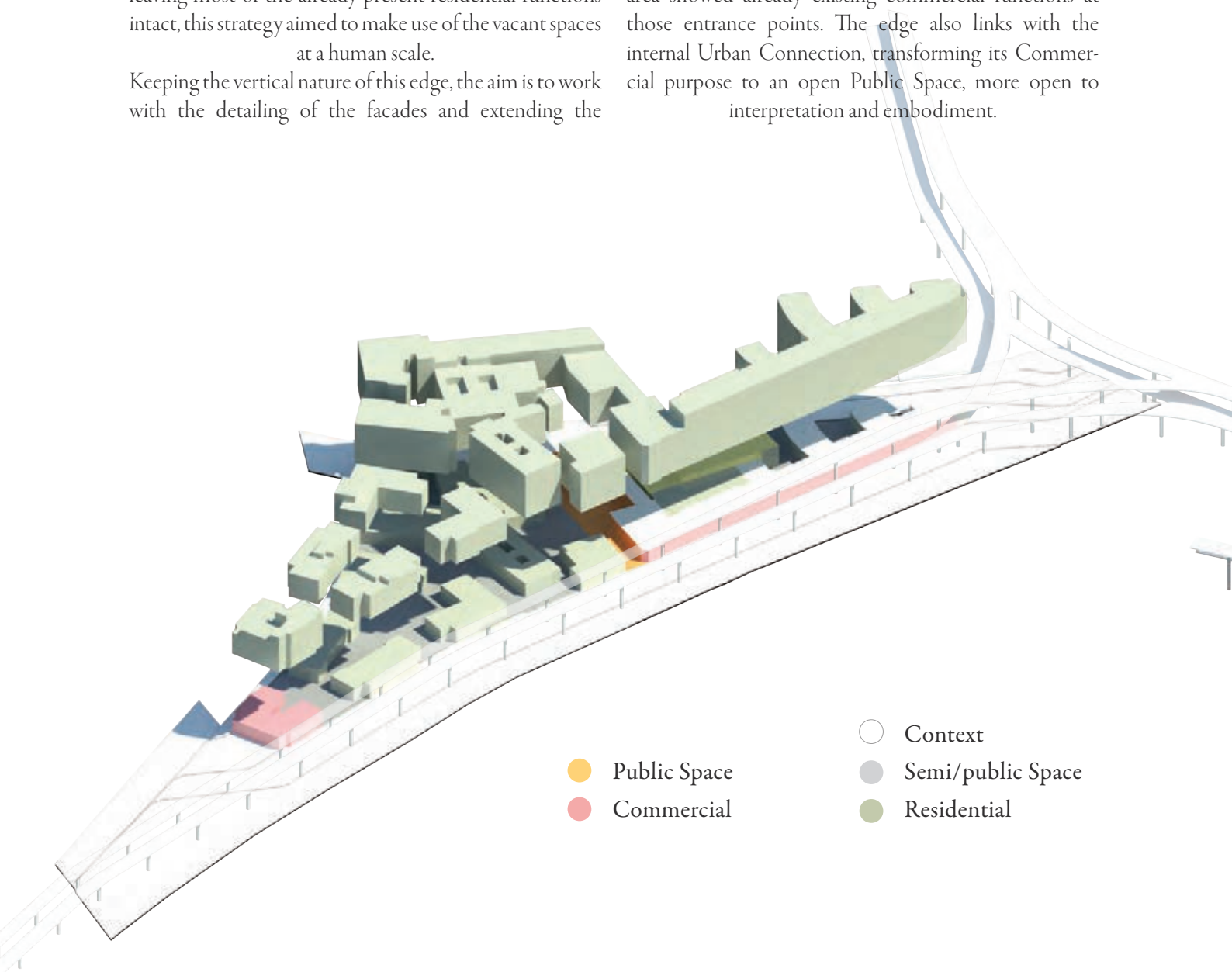
Working with the edge: Main Street

Based on the solid theoretical framework of this project, the edge of the site was a particularly important issue, which was factored in its Design. As the analysis of the area shows, the human dimension was completely ignored. Working with the Main Street, the main goal was to create a more enjoyable and interactive experience for the newly designated as a pedestrian street. However, leaving most of the already present residential functions intact, this strategy aimed to make use of the vacant spaces at a human scale.

Keeping the vertical nature of this edge, the aim is to work with the detailing of the facades and extending the

horizontal plane which supplements it, to bring down the scale of the spatial environment.

The function of the edge of the Main Street, via Prenestina, shifts from commercial to residential and commercial again. This is so because the entry points of the site will get the most exposure to the public and also mappings of the area showed already existing commercial functions at those entrance points. The edge also links with the internal Urban Connection, transforming its Commercial purpose to an open Public Space, more open to interpretation and embodiment.



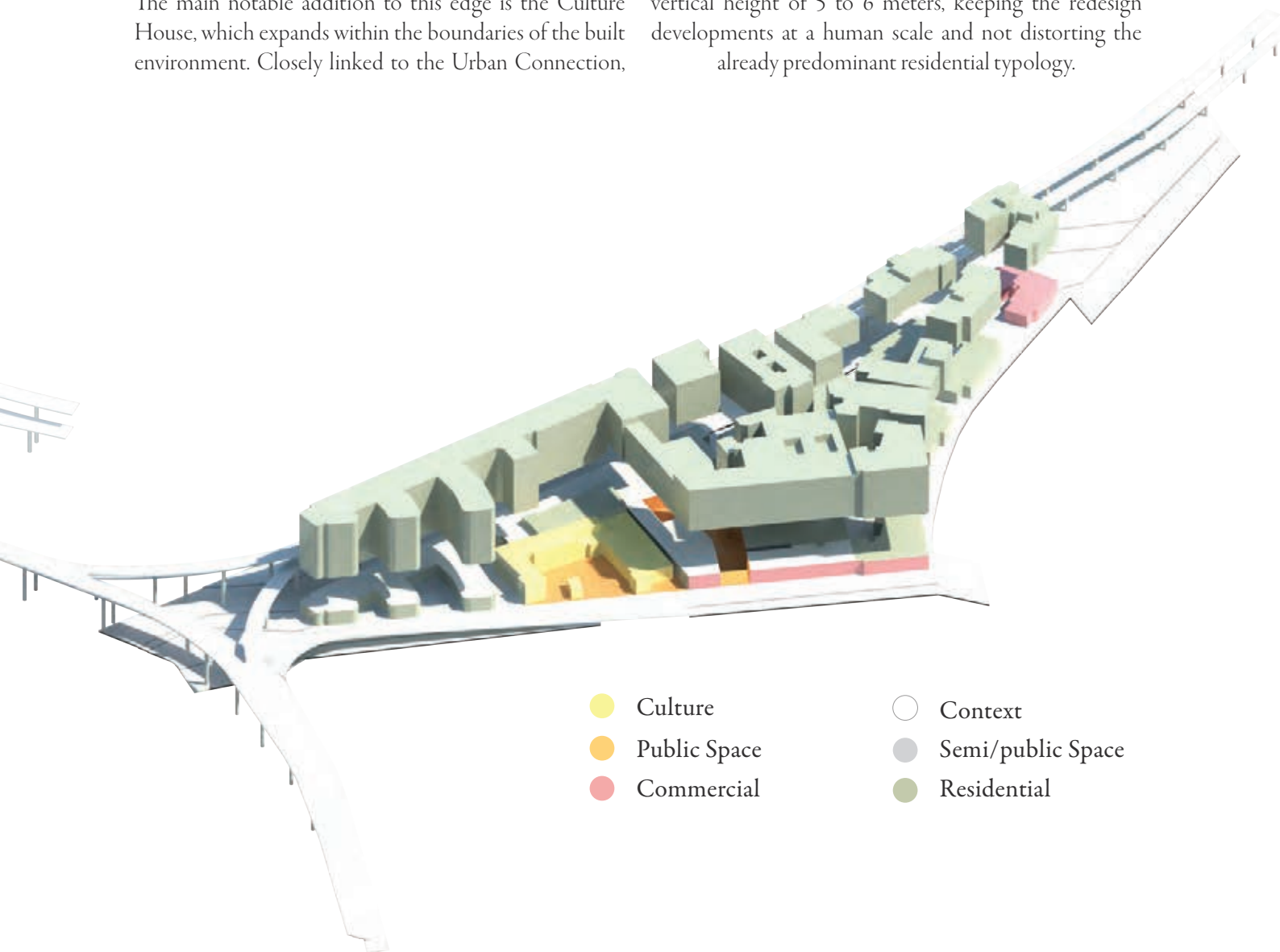
Working with the edge: Back Street

Similar to the Main Street of the project, the residential functions have not been changed alongside the edge of the Back Street. However the previously closed off semi-private and private green areas are now transformed into semi-public spaces. Further extending the more leisure atmosphere of the “Back Street” opposed to the more commercial Main one, the edge here is more open and horizontally transversal.

