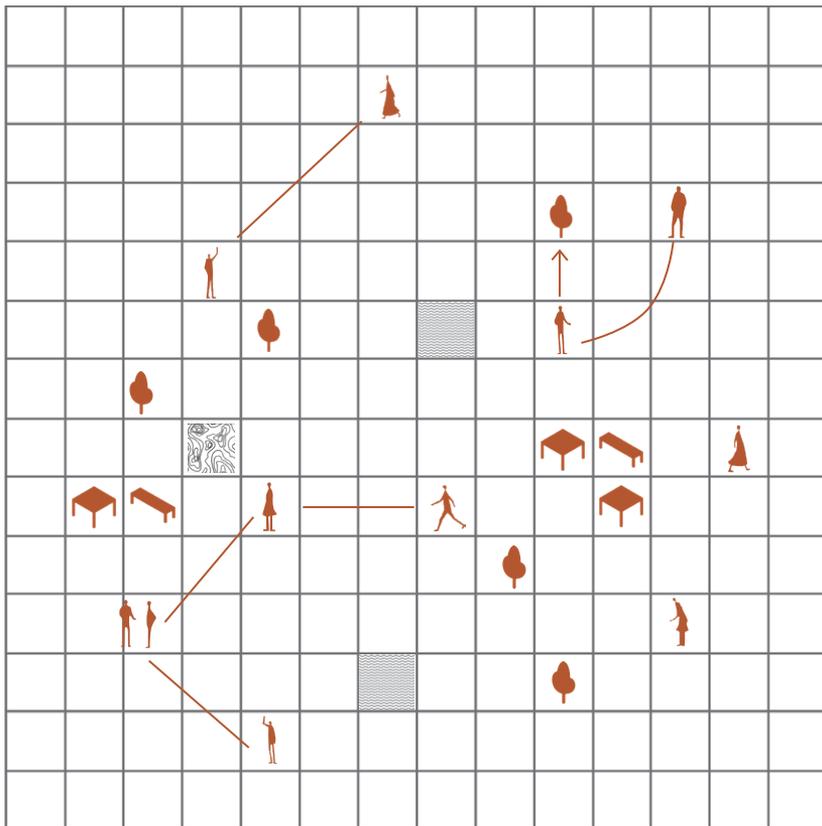


# The 'Re'creation Ground.

Wen Yee Tan



*" this is where we come together and make it possible... "*





# A.Y 20/21 MASTER THESIS

ARCHITECTURE CONSTRUCTION CITY  
POLITECNICO DI TORINO

## MARGIN

URBAN FABRIC REGENERATION

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TRANSITIONAL MORPHOLOGIES IN  
THE ITALIAN CONTEMPORARY CITY  
: THE CASE OF TIBERIO, RIMINI.

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## ABSTRACT

Nowadays, due to economic dynamics, modernity, technology and urban sprawl, humans are suffering from “placelessness”. 21st-century built environments are diminishing the unique characters that make places noteworthy. The problem with this is that people have the desire to associate with distinctive places. Ignoring this tendency will create a type of environment where places do not matter anymore. Public spaces that serve as platforms for life are not only essential to the identity of cities but also provide venues for social-cultural activities that will attract people. Placemaking plays an important role in the “placelessness” phenomenon and how it interacts with the margin urban fabric in city are worth investigating.

This master thesis is divided into two parts, Part 1 is a collaborative work focuses on the history and overview of Rimini city, aided by a series of atlas pictures from different blocks of the city. Part 2 dives into the strategies applied on margin urban fabric regeneration in Tiberio, Rimini with the concept of placemaking and parasitic architecture. At the same time, seeks to explore the integration of parasitic & modularity architecture into the new public space design in Tiberio, Rimini that could be accounted to changes and flexibility in different parts of the city. A series of analysis and visual representations are being presented in the last part of the thesis to support the proposals.

Other than that, this thesis also aims to investigate the role of architecture in increasing the quality of people’s daily experiences in the public domain, and to explore opportunities to frame a new type of public-private place in Rimini by imbuing the architecture of place with ‘a sense of place’.

*Key words: margin urban fabric regeneration, placemaking, parasitic architecture, modularity, flexibility, marginal area, public-private, public space*

# PART. 1

TRANSITIONAL MORPHOLOGIES / THE CASE OF RIMINI

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# PART . 1



**TRANSITIONAL  
MORPHOLOGIES  
IN THE ITALIAN  
CONTEMPORARY  
CITY.  
THE CASE OF  
RIMINI**

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00

**INTRO-**

**DUCTION**

Through the diachronic study of the form and rules that order the built and the cartographic reworking, it is possible to create a catalogue of operational guidelines.

## FIELD OF INTEREST

The study investigates the links between form and urban rule in the contemporary Italian city, concerning the case of Rimini. The study consists of analysing the historical settlement system to form the cognitive framework of the General Urban Plan of Rimini. The analysis is conducted in a morphological-transitional manner or formulate guidelines for urban transformation.

The city understood as a complex evolutionary system that changes continuously over time. As *Stephen Marshall (2008)* argues, “the plan of a city - like the plan of an ongoing chess game - is a snapshot of an ever-changing process. Two cities - or two games of chess - may have different distributions of pieces. Still, these distributions often have a systematic local relationship, which gives them a recognisable order”. This concept denotes the changing character of the city over time. It introduces a distributive and formal structure that organises the elements that make up the urbanised space (*Caniggia, 1979*). The deepening of the relationships between elements, especially in urban sectors capable of documenting important seasons for the city’s evolution, makes it possible to develop scenarios for future development. Thus, the participation of the present in the spaces of the existing city makes the civic and design value of the historical heritage understandable and accessible.

In this context, Rimini assumes a paradigmatic role in observing the evolutionary cycles of the existing city. Therefore, through the diachronic study of the form and rules that order the built and the cartographic reworking, it is possible to create a catalogue of operational guidelines (codes). The operating procedures allow the triggering of urban regeneration mechanisms. They respond to local needs with a view to exporting and generalising design practices.

This thesis presents a collection of documents. Starting from the global analysis of the urban fabric of the city of Rimini, four specific areas have been identified in which to simulate a series of urban projects. The design project is carried out in educational and academic settings to show possible actions in specific contexts. Thus, the simulations allow generalising the detailed reasoning and extending them to the rest of the urban fabric with the same morpho-typological characteristics.



Fig.1-4, Map of Study Areas in Rimini, Google Earth (2021)

## ONGOING RESEARCH AND METHODOLOGY

In the last ten years, the significance of urban codes has been placed in the foreground, both for their use to reform buildings and their value as new tools to shape the future (*Talen, 2012*). Urban codes, or the governance tools for administrations that allow cities to be generated and regenerated, reveal a profound relationship with the urban form, which can be studied thanks to the paradigm of transition morphologies. Investigating transition means looking at urban morphologies as a process.

Transitional urban morphologies are an operational conceptual tool for analysing the urban form of contemporary cities in their historical development, up to their present reality, and also looking at their possible future configurations of urban planning and design (*Trisciungio et al., 2021*).

The development of a new generation of urban planning rules requires a deep and critical understanding of the mechanisms of evolution of form and the analysis of the effects of the regulations on the built environment. Evolution is the lens through which city development can and must be understood (*Marshall, 2008*).

This page presents the first analysis of the historic core of the city of Rimini. Through the redesign of the Roman structure, of the Renaissance elements and the Gregorian Cadastre of 1811, it is possible to understand the permanences and the permutations of the urban morphology of Rimini. Numerous in-depth studies and considerations can be conducted by superimposing the different layers obtained from interpreting the maps and historical documents. Therefore, the aim is to understand the formal mechanisms of origin and modification of the urban fabric to build project reasoning consistent with the context.



Fig.5-8, Superposition of Roman matrix on Gregorian Cadastre of 1811, Rimini, Martina Crapolichio (2020)

**This sub- chapter showcases the urban fabric of the historic center and the distribution of different typologies in the city Rimini.**

### **General Plan : Morphological Homogenous Categories**

The collection of original maps and reworkings documents with the main elements that combine to define the character and structure of four emblematic areas, chosen as representative archetypes of morphotypological ensembles.

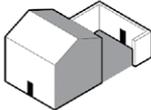
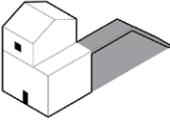
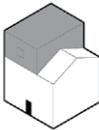
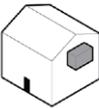
This operation helps to study the city based on the elements that compose it and define intervention strategies in a localised manner to trigger regeneration mechanisms of the entire urban fabric. This approach allows collecting the evidence of the analysis to formulate generalisable principles. Furthermore, it is possible to elaborate other questions relating to urban morphology in the planning, design and conservation of Rimini's historical centre.

The four morphologically homogeneous areas (1 Cavour, 2 Tiberio, 3 Mazzini, and 4 San Giovanni) are presented here. Each region corresponds to a graphic pattern and a precise urban morphological characteristic.

The diagram on the next page represents the constructed surface of each morphological category. A diagram illustrating the framing of the regulatory guidelines is presented on the next page.



Fig.9-13, Typological Map of Historic Center Rimini, Liqiuzi Guo (2021)

STUDY AREA	ICON	IF	YOU CAN	ADVANTAGES
CAVOUR Acupuncture		There are condition of: <b>compact building fabric with stratifications.</b>	Rethink urban space to allow porosity through: - Interventions on voids system - Interventions on facades' surface (Echo) - Interventions on roofs' surface (Echo) <b>Promoters: private OWNERS.</b>	Discount on environmental taxes; Adding volumes or/and surfaces in percentage.
TIBERIO Up & Down Strategy		There are condition of: <b>compact margin tissue, compared with canal port or different heights</b>	Recover cubage through: - Augmenting surfaces or volumes (even served by footbridges and aerial walk paths) - Allowing temporary (years) occupation of private open spaces by the municipality to realise public spaces and gardens <b>Promoters: private OWNERS.</b>	Adding volumes or/and surfaces in percentage.
MAZZINI Dynamic Growth		There are condition of: <b>building fabric of the outer village attested on roads</b>	Recover cubage through: - Augmenting surfaces or volumes partially or entirely involving the buildings' shape in plan. <b>Promoters: private OWNERS.</b>	Adding volumes or/and surfaces in percentage.
SAN GIOVANNI Air-Rights		There are condition of: <b>ribbon disposition in urban fabric along the Flaminia.</b>	Recover cubage through: - Augmenting surfaces or volumes partially or entirely involving the sides of the buildings according to stakeholders. <b>Promoters: private OWNERS agreement.</b>	Adding volumes or/and surfaces in percentage.





01

OVER-

VIEW

RIMINI BETWEEN FORM AND NORM



# UNDERSTANDING RIMINI

---

This chapter showcases a collection of articles about the history, monuments, city development and the current regulations of Rimini.

Rimini, which can be described  
as the split town, owing to its  
geographic, cultural, economic  
and politic reasons.

## THE SPLIT TOWN / by Wu Hongye

### I. Beach resort, a great turning point of city development

One of the most essential turning points in the history of Rimini was that the seaside resort gradually developed, since then, people's attention shifted from the original core of the city which centered on piazza Tre Martiri to the coastal area to the east of the city.

In **1843**, precisely under the Papal Government, Rimini officially inaugurated its **first beach resort** that became the Riviera Romagnola afterwards. The geographical boundaries of Rimini's beach resort extend from the mouth of the Rhine River up to the promontory of San Bartolo, but most of all, Rimini develops the tourist vocation along the Adriatic coast. The development of the first beach resort in Rimini was followed by the construction of the Kursaal and the hydrotherapy resort, in response to a new trend among the aristocracy and the upper middle class, who appreciated sea-bathing for its therapeutic properties. After the Second World War, many beach resorts arise in the area from Riccione to Milano Marittima and **since the '50s**, the seaside is full of areas devoted to bathing. Along with Milano Marittima, Rimini became famous throughout Europe as major tourist destination. **In the '60s**, Rimini and the Riviera Romagnola were finally recognized as leading touristic locations. Nowadays, people has already been associated with Rimini's bathing history since the first bathing establishment was founded in 1843.

In recently ten years, Rimini has made an excellent effort in terms of environmental renewal and restoration. Devoting to promote a more enjoyable and sustainable city, Rimini municipality built many leisure green parks, especially the new **Sea Park**: 16 kilometers of waterfronts, from Torre Pedrera to Miramare,



Fig.14, Beach resort in Rimini, Rimini, Wen Yee Tan (2021)



Fig.15, Beach resort in Rimini, Rimini, Wen Yee Tan (2021)

Ma ecco: non riesco a considerare  
Rimini un fatto oggettivo...  
E' piuttosto, e soltanto, una  
dimensione della memoria.  
Rimini: cos'è? E' una dimensione  
della memoria (una memoria,  
tra l'altro, inventata, adulterata,  
manomessa) su cui ho speculato  
tanto che è nato in me una sorta di  
imbarazzo (Fellini, 1971).

completely free of metal sheet and asphalt and transformed into islands and roads dedicated to greenery, nature and the quality of the sea.

In Rimini, tourists from Europe and all around the world would like to flock to the **seaside** for vacation, especially during the summer vacation, while the original historic center of the city is gradually forgotten. In fact, the historic center is full of important **memories** of the past, the memories of the people and the memories of stone (e.g. architecture, city walls, arches, etc). Cinemas, theaters, castles, cafes, museums, piazza, streets, and alleys, all of them, have both tangible and intangible memories which deserve to be preserved and continued in their own special forms.

## II. To be continue, a city of memory

Federico Fellini once wrote, “I can not consider Rimini as an objective fact. It is rather, a dimension of my memory... What is Rimini? It is a dimension of memory (a memory that in any case has been invented, adulterated, violated) on which I have speculated so much that I developed a kind of embarrassment (Fellini, 1971).”

Rimini, thus, for Federico Fellini, is not an objective fact, but primarily a facet of his **memory**. Although Fellini never shot a film in Rimini, Rimini as his memory is always existing in his films, recreated and memorized in some ways. The town of Rimini



Fig.16, Fellini is Everywhere, Rimini, Hongye Wu (2021)

**Pensare a Rimini. Rimini: una parola fatta di aste, di soldatini in fila. Non riesco a oggettivare. Rimini è un pastrocchio, confuso, pauroso, tenero, con questo grande respiro, questo vuoto aperto del mare; lì la nostalgia si fa più limpida, specie il mare d'inverno, le creste bianche, il gran vento, come l'ho visto la prima volta... Infatti, quando mi trovo a Rimini, vengo sempre aggredito da fantasmi già archiviati, sistemati (Fellini, 1971).**

truly becomes an island, in Fellini's idiosyncratic recreation, which represents a private place, protected by the sea, and where the individual can freely keep his or her most secret dreams (*Gieri, 1995*). Ostia, Rome, where Fellini shot "I Vitelloni", as Fellini describes, is more Rimini than the real Rimini. The place re-proposes Rimini in a theatrical, scenographic and, therefore, harmless way (*Fellini, 1971*). In the movie "I Vitelloni", Rimini truly becomes an island, that is, a total universe where each one of the five protagonists progressively undergoes gradual unmasking so as to expose his empty inner life, which is metaphorically paralleled by a vacuous social existence (*Gieri, 1995*).

"It looks like an American city. But who wants the American city?", the Rimini people said while they were watching the model of the future Rimini which proposed by the Americans after the WWII. Rimini was almost destroyed entirely by horrible bombs during the WWII. After the war, the Americans had promised to rebuild everything at their own expense. Then, Rimini becomes a word which is made up of auctions, of toy soldiers lined up. For Fellini, he can not objectify Rimini. Rimini is a mess, confused, fearful, tender, with its great breath, its open emptiness of the sea; nostalgia becomes clearer there, especially the sea in winter, the white crests, the great wind, as he saw it the first time... In fact, when he is in



Fig.17, Park in Castel Sismondo, Rimini, Hongye Wu (2021)



Fig.18, Park in Castel Sismondo, Rimini, Hongye Wu (2021)

Ricordo che ebbi una reazione infantile. Quello spettacolo mi pareva un oltraggio sproporzionato. Ma come, non c'è più il Politeama, non c'è più quell'albero, la casa, il quartiere, il caffè, la scuola! Mi pareva che avesse dovuto frenarli il rispetto per certe cose. Sta bene, è la guerra: ma perché distruggere proprio tutto? (Fellini, 1971)

Rimini, he is always attacked by ghosts already archived, settled (*Fellini, 1971*). Again, the Rimini which from Fellini's childhood did not exist anymore, but Fellini recreates and invents it in his films in his own way.

**In recent years**, local municipality has been working hard to enhance historical urban places with a **strong identity** starting with the redevelopment of the historic centre with the renovation and reopening of the Fulgor cinema, which is perhaps the most famous cinema in the world, the reconstruction of the Amintore Galli Theatre linked to the unitary redesign and reorganization of Piazza Malatesta up to the Malatesta Castle, the inauguration of the new PART Museum of Contemporary Art. The creation of new public spaces, street furniture, green areas, as part of a coordinated and organic design, in close connection with the other ongoing contracts aimed at creating new cultural engines, such as a series of **exhibition of Fellini** will be inaugurated on August of 2021, including the Fellini Museum which located in the recent renovated Castle and some open-air exhibitions which will be showed in the newly organized Piazza Malatesta in front of the Fellini Museum. Obviously, Fellini has already become a symbol, an icon of Rimini.

A city of memory or a memory of someone?  
So what is Rimini for you? And, how the city Rimini will be in the future?



Fig.19, Newly Piazza Malatesta Under Construction, Rimini, Hongye Wu (2021)



Fig.20, Newly Piazza Malatesta Under Construction, Rimini, Hongye Wu (2021)



Fig.21, Piazza Sull'Acqua, Rimini, Hongye Wu (2021)



Fig.22, Piazza Sull'Acqua, Rimini, Hongye Wu (2021)

A city of memory or a memory of someone?  
So what is Rimini for you?  
And, how the city Rimini will be in the future?

### III. Multiple identities, today's Rimini

It is not necessary to redefine the identity of historic city center of Rimini but what has to be done is that to grow the original identities and in the meantime to dig out profound ingredients such as disappearing tradition, demands of residents which not only have been deeply hiding in the history, during the fast urban development but also which are going to be increasingly needed in nowadays' constantly changed world such as post-pandemic era which is being faced by the individual, groups, cities, countries and the whole world (\*different dimensions of needs). Different dimensions of needs, for example, the individual considers only a single house, the group may consider how a community could be, the city takes a bigger view into account, and so on.

Overall, Rimini is an attractive city with rich culture, profound history, great artificial green parks, and stunning natural landscape from hills and sea, however, all these characters as if they are separate fragments floating on the water island. In this sense, Rimini as a **spilt town** has being seen today. One of the main influence factors is the location of **the railway**. The railway exactly right splits the city into two parts, the new town along the seaside with thousands of villa, hotels, hostels, B&B on the northeast side, while the other, the city historic center, is isolated totally on the other side. At the beginning, one of the main purposes of the planning of the railway is to bring convenience to the tourists who want to go the beach. However, it is also the main factor that weakens tourists' attention to the meaningful city center. Furthermore, apart from those important buildings for the city itself, most the residential buildings are being neglected. For example, residents renovated their house themselves in an interesting informal way or in a creative and adaptive way.

Therefore, although there is no perfect city, regenerations in several aspects will give benefits to transform the city of Rimini into a more complete, coherent, livable place and to promote its sustainable development.



Fig.23, Self-renovated Residential Building, Rimini, Hongye Wu (2021)



Fig.24, Self-renovated Residential Building, Rimini, Hongye Wu (2021)

**Rimini was founded by the  
Romans in 268 BC.  
Throughout Roman times,  
Rimini was a key communications  
link between the north and south  
of the peninsula.**

## **THE CORE OF THE TOWN / by Guo Liqiu**

### **I. The historical center\_Cardo-decumanic\_Rome**

The historic center of Rimini is surrounded by walls built by Malatesta and bounded by **the Marecchia and Ausa rivers**. The center has a unique regular urban structure of Roman origins, based on a typical Roman square mesh. Each town has two main roads, **cardus maximus** and **decumanus maximus**. One faces north-south and the other faces east-west. The town is divided into four areas by two orthogonal roads, which is based on colonial needs. The intersection of the roads is a large Piazza in the center of the town, called the **Forum**. It is used for markets and conferences. It has shops and offices on three sides, and government offices on the other.

In Adimario Adimari's plan for Rimini, a square mesh plan was adopted, with military barriers on the north and south sides coincident with the two bridges on the Ausa river. The city is surrounded by a moat and city wall, showing its strategic significance. This reflects the urban structure of the Roman period.

The urban layout, of the **Cardo-decumanic** type, is oriented from north-west to south-east and from north-east to south-west, unlike what happens for the territorial network. not only of orientation but of connection, [...], that characterizes the practical-empirical attitude of the Roman urban planners in the organization of inhabited centers. The reference to a predetermined model, the quadripartite orthogonal city, is conducted and applied, here as elsewhere, without any rigidity, historicized in relation to human and geographical pre-existences, corrected from time to time according to certain objectives. (RIMINI. Laterza. 1982).

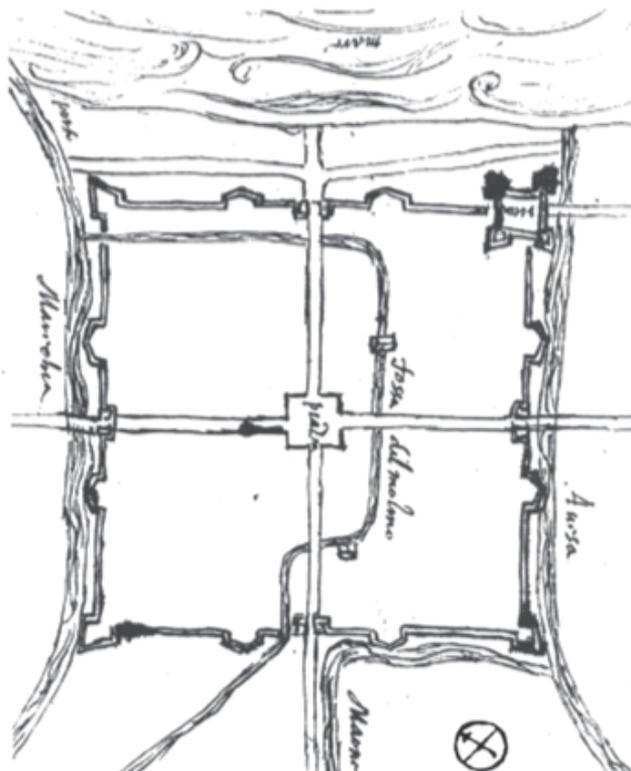


Fig.25, Drawing for the restructuring, regularization and expansion of Rimini, RIMINI, Gobbi, G., & Sica, P. (1982)

## During the Renaissance, Rimini benefited from the the house of Malatesta.

In Rimini, the city walls surround the urban space orthogonal to the street grid. At the intersection of *cardus maximus* and *decumanus maximus*, corresponding to the current Piazza Tre Martiri, was the Forum, the core of public life and commercial transactions. Roman emperors erected monuments such as the Arch of Augustus and the Tiberius Bridge to mark the beginning and the end of the *Decumanus* of Rimini.

### II. The historical center\_House of Malatesta\_Renaissance

**Malatesta Temple**, which is the most important site in Rimini, first example of the Italian Renaissance; designed by Leon Battista Alberti. **Castel Sismondo**, designed by Filippo Brunelleschi, is the symbol of Sigismondo Pandolfo Malatesta strength and power. **Piazza Cavour (Piazza Della Fontana)** is the main medieval square. **Piazza Malatesta**, formerly joined to Piazza Cavour, overlooked by the cathedral and the castle. Piazza Malatesta takes its name from the castle of Sigismondo Pandolfo Malatesta, lord of Rimini from 1432 to 1468, which combines the celebratory intent with the defensive need. The fortress stood out for the might of its towers and walls with escarpments, for the wide moat, for the grandeur of the keep.

The early medieval city was organised as a dense knot of functions and activities contracted around a square (Piazza Della Fontana) (Fig.4.) where the religious and civil powers had their headquarters. During the municipal age of Rimini, it did not undergo significant morphological changes. Punctual interventions are carried out on prestigious ecclesiastical and political buildings. Unlike other municipal city-states, Rimini does not present expansion in multiple phases since the complete circle of the **Aurelian walls**, and the *cardo-decumanic* layout dictate the morphological development and function as an urban generating structure. (Crapolicchio, 2020)

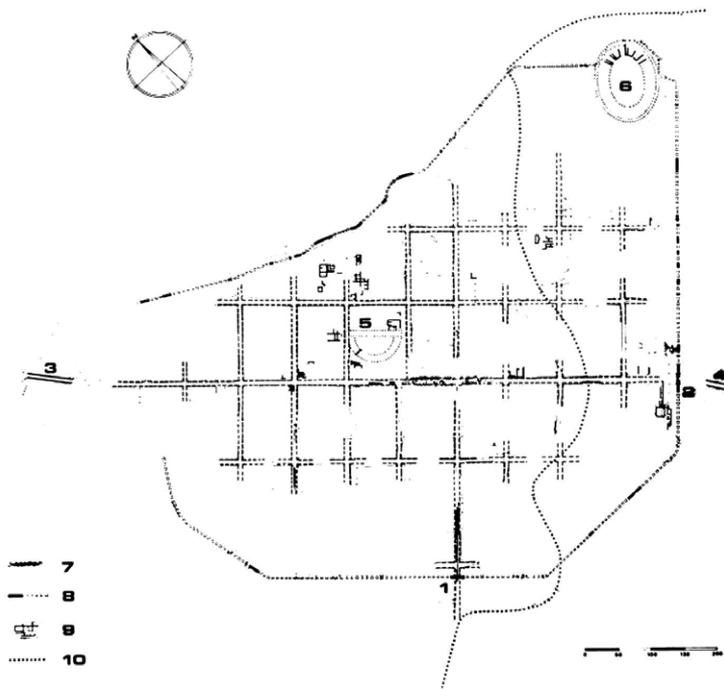


Fig.26, Map of Roman Rimini, RIMINI, Gobbi, G., & Sica, P. (1982)  
 1.Porta Montanara; 2.Arch of Augustus; 3.Bridge of Tiberius; 4. Bridge over the Ausa; 5. Theater; 6. Amphitheater; 7. Remains of the road pavement; 8. Aurelian walls (findings and presumed route); 9, Significant findings of masonry, mosaic structures, etc; 10.Percorso della Fossa Patara



Fig.27, Piazza Tre Martiri, RIMINI, Gobbi, G., & Sica, P. (1982)



Fig.28, Piazza Cavour(Piazza Della Fontana), RIMINI, Gobbi, G., & Sica, P. (1982)

In the 19th century,  
Rimini was one of the most active  
cities on the revolutionary front.  
During the World War II,  
the city was the scene of numerous  
clashes and bombings.

### III. The historical center\_19th Century

By the end of the 19th century, Rimini left the enclosure of the city wall and began to expand to the northeast. **North-East Town Plan (1906)** (Fig.5.) is the first expansion plan of the city in the area between the old center and the Marina. a large checkerboard layout, completed in two stages between 1907 and 1929.

### IV. The historical center\_current status

In ancient times, city walls were used by builders to protect themselves. In modern times, people need more connectivity. Therefore, the city wall is slowly disappearing from people's sight. After several explosions and wars, many ancient city walls and monuments have been completely destroyed or only left some relics. Some of this relics has been integrated with people's lives.

A Roman theatre was built in the first block east of the Forum. This building represents a pivotal point in the observation of Rimini's urban stratification as it remained incorporated into the residential fabric in the early medieval phase of decay and rebuilding of the city. To the south of the Theater is the Lettimi Palace, whose history can be traced back to the Renaissance period. It was destroyed during World War II, and the remains are still preserved, with some broken walls, doors and windows. The ground and walls have been occupied by plants. Seen from the street, it looks like a green wall, blending with the city. (Fig.6.)

The building fabric is defaced and undone in many places with the degradation of some monumental buildings. The latter are stripped of their materials and erased from the visible shape of the city. The amphitheatre is part of these ruins, of which only a few ruined arches covered with plants remain, more similar to natural cavities than to architectural works. As a result, the countryside returned to take possession of the urban space through areas that were wild or planted with vegetable gardens. (Fig.7.)

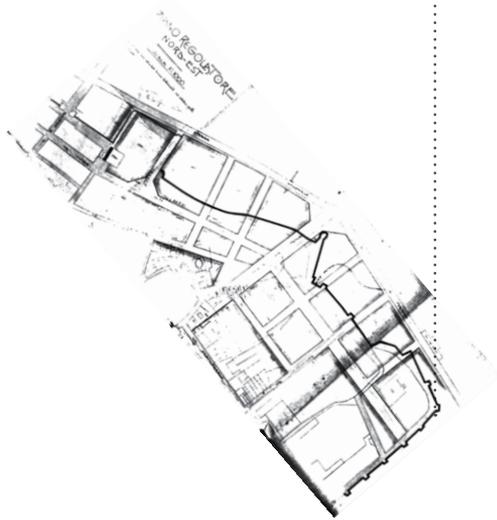


Fig.29, Piaro Regulator Northeast 1906, RIMINI, Gobbi, G., & Sica, P. (1982)

#### **IV. The historic center\_debate\_1965~1975**

De Carlo argues that "the ancient center has value only if its constructions and forms can still be used (including, of course, the contemplative / aesthetic use) by a contemporary community: otherwise it has no value"; consequently, "the purpose of an urban intervention on the historic center cannot be that of its block in its present state nor that of its reintegration to a pre-existing state, but it can only be its revitalization".

According to De Carlo, first of all it is necessary to verify the contemporary use of the historic city, to involve citizens in interpreting the needs of the community, to intervene to adapt the historic city to the social, economic and cultural needs of the community; it is therefore necessary to have the ability to listen, but also the ability to choose.

Rimini clearly bears the signs of the events that have profoundly altered it in the last 50 years, and currently does not present a unitary historical fabric: there are important monuments, some shreds of minor connective tissue, but also parts that are decidedly and definitively upset and irrecoverable. De Carlo has noticed that citizens intensely use the historical environment, appropriating and manipulating it to adapt it to current needs; what guarantees this link between the community and the historical environment are not the fabrics or the rare monuments, but the scale, the spatial relationships between the building plot and the city community: the conservation of this scale, and the intensity of the relationships that is related to it, will be the problem that the Plan will have to solve and guarantee, together with the preservation of the surviving historical values.



Fig.30, Lettimi Palace & theatre, RIMINI, Gobbi, G., & Sica, P. (1982)



Fig.31, Amphitheatre, RIMINI, Gobbi, G., & Sica, P. (1982)

**Rimini – where margin (border & edge) of the old city still remains and visible in most parts of the city and it plays an important role even in the current days.**

**ON THE MARGIN /** by Tan Wen Yee

### **I. River & Monument**

Rimini is a city that sprawls along the Adriatic Sea, on the coast between the **rivers Marecchia** (the ancient Ariminus) and **Ausa** (ancient Aprusa). The Marecchia river runs through its valley and the plain in a very large riverbed and, after confluence with the Ausa, it flows into the Adriatic sea through a deviator between San Giuliano Mare and Rivabella, while the ancient riverbed is used in its last section as the city's harbour. The Marecchia, usually with little water flow, was subjected to periodic, destructive floods near its mouth, where the riverbed became narrow after various bends: for this reason it was deviated north. Ausa creek, which was the eastern limit of Rimini for many centuries, was deviated as well after World War II, and its original riverbed was filled and turned into an urban park.

**Ponte di Tiberio** is one of the important monuments in Rimini, situated on river Marecchia, the construction begun under Emperor Augustus in 14 AD, as the inscription on the internal parapets recalls, and completed under Tiberius in 21. Built in Istria stone, the bridge consists of five arches that rest on massive pillars with breakwater spurs set at an oblique angle with respect to the bridge's axis in order to follow the current. The bridge's structure on the other hand, rests on a practical system of wooden poles. Until today, it still **connects the city centre to Borgo San Giuliano**- which was once a humble neighbourhood inhabited by fishermen and offers an exciting glimpse into the past. It is a village with total immersion in Fellini's Rimini where murals with characters and scenes from the most important Fellini films are reproduced on the walls of the village, it then leads to the consular roads - Via Emilia and Via Popilia that lead north, and it is currently opens only for **pedestrian and light vehicular circulation**.



