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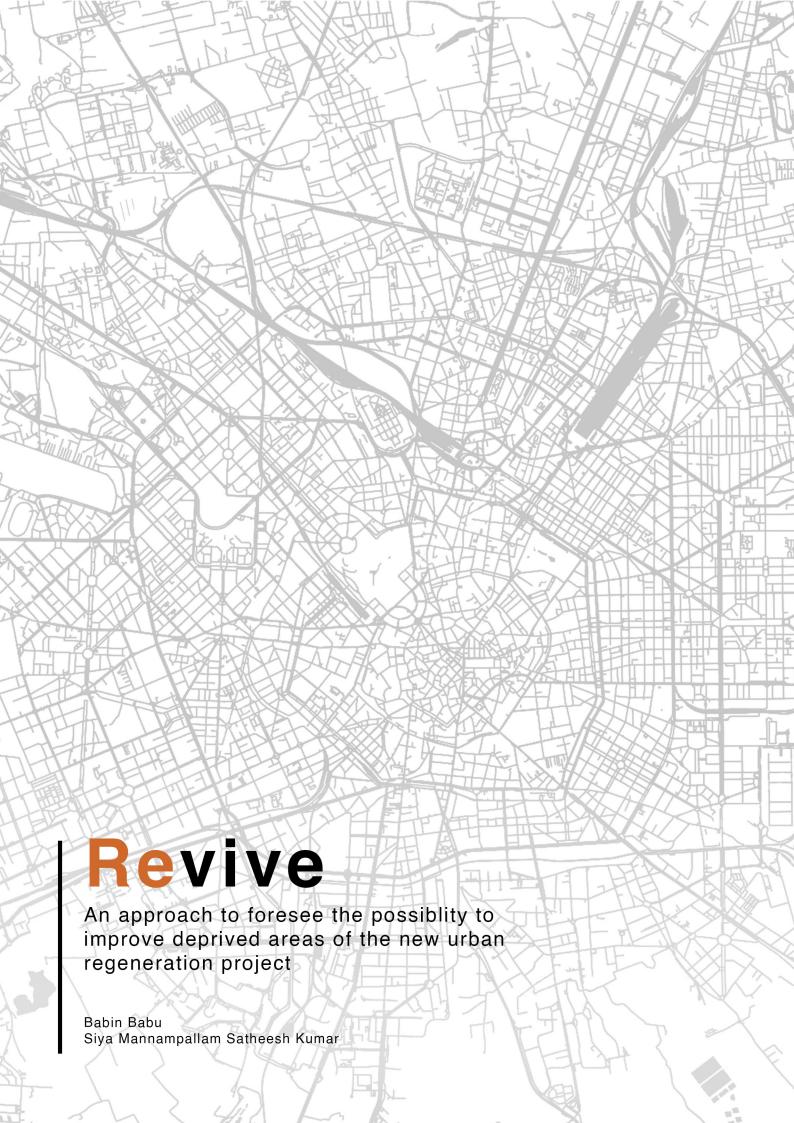
## THE IMPACT OF GENTRIFICATION ON URBAN REGENERATION NEIGHBOURHOOD

An approach to foresee the possibility to improve deprived areas of the new urban regeneration project

Student: Babin Babu (S289746)

Student: Siya Mannampallam Satheeshkumar (S289743)

Tutor: Mario Artuso Co-Tutor: Roberta Ingramo



### THESIS REPORT

2022-23

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## Concept

Before proceeding with the project, some clarification on key topics is required, as some may be understood differently.

#### Regeneration

The concept of regeneration does not stop with urbanism. Couch and Fraser's (2003, p. 2) biological definition is 'regrowth of lost or injured tissue, or restoration of a system to its initial state'. This term also applies to urbanization. So, urban regeneration can be defined as a method of planning that works with changes within the existing fabric rather than planning from scratch (Couch and Fraser, 2003).

#### **Deprivation**

According to Herbert (1975), deprivation "implies a standard of living or a quality of life below that of the majority in a particular society. It involves hardship, inadequate access to resources, and underprivilege" (p. 362). The Deprivation Indices will be used to characterize the primary concerns inside the deprived areas and to select which problems will be addressed in the final framework/design.

#### Gentrification

Gentrification is defined by Smith (1996) as "the process through which poor and the working class suburbs are refurbished by an influx of wealthy investors and middle-class homebuyers." The majority of older structures have been renovated, making housing more appealing to higher-income groups. As a result of the city's regeneration, the first tenants are relocated to cheaper sections of the city because they can no longer afford to reside in the region.

#### **Displacement**

Displacement is defined as "what happens when forces outside the household make living there impossible, hazardous, or unaffordable" by Hartman, Keating, and LeGates (1982). As a result, it is a forced relocation of persons or groups caused by external circumstances. In general, displacement has four effects on people: economic, physical, neighborhood, and individual (Marcusse, 1985).

#### New built regeneration/Gentrification

There are various types of regeneration and gentrification, each with a particular goal and approach. New constructed regeneration/gentrification refers to processes that occur in redeveloped brownfields or vacant lands (Davidson and Lees, 2004).

#### **Individual Outcome**

Individual outcomes are used. Individual outcomes are life opportunities characterized by a number of criteria such as health, employment, money, education, and so on. In literature research, this term refers to the effects of deprivation on individual residents.

## Summary

Milan developing is а constantly city that used to house а varied group of people. However, the city's demographics are shifting, and Milan is becoming a metropolis focused on upper socioeconomic groups. One of the mechanisms causing this transition is the redevelopment of vacant areas, which are typically regenerated into rich regions focusing on higher socioeconomic categories. Those revitalized places are better and more successful in both physical and economic terms. However, in addition to these benefits, there is a disadvantage to this development in that the majority of the original population have been displaced. This is due to increased property values in the area. The surrounding and mostly impoverished areas see an increase in housing and amenity values as well. The majority of residents are unable to deal with the rise, resulting in the displacement of the original population.

To avoid Milan becoming a city for the wealthy, this thesis investigates how deprived areas can benefit from new regeneration projects. thereby limiting the amount of displacement. main research question investigated is: "How can interventions in public space contribute to minimizing displacement caused by new built projects?" regeneration Scalo Porta Romana developments are used as a test case to find an answer to the research question, which will be the next new built regeneration project. To find an answer to the main question, five sub research questions are formulated, each with a different goal and methodology.

The first sub-question used to answer the main question is, "How can areas be regenerated without displacing the original residents?" According to literature research, mixed housing policies are frequently used to regenerate deprived This regeneration method areas. appears to only affect the symptoms of deprived areas, without addressing the mechanisms that cause deprivation. As a result, various authors, including Manley et al. (2011) and Chatterton and Bradly (2000), advise focusing on population empowerment in terms of education, employment, and health. This improves individual outcomes, making residents more mobile. . By doing so, the causes of deprivation in the area will be addressed rather than just the symptoms.

According to research, green spaces have a positive impact on health because they improve air quality, encourage people to be physically active, reduce stress and fatigue, and promote the formation of social ties. It is critical that people use the spaces in order to maximize the benefits of green spaces. People should be encouraged to use green spaces by improving accessibility and quality when focusing on the empowerment of health through green spaces. Furthermore, people can be empowered in terms of employment by creating work that matches the current population's skills. It is critical that jobs are not taken by people from outside the area.

An urbanist's restrictions in empowering the population are that they can either provide places for empowerment to occur or alter the urban fabric to produce conditions favorable to empowerment. As a result, interventions proposed by urbanists are more effective when accompanied by interventions from other disciplines that have a more direct influence on empowerment.

The second research question is, "What are the strengths and weaknesses of the new built regeneration proposals made for Scalo Porta Romana?" A literature research of previous new built redevelopments in Milan is conducted, as well as a specific literature study on the case of the Isola. According to the study. such regeneration projects cause a shift in population structure, focusing on higher socioeconomic groups. As a result, people from lower socioeconomic groups are forced to relocate to other areas. Because the analyzed cases are similar in nature to the developments in Scalo Porta Romana, it is likely that the people who live in the development's vicinity will be displaced and forced to relocate to other, less expensive areas.

Scalo Porta Secondly, the Romana development is examined. The entire unused Rail Yard area will be transformed mixed-use/high-rise into а area aimed primarily at people from higher socioeconomic groups. People who live in the surrounding areas will find this area not interesting because it does not meet their needs. However, the redeveloped area's public spaces provide opportunities for a broader range of people. This public space could be used by residents of the surrounding areas if it contains interesting amenities.

The third research question is, "What are the physical and socioeconomic characteristics of the Scalo Porta Romana - Corvetto area, and what mechanisms caused this?" The morphological analysis revealed that the project area will have two main centers: Scalo Porta Romana and Corvetto. Scalo Porta Romana is the center that focuses on the higher socioeconomic groups, while Corvetto focuses on the more deprived groups.

Based on the urban fabric between these two cities, it is possible to conclude that there is no direct connection between Scalo Porta Romana and Corvetto. This is primarily due to the lack of a continuous path connecting them. Furthermore, the morphological analysis revealed that the area between Scalo Porta Romana and Corvetto is primarily used for dwelling. There are some smaller shopping areas that serve the local community, as well as one larger park, but the rest of the area is mostly residential.

The fourth question is, "Which physical interventions within the project site's existing urban fabric could improve the individual outcomes of the inhabitants of Corvetto and its surrounding deprived areas?" The proposed design for the Scalo Porta Romana - Corvetto area aims to improve the area's health and employment outcomes, as a literature review and analysis revealed that these domains require improvement. This is accomplished through the proposal of physical interventions in the existing urban fabric. The interventions are created by analyzing the characteristics of the area and reacting to the current situation. The plan capitalizes on the growing popularity of small businesses in the Corvetto to attract people from Scalo Porta Romana and provide an economic boost to the center. Because there is no good connection between those two centers. the framework proposes interventions in the existing urban fabric to create direct routes between them. These are created by adding a continuous path and path markers, as well as improving existing public spaces. This intervention will make it easier and more willing to move between the areas. Furthermore, the interventions undertaken to establish the route improve the urban fabric on a smaller scale. The public space will be improved, and residents of the surrounding areas will be able to move more easily through the area. The residents of the surrounding areas will be encouraged to use the green and thus benefit from the health benefits of green spaces. Aside from that, the interventions will establish a direct path to the Scalo Porta Romana and its Park. Moving along the route will also have an impact on health outcomes because users are physically active.

critical intervention One has been described in detail, which expands on the interventions in Corvetto, in which they establish a direct connection to the center's core. Furthermore, they create some business spaces that will strengthen Corvetto's identity and encourage more people from Milan to use the amenities that the center provides. The increased number of visitors to Corvetto will stimulate the local economy and have a positive impact on employment outcomes.

The final question is, "What elements of the intervention for the Scalo Porta Romana - Corvetto area can be translated into interventions that can be useful for future projects in similar situations?" investigation The of this auestion yielded eleven conclusions, which are summarized below.

- 1. New-build regeneration projects can create opportunities to improve nearby deprived areas.
- 2. Regeneration of public space can improve individual outcomes and help to reduce displacement.
- 3. New built regeneration projects can provide facilities for nearby impoverished communities, reducing value increases in those regions.
- 4. Interventions that address larger-scale concerns can be used to effect change on a smaller scale.

- lt is critical to retain these characteristics when intervening in the urban fabric to attract more people from outside the area because of its interesting characteristics.
- 6. Minor changes to the current urban fabric can improve the appeal of public space, boosting its utilization.
- 7. When upgrading deprived areas and improving focusing on the status. population's empowering the original population is more beneficial than developing a mixed population.
- 8. People can be empowered in terms of employment by shaping the urban fabric in such a way that it encourages an increase in work.
- improving public 9. Increasing and spaces will encourage an improvement in individual health outcomes.
- 10. Paths and path markers can be used to influence movement within the existing urban fabric.
- 11. Existing urban fabric elements can be used as intermediate goals to increase people's willingness to move and guide them in the right direction.

The main question is answered in various ways by answering the five sub-research questions. This resulted in interventions for the specific case of Scalo Porta Romana - Corvetto, but also in conclusions that can be used in similar projects to help minimize displacement by focusing on improving individual outcomes through population empowerment in terms of health and employment.

# Chapter 01



Figure 1 - Ariel view of Milan [Source: theconversation.com]

## INTRODUCTION



Gentrification has captured the attention of urban scholars, policymakers, and activists all over the world. As neighborhoods are revitalized as a result of increased investment and the influx of wealthier residents, main issue of the displacement of existing, often marginalized, communities emerges. Gentrification-related displacement has far-reaching socioeconomic consequences that necessitate careful consideration and proactive interventions.

This thesis report aims to look into the complex issue of displacement caused by gentrification while investigating effective interventions to mitigate its negative effects. This research seeks to provide a comprehensive understanding of the challenges and potential solutions associated with gentrification-induced displacement by examining the root causes of displacement, analyzing the impacts on affected communities, and studying successful intervention strategies.

#### 1.1 Aim

The thesis investigates ways in which large regeneration projects can be built without displacing the original population in order to prevent the less fortunate from being displaced from the city and to minimize the transition towards a city for higher socioeconomic classes.

### 1.2 Objective

The project takes up the issue of gentrification and displacement in deprived areas caused by new built regeneration projects. These developments improved the physical economic aspects of those underprivileged areas, but because of this caused also polarisation and displacement of the original population. Because of this, the people from lower socioeconomic groups were forced to move to cheaper parts of the city, or even to other cities. This displacement has a big impact on the dispacees and affects them in multiple ways. This thesis develops interventions aimed at reducing displacement induced by new built regeneration projects.

## 1.3 Research Question

The primary research question that led this study was: How can improvements in public space help to reduce displacement caused by new build regeneration projects?

To find an answer to the research question, the Scalo Porta Romana development is used as a test case, which will be the next new built regeneration project. In order to find an answer to the main question, five sub research questions are formulated that differ in their aim and methodology. The detailed sub questions are provided on chapter 3

### 1.4 Methodology

This thesis addresses the general problem of population displacement caused on by newly built regeneration projects. A framework is suggested after studying the Scalo Porta Romana - Corvetto area in order to develop generic interventions. Later, the interventions are transformed into additional conclusions that may be applied to projects of a similar nature. Below is a description of the project's methodology.

The project's first phase involved identifying the issue statement and looking for a feasible site for study and design. The problem statement, research objective, and questions came from this. The following phase was divided into two main sections. The first was the analysis section, which included case studies, morphological, socioeconomic, historical, and policy analysis. The other component was derived from a literature review. The concept for the project was developed using the results of these two different kinds of research. This idea is utilized to establish the key details and offer a framework for the Scalo Porta Romanaregion. In-depth Corvetto literature research and case studies were also part of this process and were used to support creative decisions. This design process was repetitive, which implies that choices are evaluated to determine their effects on a bigger scale after being made on a smaller scale. Through this repetative process, we were able to improve the project's coherence and reexamine earlier decisions. In order to apply the results of this intervention in other designs, this framework for the Scalo Porta Romana - Corvetto area is examined in the last section (see figure 2).

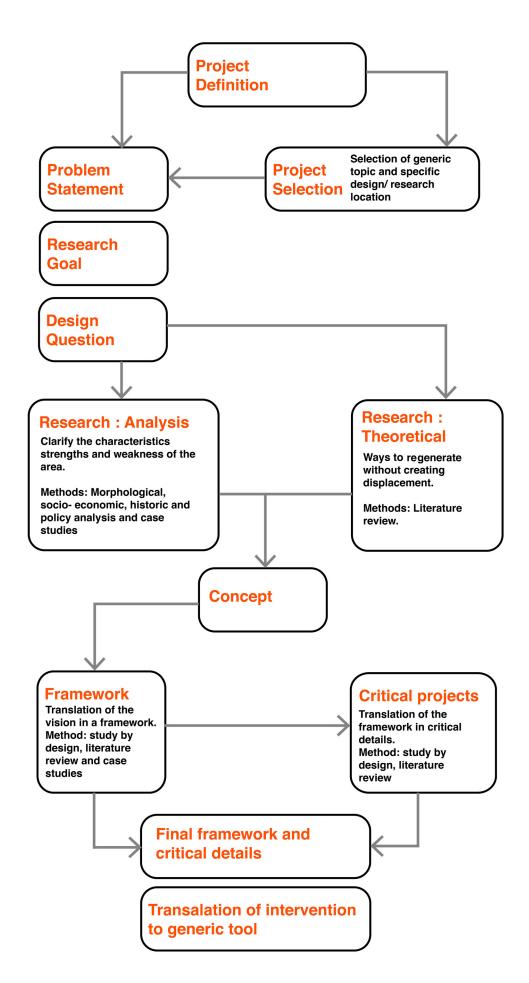


Figure 2 - Methodology [Source: Own Illustration]

#### 1.5 Context

Milan is Italy's largest industrial city, with many different industrial sectors and has a historic city center with tall, interesting buildings and palazzos. Milan is an Italian city that is constantly growing and is known for its demographic extremes. On the one hand, it is the most progressive city in Italy, and on the other, it contains many deprived areas within Milan. The city tries to improve the city through large regeneration projects in order to facilitate better living conditions.

The majority of these regeneration projects appear in disadvantaged areas with the intention of improving those areas and adding various new values to them (Fraser, 2012). The redevelopment of the Centro Direzionale (near Isola) as one of Italy's key business centers is a good example of this.

Aside from the good changes at the neighborhood. and sometimes city. national levels, there is a disadvantage to this type of development. Due to the economic and physical success of the developments, the housing and amenity values rise. This creates a gap between the original, usually poor population's requirements and what the projects give. As a result, the original population is pushed out of these places because they are unable to withstand the value fluctuations and are compelled relocate to cheaper locations such as the city outskirts or even to other cities. People who manage to stay experience social polarization as a result of lifestyle and socioeconomic status inequalities (Brownill, 1990). These kinds of shifts occur across the city, resulting in a move toward a city for the rich.

Gentrification is now a global urban strategy linked to a new globalism and a related new urbanism."

- Neil Smith



Figure 3 -Logan Square Activists To March For Development Without Gentrification

[ Source : Block Club Chicago ]



Figure 4 - Gentrification Rally Protest in NewYork

[ Source : Medium.com ]

The next big New built regeneration within Milan will take place in Scalo Porta Romana (Olymic Village for 2026 winter Olympics). Looking back to other developments of this kind in the past, there is a major chance that also this development will generate displacement polarisation. The redevelopment of Scalo Porta Romana will create a prosperous area, that has a strong connection with the city centre and most probably will be a success in physical and economic terms. Regrettably, this development does not react on its context. which will result in a strong polarisation between the inhabitants of Corvetto and Scalo Porta Romana. Besides this, the development will most likely cause displacement of the original residents, caused by rising tract prices and the increase of expensive amenities combination with the increasing pressure of redevelopment.

Big regeneration projects will always create some displacement, because the dwelling values in the surrounding areas will rise and the mismatch between the new amenities and the original population. However this does not imply that no action is needed, because successful regeneration should also come with positive effects for its context. In this, the original residents should not be the victim of displacement but they should face the positive effects.

Therefore, the goal for the thesis is to find a way in which the redevelopment of Scalo Porta Romana makes the inhabitants of the surrounding areas profit from the developments rather than being displaced.

### 1.6 Design **Outcome**

The research findings and proposed site actions for the are converted into interventions that may be used comparable situations to reduce displacement and enhance livina conditions for the original community. The aim is to empower deprived areas, enhance individual outcomes in terms of health and employment, and create a more inclusive city that mitigates the adverse effects of gentrification.

# Chapter 02



Figure 5 - Communities opposes proposed luxury housing development in San Francisco

[ Source : Bayview National Black Newspaper ]

## GENTRIFICATION



First, this thesis will examine the word gentrification and who is involved in the process. Gentrification became an umbrella concept as its meaning evolved over time. The first challenge in studying the gentrification phenomenon is to define its meaning. There is clearly a large and diverse literature on this topic, which has been generated over the last six decades by various scholars and researchers; consequently, it is not always clear when and whether it is acceptable to discuss gentrification. Simultaneously, it attempts to critically assess the existing gentrification literature through the contributions of some of the subject's most recognized authors.

This chapter traces the gentrification phenomenon in the Italian context and is followed by an introduction to the Milanese setting, which serves as a bridge to the following section of this work.

## 2.1 Defining Gentrification

The term is now used to describe a variety of urban fabric processes that affect the population of a given area. Because gentrification is triggered by various mechanisms and occurs in various locations, the concept needs to be differentiated. Ruth Glass, a British Marxist sociologist, coined the term "gentrification" in the 1960s while researching the transfer of ownership of mews and cottages in the heart of London.

For almost ten the years, term "gentrification" appeared to be limited to inner-city London boroughs and British literature, at least until some US urban redevelopment projects that involved new building started to exhibit a particular pattern (Smith, 1979). Before Smith himself said that "gentrification is no longer about a narrow and quixotic oddity in the housing market but has become the leading residential edge of a much larger endeavor: the class remake of the central urban landscape," these processes were initially seen as distinct from the classic concept of gentrification (Smith, 2010, pp. 31).

The three key components of Glass' original idea of gentrification-forced social turnover, physical renewal, and centrality-remain present even if in this instance we are not describing spontaneous movement construction of new structures (Gaeta, 2009). Because of this, many American academics have begun using the term "new developments" and "real estate driven urban rejuvenation" abroad. These researchers explained how to view "gentrification by capital" from a supply side perspective. From this viewpoint, gentrifiers are viewed as new potential consumers who adopt particular methods and design approaches in order to draw in and increase capital.



Figure 6 - Gentrification Illustration by MARIA PETRISHINA [Source: Yes!]