The main notable addition to this edge is the Culture House, which expands within the boundaries of the built environment. Closely linked to the Urban Connection,

the edge in that area wraps around a small square space, which is a redesign of an old warehouse development, with a much more human scale than the rest of the site. Around it, semi-public, public and commercial edges provide a more practical functionality of the space, attracting more users.

With the edge of the Back Street, as well as the Main Street, the main detailing of the edge was kept at around a vertical height of 5 to 6 meters, keeping the redesign developments at a human scale and not distorting the already predominant residential typology.



- Culture
- Public Space
- Commercial

- Context
- Semi/public Space
- Residential



3 ZOOM-IN PLAN

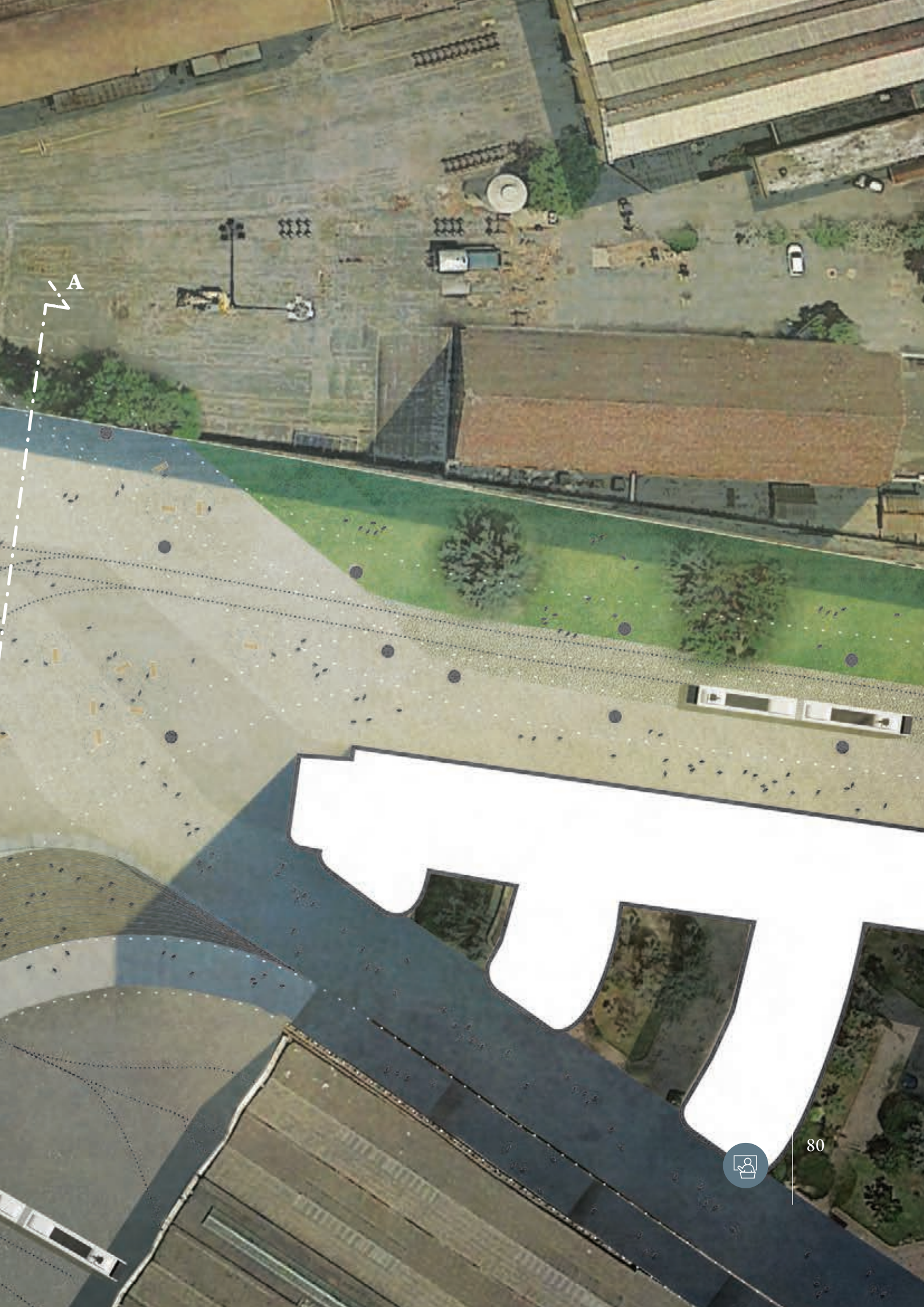
A Detailed part of the Masterplan, this zoom-in shows an imperative for the site area; where the Urban Void is most impactful, both in scale and potential. The detailing illustrates the designed pavement for the new pedestrian square. The pavement strips are made up to contrast the Fly over structure above, conceptualized in a more orthogonal geometry. Two different types of texture for the ground surface form a playful interaction which stimulates the perceptions, made out of small elements opposed to the big scale concrete surroundings.

Another distinguishing feature which contrasts the concrete structure framing the Urban Void, is the Green Strip alley, starting at the newly formed square. The pedestrian path composed of three different textures, creating a gradient in the material density, working from a smoother towards a stricter one when approaching the building edge.

The newly implemented Staging Tribune is shown on the Zoom-in Plan, as a centrally positioned element, has an overview of the whole Urban Void, facing towards the LED Screen opposing it.

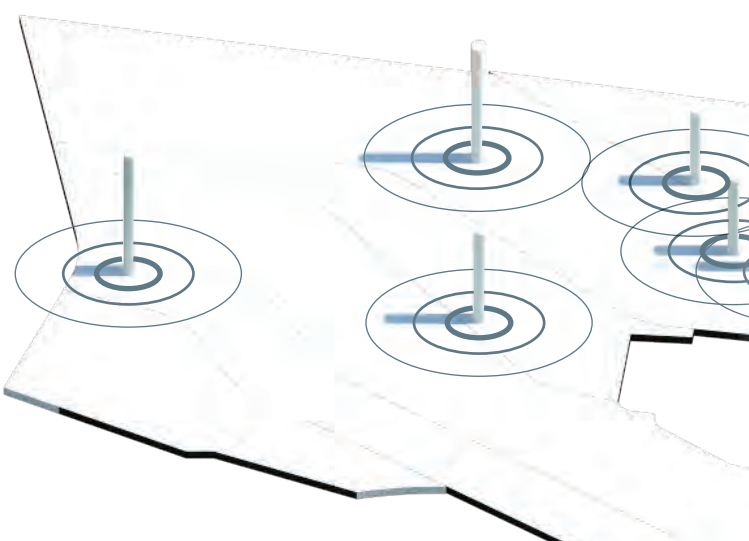


Scale 1:500



A





● *Sharing Pillars*

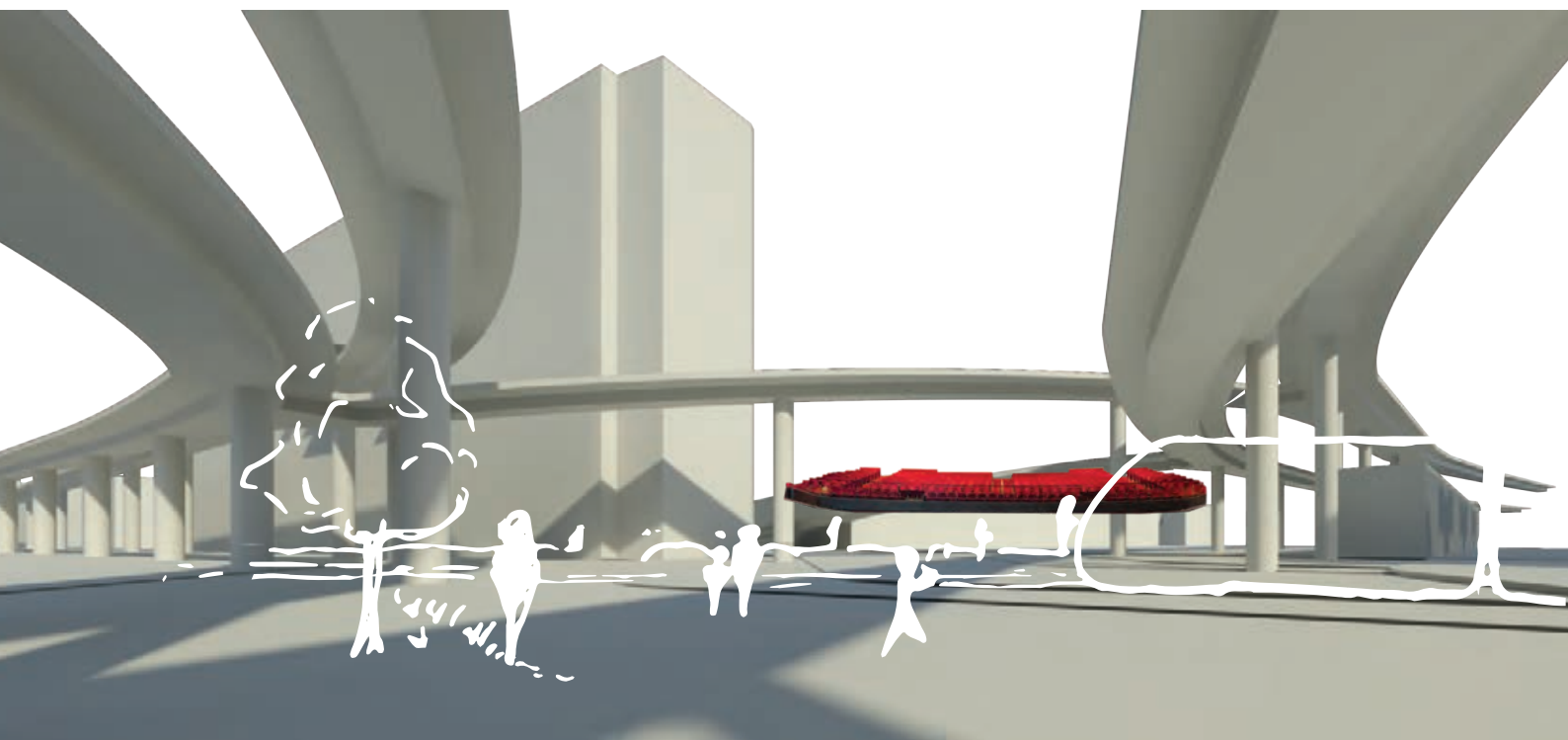
The concept of using the pillars is a way to incorporate the already existing structure in a different and creative way, while also introducing a practical usage. Based on the fact that the neighbourhood surrounding the site is a cultural node within Rome, these columns can be used to transfer music, graphics and art, through a simple USB sharing network.