Fig.32, From Ponte di Tiberio to Borgo San Giuliano, Rimini, Wen Yee Tan (2021)

## II. Rimini Riverside Development

The current Rimini has an extensive parks system that includes a series of **large urban parks**, created along the old riverbeds of Marecchia and Ausa. Neighbourhood parks, gardens and tree-lined boulevards were largely incorporated in the recent city development.

Being Rimini's largest and most spectacular park-**Marecchia Park** that also known as XXV Aprile Park is located right in the heart of the city centre and is perfect for a stroll or some relaxation on the edge of the beautiful town square overlooking the water Piazza sull'Acqua. Built at the foot of the Ponte di Tiberio, where the ancient Marecchia River once flowed (before being diverted in the 1930s), **Piazza Sull'acqua** is the public place redeveloped in 2017-2018 that surrounds it. It is the terminal part towards the sea of the Marecchia Park and the ideal place for the realization of cultural and spectacular events in a frame of absolutely unique naturalistic and architectural beauty. Many activities and few markets were held in the new piazza since its opening, the spacious venue and well-designed public area helped to attract the citizens to utilize this place. From Piazza Sull'Acqua that overlooks the reservoir of the old river Marecchia, the Ponte di Tiberio, stands immobile and steady, showing the city all its beauty. A new floating walkway connects the left and right docks of the ancient port facing the bridge, is considered one of the most beautiful in the world.

Nearby, the **Archaeological Park "Le pietre raccontano"** offers the chance to discover the long history of the bridge with a long walk on foot just an inch from the water and offers a panoramic terrace towards the Marecchia park that will leave the users breathless.



Fig.33, Piazza Sull'Acqua, Rimini, Wen Yee Tan (2021)



Fig.34, Flower market on Piazza Sull'Acqua, Rimini, Wen Yee Tan (2021)

### III. Past and Present of the City Wall System

Rimini's city walls were built by Malatesta, it was divided since the Middle Ages in four districts (Rioni): Cittadella, Clodio, Pomposo and Montecavallo. The boundaries of these districts are not known, but it is assumed that they followed the current Corso d'Augusto, Via Garibaldi, and Via Gambalunga. Additionally, the ancient coastline was situated much farther inland than today's, it gradually shifted outward over centuries and the new land was developed throughout the 20th century.

The **city walls**, with its towers and gates, and the castle constituted for centuries as an **important defensive system** for city life under many aspects, such as the protection from external dangers, an essential element of the urban planning and control over trade with the surrounding area.

Rimini had a city wall since its foundation (268 BC). In the third century AD, a new fortified system was built which remained operational for a long time, until the Middle Ages, when new military requirements required the construction of a **new fortified circle**.

**Castel Sismondo**, wanted by Sigismondo Pandolfo Malatesta as a noble residence and fortress at the same time, crowned the Malatesta defensive system by connecting to the city walls.

As military techniques and political conditions changed, between the end of the eighteenth century and the mid- nineteenth century, almost all the city gates were **demolished and replaced** by customs barriers, further destruction occurred in the twentieth century, when the urban expansion crossed the ancient and now obsolete limit of the walls. There are a total of 4 city gates of old Rimini which still exist today and outside of the city walls, there are **four boroughs (Borghi)- Borgo San Giuliano, Borgo San Giovanni, Borgo Sant'Andrea (or Borgo Mazzini) and Borgo Marina**, which were entirely incorporated to the city by the urban sprawl in early 20th century.

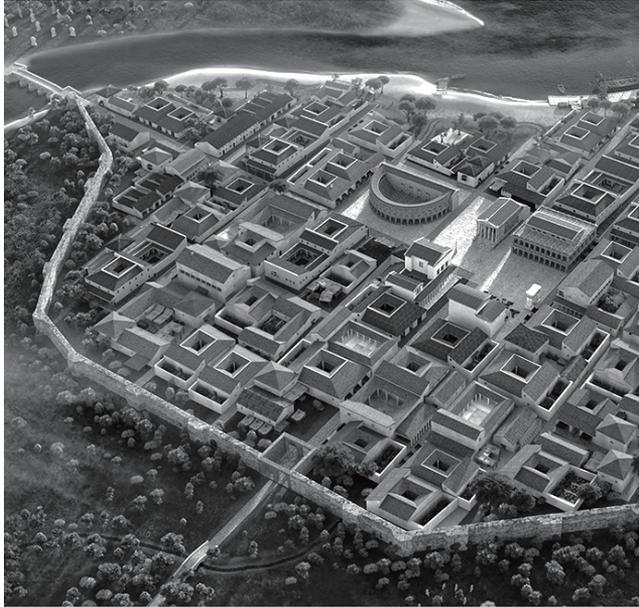


Fig.35, Rimini with ancient city wall system, Arimini Caput Viarum



Fig.36, Rimini with ancient city wall system, Arimini Caput Viarum

### City Gate 1 - Arco di Augusto

The triumphal Arch of Augusto (Arco di Augusto) is the **oldest preserved arch in northern Italy**, and it is also one of the main attractions in the old town of Rimini. It marks the entrance to the city for those coming from the Flaminia, the route traced by the consul Flaminio in 220 B.C. to connect Rome to Rimini. Being a city gate and honorary arch, Arco di Augusto was erected in 27 B.C. by the will of the Senate in celebration of Octavianus Augustus, as manifested by the inscription placed above the arch. The Arch is located on the South side of the old town, then it was a **city gate** and was built into the **defensive walls** of the city, marking a main road in Rimini. Sitting just outside the largest entrance to the city where the majestic Arco d'Augusto stands, there is Borgo San Giovanni. This neighbourhood historically developed around the end stretch of the Via Flaminia, and remnants of its past remain to this day, such as its lively and welcoming streets packed with bars and quaint shops.

### City Gate 2 – Porta Galliana

Porta Galliana is a city gate that was built in the thirteenth century to **connect the city with the port area** along the Marecchia river. It was part of the defensive walls due to the enlargement of the city in the Frederick era (13th century). It replaced another door **moved slightly further** into the city. Currently, the area is undergoing construction for the recovery and redevelopment of the area, that aims to enhance the city gate and the fact that the historical-archaeological area that can be visited and accessible to all visitors and the desire to restore an ancient artefact as it is the only medieval - Renaissance city gate that is still usable, and largely recoverable, existing in Rimini.

### City Gate 3– Porta di Sant'Andrea

The Montanara Gate, also called the "Porta di Sant'Andrea", is the only example in northern Italy of an **urban gate** of the **Sellian age**. Dates back to the first century BC, it was also part of a general reorganization of the city's defensive walls attributed to Sulla. From 1400 to 1809, it was the only access point to the



Fig.37, View of Arco di Augusto from San Giovanni, Rimini, Hongye Wu (2021)



Fig.38, Porta Galliana, Municipality of Rimini

city of Rimini from the mountain. The rounded arch, in blocks of sandstone, was one of the two entrances of the door that allowed access to the city for those coming from via Arezzo, along the Marecchia valley. The double archway facilitated traffic, channeling the path out of Ariminum, through the *cardo maximus*, and the one in entrance, in parallel passages. In the first centuries AD, the arch facing north was buffered and the door, thus resized to a single arch, continued to mark the entrance to the city until the Second World War. It is the **Roman monument** that suffered the greatest damage during the **bombings of the Second World War**, despite having been protected with sandbags. In 1949, when the war was over, the ministry established that the gate had **no monumental value and ordered its dismantling**. It was rebuilt in the courtyard of the Diocese of Rimini. However, in 2003, it was then relocated to its original position, at the extremity of the Cardine Massimo of the old Roman city.

Outside the city walls (near Porta Montanara) is where Borgo Sant'Andrea (Borgo Mazzini) located, this district was once home to the Foro Boario and is now a beautiful neighbourhood lined with beautiful green parks. The long road to Covignano also begins here and runs from the old town into the hills, offering splendid views of the Adriatic along the way.

#### **City Gate 4– Porta Gervasona**

The Porta Gervasona or Portello belonged to the **defensive system of the Malatesta Walls**, which flank it and surround the whole village of S. Giuliano and date back to the 15th century. It can be reached from the promenade that winds from the Ponte dei Mille to the small church entitled 'Madonna della Scala'. Continuing along via Madonna della Scala, the remains of the walls and towers with the passages still accessible.

#### **IV. The Current Status**

In recent years, this **dynamic city** has seen the completion of a participatory **urban regeneration plan** that has radically and permanently innovated the city. Rimini's city council has been investing and planning a lot of redevelopment activities for the riverside urban parks and even to rebuild the ancient wall or integrating them into the new functionality of space today. It helps not only to promote tourism but at the same time, to bring the **balance between the old and new** memories that is still intact in the city.



Fig.39, Porta di Sant'Andrea, Rimini Turismo



Fig.40, Porta di Gervasona, Rimini Turismo

## The presence of the tall building in a compact inline urban fabric, reasons and relations with the urban fabric.

### **ALIENS IN THE URBAN FABRIC OUTSIDE OF THE WALL**

/ by Dai Wanping

#### **I. The urban fabric outside the wall**

Outside the historical center surrounded by city walls, which is another mark of history, connecting the new and the old urban fabric. The main streets of the ancient urban structure of Rome extend to the land beyond the city walls and become the main roads outside the historical center, the *Cardo* and *decumanic*. Among them, the main street of San Giovanni originates from the *Flaminia* and connects the city and Rome. The urban fabric of the city center is full of voids and arranged compactly. Even though the city wall separates the center from the periphery, the traditional urban fabric does not totally disappear and it continues with the buildings that grew along the central axis. The unique thing is that several buildings with completely different ratios of length, height and width that suddenly appear on the periphery is particularly eye-catching and the high-rise building is even ten meters away from the neighbouring building. At the same time, the side of the tall building is exposing. Some buildings are even without any decoration and windows, which show a blank façade. Those independent huge buildings occupy the blocks and become the protagonist. Most of them seem to be abandoned by history and are out of place, and some of them are connected with the surrounding historical buildings to form a strong contrast. The skyline of the whole street is like jagged teeth. Why do buildings here take on a unique shape? They seem to be the last struggle in the process of urban transformation. Leaving this area to the south, the texture of the historic center is completely broken. People no longer gather in an apartment and share a courtyard.

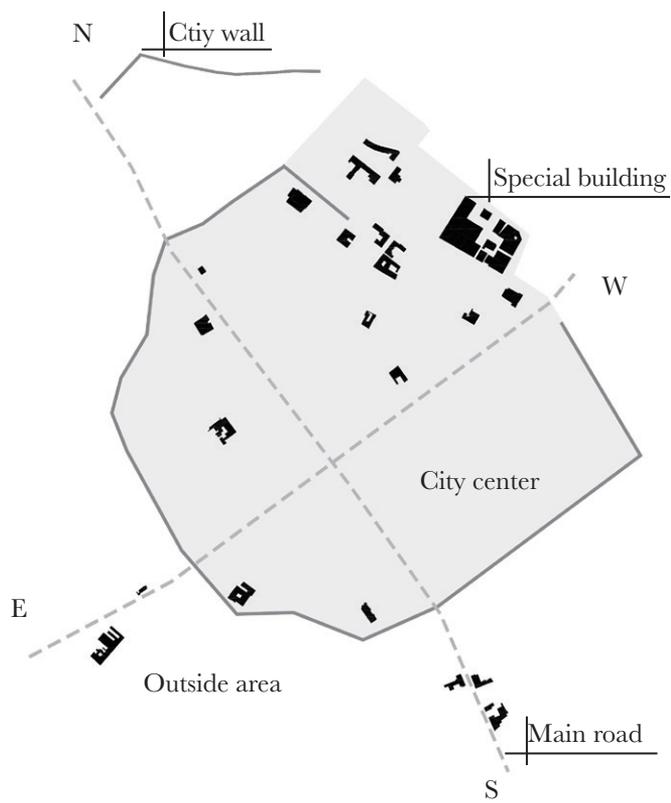


Fig.41, The Historical Center and Outside, Wanping Dai (2021)

The density of buildings begins to decline. Instead, they choose to own their villas and build fences to divide their domain. There are more high-rise buildings by the sea, and the distance between the buildings is gradually widening.

It can be observed from the figure 2 that the fabric of the city center and its exterior has changed. The periphery area has become a transitional area connecting the historic center and the new fabric. Besides, the historical fabric and the geometric form of the sites make the urban fabric more complex nowadays. Places like San Giovanni and Mazzini have a more substantial historical mark, and all thanks to the preservation of the church and the historical urban fabric for centuries, it becomes its unshakable element.

## II. The formation of the aliens

There were several attempts to trace the appearance of these **alien buildings**. From the 19th-century city plan, the main road leading to the waterfront marks its opening to the sea. Before that, around the historic center, the urban fabric of the old city continues. However, in 1912, Rimini began to focus on coastal planning, ushered in the most crucial turning point, and began to develop into the tourism industry, providing cost-effective villas and rental houses for the nobility and middle class. Also, due to the Second World War, some historical buildings were destroyed, which accelerated the construction of the urban image based on mass tourism (*Grazia Gobbi, Paolo Sica, 1982*). Thus, the periphery historical center became a testimony of a turning point.

Figure 3 shows Rimini's plan in 1882. The coastal area was planned to be developed. The empty space was divided into a chessboard layout, since then, the city's development has moved in this direction. The substantial opening of the ancient city indicated on the map is towards the sea, with the establishment of the railway station. Above all, with the connecting axis to the bathing establishment, at a scale hitherto unknown to the

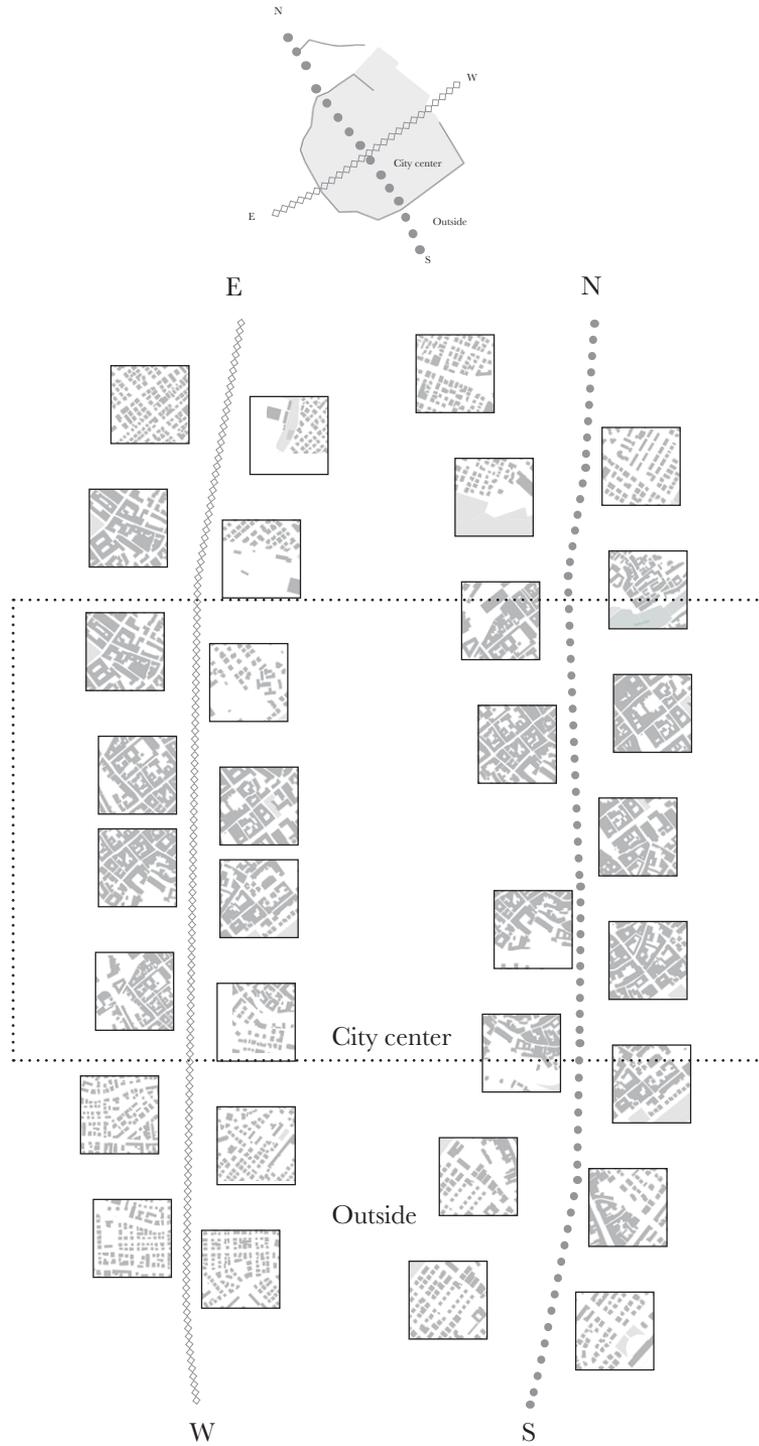


Fig.42, Changing of the Urban Fabric Along the Main Road, Wanping Dai (2021)

intramural city. The same field depicted on the map, in which the ancient city is no longer the center of gravity of the representation, clearly denounces the different involvement of the territory in the city's life. The new weight was assumed by the "Marina," albeit documented at the beginning of urbanization, but felt like a pole of convergence of new urban interests (*Grazia Gobbi, Paolo Sica, 1982*).

There is no way to judge from the vertical direction when these high-rise buildings appeared. However, it could be speculated that under this unsaturated expansion, the periphery of the historic center is transforming. The evolution of the city urgently needs more housing space and population to support Rimini's industry. This rapid demand has led people to seek more space outside the historic center. Coupled with the impact of post-disaster reconstruction factors, the target is locked in partially destroyed residential buildings. These buildings have been rebuilt and integrated with the characteristics of modern architecture, aiming to provide people with more economical housing. Therefore, the city we see today continues the old texture but with few appearances of high rising buildings. From the plans of those alien buildings today, it appears that they are of the same type as the neighboring buildings. However, Rimini divided the blank area with a checkerboard layout (*Crapolicchio, 2021*). Many villas in the remaining regions aim to provide the middle class with the private territory for vacation and leisure differences in the urban texture. These alien buildings are the energy supply in this process. The fabric of the historic center continues, but the height presents differently.

This phenomenon is considered as the degradation of traditional urban centers. For instance, since Rimini began to expand outward with the development model of the historical center, the buildings' plan remains the traditional Italian typologies: The ground floor is for shops, and the rest are for residences, sharing a public area as a transportation connection. A building



Fig.43, Plan in 1882, retrieve from Gobbi, G., Sica, P. (1982), redraw by Dai Wanpig (2021)

usually comprises four households with one staircase, so the aspect ratio often does not deviate from the average. In the periphery of the historical center, the ground level has not changed much. Still, there are usually more or fewer differences in building facades and heights, which is proof of the transitional phase of the historical center in the process of degradation. What's more, the degradation of the city is not only manifested in the characteristics of the building, it could cause a series of influences, reflected in the economy, culture, population, urban form, etc., and these factors, in turn, affect the city's construction. For example, with the expansion of the coast, the population is constantly migrating from the old historical center, leading to the disintegration of the social structure of the historical center. In addition, due to insufficient capacity and financial support, there has been a transformation for purely commercial purposes or a lack of precise positioning to solve the current dilemma. The characteristics of these alien buildings in Rimini reflect in the density and the facade (high buildings with blank walls).

### **III. About future**

Interventions will be carried out at this node connecting the historic center. When the need to restore the historic center arise, following questions should be considered :

1. Since there are many blank walls in Rimini, to repair the defects in the urban texture, what intervention should be implemented to integrate these buildings into the urban texture better?
2. How to deal with environmental problems, streets, and courtyards?
3. How to re-attract people to the city center by intervening in the plot?

These issues play a crucial role in urban regeneration. In future interventions, Rimini aspires to take on a new look and provide people with a new development idea through the intervention of these aliens. Therefore, by studying the reasons for the emergence of these aliens buildings, can clear understand of the responsibilities on urban regeneration and tracing the roots. It aims to provide people with an ideal utopia and restore their cherished historic center.



Fig.44, Building Outside the Wall, Wanning Dai (2021)

## **PANORAMA ON THE CURRENT RULES / by Alessia Portigliatti Pomeri**

Urban regeneration must guarantee a valid usability of public spaces and affirm the environmental sustainability of the transformations. Historic centers fall within these contexts as they can be affected by particular and widespread forms of decay as well as abandoned areas. To promote and combine their urban and energy adaptation, a system of rules, incentives and agreements between public and private actors is necessary.

On urban and energy regeneration at national and regional level, work is still in progress and the regulations are partial and not yet organically defined.

### **I. Regional Law of Emilia Romagna**

With adoption of the Emilia-Romagna Regional Urban Planning Law no. 20 of 24/3/2000, the government of the territory is profoundly innovated in content and forms, regulating the relations between territorial and local authorities on urban planning according to the principles of subsidiarity and cooperation between bodies, environmental and territorial sustainability, simplification of procedures and planning tools.

The Piani Regolatori Comunali are modified in their characteristics and procedures, separating their contents into three new general planning tools:

Piani Strutturali Comunali (PSC), Piani Operativi Comunali (POC) and Regolamenti Urbanistici Edilizi (RUE). The contents of the municipal planning remain unchanged, but are organized separately and structured with three different degrees of definition of the choices and contents of the planning: each of the three municipal urban planning tools will be a necessary condition to define a complete planning discipline and the integration of their contents will in fact constitute a "Piano Urbanistico Comunale" with rules and forecasts for the planning of the municipal territory.

Rimini, and urban regeneration. From  
the Regional Law n.20 of 24/03/2000 to  
the Regional Law n. 24 of 21/12/2017  
to refer to Urban Planning Building  
Regulations currently in force,  
pending the future Piano Urbanistico  
Generale PUG



Fig.45, Orthophoto map of Rimini, Google Earth Pro (2021)

## **General Planning Tools**

The RUE (Regolamento Urbanistico Edilizio) contains the related regulatory and regulatory aspects construction activity and health and hygiene aspects; it is configured as the union of the Building Regulations and a part of the Norme Tecniche di Attuazione of the past Regulatory Plans and regulates the interventions in the consolidated area and in the rural area.

The rules of the RUE apply to the entire municipal territory, are valid indefinitely and serve to clarify the urban planning and implementation terms of the PSC and the POC and the building terms and the typological and hygienic characteristics of direct building interventions. It brings together the municipal provisions relating to the urban and building profile: the Regulation is strictly connected to the provisions of the Structural Plan and in fact contains the discipline to carry out, through the authorization title alone, the transformation interventions permitted by the Structural Plan itself in the consolidated urban territory. and in the agricultural territory, interventions on heritage existing building, completion, maintenance and modernization interventions of technological systems and urbanization in existing production areas.

In the areas to be redeveloped, the interventions of new settlement, urban restructuring and environmental redevelopment are programmed by the POC (Piano Operativo Comunale), within the limits defined by the PSC (Piano Strutturale Comunale), which defines specific contents, methods and terms and implement upon approval of an Piano Urbanistico Attuativo extended to an entire sector defined by the POC, or to part of it as defined by the POC itself.



Fig.46, Sea park, Piazzale Kennedy, Alessia Portigliatti Pomeri (2021)



Fig.47, Piazza Cavour, Historical center, Alessia Portigliatti Pomeri (2021)

## II. Analysis of RUE Categories

From the Regional Law n° 24/2017 to the formation process of the Piano Urbanistico Generale (PUG)

Following an initial phase of experimentation of the Regional Law n. 20 of 24/3/2000, LR 6/2009 'Government and solidarity redevelopment of the territory' has made further changes aimed at defining criteria for streamlining and simplifying procedures with objectives of reducing land consumption, urban redevelopment, incentives for inter-municipal planning in particular strengthens the objective of redeveloping the existing building heritage (also providing for appropriate urban planning incentives) and the role of the Provincial Territorial Coordination Plan (PTCP) "by explicitly assigning it the task of establishing the conditions and limits on the consumption of non-urbanized land as well as the requirements of territorial sustainability and municipal urban planning forecasts which entail significant effects that go beyond the administrative boundaries of each entity".

LR 20/2000 and the subsequent LR 6/2009 were an opportunity to identify and evaluate "good practices" of transformation of the territory, unfortunately, perhaps traditional planning prevailed over the culture of urban design and the assessment of the sustainability of building transformations for the recovery of urban spaces.

With art. 7 ter added by art. 16 of the L.R. 6 July 2009 n. 6, later integrated with the addition of paragraphs 3 bis and 3 ter by art. 30 of the L.R. 18 July 2014 n. 17, the ways in which urban planning can pursue the objective of promoting the qualification and functional recovery of the heritage are identified existing building, in compliance with the regulations relating to buildings of historical-architectural, cultural and testimonial value and in line with the historical, landscape, environmental and urbanistic characteristics of the areas where such buildings are located.

The law provides that urban planning establishes "volumetric incentives for:

- a) promote urban redevelopment, also through building interventions that qualify urban fabrics and, at the same time, discourage settlement spread and land consumption;
- b) achieve a significant improvement in the energy efficiency of buildings, with the full application of the energy performance requirements of buildings and energy systems;
- c) incentivize the implementation of seismic adaptation or improvement interventions, in application of the technical regulations for constructions;
- d) promote the elimination of architectural barriers;
- e) ensure compliance with the health and hygiene requirements of the inhabited areas and living and working rooms, as well as the requirements relating to plant safety, fire prevention and construction site safety;
- f) carry out the simplification and speed of the authorization procedures, while ensuring that the necessary checks are carried out on projects and works in progress of work and on those made ".

This article is very interesting as it provides not only for the possibility of recognizing surface incentives outside the dimension of the Plan, but also exceptions to the distances provided for by Ministerial Decree 1444/1968. Any volumetric incentives recognized for the intervention can be realized with the raising of the original building, also notwithstanding Articles 7, 8 and 9 of Ministerial Decree no. 1444 of 1968, as well as with out-of-shape expansion of the original building where the minimum distances between buildings or those from pre-existing buildings in front, if smaller, are still respected.

Finally, it is specified, with paragraph 3, that these provisions "prevail over the various forecasts on building density, on the height of buildings and on the distances between buildings provided for by the municipal urban planning tools".

There are also some subsequent changes that were made to Regional Law 20/2000 by Regional Law 15/2013 in favor of a shared and integrated vision of the building regulations and respect for environmental constraints deriving from superordinate planning: for example, changes have been introduced to the Article 19 (Carta unica del territorio) of Regional Law 20/2000 with the introduction of Article 3-bis (and subsequent ones) which states that "in order to ensure the certainty of the urban and territorial regulations in force and of the constraints on the territory and, consequently, simplify the presentation and control of building permits and any other activity to verify the compliance of the planned transformation interventions, the Municipalities equip themselves with a specific cognitive tool, called "Table of constraints", in which all the constraints and prescriptions that preclude, limit or condition the use or transformation of the territory, deriving further that by the urban planning tools in force, by the laws, by the superordinate, general or sectoral plans, or by the administrative acts of affixing protection restrictions. This deed is accompanied by a specific document, called "Form of constraints", which reports for each constraint or prescription, a summary indication of its content and the deed from which it derives. "

On 1 January 2018, Regional Law no. 24 of 21 December 2017 entitled "Regional discipline on the protection and use of the territory", becomes the new urban planning law of Emilia-Romagna. It sees among its main objectives the reduction of urban planning forecasts and the introduction of the principle of land use with zero balance, new devices for urban regeneration and the redevelopment of buildings, the protection of the territory and respect for legality.

In particular, the regulation of land consumption provided for in the law, which establishes a ceiling on new settlement expansions, is set at an additional 3% compared to the current urbanization and to be saturated until 2050. It provides for the PUG (Piano Urbanistico Generale) Single Municipal Plan which replaces PSC RUE and POC.

The Piano Urbanistico Comunale has the obligation to devote all the attention, choices and tools to the existing settlement system, to the rapidly evolving demographic and social structure, to the morphology and environment of the built city, and to the vast and complex scope of the portions of territory "compromised" by urbanization, to be completely rethought and redesigned. The new characteristics and requirements thus become those of resilience, that is, the ability of the urban organism to adapt to environmental and social challenges and also to react positively to traumatic emergencies; the study of urban metabolism, aimed at creating or strengthening virtuous circuits in the use of resources and in the growth of well-being (circular economy); of the transformability of urban fabrics, to make them participate in a new design in which the social dimension of public and private spaces represents the guideline for generating a condition of quality of life and sustainability of choices.

The formation of a Piano Urbanistico Generale is still in progress, therefore reference is made to the regulatory instrument in force.

Below is an excerpt of the rules of the Rue concerning the area of the historic center. Articles 48, 49 and 50 regulate possible interventions on buildings located in the historic center.

Below are the articles present in the RUE that regulate the historic center.

**TITOLO II – CLASSIFICAZIONE AMBITI E DISCIPLINA INTERVENTI EDILIZI DIRETTI**  
**CAPO 9 – CITTA' STORICA ED EDIFICI TUTELATI ESTERNI**

**Art. 48 - Disposizioni generali**

1. Le disposizioni del presente Capo disciplinano gli interventi ammissibili nella Città Storica (ambito ACS), nonché quelli effettuabili sugli edifici soggetti a tutela in quanto riconosciuti di interesse storico architettonico o di pregio storico-culturale e testimoniale, collocati in altri ambiti del territorio comunale.

2. Per gli edifici soggetti a tutela esterni alla Città Storica, le disposizioni riguardanti la categoria d'intervento del presente Capo prevalgono su quelle dell'ambito specifico in cui ricadono.

3. Costituisce la Città Storica la porzione di territorio individuata dal PSC ai sensi dell'art. A-7, comma 1, della L.R. 20/2000 s.m.i..

4. Le norme del presente Capo, in relazione al controllo qualitativo degli interventi sugli edifici e sugli spazi esterni, vanno integrate con le disposizioni dei successivi Capi 16 e 17, nonché con le prescrizioni di cui all'art. 9 comma 3 in relazione alla SP.

5. La disciplina particolareggiata riguardante la Città Storica è costituita:

- dalla Tav. 2-3 del RUE: “Città Storica: categorie di tutela e unità di intervento. Funzioni pubbliche e di interesse pubblico”;
- dalle norme del RUE;
- dalle Tavole dei Vincoli e dalle Schede allegate;

6. Le prescrizioni previste nei successivi articoli, si integrano con le modalità di intervento di cui al precedente Capo 4 richiamate in ogni categoria di tutela, ed in caso di contrasto prevalgono su di esse.

7. Qualora la rappresentazione planimetrica di un edificio non corrisponda a quella reale, dovrà essere applicata ugualmente la categoria di intervento indicata in cartografia.

Qualora nella particella catastale sussista unicamente un edificio non classificato, dovranno applicarsi le modalità MO, MS, RRC.

8. Nell'ambito della zona omogenea A gli interventi di RE seguono la disciplina del D.P.R. 38=710 s.m.i..

Nel suddetto ambito, in conformità all'art. 5.1, punto 8 del PSC, laddove consentita la modalità RE per gli edifici di categoria C1, C2 e D, non sottoposti a tutela di cui al D.Lgs. 42/2004 s.m.i., è consentita la demolizione e ricostruzione, qualificata RE, senza incrementare la sagoma planovolumetrica del fabbricato esistente, entro il limite del sedime originario con modifica dei prospetti e delle sue caratteristiche planivolumetriche e tipologiche. Negli edifici tutelati sparsi, laddove consentita la modalità RE per gli edifici di categoria C1 e C2, non sottoposti a tutela di cui al D.Lgs. 42/2004 s.m.i., è prescritto il mantenimento della sagoma e del sedime esistenti, fatta salva la sola deroga al sedime ai sensi dell'art. 8 comma 5.

Per gli edifici di categoria C2 inoltre, la ricostruzione delle porzioni mancanti dovrà rispettare quanto indicato al successivo art. 49.