'Gentrification' is a term that describes a process of relative re-urbanization in declining urban neighborhoods. It is a process that testifies to the increase of socio-spatial inequalities in urban areas and that well describes the injustice of the neoliberal urban restructuring process that is reshaping many post-industrial cities. In Italy the phenomenon, linked with the vicious circle of rent accumulation, has not received proper recognition for its effects on Italian urban metropolitan cores, and it has been under-evaluated for several reasons: because of its historical roots - that see the phenomenon as a complementary and a necessary evil of modernity; or one that is welcomed - for its positive effects in terms of the rehabilitation of building stock and a zero cost regeneration effect.

Gentrification studies have long incorporated critical analysis contemporary urban changes. Gentrification is а sort of 'relative reurbanization' (Piccolomini, 1990) which implies the substitution/ displacement of low-income populations and the formation of selective residential enclaves.

Despite positive interpretation. gentrification is inseparable from its critical core: the denouncement of socio spatial inequalities resulting from a counterdistributive project (Harvey, 2005) based on exploitation of land values, property revenues and, last but not least, different rates of accessibility to positional goods.

Because of its multidimensional nature, gentrification implies the building stock's rehabilitation and the economic revival of a place. However, it also comes at a high cost for the city: residents are displaced and dislocated (forced or not, directly or indirectly); is associated with local and retail substitution; it comes with the increase in housing costs; last but not least, encompasses the loss of social diversity. Since its first coinage, 'gentrification' has gone global and can be seen in cities around the world (Atkinson and Bridge, 2005; Lees, 2012 for a critique). However, it is also locally adjusting to contextual variables (Maloutas, 2012), and it is assuming different connotations according to different land regimes and regulatory landscapes.

66 Gentrification can be a plague, as it eats up neighborhoods." - Gordon Quinn

## 2.1.1 Different types of Gentrification

According to Davidson And Lees there are three main categories of gentrification exist: classic gentrification, state-led gentrification, and New Built Gentrification (Davidson And Lees, 2004).

Glass (1964) detailed the procedure that resulted in a social turnover of some working-class districts in London's inner city through the refurbishment of preexisting buildings. The wealthier residents of this area purchased homes less affluent neighborhoods. renovated them, and altered them to suit their needs. These locations' favorable proximity to the city center made them interesting to such groups. Glass states that "Once this process of gentrification starts within a district it goes on rapidly on until all or most of the original occupiers are displaced and the social character of the district is changed". This process does not only affect the individual dwellings, but the whole gentrified district will face an image change" (Glass 1964, p. xviii). This discreet method of gentrification regarded as classic gentrification (Davidson and Lees, 2004).

According to Shaw (2008), gentrification has expanded to include a wider spectrum of construction projects in modern times. Gentrification that is more frequently started by local and national governments is referred to as policy-led gentrification. By offering the targeted groups suitable living conditions, governments encourage people from various socioeconomic categories to settle down in a certain location. These programs mostly concentrate on subgroups that fall under

the more wealthy categories. In addition to the difference in originator, policy-led gentrification now emphasizes not just commercial but also residential changes (Davidson and Lees, 2004).

New built gentrification is the final type of gentrification. This kind can be found in the urban fabric in barren lands. These are typically empty brown fields or other sorts of abandoned property that have been turned into thriving mixed-use neighborhoods. There is no direct eviction of residents because the developments take place in unused or industrial zones (Davidson and Lees, 2004). Instead, it is a "invasion and succession" process (Lambert and Boddy, 2002, p. 18).

Atkinson (1999) used the classification of socioeconomic classes to define the gentrifiers (gentrifiers) and the gentrified (displacees) in order to quantify and categorize gentrification. He believes that those who fall within groupings 01, 02, and 03—which are made up of "managers and senior officials, professional occupations, and associate professionals"-are the gentrifiers (Davidson and Lees. 2004. p1177). The displacees are classified as belonging to groups 04, 05, 06, and 09, and they work in "clerical and secretarial vocations. personal and protective services occupations, process operators, skilled trades, as well as chronically sick and retired" fields (Davidson and Lees, 2004, p1177). It's critical to understand that those two groupings are relative. People who are members of the displaced group can likewise displace people of higher or related groups.

Chan et. al (2016) examines three forms of tourism gentrification in Yunnan, China. According to him self-gentrification refers to the proactive response of long-term residents. including both Indigenous people and long-time inhabitants who have adopted local cultural practices, to the threat of gentrification. Instead of being displaced or negatively affected by the process of gentrification initiated by external forces, these residents choose to actively participate in and shape the gentrification of their own neighborhoods.

By adopting a proactive approach, the long-term residents aim to become part of the "gentry" themselves, benefiting from the positive aspects of gentrification while mitigating many of its negative effects, particularly displacement.

It is important to note that this concept of self-gentrification is proposed within the specific framework of this study and may not be universally recognized or adopted in the broader discourse on gentrification.

The study, conducted by Neal (2010) and referenced in the passage, explores the concept of gentrifier-led gentrification. perspective gentrification on sees it as a gradual process initiated and sustained by incoming populations, whom he refers to as "pioneers." These aentrifiers portraved are individuals seeking to transform rundown neighborhoods and potentially profit from rising property values. While some scholars argue that gentrifiers are driven solely by a desire to civilize their new locality, others challenge this Schlichtman assumption. and (2014)identify various factors that gentrifiers. attract including economic affordability, practical centrality connectivity, aesthetic appeal, presence of amenities, social diversity, and symbolic aspects such as community history and authenticity. According to Schlichtman and Patch, gentrifiers may accept the inconveniences of living in deprived areas for one or more of these pull factors.

Type of Gentrification	Description	Impacts	Gentrifiers
Classic Gentrification	Refurbishment of preexisting buildings in working-class districts by wealthier residents, leading to displacement of original occupiers and a change in the neighborhood's social character.	Displacement of original occupiers and loss of affordable housing. Social turnover and change in the demographic composition.	Wealthier residents who purchase and renovate homes in less affluent neighborhoods.
State-led Gentrification	Gentrification initiated by governments through policy- driven initiatives to attract people from more affluent socioeconomic categories, leading to improved living conditions and potential displacement of existing residents.	Investment in infrastructure and amenities, improving living conditions. Increased property values and economic development. Potential displacement of existing residents.	People from more affluent socioeconomic categories who are targeted by government initiatives.
New Built Gentrification	Transformation of barren lands into mixed-use neighborhoods in unused or industrial zones, revitalizing underutilized areas and creating economic opportunities.	Revitalization of underutilized areas and economic benefits. Limited impact on displacement.	Developers and investors who transform barren lands into mixed-use neighborhoods.
Self-gentrification	Proactive response by long-term residents to the threat of gentrification, actively participating in and shaping the gentrification of their own neighborhoods.	Residents have agency and influence in shaping their neighborhoods. Ability to benefit from positive aspects of gentrification.	Long-term residents, including Indigenous people and long-time inhabitants, who choose to actively participate in and shape the
Gentrifier-led Gentrification	Gentrification driven by incoming populations seeking to transform rundown urban neighborhoods and potentially profit from rising property values.	Physical transformation of rundown neighborhoods, including improved infrastructure and aesthetics. Increase in property values. Potential displacement of original residents.	Incoming populations, often referred to as "pioneers," who are attracted to rundown urban neighborhoods and seek to transform them.
Tourism Gentrification	Gentrification fueled by tourism development and the influx of visitors in certain areas, leading to economic benefits and potential displacement of local residents.	Economic benefits through tourism revenue and job opportunities. Increased investment in tourism infrastructure and amenities. Potential displacement of local residents.	Tourists, investors, and developers who contribute to tourism development in certain areas.

Figure 7 - Gentrification Types and Characteristics Chan et. al (2016) [Source: Research of Chan et. al t (2016)]

## 2.2 Gentrification in Italian Context

When discussing this complicated subject, the context's applicability is crucial. In actuality, gentrification's effects are greatly influenced by the variations among nations, cultures, housing markets, and other factors. So an overview of the gentrification phenomenon will be given, with reference to Milan and well-known gentrified neighborhoods around Italy.

## 2.2.1 Gentrification in Italy

The gentrification issue has never been thoroughly studied in Italy, and, more importantly, this idea does not exist in the language or general society as it does, for example, in the US. However, from a broad survey of the Italian literature on gentrification, several common characteristics may be found.

At first, it appears that gentrification in Italy is typically, if not always, handled and studied using a case-based approach. The majority of the contributions do, in fact, come from various studies that have been done on various particular subjects. Gentrification processes have actually been discovered in a few Italian neighborhoods (see figure 8), including the historic center of the Quadrilatero Romano in Turin (Curto et al., 2009; 2004; 2015), Santa Croce in Florence (Semboloni, 2009), Isola in Milan (Diappi et. al, 2009; Semi, 2015), Genoa (Gastaldi, 2003; 2006; Semi, 2015), and Pigneto in Rome (Scandurra, 2005; Semi, 2015) are few examples.

Second, a problem that arises from the few contributions that use gentrification as a broad research framework typically emphasizes the importance the this semantic value of contentious concept (Laino, 2007; 2016; Annunziata, 2007). The current resurgence of Italian authors' interest in gentrification and their attempts to interpret it in the domestic context occasionally look more like a desperate attempt to keep up with the global conversation than the product of empirically supported study. It may not always be appropriate to use gentrification as an interpretive framework to grasp the shifting dynamics in some formerly working-class districts.

Undoubtedly, the selectivity and exclusivity that characterize so many of the aforementioned situations raises some relevant issues and generates a lively discussion about the effects of regeneration processes and the function of public policy. Gentrification still bears some distinctive characteristics that cannot always be identified everywhere, despite the fuzzier boundaries that have emerged over time.

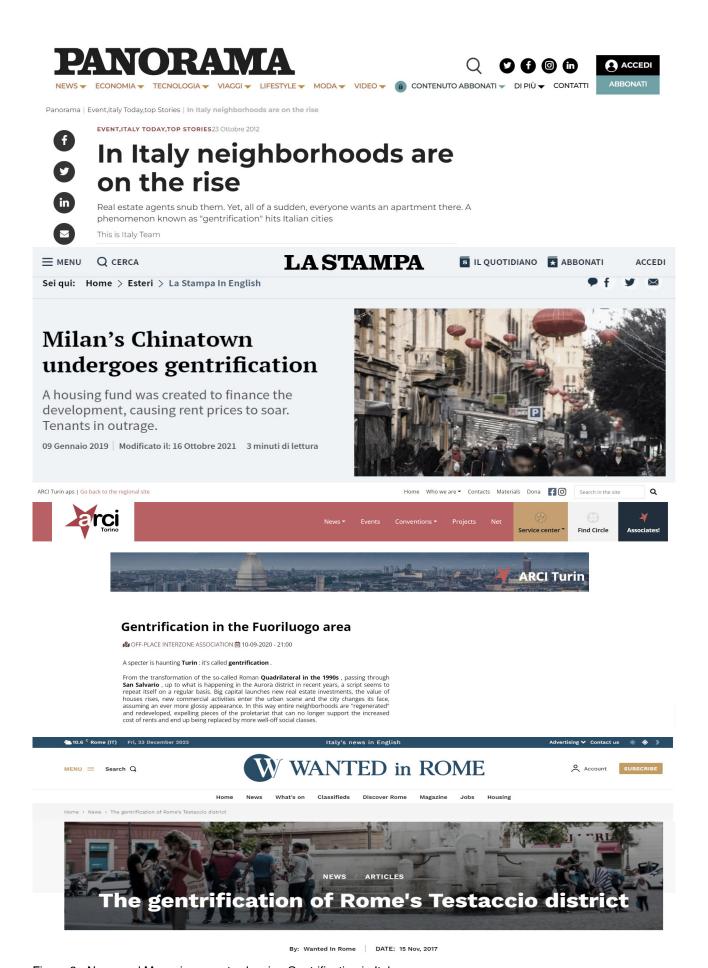


Figure 8 - News and Magazine reports showing Gentrification in Italy [ Source : Panorama ; Lastampa ; Arci Toino ; Wanted in Rome]

Italian scholars have described the phenomenon as a 'soft process of social change' (Diappi et al., 2008;2006), arguing that is occurring without displacement. This seems to be evident in Milan, where the phenomenon is also seen as a 'vector of cultural and creative local economy' (Bovone and Mazzette, 2005). However, Manzo (2012) argues that, even if displacement does not occur as in Britain and the USA, due to the specificity of housing tenure, the aestheticization of a place resulting from gentrification produces a sort of moral displacement: 'residents feel they do not belong anymore to their neighborhood. The absence of displacement, however, does not protect the city from the risk of becoming a sort of selective enclave (Annunziata, 2008).

The case of the Milanese neighborhood of Sarpi (see figure 10), where the attempt to expel the Chinese population, politically justified in the name of Sarpi's ancient Italian cultural heritage, would deny the history of those who helped transform and create the neighborhood, 'engendering a change of skin and soul' (Manzo, 2012).

In this respect Turin, with the cases of San Salvario and Quadrilatero (see figure 11 ), provides a more complex and picture where gentrification interweaves with ethnic and immigration issues, as is occurring in many southern European neighborhoods with high ethnic connotations. These types of gentrification appear to be related to cultural and symbolic aspects of consumerism (Semi, 2004), which partially exploit ethnicity as part of a cosmopolitan interest, free of genuine signs of integration (Annunziata, 2011).

According to Minoia (2017) investigate the effects of tourist gentrification on the sense of place in Venice (see figure 13). They analyze how the growing tourism industry has altered the city's urban landscape, impacting the everyday lives and experiences of local residents. However, the tourist monoculture and cosmopolitan consumption have depleted the original elements of this attraction: traditional places, residents, livelihoods, material and immaterial cultures.

A summary of Italian scholars who studied the Gentrification in Italy and their findings are given below (see figure 9).

Scholar	Year	Place Studied	Conclusion	Explanation
Piccolomini	1993	Genoa	Describes waterfront and historic center regeneration in Genoa	The regeneration projects led to urban changes and neighborhood revival
Gastaldi	2003	Genoa	Describes the regeneration of the waterfront and historic center in Genoa	The success of the revitalization projects in Genoa led to social costs becoming apparent
Semi	2004	Turin	Describes gentrification related to cultural and symbolic aspects of consumerism	Gentrification exploits ethnicity for cosmopolitan allure without real signs of integration
Annunziata	2008	Rome	Discusses gentrification in relation to urban periphery regeneration	Gentrification in the urban periphery of Italy leads to selective enclaves and displacement risks
Manzo	2012	Sarpi neighborhood (Milan)	Discusses moral displacement and attempts to expel Chinese population	The aestheticization of places through gentrification can lead to moral displacement, even if physical displacement does not occur
Minoia	2017	Venice	Explores the impact of tourist gentrification on the sense of place in the city of Venice.	The study highlights the need for sustainable tourism practices that balance the economic benefits of tourism with the preservation of local identity and community well-being.

Figure 9 - Summary of Italian scholars who studied the Gentrification in Italy and their findings [ Source : Own Illustraion ]



Figure 10 - Via Paolo Sarpi (Chinatown) Milano [ Source : Wikimedia ]



Figure 11 - Gentrification, Militarization and Resistance In Aurora [Source: Radio Blackout]



Figure 12 - Gentrification of Genoa, Italy [Source: Pixabay]



Figure 13 - Venice gentrification [ Source : www.morethangreen.es ]



Figure 14 - Soho House - private Club in San Lorenzo ,Rome [Source: Arch daily]

The foregoing information is all from relatively recent contributions, therefore this leads us to pose the following question: Is gentrification in Italy a "new thing"? It is in some way. First, since gentrification processes by definition take place in major urban centers, it is vital to understand how the social structures of the largest Italian cities have changed over time. Ruth Glass was referring to the upper middle class at the time who were living in the suburbs when she used the term "gentry." Their Back to the city movement started the gentrification process. The Italian context makes it impossible to identify the same processes since, like in other cities in continental Europe, the upper middle class may have chosen to migrate to other specific areas outside of the city center (like in the case of Genoa), but they never actually left the city. As a result, rather of focusing on movements on a larger scale, it is vital to examine the fluxes and changes that took place within the city.

The layout of Italian cities was typically characterized by a particular pattern at the time of industrialization. While the upper middle class remained in the city center, production and the relative population were moved to the outskirts. However, the transition from an industrial to a postindustrial civilization has had a significant effect on Italian cities. The main northern Italian urban centers have experienced a significant change in social inequality as a result of the working class's slow but persistent decline and the end of inmigration movements from southern Italy (Alasia and Montaldi, 1960; Foot, 2003). Gentrification happened more slowly and was more easily detected because of the loss of the working class than because of its direct displacement.

The housing market should also be taken into account. Similar to other Mediterranean nations like Spain or Greece, Italy has a very high percentage of homeowners (See Figure 15). In actuality, only 18.3% of Italian households paid rent in 2011, while 82.7% of households owned their homes (ISTAT, Italian Census Data for 2011).



Figure 15 - Types of tenure by Dwelling in Italy [Source: ISTAT, Italian Census Data for 2011]

These numbers of tenure can be attributed to a variety of factors, but one of the most important is undoubtedly the ineffectiveness of the welfare system (Poggio, 2008), as owning a property is viewed as the only assurance of social security.

Figure 16 depicts the changes in the various tenure shares in Italy during the past ten years. It is evident that the situation remained constant over the past ten years despite the severe financial crisis of 2008, which had a significant impact on this nation and its housing industry. Homeownership continued to hold its position as the most popular form of tenure. As it has already been said, this

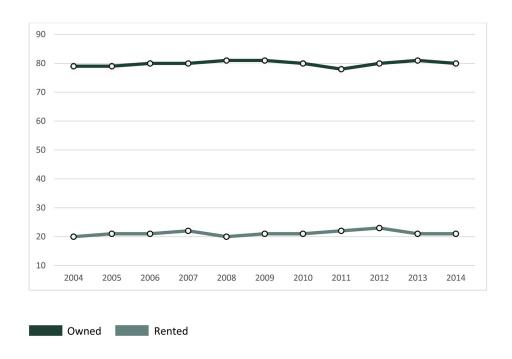


Figure 16 - Evolution of tenure by Dwelling in Italy [Source: ISTAT, Italian Census Data for 2011]

fact undoubtedly has an impact on displacement, one of the most talked about gentrification-related issues. The main problem identified by these research is the selectivity and exclusivity that these areas endure. In fact, none of the aforementioned Italian neighborhoods have shown any evidence of direct displacement. Therefore. rather being a destructive force that directly threatens the societal stratification of a neighborhood, "Italian gentrification" appears to be much more similar to the idea of a gradual and spontaneous polarization.

Finally, it might be claimed that the literature on gentrification in Italy lacks a robust discussion of the overall principles that underlie this phenomena. Clearly, gentrification has been extensively discussed in a wide variety of foreign contributions. However, it appears that there is always a scale gap from Italian authors who typically go directly for local evidence without contextualizing those discoveries that originated from such international contributions in broad national setting. Having said that, it is equally important to take time into account while examining gentrification processes. Although they are dynamic, neighborhoods are not static places. The process of gentrification creates a sense of change from a poor community to an affluent one. However, this does not imply that gentrification processes are always taking place when such changes take place or when an area differs from how it formerly was (Annunziata, 2007). Define a precise framework that includes all the context-specific details in order to accurately identify these processes and evaluate their social implications.

## 2.3 Gentrification in Milan

Regarding demographic contrasts, Milan has always been a city of contrasts. Only a small number of people who belong to groups in between were present, compared to large groups of both lower and higher socioeconomic group members. Milan's position as Italy's richest city serves as evidence of this. Milan has a population of 1,242,123 as of the 2011 Italian census, but its entire metropolitan area (which should not be confused with the administrative Metropolitan City of Milan) is estimated to have a population of more than 5 million people, making Milan one of the most densely populated and urbanized regions in the EU.

The city is well known as a significant global center for fashion and design. In reality, it serves as the venue for a number of occasions, including the Salone del Mobile, the biggest furniture market in the world, and Milan Fashion Week, Milan is home to several national and international banks' enterprises' corporate and headquarters, as well as the Italian Stock Exchange. For these reasons, Milan appears to be the ideal location for gentrification because the city is able to draw capital and, most importantly, a growing "creative class" that works in a variety of industries, including fashion, design, ICT, and finance.



#### Milan's struggle to tame gentrification

Milan's struggle to tame gentrification. Investments and renovations have made housing more expensive — pricing out poorer residents.

May 12, 2022



## A Challenge for Cities: Going Green, Without the Gentrification

A park in the Porta Nuova district of Milan, where new green features like architect Stefano Boeri's "Bosco Verticale" have boosted housing...

Nov 10, 2022



#### Milan | House prices: the revenge of the semi-suburbs

In milan, the area with the greatest increase recorded is the one that ... so let's not complain about gentrification, 400 thousand euros for a...

3 weeks ago









Milan, as a major European metropolis with a population of over 7 million, presents a compelling case for studying gentrification. The city's transition from an industrial to a post-industrial society, coupled with its integration into the global economy, offers valuable insights into the impact of economic factors on gentrification (Festa and Tognoli, 2010). Milan's dense and diverse productive fabric, with notable sectors like fashion and design, contributes to the complexity of the gentrification phenomenon (Magatti, 2005).

The city's role as a global economic and financial hub further accentuates the influence of private stakeholders in real estate transactions, often overshadowing the public sector (Anselmi, 2013). While the public sector still plays a role, the increasing involvement of private, national, and international funds in real estate investments and urban regeneration highlights the dynamics of power and decision-making processes (Baiardi and Ciaramella, 2020).

Milan's urban development strategies align with the urban entrepreneurialism emphasizing image model. and territory promotion, major architectural interventions. and investments large-scale events (Semi, 2011). This approach contributes to a complex urban development model with contradictions. characterized by planned projects that encounter challenges in their implementation due to various factors (Bricocoli and Savoldi, 2010).