A horizontal LED circle designates these centrally positioned columns within the square. Their lighting indication can also serve as a illumination during the night, creating a more safe and attractive atmosphere.

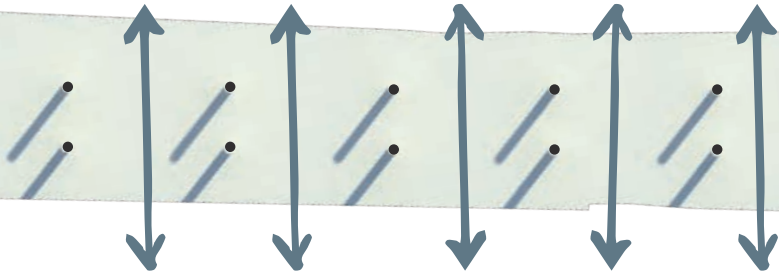
≡ *Staging Tribune*

The new Terrace/Stage design is conceptualized to extend the existing Fly Over structure in such a way that it does not distort its current form, but coherently blends in with it. An extension of the Pedestrian Terraces, the stage is their focal point, as it brings an extraordinary overview of the whole square.

Constructed of the same elements and materials of the Fly Over structure, the Stage takes use of a closed car ramp, to create a large space for people. Similar to the Pedestrian Terraces, this stage is designed as a place of leisure, where people can go and stay; view the fast paced world both above and below it.



● *Illuminating Pillars*

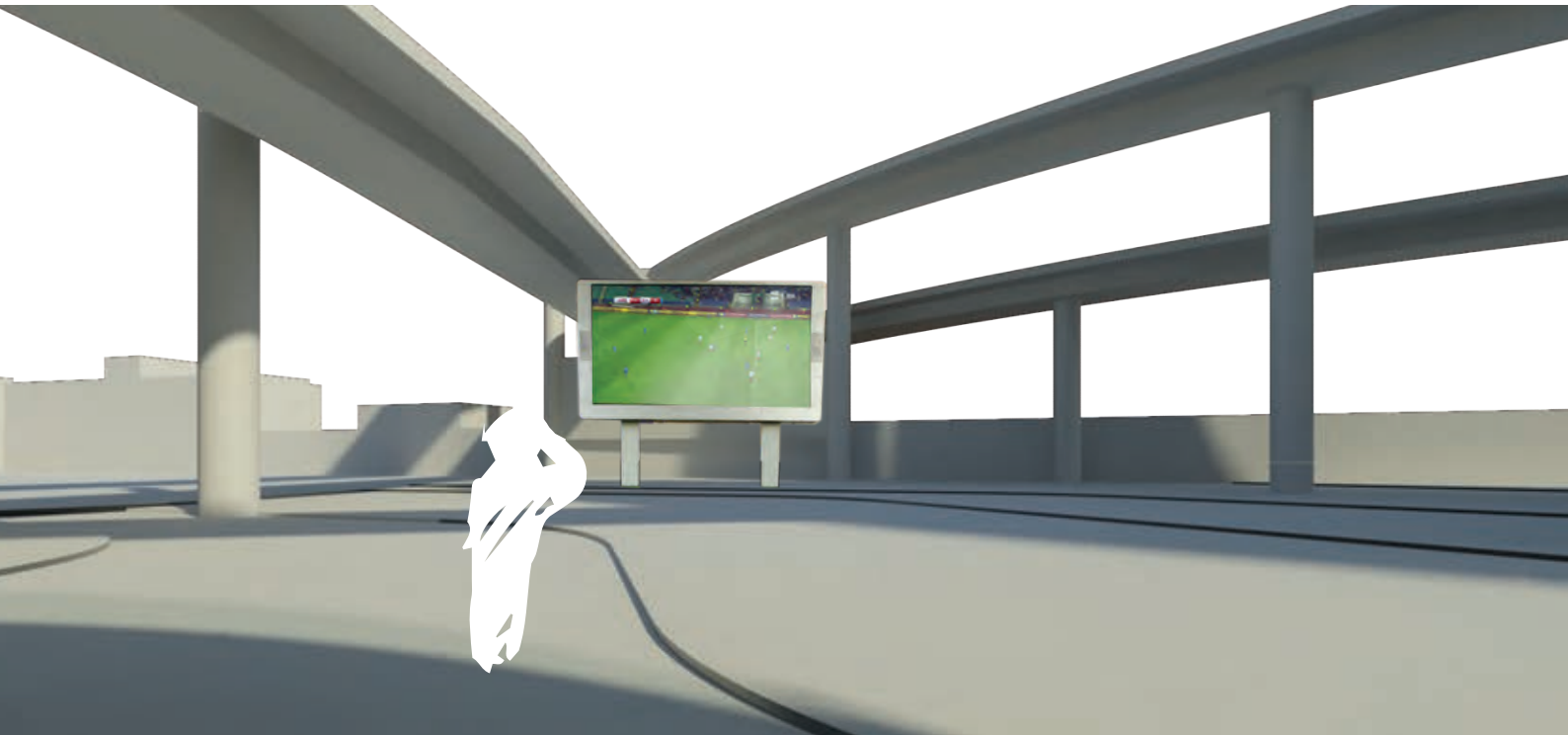


Similar to the Sharing Pillars' concept the rest of the columns within the site are redesigned to hold a vertical LED light illumination, creating an interesting and altering corridor of light beneath the present Fly Over structure. Opposite to their physical environment, these lights are conceptualized to increase the transversal permeability through the site, which at the moment is poorly designed. Again making the site a more attractive and safe place during the night, these lights can also be used as an indication for the incoming tram traffic, which is their more practical use above their aesthetic one.

●● *LED Screen*

The LED Screen is designed as a visual meeting point, guided by the organic lines of the Fly Over. Opposite the Staging Tribune, the screen can serve as a cinema, theatre for it, but also function on its own.

Versatile in its programming, the LED Screen can serve as an information board; supplement the Sharing Pillars or an art installation. Its structure is made in such a way, that the screen can be both extended from and into the Pillar of the structure above.





4
SECTION A-A'



This section is a cut-through the more detailed area of the Master Thesis project, showing the scale of the Fly Over structure opposed to the human dimension below. An interesting contrast, the section relates the atmosphere of the space below – A huge open area, which although overwhelming in its dimensions, does



not intimidate or feel uncomfortable. On the contrary, the Void Structure, below the magnificent concrete structure is open, clean and welcoming, having the potential to house all of the small implementations, part of the design of this project.















5 MOBILE APP



The mobile application idea is only at a conceptual stage, an additional and innovative way to activate the catalytic potential of the Urban Voids. With the ability to program them in a really adaptable way, this concept uses the notion of the unphysical nature of the void.

Using this Mobile Application, the user can discover a hidden world, which lies in a layer which is invisible but still intertwined with the present environment at the site. Play, explore, create are only a part of the options that this mobile application can have.