9. Fatte salve le possibilità di ricostruzione, da valutarsi secondo i casi per i fabbricati individuati nelle unità di intervento speciali di cui all'art. 5.1 comma 13 del PSC con la categoria A e C2, nonché gli interventi ricostruttivi concessi dal precedente art.8 comma 4, con RE è inoltre ammessa la possibilità di ricostruzione del volume di edifici parzialmente crollati precedentemente alla data del 29/03/2011, ai sensi dell'Allegato all'art. 9, lettera f), della L.R. 15/2013 s.m.i., a condizione che l'intervento sia esteso e sottoscritto a tutti gli aventi titolo dell'intera UMI di appartenenza.

10. Per i corpi accessori individuati in cartografia con apposita simbologia, è consentito l'intervento RE nel rispetto delle seguenti condizioni:

- mantenimento della SU e/o della SA preesistenti;
- H max: ml. 2,50;
- distanze tra pareti finestrate: almeno ml. 3,00;
- distanze da strade e spazi pubblici: almeno ml. 3,00;
- distanze dai confini di proprietà: Codice Civile.

11. La tutela delle aperture esterne prevista nei successivi articoli non riguarda i lucernai posti sulle falde di copertura, per i quali si rimanda alle prescrizioni dei successivi artt. 91 e 122 secondo i casi.

12. Nei fabbricati esistenti a destinazione residenziale per almeno il 51% di SC, fermo restando le possibilità di deroga ai sensi dell'art. 7.5 del D.M. 236/1989 s.m.i., è consentita l'installazione di ascensori/piattaforme elevatrici interni, nel rispetto dell'art. 8.1.12 e 8.1.13 del citato D.M., contestualmente alla riduzione delle rampe scale esistenti, a condizione che la larghezza di tali rampe non sia inferiore a cm. 80 e che l'intervento complessivo non comporti la demolizione (anche parziale) del fabbricato. In caso di dimostrata impossibilità strutturale, l'ascensore potrà essere installato anche con dimensioni inferiori a quanto previsto dai menzionati art. 8.1.12 e 8.1.13.

Nei fabbricati di categoria A e B non è ammessa la riduzione delle rampe scale esistenti.

13. Nel territorio urbanizzato, oltre all'applicabilità dell'art. 9 L. 122/1989, compatibilmente con i criteri di tutela riportati nel presente Capo e per le destinazioni non residenziali, è consentita la realizzazione di un solo piano interrato ad uso parcheggi P3, anche parzialmente o totalmente fuori sedime, indipendentemente dalla categoria di tutela prevista, solo contestualmente ad interventi di tipo conservativo.

Alla fine dei lavori dovrà essere prodotto atto trascritto di asservimento all'uso a garage. Tali interventi sono soggetti a Permesso di Costruire.

14. In tutte le categorie di tutela è ammessa la realizzazione di soppalchi anche con aumento di C.U..

15. La coibentazione delle facciate esterne degli edifici ricadenti nella Città Storica (ambito ACS), nonché in quelli tutelati esterni, è consentita solo sugli edifici ricadenti nelle categorie di tutela C e D, per le quali è consentita la modalità di intervento RE alle seguenti prescrizioni:

- negli edifici ricadenti nella Città Storica non sarà consentito installare la coibentazione sulle facciate poste a confine con gli spazi pubblici e su quelle che determinano una cortina edilizia continua;
- negli edifici esterni alla Città Storica non sarà consentito installare la coibentazione sulle facciate, poste a confine con gli spazi pubblici, che determinano una cortina edilizia continua.

#### Art. 49 - Categorie di tutela

1. I tipi di intervento definiti al precedente Capo 4 da integrarsi con le DTA di cui all'art. 9 bis, sono applicabili nel rispetto delle finalità e delle modalità di intervento indicate per ciascuna categoria e sottocategoria di tutela. Gli interventi che non rispettino le prescrizioni di conservazione o il ripristino degli elementi di cui all'art. 49 comma 3 lett e) e comma 4 lett e), saranno sottoposti alla valutazione della CQAP anche con richiesta preventiva.

2. Categoria A (ovvero "restauro scientifico"): comprende le unità edilizie che hanno assunto rilevante importanza nel contesto urbano territoriale per specifici pregi o caratteri architettonici o artistici.

Gli interventi su tali unità edilizie sono da qualificarsi come operazioni storico-critiche, condotte con metodo scientifico, nel rispetto degli elementi tipologici, formali e strutturali, e sono dirette alla conservazione e alla valorizzazione dell'unità edilizia, rendendone possibile un uso adeguato alle intrinseche caratteristiche.

All'interno di tale categoria sono comprese anche ville o palazzi storici con parco; per tali complessi la documentazione storica e l'analisi storico-critica dovrà essere effettuata non solo per le costruzioni ma anche per il parco e l'assetto vegetazionale.

Nel rispetto di quanto disciplinato dal successivo Capo 17 sono ammessi i seguenti interventi: RS, così come definito dal punto c) dell'Allegato all'art. 9 della L.R. 15/2013 s.m.i., da integrarsi con le DTA di cui all'art. 9 bis.

Gli interventi edilizi di RS, nel rispetto della ricostruzione filologica dell'intero fabbricato e/o unità immobiliare, devono mantenere invariato la dimensione e posizione delle aperture esterne, comprese le aperture di logge e portici; inoltre è consentito il ripristino delle aperture originarie e/o l'eliminazione di quelle incongrue, nonché, nei fronti non prospicienti gli spazi pubblici, la creazione di nuove aperture

o l'adeguamento di quelle esistenti per esigenze igienico-sanitarie e di accessibilità, purché non venga alterata l'unitarietà del prospetto e degli elementi di composizione architettonica. Per gli interventi riguardanti le facciate esterne, il rilievo ed il progetto dovranno essere estesi all'intera facciata interessata.

3. Categoria B: comprende le unità edilizie di interesse storico architettonico o di pregio storico culturale e testimoniale non già ricomprese nella categoria A, che hanno complessivamente o prevalentemente conservato i caratteri tipologici, strutturali e morfologici originari.

Gli interventi edilizi devono avere le finalità sotto riportate.

a) Valorizzazione degli aspetti architettonici originali, mediante:

- il restauro finalizzato al recupero degli elementi significativi dei fronti; è prescritto inoltre il mantenimento delle aperture esistenti ed è comunque consentito il ripristino delle aperture originarie e/o l'eliminazione di quelle incongrue, nonché, nei fronti non prospicienti gli spazi pubblici, la creazione di nuove aperture o l'adeguamento di quelle esistenti per esigenze igienico-sanitarie e di accessibilità, purché non venga alterata l'unitarietà del prospetto e degli elementi di composizione architettonica;

- il restauro ed il ripristino degli ambienti interni qualora sussistano elementi di documentata importanza.

b) Il consolidamento strutturale ai fini del miglioramento/ adeguamento sismico, con eventuale sostituzione delle parti non recuperabili, senza modificare la posizione dei seguenti elementi: murature portanti sia interne che esterne, solai, volte, scale principali originarie, tetto con ripristino del manto di copertura;

c) Obbligo di demolizione delle superfetazioni qualora l'intervento sul fabbricato principale ecceda le opere di MS;

d) L'inserimento degli impianti tecnologici e igienico-sanitari essenziali nel rispetto dei criteri di cui ai commi precedenti;

e) La conservazione o il ripristino di elementi morfologici e di finitura congruenti con la tipologia originaria (colori, infissi e chiusure, rivestimenti, manto di copertura, comignoli, elementi decorativi, ecc.).

Nel rispetto di quanto disciplinato dal successivo Capo 17, da integrarsi con le condizioni di cui sopra,

sono ammessi i seguenti interventi: MO, MS, RRC.

#### 4. Categoria C - Unità edilizie storiche parzialmente alterate e recuperabili

Sottocategoria C1: comprende le unità edilizie di pregio storico culturale o testimoniale in mediocre o cattivo stato di conservazione ovvero parzialmente alterate rispetto all'impianto e ai caratteri morfologici originari, che possono tuttavia essere recuperate come parte integrante del patrimonio edilizio storico.

Per gli edifici assoggettati a vincolo di cui al D.Lgs. 42/2004 s.m.i. e/o a RRC nelle Tavole dei Vincoli e Schede allegate, gli interventi edilizi, devono avere le finalità sotto riportate.

a) Valorizzazione degli aspetti architettonici mediante:

- il restauro finalizzato al recupero degli elementi significativi dei fronti o la loro modifica con caratteristiche coeve all'epoca dell'edificio; verso gli spazi pubblici è prescritto inoltre il mantenimento delle aperture esistenti; nei fronti non prospicienti gli spazi pubblici, è ammissibile la creazione di nuove aperture o l'adeguamento di quelle esistenti per esigenze igienico-sanitarie e di accessibilità, purché non venga alterata l'unitarietà del prospetto e degli elementi di composizione architettonica;

- la conservazione o ripristino degli ambienti interni qualora sussistano elementi di documentata importanza; sono consentiti adeguamenti delle altezze interne degli ambienti, con mantenimento delle quote delle finestre e della linea di gronda, fermo restando la conservazione in sito di eventuali solai voltati.

b) Il consolidamento strutturale ai fini del miglioramento/ adeguamento sismico, esteso a larghe parti dell'edificio.

c) Obbligo di demolizione delle superfetazioni, per i soli fabbricati esclusi dalla modalità RE, qualora l'intervento sul fabbricato principale ecceda le opere di MS.

d) L'inserimento degli impianti tecnologici ed igienico-sanitari essenziali nel rispetto dei criteri di cui ai commi precedenti.

e) La conservazione o il ripristino di elementi morfologici e di finitura congruenti con la tipologia originaria (colori, infissi e chiusure, rivestimenti, manto di copertura, comignoli, elementi decorativi, ecc.).

Nel rispetto di quanto disciplinato dal successivo Capo 17 da integrarsi con le condizioni di cui sopra sono ammessi i seguenti interventi: MO, MS, RRC.

Per gli edifici non assoggettati a vincolo di cui al D.Lgs. 42/2004 s.m.i. e/o a RRC nelle Tavole dei Vincoli e Schede allegate denominate Vin 2.1 a), Vin 2.1 b) e Vin 2.1 c), è inoltre ammesso l'intervento RE con i limiti di cui all'art. 48 comma 8.

Sottocategoria C2: riguarda le unità edilizie fatiscenti, totalmente o parzialmente demolite o fortemente alterate, di cui sia possibile reperire adeguata documentazione della loro organizzazione tipologica originaria.

Gli interventi edilizi devono avere la finalità di ripristinare, a seconda del contesto, l'omogeneità e continuità del tessuto edilizio storico o la compiutezza del complesso storico-architettonico di cui l'edificio faceva parte, ovvero l'assetto paesaggistico, attraverso una riedificazione congruente con i caratteri tipologici e morfologici originari.

Nel rispetto di quanto disciplinato dal successivo Capo 17 da integrarsi con le condizioni di cui sopra sono ammessi i seguenti interventi: MO, MS, RRC, RE.

Sottocategoria C3: comprende le unità fondiari e gli spazi pubblici storicamente non edificati, che testimoniano l'assetto storico dell'insediamento e la sua evoluzione, da conservare o ripristinare. Comprende inoltre le aree nelle quali è prescritto il recupero e la valorizzazione delle risorse storico archeologiche.

Gli interventi devono avere la finalità di valorizzare gli spazi e i manufatti diversi che li arredano, di demolire gli eventuali edifici ovvero manufatti incongrui esistenti e realizzare opere capaci di concorrere alla riorganizzazione funzionale e formale delle aree e degli spazi liberi. L'intervento può comprendere la realizzazione di: costruzioni interrato; manufatti di servizio urbano o di arredo urbano (fontane, fioriere, lapidi, panchine, contenitori rifiuti, pavimentazioni, ecc.); infrastrutture tecnologiche a rete.

Negli spazi pubblici e nei percorsi non edificati di interesse storico si applicano le norme generali relative alla conservazione, recupero e valorizzazione degli spazi urbani storici di cui al successivo Capo 17.

Nel rispetto di quanto disciplinato dal medesimo Capo sono ammessi i seguenti interventi: RAL.

5. Categoria D - Unità edilizie fortemente trasformate o moderne nella città storica

Sottocategoria D1: riguarda le unità edilizie della città storica che, pur non presentando caratteristiche di pregio storico-architettonico, o essendo costruzioni e ricostruzioni moderne, sono tuttavia compatibili e congruenti con l'impianto urbanistico e con i caratteri morfologici del tessuto storico, e sono quindi da consolidare nel loro rapporto con il contesto.

Nel rispetto di quanto disciplinato dal successivo Capo 17 sono ammessi i seguenti interventi: MO, MS, RRC, RE.

Sottocategoria D2: riguarda unità edilizie, di epoca recente, la cui costruzione ha modificato l'impianto del tessuto storico in modo irreversibile, introducendovi un assetto planivolumetrico difforme, e che tuttavia sono da considerarsi consolidate nel loro assetto odierno.

Nel rispetto di quanto disciplinato dal successivo Capo 17 sono ammessi i seguenti interventi: MO, MS, RRC, RE.

Sottocategoria D3: riguarda immobili di norma di epoca recente, con caratteristiche planivolumetriche, tipologiche o morfologiche scarsamente compatibili o dequalificanti rispetto al contesto del centro storico, o la cui permanenza nelle forme attuali non consente la valorizzazione degli elementi di pregio storico-architettonico o testimoniale del contesto.

Nel rispetto di quanto disciplinato dal successivo Capo 17 sono ammessi i seguenti interventi: MO, MS, RRC, RE, DR a parità di volume e H max preesistente.

Sottocategoria D4: riguarda corpi di fabbrica o manufatti incongrui, di norma di epoca recente, la cui permanenza impedisce la valorizzazione di risorse storiche o archeologiche primarie.

Nel rispetto di quanto disciplinato dal successivo Capo 17 sono ammessi i seguenti interventi: MO, MS, demolizione.

6. Unità di intervento speciali attuabili tramite POC. Le unità di intervento speciali individuate nella tavola 2 del RUE con numeri progressivi riguardano immobili o complessi di immobili per i quali il PSC auspica una organica riprogettazione per perseguire la messa in valore di risorse storiche o archeologiche presenti, ovvero recuperare situazioni di disordine edilizio, anche attraverso interventi di ristrutturazione urbanistica di cui alla L.R. 15/2013 s.m.i., con la riconfigurazione o la demolizione di corpi edilizi di epoca recente che hanno modificato e degradato l'impianto storico, e la ridefinizione di un nuovo assetto degli spazi aperti.

Nelle more della previsione del POC, secondo gli obiettivi definiti dal PSC, sui singoli edifici esistenti, sono ammissibili i tipi di intervento secondo la categoria di tutela attribuita a ciascuno di essi nella tavola 2.

Sugli edifici esistenti classificati D2, ritenendo la loro riqualificazione un intervento di interesse pubblico, oltre alle modalità previste al precedente comma 5, è ammessa la sostituzione urbana attuabile con intervento di DR a parità di volume e H max preesistente, subordinata al rilascio di PdCC.

6 bis. Per la UMI 13 denominata "Resti del Convento di S.Francesco e Mercato Coperto", per la sola porzione del Mercato Coperto, fatto salvo il vincolo di cui al D.Lgs. 42/2004 e smi presente

sull'immobile, valgono le seguenti disposizioni:

- l'intervento di recupero dell'edificio può essere eseguito tramite RE o DR a parità di volume;
- H max quella preesistente;
- D1= 5 ,00 ml;
- mantenimento degli allineamenti esistenti su Via Michele Rosa; sono ammissibili eventuali modifiche rispetto al profilo del fabbricato esistente prospiciente Via Castelfidardo finalizzate alla creazione di aree e spazi pubblici;
- tipi d'uso ammissibili: centro commerciale di vicinato costituito dagli spazi adibiti all'uso mercato pubblico, unità ad uso b1.1 e una sola unità ad uso b1.2.a.

Le dotazioni standard pubblico, ai sensi dell'art. 5.1.2 lettera c) della D.C.R. 1253/1999 s.m.i., non sono dovute; le dotazioni di parcheggio pertinenziali sono dovute e monetizzabili con i criteri di riduzione previsti dalla D.C.C. 208/2011 per la sola funzione b1.2.a, ai sensi dell'art. 5.2.5 lettera b) della D.C.R. 1253/1999 s.m.i, mentre non sono dovute per le restanti porzioni di fabbricato.

7. Le specifiche descritte per gli interventi edilizi di RS e RRC riportate nei precedenti commi 2 e 3 non risultano prescrittive per gli edifici vincolati ai sensi dell'art. 10 comma 3 del D.Lgs. 42/2004 s.m.i., in quanto, ai sensi dell'art. 2.14 del PSC, il rilascio dell'autorizzazione della competente Soprintendenza è ritenuta integrativa della categoria d'intervento assegnata all'edificio riportata nella tavola 2-3 di RUE.

Le modalità di intervento dovranno comunque rispettare le disposizioni contenute nell'art. 3 comma 1 lettera c) del D.P.R. 380/2001 s.m.i. e quelle alle lettere c) e d) dell'allegato all'art. 9 comma 1 della L.R. 15/2013 s.m.i..

#### Art. 50 - Tipi d'uso ammessi e condizioni

1. Tipi d'uso ammessi: a1, a2, b1.1, b1.2, b3.1, b3.2, b4, b6, c1, c2, c3, c4, c5, c6, c7, e1, e2 (per i soli ostelli).

Gli edifici con uso in essere "e1" non possono mutare destinazione, salvo che attraverso interventi programmati nel POC.

È esclusa l'apertura di nuovi sportelli bancari; è sempre ammesso l'ampliamento degli sportelli bancari esistenti ai piani superiori al piano terra.

Sugli edifici individuati con apposito grafismo nella Tavola 2-3, corrispondenti al Polo Funzionale Universitario, indicato all'art. 5.6 del PSC, sono ammesse tutte le destinazioni d'uso coerenti e complementari con la funzione principale universitaria, quali ad esempio: attività culturali, formative, ricreative, sportive, convitti, studentati, collegi, seminari, mense.

2. Nella Città Storica, le unità immobiliari poste al piano terreno in affaccio alle strade individuate come strade commerciali nella Tav. 2-3 del RUE che abbiano destinazione d'uso in atto b1.1, b1.2, b4, sono ammesse variazioni esclusivamente fra questi tipi d'uso.

3. Nella Città Storica, i locali posti al piano seminterrato o interrato, qualora rispettino i requisiti igienico sanitari e di sicurezza, possono anche essere utilizzati come estensione di attività commerciali, artigianali, studi professionali e pubblici esercizi poste ai piani soprastanti.

4. Negli edifici tutelati esterni alla Città Storica, le destinazioni d'uso consentite sono quelle ammesse nell'ambito in cui l'edificio ricade, ai sensi del presente Titolo II.

With reference to the articles that regulate historic centers, we can also refer to CHAPTER 17 and CHAPTER 23..

The rules of Chapter 17 are specific for all buildings falling within the historic city and for all buildings falling within the remaining territory recognized as having historical-architectural value by the PSC or recognized as having historical-architectural and testimonial value by the RUE.

- Art. 101 - Disposizioni generali
- Art. 102 - Materiali ed elementi costruttivi
- Art. 103 - Strutture portanti orizzontali
- Art. 104 – Coperture
- Art. 105 - Elementi decorativi e facciate
- Art. 106 - Infissi esterni
- Art. 107 - Manufatti tecnologici
- Art. 108 – Recinzioni

The rules of Chapter 23 are made up of several articles, the one that interests us standard photovoltaic systems.

- Art. 126 - Localizzazione degli impianti fotovoltaici

Another reference to consider is Article 6 bis in CHAPTER 1 which deals with energy redevelopment and improvement of the energy performance of buildings subject to building intervention.

## CAPO 1 – DISPOSIZIONI GENERALI

Art. 6 bis - Interventi di qualificazione e sostenibilità

1. Al fine di migliorare le prestazioni energetiche degli edifici oggetto di intervento edilizio è necessario garantire il rispetto dei requisiti minimi di prestazione energetica, in funzione della tipologia d'intervento, in conformità alla D.G.R. 967/2015 s.m.i. e alla D.G.R. 1383/2020 s.m.i..

2. Per interventi volti ad incrementare i valori minimi obbligatori definiti al comma 1, in applicazione del 2 comma, lettera b) dell'art. 7 ter della L.R. 20/2000 s.m.i., il RUE definisce nel Titolo II, gli incrementi di volume e superficie in funzione del tipo d'intervento secondo disciplina d'ambito.

Ulteriori incentivi in termini di volume e superficie sono concessi nel Titolo II per interventi finalizzati al complessivo perseguimento degli obiettivi di interesse pubblico ai sensi del 2 comma, lettere c), d), e) dell'art. 7 ter della L.R. 20/2000 s.m.i. .

Sono ammissibili, con l'obiettivo di favorire la qualificazione e il recupero funzionale del patrimonio edilizio esistente, le seguenti modalità di intervento:

- RE di demolizione e ricostruzione totale comprensiva dell'incentivo volumetrico, con deroghe alle distanze D1, D2 e D3 in conformità alle condizioni di cui all'art. 2bis del D.P.R. 380/2001 s.m.i. e all'art. 10ter della L.R. 15/2013 s.m.i., nonché alle altezze ed alla SC secondo disciplina d'ambito;
- RE conservativa e contestuale intervento di AM con deroghe alle distanze D1 e D2, nonché alle altezze ed alla SC secondo disciplina d'ambito;
- DR con deroghe alle distanze D1, D2 e D3 in conformità alle condizioni di cui art. 2bis del D.P.R. 380/2001 s.m.i. e all'art. 10ter della L.R. 15/2013 s.m.i., nonché alle altezze ed alla SC secondo disciplina d'ambito.

Tali incentivi, come disciplinati nel Titolo II, sono a loro volta alternativi e non cumulabili con quelli concessi in applicazione dei commi 3 e 4 seguenti.

3. Per favorire interventi ecosostenibili e biocompatibili, inoltre, il “Regolamento delle misure volontarie di bioedilizia”, come specificato dalle successive circolari applicative, prevede incentivi calibrati in base alla qualità progettuale. Tali incentivi, come indicato nel Titolo II, sono a loro volta alternativi e non cumulabili con quelli concessi in applicazione del comma precedente e seguente.

4. Il medesimo Titolo II stabilisce forme diverse di incentivazione e deroghe ai sensi dell’art. 5, comma 3 della citata D.G.R. 1383/2020 s.m.i., da considerarsi alternative e non cumulabili con quanto previsto dai commi precedenti.

4 bis. Nel territorio urbanizzato e per i fabbricati con destinazione residenziale, con intervento RE conservativa è consentita la contestuale realizzazione di interrati ad uso parcheggio, nei limiti e alle condizioni di cui all’art. 9 della L. 122/1989 s.m.i..

Nel territorio urbanizzato negli interventi comportanti l’integrale demolizione e ricostruzione di fabbricati con destinazioni compatibili, è ammissibile l’incentivo volumetrico per la realizzazione di interrati ad uso parcheggio nei limiti e alle condizioni di cui all’art. 2 della L. 122/1989 s.m.i. e nelle quantità prescritte al successivo art. 40, comma 1; tale incentivo, nelle more della formazione del P.U.G., ai sensi dell’art. 7 comma 4 lettere a) e b) della L.R. 24/2017 s.m.i. e allo scopo di promuovere l’attivazione dei processi di rigenerazione urbana, è cumulabile con quelli concessi in applicazione dei commi precedenti.

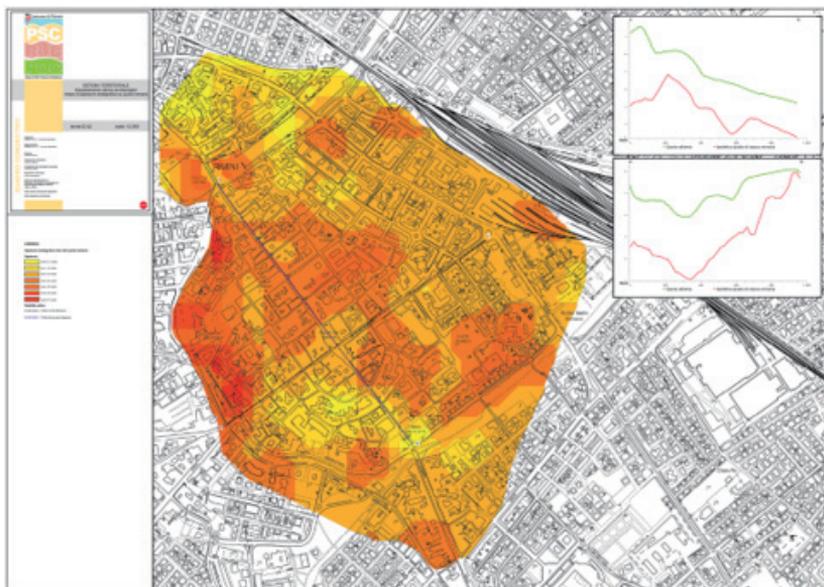
Lo stesso incentivo volumetrico è applicabile, con le modalità di intervento di RE ricostruttiva, nell’ambito del Centro Storico e sugli edifici tutelati sparsi in territorio urbanizzato.

5. In merito all’applicazione delle norme in materia di bioedilizia valgono le seguenti prescrizioni:

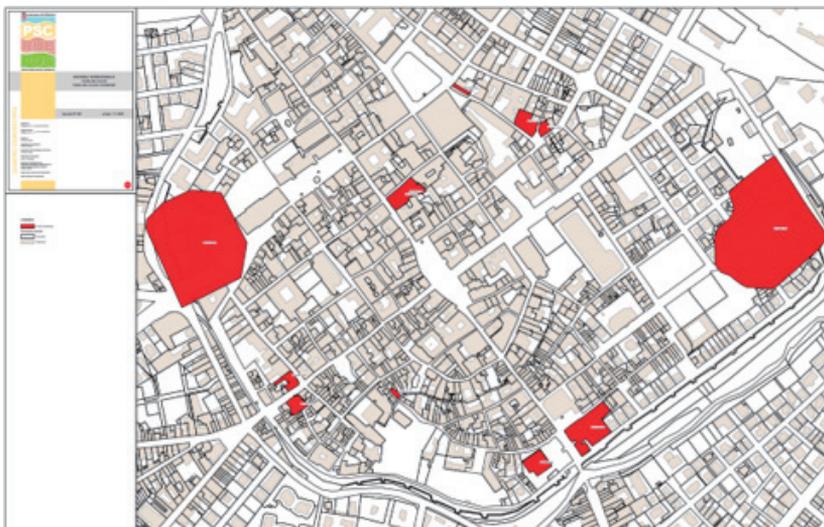
- i P.P. approvati e convenzionati in data precedente all’adozione del RUE, o durante il periodo di salvaguardia, sono regolati dalle NTA dei rispettivi piani che hanno ancora come riferimento il P.R.G. previgente (parametri edilizi ed urbanistici compresi), in tal caso non sarà necessario procedere ad una verifica delle dotazioni di standard urbanistici assentiti;
- i P.U.A. approvati e convenzionati in fase transitoria, in attesa del primo POC, potranno beneficiare degli incentivi edilizi previsti dal comma 2 dell’art. 1.3 del “Regolamento delle misure volontarie di bioedilizia”, incrementando le quote di dotazioni di standard proporzionalmente alle maggiori quantità di superfici realizzate



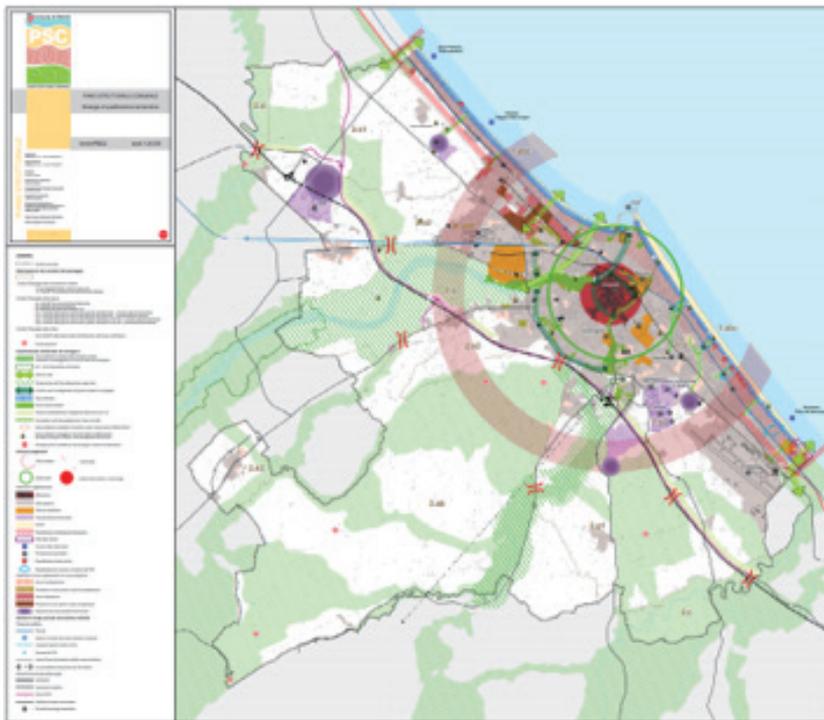
Fig.48, Cavour district view , Google Earth Pro (2021)



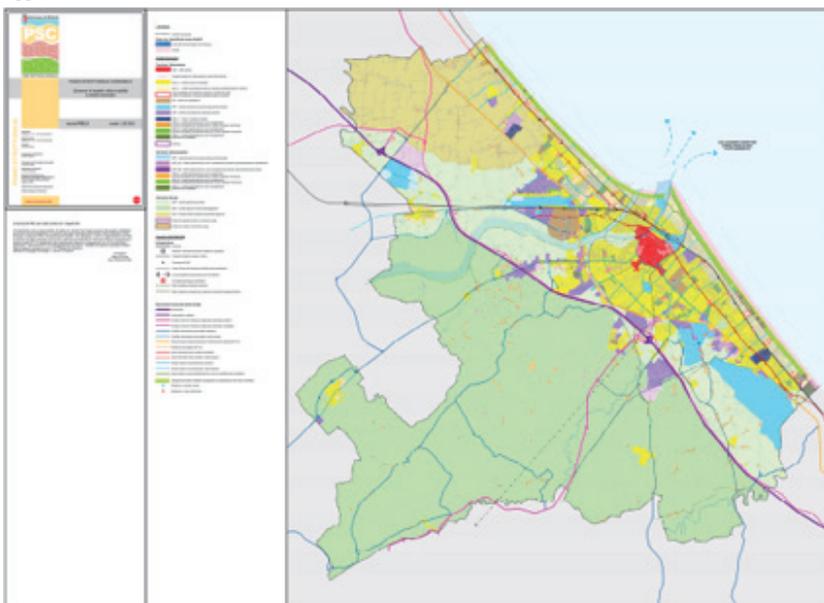
SISTEMA TERRITORIALE  
 Inquadramento storico archeologico  
 Indice di spessore stratigrafico su quota romana  
 Tavola C.1.3  
 Approvazione con delibera di C.C.n.15 del 15/03/2016



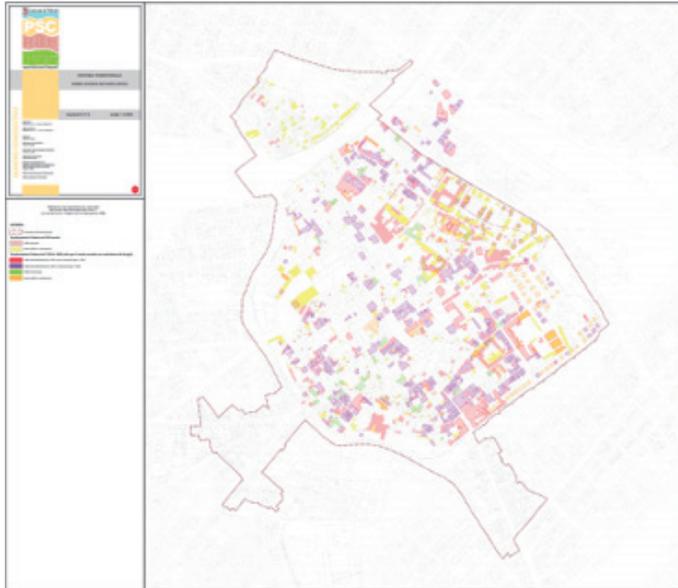
SISTEMA TERRITORIALE  
 Carta dei vincoli  
 Carta dei vincoli ministeriali  
 Tavola C.1.5  
 Approvazione con delibera di C.C.n.15 del 15/03/2016



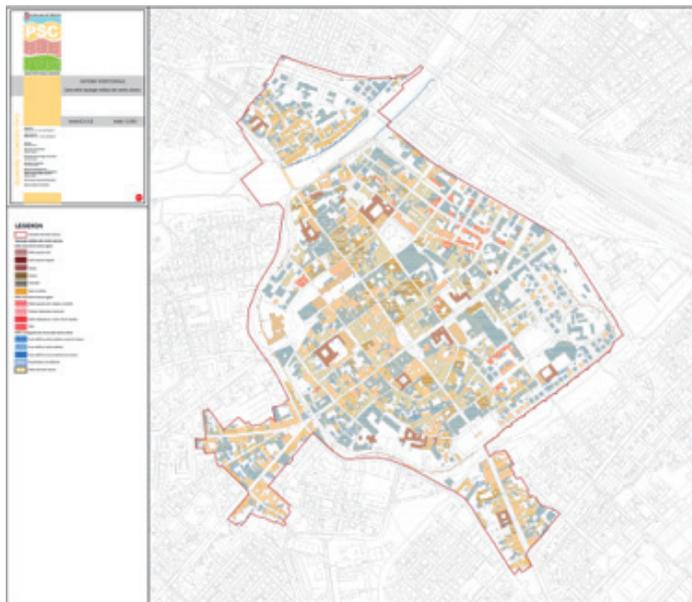
PIANO STRUTTURALE COMUNALE  
 Strategie di qualificazione del territorio  
 Tavola PSC.2  
 Approvazione con delibera di C.C.n.15 del 15/03/2016



PIANO STRUTTURALE COMUNALE  
 Schema di assetto della mobilità e ambiti normativi  
 Tavola PSC.3  
 Stesura dicembre 2019



SISTEMA TERRITORIALE  
 Analisi evolutiva del centro storico  
 Tavola C.1.1.1  
 Approvata con delibera di C.C n. 15 del 15/03/2016



SISTEMA TERRITORIALE  
 Carta delle tipologie edilizie del centro storico  
 Tavola C.1.1.2  
 Approvata con delibera di C.C n. 15 del 15/03/2016



SISTEMA TERRITORIALE  
 Carta della tutela monumentale  
 Tavola C.1.1.4  
 stesura novembre 2019



Città Storica: categorie di tutela e unità di intervento. Funzioni pubbliche e di interesse pubblico.  
 Tavola RUE.2-3  
 stesura dicembre 2019







**02**

**ICONO-**

**GRAPHIC**

APPARATUS



# THE TRANSITIONAL FORM OF RIMINI

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This chapter showcases different maps of Rimini, ranging from the years of 1800-1990. The analysis of maps are carried out to focus mainly on the changes of city from different times, ranging from road system, city walls, and zoning.