" need We to define gentrification separate from the process displacement." - Justin Davidson

The history of gentrification in Milan dates back several decades. with central districts such as Brera and Corso Garibaldi experiencing social transformations and conflicts related to the influx of middle-class residents (Boffi, 1972). The gentrification process has gradually expanded from the city center to adjacent neighborhoods, with wealthier classes displacing traditional workingclass populations (Diappi, Bolchi, and Gaeta, 2009).

studies provide further Three case insights into the gentrification processes in Milan. The Navigli district exemplifies transformations driven by aestheticization and the promotion of authenticity, leading to its emergence as a vibrant nightlife area. The Sarpi district highlights the between gentrification interplay and multiculturalism, with conflicts and debates surrounding the aestheticization diversity. The Isola district demonstrates large-scale real estate operations involving both public and private elements (Diappi, Bolchi, and Gaeta, 2009).

Scholars studying gentrification in Milan have emphasized the unique characteristics of the city's real estate market, the role of the public and private sectors, the historical patterns of social transformations, and the complexities of urban development models (Anselmi, 2013; Magatti, 2005; Boffi, 1972; Semi, 2011). These perspectives provide a comprehensive understanding of gentrification in Milan, making it an intriguing choice for further research and analysis.

A summary of scholars who studied the Gentrification in Milan and their findings are given below (see figure 18).

Scholar	Year	Conclusion	View on Gentrification
Boffi	1972	Social conflicts and transformations have accompanied gentrification in central districts of Milan since the 1960s.	Gentrification in Milan has resulted in social tensions and conflicts, particularly in central neighborhoods.
Magatti	2005	Milan's transition from an industrial to a post- industrial society underscores the multifaceted nature of gentrification in the city.	Milan's post-industrial context and knowledge society dynamics contribute to gentrification.
Diappi, Bolchi, and Gaeta	2009	Milan's real estate market experiences spontaneous evolution, with involvement from public administrations in major urban renewal projects.	Gentrification in Milan is driven by a mix of market forces and public policy initiatives.
Festa and Tognoli	2010	Milan's dense and diverse productive fabric, including sectors like fashion and design, contributes to the complexity of gentrification.	Economic factors play a significant role in the gentrification process in Milan.
Bricocoli and Savoldi	2010	Milan's urban development model is characterized by contradictions and large-scale planned projects that may encounter implementation challenges.	Gentrification in Milan is influenced by complex urban development models and their inherent contradictions.
Semi	2011	Milan's urban development aligns with the urban entrepreneurialism model, emphasizing image, promotion, and investments in large events.	Milan's urban development exhibits characteristics of urban entrepreneurialism, impacting gentrification patterns.
Anselmi	2013	Private stakeholders have gained influence in real estate transactions, impacting decision-making and diminishing the role of the public sector.	Power dynamics between private and public sectors shape gentrification in Milan.
Baiardi and Ciaramella	2020	Private, national, and international funds have increasingly played a role in real estate investments and urban regeneration in Milan.	Gentrification in Milan is influenced by a shift towards private sector dominance in real estate and urban development.

Figure 18 - Summary of scholars who studied the Gentrification in Milan and their findings [Source: Own Illustraion]



Figure 19 - The skyline of Milan view [ Source : italia.it ]

But over the past forty years, Milan has undergone demographic change due to the decentralization of production activities to outlying areas that were previously concentrated in the city's "industrial triangle" and the shift from a production economy to a service economy. From 148,000 manufacturing jobs in 1991 to 60,000 manufacturing jobs in just 20 years (a loss of 59 percent) in Milan, Manufacturing lost two-thirds of its proportion when compared to other economic sectors, going from 22.8% of Milan's total employment to just 7.8% in the most recent Census. In addition to the decline in the number of positions for the lower socioeconomic categories. there is an increase in the number of persons from the higher socioeconomic groups. In addition to changing the city's demographics, this has an impact on its political and economic landscape. Different theories can be used to explain the reasons for this shift towards a population with higher levels of education. People from lower socioeconomic classes are being displaced by more affluent people as a result of the gentrification of the city, which is the primary reason for this change that is discussed in literature. Because they cannot afford to live in Milan, poorer socioeconomic classes were forced to relocate to the city's outskirts or to other cities (Petros Petsimeris and Stefania Riinoldi, 2015).

In addition to this, there are further explanations potential including voluntary migration and the population's professionalization (Atkinson, 1999). difficulty Due to the of assessing gentrification, it can be difficult to tell whether households moved voluntarily or were forced to do so. This makes it difficult to evaluate whether the population in a certain region is being replaced or displaced. The urban design of the city is also impacted by this change in demography. Because of their favorable location within city. the the lower socioeconomic neighborhood slowly transforms into a community for the upper socioeconomic classes. Wealthy individuals purchase the abandoned homes in certain places and renovate and alter them to meet their needs. Along with the change in housing, those places' amenities also alter. The majority of the space in the region has been improved, and new businesses have moved in. This type of traditional gentrification first occurred in various Milan neighborhoods, but it is now spreading to other areas of the city.

In addition to this classic gentrification, new-built gentrification began significantly contribute to the alteration of the city's urban layout in the 1980ies. By attracting new firms and residents, the major industrial zones that supported the population of blue-collar workers were renovated. Even while it sounds wonderful. everything has а price. Gentrification, along with brand-new wineries and hipster bookshops, uproots the most disadvantaged residents of the neighborhood and leads to socioeconomic isolation. Most of these places underwent transformation into mixeduse communities that were primarily built for socioeconomic levels. Several blocks of traditional low-income housing on the southern side of Isola were demolished and replaced with luxury residences, and an old railway station was moved several hundred meters from its original location. These developments are wellknown instances. These initiatives were huge successes both economically and

physically, but they are also notable for the amount of displacement they caused (Caselli, D., and Ferreri, M.,2013).

Presently, non-European migration and the influx of the "creative class" are the two main significant flows that have the potential to alter Milan's social structure. It is still required to quickly review the overall situation at a metropolitan scale before beginning a more in-depth investigation at a neighborhood scale.

Figure 20 illustrates Milan's historical population since Italy's unification based on Istat census data. Up to the 1970s, the population of Milan grew consistently and significantly. In actuality, the city has significantly declined in population over the past 40 years, primarily as a result of the post-industrial revolution and the end of immigration flows from southern Italy. Gentrification processes typically take place in environments that may draw new residents, meaning that there is a high demand for the city. It appears that Milanese demography cannot accurately depict the ideal environment for gentrification to emerge, despite the fact that the population drop stopped in the last 15 years and the situation is quite steady.

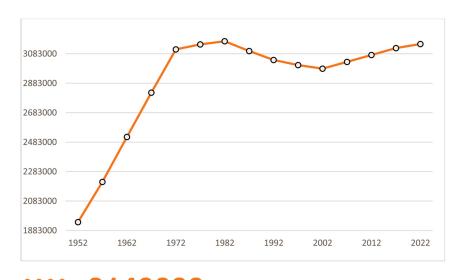


Figure 20 - Historical population of Milan [Source: United Nations - World Population Prospects, www.macrotrends.net]

Population of Milan in 2022

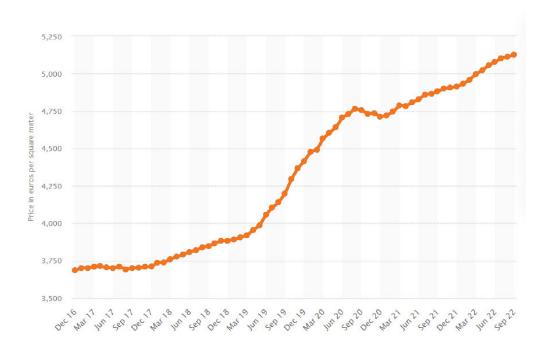


Figure 21 - Evolution of average price for apartment for sale in Milan (euro per square meter) [ Source : Statista ]

Based on Statista data, Figure 21 depicts the evolution of average apartment costs per square meter in Milan. These costs are obviously highly illustrative and inaccurate because they represent an average of several places and because the cost of a home is heavily influenced by both extrinsic (such as accessibility and environment) and intrinsic (such as building quality, floor plan, and layout) factors. However, it is important to observe the trends and advancements of such costs. They grew gradually yet consistently. . How might these costs affect gentrification processes in the Milanese context? Evidently, an overall rise in housing market prices has the potential to accentuate the selectivity and

exclusivity processes currently present in many Milanese districts. However, in order to properly comprehend the true effects of social and economic changes in the city, it is imperative to examine these data at a neighborhood scale.

To sum up, the Milanese context exhibits key traits that may help gentrification proceed: attractiveness, dominant а position in a number of cultural and financial industries, crucial and а housing market. On the other side, high homeownership rates and a generally stable population can reduce forced relocation and housing competition.

## 2.3.1 Gentrification in Isola - A Case study

Gentrification in Milan has taken place in many different ways, not all at once, and with varied starting points for the modifications. Here, a few of the cases are mentioned. In the 1980s, the Navigli neighborhood underwent changes that were spurred by aestheticization and exaltation of authenticity, which encouraged the neighborhood's vocation as a center of Milanese nightlife. The situation of Sarpi (in the 1990s) is distinguished by a significant multicultural component. and in this instance. gentrification is associated with a source of conflict and the problem of diversity aestheticization. The Isola district, which is known for major real estate deals including assets with a significant public and private component, is a final example from the 2000s. This section will explain the Isola case to give a clear picture of gentrification in Milan.

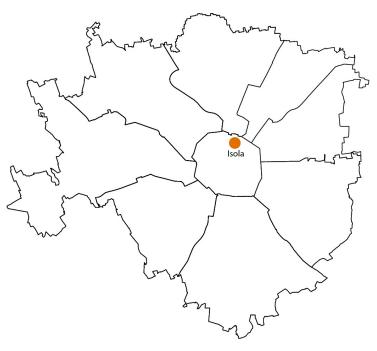


Figure 22 - Location of Isola in Milan [Source: Own Illustration]

#### **MILANOTODAY**









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## Isola, the neighborhood of gentrification and green nightlife

Not only Bosco Verticale, Isola is still today one of the busiest areas of the city of Milan



Figure 23 - Report showing gentrification in Milan [Source: Milano Today]



Figure 24 - Isola Garibaldi district Night view - present [Source : viaggi.corriere.it]



Figure 25- Isola District, Milan - present [Source: notizie.it]





Figure 26 - Isola district, Milan 1978 [ Source : Off topic Lab ]

#### **Isola District of Milan**

The Isola is a location on the outskirts of Porta Nuova, a recently developed neighborhood. According to the 1953 Master Plan, the ancient railway station had to be moved hundreds of meters from its original location, opening up a wide area of ground for construction. Le Varesine, an amusement park, operated there for a number of years. The different plans for the area were based on the "Centro Direzionale" blueprint and called for the removal of several blocks of traditional low-income housing on the southern side of Isola, the majority of which belonged to a small group of local families, and their replacement with luxurious residences.

The 1953 Plan had the significant effect that "landlords in Isola let their properties decay in anticipation of a revaluation of the land," which, however, turned out to be weaker than expected due to delays brought on by the National Railway's shifting agendas, those of some local landowners and the local administration, as well as in part by the counter information and resistance campaigns led by the Comitato di Quartiere Volta-Garibaldi.

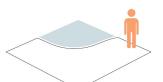




Figure 27 - Isola district in 2000 and 2023 [ Source : Google earth ]

Following these, the 1960s to the early 1970s could be seen as the beginning of the first wave of traditional gentrification, which was halted in its tracks by a combination of local resistance initiatives from the first left-wing city council, which put into place the "Piano per popolare" integrativo l'edilizia (Integration Plan for Low-Cost Housing, also known as "Piano Velluto") in 1976. The Volturno-Sassetti area in the Isola neighborhood was one of the classic low-income housing districts that the Plan wanted to protect by allocating government funds for renovation and construction. The predicament Isola in the ensuing decades could be understood as the legacy of the opposing development dynamics that had already threatened the place forty years earlier, in accordance with this understanding of the neighborhood's history.

Later, it is important to understand the conceptual continuity between the 1960s Centro Direzionale development plan and the 1990s and 2000s growth plans. The logic of the Passante to the M5 Underground line, which directly increased the value of residential homes. as witnessed by many local real estate professionals, translates from the idea of constructing new transportation infrastructure strengthening and the connection of the area. A "do-iturbanism" vourself was encouraged by the PII (Programma Integrato de Intervento), which when combined with the widespread financialization of the global real estate market led to a sharp increase in real estate values in the city, particularly in central and semicentral neighborhoods, has been interpreted as a clear expression of the politics of urban governance that were developing in Milan in the 1990s.



Deprived Isola working class development



Development of expensive housing and facilities



Insertion of new higher educated population



Increasing land values and social polarisation



Exclusion of local population Gentrification

Figure 28 Icons that depict the gentrification trend that took place in Isola, Milan

[ Source : Own Illustration]

Unlike Urban Renewal, Gentrification is a gradual process, occuring one building or block at a time, slowly reconfiguring the neighborhood landscape of consumption and residence by displacing poor and working class residents unable to afford to live in revitilized neighborhoods with rising rents, property taxes and new businesses catering to an upscale clientele"

- Jesús M. González-Pérez

Milan experienced a remarkable surge in real estate values from the end of the 1990s to the beginning of the 2000s, which coincided with a national trend that saw rents rise by 71% while the average price of houses in large cities rose by 108%. The effects of these tendencies were particularly striking in social spaces-commercial Isola. All and residential—as well as green spaces and communal areas in apartment buildings—were the subject of frequent conflictual intervention as a result of conflicting opinions and interests expressed by various groups of the population on matters relating to housing, public spaces, and leisure activities. The most recent information on the expansion of the real estate market comes from a 2007 report that revealed Isola was the Milan neighborhood that saw the greatest increase in real estate values between the years of 2002 and 2006. The same survey showed a significant increase in the number of college graduates and independent contractors residing in the area and a decline in house-sharing and elderly inhabitants, who were identified as the main group most likely to sell their homes and move.

According to a classic gentrification trend, the "pioneers," who had a middle-high level of cultural capital and a middlelow level of income, were followed by the "gentry," who had a higher level of economic capital. Their presence had a significant impact on housing costs as well as the features of public spaces and new businesses. It has been noted that "the effects of classic gentrification are generally mitigated by the traditional social heterogeneity of Italian towns and by fragmentary processes of requalification, which permit the existence of buildings in disrepair inhabited by locals or immigrants on low incomes" in many Italian cities (Caselli, D. and Ferreri, M. 2013).

The long-running Garibaldi-Republica project's 2001 publication improved the Isola district's media exposure. When reconstruction Corso Como's finished. it diverted extra residential demand to the less expensive Isola neighborhood, which was located beyond the railway, during the same years. The neighborhood has experienced the city's fastest growth rate in real estate values as a result of the simultaneous existence of these two elements. The region is still affected by the recent past in its evolutionary trajectory. As a result of the shift in the urban economic foundation, low-income residents coexist there with newly rising populations.

## 2.3.2 In danger of gentrification: SCALO PORTA **ROMANA**

The Scalo Porta Romana, located near the deprived area of Corvetto, is an example of an innovative redevelopment project. Scalo Porta Romana regenerating an abandoned rail yard into one of Milan's next and most inventive poles, and this area will be regenerated into a new Central activity zone occupying 60,000sam roughly of residential structures, offices, social and student housing spaces. The area's active railway line will be partially buried and replaced by a park with facilities like as children's playgrounds, sports fields, and urban gardens.

This project will partially house the Olympic Village and will accommodate athletes from the 2026 Winter Olympics in

Milan-Cortina. After the games, the spaces will be transformed and reused. The athletes' accommodations will be converted into student housing, the park and railway-side buildings will be converted into affordable housing, and the Olympic village plaza will be transformed into a neighborhood square with social services like as stores and cafés. Outdoor space will also be available for farmers' markets and community gatherings.

The expectations are great, but based on what has happened on the Isola, the development of Scalo Porta Romana may result in the displacement of the original residents of the nearby deprived area to other regions of Milan or other cities.



Figure 29 - Olympic Village, Milan Winter Olympics 2026 [Source :blog.urbanfile.org]

# Chapter 03

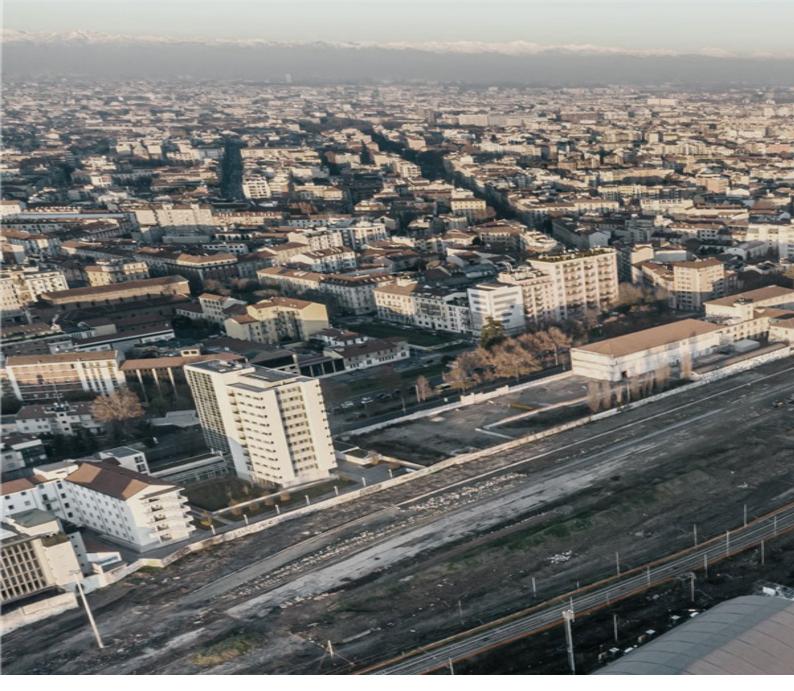
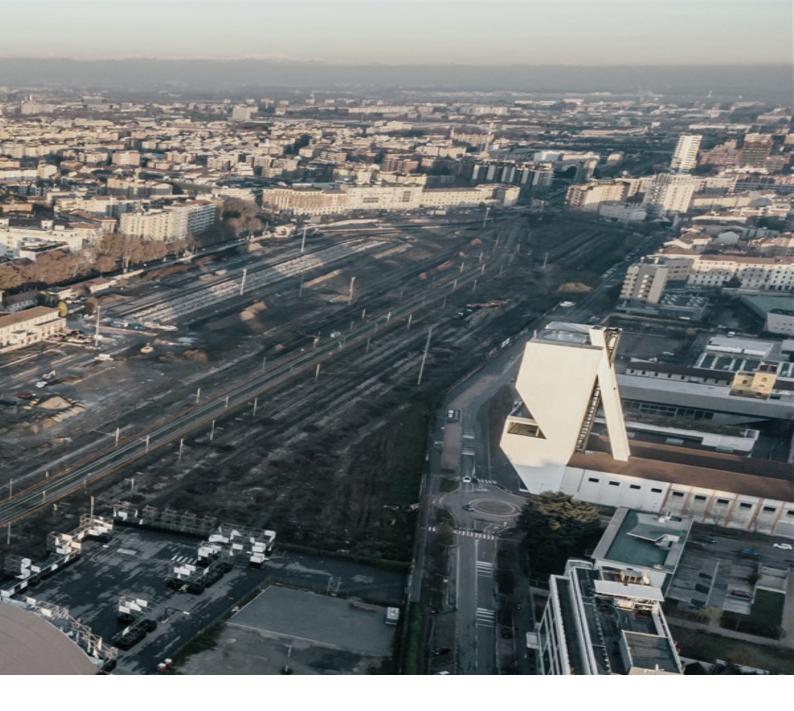


Figure 30 - Aerial view of the former Porta Romana railway station in Milan [Source: monitorimmobiliare.it]

# PROBLEM FIELD



The third chapter, goes into more detail about the new projects that are planned for Scalo Porta Romana.

The problem statement will be established following the analysis of the issue and will outline the main concerns that this thesis will address. On the technique utilized to support this thesis, more detail will be provided in the final sections. The research topics will be clarified in this, and the planning for the study will be demonstrated by the methodologies that were used.

## 3.1 Context Introduction

## 3.1.1 Why Milan ?

Milan is an ideal site for analyzing gentrification and new regeneration projects due to several compelling reasons. Firstly, Milan is a cosmopolitan and economically thriving city located in northern Italy, renowned for its rich history, culture, and architectural heritage. Its dynamic urban landscape has witnessed significant transformations in recent decades, making it a fertile ground for studying gentrification processes and the associated impacts on local communities.

Secondly, Milan has experienced substantial regeneration initiatives aimed revitalizing neighborhoods and repurposing industrial areas. These projects, such as the Porta Nuova and CityLife developments, have attracted both national and international ambitious attention for their urban transformations. Studying these regeneration projects provides valuable insights into the drivers, mechanisms, and consequences of gentrification in Milan.

Additionally, Milan's status as a global financial and fashion capital attracts investment and fosters real estate development, contributing the dynamics of gentrification. provides a unique opportunity to examine the relationship between economic growth, urban regeneration, and the displacement of lower-income residents. Also the city exhibits a mix of neighborhoods with varying levels of affluence, historic significance, and social vulnerability. Analyzing gentrification in Milan enables researchers to explore the complex interplay between economic forces, cultural influences, and social inequalities within an urban context. Overall, studying gentrification in Milan contributes to our knowledge of urban development and provides valuable lessons for other cities facing similar challenges.