The mobile application creates a secret world, open for exploration, regardless if we are talking about the big open square spaces or the smaller Urban Connection. Socializing together, this application has the potential to further catalyse the Social Geography within the site. But most of

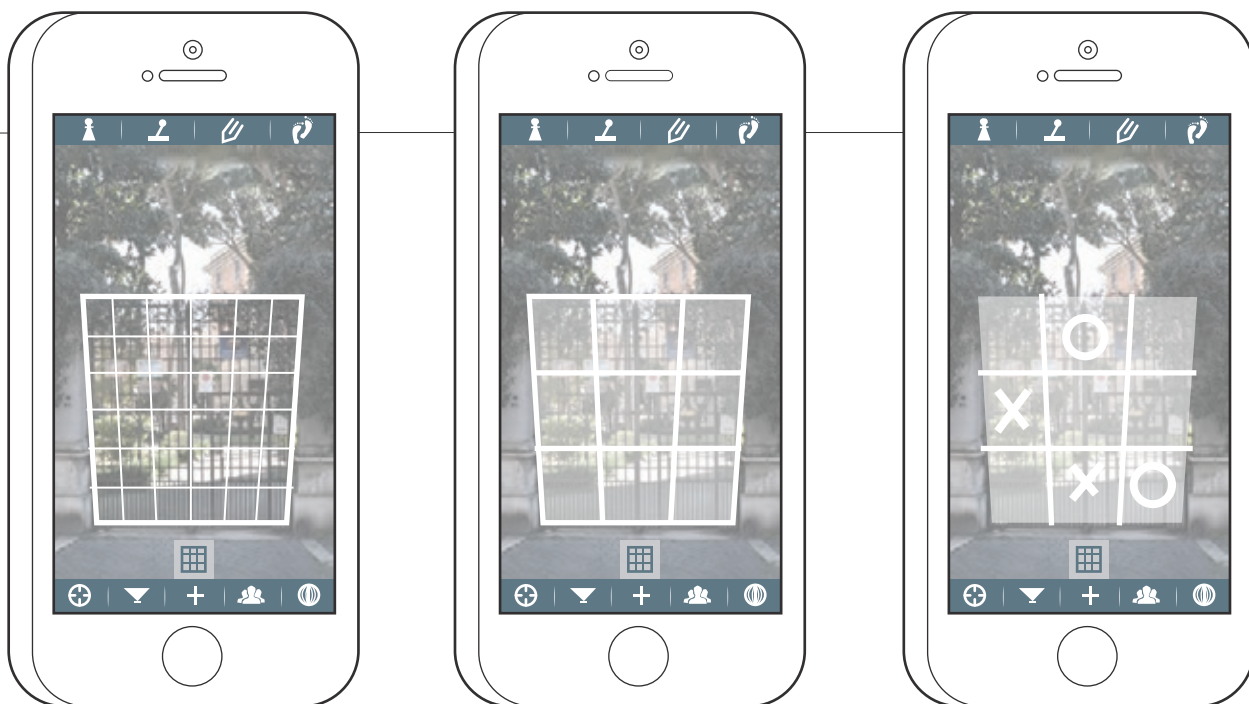
all, the idea allow for users to actively participate in the manipulating and designing of the urban fabric, which in turn can also be used to gather data of how the Urban Voids can be further transformed by small implementations, specifically targeted at what the users want.

Further transforming the urban context into something new, something that changes all the time, this concept creates an entirely new atmosphere, dictated by audio and graphical visualisations. From practical usage, regarding the public transport network or the parking and traffic situation within the site, the mobile application can also stimulate the sensory experience of its users. Connecting together the real world with a digital one, the possibilities of this idea are endless.

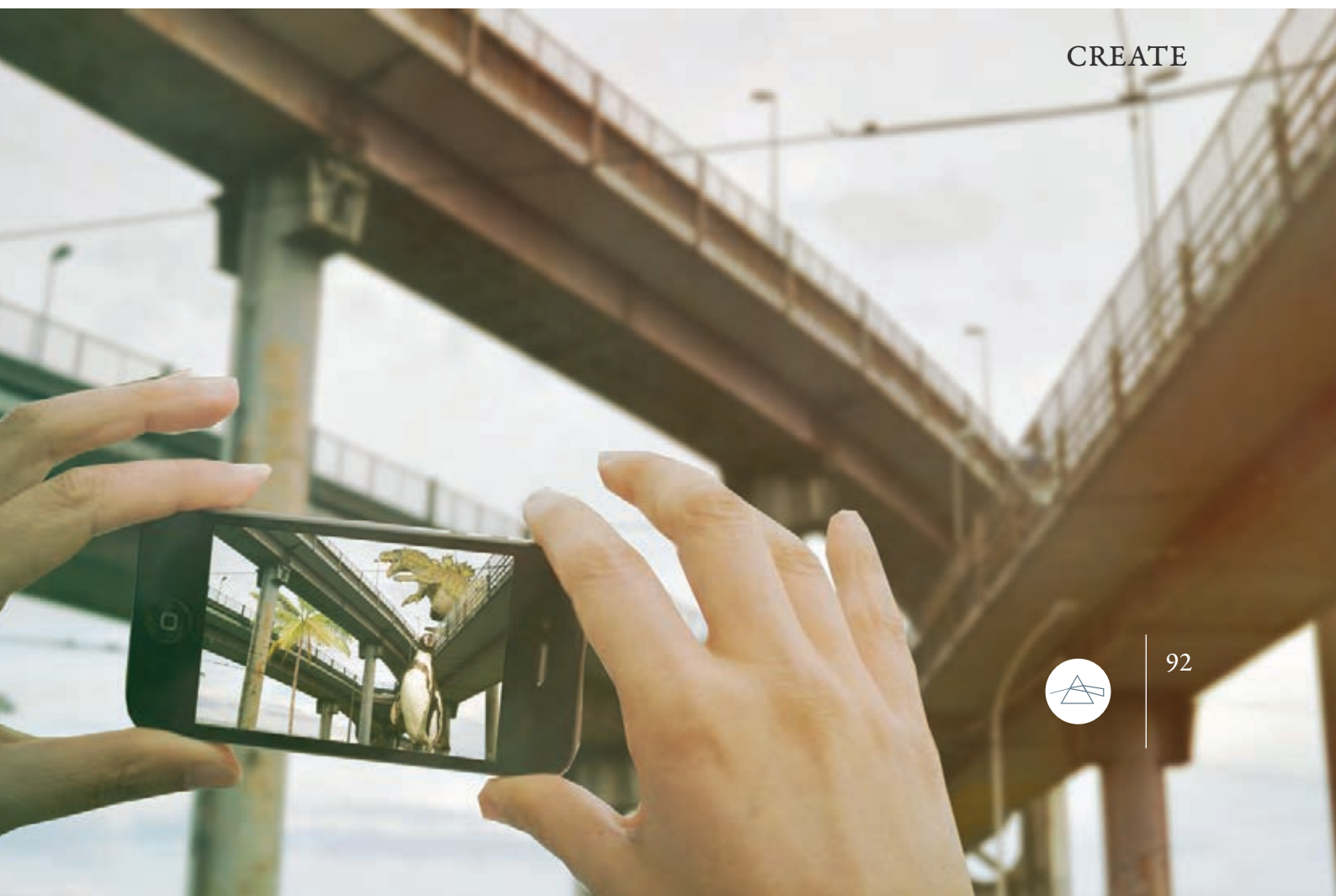
INTERACT




PLAY



CREATE







First of All
Nuclei and Epicenters
Design Goals
Social Geography
Research Answer

Last Thoughts

1 FIRST OF ALL

History

Historically the ancient city of Rome was built upon the foundations of a vivid public life, with spacious forums and squares, which endorsed human interaction, business and leisure. However the industrialization and modernism periods in the past century have put little to no emphasis upon those ancient practicalities. Enormous infrastructure developments combined with the urban sprawl has left the outskirts of the city of Rome less prone to a lively public life. Filled with not functioning and neglected areas, the built urban fabric of the city is separated by numerous urban voids. Connected together, these voids can be viewed as a backbone of the city, similar to the already built urban fabric, possessing enormous potential for the future urban development for the modern face of Rome.

Geography

As a big metropolitan area, the city of Rome is a network of various geographical, urban and social entities, composed of neighbourhoods and areas with a different cultural identity. With many interesting examples of urban voids within its boundaries, or site pres-

ented a specific interest, because of its important location. Positioned in the urban composition of Rome, as a link to 5 municipality districts and a direct connection to the city centre, our site had the potential to serve as a case study example for the future development of the concept of urban voids.

Context

The surrounding neighbourhoods are a mix of residential and industrial zones, with green areas to the east of our site and the enormous Rome cemetery as well as its first University, to the North. Although the primary nature of the adjacent neighbourhoods can be easily described, all of them lack an important balance between their functional and social mix. Similar to the case study in Milan, these neighbourhoods were viewed as components to a complicated matrix, which is represented by the city of Rome. Looking at their potentials and problems, their identity, all of them had a common element – the urban voids. Unutilized and filled with potential, these spaces were an inert catalyst for urban development waiting to be activated.