## THE TRANSITIONAL FORM OF RIMINI



Fig.49, Historical Map 1811, RIMINI, Gobbi, G., Sica, P. (1982)



Fig.50, Analysis of Transitional form of Rimini Historical Map 1811, Hongye Wu (2021)

## THE TRANSITIONAL FORM OF RIMINI



Fig.51, Historical Map 1912, RIMINI, Gobbi, G., Sica, P. (1982)

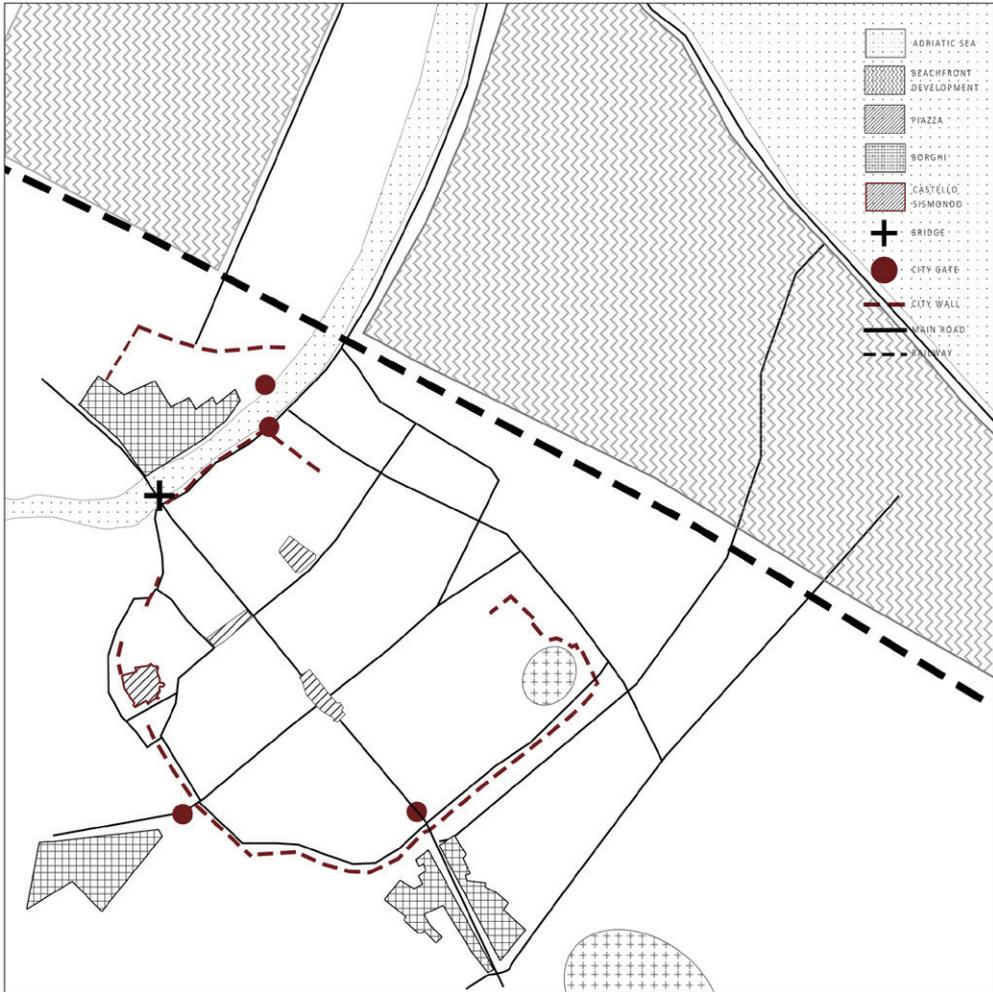


Fig. 52, Analysis of Transitional form of Rimini Historical Map 1912, Wanning Dai (2021)

THE TRANSITIONAL FORM OF RIMINI



Fig.53, Historical Map 1975, Municipality of Rimini

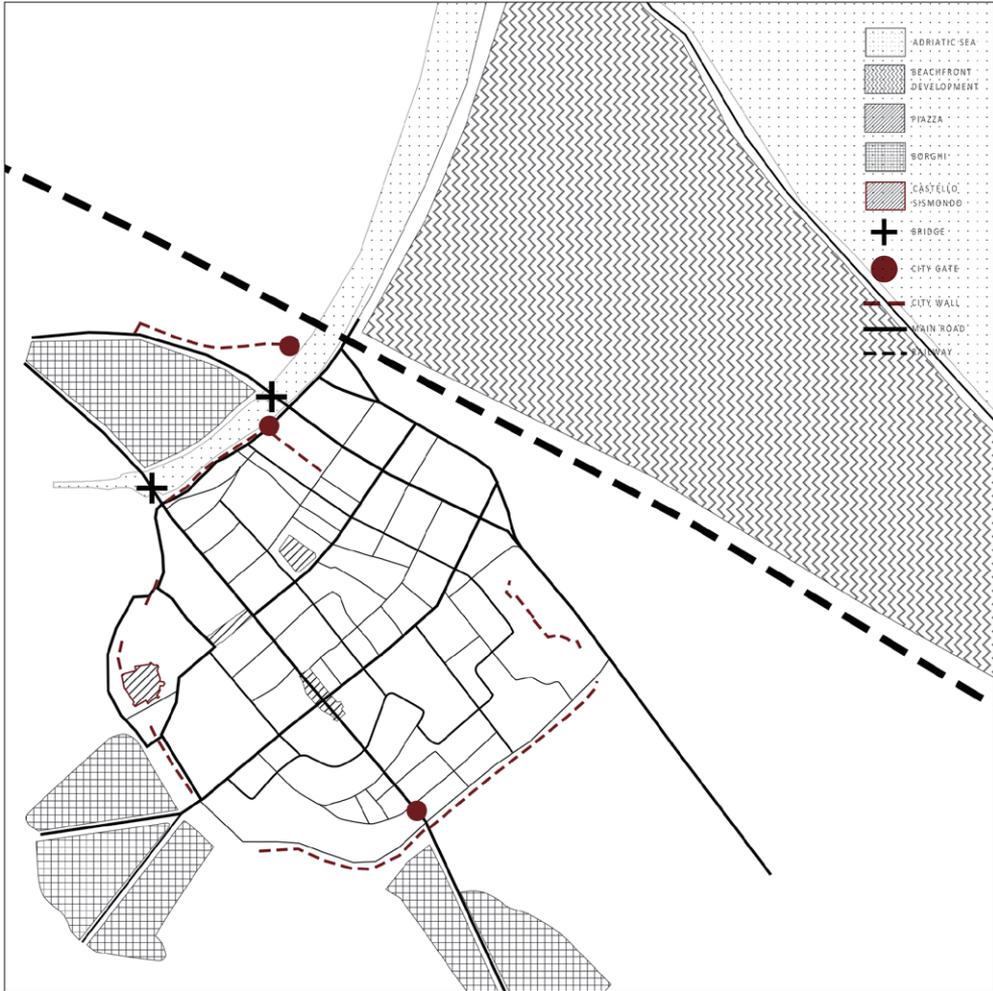


Fig.54, Analysis of Transitional form of Rimini Historical Map 1975, Liqizi Guo (2021)

THE TRANSITIONAL FORM OF RIMINI



Fig.55, Historical Map 1990, Municipality of Rimini, Prof. Arch. Leonardo Benevolo

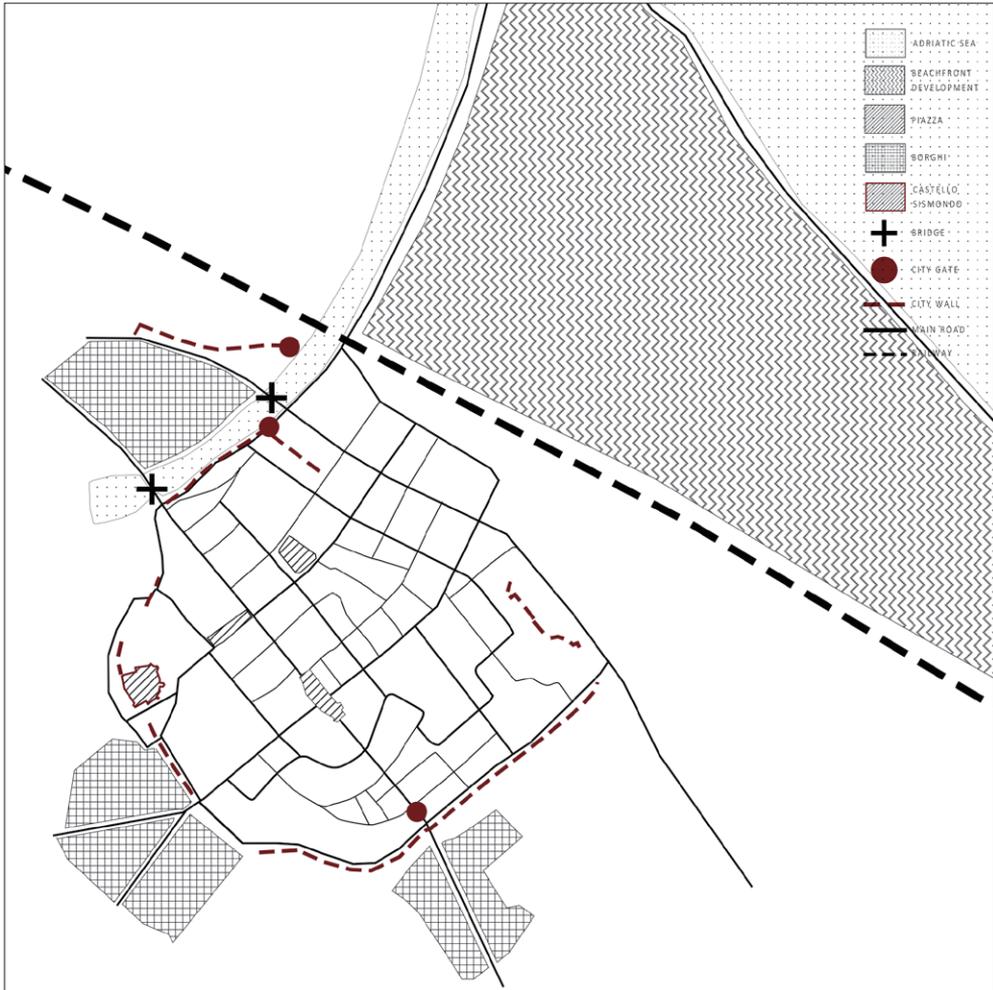


Fig.56, Analysis of Transitional form of Rimini Historical Map 1990, Wen Yee Tan (2021)



# THE ATLAS OF PICTURES OF RIMINI

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This chapter is consists of a series of pictures taken on site Cavour, Tiberio, Mazzini, San Giovanni to showcase the atmosphere, street life and architecture of Rimini.

CAVOUR/ by Hongye Wu











CAVOUR/ by Alessia Protigliatti Pomeri



CAVOUR/ by Alessia Protigliatti Pomeri





CAVOUR/ by Hongye Wu





CAVOUR/ by Hongye Wu





CAVOUR/ by Hongye Wu





TIBERIO/ by Wen Yee Tan





TIBERIO/ by Wen Yee Tan





TIBERIO/ by Wen Yee Tan









TIBERIO/ by Wen Yee Tan





TIBERIO/ by Wen Yee Tan





TIBERIO/ by Wen Yee Tan









Fig. 41. Mazzini, Rimini, Hongye Wu (2021)













MAZZINI / by Hongye Wu





MAZZINI / by Hongye Wu









MAZZINI / by Hongye Wu





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai





SAN GIOVANNI/ by Wanping Dai







# PART . 2



**TRANSITIONAL  
MORPHOLOGIES  
IN THE ITALIAN  
CONTEMPORARY  
CITY.  
THE CASE  
OF RIMINI  
TIBERIO**

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## INTRODUCTION

Urban regeneration has been accompanying urban development since the earliest human settlement, and was emphasized after the World War Two. Several decades' experience and billions of dollars forced the decision makers to realize the importance of urban image, quality of life, and urban environment, which were recognized as prerequisites and catalysts for the economic development of cities. In this circumstance, **marginal areas** between or around buildings are often one of the first areas to be aimed to be involved in urban regeneration projects, to grant new function and to provide more usable spaces for the surrounding residents.

Marginal areas are often associated to the word 'dark' or 'undesirable', as they are generated as inevitable by-products of urban spatial development and they are being called the '**places of neglect and decline**'. While urban regeneration calls for attention, the enhancement of marginal areas can be an opportunity for urban planning to reflect differently and provide alternative opportunities to a more **affordable and systemic interventions**.

Even though the urban regeneration policies are varied in different countries and cities, however, they do have one thing in common—the **involvement of public space** in urban planning. Public space such as the streets, squares, parks and green spaces, is the stage upon which the drama of communal life unfolds. To create meaningful public spaces, **placemaking** bounds to take 'place'. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well-being.

This thesis is trying to provide a **potential answer to the future of marginal areas** in the process of urban regeneration through the concept of placemaking and to involve more private owners in the decision making process. Furthermore, a new way of designing the private-public spaces through parasitic architecture is also being explored and tested, followed by a modular system that aims to adapt to the future paradigm.







**03**

**PRE-**

**FACE**

LITERATURE REVIEW



# **PLACEMAKING & PARASITIC ARCHITECTURE**

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The first chapter unfolds the notion & origins of placemaking & parasitic architecture, and the different typologies found in respective category .

/ 'pleɪs, meɪkɪŋ / :  
connection between people &  
place, the creation of quality  
places.

## PLACEMAKING (FROM SPACE TO PLACE)

### I. Introduction & History

Placemaking is a collaborative process where different individuals work together to shape the public spaces and strengthen the connection between people and the place they shared. Rooted in **community-based** participation, Placemaking involves the planning, design, management and programming of shared use spaces. More than just promoting better urban design, Placemaking brings diverse people together to improve a community's cultural, economic, social and ecological situation. Moreover, it also facilitates creative use patterns, paying particular attention to the diverse identities that defines the place and support its ongoing evolution. It is a creative but intentional process. Placemaking builds on the growing environmental awareness by helping communities adapt and thrive within the constructed and natural world.

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody." (*Jacobs, 1961*) From street configurations to plaza dynamics to community engagement activities, Placemaking is concerned with not only the spaces in our cities but the human interactions that make cities great. It is all about **People – Place – Connection**. Placemaking shows people just how powerful their collective vision can be. It helps them to re-imagine everyday spaces, and to see a new potential of parks, downtowns, waterfronts, plazas, neighborhoods, streets, markets, campuses and public buildings.

Although the term has been used widely in the architecture fraternity mostly from the early 2000s, the concept behind Placemaking **originated in the 1960s**, when writers like Jane Jacobs and William H. Whyte offered groundbreaking ideas

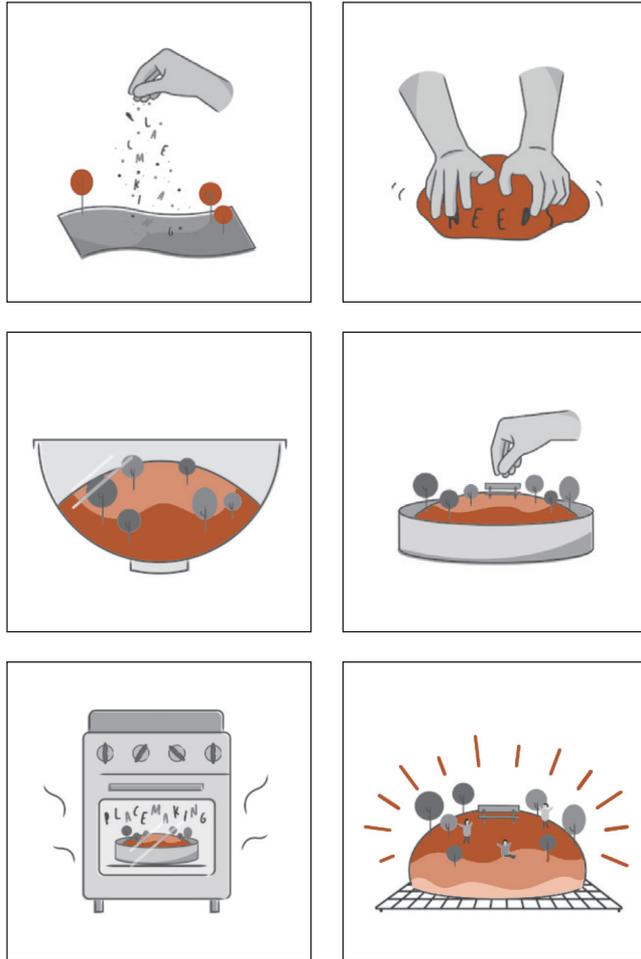


Fig 1- Fig 6, Bread-baking as Placemaking Analogy, One Bite Design, Hong Kong

about designing cities that catered to **people**, not just to cars and shopping centers. Their work focused on the importance of lively neighborhoods and inviting public spaces. Jacobs advocated citizen ownership of streets through the now-famous idea of "eyes on the street". Whyte emphasized essential elements for creating social life in public spaces. With the advent of the 'swinging sixties' rampant with radical shifts in political and societal ideologies, and an instant rise in countercultures, Placemaking was a spatial revolution that was bound to take 'place'.

The term came into use in the 1970s by landscape architects, architects and urban planners to describe the process of creating squares, plazas, parks, streets and waterfronts that will attract people because they are pleasurable or interesting. Landscape often plays an important role in the design process. The term encourages disciplines involved in designing the built environment to work together in pursuit of qualities that they each alone are unable to achieve.

"First life, then spaces, then buildings – the other way around never works"; and "In a society becoming steadily more privatized with private homes, cars, computers, offices and shopping centers, the public component of our lives is disappearing. It is more and more important to make the cities inviting, so we can meet our fellow citizens face to face and experience directly through our senses. Public life in good quality public spaces is an important part of a democratic life and a full life." (*Gehl, 2011*).

Placemaking has come a long way ever since its first appearance. The rise of this concept challenges many 'experts' as the systems of a city are mostly designed and executed by them. But, who knows a place better than the inhabitants? Placemaking is both an essential concept in the design world and also a **practical tool for connection between humanity and the city**. It allows all the stakeholders, including government, owners, designers and end-users to find a balance in making decisions and to build collective community power that makes a place sustainable.

**"Today's Placemaking represents  
a comeback for community.  
The actions and collaborations  
inherent in the making of places  
nourish communities and  
empower people."  
- MIT, Department of  
Urban Studies & Planning**



Fig 7 & Fig 8, Piazzas used for public activities, Author, Rimini (2021)

"Great public spaces are those  
places where celebrations are held,  
social and economic exchanges  
occur, friends run into each other,  
and cultures mix."  
- Project for Public Spaces

## II. What makes a Great Place?

### The Notion of Place

In order to understand Placemaking, it is important to understand what a 'place' is. A 'place' can take different forms and the term is relevant at different scales. For example, a lane, a street, incidental public space, formal square or park can be a place, but the term 'place' can also refer to a wider neighbourhood, or a village, town or city centre. Placemaking is relevant at all these scales and the impact of any proposal should be considered at **different scales**.

There are many ways to define 'place'. The most relevant in this context are:

- A defined area
- A distinct locality or neighbourhood
- A landscape
- A space which has a distinct character (*Norberg-Schulz, 1980*)
- Space with meaning (*Clifford, 1997*)

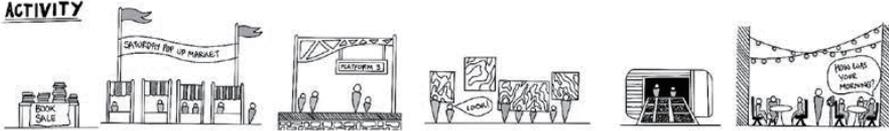
The theory of understanding place commonly attributes **three key components** to good places and placemaking should seek to ensure that each of these are addressed :

1. **Activity** - The activities that occur in the place supported by land uses, pedestrian and cycle movement, play and social life within the public realm and events.

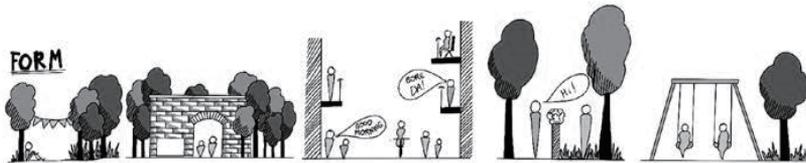
2. **Physical Form** - The physical setting that makes up the place including the townscape, built form, landscape, topography, ecology, microclimate and public realm.

3. **Meaning** - The unique features of a place including the context, identity of existing places, unique sense of place, significant built and natural features, cultural associations, sensory experiences, safety and inclusiveness and sense of belonging.

**ACTIVITY**



**FORM**



**MEANING**

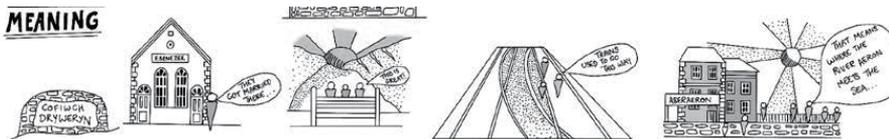


Fig 9 - Fig 11, Examples of different aspects of a place at different scales, Placemaking Guide Wales (2020)

### **Key attributes to Great Place**

According to Project to Public Spaces, most great places, whether a grandtown plaza or humble neighbourhood park, share **4 key attributes** :

1. They are **easy accessible and well connected** to other important places in the area.
2. They are **comfortable** and **project a good image**.
3. They **attract people** to be involved.
4. They are **sociable environments** in which people want to be again and again.

And these 4 attributes can be breakdown into further explanation as below,

#### **Access and Linkages**

The accessibility of a place can be easily judge by the connections to its surrounding, including visual links. A great space is easy to get to, easy to enter and navigate. It is arranged so that they are visible from a distance or up close. The edges of a public space also play an important role in making it accessible. Accessible spaces can be conveniently reached by foot and ideally, public transit, and they have high parking turnover.

#### **Comfort and Image**

A space that is comfortable and looks inviting is likely to be successful. A sense of comfort includes perceptions about safety, cleanliness, and the availability of places to sit. Lack of seating is the suprising downfall of many otherwise good places. People are drawn to places that gives them a choice of places to sit, so they can be either in or out of the sun at various times of day or year.

#### **Uses and Activities**

A range of activities are the fundamental building blocks of a great place. Having something to do gives people a reason to come and return to a place. When there is nothing interesting to do, a space will be left empty. That is the best measure that something is wrong. A carefully chosen range of activities will help a place attract variety of people at different times of a day.

#### **Sociability**

This is the most important quality for a place to achieve and the most difficult. When a place becomes a favourite spot for people to meet friends, greet their neighbours, and feel comfortable interacting with strangers, then you are well on your way to having a great place.

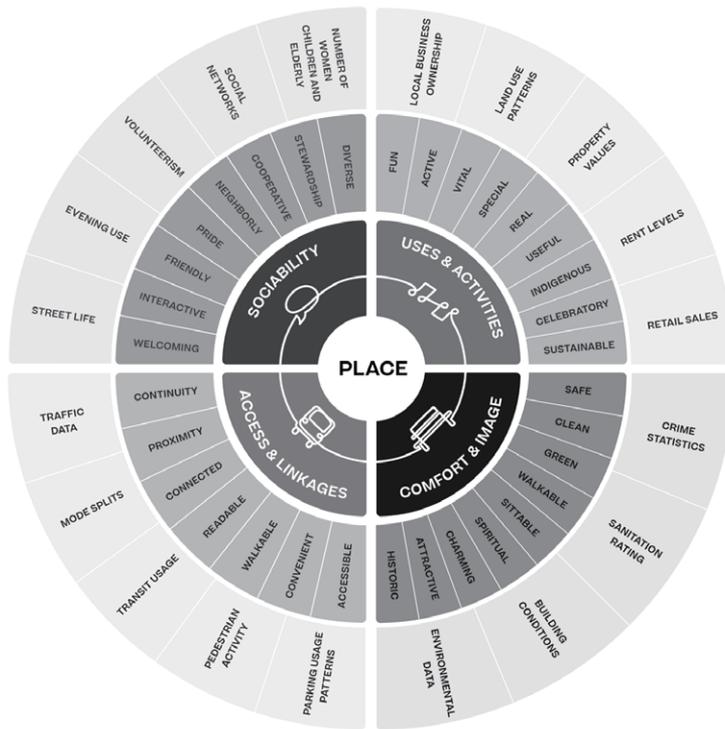


Fig 12, What makes a Great Place?, Project for Public Spaces (2005)

" It takes a place to create a community and a community to create a place." - Fred Kent (2007)



Fig 13, The Benefits of Great Place, Project for Public Spaces (2009)

### III. 11 Principles of Placemaking

Effective public spaces are extremely difficult to accomplish because their complexity is rarely understood. As W.H Whyte said, "It's hard to design a space that will not attract people. What is remarkable is how often this has been accomplished."

PPS has identified **11 key principles** for transforming public spaces into vibrant community places, whether they are parks, plazas, public squares, streets, sidewalks, or the myriad other outdoor and indoor spaces that have public uses in common. These principles are:

#### Underlying ideas

##### **1. The community is the expert**

The important starting point in developing a concept for any public space is to **identify the talents and assets within the community**. In any community there are people who can provide an historical perspective, valuable insights into how the area functions, and an understanding of the critical issues and what is meaningful to people. Tapping this information at the beginning of the process will help to **create a sense of community ownership** in the project that can be of great benefit to both the project sponsor and the community.

##### **2. Create a place, not a design**

If your goal is to create a place (which we think it should be), a design will not be enough. To make an under-performing space into a vital 'place', **physical elements** must be introduced that would **make people welcome and comfortable**, such as seating and new landscaping, and also through 'management' changes in the pedestrian circulation pattern and by developing more effective relationships between the surrounding retail and the activities going on in the public spaces. The goal is to create a place that has both a **strong sense of community and a comfortable image**, as well as a setting and activities and uses that collectively add up to something more than the sum of its often simple parts. This is easy to say, but difficult to accomplish.

##### **3. Look for partners**

Partners are **critical** to the future success and image of a public space improvement project. Whether you want partners at the beginning to plan for the project or you want to brainstorm and develop scenarios with a dozen partners who might participate in the future, they are invaluable in **providing support and getting a project off the ground**. They can be local institutions, museums, schools and others.

#### **4. They always say "It Cant Be Done."**

One of Yogi Berra's great sayings is "If they say it can't be done, it doesn't always work out that way," and we have found it to be appropriate for this work as well. Creating good public spaces is inevitably about **encountering obstacles**, because no one in either the public or private sectors has the job or responsibility to 'create places.' For example, professionals such as traffic engineers, transit operators, urban planners and architects all have narrow definitions of their job - facilitating traffic or making trains run on time or creating long term schemes for building cities or designing buildings. Their job, evident in most cities, is not to create 'places.' Starting with **small scale community-nurturing improvements** can demonstrate the importance of 'places' and help to overcome obstacles.

#### **Planning & outreach techniques**

##### **5. Have a Vision**

The vision needs to come out of each individual community. However, essential to a vision for any public space is an idea of what kinds of activities might be happening in the space, a view that the space should be **comfortable and have a good image**, and that it should be an important place where people want to be. It should instill a sense of pride in the people who live and work in the surrounding area.

##### **6. You can see a lot just by observing**

We can all learn a great deal from others' successes and failures. By looking at how people are using (or not using) public spaces and finding out what they like and don't like about them, it is possible to assess what makes them work or not work. Through these observations, it will be clear what kinds of activities are missing and what might be incorporated. And when the spaces are built, **continuing to observe them** will teach even more about how to evolve and manage them over time.

#### **Translating ideas into Action**

##### **7. Form supports function**

The input from the **community and potential partners**, the understanding of how other spaces function, the experimentation, overcoming the obstacles and provides the concept for the space. Although design is important, these other elements tell you what 'form' you need to accomplish the future vision for the space.

## 8. Triangulate

"Triangulation is the process by which some external stimulus provides a linkage between people and prompts strangers to talk to other strangers as if they knew each other" (Holly Whyte). In a public space, **the choice and arrangement of different elements** in relation to each other can **put the triangulation process in motion** (or not). For example, if a bench, a wastebasket and a telephone are placed with no connection to each other, each may receive a very limited use, but when they are arranged together along with other amenities such as a coffee cart, they will naturally bring people together. On a broader level, if a children's reading room in a new library is located so that it is next to a children's playground in a park and a food kiosk is added, more activity will occur than if these facilities were located separately.

## 9. Experiment: Lighter, Quicker, Cheaper

The complexity of public spaces is such that you cannot expect to do everything right initially. The best spaces experiment with short term improvements that can be tested and refined over many years. Elements such as seating, outdoor cafes, public art, striping of crosswalks and pedestrian havens, community gardens and murals are examples of improvements that can be accomplished in a short time.

## Implementation

### 10. Money is not the issue

This statement can apply in a number of ways. For example, once you put in the basic infrastructure of the public spaces, the elements that are added that will make it work (e.g., vendors, cafes, flowers and seating) will not be expensive. In addition, if the community and other partners are involved in programming and other activities, this can also **reduce costs**. More important is that by following these steps, people will have so much enthusiasm for the project that the cost is viewed much more broadly and consequently as not significant when compared with the benefits.