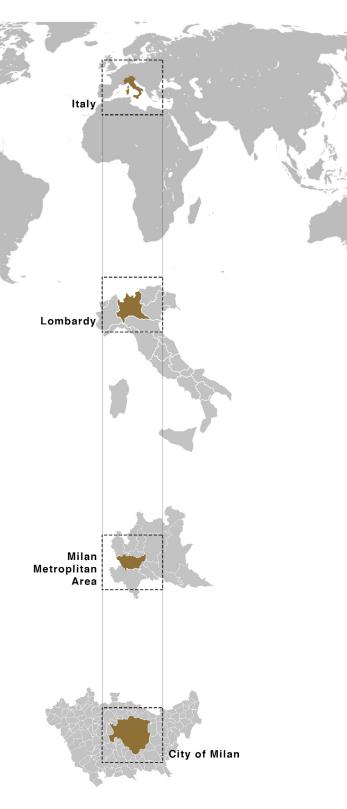


Figure 31 - Context Location map [ Source : Own Illustration ]

## 3.2 The Site



Figure 32 - Location of the project area within Milan [Source: Own Illustration]

This thesis will concentrate on two neighborhoods in south Milan: Scalo Porta Romana and Corvetto (see figure 32). South Milan is Milan's future. Scalo Porta Romana is the location of the next major new built development project as part of Milano Cortina 2026: the Olympic project for Scalo Porta Romana. Scalo Porta Romana has been an unpassable barrier between south and east Milan for many years. A abandoned and semi-empty space of approximately 190,000 square meters, except for freight trains that come and deposit here. In the future, it will be changed into a new type of interaction between nature and metropolis. The neighborhood is bordered by various

impoverished with Corvetto areas, serving as the primary hub. Aside from the severe deprivation, the center is recognized as the suburbs with the heart of food, and it is a distinct community with Arab and South American roots. If the Scalo Porta Romana plans are successful, the Corvetto area may face negative consequences like as population displacement.

This section will focus on the two areas in order to gain a better knowledge of their characteristics and challenges.

#### 3.2.1 Location of Site

The project area is located in Milan's south-eastern outskirts, in Municipalities 4 and 5. (see figures 33). Scalo Porta Romana is in Milan's Muncipality 5, and Corvetto is the center of the deprived area near to Scalo Porta Romana. These places are located in Milan's Muncipality 4.But Scalo Porta Romana and Corvetto are around 2 kilometers apart.

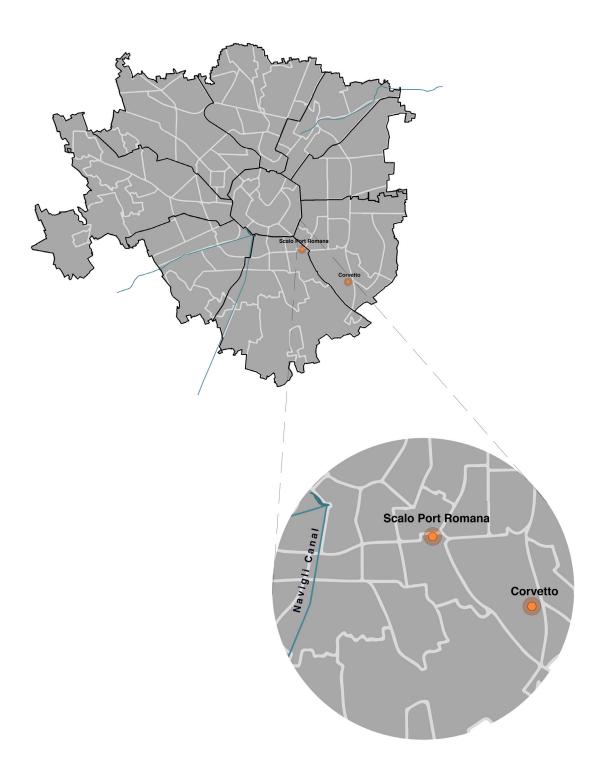


Figure 33 - Location of the project area within Milan, closer view [ Source : Own Illustration]

#### 3.2.2 Scalo Porta Romana

As previously mentioned, Scalo Porta Romana is one of Milan's abandoned train yards and will soon take on a new appearance. Olympic The projects for Scalo Porta Romana are the next significant new construction gentrification project proposed as part of Milano Cortina 2026. The government prioritizes regeneration of this particular area for a number of reasons. The first reason is because this area, which serves as our "gateway" to the parks in the southern part of the city, is the most in need of urban regeneration. The abandoned yard is situated between the city center and some peripheral neighborhoods that are currently undergoing renovation. The 2026 Winter Olympic Games in Milano Cortina are the second reason. A vibrant, selfsufficient neighborhood will be developed inside the Porta Romana neighborhood of Milan from the Olympic athletes' housing facility into the creative, sustainable village for the 2026 Winter Olympics.

The Scalo Porta Romana Project suggests converting the area into a large Central Park, urban continuity, connections for pedestrians and cvclists. eco-zones. public and the squares. Suspended Forest. These are the unique features of the Parco Romana Masterplan, which unites nature and city in an innovative and environmentally friendly system of public spaces (See figure 34). Three fundamental ideas are crucial to the development. The first rule to restore the urban fabric that the Scalo's industrial activity has been rupturing for more than a century, connecting Milan's central business district to the metropolitan hinterland. The second guiding principle is to make Scalo Porta Romana the development's focal point for south Milan. These growth poles are areas with a high concentration of services, public squares and ground floors, green spaces, and commercial buildings.Parco Romana will

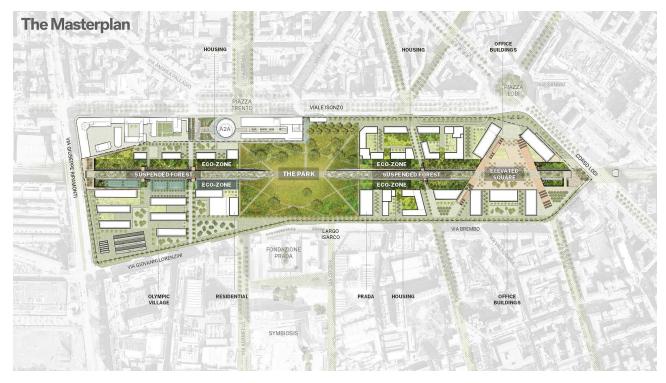


Figure 34 - Proposed master plan of the 2026 Winter Olympic Village [Source: www.pradagroup.com]

be a dynamic and vital neighborhood with a high concentration of residential areas (particularly to the west) and third-party services (especially to the east). This growth pole will combine into one of the central activity zone's centers. The third guiding principle is to create a special model for integrating nature and the city.

As was already mentioned, the abandoned rail yard (see figure 35) in a location close to Milan's city center requires the construction of the Scalo Porta Romana. Scalo Porta Romana has long served as an impenetrable barrier separating Milan's south and east. A 190,000 square meter region that is mostly empty and abandoned except for the freight trains that come and go.

However, a new structure that would partially serve as the Olympic Village and house the athletes during the Milan-Cortina 2026 winter Olympics was announced on July 15, 2021. The 180 million euro master plan has been given to

the consortium made up of the Coima, Covivio, and Prada businesses (see figure 36). The village is the result of collaboration between 70 firms, led by US architects Skidmore Owings & Merrill, and will include 60,000 square meters of residences, offices, and social and student housing (See figure 37). The area's stilloperating railway line will be partially buried and covered by a park that will house amenities including playgrounds for kids, sports fields, and urban gardens (100,000 sgm will be used as a park). By enabling the passage of what is currently a barrier, this alteration will make it simpler to travel between Milan's center and its south/southeast region. A publicprivate collaboration will repurpose the Olympic village into housing for around 1,000 students after the event. Giuseppe Sala, the mtayor of Milan, raised the possibility that the region will develop into a "neighborhood for young people" during the press conference.



Figure 35 - Abandoned Rail Yard , Scalo Porta Romana [Source: www.coima.com]



Proposed master plan of the 2026 Winter Olympic Village [Source: blog.urbanfile.org] Figure 36 -



Proposed amenities of Scalo Porta Romana [Source: scaloportaromana.com] Figure 37 -

#### 3.2.3 Corvetto

Corvetto is considered the principal core of the Quartiere Mazzini (Mazzini District) and has an ethnically diverse population. The Mazzini area is a public housing complex in Milan and the largest of the popular districts developed by the Istituto Case Popolari (ICP) of Milan between the wars. The complex of buildings is laid out in four trapezoidal blocks to shelter the "poor and very poor," or persons higher experiencing socioeconomic hardship. A unique feature of the buildings in this area is their reference to nineteenth-century and historicist design elements, which call for a base, growth in alternately vertical full and empty bands,

corresponding to the services and balconies, crowning, and, in many cases, discontinuous eaves lines because it was decided to vary the height of the buildings in order to avoid overly boring and repetitive construction. The Mazzini district now includes the entire quadrant to the south of the original district, the Porto di Mare Park, which alone takes up half of the area, and the portion of the town to the north as far as Viale Brenta. The original Mazzini district boundaries were the eastern border of Piazza G. Rosa and the western border of Piazza Angilberto II.



Figure 38 - The overpass of piazzale Corvetto [Source : milano.corriere.it ]

Corvetto, hardly attributed to a particular identity, continues to be a reachable suburb. It is distinguished by the existence of significant road and railroad facilities that connect it to the city center and make it an important crossroads to and from southern Milan. It is closer to the center than one might assume. From the Rogoredo wood to Mazzini's apartment buildings, the area has been recognized over time as one of profound unease and degradation. The neighborhood and its surroundings are equally characterized by voids and possibilities: there are many vacant spaces and social and physical deficiencies that have survived the frequent processes of transformation, but there are also many drives for change that have infused the area in recent years.

Corvetto is one of Milan's most hazardous neighborhoods, and it is best not to walk there at night. It is one of the areas that Milanese strive to avoid as much as possible. A major portion of public housing is occupied and in state of disrepair, and thefts, assaults, and stabbings are common. In addition to the problem of degradation and illegal occupation, there are frequent incidents of petty crime and drug selling in the region (See figure 39) In recent years, the district has been experiencing a modest but steady makeover, which is transforming it from its origins as a village into an ideal residential area full of greenery, while retaining the historic shops and traditional and ancient shops.

#### CORVETTE

#### The armed robber who attacks passers-by to steal 2 euros

A 33-year-old man is in handcuffs. He attacked three people in minutes. Loot: 2

Tuesday, November 15th

#### CORVETTE

#### The boy stopped in Milan with cocaine, 'smoking' and Ecstasy

A 25-year-old arrested, stopped by the police in via Toffetti

Tuesday, November 15th



#### CORVETTE

#### "Women deceived - The veil as religion, identity and freedom" by Giuliana Sgrena

There are women who don't know what it means to feel the wind in your hair. And they are forced to cover their faces with a double veil: one made of fabric and imposed by a fundamentalist religious tradition; the other, metaphorical, which tells of hypocrisy - cultural and ideological - with...

Friday, November 11th

Figure 39 - News Report showing Crime in Corvetto



Corvetto, on the other hand, is one of and liveliest Milan's warmest neighborhoods, with strong Arab and Latin influences and plenty of good gastronomy in all forms. With the introduction of the yellow metro in the 1990s, an immediate connection to the city center became available. Moving towards P.le Lodi and Brenta, there are middle-class condominiums. some of which were recently developed, due to the area's long history of industrial usage and the numerous places undergoing residential transition. There are various bars, clubs, and restaurants along Corso Lodi, as well as many sushi and high Chinese cuisine, while takeout of pizza, chicken, kebabs, tacos, samosas, and Cantonese rice are centered in via Polesine and around Piazzale Bonomelli (See figure 40).

Aside from this beneficial progress within Corvetto, there are also other issues. The main issue is the severe deprivation demonstrated by the Multiple Deprivation Index within the area. The Indices represent the average level of deprivation in smaller production areas. One of those maps depicts overall deprivation, which is determined by examining many components of deprivation such as health, income, and employment (See figure 41) depicts a part of this map centered on Corvetto and Scalo Porta Romana. The area surrounding Corvetto is clearly identified as a highly deprived area that extends to the north and south (ISTAT, 2011).

Furthermore, the Municipality of Milan's Development Plan for 2016 (Territorial Government Plan, PGT 2030) presents a summary of the significant issues in this sector. The key issues are high unemployment, high crime rates, illiteracy, poor health, and a lack of open public space.



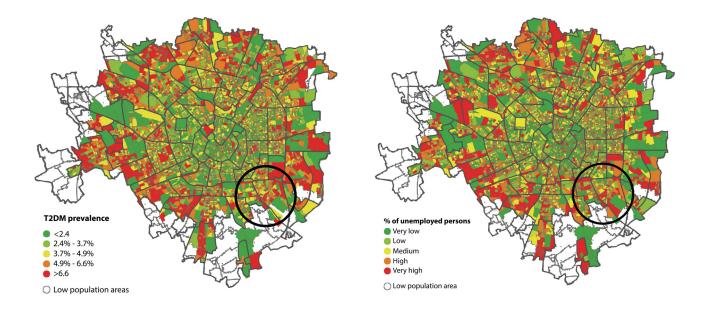




Figure 40 - Street shops in Corvetto

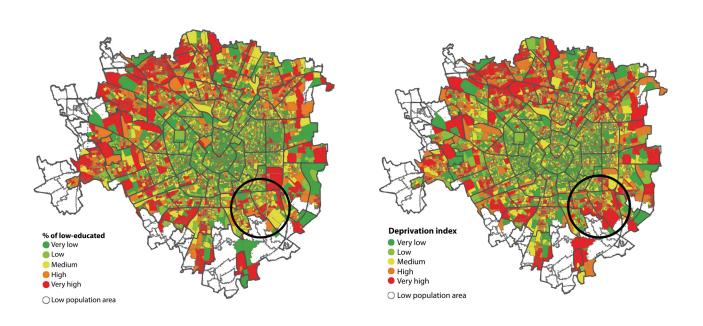
[ Source : <u>le-strade.com</u> ]

It is critical to recognize that neighborhood deprivation influences individual results as well as statistics. The Milan analysis map from ISTAT ,2011 shows that the area comprises areas with severe health deprivation. This shows that people in those locations have poor health, which interferes with their daily life. Apart from health, there are other factors that directly affect residents, such as the extremely high crime rate, which influences people's behavior.



T2DM prevalence in Milan, 2018

Average percentage of unemployed persons in each census block. Milan, 2011.



Average percentage of low-educated persons in each census block. Milan, 2011

Deprivation index. Milan, 2011.

Figure 41 - Map showing differnt deprivation in Milan

[ Source: PhD Research paper Consolazio et al.(2019) (Istat 2011 census data) ]

## 3.2.4 Past regeneration and Gentrification

Corvetto is undergoing gentrification, which is mostly brought on by the renovations made in the city center. involves construction This of apartments, accommodation for students, regenerating the public area, including expanding the sidewalk and renovating the largest square in the center (painted a large bend in the square with polka dots, delimiting it with large vases and equipping it with two beautiful stone ping pong tables (See figure 42). At the intersection of via Bessarione and via Comacchio, where Peruvian restaurants concentrate where you can taste seafood ceviche, as well as Egyptian pizzerias and halal butchers, the perimeter features numerous benches and fresh trees and is redefining social life. Additionally, the housing supply is growing, and the houses held by housing associations are renovating and expanding to include all the essential amenities. As a result of this regeneration, Corvetto has begun to draw residents from different socioeconomic classes. prompting the housing corporations to build more expensive houses on the vacant lots in the area. People from other areas of the city were encouraged to move in as a result. It becomes obvious that there is a significant distinction between this gentrification and other gentrification processes in Milan.

In other gentrification schemes, a larger portion of the original population is typically displaced by rich residents. The difference between this and gentrification in Corvetto is that here, another group of people is added to the population, or, as Butler and Robson mentioned "a new social tectonic plate is added to the population" (Robson and Butler, 2001, p. 2158). One possible explanation for why not the entire population has been moved is that Corvetto's regeneration had a social component apart from physical regeneration. In this case, businesses received assistance in professionalizing their business practices, allowing them to handle the area's value increases.



Figure 42 - View of Piazza Angilberto II [Source: www.yesmilano.it]

Next to this kind of gentrification, it can be predicted that the new built regeneration in Scalo Porta Romana will result in gentrification the neighborhood. in However, because of its location close to a development and the pressure redevelopment, which will cause gentrification in the neighbouring regions to increase, regeneration will raise the value of houses in the neighborhood.

The areas closest to the newly constructed regeneration area will be most severely affected (see figure 43), and this impact lessens as the areas become farther away from the construction, according to gentrification trends of earlier development.











Figure 43 - Site photos showing past regeneration and Gentrification [ Source : Own Image ]

#### 3.3 Problem Statement

Milan's population is shifting from being a city that accommodates both lower and higher socioeconomic groups to one that is increasingly focused on higher socioeconomic groups. The increasing construction of mixed-use areas that prioritize higher socioeconomic classes is one of the factors of this transition. Once built, those regenerations are a huge success in terms of both physical development and economic growth, but when we examine the social changes that these kinds of projects bring about, we see that the regions are gentrified and a huge percentage of the original population is displaced. The lower socioeconomic classes will be pushed to the periphery or to other cities if those developments continue, making Milan a city for the higher socioeconomic groups.

Scalo Porta Romana will undergo the next significant change in Milan, and it might be categorized as a new-built gentrification project. Given the history of such developments, there is a high probability that this project will result in displacement and polarization. Scalo Porta Romana's redevelopment will probably be a success both physically and economically because it will produce a prosperous district with a strong connection to the city core. Unfortunately, this development does not respond to the context in which it occurs. which will lead to a sharp polarization between the people of Corvetto and Scalo Porta Romana. In addition, the development will probably result in the eviction of the area's original occupants because of rising tract values, the addition of expensive amenities, and the mounting pressure to reconstruct the area.

Large-scale regeneration projects will always result in some displacement since neighboring property values will increase and because the new amenities will not be as favorably received by the original population. However, this does not mean that no action is required, as successful regeneration must have advantageous impacts on the environment in which it occurs. The original occupants in this case shouldn't be forced to relocate; instead, they should benefit from the development and influence individual results favorably. Therefore, the objective of this thesis is to identify a strategy by which Corvetto residents might benefit from the new construction in Scalo Porta Romana and lessen their risk of being displaced. At the same time, the changes in Corvetto should be advantageous to the new residents of Scalo Porta Romana.

There are several techniques to improve deprived areas, thus it is important to define the scope. This study will primarily target on physical improvements in the built environment and how those modifications impact and improve the socioeconomic values of persons who live in the region. The theoretical and analytical study results will be used to define the scope in further depth.

#### 3.4 Relevance

#### 3.4.1 Societal Relevance

According to Brownill (1990), similar developments in London led to social polarization and displacement, supporting the social relevance of looking into strategies to regenerate without displacing the current residents. The majority of the people was moved to other areas of the city, which had worse social and environmental situations, and this had an impact on society. This thesis will

unfavorable investigate how the developments consequences of those might be minimized and how developments could satisfy the needs of the original population. The Scalo Porta Romana - Corvetto neighborhood was selected because it has characteristics previous Milanese developments led to social polarization that displacement.

#### 3.4.2 Theoretical Relevance

This thesis will express a position the ongoing discussion over redevelopment plans for the city in face of displacement. This argument focuses on whether regeneration aims to improve neighborhoods for the benefit of its residents or if it seeks to improve people's well-being through actions that improve personal results. Numerous developments appear to take the first's side (Lees, 2008). This is mostly based on the neighborhood effects theory, which relates a neighborhood's features to individual outcomes. This concept is the foundation of numerous ideas, including Wilson's (1987) theory, which contends that an environment with a high unemployment rate stimulates unemployment. widely established notion is applied in many nations, including the UK, and frequently leads to the construction of homes for higher socioeconomic classes in deprived neighborhoods in an effort to enhance the neighborhood. On the other side, there is research that contends there

are no neighborhood effects and that placing members of higher socioeconomic categories in deprived neighborhoods merely serves to promote social polarization and exclusion (Atkinson, 2005). According to Manley, Ham, and Doherty (2011), regeneration should focus on empowering the population to improve their mobility and well-being.

This thesis includes a literature study that explains these various viewpoints and goes over several concepts. This explanation helps in taking a position in the current debate, which will be reflected in the proposal for the Scalo Porta Romana - Corvetto area. By deriving results from the study, it will take a stand in the present discussion and provide methods to enhance individual outcomes in deprived areas.

#### 3.5 Questions

To avoid Milan becoming a city for the wealthy, this thesis investigates how deprived areas can benefit from new built regeneration projects, thereby limiting the amount of displacement. The main research question used to investigate this is:

How can interventions in public space help to reduce the amount of displacement brought on by new built regeneration project?

The subquestions to the main question are as follows:

#### 1. How can neighborhoods be regenerated without displacing the original inhabitants?

As previously mentioned, regeneration, particularly major ones like those envisioned for Scalo Porta Romana, can polarize and displace people. By responding to the question, information about how to regenerate an area without displacing the native inhabitants is learned. The question made clear:

- 1. what are the reasons for the current regeneration projects' displacement;
- 2. what steps can be taken to avoid displacement in programs for urban regeneration project
- 3. strategies for regeneration with the least amount of displacement;
- 4. as well as elements that can be used to support the proposal. The result is used to define the design's scope and to suggest interventions that cause less displacement. A literature review is the technique used.

#### 2. What factors led to the social and physical characteristics of the Scalo Porta Romana

#### - Corvetto region?

It is essential to understand the area in order to create a framework for Scalo Porta Romana - Corvetto area. By providing a solution, you can have a deeper comprehension of the topic and gain knowledge of the opportunities and problems. This question made clear:

- 1. the location and significance of the project site in Milan;
- 2. the primary spatial elements within the project area;
- 3. the principal socioeconomic features of the region;
- 4. the various policy types that have an impact on the region;
- 5. local historical context:
- 6. as well as the elements that can be used to support the idea.

The outcome is used to create a carefully designed framework and details. Methods include morphological, socioeconomic, historical, and policy analysis, as well as site visits.