New nuclei system in-between

As in the case study example in Milan, our goal was to observe urban voids as possible catalysts for different purposes developments. In this Master Thesis case, our site represents a vital connection within the confines of its urban context, an epicentre of sort within the network of its surroundings. The UDP of Milan looks at the smaller scale of the urban context, as it identifies smaller cultural micro neighbourhoods, rather than creating its basis of future urban development based on the regulated municipal neighbourhood distinctions. In our vision, we can look at an urban void as such a micro epicentre, which can for example serve for spatial densification development. These voids carry the potential of connecting the urban tissue, supplementing to the missing functional mix of their surroundings, creating a more integrated and well-designed designed metropolitan area, thus making the city of Rome more attractive, efficient and foremost liveable.

Urban voids

These urban voids can be viewed as and connected as a chain of spaces, due to their high number and close proximity, within every contemporary metropolitan city. Having a hierarchy of importance in the developing of the context around them, the main focus of this project was to redesign such a key urban void, but also to develop guidelines for the future development of similar sites or urban voids.

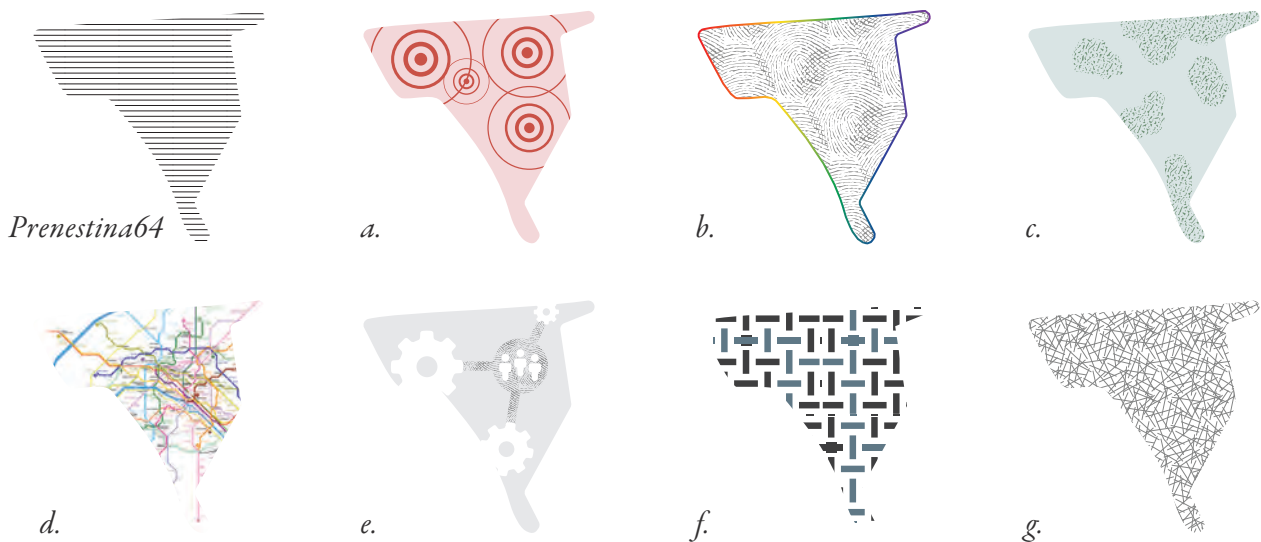


3 DESIGN GOALS

Implemented in the design process of our site, these goals are correlated to the case study in Milan as well as the theoretical foundations of the project.

Aiming to utilize the potential of our key urban void, catalysing the development of not only our site but also the surrounding neighbourhoods, the goals target specific areas that are problematic for the urban context of the site.

- a. Places for everyday living and leisure.*
- b. Creating a contemporary identity linked with the surrounding social environment.*
- c. Forming new green spaces.*
- d. Developing the urban public transport system.*
- e. Achieving a balance between a functional and social mix.*
- f. Redistribution of vehicular traffic.*
- g. Creating pedestrian areas and connections through out the city fabric.*



The purpose of these design goals is to follow a specific path of revitalization within the area and around it, that aims to develop the site into a more attractive, efficient and liveable place, but also stimulate the social and cultural aspects

of the existing surroundings. Laying on a solid theoretical foundation of urban studies, such as Jahn Gehl's "*Cities for People*", these goals prioritize and promote enchanted social interactions and quality of life for the people of Rome.



As a definition, the term “social geography” means the study of people and their environment with particular emphasis on social factors. With that said it was only logical that the aim of the project was not entirely focused upon a specific site or area, but also orientated towards a more broad scope of understanding the urban fabric of a city. Seen as the “environment” around our site, it was important to take into consideration that these neighbourhoods will influence our design outcomes and should be considered as a factor in it. This is so because such a key urban void will not only impact the neighbourhood in which it is located, but also influence its surrounding areas. The effects of the project will ripple like a wave, having of course a lesser effect as further as they are from its epicentre.

The social factors that play a role in this project are directly connected to the environment, because of its effect upon them. Shaping that environment will shape the people who inhabit it – *“First we shape cities, and then they shape us”*¹. By the way the environment is designed it can either endorse or dissuade public life and interactions, thus impacting the social geography. Taking in account the different cultural backgrounds of the people in our site, the design aims to stimulate not only social but also cultural interaction, creating a more broad scope of activities, possibilities and communications, not only within the specific site but also within a wider urban context.

*“The built environment is no longer the goal, but the starting point”*². This quote is something that the case study in Milan and our project’s vision has adopted. Modern cities already possess a vast network of built environment. Cities cannot grow forever, but rather must be densified, redesigned in a new, smarter way. Like missing pieces of a puzzle, urban voids represent vital parts of the full picture of what a contemporary

city should be. Even if seemingly nothing is there, potential lies hidden. Not necessarily physical, the different parts of the environment around can be invisible to the naked eye, in the form of not only urban voids but also vast mobility networks of communication and information.

Designing the physical setting, implementing these urban voids within the built environment empowers urban life. It has the possibility to provide such diversity and unleash the imagination upon innovative solutions. These spaces can be designed in various ways to supplement the already existing built environment by enchanting its lacking functional, cultural or social aspects.

Jan Gehl provides some really interesting and insightful thoughts about a well-designed urban space, with some of the most important focus points of his research included in the design goals for this project. But contemporary cities are fast paced, complexly created. They are places where a vast network of systems and flows interacts. Working in a human scale is not always possible or functional. As “Staging Mobilities” by Ole B. Jensen shows cities work on different levels and scales. Working in a human dimension must not exclude the development and concept of different layers interacting together in a three-dimensional scale.

It is important to note that *“Societies are not static ‘things’ and ‘places’, but dynamic relations and networks!”*³. A contemporary city should be able to mix the fast paced life, with existing and expected flows of people, as well as the quality of the public spaces. With that said the design goals extracted the most important conclusions from the solid theoretical background of the project and combine them together in order to supplement each other.

1. Cities for People by Jan Gehl (2010)

2. Urban Catalyst: The Power of the Temporary Use by P.Oswalt, K.Overmeyer, P.Misselwitz (2013)

3. John Urry from Staging Mobilities by Ole B.Jensen (2010)

5
RESEARCH ANSWER

Research Question:

“How can we unpack the catalysing potential of Urban Voids in contemporary cities?”

What is the urban void?

Blank and unusable space? Empty but filled with potential? The blueprint of the future redevelopment of contemporary cities?

The urban void can be all of those things, simply because of its nature, left to interpretation but most of all, perception. The biggest problem with the concept of the urban voids is that people do not perceive them as spaces thus they do not see the potential which lies hidden.

Urban voids make up for a large percentage of a city's environment. Although in many cases inert, they connect the built fabric together.

However that fabric needs to change in order to meet the requirements of modern society. Densification; redistribution of multi-layered mobility networks; emphasising social geography; these are just parts of the processes cities need to go through. Overwhelming and significant, this process cannot happen without a catalyst to manifest it.

What is a catalyst?

In Urban Design terms, a catalyst is a sort of redevelopment strategies consisting of different guidelines, implementations, projects and etc. which drive urban transformation. Lying hidden within contemporary cities is the ideal facilitator for such processes- the

Urban Voids.

Extending far more than the mental image most people have of a chemical analogy, which forces elements to react faster and with less energy, a catalyst in an urban context is something different. It is a component which interacts with the urban environment, but its possible results can be in a much more widespread perspective. It has a greater purpose and dynamic potential.

As Urban Designers we have the power to form such catalysts. Modifying them to fill a specific purpose, they have a really diverse functionality. Shaped by the environment and people surrounding, in which we place it, catalysts in turn shape them back.

“Its purpose is the incremental, continuous regeneration of the urban fabric. The important point is that the catalyst is not a single end product but an element that impels and guides subsequent development.”⁴

But one important thing to remark about the catalysis of urban development is that unlike the chemical compounds whose name they carry, their effects slightly differ. In the world of Chemistry, a catalyst is reacts with the elements and can be extracted afterwards, without changing its chemical composition.