### 11. You are never finished

By nature, good public spaces that **respond to the needs, the opinions and the ongoing changes of the community** require attention. Amenities wear out, needs change and other things happen in an urban environment. Being open to the need for change and having the management flexibility to enact that change is what builds great public spaces and towns.

## PARASITIC ARCHITECTURE

### I. Introduction

Contemporary use of the term parasitic architecture refers to a wide scope of small scale architectonic **'additions' to existing buildings**. Legal and illegal, temporary and permanent, they all expand volumes of their hosts and sometimes develop their functions. The notion parasitic architecture was first brought up by O.M.Ungers in his article "Großformen im Wohnungsbau". He describes his vision on the city: "Grossform generates the frame, the order and planes space for an unforeseen, unplannable, and dynamic process, for a parasitic architecture. Without this component planning remains inflexible and devoid of life". According to Ungers, parasitic architecture is a filling of Großformen in a city.

Theoreticians of architecture, visioners, such as Archigram group and AA circle in London, the Metabolists in Japan, Lebbeus Woods in the USA anticipated these phenomena in the sixties of the 20th century. Their followers Zaha Hadid, Rem Koolhaas and Peter Eisenman introduced the new qualities into architecture. Variability in architecture gained professionals, users and onlookers appreciation. Spontaneous activities of owners and inhabitants result in 'personalised' additions to the elevations, roofs and volumes of buildings. Although they melt into contemporary townscape, the sense of susceptibility to deformations of buildings and urban spaces remains. This concerns laymen, artists and architects, and contradicts former constancy of architecture. Probably the facts mentioned above contribute to perceiving buildings and urban space as adaptable structures.

**Parasite :**  
**/ˈpærəsɪt/ : an organism that lives**  
**in or on an organism of another**  
**species (its host) and benefits by**  
**deriving nutrients at the other's**  
**expense.**

The first attempts of placing parasitic extensions on existing buildings were implemented in the seventies of the last century. In 1971 architect Jean-Louis Chanéac and Pascal Häusermann installed a 'parasite' bedroom for a baby on the façade of a modernist residential apartment block in Geneva for a family struggling with no success for a bigger flat. 'La Bulle Pirate' had organic shape and was made of laminates, resins, glass fiber, reinforced polyester and foam. In that time, actions like this were considered artistic manifestations.

Parasitic architecture investigates **reusability of the spaces in urban texture** and especially it can be seen in **urban interstitial spaces, inert spaces, voids and structural systems that lose their functions**. As it is mentioned, parasite structures use the articulation method to host structures and this articulation can create some urban infrastructure elements like roof, the void between two structures, skywalks etc. This design approach focuses on architectural design and urban context because of the parasitic condition and the examples of it cannot be considered without context. Therefore, this condition creates **strong relation between the design element and its context** and, those elements could create **new qualities to the context**. Moreover, this articulation operation creates new programmes to the structures, different functional possibilities and also usage patterns. Therefore, it defines both structural and experiential existence.

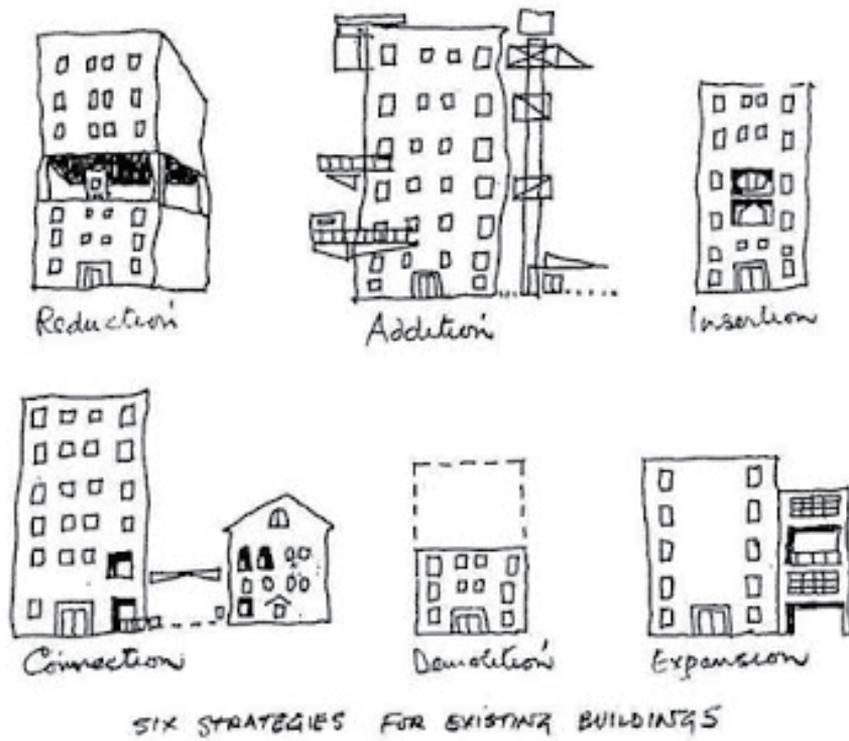


Fig 14, Six strategies to intervene in existing buildings, Cedric Price

## II. Typology of Parasitic Architecture

Parasitic architecture is a confrontation to the imaginary boundary – 'site'. (Yu, 2019)

Working incisively and in maximal proximity with the existing fabrics, the site is no longer a mere supplement to the design process. With multiplicity and uncertainty of local conditions, Parasitic architecture refuses to be prescribed to any preconceived style, process or materiality. The local condition is hence incorporated in every aspects of Parasitic Architecture. What used to be backdrop now takes part in the spatial dialogue.

Despite the seemingly haphazard natures, Parasitic Architecture is not mindlessly deployed. The opportunistic nature to this reciprocal relationship beckons a new taxonomy and vocabulary to signify the gestures from the intervention towards the existing condition.

### Attaching

Attaching is a direct intrusion to the integrity of host architecture. This formal operation starts with the exploitation of envelope of the existing architecture.

Since modernist era, architects incorporate piloti as visual gimmick to trick the sense of gravity. Nevertheless, architecture as a singular entity inevitably anchored to its footprint. On the contrary, attaching frees Parasitic Architecture from this binding between ground plane and vertically. In its place, the topological exterior becomes the new ground that gives firmness to Parasitic Architecture. Meanwhile, the deconstruction of the external boundary primes the building envelope to be figuratively porous, as the intimate formal encounters permit exchanges (structural, spatial, flows of energy) to happen.

### Ingestion

In opposite to Attaching, this spatial operation essentially deploys void instead of objects. While attaching feasts on the envelope of existing building fabric, Ingestion starts with dissecting what lies beneath the skin.

Ingestion is not to be purely reductive. It welcomes the accidental spatial discovery through the temporal absence of rigidity and entanglement between solid and void. Freed from fixation, the former spatial organs and skeletons are once again malleable in the hands of parasitic operation. Ingestion therefore creates an opportunity to a crossover between stereotomic and tectonic approaches. Such possibility alludes to the discovery of a new dynamic to the internal order of existing hosts.

### **In-Fill**

Outside Unger's Grossform, Parasitic architecture is not caged by a formal ordering. Without a predesignated framework, it seeks to exploit waste spaces across the uneven landscape of detached architectural entities. In-fill leads Parasitic Architecture to maneuver through the gaps between potential hosts. It nests in the power vacuum within the architectural presences. Then it proceeds to expand and reach out, dissolving and assimilating the boundaries into part of itself.

In-fill essentially produces the new 'grey' in the field of figure ground dualism. As the Parasite takes shape of the residual space, the demarcation between the interior and the exterior becomes ambiguous. As a result, the Parasite reactivates and stimulates the tension between the hosts. The interconnected static architectural entities acquire a new collective body, where the in-fill parasite is both the heart and the veins.

### **Aggressive mimicry**

The deployment of Parasitic Architecture inevitably instigates the provocation against the existing architecture. When such provocation is intended, parasitic architecture will follow the strategy that fully exposes itself to its recipients.

To maximize the effect of deliberate expressiveness, Parasitic Architecture must form a vivid display of juxtapositions to its host. This is when Parasitic Architecture fully releases its eccentric and playful side. By exploitation of the host and immediate context, it creates counterparts from the existing tectonic elements (form, materiality, transparency, structure, etc) and styles (historic-cultural references).

However, this forms extroversion does not elevate Parasite to be monumental. The signification cannot be acquired by its own. Only by means of superimposition, its critical aesthetics can gain validity. The parasite and the host are entwined in this reciprocal juxtaposition while retaining their respective readiness. Consequently, Parasitic Architecture is situated as a heterotopic

existence parallel to the ordinary space which we inhabit. This tangible 'otherness' makes Parasitic Architecture a mirror that reflects the possibilities outside the ordinary. It is a corporeal gesture towards the existing fabrics that instigates the necessary critique of the mundanity.

### **Camouflage**

Active provocation is not always favoured. Radical transformation will always meet rejection. Especially for Parasitic Architecture, its controversial nature of exploiting existing building fabrics inevitable traverses public and private boundaries.

The 'immune system' of the city- a collective consciousness or legislation that resists transformation- will target any changes that perceived as subversion of the ordinary system. Therefore, Parasitic Architecture must adopt an alternative strategy instead of direct conflict. The solution, Camouflage as a defensive strategy requires cunningness in either tectonic adaptation and when selecting its host and immediate context.

In the first approach, the parasite actively mimic its host and the immediate surrounding to disguise or mitigate its presence. Through a series of carefully selected ad hoc bricolage, the parasite draws tectonic elements from the host which produces a subtle parody to the existing order.

The second approach is more of a passive approach which utilises the immediate context as a cover. For instance, hiding in the existing plain orderlessness will shield parasitic architecture from the grasp of legislative rejection. Other factors such as traffic, orientation, visual blockade and even the perceived cultural/ economic value of the host, can also be exploited to conceal Parasitic Architecture.

Both approaches to camouflage are able to render the parasite elusive from the general audience, therefore the scrutiny of immune system of the city. Only accidental or voluntary intimate encounters can expose the provocative element of parasitic architecture to the explorers. Therefore, camouflage introduces a positive side effect which amplifies the transformation through the unexpectedness.

### **Symbiosis**

Not all Parasitic architecture have to sacrifice for transient provocations or struggle to survive. Symbiosis offers a peaceful reconciliation between the parasite and its potential threat through the notion of mutualism. When the utilitarian aspect of parasitic

architecture aligns with the needs for improvements.

The parasitic relationship of symbiosis benefits both the host and the parasite. Often appear in junction with adaptive reuse, the parasitic intervention is at the same time diagnostic and remedial to the static (in most cases deteriorating) state of the existing architecture. Metaphorically, the parasite is comparable to an external, transplanted organ, which introduces a new system of flow that circulates between the parasite and the host. A positive feedback process is essential for the reactivation and transformation, as well as the sustainability of the couple.

Parasitic architecture is always more than creating surplus space. The spatial extension is coincided with programmatic transformation, alluding a process of continuous and progressive building. The parasitic interaction allows new trajectory of design evolution to be grafted onto the loose end of the finished, enclosed architectural entity. The design process is reinstated.

Symbiosis foresees a possibility to gain semi permanence and legitimacy for a 'pacified' type of parasitic architecture. Its capability to introduce continuous design that transforms the rigid and static conventional architecture to a flexible organic body. The notion of 'liveliness' is then acquired by hybridization and supplementary 'genes'.



Fig 15, Parasite Office, Za-Bor Architects, Russia (2011)



Fig 16, Metal staircase outside Werkraum Warteck, Stefan Eisele & Fabian Nichele, Switzerland (2014)



Fig 17, Plug-in City 75, Malka Architecture (2018)







**04**

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**REFE-**

**RENCES**

CONNECTIVITY / MODULARITY

### CASE STUDY 1: ICELAND WHARF

**Architect : pH+ Architects**

**Location : Fish Island, Hackney Wick, London.**

**Description: New build Mixed-use scheme providing commercial space and 120 new homes**

**Year : 2018**

Iceland Wharf seeks to provide an example of how to intensify sites in order to deliver sustainable high-density mixed-use developments. The project delivers layers of housing, industrial and maker space alongside more flexible tethered living and working environments. These are linked by shared yards and amenity spaces to facilitate the exchanges required to allow emerging communities to form.

The architects describe the organization of **outdoor balconies and walkways as the "spine" of the complex**, connecting the rooftop terraces with the residences. From above, the terraces provide views of London and the River Lea located at the complex's edge.

The historic building is seamlessly integrated into newly designed structures, and connected by internal courtyards framed by outdoor walkways that allow light to enter into dark interior spaces.



Fig 18, Balconies elevation, Iceland Wharf, pH+ Architects (2018)

### CASE STUDY 2 : 26 PASSIVE APARTMENTS

**Architect : Benjamin Fleury**

**Location : Montreuil, France**

**Description: Residential complex with 26 affordable apartments**

**Year : 2019**

26 Apartments is surrounded by a mix of 1960s housing blocks that range from structures that are 5 to 10 stories in height to smaller, standalone homes with gardens. Creating a building sensitive to these different building typologies was paramount to the design, as was injecting a contemporary morphology. As a result, the architects decided to split the affordable housing complex into two blocks: a street-facing "urban" block that sits opposite the multistory, mid-century housing blocks and a second "residential" block tucked farther back on the block. A communal garden and gathering space planted with deciduous trees occupies the space between the two buildings.

The project blocks are linked with a **footbridge**, which is connected to the flats with an **exterior passageway**. These features altogether (footbridge, passageway, balconies...) gather the flow and the animation of the buildings in a unique central space, which stimulates interactions between people and the creation of strong bounds.



Fig 19 - Fig 20, Exterior passageway, 26 Passive Apartment, Benjamin Fleury (2019)

### CASE STUDY 3 : Build Me! Modular Furniture

**Designer : Enorme Studio / Todo X La Praxis / TeamLabs**

**Location : Madrid, Spain**

**Description: 70 workshop participants work along with design studios to create a furniture that has different modules.**

**Year : 2016**

BUILD ME! is an experiment of putting together singular groups that are bound to design and build one part of a collective bench. They worked together to conform a common object, a large piece of furniture that becomes **the place to meet and interchange** and that is located in one of the patios of the school.

This furniture is built using ten different pieces of furniture all based on the same building principle, so they could be **easily assembled** in new configurations to cater different social activities. Once the graphic design was selected, the participants and designers arrived at the final stage, namely building and decorating the construction, based on the principles of self-building. It is functioning on the singularities that build common objects, places to share.

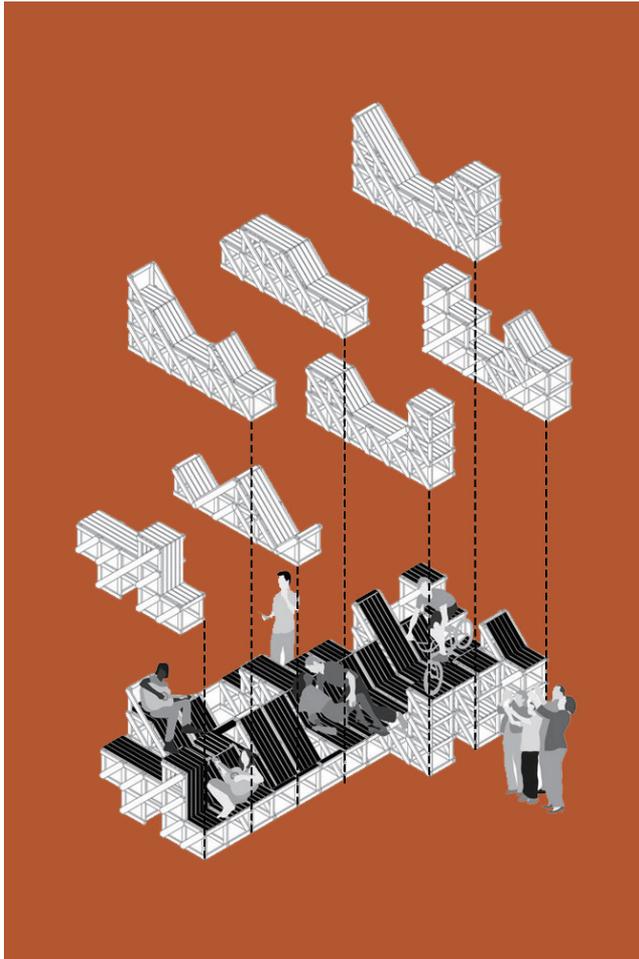


Fig 21, Build Me! Workshop Furniture Illustration, Enorme Studio (2016)

### CASE STUDY 4 : Urban Platform

**Designer : Bumjin Kim and Minyoung Kim**

**Location : Lisbon, Portugal**

**Description: ARCHmedium's Lisbon Open Room competition for young architects**

**Year : 2014**

The winning team developed a modular urban intervention for Lisbon, Portugal, with the intention of providing a more flexible space for the city's urban centre.

Bumjin Kim and Minyoung Kim's "Urban Platform" rests lightly on the site, evoking the appearance of temporary scaffolding. The young architects' intention for the intervention to be "invisible from the distance" is expressed through a bare aluminum tubular structure that complements its urban surroundings.

Functioning as an elevated public plaza, "Urban Platform" incorporates five different modules which are **easy to build and reconfigure**, allowing **versatility of function**. These five modules are: "steps, stage, void, enclosed space and Miradouro (a Portuguese word denoting an open-sided gallery and vantage point)". The modules each serve a distinct individual purpose, and can be merged and arranged to give new functionalities. The adaptable structure is designed to conform to a variety of contexts and accommodate a range of uses.









**05**

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INTERVENTION IN TIBERIO

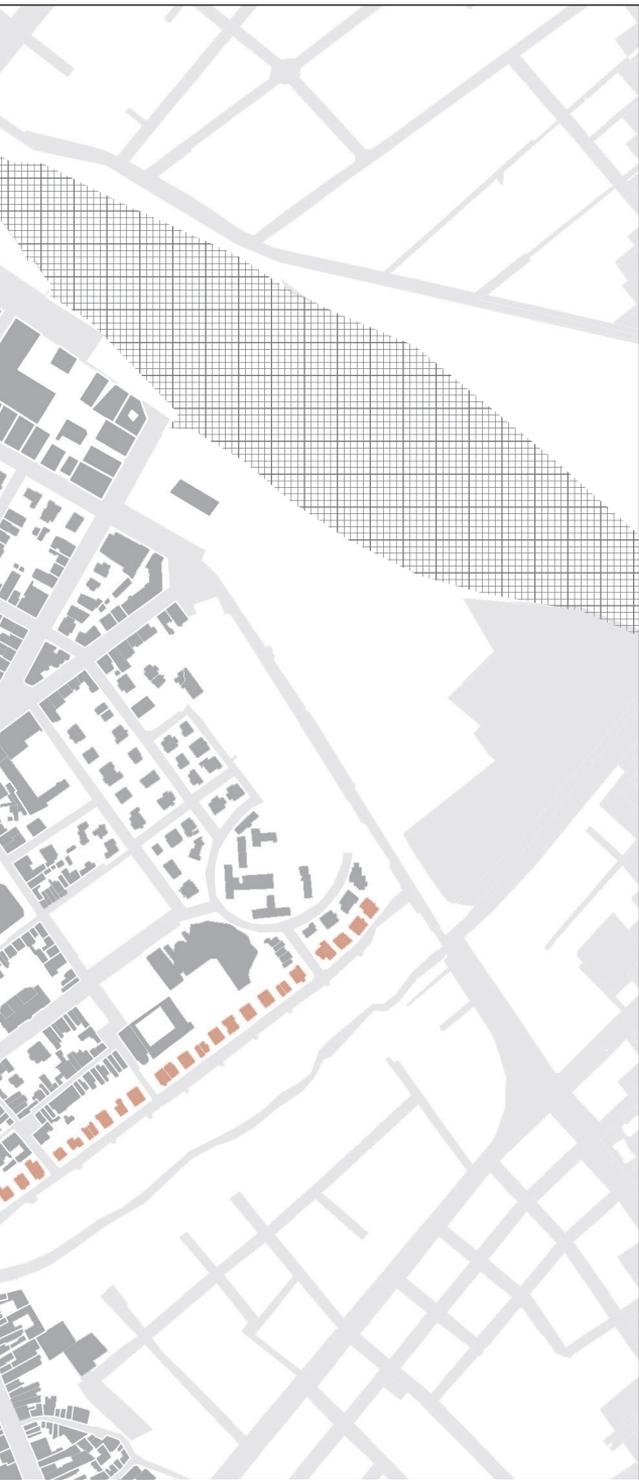


# **CITY OBSERVATION: SITE ANALYSIS**

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This sub-chapter showcases different site analysis carried out in Tiberio during the design process with the assist of various diagrams and drawings, focusing on the current status of the block.

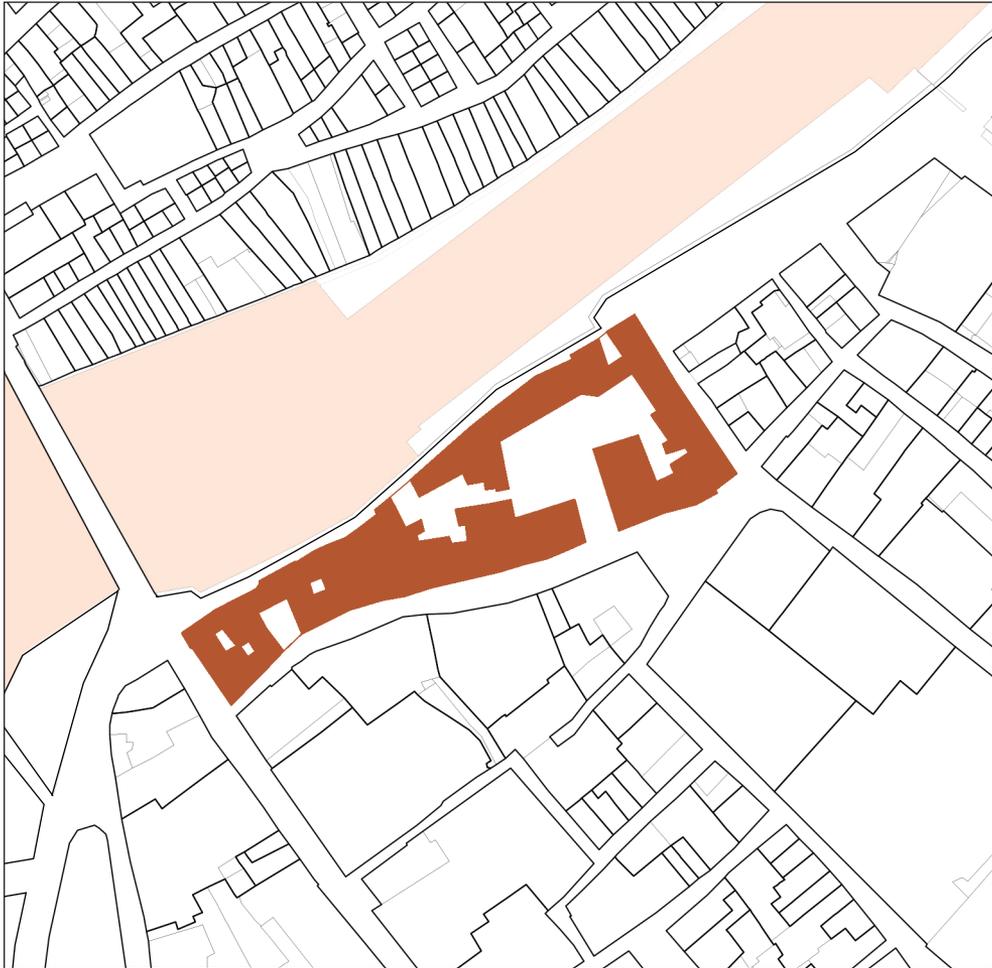




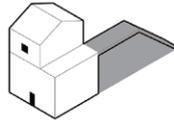
## Legend

-  Study Area - Tiberio  
(Fringe Fabric with marginal area)
-  Others  
(Fringe Fabric with marginal area)
-  Marecchia River
-  Existing Building Blocks
-  Existing Road
-  Railway

Rimini Historic City Centre Map, scale 1:7500



Study Area - Tiberio, scale 1 : 2500



## **CITY OBSERVATION - SITE ANALYSIS : TIBERIO**

### **Morphology :**

**Compact margin tissue, compared with canal port.**

### **Operational Guidelines :**

**Heavy - Urban sections and the role of height differences in cubature recovery operations from road level.**

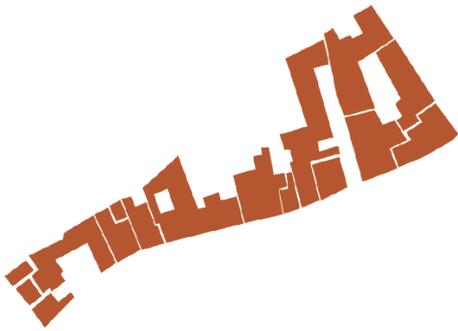
### **Strategy :**

- differences height survey;**
- analysis of sections;**
- hypothesis of intervention on the marginal areas of the consolidated fabric.**

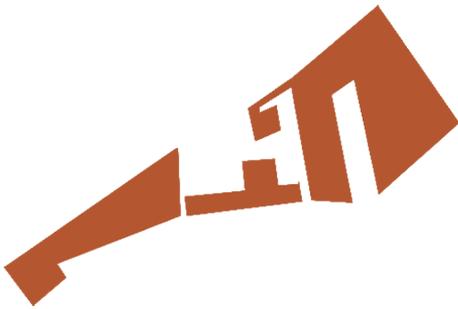
Tiberio is one of the historical settlements in Rimini, located steps away from the well-known roman bridge - Ponte di Tiberio. Next to the site, is the new suspended walkway connecting to the urban parks near the bridge, it is one of the main interventions of the Rimini Open Laboratory in 2018. Besides, the ancient village of sailors and fishermen, named Borgo San Giuliano is located opposite the site and it is currently a residential area with few commercial building in between. The village is visually visible on the upper floor of the site.

The site is inhabited mostly with residential buildings while some with commercial function on the ground floor. The large courtyard within the site functions as a parking & storage area for the residents, and the smaller courtyard has the similar function too. Some part of the courtyards are left abandoned and they seem to be under-maintenance when it contains much more potentials for other development for the residents.

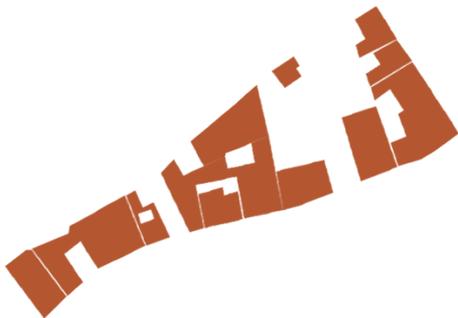
Morphology of Tiberio Block from different time frame