#### 3. What are the benefits and drawbacks of the plans developed for Scalo Porta Romana?

The thesis reacts on the developments in Scalo Porta Romana. In order to accomplish this, an analysis of the current plans is conducted, which led to a better knowledge of the plans made for the region and provided insight into the opportunities and concerns with regard to the new plans. By answering to this question, gain knowledge about:

- 1. the physical interventions that are planned;
- 2. the desired facilities;
- 3. the intended target populations;
- 4. the relationship between the new developments and the neighborhood;
- 5. and the elements that can be used to support the proposal.

The framework responds to the developments in Scalo Porta Romana using the outcome. Method: Case study and site visit.

#### 4. Which physical changes to the project site's existing urban fabric could enhance the individual results of Corvetto residents and others living nearby?

The thesis will propose for an intervention in the Scalo Porta Romana - Corvetto neighborhood. To be able to provide these solutions that are appropriate for the area, all of the research findings will be incorporated into a framework and translated into crucial details. This question clarified:

- 1. what aspects of the area should be included in the final framework;
- 2. what concept can be applied for the framework;
- 3. how similar concepts are utilized elsewhere and their main qualities;
- 4. and how the concept improves the problems in the area.

Methods: research by design and case studies.

#### 5. Which components of the intervention for the Scalo Porta Romana - Corvetto area can be adapted into interventions that can be beneficial for upcoming projects in related circumstances?

By analyzing the primary concepts used in the project and converting them into more generic interventions, the project will draw findings that may be applicable to other projects with the similar conditions. These findings will offer ways to stop regeneration from producing displacement in the future. This question will discover:

1. an outline of the project's findings;

#### 3.6 Methods

To answer the main and sub questions, various methods are used. The paragraphs that follow will elaborate on these methods and a description of the project's methodology is explained in chapter 1

#### **Literature Study**

A literature study is carried out in order to make more better decisions. The primary focus of this review is how displacement can be avoided in regeneration projects, as well as what possible solutions exist, which formed the foundation for the design interventions. The second section of the study expands on the effect of green on displacement, as the analysis revealed that the area lacks larger public green elements and has a low number of trees in the street profile. In this review, various articles by various authors are used to establish the theoretical foundation, with papers by Chesire (2009) and Maas et al. (2006) being particularly important. Analysis is a major method used to answer research questions. According to Vroom (2005), analysis is the process of obtaining and understanding data through a logically-based creative process. This project makes use of a variety of analysis types.

#### **Morphological Analysis**

Morphological analysis comes first on the list. The physical structures in the area are mapped as part of this investigation. Varied scales and different components of the mapping. such as mobility. spaces, educational green activities, etc., are used. A greater understanding of the area was achieved as a result of the mapping, which gave data utilized to identify the most crucial components and features of the site.

#### Socioeconomic Analysis

Socioeconomic analysis is the second technique that is employed. The demographics of the area are determined by studying the literature and statistics used in this investigation. The Italian National Institute of Statistics (ISTAT, census data for 2011) is an example of such a publication . Decisions are made using this information and are adjusted to the existing population.

#### **Historical Analysis**

The third type is historical analysis, which is carried out through the study of old maps and book research. This study explains the logic behind current structures. The sources used are mainly digital, like the website The 1900 Map Collection and Old maps online, which has a variety of maps from various eras.

#### **Policy Analysis**

The policy analysis technique is another type of analysis that is employed to learn more about the plans that governmental organizations have for the project site. Maps and policy reports like the Piano di Governo del Territorio, PGT Milan 2030 serve as the primary sources of information for this policy (Comune di Milano). To match the interventions to the concepts of the governmental bodies, knowledge of the area's policy is used.

#### **Case Study**

Case studies are one of the studies conducted to determine how reference projects address comparable issues. In order to complete this case study, it was necessary to look at similar projects to the intervention site and translate the key concepts into text and illustrations. These elements are derived from the case's morphological analysis. By doing this, conclusions that serve as a guide for choosing the intervention could be drawn.

#### Site Visit

Two visits are made to the location during the project. The objectives of the various site visits varied. The first involved visiting the area and speaking with locals to get a sense of the terrain, the culture, and the problems. This led to the creation of several maps that summarized the research. The gaps in the analysis were filled and a more focused analysis was made during the second site visit. Maps and text are the main forms of documentation for this analysis, which is used to guide the intervention's decisionmaking.

# Chapter 04



Figure 44 - BIG's urban regeneration project in City Life Milan

[Source: www.archdaily.com]

## **REGENERATION &** DISPLACEMENT



The fourth chapter of the thesis provides more details on the literature study that was conducted for it. The first section goes into detail on the various methods of regeneration and the problems that arise with it. How to regenerate for the original Population in terms of green public places will be covered in greater detail in the second section.

# 4.1 Regeneration strategies causing minimal displacement

The theoretical framework will examine how some regions could be developed without leading to significant displacement in order to reduce the potential eviction of original residents due to new-build redevelopments in Scalo Porta Romana. In keeping with this, the research question for this literature review is: How can interventions in public space help to reduce the amount of displacement brought on by new built regeneration project? The subject will be addressed by going into more detail about the present methods of regeneration and examining the results of such efforts.

### 4.1.1 Neighborhood Effects theory and the Mixed Housing Policies

Different types of regeneration were suggested as cities attempted to address deprivation in various ways. The mixed housing approach, which is based on the neighborhood effects theory, is one of the primary treatments used to improve the well-being of the poor. This section will go into more detail about this widely used regeneration approach and examine its results.

There is widespread acceptance among experts in urbanism and planning that neighborhood influences on individual outcomes do occur. According those beliefs. neighborhood features have an impact on people's individual socioeconomic outcomes. including their health, income, and employment. Numerous studies have been done on the subject because the idea is frequently applied to city planning, and the majority of the findings point to a connection neighborhood characteristics between and individual outcomes (Manley, Ham, & Doherty, 2011). One of the first to discuss the neighbourhood effects theory was Wilson (1987). He believes that some undesirable neighborhood traits do have an impact on its residents. His theory focused on finding employment. According Wilson, to a community with a high percentage of structurally unemployed people may exhibit "poor social dispositions, low aspirations, and casual work practices" (Wilson, 1991, p. 642). According to his theory, he says that some regions encourage the development underclass that is primarily comprised of the unemployed. Following Wilson's theory, numerous studies were conducted in which the researchers came to identical conclusions. Examples include a study by Overman (2002), which found that neighborhood features affected each student's performance in school, and a study by Friedrichs and Blasius (2003), which argued that people's tendency to exhibit abusive behavior is influenced by their home environment. Different arguments are made by the researchers to support the presence of neighborhood effects, such as the influence of role models, employer discrimination based on applicants' residences, poor public services, and crime (Cheshire, 2007).

#### **Mixed Housing Strategies**

Nowadays, many ideas for urban regeneration are founded on applications of this principle of neighborhood effects. These ideas are based on the theory that regenerating deprived areas will boost people's wellbeing. To improve impoverished communities, it is usual practice in urbanism and planning to build up a balanced population made up of members of various socioeconomic classes. Wilson's theory indicates that this mix of people from various socioeconomic mitigate groups will the negative neighborhood effects and enhance the welfare of the underprivileged. The garden city movement was the first to use this concept of mixed populations, and it is now incorporated into many Western urban strategies (Cheshire, 2009). In general, these methods create mixedsocioeconomic communities by altering the tenure structure of the neighborhood. Because the current properties don't satisfy the criteria of the target people, these strategies frequently accompany large-scale demolition projects to build new homes that do (Manley et al., 2011).

Some authors reject mixed housing methods and claim that they are founded on a faith-based theory, primarily for two reasons. Cheshire (2009) describes the first and claims that it just addresses the symptoms of poverty rather than its root causes in his article about mixed communities. In his view, revitalizing impoverished regions involves bringing in more wealthy residents, which raises overall socioeconomic statistics but not the socioeconomic status of the poor. The mixed population will spread the problem and lessen its exposure, not improve the living conditions for the poor.

Secondly, the neighborhood is regnerated to draw in the wealthier residents. Along with changing housing stock, this will also alter the amenities to better meet the needs of the incoming population. The alteration of amenities will directly lead to higher expenditures for housing, public services, and amenities (Cherhire, 2007). Most poor people do not benefit from this improvement and cannot afford this rise due to the low salaries of the original population, which forces them to relocate to less expensive places.

#### 4.1.2 Ways to minimise displacement

The regeneration and displacement literature that was used for this review goes into great detail about the effects of mixed housing policies and whether they are a solution or not, but only a small number of the studies offer potential remedies to improve the living conditions of the population in these impoverished areas. Several distinct interventions are mentioned in this; they are summarized in the following parts.

### Empowerment of the poor people

Some authors who reject mixed-housing policies argue that empowering locals can help to improve the socioeconomic status of those who live in impoverished places. The population will be in a stronger position as a result of empowerment since they will be more mobile and, as a result, more resistant to displacement. This approach will attack the process that causes people to experience deprivation rather than just the symptoms of it.

According to the Manley et al. (2011) research on mixed housing policies, this empowerment primarily focuses on reducing health disparities and making investments in education. People will become more independent and mobile as a result, making them less vulnerable to exploitation. In their article Chatterton and Bradley (2002), add employment to those two. Additionally, Manley et al. (2011) claim that concentrating only on the empowerment of the locals is insufficient. According to them, it's crucial to provide for the basic requirements of those who live in deprived areas in order to ensure public safety and environmental quality.

Various authors elaborate on potential strategies for empowering people in the areas of health, employment, and education. In this, Crowther, Cummings, Dyson and Millward (2003) highlight the benefits of improved techniques of education on the individual outcomes of the population in their book about regeneration and the role of schools in this. They performed studies contrasting schools that made investments in their students' education with those that did not. The findings demonstrated that enhancement of the curriculum improved the wellbeing of the students. In their study on the impact of afterschool activities, Durlak and Weissberg (2007) demonstrate how these programs enhanced the students' social, personal, and academic skills. This is brought on by improvements in social integration, higher school performance, less aggression, and other behavioral issues, as well as an increased willingness to attend school.

Secondly, Chatterton and Bradley (2000) elaborate in their paper about the impact of employment on housing policies .They believe that the best way to effectively empower the population in terms of employment is to create jobs that are compatible with their aspirations and skill sets. The population will become more mobile if they can hold such occupations since their salaries will increase. The researchers note that a flexible strategy is required since citizens' objectives and skills may alter as a result of empowerment and a changing demographic composition. Additionally. they point out that the newly created jobs can be grabbed by residents of other regions, meaning that the local population would not gain from the increase of employment in the region.

Thirdly, according to study by Buckland and Pojani (2022), visiting green public places, such as parks, has a good impact on health because it encourages physical activity, improves air quality, reduces stress and tiredness, and promotes the formation of social bonds. A more detailed explanation will be provided in the second section, which will discuss the impact of green public places on health.

The role of the urban designer in empowering the population is constrained because it is limited to suggesting physical solutions; they are unable to create jobs or alter educational curriculum. What they can do is provide practical solutions that will eventually give people more power. This can be demonstrated by creating areas where this empowerment can take place, such as by adding parks or commercial space.

#### Maintenance of public housing

The maintenance of public housing is another frequently proposed measure reduce displacement. Research on gentrification in New York and the displacement it caused was conducted by Newman and Wyly (2006). Public housing is one of the key defenses against displacement, according to their report. With the help of public housing, lowincome residents can live in high-quality homes for an affordable price. Thus, expanding and sustaining public housing in poor neighborhoods will prevent major displacement.

Cheshire (2007) makes addition, the argument that access to a living environment is included more than the affordable houses. In doing so, he emphasizes the value of having amenities that meet the needs of the population. Because the poorest residents of a neighborhood cannot afford the amenities when their prices are too expensive. Additionally, the development of top-notch amenities will have a direct impact on the prices of homes and on rent.

#### 4.1.3 Result

The literature analysis on regeneration and displacement revealed that because these policies do not deal with the root causes of deprivation, they do not improve the condition for the original inhabitants of deprived areas. Instead, they increase the number of rich individuals living in the poorer neighborhoods, which raises the numbers but does nothing to improve the poverty itself. Additionally, the value of houses and amenities increases as a result of the gentrification that is necessary to draw in those wealthy people. The original population frequently can't support the growth and is forced to relocate to less expensive locations.

The researchers that argue against mixedhousing programs suggest concentrating on improving individual results and, in doing so, improving the systems that cause people to be deprived. In this, the researchers' advise is to concentrate on empowering the locals by focusing on enhancing the outcomes in health, employment. and education. Since employment and health are the two areas of deprivation that are most prevalent in the Scalo Porta Romana area, those will be the key areas of emphasis in the proposal for that region's Corvetto neighborhood. It's important to keep in mind that an urbanist can only suggest physical changes that can indirectly encourage population empowerment. The review demonstrated that, in addition to emphasizing empowerment, maintaining public housing can be a useful strategy for preventing eviction. However, merely raising amenity values might potentially result in the original population being displaced.

Analysis of the findings from the literature research reveals that displacement is mostly brought on by a rise in the costs of housing and amenities and the inability of the original population to adapt to these changes. Therefore, it's crucial that the interventions used to improve a community's deprivation be appropriate for the people and that they can withstand the value increases brought on by the actions. In order to prevent displacement brought on by regeneration initiatives, simultaneously regeneration that emphasizes the empowerment of the local population may be an effective strategy.

#### 4.2 Areas of Empowerment

The second component of this literature study will concentrate on practical methods for physically empowering residents in terms of their health. This thesis focuses on the two types of deprivation since, as was already said in the previous section, employment and health are the two areas that suffer the most in the Scalo Porta Romana - Corvetto area. The thesis previously expanded on work by Chatterton and Bradley (2000), who claim that by creating jobs that fit the talents of the locals of this underdeveloped area, the employment domain can be improved. Additionally, the improvement of health deficit will be the main topic of this second portion. The investigation revealed that there are only few less maintained parks or other green public areas in the project region. Combining this deficit with the widespread conviction that green spaces are beneficial to health, it becomes clear that creating and enhancing green spaces could be a means of empowering the population. The lack of green public places is a concern in underprivileged communities, according to recent research by Buckland & Pojani (2022), and those areas have much fewer public parks. Implementing and enhancing green spaces in those disadvantaged areas could help fight individual deprivation if the widespread assumption that being in the outdoors is good for people's health is true.

This second section of the theoretical framework asks, "How could green spaces improve individual outcomes?" in order to achieve its goals. A review of the literature is used to address this query, and it begins with a description of how green spaces are distributed around the city. The impact of green on health will next be discussed, followed by a summary of the factors that promote an improvement in health. The drawbacks and restrictions of this study will then be discussed, and the research will conclude by examining how using greenery might help relieve poverty.

#### 4.2.1 Distribution of green spaces

The city's green spaces are not evenly distributed. The advantages of urban green spaces for the environment are equally considerable. In five medium-sized European cities—Birmingham, Brussels, Milan, Prague, and Stockholm-Buckland & Pojani (2022) look into the differences in access to urban green space today. They discover that urban inhabitants can benefit greatly from green space in terms of their physical and mental health, including a reduction in stress, anxiety, depression. Additionally, space is used for physical activity, which helps to cut cholesterol and lower the prevalence of obesity and cardiovascular disease. Green space promotes social cohesion and strengthens links between neighbours, which preserves wellbeing. Green space, if it is available to everyone in a community, can help lessen health caused by socioeconomic disparities disadvantage. Better air quality, lower temperatures, cleaner groundwater, lower flood danger, and greater biodiversity can all be found in areas with a lot of trees, plants, and pervious soils. Green spaces improve the quality of life for city people by contributing to ecosystem services.

According to Buckland and Pojani's research (2022)Milan's green on areas in relation to their location. The neighborhoods with the best access to green space are typically near to groups of large parks, whereas the neighborhoods with the worst access to green space are those with smaller, random parks. The accessibility score for the city center as a whole is 49%. There is not much green space in the city center The area has a high (Figure 45 , 1). concentration of houses but just five small parks, two of which are close by, leaving the majority of residents without access to urban green space near their homes.

The region with the highest percentage of houses with access to green space (Figure 45, 2) is evenly dispersed with a range of parks of various sizes. The Milan urban core's area with the least access to green space is distinct from most other places (Figure 45, 3). A statistically significant positive link between income and access to green space is explained by the linear regression model. The greater open spaces and the Central Business District are typically closer to the higherneighborhoods. High-income income neighborhoods make up the entire urban core. In the urban fringe, where there are few accessible green spaces, are concentrated low-income neighborhoods.

In this case, the data shows that rich areas have more easily accessible public green spaces than impoverished areas. Additionally, there are variations in the green's quality. Green spaces are frequently less desirable for locals to visit in underprivileged regions since they are not as well maintained.

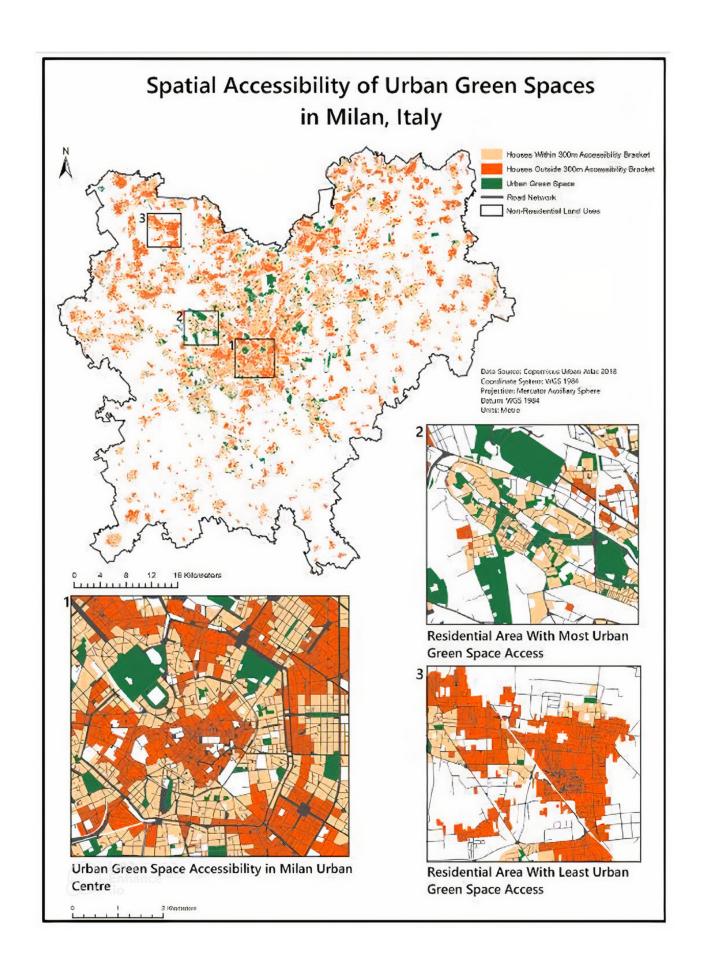


Figure 45 - Spatial accessibility of green spaces in Milan (Megan Buckland & Dorina Pojani,2022)

[ Source : www.tandfonline.com ]

## 4.2.2 Impacts of green areas on several aspects of health

frequently divided into two Health is categories: perceived health and assessed health in the academic research on the positive effects of green spaces on wellbeing. Physical and mental health are the two components of the assessed health in this (Maas et al., 2006; Lee & Maheswaran, 2010) (see figure 46). The impact of green spaces on those three categories of health will be further discussed in this research.

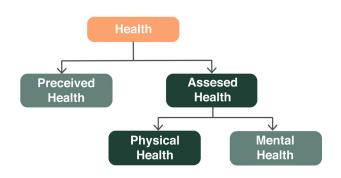


Figure 46 - Typology of health used in different kinds of literature. [ Source : Own Illustration]

#### Perceived health

Green areas are often seen to have a good impact on people's perceptions of their health. Maas et al. (2006) conducted studies support this widespread Dutch citizens of various assumption. social and demographic backgrounds were chosen by the researchers, and they asked them to rate their personal health. The result is compared with details regarding the quantity of green space that surrounds their home. They calculated the percentage of green space within 1 km and 3 km of the resident's house using a database that identified 39 different landuse types.

The study's findings supported the notion that there is a link between the amount of green space and residents' perceptions of their health (see figure 47). They came to the conclusion that greater access to green causes higher perceptions of health. Additionally, the study assessed how much perceived health was affected by green space within a 1km and 3 km radius. They arrived to the conclusion that the presence of greenery within a one-kilometer radius has a greater impact on perceived health in densely populated places (Maas et al., 2006).

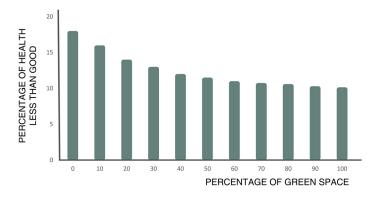


Figure 47 - The amount of perceived health in relation to the amount of green within a radius of 3km around the dwelling (Maas et al., 2007) [Source: Own Illustration]

#### Assessed health

The amount of perceived health of residents is not same as the amount of assessed health of residents. It is important to explain the connection between the quantity of green space and the estimated health of people. Maas et al. (2009) expanded on the previous research by measuring the number of green spaces in connection to the diseases that physicians were treating. The findings indicate that areas with a lot of green space have lower rates of 15 of the 24 types of diseases (see figure 48). This demonstrates a link between having access to green spaces and having good health as determined by a doctor. Additionally, the research supported the hypothesis that green space density within a radius of one kilometer is greater than that within a radius of three kilometers (Maas et al., 2009).

previously argued, studies demonstrated a connection between the availability of public space and a person's health. It must be noted that this association could be due to variables other than environmental protection, such as the quality of the food consumed and the standard of living.