When talking about Urban Design however, these catalysts have a much longer lasting effect, even if removed from the initial environment they were placed in. Furthermore that environment reacts with them, as much as they react with it, morphing them into something new.

Urban Voids as Catalyst

The Urban Voids are a strong example of a possible urban catalyst because of their following characteristics:

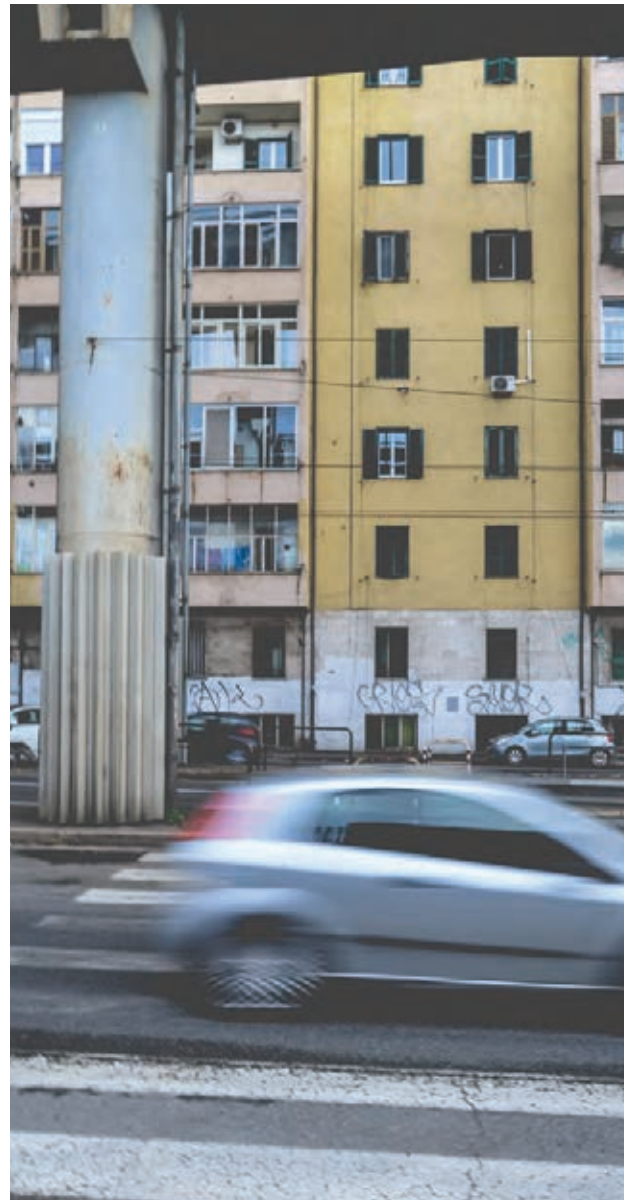
- a. They are ideally positioned as a connective tissue in the built environment of contemporary cities. Centrally located, either in the whole city network or in their local context.*
- b. Urban Voids possess the potential versatility in their functions.*
- c. "Empty" and non-programmed space, open to physical interpretation.*
- d. Usually they have a strong identity and/or historical background.*
- e. They are part of a backbone structure of Void spaces which spreads throughout the city environment.*

As this Master Thesis project demonstrates the main problem with unpacking the potential of Urban Void is perception. Whether people cannot see them as a spatial component or urban designers do not emphasise their importance in their concepts, Urban Voids are simply unutilized. As important as the built environment and sometimes even more, these spaces need to be addressed.

"But how can we channel all of that hidden potential in the form of an urban catalyst?"

Unpacking Urban Voids

In the course of working with this project, the first main focus was to pick out a great example of an Urban Void in a big contemporary city, one which possessed the qualities to be large enough in scale to be used both as a case study for further development of the subject and reflect upon as academic pupils as well as future Urban Designers.



Studying its problems and potentials, we aimed to understand how it actually connects to its environment and of course how can this Void provide a vital prospective towards the catalysation of urban development within its context.

With that said, this is the first step into utilizing the full potential; unpacking the Urban Voids – **context**. Their relations to the built environment, as well as to each other, provide key information on how the perception of them can be changed in an impactful way. In other words the Voids can be designed and programmed in such a way that they supplement their environment.

The interesting thing here is that although planned, or staged from above, in a particular way, these catalysts are not dictated by a single-minded vision. Their impact extends beyond the confines of their relation to their surroundings and their purpose. For example although the Urban Void with which this Master Thesis deals with is designed to be a social catalyst for its area, it also has an economic, cultural and in a way even political influence. Furthermore it also interacts in the built environment, with the architecture of the site.

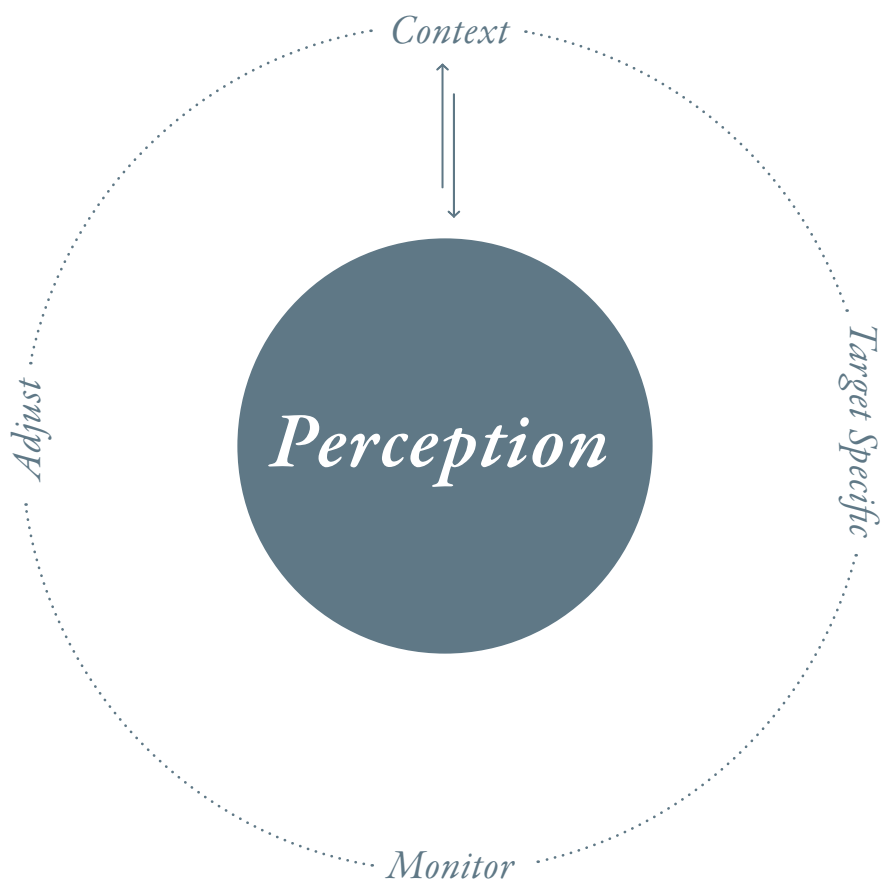
However, even though their positive prospective returns are extensive, the second important aspect into properly utilizing their full potential is good staging from above. Their design must be focussed at a precise scope of revitalization. Simply adding on development or functions does not usher good urban design. The potential of these Urban Voids can be unpacked only if there are **target specific**, towards problematic or lacking areas in their urban fabric context.