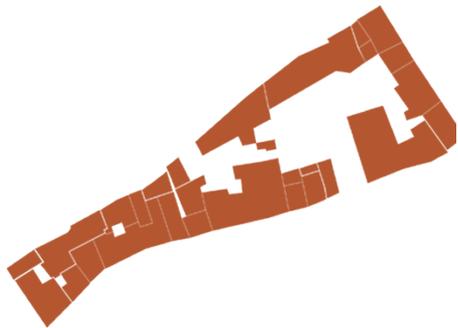
1811



1912



1975



2021

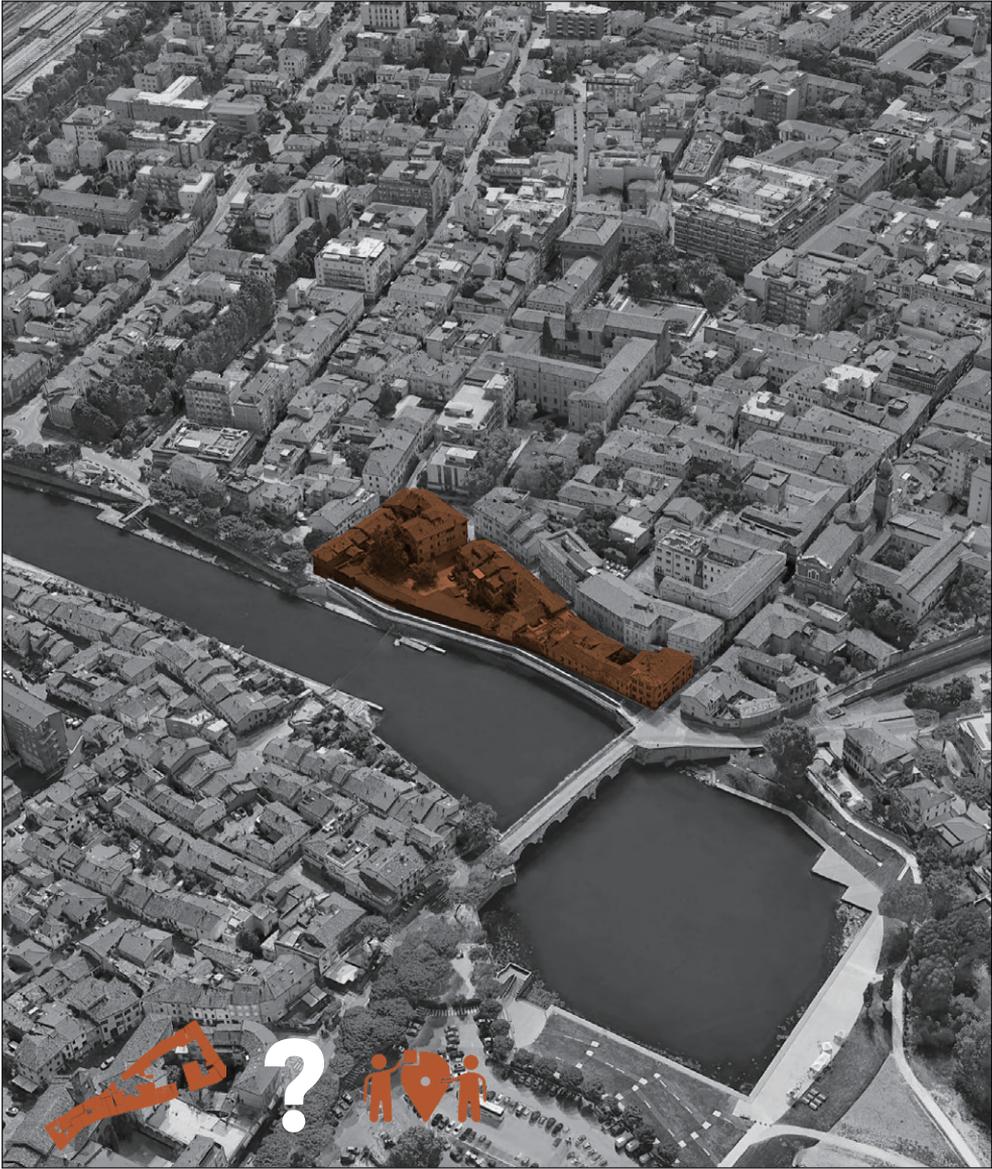
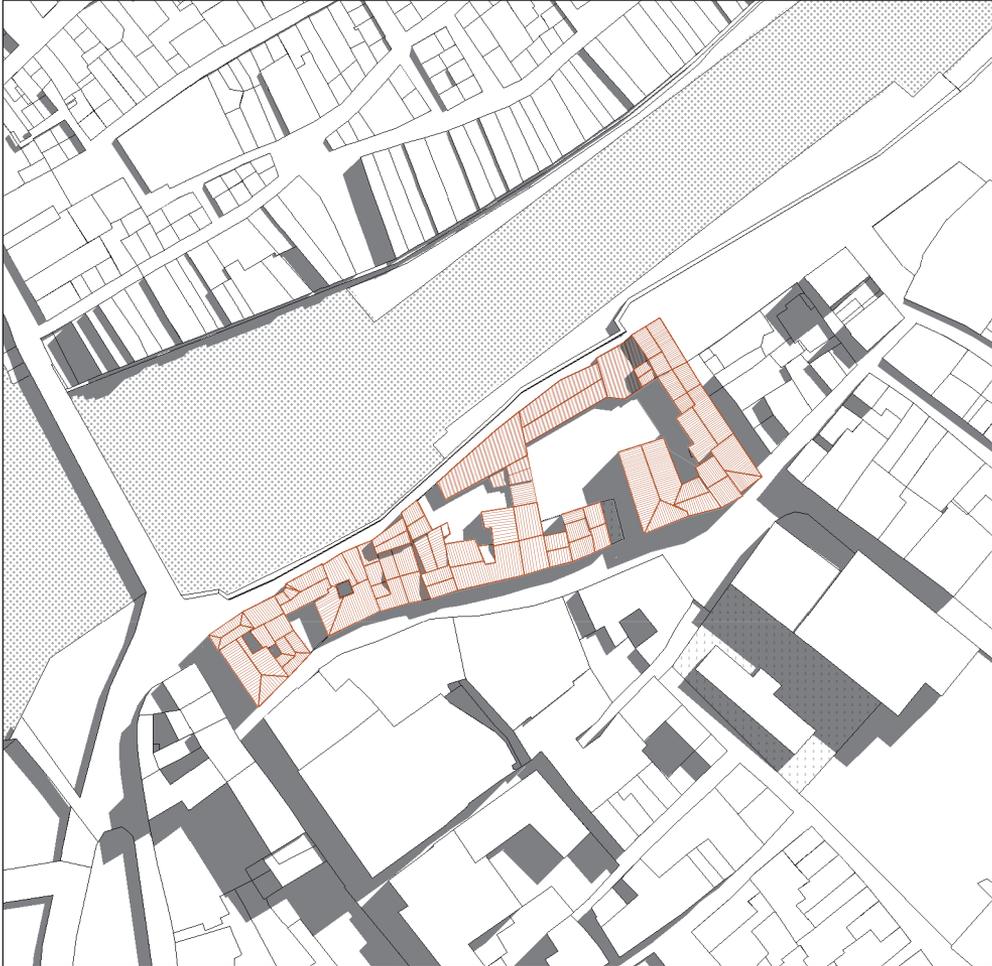
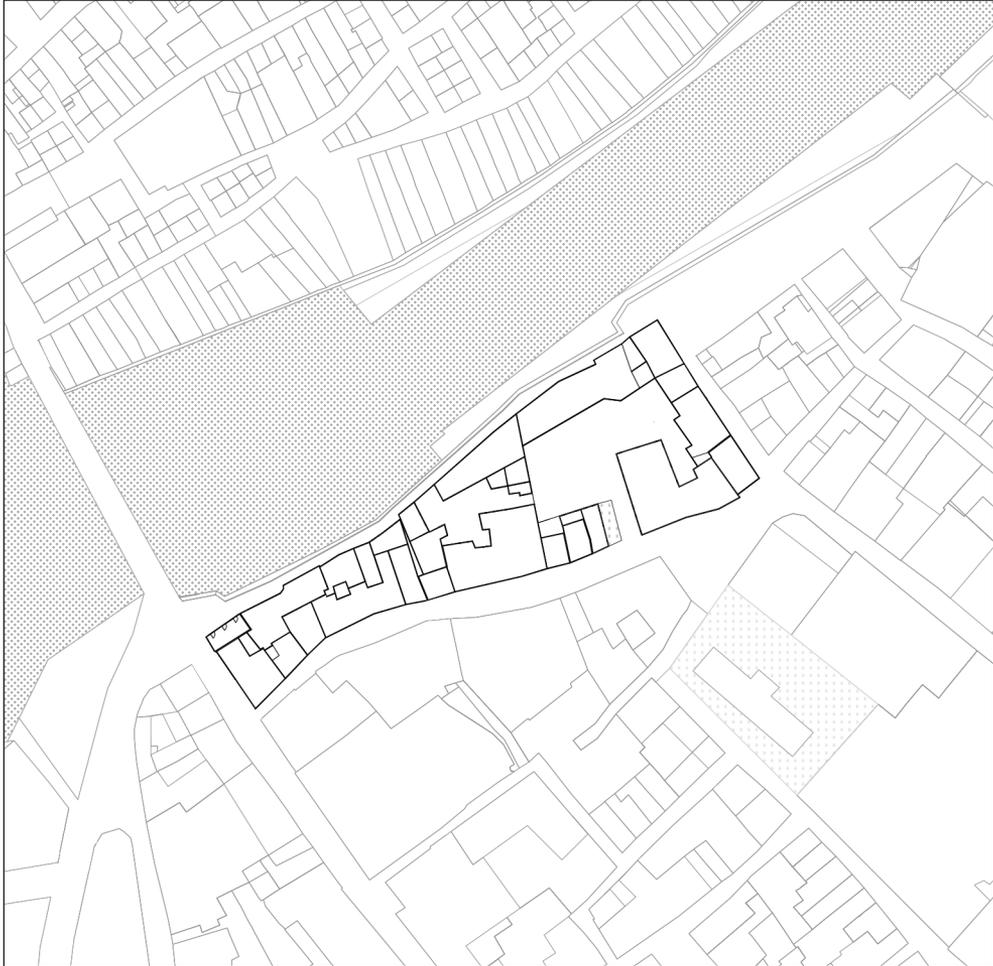


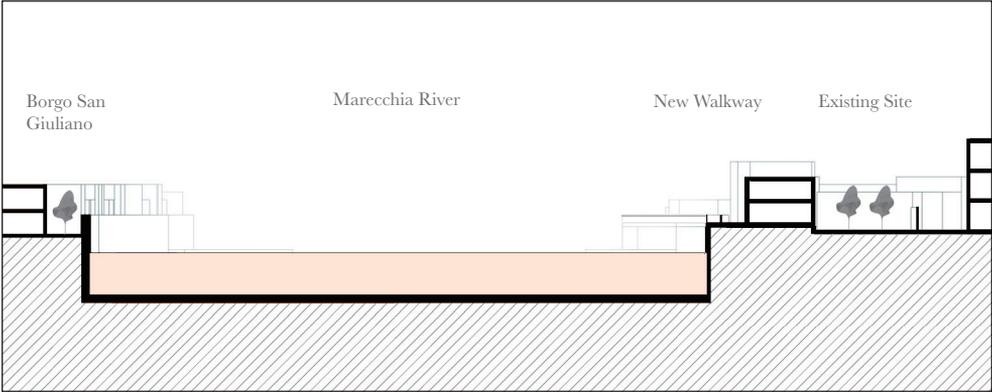
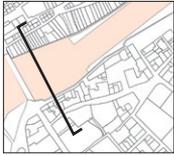
Fig.24, Axonometry of Current Tiberio, Google Earth Pro (2021)



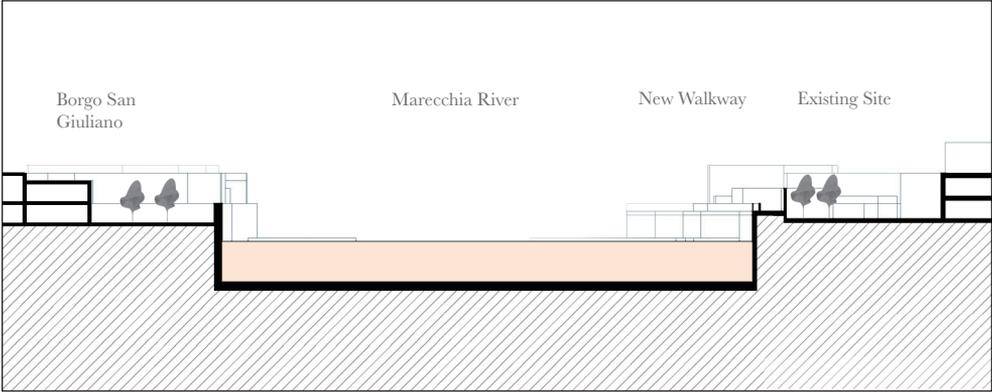
Tiberio - Roof Plan with shadows, scale 1 : 2500



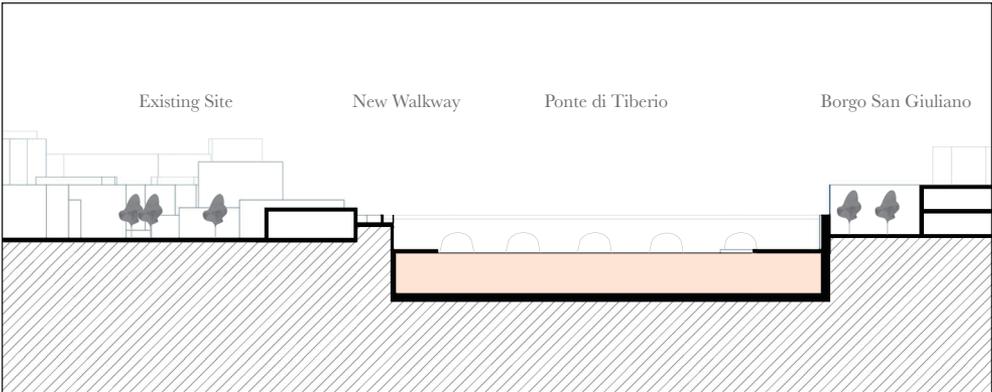
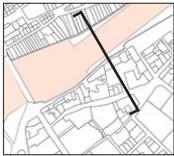
Tiberio - Block Plan, scale 1 : 2500



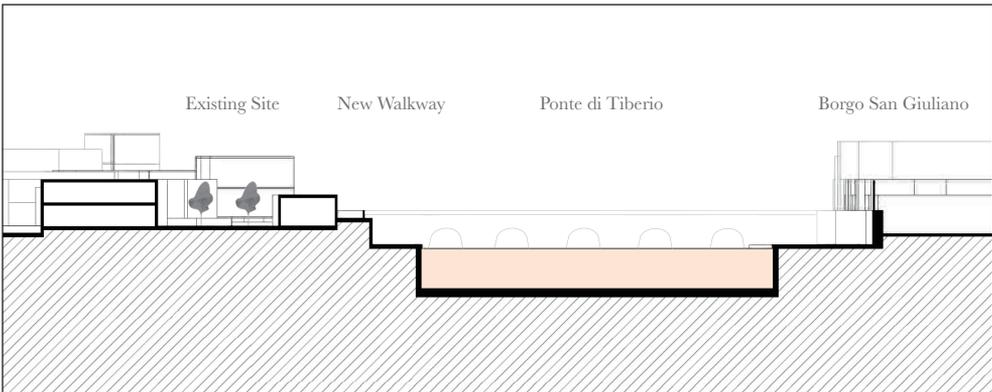
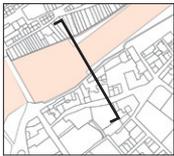
Site Section 1, scale 1:1000



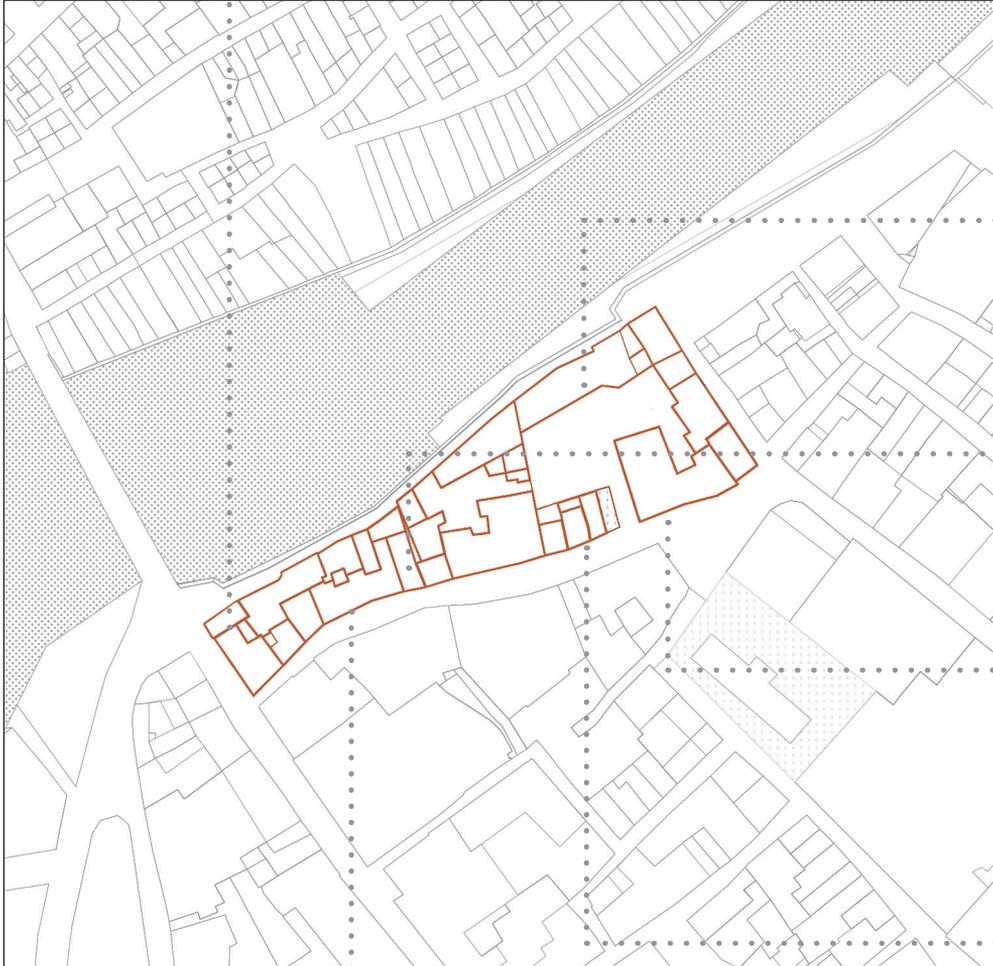
Site Section 2, scale 1:1000



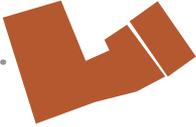
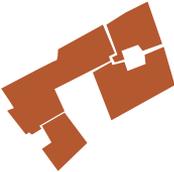
Site Section 3, scale 1:1000



Site Section 4, scale 1:1000



Typological Map of Tiberio, scale 1 : 2500

	<u>Building Types</u>	<u>Description</u>
	Shophouses	Mix-used building (residential & commercial)
	Services	Shared garage
	Abandoned	Abandoned residential building
	Tall Buildings	3 storeys Residential Buildings
	Row Houses	Residential Buildings with private garage
	Courtyard Houses	Residential Buildings with shared courtyard



Street Hierarchy & Activities around Tiberio



Figure Ground Map



Voids



Marginal Area



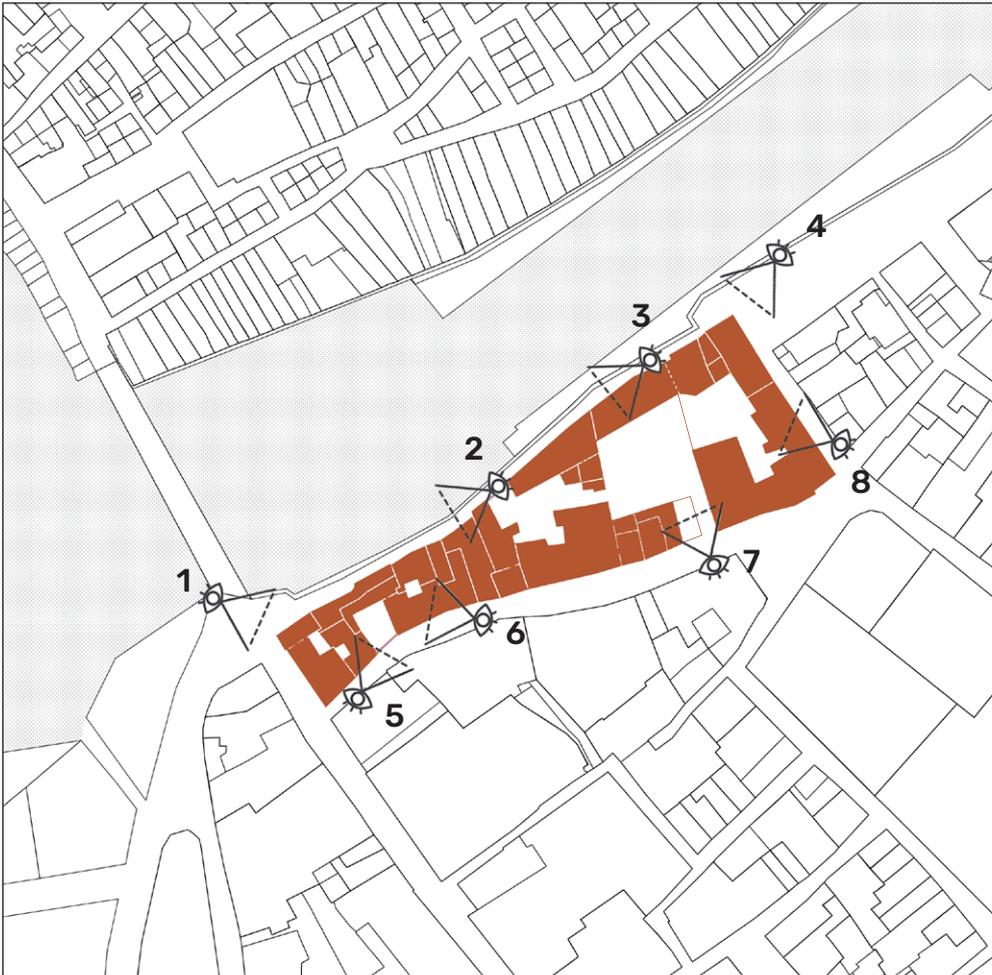
Private / Public Building



Building Height



Access



Street Views around Tiberio

1



5



2



6



3



7



4



8





# DESIGN STRATEGY

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This sub-chapter showcases the design concept, SWOT analysis and design strategies implemented on Tiberio according to the conditions of the site are indicated as following.

**'RE' CREATION GROUND**  
The act of making something exist of  
happen again.  
Something done for pleasure, relax or  
such activities.

## **DESIGN CONCEPT**

The main idea is to integrate modular, easy assembled & dismantled, light and multipurpose structure into the site in order to change the original "boring & plain" mood of the site. A mutual relation exists between margin and line, the center piece of this site redevelopment-suspended walkway acts as the line that creates connection in between the marginal spaces (courtyard), it also provides a new social spaces (new social balcony) for the residents to interact, along with other interventions.

Due to overpopulation in all major cities in both developed and developing countries, people are not only faced by the lack of physical space, they also experience a mismatch between the built environment and the actual patterns of using the city (*Beekmans & Boer, 2014*). It is now the age where development projects fully occupy a city, yet the space vacancy rate is at the peak. This provides the room to rethink the definition of "public space" in today's world.

Hence, the potential of **Privatised Public Space & Public Space** are being explored in this design where the spaces on first floor will be fully privatised, whereas the ground floor will be open to public and the residents will always be prioritised if they are interested to rent/use the space. The creation of these new spaces will help bringing a new entity and vibrancy to the neighbourhood.

Connection  
Light Structure & Materials  
Easy Assembled &  
Dismantled  
Modular  
Multipurpose  
Greenery  
Private / Public

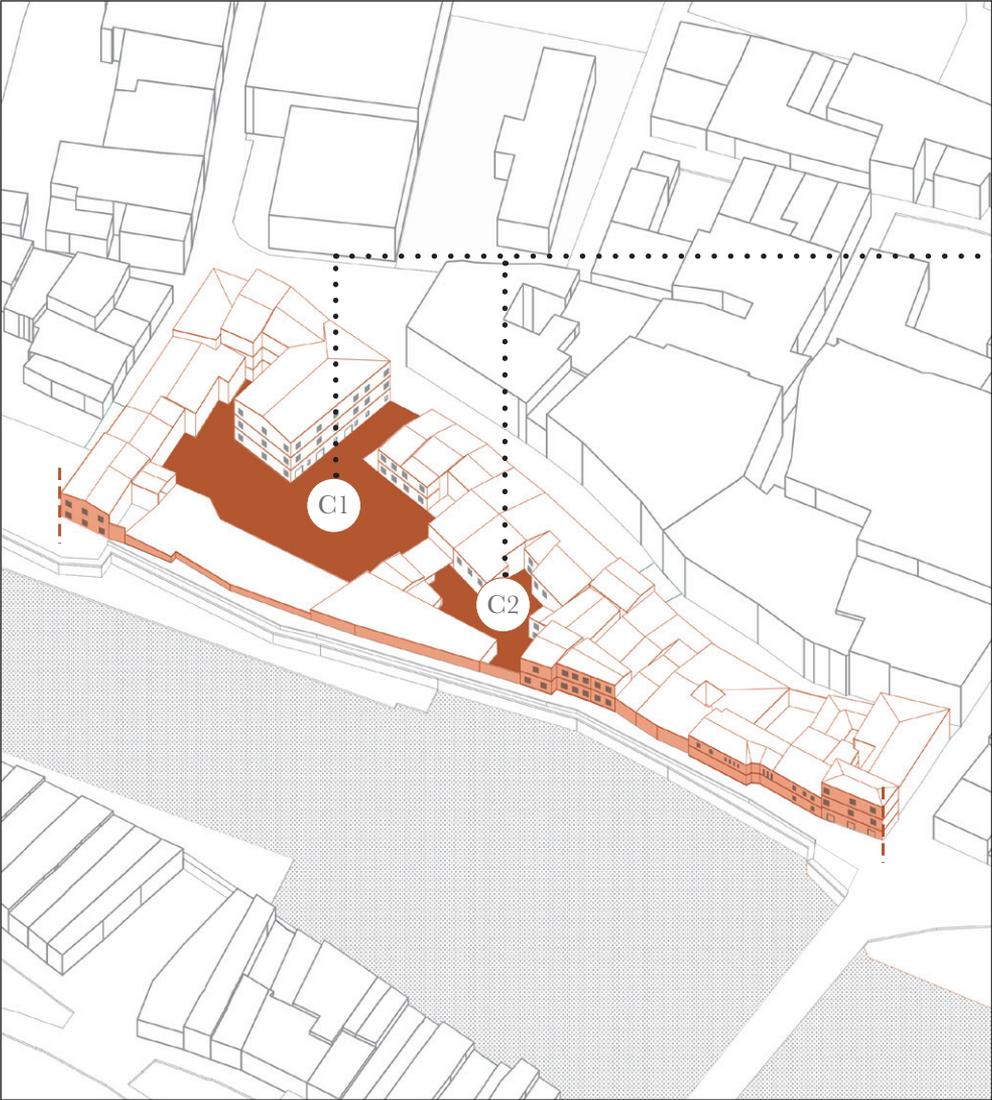


## SWOT Analysis

<b>STRENGTH</b> <ul style="list-style-type: none"><li>· Richness of historical, heritage &amp; cultures</li><li>· Public parks &amp; new river walkway</li><li>· Entitled to Marecchia River view</li><li>· Balanced building heights</li><li>· Mostly residential area</li><li>· Easy accessible</li></ul>	<b>WEAKNESS</b> <ul style="list-style-type: none"><li>· Monotonous &amp; enclosed facade</li><li>· Underused &amp; abandoned courtyards</li><li>· Limited private space</li><li>· No interaction zone for residents</li><li>· Different ground levels</li></ul>
<b>OPPORTUNITY</b> <ul style="list-style-type: none"><li>· New functional zone for residents</li><li>· Revitalised courtyards</li><li>· Coherent riverside development</li><li>· Utilize level differences around site for new design</li></ul>	<b>THREAT</b> <ul style="list-style-type: none"><li>· Traffic congestion with new public area</li><li>· Lack of interest from local residents</li><li>· Overcrowding the marginal space</li><li>· Heritage policies limit new development</li></ul>



**Intervention Areas**

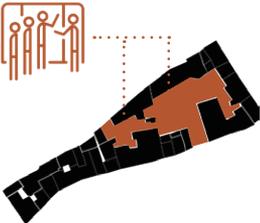
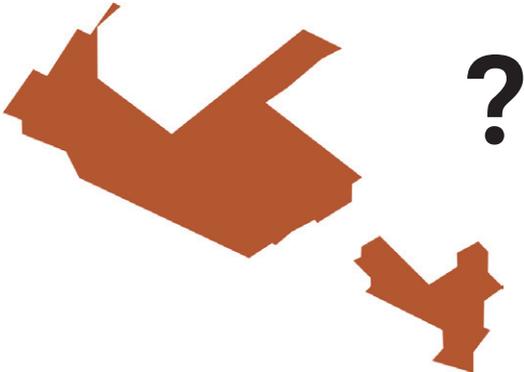


C1 Underused Courtyard 1

C2 Underused Courtyard 2

Monotonous Riverside Facade

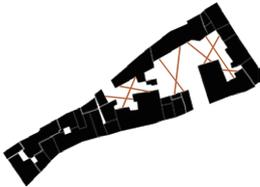
Design Strategy



margin area as public ground



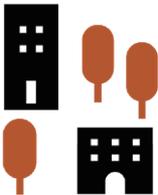
utilize existing rooftop area to allocate new space



create connection between existing buildings



privately-owned public spaces for existing residents



provide green escape for the residents



optimize existing river view

## INTEGRATING “THIRD PLACES” INTO URBAN VOID (The Margin Urban Fabric)

A city is a place where functions and uses are concentrated, and it is a place full of meaning and purpose. There are areas for living and industry, culture and transport, administration, services, recreation and more. On a map of a city, there seem to be no remaining space for spaces or voids without any function. Where many people and requirements meet, the limited space has to be used optimally. But urban voids exist, it is also identified as the marginal spaces. Urban voids are areas with unspecified uses that disrupt the urban organization of the city. They possess multiple and diverse identities and are available for users' actions. "Urban Voids are also areas between private and public space that fail to connect elements in a comprehensible and consistent way. They are often considered ruins or anti-space, giving no positive contribution or content to its surroundings and users. Some voids are areas which lost their purpose, while others are created due to carelessly planning", (*Lepanović & Deak, 2016*).

Around the site, there are some marginal / underused spaces (urban void) that could be transformed into new spaces that is beneficial to the built environment and residents. Most of the urban voids in the area are **gaps between buildings or vacant plot**, often presented as the **courtyard** for the neighbourhood which originally serve the purpose of promoting connection between residents, however, they are now left as a parking area or abandoned spaces instead, slowly losing the original functionality of the space.

Oldenburg identifies "third places" as the public places on neutral

**" Most needed are those third places which lend a public balance to the increased privatisation of home life." - Ray, Oldenburg (2000)**

ground where people can gather and interact. In contrast to first places (home) and second places (work), third places allow people to put aside their concerns and simply enjoy the company and conversation around them. Third places "host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work." Oldenburg explains that beer gardens, main streets, pubs, cafés, coffeehouses, post offices, and other third places are the heart of a community's social vitality. Providing the foundation for a functioning democracy, these spaces promote social equity by leveling the status of guests, providing a setting for grassroots politics, creating habits of public association, and offering psychological support to individuals and communities.

The key ingredient lies in the fact that they are socially binding, encouraging sociability at the same time and fighting against isolation. They simply make life more joyous, colorful, and they enrich city's economic activity, public life and democracy. Third places can also help by creating or enhancing a sense of community on a smaller, more human scale a relief from the overwhelming sensory experience of a large and unfamiliar city.

The new walkway design provokes the original image of the third place, it is **not only a passageway, or a balcony**. Third place is usually associated with public use area, in this case, it is the opposite. This walkway functions as a new gathering ground and privately owned green walkway for the existing residents. Connecting to the existing facade of the housing area, the residents can walk out from their house to the new public ground whenever they want to socialize or simply to have a breath of fresh air, and it also accesses to the new park - a park lavished with greenery is only few steps away, exclusively provided for the residents' use only.

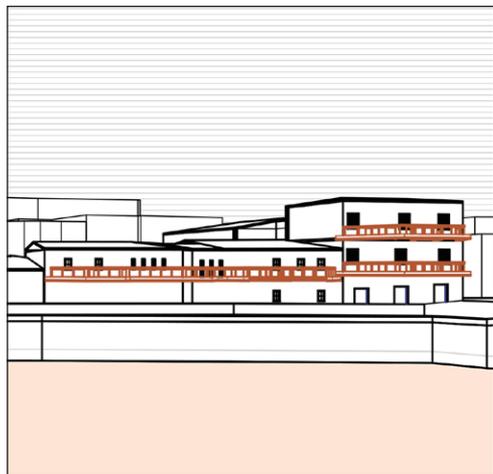
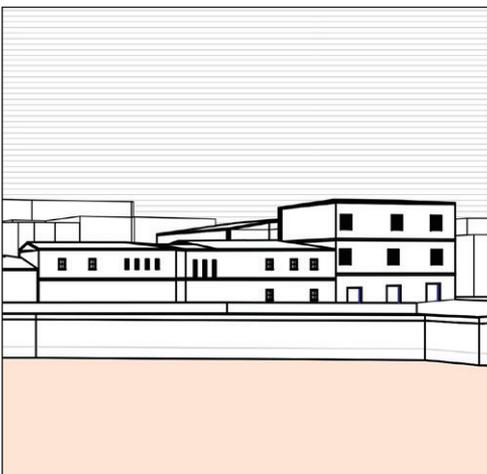
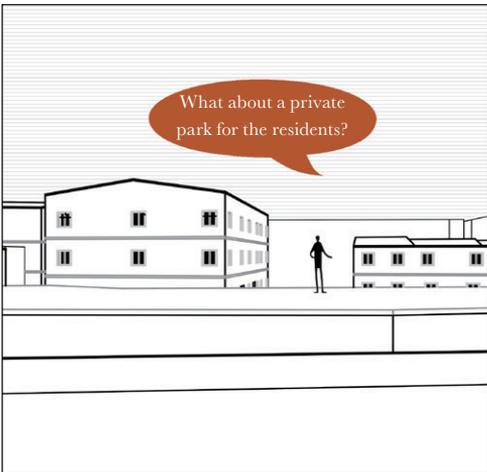
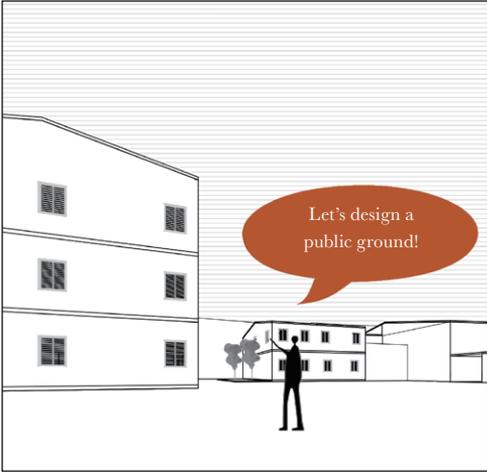
## NEW PROPOSED INTERVENTIONS

The proposed interventions are being implemented on the riverside facade and two different sizes of courtyard (C1 & C2) found within the block, they are also separated into 3 different strategies.

Starting from existing ground floor where C1 is situated, the middle part of the courtyard is excavated (3.5m depth) to create a new public zone (LG Floor) with small amphitheatre function, to house performance area or small local market, equipped with modular furniture that can be stacked or arranged based on user's need. The other part of the public ground is fitted with another set of modular bench seatings that caters for different functions. Restricted with the size, the smaller courtyard - C2 is fitted with the modular furniture in order to fully utilised the underused courtyard space.

Above the public ground area in C1, is the private walkway (Sky Avenue) for the existing residents that leads to Flow Park - a park with lavish green zone, equipped with light structure that can be used as playground or exercising zone, newly built on the rooftop of existing garage of residents. The private walkway is designed to be connected to the existing window on the buildings, it is then to be replaced with a new door that leads to the new public space.

Similar treatment are being applied to the buildings on the riverside (Walk-Out Balcony), where residents can walk out and enjoy the fresh air without leaving the housing compound. The walkway functions more than just a passageway to the park / or from the house. With pockets of wider, open spaces, it also caters for communal gathering and socializing, forming a new type of social spaces for the residents in the same neighbourhood, hence realizing the concept of privatised public space as mentioned before.