	Prevalence per 1000	
Cluster	10% green space	90% green space
Cardiovascular		
High blood pressure	23.8	22.4
Cardiac disease	4.7	4.0
Coronary heart disease	1.9	1.5
Stroke, brain haemorrhage	0.92	0.76
Musculoskeletal		
Neck and back complaints	125	106
Severe back complaints	99.2	65.8
Severe neck and shoulder complaints	75.6	63.3
Severe elbow, wrist and hand complaints	23.0	19.3
Osteoarthritis	21.8	21.3
Arthritis	6.7	6.2
Mental		
Depression	32	24
Anxiety disorder	26	18
Respiratory		
Upper respiratory tract infection	84	68
Bronchi(oli)tis/pneumonia	16.0	14.7
Asthma, COPD	26	20
Neurological		
Migraine/severe headache	40	34
Vertigo	8.3	6.6
Digestive		
Severe intestinal complaints	14.9	12.3
Infectious disease of the intestinal canal	6.5	5.1
Miscellaneous		
MUPS	237	197
Chronic eczema	5.5	4.9
Acute urinary tract infection	23.2	19.4
Diabetes Mellitus	10	8
Cancer	4.9	4.4

Figure 48 - Morbidity rates in average neighbourhoods, per 1000 inhabitants (Maas, Verheij, et al., 2009).

### 4.2.3 Aspects of green that positively affect health

Understanding the benefits of green areas for health is essential if you want to use them to improve health problems. Numerous articles have looked into topic and highlighted various elements. Van Dorst (2012) and Maas et al. (2009) studies primarily highlighted four features of green that are significant for health. These four aspects will be described in the paragraphs that follow, with the physical and mental aspects being covered first.

# Aspects of green that positively affect physical health

The first is a physical aspect: Green spaces provide superior air quality. Maas et al. (2009) discovered a very substantial correlation between the number of green spaces and the prevalence of respiratory persons who illnesses among adjacent to green spaces. Respiratory illnesses are less common in people who live close to parks or other significant green spaces. Because of the removal of pollution and the provision of oxygen by trees and other vegetation, this is likely related to the higher air quality in green spaces.

According to Bedimo-Rung et al. (2005), the second physical aspect is that green areas indirectly improve people's physical health. Green places encourage physical activity, which will improve people's physical health, which is why this is the case. According to their claims, regular exercise enhances physical health and lowers the risk of heart disease, diabetes. high blood pressure, colon cancer, and other diseases while promoting development and maintenance of strong bones, muscles, and joints. Utilizing open space for exercise helps to decrease cholesterol and lower the prevalence of cardiovascular disease and obesity (Astell-Burt et al. 2014; Dahmann et al. 2010; Grigoletto et al. 2021).

According to research, there are two primary characteristics of green environments that stimulate activity. The first is that most parks offer a variety of free and easily accessible opportunities for physical activity (Bedimo-Rung et al., 2005). The majority of parks have features that encourage physical activity, such as football fields and exercise equipment, as well as more fundamental components that encourage movement, like a path system or grass areas. However, it should be highlighted that paved places can also encourage physical activity, not just green spaces (Lee & Maheswaran, 2010). The second factor is detailed by Bedimo-Rung et al. (2005), who discovered that when people can exercise in a beautiful green space and when they observe others exercising, their willingness to do so increases. The length of the exercise will likewise lengthen, according to the Dutch Advisory Council for Research in Spatial Planning Nature and the Environment and the Health Council of The Netherlands (2004).

#### Aspects of green that positively affect mental health

The second part of the mind deals with the reduction of stress and tiredness. Research on the healing properties of green was conducted by Van den Berg et al.(2007). Two groups of psychologically exhausted Swedish students were placed in a controlled environment as part of an experiment. A natural environment was presented to one group, and an urban environment to the other. When considering the amount of recovery from exhaustion. the measured outcome reveals that the students who were placed in a natural environment performed nearly 2.5 times better. Additionally, a study by Steptoe, Feldman, and Hartig (2004), who examined how green spaces affect stress by monitoring blood pressure, demonstrates that surroundings strong restorative benefits will make people feel less stressed.

The last aspect is that being in the green encourages the development of social relationships. By concentrating on social factors, Maas et al. (2009) conducted study on the relationship between green space and residents' health. They imply that close social connections, which are greatly facilitated by the environment, have a good impact on mental health. According to the authors, public spaces are essential components that foster interaction between individuals, which is necessary to develop social relationships and build local communities. According to Flap and Volker (2005), places like parks, recreation centers, schools, and churches are examples of public places where this connection takes place.

Green areas have a significant impact on this because they typically draw more people than bare areas, leading to more meetings. People frequently select green spaces over other types of public space due to their simple accessibility, ability to provide restorative effects, ability to generate shadow, ability to reduce noise, and ability to create privacy (Maas et al., 2009).

Greenbaum (1982) expands on this subject in the context of neighborhood interactions. He argues that regular eye contact, greetings, and brief conversations are the key reasons why neighbours engage more. In order to encourage unexpected gatherings and conversations, a suitable public area is necessary. The importance of having a suitable public space in high density places is emphasized by various authors since relationships between people in urban areas appear to be significantly weaker than those between people who live outside of urban areas (Forrest & Kearns, 2001).

As was previously mentioned, there are four reasons why green spaces are good for your health: they offer clean air, they encourage physical exercise, they lessen tiredness and stress, and they foster and enhance social bonds.

#### 4.2.4 Interventions to improve health

After extensive research on the benefits of green to health, little is still understood about how various aspects of green spaces affect people's wellbeing. Various works of literature go into detail about particular components used in green spaces. According to their intended these components can purpose, divided into three groups: those that try to attract people, those that encourage physical activity, and those that encourage social connection. This paragraph will go into further detail about those various interventions.

The first step is to promote the use of green places. Research on the number of trees in Chicago in relation to space use was conducted by Coley et al. (1997). They came to the conclusion that outdoor spaces with trees located in low density regions drew three times as many visitors as locations without trees. Additionally, a correlation between the number of trees and the population of low-rise neighborhoods was discovered: Figure 49 illustrates this relationship and demonstrates the stark contrast between areas without trees and areas with one or two trees. The study found no proof that densely populated places with trees draw more people. In a follow-up study, Kuo et al. (1998) examined the relationship between the number of trees and the felt sense of safety in a neighborhood. They discovered that more trees boost the feeling of safety in the neighborhood.

The second step attempts to encourage physical activity. In their study, Ebbeling et al. (2002) discovered that some factors, such as playgrounds, affect children's well-being. According to this study, playgrounds can prevent childhood obesity because they encourage youngsters to be physically active. In fact, all factors that encourage physical activity, such as sports courts, public exercise equipment, and path design, have a good impact on physical health.

The final tool mentioned in literature tries to enhance social interactions. According to a study by Buckland & Pojani (2022), green areas in particular can help to reduce radical conflicts between individuals from various backgrounds. **Facilities** that encourage interaction, such playgrounds and football fields for sports, are significant factors in this. People consequently get to know one another through informal activities. which fosters social cohesion within a neighborhood and strengthens social relationships.

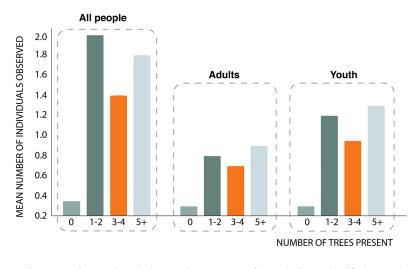


Figure 49 - Amount of trees in relation to the amount of people in parks (Coleyet al., 1997).

#### 4.2.5 Problems caused by green spaces

Existing research on green spaces also highlights some negative consequences on health, which must be brought up to round out the explanation. The issue that keeps coming up is that poorly managed green spaces have the opposite effect of attracting tourists. After conducting research on the use of green spaces the (2010) Commission of Architecture and the Build Environment found that poorly managed green spaces and declining amenities frequently lead to a deterioration in the green space's appeal. The number of visitors is negatively impacted by this. The decline of visitors could encourage criminal activity and antisocial behavior, which would frighten desired people. As a result, there will be a bad reputation and people may be afraid to be around crime. Women are more worried about their safety in this situation than males are. Additionally, ethnic minorities will stay away from those underdeveloped areas, especially because they worry about racism and discrimination (Floyd, Gramman, & Saenz, 1993).

The Commission of Architecture and the Build Environment (2010) conducted study on the utilization of green space in England and found that many green places are viewed as harmful. They discovered that just 75% of survey participants feel secure in the natural areas near their homes. A closer look at the research's findings reveals that, for instance, people from Bangladesh feel less secure: only 53% of Bangladeshis feel secure in the green areas that surround their homes.

The Commission of Architecture and the Build Environment's (2010) research also examined the justifications for why people thought the places were risky. They discovered that in order to feel safe, people want to have a complete view of the green space. To be able to have a decent overview of the area, they advise avoiding high barriers and foliage that blocks the view. Additionally, according to Luymes and Tamminga (1995), better lighting, a better layout, and self-policing will produce environments that are viewed as being safer.

25% of people don't use the green spaces that surround their homes because they don't feel comfortable there. This means that those individuals do not likewise gain from the health benefits of green places. People will use green spaces more frequently as a result of improvements to the green areas. Long-term improvements in personal health will follow from this.

#### 4.2.6 Limitations of current research

A higher proportion of green space is associated with better perceptual, mental, and physical health, according to the literature that served as the basis for this theory evaluation. It also reveals a definite association between the amount of green space and health. This calls for a comment to be made. As several papers have already noted, selection effects that arise from the cross-sectional design of the various studies can contribute to or otherwise affect the connection (Maas et al., 2006, 2009). It's possible that the results are affected by selective migration, such as when healthy people choose to live in greener locations. The majority of research attempted to eliminate these selection effects by examining the unique demographic and socioeconomic traits of the various groups, however it is impossible to completely eliminate selection impacts (Maas et al., 2006). Additionally, there are other factors besides green that affect people's health. There are other additional factors, such as food quality and living environment.

The recent research on the link between green spaces and health has vet another drawback. There is still much to learn about the components of green spaces and how they affect people's welfare, as was already indicated in the research. In line with this, a report from the Health Council of The Netherlands and Dutch Advisory Council for Research in Spatial Planning Nature and the Environment (2004) states that there is a need for more in-depth research on the effects of various types of greenery on healthrelated aspects, and goes on to elaborate more on the size and quality of the green spaces.

#### **4.2.7 Result**

According to the literature analysis on this subject, there is a connection between residents' perceived physical and mental health and the amount of green space present in residential areas. It is crucial to keep in mind that the limitations of the reviewed literature may have an impact on this correlation. However, the fact that green promotes physical activity, clean air, space for social interaction, and a reduction in fatigue and stress can all be used to explain why green has a favorable impact on health. To enable people to benefit from the advantages of using green, certain components within green spaces must be implemented. These components can be broken down into three groups with distinct objectives: interventions that draw people, interventions that encourage physical activity, and interventions that encourage social interaction.

Improvements to existing spaces and the addition of new ones would improve health aspects of those who utilize the green because poor communities lack adequate green spaces like parks and have a small number of trees. Since there is no proof that merely having access to green spaces improves health outcomes, it is crucial to not only build green public space but also encourage people to use it. In order to draw people in, it is crucial to make investments in the accessibility and attractiveness of the green spaces.

The Scalo Porta Romana - Corvetto area analysis reveals that there aren't many well-maintained, big green public spaces in the project area (see chapter 5). One park is very popular in the summer and is frequently used for physical recreation. However, aside from that, there aren't many large parks and there aren't many other types of green places, like grass verges or trees. Therefore, creating more green public places could help the area's health outcomes. It's crucial that those new areas are appealing and easily accessible.

#### 4.3 RESUME

The final section of this chapter will summarize the major conclusions from the literature review and offer some suggestions for the project site.

#### 4.3.1 Conclusions from the literature review

According to a study of the literature on regeneration and displacement, mixedhousing strategies, which are frequently utilized, may not enhance the lives of the original inhabitants of disadvantaged regions and may even be the reason for population relocation. The empowerment of the population in terms of employment, and education, where population becomes more mobile and hence more resistant to displacement, is the focus of authors who argue against the mixed housing policy. It's important to remember that the function of the urban designer is constrained since they can only create the conditions for this empowerment to occur; they have no control over the empowerment itself. Because the locals will be more mobile and able to handle the local value increases, focusing regeneration initiatives on the empowerment of the original population may be a way to minimize displacement.

More research has been done the enhancement of personal health outcomes by green spaces, and it has been found that being in green spaces is beneficial to health. Four primary points can be used to explain this: green promotes physical activity, providing clean air, provides a place for social connection, and lessens exhaustion and stress. To ensure that people can benefit from the advantages of using green, specific components must be implemented inside green spaces. These interventions can be divided into three groups with distinct goals: interventions that encourage social engagement, interventions that encourage physical activity. and interventions that attract individuals. It is crucial to understand that people only benefit from green spaces when they are utilizing them. Because of this, it's crucial to pay attention to the accessibility of public green spaces rather than just the space itself.

#### 4.3.2 Recommendations for the Scalo Porta Romana - Corvetto

The regeneration of the area should concentrate on enhancing conditions for the current residents and on the empowerment of the original population in order to propose a framework for the Scalo Porta Romana - Corvetto area that contributes to minimizing displacement brought on by the developments in Scalo Porta Romana. Since employment and health are the two areas with the greatest need, empowerment in this area should primarily impact them. Regeneration and empowerment together enhance livelihood that residents will be able to defend against value increases brought on by newly constructed regeneration projects.

Corvetto has a low amount of public green space and a high percentage of unemployment, thus creating attractive public green spaces and jobs for locals would make them feel more empowered. has alreadv mentioned. urban designers cannot directly affect these two factors, but they may construct environments that allow for this empowerment. Therefore, by building additional commercial spaces that match the needs and abilities of the current population, employment results could be improved (see figure 50). According to the research, encouraging people to use green public spaces can enhance health outcomes. This can be done by improving current spaces to make them more appealing and by implementing new ones.

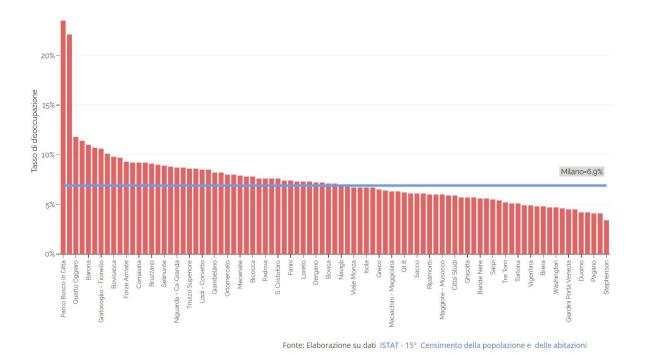


Figure 50 - Neighborhood Unemployment rate in Milan [ Source : chart-studio.plotly.com ]

# Chapter 05



Figure 51 - Piazzale Luigi Emanuele Corvetto

[ Source : urbanpromo.it ]

### **EXPLORING SITE** SCALO PORTA ROMANA - CORVETTO



The fifth chapter will examine the project site and present some of the analysis. This analysis is done to learn more about the project area as well as the relationship in a larger environment.

#### 5.1 Milan

The investigation began by examining the larger structures that surround the project site and the kind of strategies that have an impact there. The following explanations cover the analysis's key points.

#### **Urban fabric**

Milan, which has a population of about 1.4 million, is the second-most populated city in Italy after Rome (ISTAT, 2017). Historically, canals ran through Milan's city center, much like they do in Amsterdam or Venice. There is a large river associated with practically every significant inland city. The Spree River runs through Berlin, while the Seine runs through Paris and London has thames. However, Milan is one of the Europe's wealthiest cities, so the city was forced to create one for itself. A network of navigli (canals) was constructed between the 12th and the 17th centuries in order to increase the wealth and power of the landlocked city. By the end of the 15th century, a network of smaller channels connected Milan to the rivers in the east and west and united the city as a whole. In the south, Navigli, and in the north, Martesana canal, the majority of the remaining remnants of this network can be seen. As a result of modernization in the middle of the 20th century, the Inner Ring canal was covered in concrete, and cars and trains took the place of boats as the fastest and most efficient method of transportation.

The building of the railroad infrastructure and the reinforced walls helped to shape the city of Milan. It is well-known for its architecture, landmarks, and historical remains. Milan evolved entirely within the constraints of the Spanish city in the first half of the 19th century. The city did, however, increase as a result of pressure from population expansion. Industrialization pushed the city to grow throughout the 20th century, leading to the construction of airports, train stations, and other infrastructure. Due to the international success of Milanese fashion houses like Dolce & Gabbana, Armani, and Versace in the late 20th century, Milan gained recognition as a travel and fashion Instead of manufacturing, destination. concentrates on developing new business areas, financial centers, information technology, and the creative sector, such as Porta Nuova, CityLife, and Brera district, resulting in an old city with a modern and vibrant way of life.

#### **Nature**

Parks are positioned along the city's perimeter, forming a continuous trail of nature, along with the infrastructure system. Our site is situated along that trail, which offers ideal conditions for enhancing the city's ecological system. The Green Belt serves as a divider between the city center and peripheral neighborhoods. Large parks may be found in Milan's inner city, whereas the city's southern region is home to agricultural area (see figure 52).

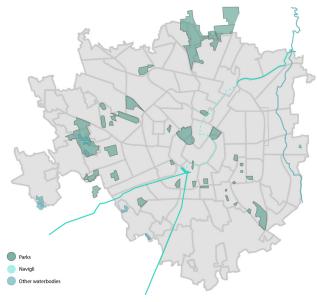


Figure 52 - Major Parks in Milan.

[ Source : geoportale.comune.milano.it ]

#### **Main Squares**

The majority of Milan's significant piazzas (squares) are concentrated in the city's center (see figure 53). The central activities zone of the city contains few international centres that are located on the central area. The policy described in the PGT 2030 of Milan proposes to turn Scalo Porta Romana into one of those metropolitan centres, so it will be comparable with the Other main squares. Besides this metropolitan centres, there are many squares of which Corvetto is part of.

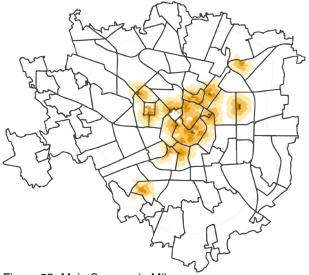


Figure 53- Main Squares in Milan.

[ Source : transformtransport.org ]

#### **Average Dwelling rent**

The average rent per square meter varies greatly within the city. Rents in the southern part are cheaper than those in the middle part, according to the overall pattern. Rents are obviously higher in Milan's City Center and the areas immediately surrounding the core business district (see figure 54).

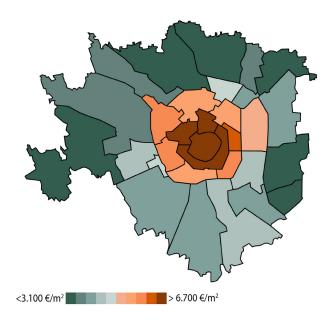


Figure 54- Average dwelling rent in Milan.

[ Source : immobiliare.it ]

# Recommended increase in Public space

The project site area lacks significant parks or open spaces, which is consistent with the information in the Systematica (transform transport) map that shows the absence of public spaces. The map (see figure 55) shows locations where there needs to be more green public space.

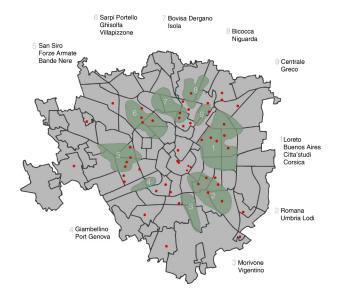


Figure 55- Recommended increase in public spaces in Milan.

[ Source : transformtransport.org ]

### 5.2 Deprivation

According to the Indices of Multiple Deprivation, Corvetto and its neighboring regions are deprived. Using information from the ISTAT 2011 and Comune di Milano, which provides details on the extent of deprivation in Milan, this section describes the various types of deprivation that exist within the project area. The maps of the Indices of Multiple Deprivation are used to identify locations that qualify as needed areas because they lack certain qualities. Unemployment, Education, Health, Population Density, Foreign Resident, Income, Crime, and Environment are some of the relevant indexes that are used to create the Deprivation Index (see figure 56 and 57).