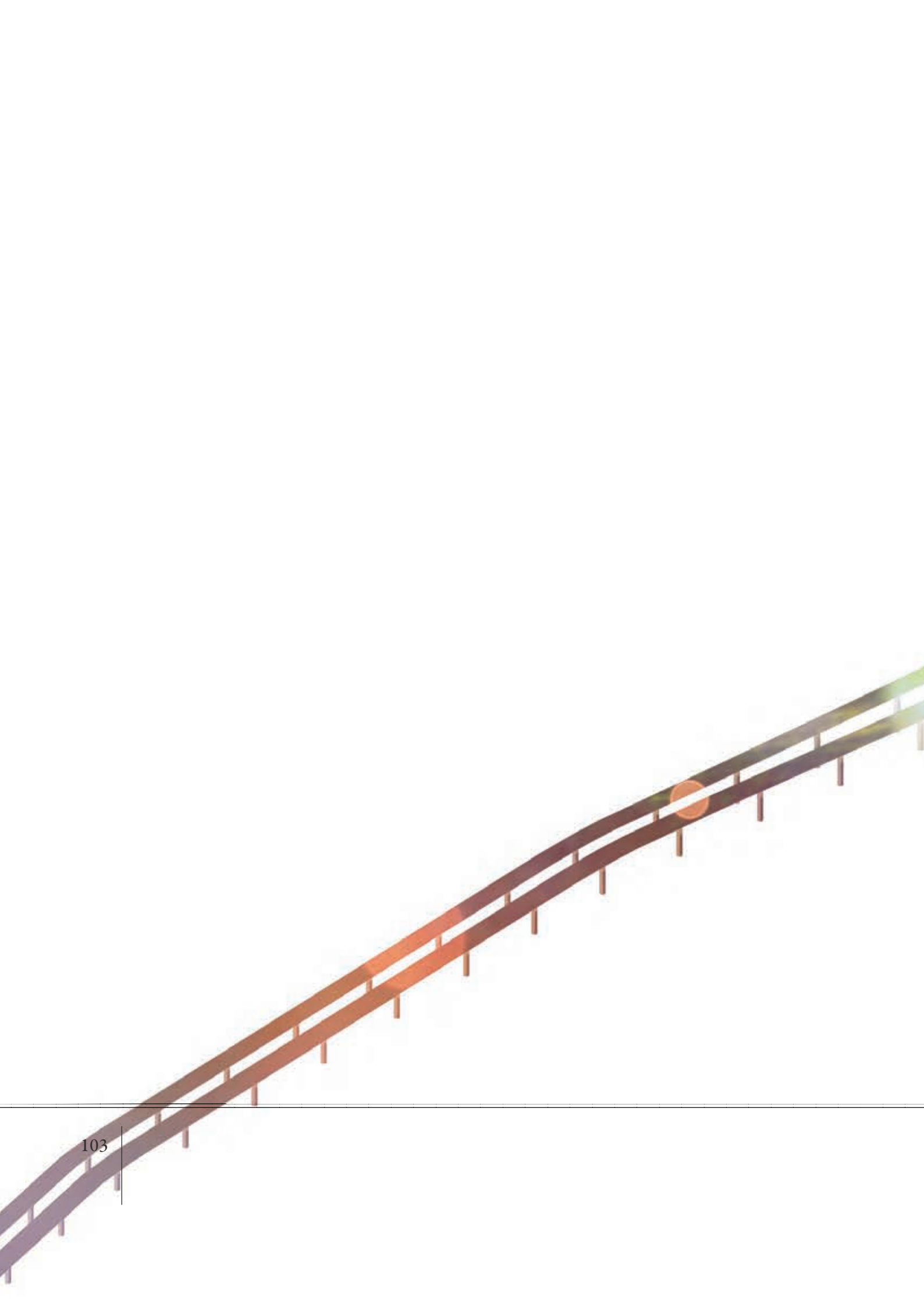
It is important however to **monitor** their progress

development over time. As mentioned earlier, catalysts are shaped by their environment and in return shape it back. People play a big role in this, with their embodiment performances and direct interaction with their environment. This means that the process of catalysation in any given surroundings is on-going and dynamic. Monitoring the unpacking of Urban Voids, beyond their initially designed potential is necessary to further supplement their influence upon the contemporary cities, by understanding their mutual relation to both people and the urban fabric.

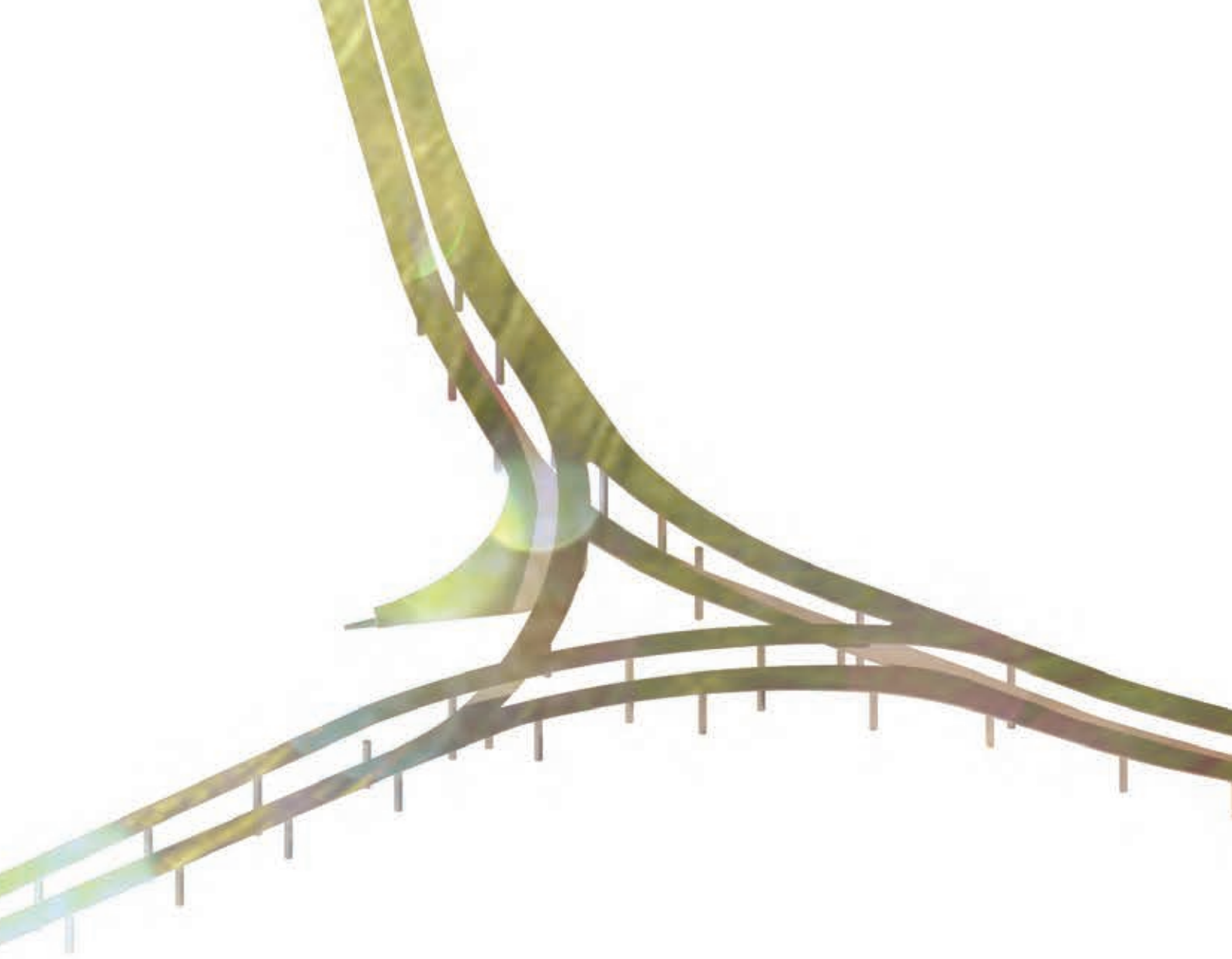
Here it is important to point out another positive characteristic of the Urban Void – their flexibility. Although they must be designed to focus on a specific problem and area, their multifunctional nature allows for them to be **adjusted** in a later for the development process point in time. This essential quality allows for the unpacking of their potential to be done with small and temporary implementations over a period of time, opposed to more concrete urban design solutions, which in turn means that Urban Voids are an economically feasible solution.

The final point, which stands as the most important one, as we look to unpack the hidden potential of the Urban Void as a catalyst, is **perception**. Whether we are talking about physical obstructions or perceptual such, Urban Voids are often non-existent in the eyes of many. Unpacking their potential requires the knowledge and awareness of their presence, but even more, the sound mind to practicably reveal them. This must be done in a subtle but efficient way, because these Voids mustn't seem out of place. Their design must relate to exactly how they exist at the moment – connected to the urban fabric of contemporary cities.





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New Traffic Scenarios
Checking Parkings
Drone Aerial Videos
Some References