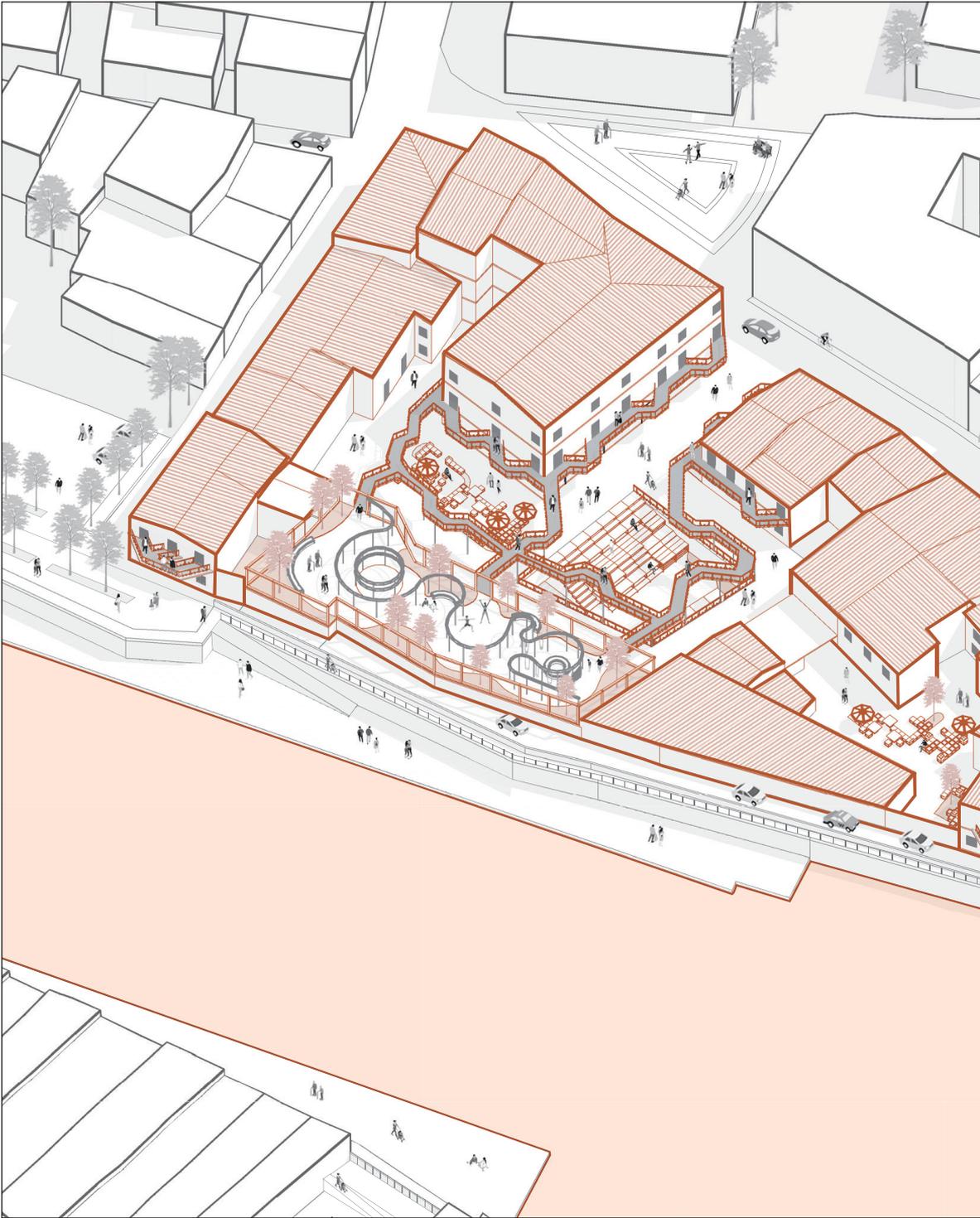
Before & After Proposed Intervention of Tiberio



# **UNFOLD: THE 'RE' CREATION GROUND**

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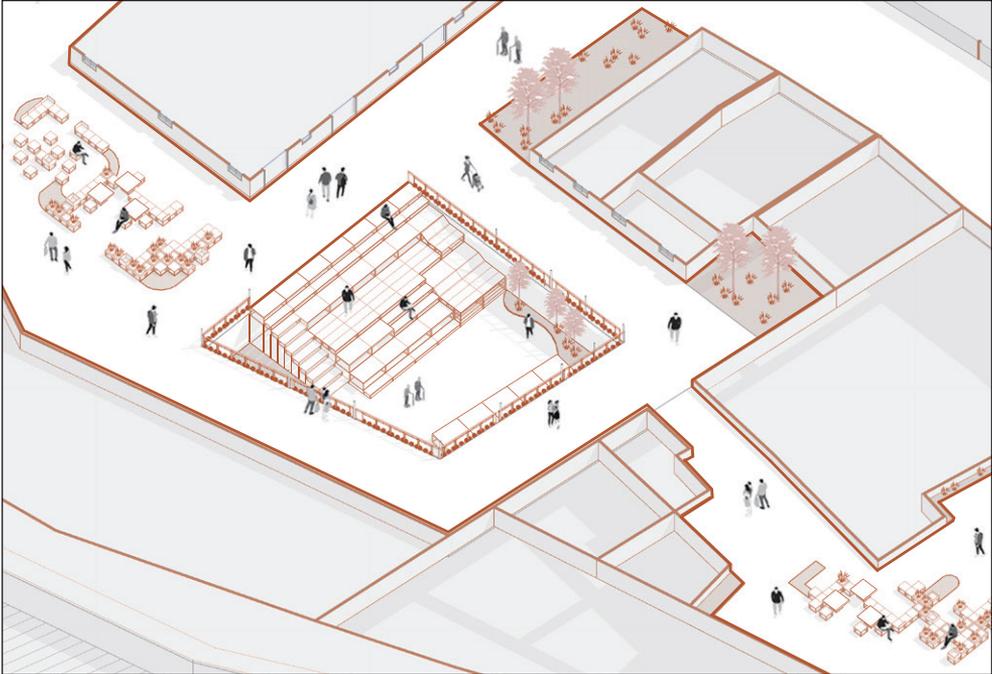
This sub-chapter dives into the complete design project for the regeneration of Tiberio block, with different drawings and visual representations.



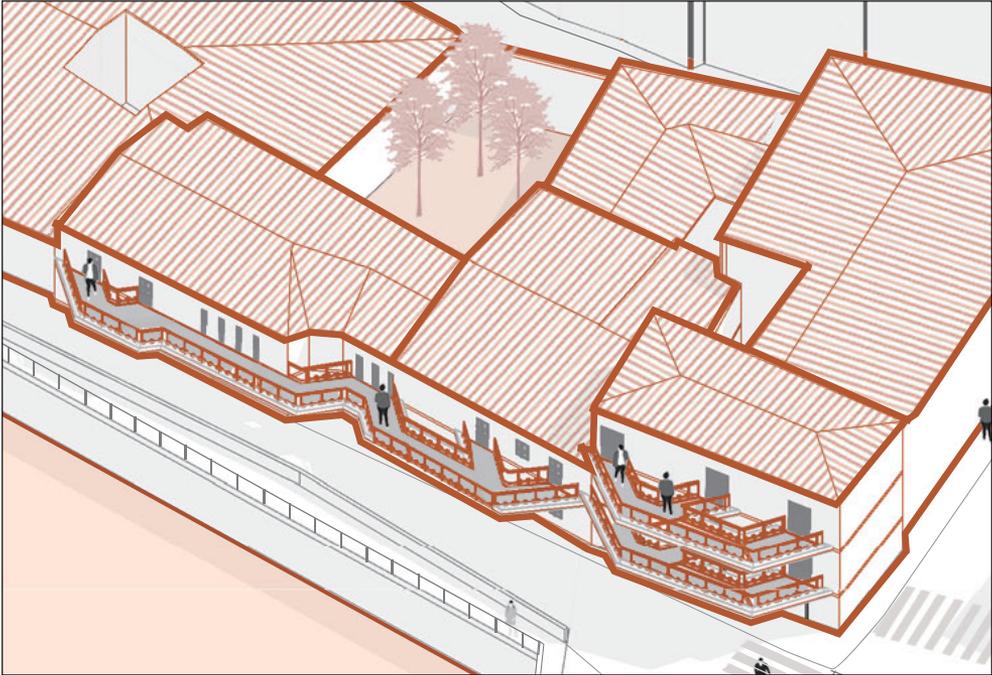


Overview of The 'RE'creation Ground

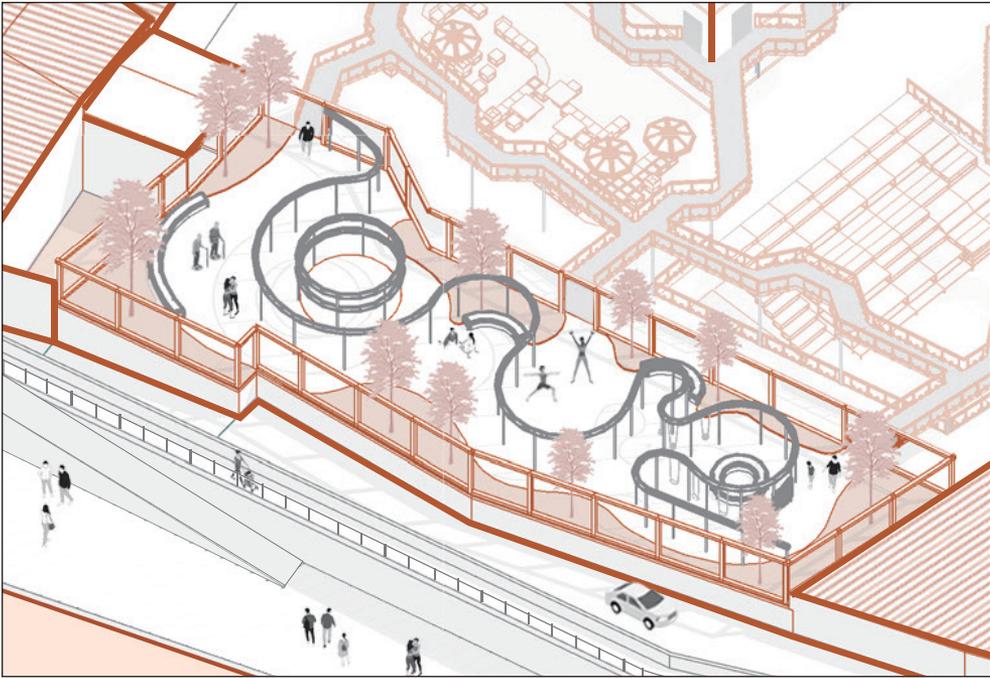
Main Attractions of The 'RE'creation Ground



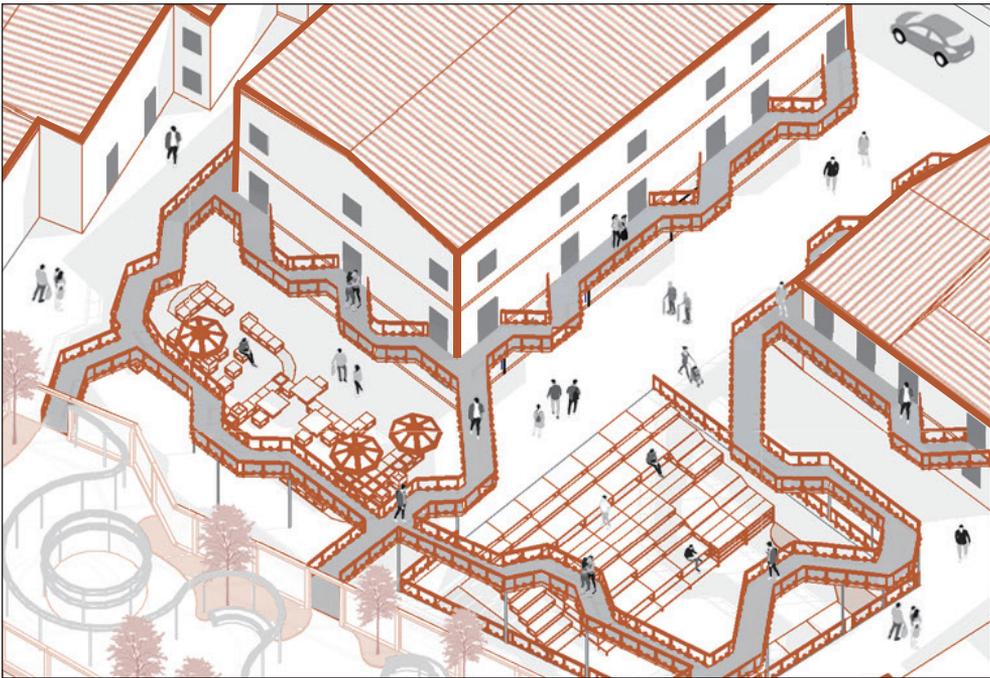
Modular Public Ground



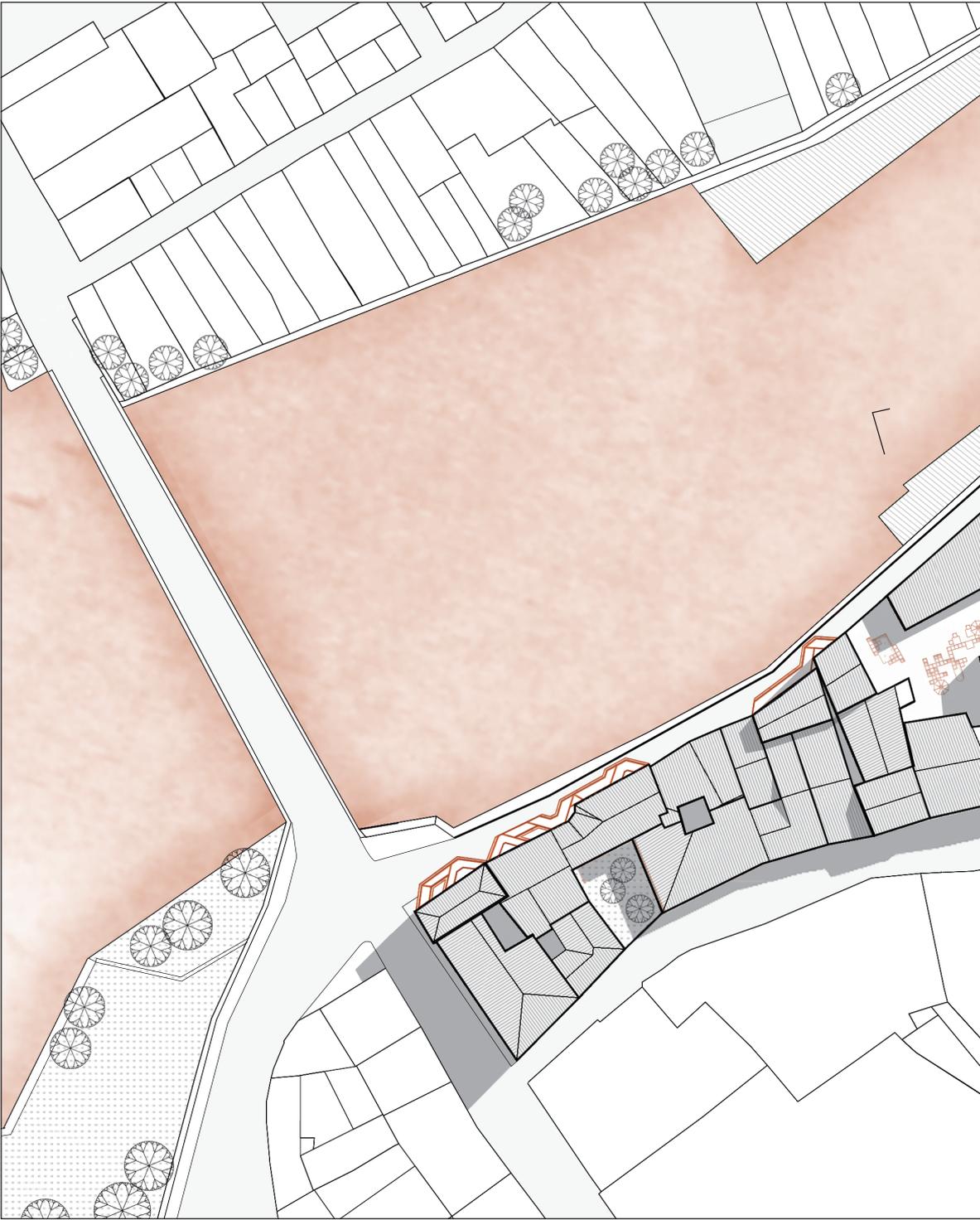
Walk-Out Balcony



The Flow Park

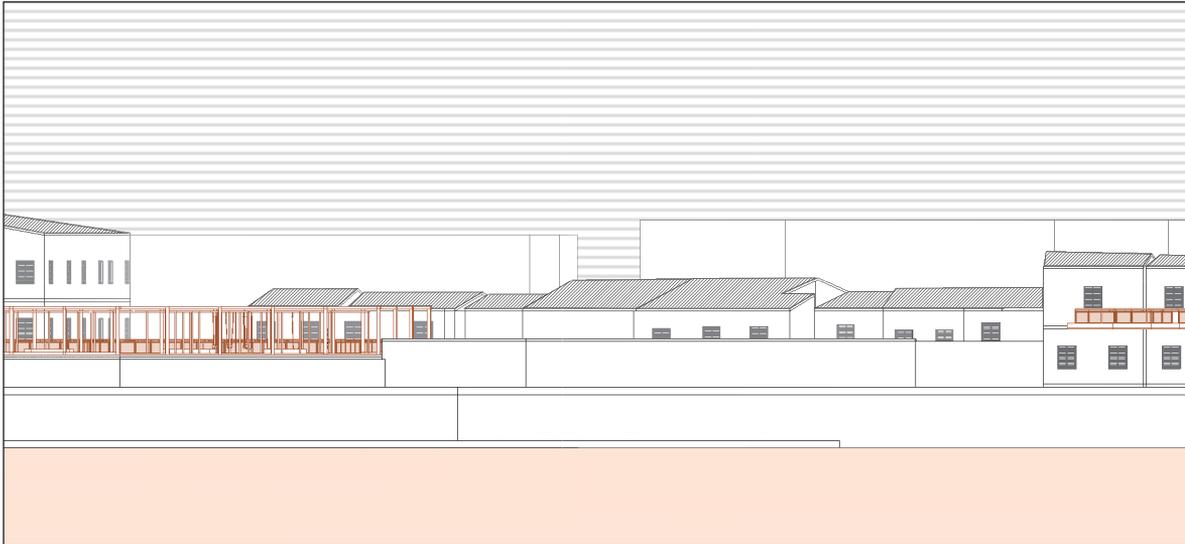
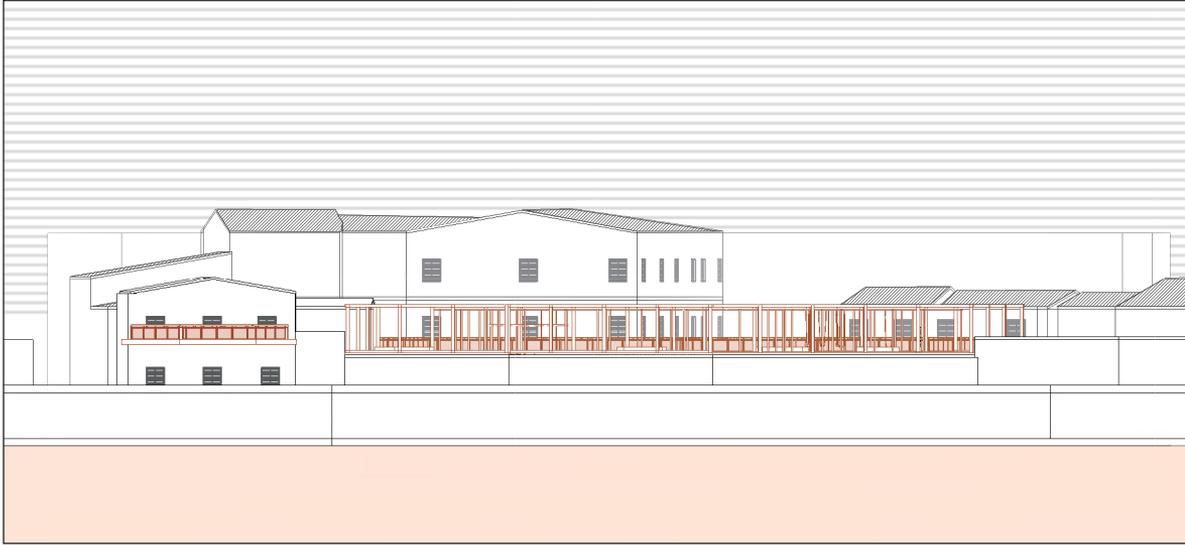