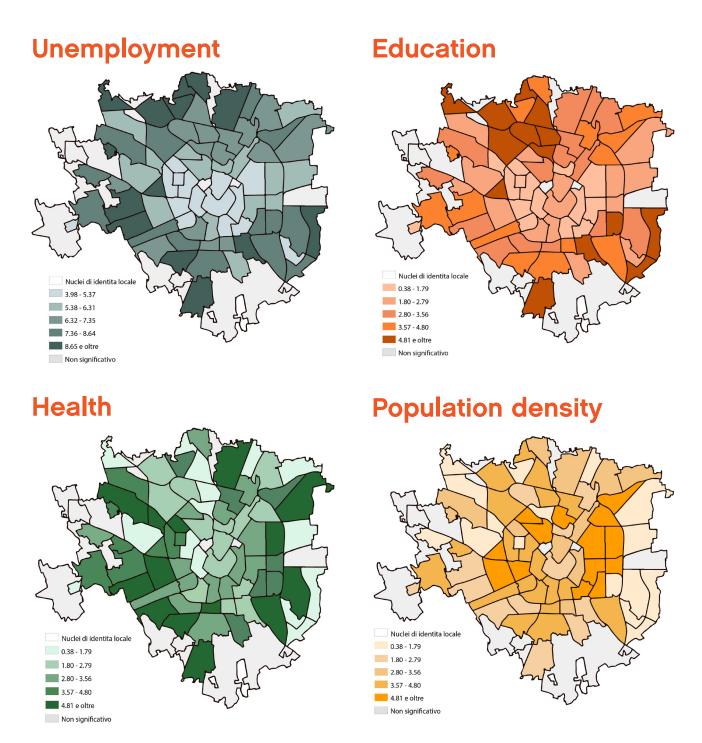
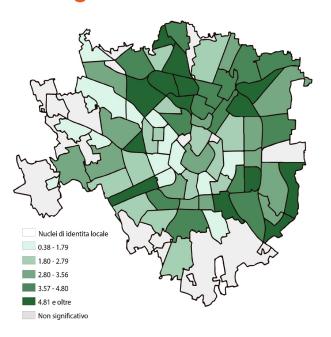
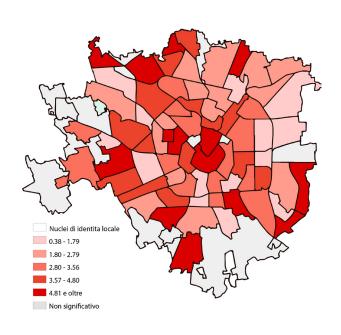


Figure 56- Map showing Unemployment, Education, Health and Population density. [ Source: ISTAT 2011 ]

### Foreign resident

### Income





### **Environment**

### **Deprivation Index**

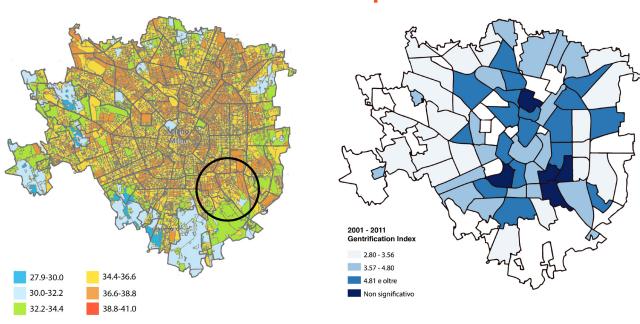


Figure 57- Map showing Foreign Resident, Income, Environment, Deprivation Index. [Source: ISTAT 2011]

These data demonstrate that there are significant variations in the types of deprivation within Milan, but they also demonstrate patterns that suggest some areas are more deprived than others. The Lodi-Corvetto and Scalo Romana NIL Districts of PGT 2030 area is depicted on all of the maps as having aboveaverage levels of deprivation in terms of employment, education, income, health, crime, and environmental conditions. In each zone of Milan, there are variances based on the types of maps. Most of these categories show that central Milan is well developed, while the periphery has greater deprivations than the center area.

The map demonstrates that those who reside in Milan's outer suburbs are less educated and wealthier because they struggle with unemployment and are therefore unable to rent a home in the city center. Foreign residents choose to live in the suburbs because the rent there is less expensive than in the city center. The number of instances involving violence, theft, criminal damage, and burglary makes up for the crime deficit. The pattern reveals that theft and crimes tend to occur more frequently in the Corvetto neighborhood close to our site. Land Surface Temperatures Map in Milan demonstrates that the area as a whole has a high temperature, with sections with few, large parks having the lowest temperature. Therefore, it is important to preserve and develop the greenery in these areas to maintain a healthy environment.

We can conclude that quite a few domains are deprived when we consider the entire picture of deprivation in the area, with the environment condition serving as the primary deprived domain. Contrarily, there are few crime and safety issues in the neighborhood and little educational deficiency. The domains that framework will cover will be determined by the analysis. As was already established, improvements in the areas of health and employment will be the major factors of people's empowerment. Their income rises automatically if their employment and health improve.

### **5.3 Morphology**

This section shows the most important analysis of the area in between Corvetto and Scalo Porta Romana and will elaborate on the key findings.

### **Institutions and Education**

Figure 58 shows the institutions and educational centers (hospitals, school, recreation centers, churches, etc.) in the area. The map shows that the institutions and education centres are spread over the whole area.

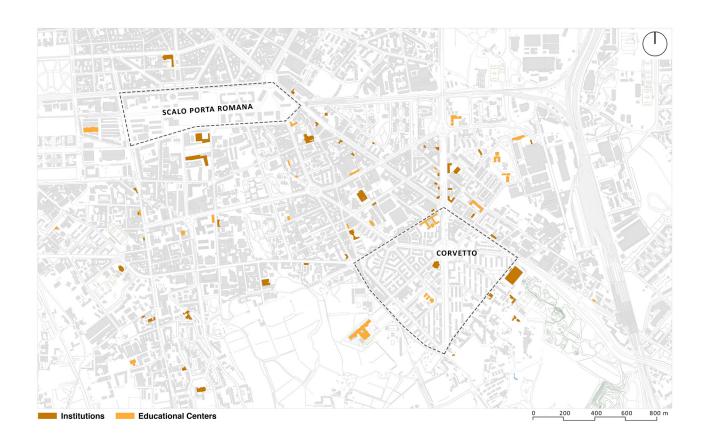


Figure 58- Institutional and Educational Buildings. [Source: Own illustration based on datas of Comune di Milano]

### **Public Spaces**

The area between Scalo Porta Romana and Corvetto lacks bigger public green spaces like parks. This can also be seen in the analysis of the parks and public spaces, that show that Parco pubblico - Marco d'Agrate/Ortles is the only big public space in between those centers (see figure 59).Parco pubblico - Marco d'Agrate/Ortles is a typical neighbourhood park that is used by the local population to play sports, walk the dog or enjoy the sun. Most of the bigger parks are located on the outskirts of the Corvetto.

The new developments in Scalo Porta Romana will contain a large park and Outskirts of Corvetto has a large adventurous park that mostly people use in summer and many small parks but all of them are not used and maintained properly. Those two places are therefore quite distinct and act on a lower scale as a way marker.

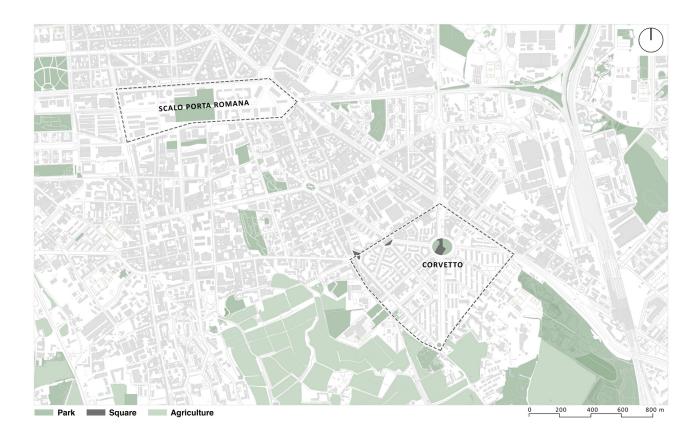


Figure 59- Green and Public spaces. [ Source: Own illustration based on datas of Comune di Milano]

### **Major Centers**

Within a few years, Scalo Porta Romana and Corvetto will be the main centers in the project area. In this, Scalo Porta Romana will contain large and exclusive shops that focus on people of the higher socioeconomic groups from all over the city and will be one of the main squares of milan. Besides shops, the area will also contain exclusive restaurants and luxury residences, student housing.

Corvetto however is the opposite and contains small markets and informal businesses that are mainly used by the local population. But since a few years, the small markets are also used more often by people from other parts of the city that like the informal atmosphere of the area. It is mostly young students and professionals that are attracted to the center and the owners of the markets

anticipate this new group of customers by the professionalization of the businesses while mostly maintaining its authenticity and its small scale. Corvetto also has large adventure park and many recreational centers which is also a factor of attraction of people. This increasing number of people that make use of the center of Corvetto could be one of the main points of departure in the regeneration.

Besides these key centers, there are also a few smaller shopping areas in between. Mostly those areas are developed along streets and contain the basic shops and restaurants to provide the daily needs (see figure 60).

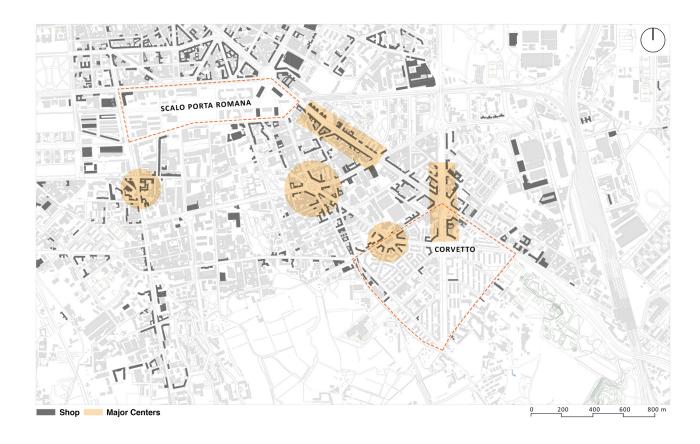


Figure 60- Major Centers. [ Source: Own illustration based on datas of Comune di Milano]

### **Infrastructure Network** and Mobility

Scalo Porta Romana and Corvetto are connected by the Yellow Metro line - M3. The major street is Corso Lodi, where incoming traffic from the periphery to Milan combines with local traffic which creates major traffic congestion (see figure 61).

Despite its location on the outskirts of Milan, Corvetto is easily accessible through numerous kinds of public transit, including buses, metro, and, to a lesser extent, tram. Additionally. Corvetto has appropriate road infrastructure as well as a bike sharing system. Both bicycle and road infrastructure could be improved.

However. infrastructure also creates physical barriers, like the Overpass or the disruption of the existing pedestrian and bicycle infrastructure.Besides a visual barrier, the tracks also limit the physical connection. Improving accessibility connectivity for people important element in Milan's planning as demonstrated by the general plans (PUMS & PGT), which identified areas where pedestrian and cycling infrastructure could be improved and have proposed further new infrastructure and policies to meet them.

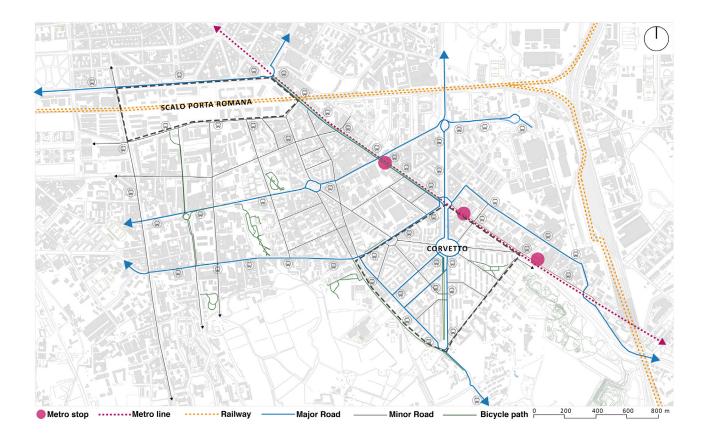


Figure 61- Infrastructure Network and Mobility. [ Source : Own illustration based on datas of Comune di Milano ]

# Chapter 06



Figure 62- Proposed design for Olympic Village

[ Source : urbanfile.org ]

# FRAMEWORK TO **EMPOWER**



The sixth chapter goes into more detail about the suggested framework for the area. The concept that is used to create the framework will be explained first, followed by an explanation of the case studies' findings. The final section goes into more detail about how the framework works and how it affects the lower scale.

### 6.1 Concept

This chapter explains the framework as well as the reasoning behind the proposed interventions. By offering the framework, the following sub-question will be addressed: Which physical interventions within the current urban fabric could improve the personal outcomes of the people living in Corvetto and the surrounding areas?

The framework was largely created as a result of the literature review and the area analysis, which also helped define the intervention's parameters. The following provides a brief overview of the study's key findings. The chapters 2, 3, 4, and 5 of the thesis contain the entire research.

### Recap of the research

According the literature to review. displacement caused by regeneration projects can be reduced by focusing on population empowerment. When the population's socioeconomic outcomes improve, they become more resistant to value changes caused by new built redevelopment and less vulnerable to displacement. According to Chatterton and Bradley, population empowerment can be achieved by focusing on improving employment. education. and outcomes, with the last two of these being the most important in the project area when looking at deprivation analysis. Furthermore, the literature review looked into how this empowerment could occur. and Bradley argue that Chatterton creating jobs that matches the skills of the population can increase employment in an area. It is important to consider that the jobs that are created can also be taken by people from other areas.

from employment, the study revealed techniques to enhance individual health outcomes within а certain location. The study concentrated on the relationship between green and health because the investigation revealed that the area has a limited number of public green spaces. The study found that spending time in green settings is good for your health. This is explained by the fact that green surroundings, such as parks, encourage physical exercise, improve air quality, reduce stress and fatigue, and provide a space for social interaction. It is critical that citizens use green public places to benefit from the positive effects of those spaces.

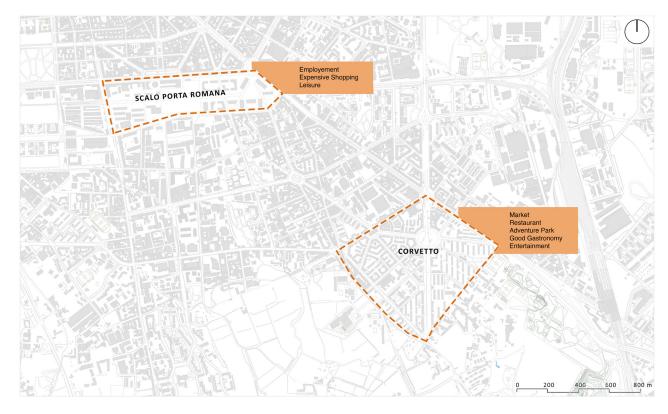


Figure 63 - Major centres in the project area [ Source : Own Illustration\_]

One of the significant findings of the investigation is that the area is dominated by two main centers: Scalo Porta Romana and Corvetto (see figure 63). Scalo Porta Romana is a fresh new business district that focuses on higher socioeconomic classes includes and exclusive restaurants and shops, well as numerous types of recreation. The center of Corvetto has a completely different character because it is more informal and authentic, and it focuses more to the residents of the neighboring areas. The center consists of small shops mostly managed by locals, such as small indoor markets, restaurants, grocery stores, and popular clubs. Furthermore, the morphological analysis found that there are no continuous linkages between the two centers, which discourages people from using the amenities of the other centers in the the area.

### Concept

Instead of viewing the two locations as competitors, consider how they might complement each other because they contain businesses that cover a different niche. People who live in Scalo Porta Romana can visit Corvetto to enjoy a good lunch at one of the tiny restaurants rather than traveling much further to other destinations. Corvetto residents, on the other hand, could go to Scalo Porta Romana for more expensive shopping. Such a development will result in more customers in both locations, with Corvetto benefiting the most because it mainly focuse on local people. If the number of visitors to Corvetto grows, there will be additional opportunities to build similar businesses that fit with the character of Corvetto. When local people take advantage of these possibilities to create fresh businesses, employment in the area rise, affecting the individual outcomes of the local population.

To establish this exchange of people between the two centers, a direct enjoyable link is required since when people have to travel for a long period, their willingness to visit the site reduces (Gehl, 2011).

The morphological analysis of the infrastructure and mobility within the area discovered that public transportation, including buses, metro, and trams, have good connection to all over the site. But urban fabric comprises various physical barriers, such as the overpass or the disturbance of the existing pedestrian and cycling infrastructure between Scalo Porta Romana and Corvetto.

To create a movement flow between Scalo Porta Romana and Corvetto number that will increase the Corvetto customers for businesses. the framework creates a direct and pleasant connection between Corvetto and Scalo Porta Romana that will encourage people to move between the two centers ( see figure 64). This connection is established in three stages.

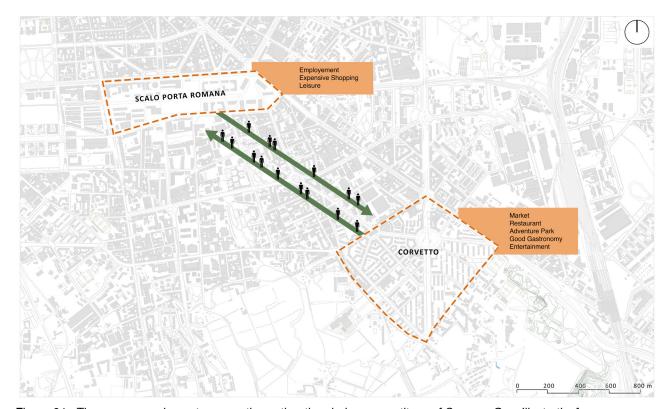


Figure 64 - The areas complement one another rather than being competitors. [Source: Own Illustration]

The first step is to investigate the interesting areas that can contribute to the network. This investigation will lead to the selection of public spaces that will be included in the network and used as intermediate goals (see figure 65).

The second step is to connect these various areas by highlighting existing connections within the existing urban fabric and adding paths where there are none to be found .This connecting of various interesting areas should be done in such a way that the routing is clear for users and connects to various types of public transportation, with a focus on slow traffic and public transportation ( see figure 66).

Finally, along the route, new green public spaces will be created. These new spaces will be created in areas where the urban fabric allows for it. These various spaces will serve various functions in the network (see Figure 67). The addition of these green public spaces will improve the route and add intermediate goals to the network.

Apart from the effects on a larger scale that focus on connecting the two centers, there are also positive effects on a smaller scale. Because new public spaces will be added and access to them will be improved, residents' willingness to use these public spaces will increase, and they will likely use them more frequently. People will benefit from the health benefits of being in a green environment by using those spaces, such as improved air quality, the formation of social ties, and the reduction of stress and fatigue. Furthermore. people will be physically active because they will have to move to the spaces and will be stimulated to be physically active when they arrive. Furthermore, the network will encourage people to participate in sports by providing adequate cycle lanes and wide pavements for various activities such as running, cycling, and roller skating.

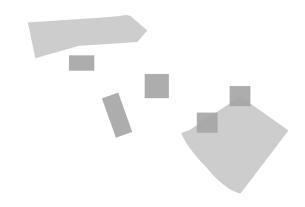


Figure 65 - Selection of the intermediate goals [ Source : Own Illustration]

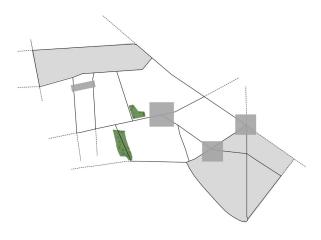


Figure 66 - Connection of intermediate goals [ Source : Own Illustration]

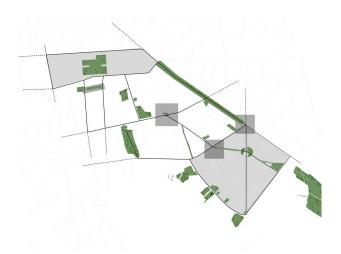
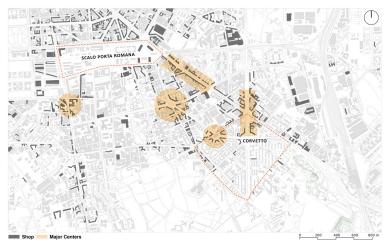


Figure 67- Addition of green public space and the improvement of the existing public spaces [ Source : Own Illustration]

### 6.2 Selecting intermediate Goals

The first step in creating a network is to identify spaces in the existing urban pattern that can serve as intermediate goals. The analysis demonstrated that almost the entire area is used for residential purposes and lacks many distinct public spaces (see figures 68 to 71), with only a few small economic centers, a larger park, and an art center. Those few potential spaces in the area were analyzed, resulting in a clear picture of their physical layout, amenities, and accessibility. The following pages provide a summary of this analysis.



centres noted the smaller economic centres that could be included in the route.

The analysis of the economic

Figure 68 - Economic centres [Source: Own Illustration]

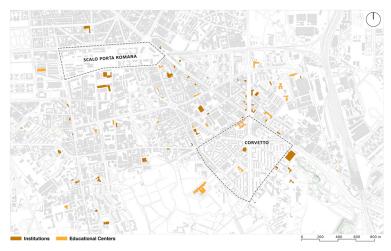


Figure 69 - Institutions [Source: Own Illustration]

The analysis revealed that there is a cultural center (Prada Foundation Art Centre) located between Corvetto and Scalo Porta Romana that could potentially enhance the quality of route.

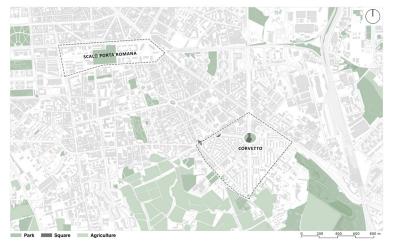


Figure 70 - Public spaces

[ Source : Own Illustration ]

The analysis of the public spaces showed that Marco d'Agrate / Ortles park is the only bigger public space that is located in between Corvetto and Scalo porta romana, and there are other two small park (Franca Helg and Balduccio Garden of Pisa / Calabiana) and therefore interesting to analyse.

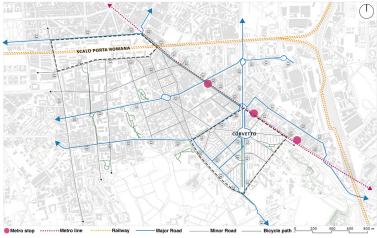


Figure 71 - Infrastructure [Source: Own Illustration]

The showed analysis that there is overall bus service throughout the area but there is lack of pedestrian paths in some areas and there is no continuous cycle path in the site area which reduces the usage of the same.

### 1. Luigi Emanuele Square

Luigi Emanuele Square is a small neighborhood center located between the two centers (see figure 72). This center is mostly made up of small shops selling daily necessities, such as supermarkets, mini markets, and small hardware stores. Twice a week, there is also an openair market. Furthermore, this corvetto is home to lively bistros, pastry shops, and international restaurants. Aside from a good bus connection to the center and other parts of Milan, there is a metro station that connects to Lodi Tibb (Scalo Porta Romana) and Porto di mare (Corvetto avventura park) (see figure 73).

It's interesting to include Luigi Emanuele Square in the network because it has some important amenities, such as a metro station and a nightclub. Luigi Emanuele Square is not the only small-scale shopping area, but there are several others that are comparable and popular. Those are also interesting areas to include in the network.