Appendixes

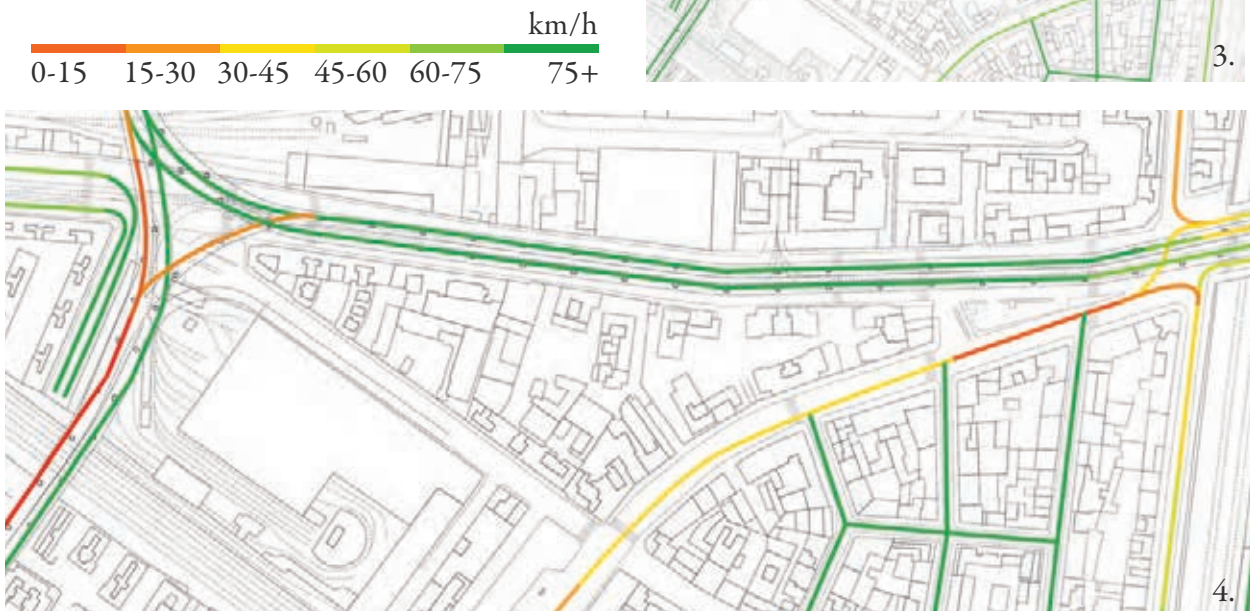
Extra Material

NEW TRAFFIC SCENARIOS

1.Go South

From the traffic analysis conducted during the analytical phase of this master thesis, there has been observed pros and cons of the traffic situation in our site before our design proposal. Seen that, one of the two possible options for the re-direction of the traffic is to move it to the south part of the site where there has been found no problems at all.

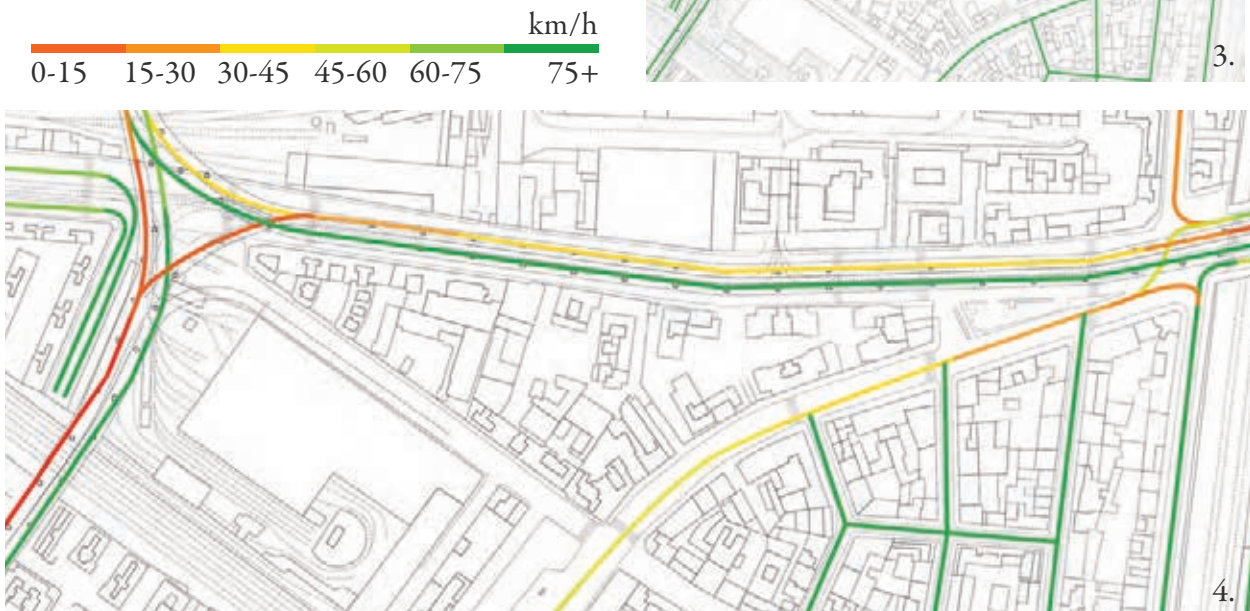
In fact the average speed mapped is between 30 km/h and 45 km/h, a value that permits the channeling of new traffic, previously allocated in our site, to the southern L'Aquila Street.



2.Up the Ramp

As discussed in the previous page, from the analytical phase it has been observed that from the current traffic situation there are two possible options for the re-direction of the traffic. *Go South* (previously explained) and *Up the Ramp*.

In this second scenario the vehicular flow, previously going to our site, is re-directed up the flyover on top. Also in this case, it was mapped an average speed between 30 km/h and 40 km/h, enough low to allow the insertion of new traffic within.



2 CHECKING PARKINGS



Analysing the parkings in the area, before our design proposal, it has been found that the number of cars is higher than the number of pedestrians.

Now seen that the designed parkings are even more than the pre-existent ones, it could sound a paradox the fact that instead of decrease the amount of cars, it has been actually increased. This comes for a reason, the

simple fact that before there were mainly linear illegal parkings beside the streets, from the design proposal instead, there has been the implementation of an underground parking lot. The latter, together with the others parking lots, will be able to contain not just the local inhabitants' cars, but also the cars of new incomers coming for pass some time in the new public space designed in the area.

Pre-Existent

$$\frac{10'340 \text{ m}^2}{12,5 \text{ m}^2} = 826$$

$$\left(\frac{\text{total parking surface}}{\text{standard parking area}} = \text{number of actual parkings} \right)$$

Law Requirements

$$4'468 \text{ hb} \cdot 2,5 \text{ m}^2/\text{hb} = 11'168 \text{ m}^2$$

(inhabitants in our area · parking area pour inhabitant by law = required parking area)

$$\frac{11'168 \text{ m}^2}{12,5 \text{ m}^2} = 893$$

$$\left(\frac{\text{required parking area}}{\text{standard parking area}} = \text{number of required parkings} \right)$$

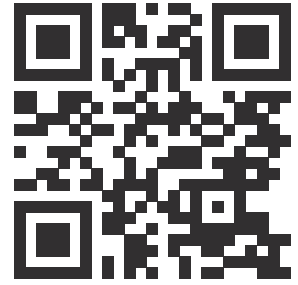
Designed Parkings

$$\frac{22'560 \text{ m}^2}{25 \text{ m}^2} = 902$$

$$\left(\frac{\text{total parking surface}}{\text{standard parking area including distribution}} = \text{number of designed parkings} \right)$$

3
DRONE AERIAL VIDEOS

During the Analytical Phase of this Master Thesis there have been conducted also several observational mappings, done with Drones, GoPros and Reflex Cameras. These tools served to create 3 videos focused on different matters. The drone's videos have been done mainly to have a look from an unusual perspective (different from the human one) and to take a closer look at the flyover's infrastructure. With the GoPros instead it has been possible to study three different ways to experience the site, and lastly with some Reflex Cameras there has been produced some timelapse videos to analyse rhythms and flows of the area. To watch the videos scan the QR Code.



DEFINITELY STAGED FROM ABOVE [DRONE]

<https://vimeo.com/122186971>



RHYTMS AND FLOWS [TIMELAPSE]

<https://vimeo.com/122950926>



3 DIFFERENT PERSPECTIVES [POV]

<https://vimeo.com/122422367>

SOME REFERENCES

During the development of the Master Thesis there has been researched, studied and analysed several references, very different among each other, but related to projects dealing with the same issues around the world.

In these two pages are listed just some of them, the 5 that has been found more relevant for the development of the concept and for the actual shaping of the final design proposal.



THE PORCH
Philadelphia, USA
2011



HIGH LINE
New York City, USA
2009-2015

OCTAVIA'S BOULEVARD

San Francisco, USA
2002



Taman Film Bandung

Bandung, Indonesia
2007



SOTTO IL VIADOTTO

Rome, Italy
2014



BIBLIOGRAPHY

Cities for People

by Jan Gehl, Island Press (2010)

Staging Mobilities

Ole B. Jensen, Routledge (2013)

Re-thinking a Lot: The Design and Culture of Parking

by Eran Ben-Joseph, Mit Pr (2012)

Urban Catalyst: The Power of the Temporary Use

by P.Oswalt, K.Overmeyer, P.Misselwitz, DOM Publishers (2013)

Finding Lost Space: Theories of Urban Design

by Roger Trancik, Wiley (1986)

Milan, The Dense City

THE PLAN Magazine (2010)

American Urban Architecture: Catalysts in the Design of Cities

by Wayne Attoe and Donn Logari, University of California Press (1992)

Ways of Worldmaking

by Nelson goodman, Hackett Pub Co. Inc. (1978)

ILLUSTRATION LIST

- 17 Map of Rome (1962), RomaTre University of Rome
- 30 Photo by Antonello
<https://www.flickr.com/photos/anton3ll0/>
- 31 Photo by Giorgio Vianini
<https://www.flickr.com/photos/giothebike/>
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- 95 Map of Rome (1845), RomaTre University of Rome

All the remaining illustrations and photos have been made by Yordan Vakarelov and Simone Fracasso.