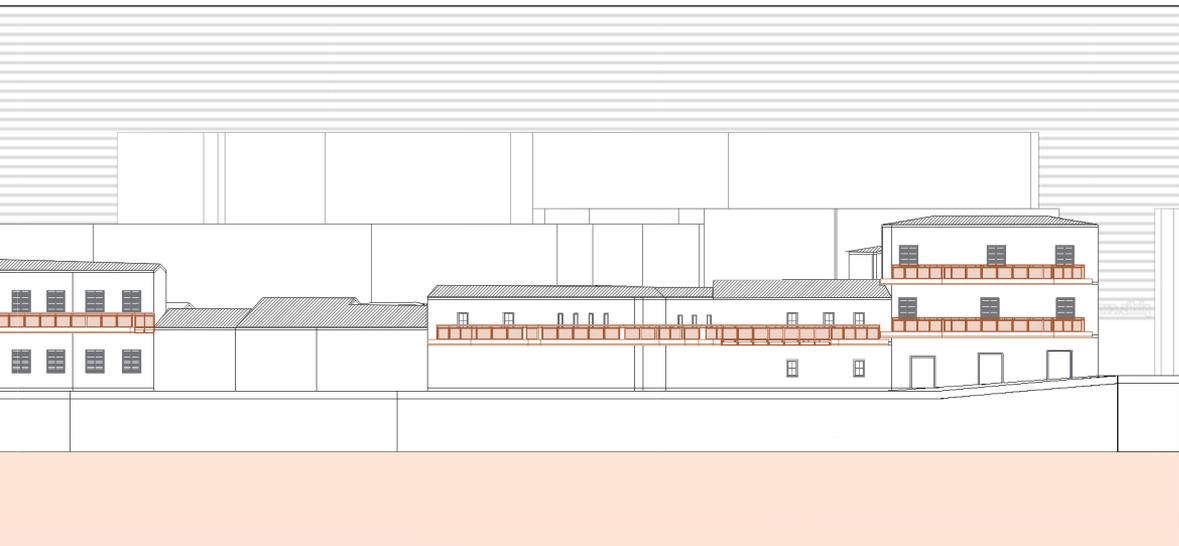
Sky Avenue



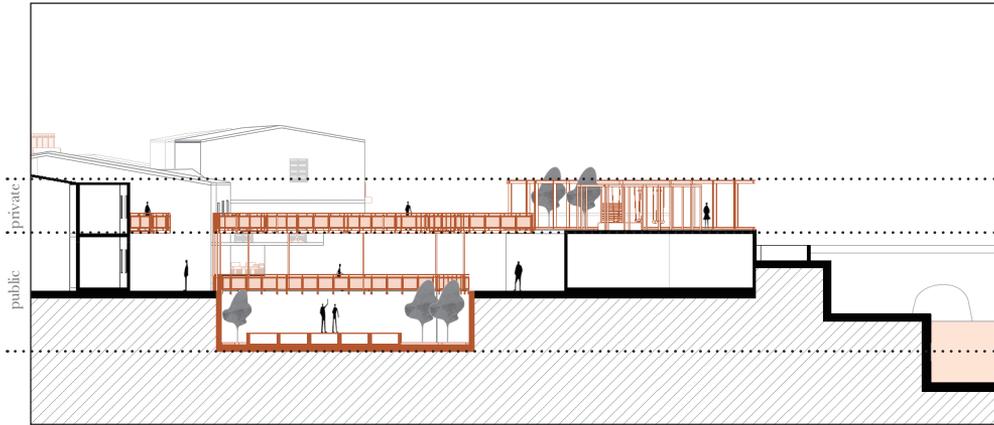


Overall Site Plan, 1: 1000

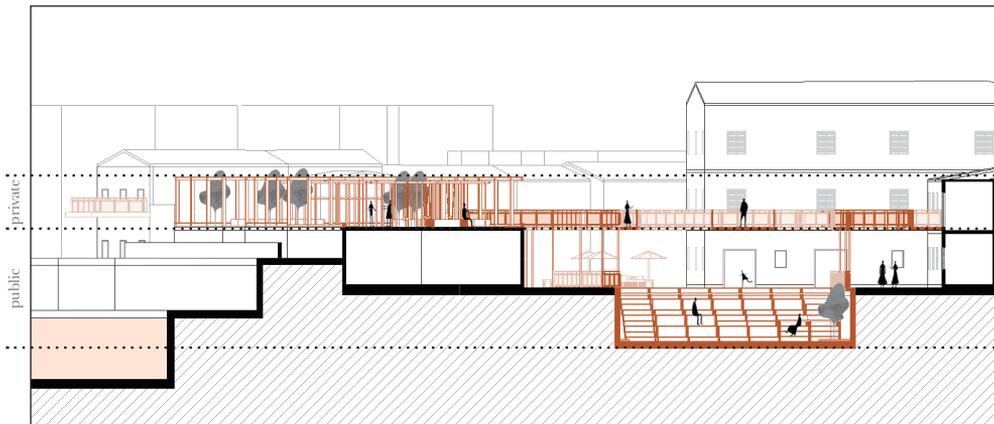




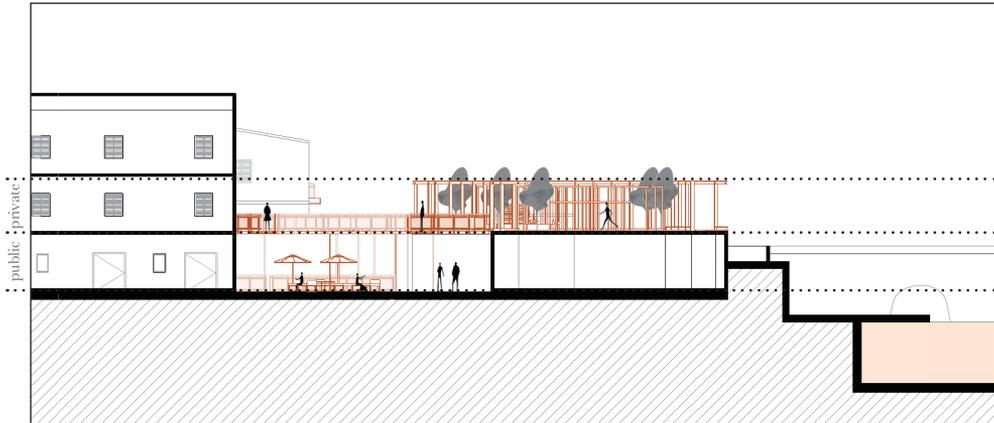
Riverside Elevation, scale 1:500



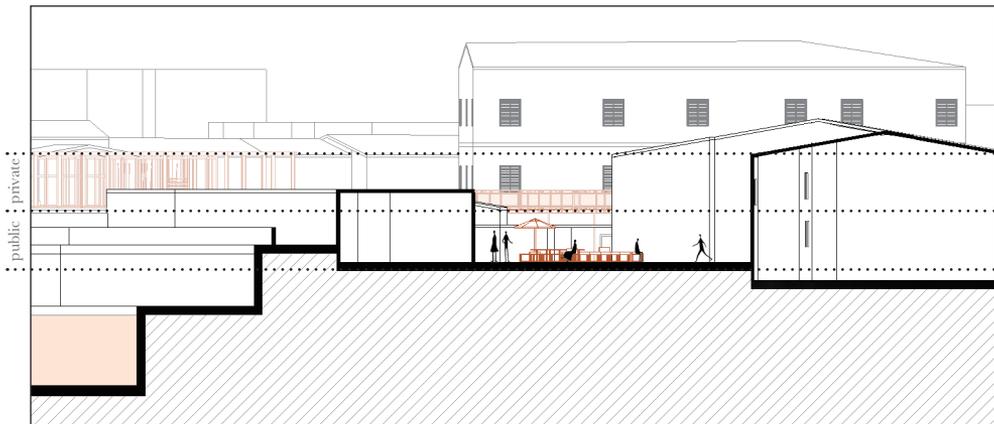
Section 1, scale 1:500



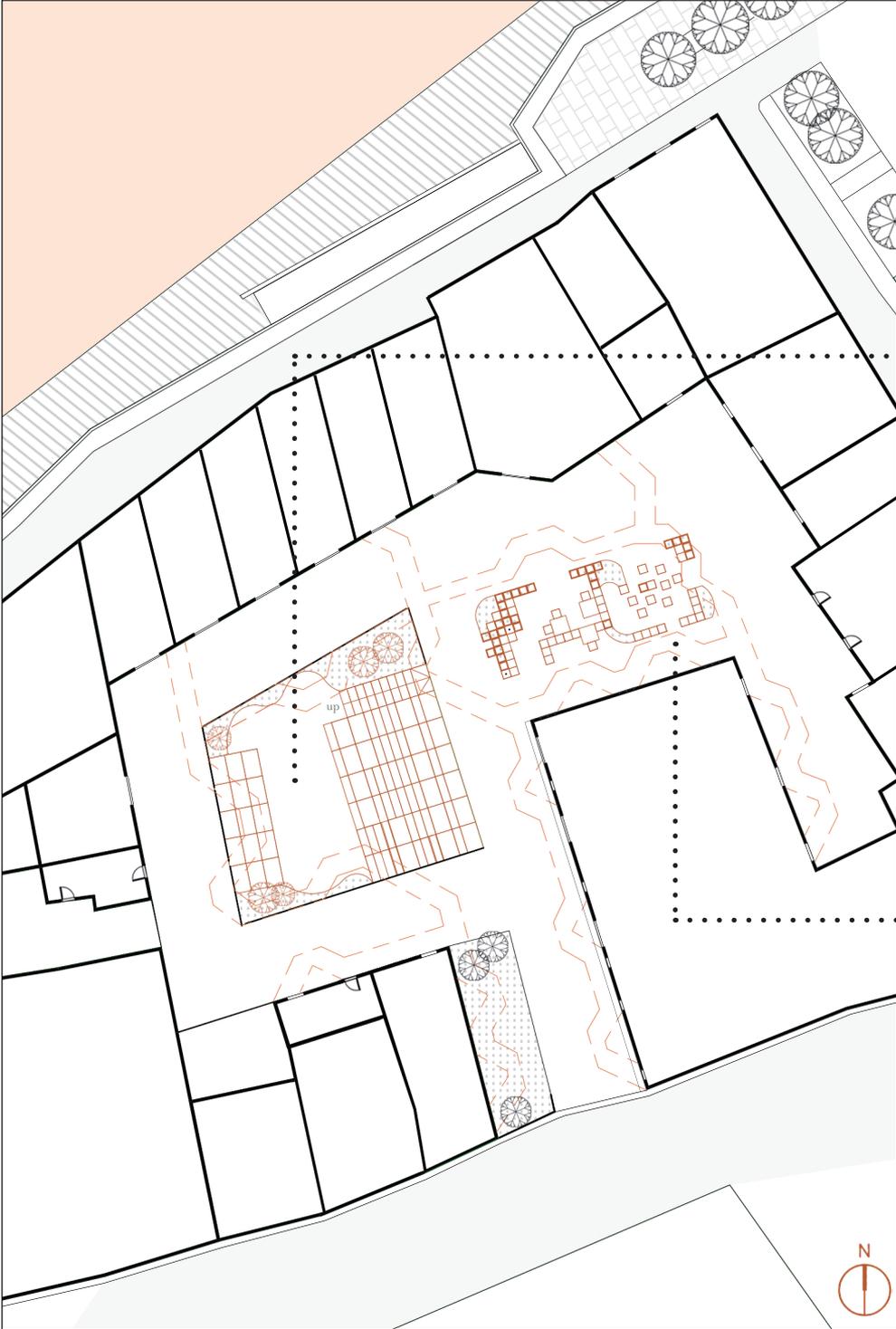
Section 2, scale 1:500



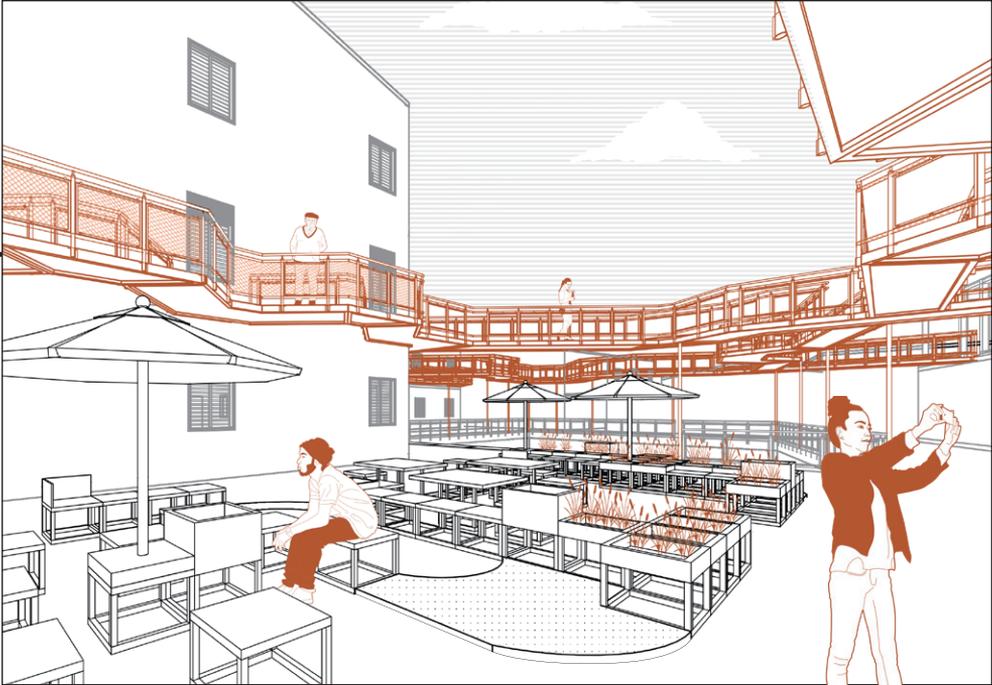
Section 3, scale 1:500



Section 4, scale 1:500



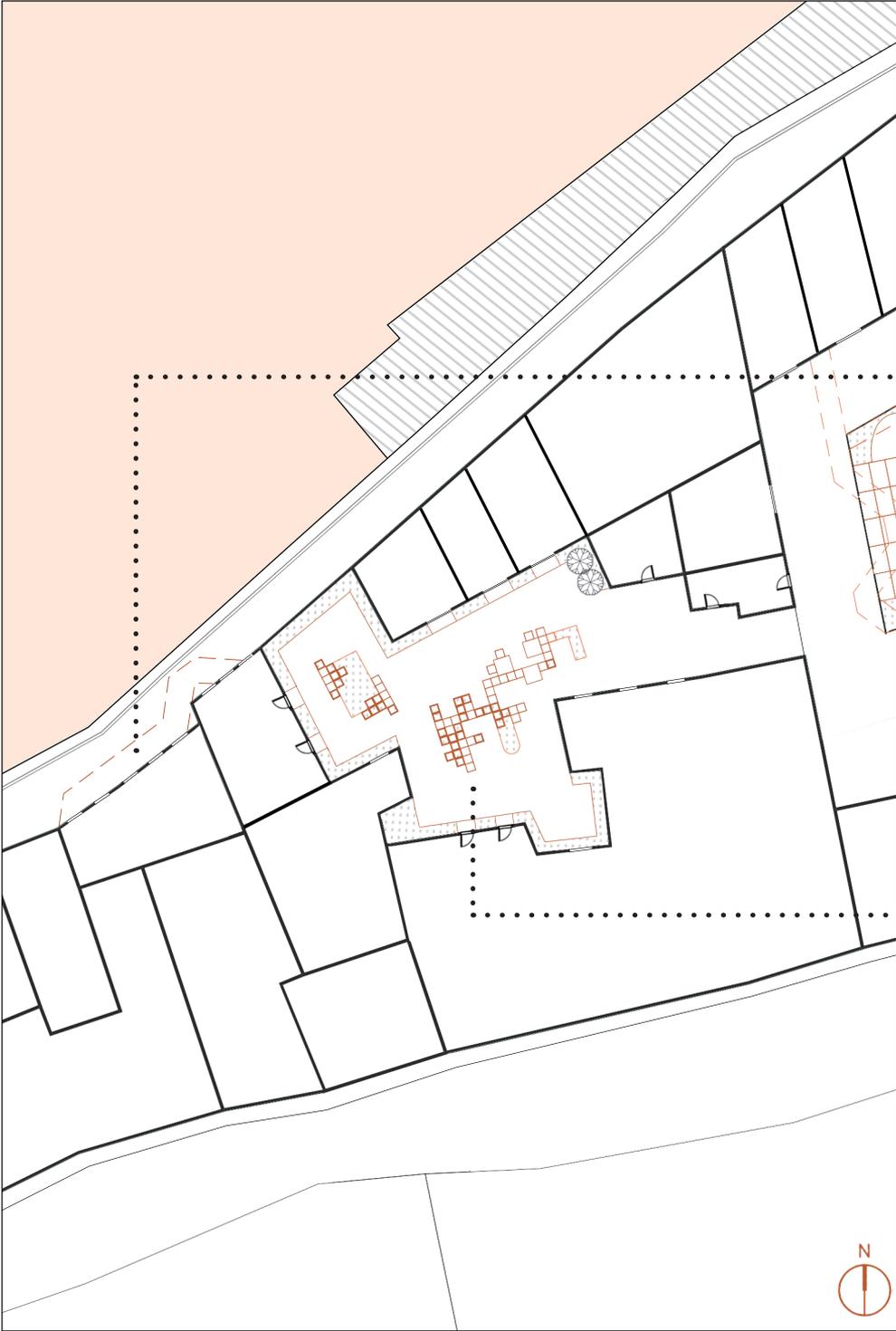
C1 Public - Ground Floor (Modular Public Ground), 1: 500





C1 Private - First Floor (Sky Avenue + Flow Park), 1: 500

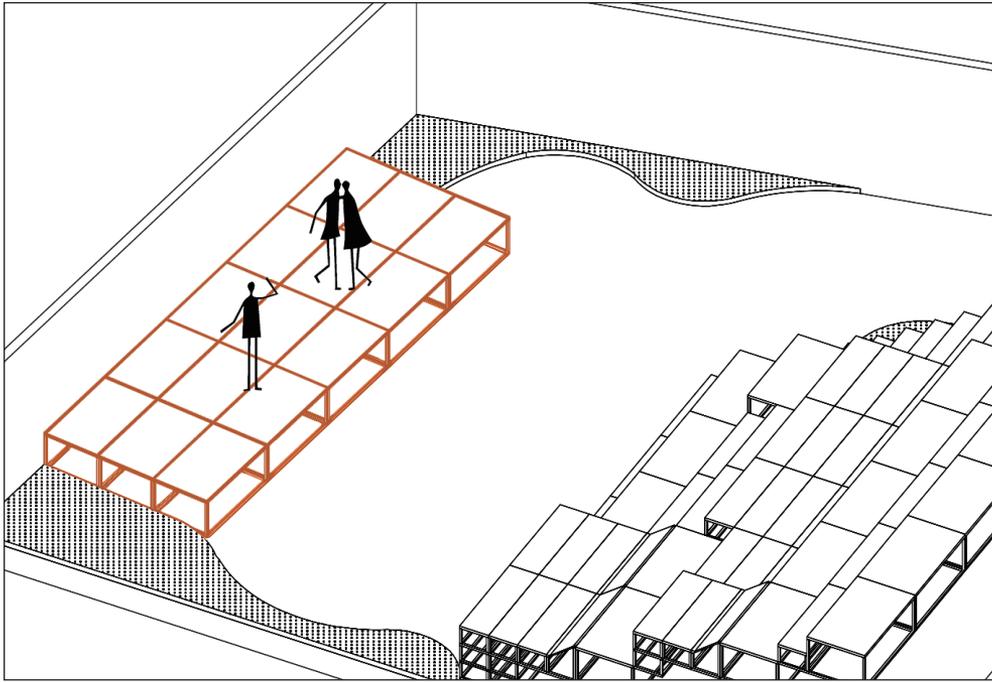




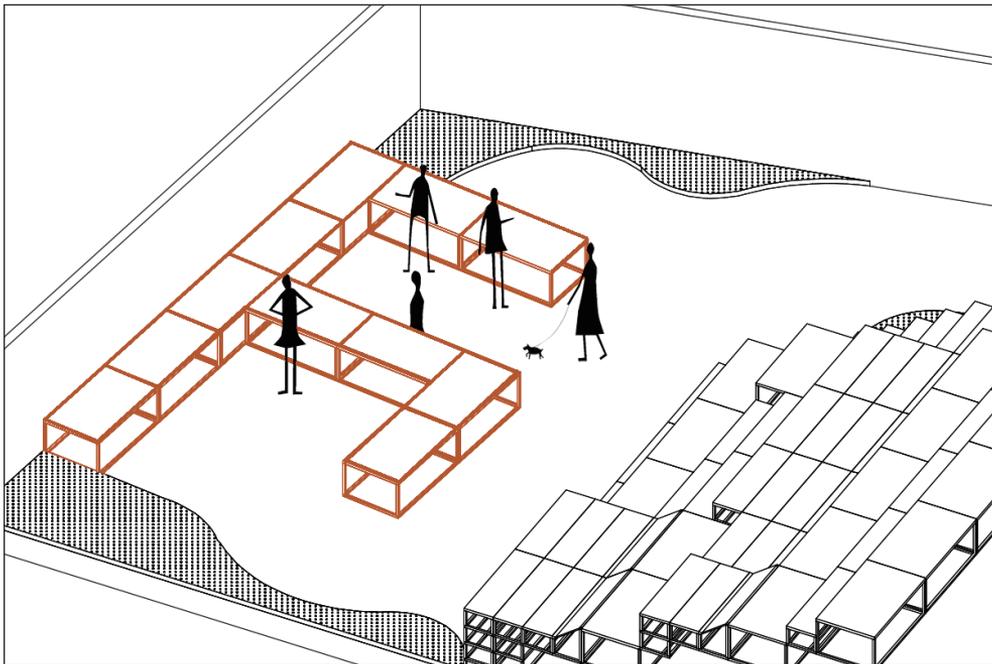
C2 Public - Ground floor (Modular Public Ground), 1: 500



# THE NEW PUBLIC GROUND

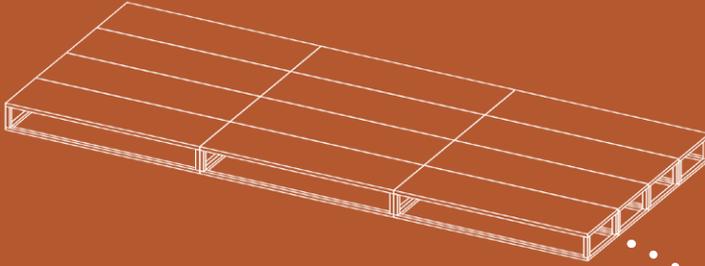


Mini Concert / Public Talk



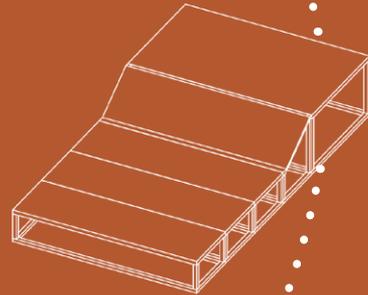
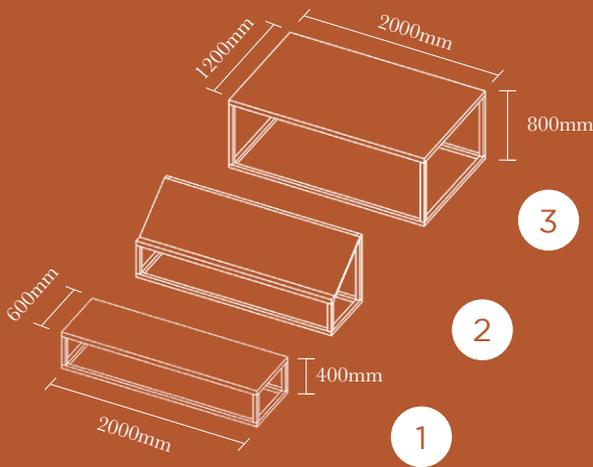
Pop-up Market / Book Market

COMBO 1 : Performance Stage

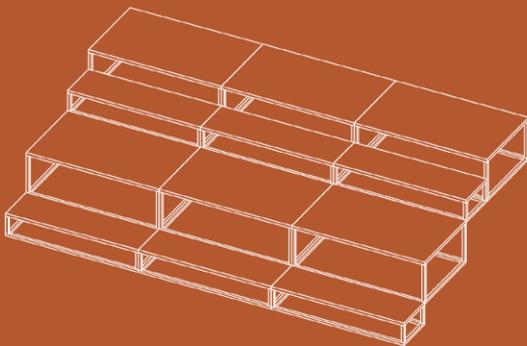


# MODULAR FURNITURE

COMBO 1+ 2 + 3 : Layback Bench



COMBO 1 + 3 : Amphitheatre Seating



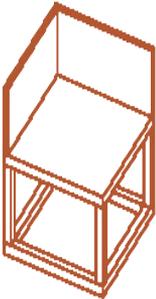
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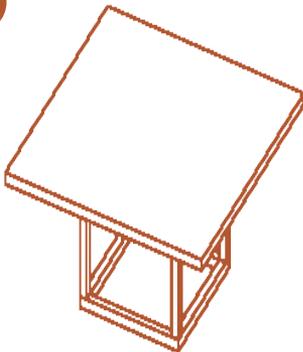
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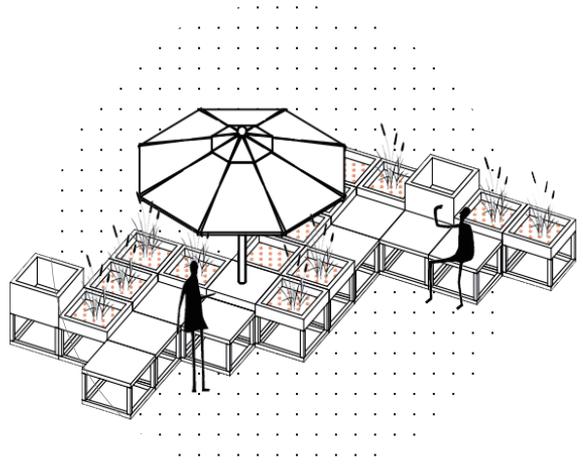


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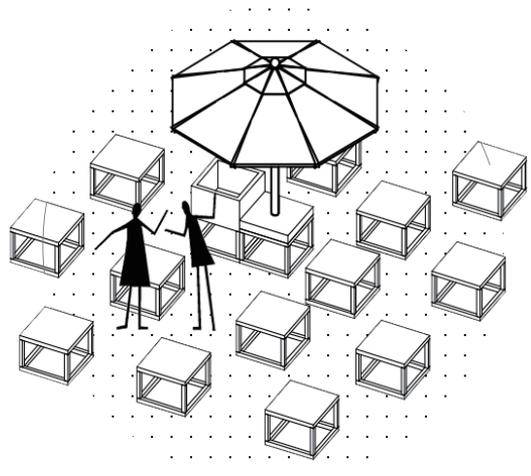


# MODULAR BENCH

bench dimension : 600 x 600 x 400 mm  
table dimension : 1000 x 1000 x 650 mm

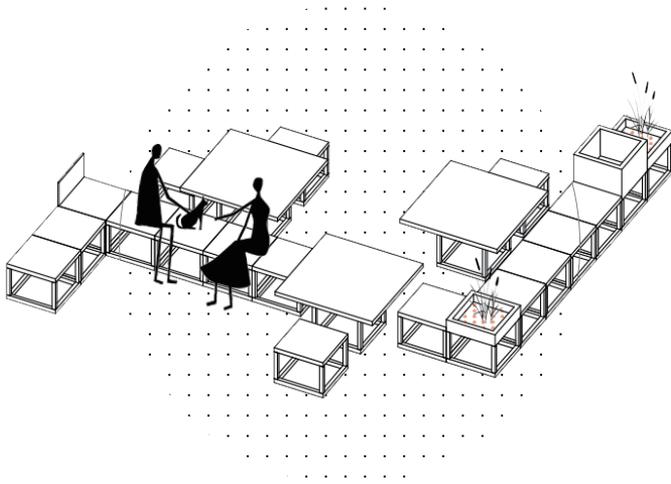


Module 1 : Mini Garden

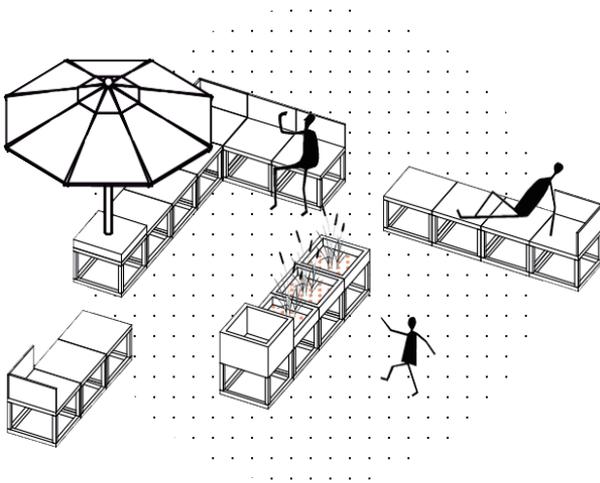


Module 2 : Meeting Area

The modular bench configurations are made up of 7 different modules, users are free to modify or alter the configurations based on their needs. The possible configurations including Mini Garden, Gathering Area and Seating Area and Meeting Area, they are shown in the diagrams below. The versatility of the modules can help to increase the flexibility of the space, and also to provide conveniences to the users.

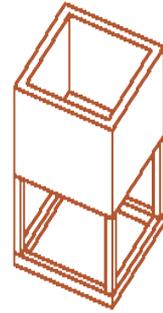


Module 3 : Gathering Area

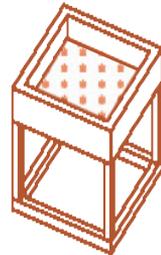


Module 4 : Seating Area

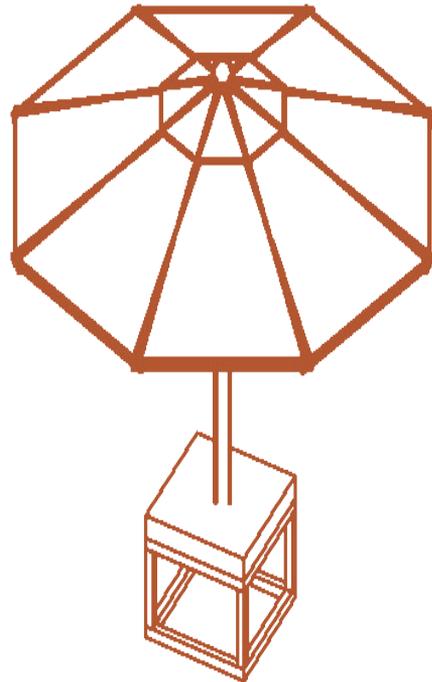
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6

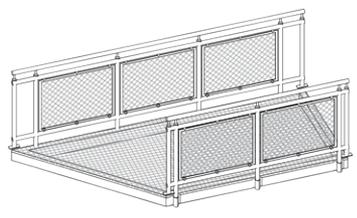


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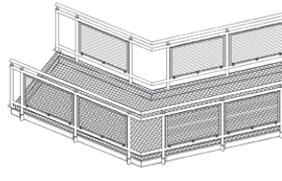


# NEW SOCIAL BALCONY

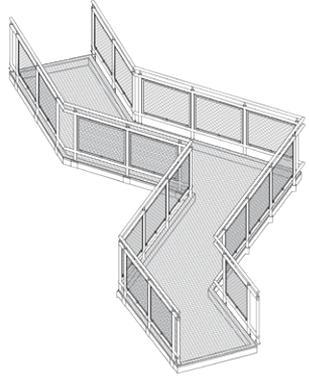
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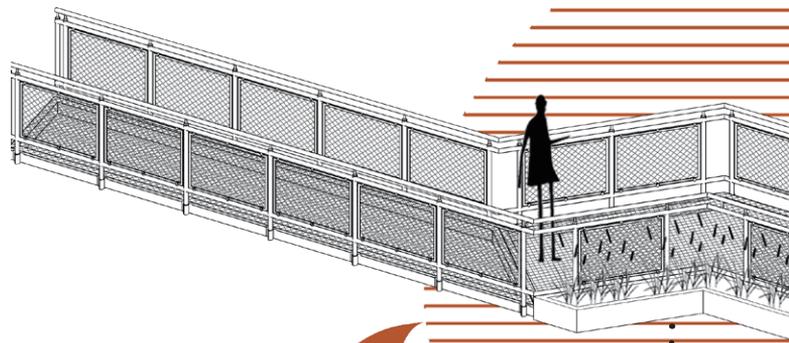
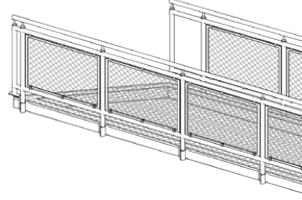
2



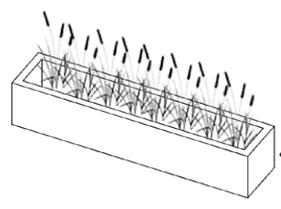
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5

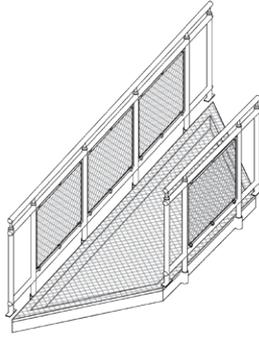
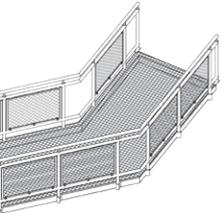


Planter box helps to liven up the surrounding and provide green escape to the residents.

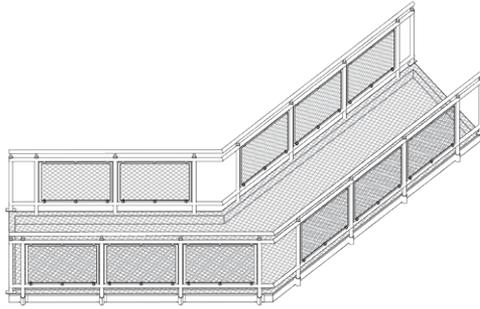
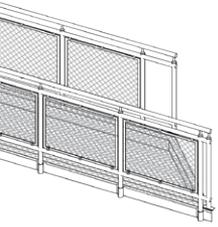


Planter Box

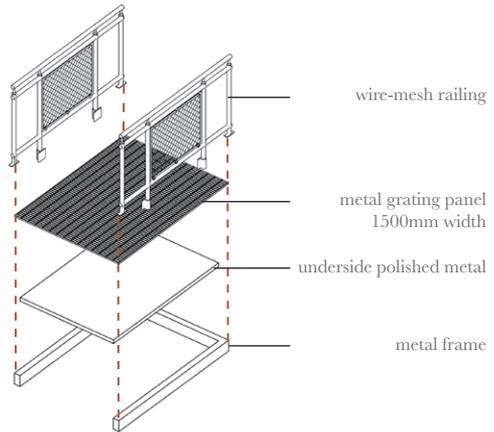
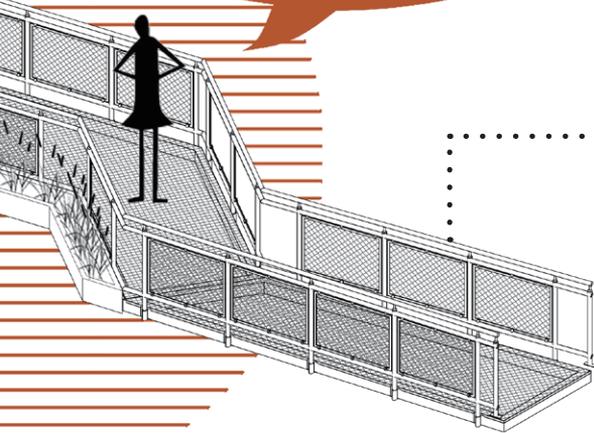
3



6



The underside polished metal that reflects the surroundings and makes the pathway seem less obtrusive when the passerby look up.



Exploded Axonometry of Walkway Module Materials







06

CON-

CLUSION

BEYOND RIMINI TIBERIO



**Future = Variability**  
**Revitalised marginal space with**  
**multipurpose / modular design to**  
**accomodate different scenarios.**

### **Beyond Tiberio\_Rimini**

As important as the built environment, the **marginal areas** are an important tissue in the fabric of the city and needs attention for their development, than just isolation. These residual or otherwise inefficient spaces could contribute to the idea of a **great public space** that will brighten up the neighbourhood.

**Tiberio** as one of the historical areas in Rimini has been chosen as the pioneer to experiment the new approaches in designing the public space, where the street, square, and plaza are usually on the ground, it is now being moved up to the sky. The proposed designs found in this master thesis are drawn to challenge the ordinary image of public space, where the public space (modular skywalk) is designed to be connected to the private homes, to form a new **hybridity of private-public space**. The parasitic-modular skywalk creates a **strong relation between itself and the context**, they also help to create new qualities to the neighbourhood. At the same time, the variability and modularity are also being adapted as the answer for future development in the marginal areas in Rimini. The same design approaches can be easily applied in different parts of the city, as the modular designs are tailored to **accomodate different scenarios** on respective sites.

Some other blocks in the city that contains the similar conditions as Tiberio (fringe fabric with marginal area) such as Via Massimo d'Azeglio, Via Molini, Via Bastioni Orientali, Via Marecchia are being presented on the following pages to showcase how do these parasitic - modular design approaches are being applied and realised throughout the city of Rimini. By intergrating a modular design of 'third places' into the marginal areas, it showcases a whole **new image of public space** and its functionality also helps to **revive** the boring and plain **neighbourhood**, increasing the market value and invent more future possibility for the site.



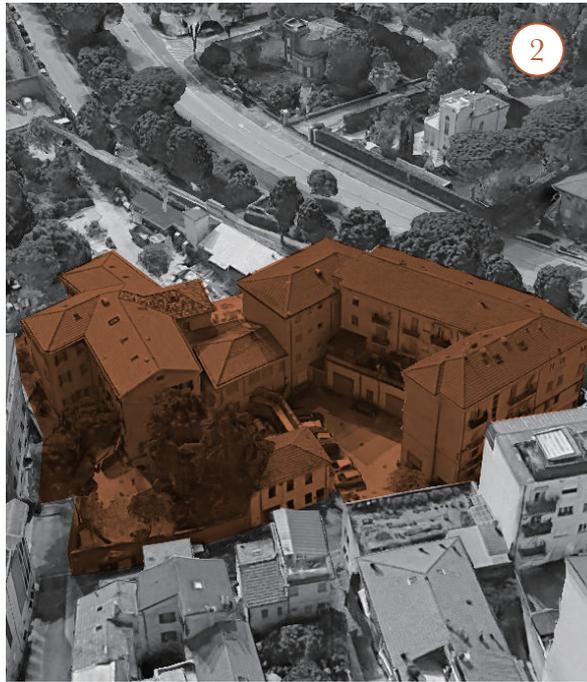
Site - Tiberio

Via Massimo d'Azeglio



Via Bastioni Orientali

Via Molini



Via Marecchia

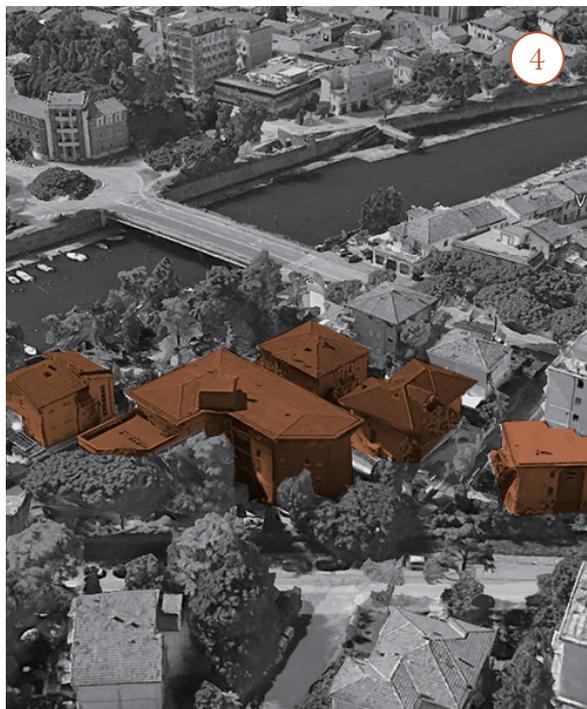


Fig 25 - 28, Current Status of different blocks (Fringe Fabric with Marginal Area) in Rimini, Google Earth Pro (2021)

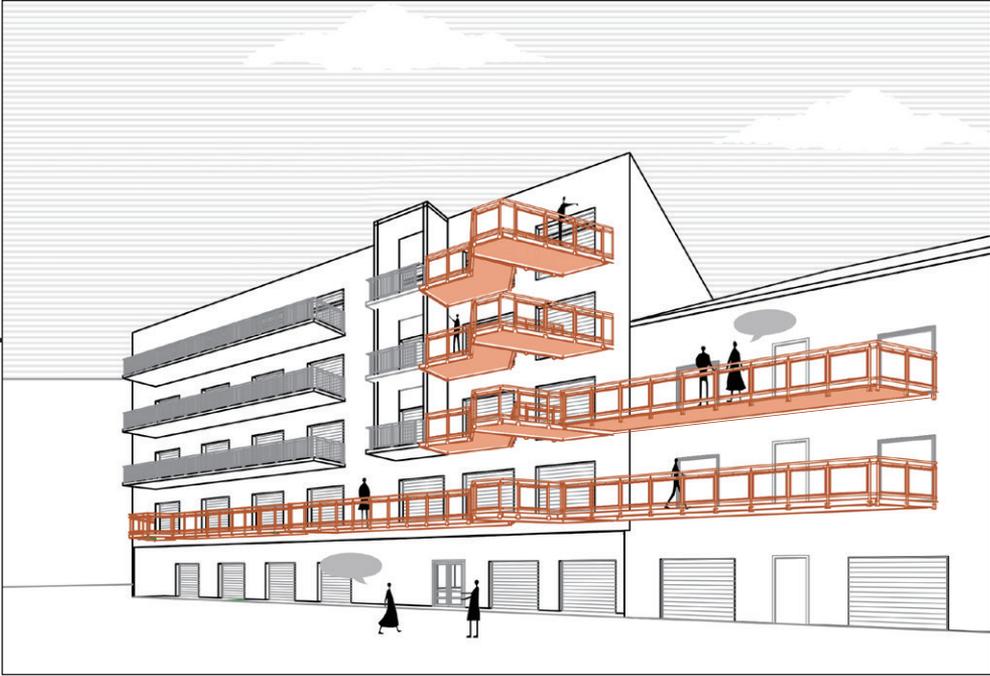
**Before & After Intervention**



Via Massimo d'Azeglio (Before)



Via Molini (Before)



Via Massimo d'Azeglio, with modular walkway



Via Molini, with modular walkway & bench

Different Blocks Before & After Intervention



Via Bastioni Orientali (Before)



Via Marecchia (Before)



Via Bastioni Orientali, with Modular Walkway



Via Marecchia, with Modular Walkway & Bench







**07**

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Source: [https://www.archdaily.com/611966/urban-platform-wins-first-in-lisbon-open-room-competition?ad\\_medium=gallery](https://www.archdaily.com/611966/urban-platform-wins-first-in-lisbon-open-room-competition?ad_medium=gallery)

Fig.24, Axonometry of Current Tiberio, Google Earth Pro (2021)

Fig.25-28, Current status of different blocks (fringe fabric with marginal area) in Rimini , Google Earth Pro (2021)



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