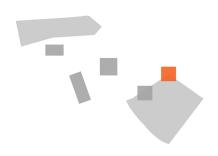


Figure 72 - Location Map [ Source : Own Illustration ]



Figure 73 - Luigi Emanuele Square Corvetto [Source: milano.corriere.it]

### 2. Piazzale Ferraira



Figure 74 - Location Map [ Source : Own Illustration ]



Figure 75- Piazzale Ferraira [ Source : Comune di Milano]

Piazzale Ferrara is the heart of the Corvetto area, with the historically weekly market in the center of a large square (see figure 74). For years, the space has hosted social programming thanks to the aid of local associations and citizens, recognizing its importance and potential as a community gathering spo (See Figure 75).

The square is an interesting element that can be incorporated into the network. It will be one of the major elements along the route between Scalo Porta Romana and Corvetto, act as a intermediate goal.

### 3. Piazza Geremia Bonomelli

Piazza Geremia Bonomelli is a small neighborhood center near the ring road and on the direction that connects Milan's east and west. This center is mostly made up of small shops that sell daily necessities, such as cafes, restaurants, and supermarkets (see figures 76).

It is also located in the heart of a densely populated neighborhood, and hundreds of pedestrians pass through both transversal and perimeter pedestrian crossings every day, at the intersection of five streets (see figure 77).Piazza Geremia Bonomelli is not the only small scale shopping area, but there are other comparable and popular small shopping zones. As a result, these areas have potential for inclusion in the network.



Figure 76 - Location Map [ Source : Own Illustration ]



Figure 77 - Piazza Geremia Bonomelli [ Source : Immobiliare ]

### 4. Parco Publico Marco d' Agrate / Ortles

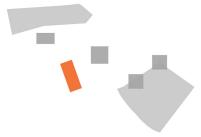


Figure 78 - Location map [ Source : Own Illustration ]



Figure 79 - Parco Publico Marco d'Agrate / Ortles [ Source : Top Rated Online ]

Parco Publico Marco d' Agrate / Ortles is the largest park located between the project area and is primarily used for recreation by residents of the surrounding areas (see figure 78). The area includes a children's play area and a sports court. This park deserves much more attention (see figure 79).

The park is an interesting element that can be incorporated into the network and will be one of the major elements along the route between Scalo Porta Romana and Corvetto, act as an intermediate goal.

#### 5. Fondazione Prada

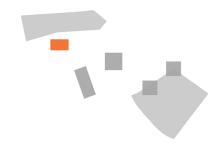


Figure 80 - Location Map [Source: Own Illustration]



Figure 81- Fondazione Prada [Source: Living.corriere]

The Fondazione Prada is in charge of promoting culture and contemporary art located near the Scalo Porta Romana (see figure 80) .The new space-museum is the result of the transformation of a 1910s distillery.The historic buildings have been restored and repurposed to house the Foundation's various activities. There are large spaces dedicated to temporary exhibitions and events on the 19,000 square meters.

Three new structures give the citadel a modern feel. With its nine exhibition floors, the Tower - a geometric structure of glass and white structural visible concrete, facing the city center, with irregular shapes, stands out over the lower buildings, houses the Foundation's permanent collection of contemporary art. The Haunted House, a four-story gold-leafed structure, and the Podium, a two-story central space (see figure 81).

The Fondazione Prada is an attractive element that can be incorporated into the network. It will be one of the major elements along the route between Scalo Porta Romana and Corvetto, that serve as a intermediate goal.

The analysis of major elements between Scalo Porta Romana and Corvetto resulted in the selection of five elements that will play a significant role in the intervention. These five elements are the Fondazione Prada, Piazza Geremia Bonomelli, Parco Publico Marco d' Agrate / Ortles, Piazzale Ferraira, and Luigi Emanuele Square Corvetto or the Corso Lodi road (see figure 82 on next page).

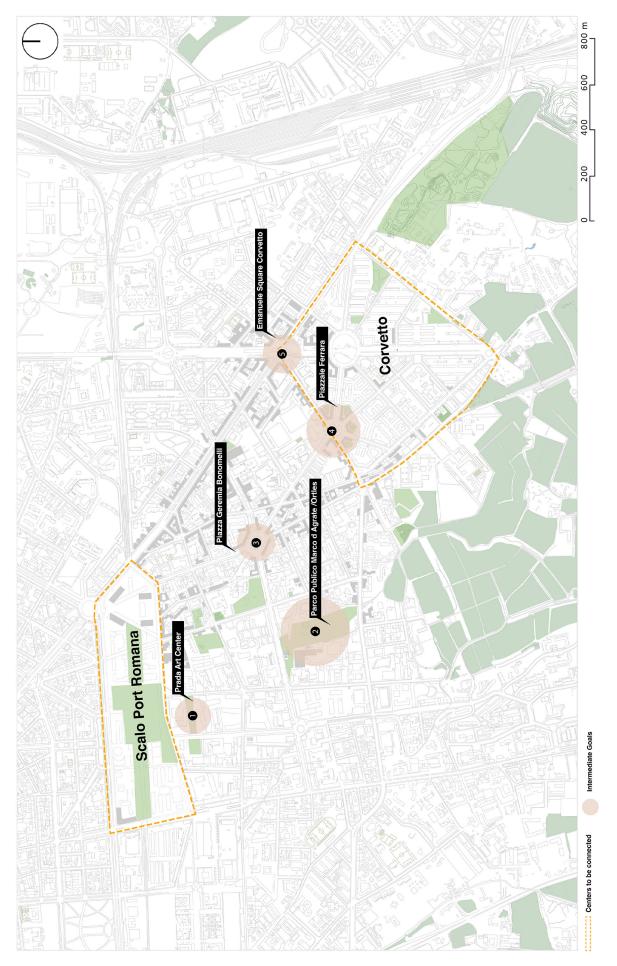


Figure 82- Map showing the areas that will be a part of network as Intermediate goals [Source : Own Illustration]

# 6.3 Case studies - Tools to influence movement

To connect the selected areas, research is being conducted on routing and how to influence people's movement patterns. In their book (Opening spaces), Loidl and Bernard (2002) state that movement patterns are predictable and that it is possible to design movement flows in an area by designing connections that together create a route.

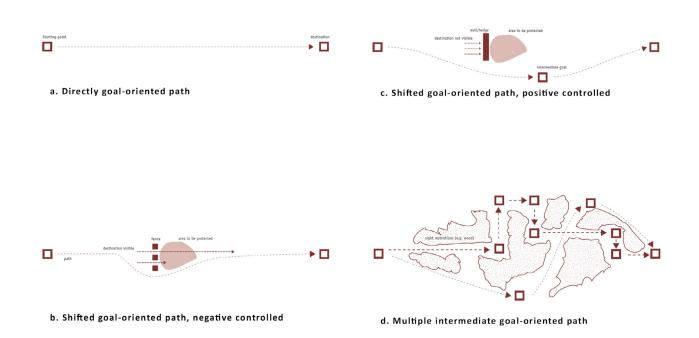


Figure 83- Different kind of paths according to Loidl and Bernard (2002) [Source: Opening Spaces]

The authors distinguish three types of routes based on how they function (see figure 83). The first one is goal-oriented paths that connect the user directly to the endpoint (a). One critical aspect is that the user can see the endpoint so he knows where to go. The shifted goal-oriented paths (b and c) are the second group of paths. In this case, the user cannot reach the endpoint in a straight line and must take a detour to get there. There is a distinction between positive and negative controlled paths within this group. The Positive controlled paths make use of an interesting intermediate goal that draws

the user's attention. When the user arrives at this point, he feels as if he has accomplished something, and from here he can see the end of the route. There is no intermediate goal in the negative controlled ones. Because there is an instinctive need to approach the goal directly, this results in a goal-oriented approach with a detour. The final set of paths consists of multiple intermediate goals that guide the user to the final goal (d). It is critical that the intermediate goals are interesting in order to keep the user motivated to continue.

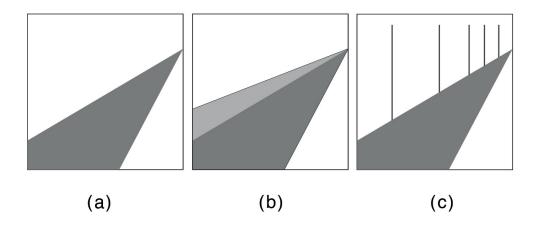


Figure 84 - (a) path, (b) linear path markers and (c) repetitive path markers [Source: Own Illustration]

The authors define elements that create or emphasize routes in order to create connections between the various points. In this, they classified paths and path markers (see figure 84). The location and direction of regular movement flows and connections are indicated by paths (a). Typically, those paths are created by a physical linear element composed of coherent path signs such as surface, profile. width. and material. which strengthens the route's unity and ease of use.

Path markers are frequently used to emphasize a path by making it more distinct. Because of the increased distance between the path and the surrounding area, it is easier to use the path, making it more enjoyable to use. There are two types of path markers in this case: linear (b) and repetitive (c). Linear path markers mark the edge of the path and provide direction, such as a row of trees or a building front line. Repetitive path markers are more subtle, with more space between elements such as lamp posts, seating, and so on. The use of repetitive elements improves the path's uniformity.

# 6.3.1 Case Study 1 - Maxima park, Utrecht, Netherlands

The Maxima Park is a large park created for the people of Leidsche Rijn. The park includes a variety of features such as sports complexes, restaurants, garden centers, and playgrounds. "Het Lint" is a path within the park that connects and makes accessible the major elements (West8, 2013). The path is designed to stand out from the other paths in the park, making it one of the most prominent paths in the park with a pedestrian and cycle track, adorned with a daisy motif, and allowing visitors to circulate throughout the entire 300ha park. From bridle paths to flowery meadows, the Lint allows runners, cyclists, and skaters to experience the park's various and ever-changing atmospheres. The key elements that are used to influence the movement of the people are explained below. (see figure 85)







Figure 85- Images of Maxima park [Source: west 8]

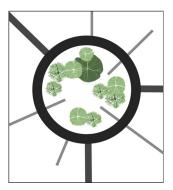


Figure 86- Network within the park

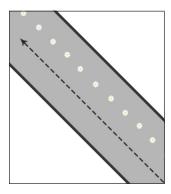


Figure 87 - Major path within Leidsche

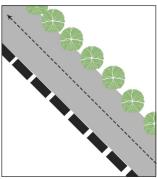


Figure 88- Tree line in accompanying the path

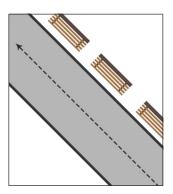


Figure 89- Benches that function as repetitive path markers

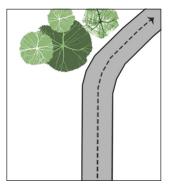


Figure 90 - Tree clusters that emphasise the direction of the path

#### **Network**

The park has a variety of paths that can be classified according to their importance. The Het Lint is a circular path that runs along the park's perimeter. This major path is linked to the main infrastructure by broad paths that indicate major exits. Aside from this major exit, there are intersections by narrower paths that connect to the urban fabric and the park's facilities (see figure 86)

#### **Path**

The main route is made of asphalt and is bordered by two white kerb strokes. A road marking in the shape of a flower separates different modes of transportation. This welldesigned path stands out among the others in the park, and it is obvious to visitors that this is the path to take (see figure 87).

### **Linear Path markers**

To emphasize the importance of the path, the major route is accompanied by various types of path makers. The lines of trees placed along the route are one of the path markers (see figure 88). In addition to the trees, there is a ditch that runs along the path in some places. This ditch emphasizes the sense of direction and reduces the need to deviate from the path.

### Repetitive Path markers

Repetitive path markers emphasize Het Lint's direction. These are benches that are built into the path and thus become a part of the route. The designers used one type of bench throughout the park to create coherence within the park and to connect the path to the park's infill (see figure 89).

### Other kinds of path markers

There are some guiding elements along the path that help to support the path's direction. This is mostly accomplished through the placement of trees, which guides users in a clear way. This, combined with the well-defined path, causes the user to move in the desired direction (see Figure 90).

# 6.3.2 Case Study 2 - Rambla del Brasil, Barcelona , Spain

Rambla del Brasil was a busy street in the heart of Barcalona that connected two major streets (Diagonal and Les Corts) and was mostly surrounded by residential functions. Because of the heavily used street, living conditions in the surrounding area were drastically poor, so the municipality decided to put the street underground and create public space for the neighborhood on top. Because this space was built on top of the tunnel, it now serves as a slow traffic route connecting the two previously mentioned points (see figure 91) (Public space, 1997).





Figure 91 - Images of Rambla del Brasil [Source : Urbaning 100]

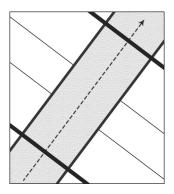


Figure 92- The rambla del brasil and its positioning within the network

### **Network**

The rambla is a prominent structure in the urban fabric. The only roads that intersect the structure are the major ones that serve a larger connecting function. Local traffic must use roads parallel to the rambla to reach streets that cross the structure (see figure 92).

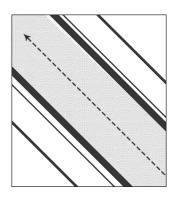


Figure 93- The elevated surface of the rambla

### **Path**

The path is determined by two interventions: the actual paved path and the structure's elevation. The path's elevation separates the ramblas from the streets that run parallel to it, reducing traffic noise and the need to exit the structure, which is only possible at certain points (see figure 93).

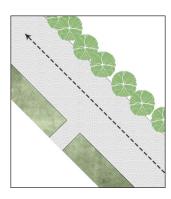


Figure 94- Ttrees and borders that emphasise the path

### **Linear Path markers**

The Ramblas is surrounded by trees, but also by linear borders. This border emphasizes the path's direction and makes the space available to people narrower and more intimate. This emphasizes the element's linearity and increases the sense of direction. People rest and relax along the mostly grass-filled borders (see figure 94).

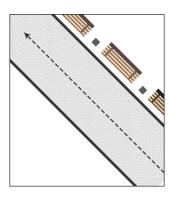


Figure 95- Benches that function as repetitive path markers

### Repetitive Path markers

The furniture emphasizes the route over the Rablas. The large lampposts made of Corten steel that create a sense of direction and coherence are the most visible. The benches and other pieces of furniture are mostly made of the same material. As a result, Corten steel is one of the route's characteristics, and people may recognize the route because of its use of this material (see figure 95).

# 6.3.3 Case Study 3 - Brandgrens, Rotterdam , Netherlands

The "Brandgrens" line in Rotterdam denotes the area that burned down as a result of German bombing in 1940. Because almost the entire inner city burned down, the municipality decided to mark this line with spots in the pavement. Years later, the municipality created an audio tour that tells people about the history of Rotterdam while they walk through the spots. Because of the route's success, more things are sprouting up around it, such as memorials, museums, and public space (see figure 96) (Stadsarchief Rotterdam, 2014).







Figure 96- Images of Brandgrens [Source: Mothership]

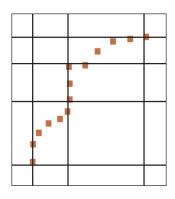


Figure 97- The Brandgrens and its positioning within the network

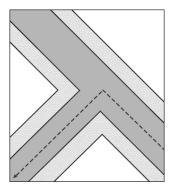


Figure 98- The Pavement that is used to create the

### **Network**

The Brandgrens is not a planned route and does not follow the city's pattern. It only denotes a historic boundary that occasionally runs through building blocks. As a result, the route people take does not correspond to the historic line, but rather connects points where the brandgrens is located within public space (see figure 97).

### **Path**

The route, as stated in the introduction, does not exist as a continuous, coherent path, but it makes use of existing structures (see figure 98).

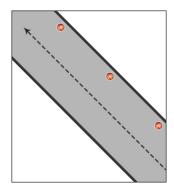


Figure 99- The integrated spots

### Repetitive Path markers

The route is indicated by spots. These spots are built into the pavement and are typically spaced every 12 meters, or more, where the line crosses public space .The route's problem is that the path markers are not continuous, and there are sometimes large gaps in between because the line does not cross public space. As a result, people who want to use the route should know how to walk, for example, by listening to the audio tour. The spots are visible during the day, but they really highlight the route at night (see figure 99).

The results of the three case studies are summarized in the table below (see figure 100). The table contains all of the principles extracted from the case studies that can be used in various designs aimed at influencing people's movement and are organized according to Loidl and Bernard's (2002) classification. Looking at the various case studies, it is clear that they use a combination of different elements to influence people's movement. The various interventions strengthen the sense of direction, making the route easier to follow. This toolbox is used to create routes between Scalo Porta Romana and Corvetto. The following sections will go over how this connection is made and what tools are used.

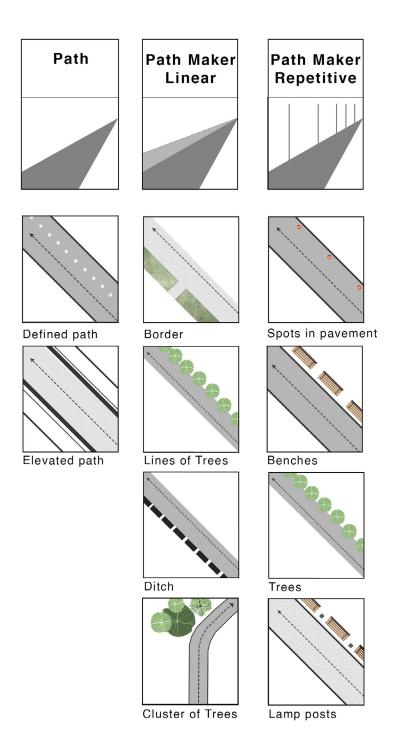
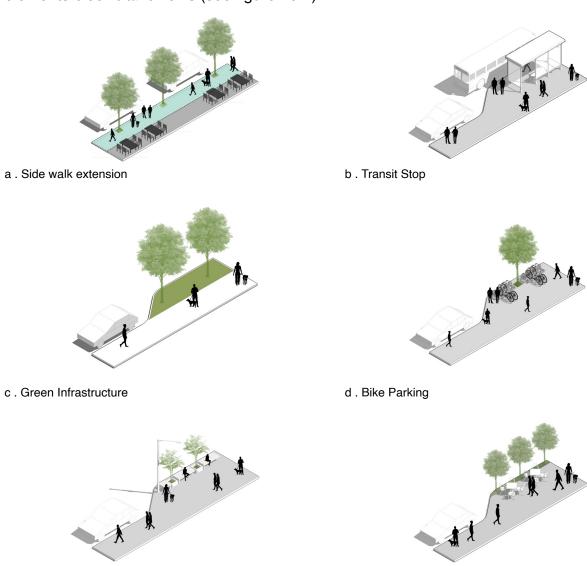


Figure 100 - Elements that influence people's movement that can be used to change people's movements. [Source: Own illustration]

## 6.4 Connecting the intermediate goals

The various interventions for path and path makers strengthen the sense of direction, making the route easier to follow. Curb bulb and side walk extension are the strategies used in this thesis for influencing people's movement from the book Adaptive Streets: Strategies for Transforming the Urban Right-of-Way by Mike Schwindeller and Jordan Lewis. As already mentioned, a wide kerb is used to emphasize the different lanes. Wider sidewalks can improve the pedestrian's experience of the city. In commercial areas, wider sidewalks can provide room for cafe seating, street furniture, trees and landscaping. A curb bulb can be used to improve safety by calming traffic by visually narrowing the roadway, also it can provide a space for public amenities such as bike parking, transit stops, seating, lamp posts and green infrastructure to create a consistent structure and to avoid that those elements block traffic flows (see figure 101).



f . Seating

Figure 101 - Different uses of the kerb according to Mike Schwindeller and Jordan Lewis [ Source : Adaptive Streets: Strategies for Transforming the Urban Right-of-Way ]

e. Lamp Post

### 6.4.1 Path and path Markers

Multiple tools for guiding people are used, as in the reference cases. The framework's connections will be marked with a clearly defined path. This path will have a wide pedestrian zone with two wide kerbs on both sides. These kerbs will highlight the path and serve as a distinguishing feature of the urban fabric. Aside from a good pedestrian zone, there will be a proper cycle lane separated from fast traffic and located next to the pavement, forming a continuous element. Six major sections are provided to ensure that the path is consistent throughout the network (see figure 102).

The first section passes through the park and larger public spaces. The cycle path and pedestrian zone are placed next to each other to create one continuous element and to reduce space fragmentation. The cycle lane is lowered to improve separation between the two types of traffic (see figure 103).

The second section is a narrow street with one-way and two-way traffic flow. In the first case, the road is converted into a one-way street to make room for the pavement and to maintain the parking lots alongside the road, whereas in the second case, the road is two-way with parking on both sides. Cyclists will follow the red stroke indicating the cycle lane (see figure 104-107).

The final section includes a broad profile. The profile is similar to that of the narrow street section, but here a linear park with a cycle lane and a pedestrian path runs through the middle of the street (see figure 108).

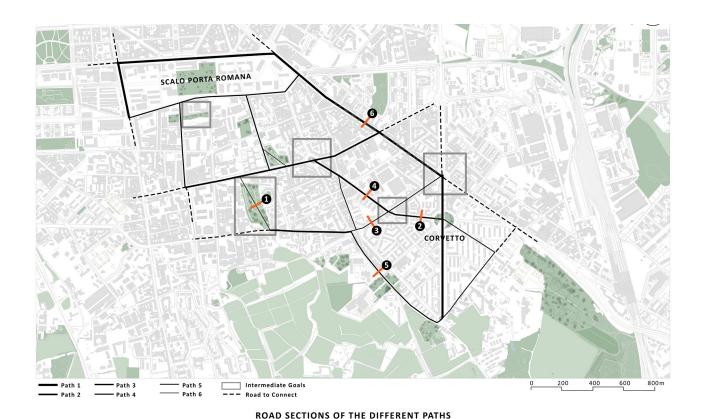


Figure 102 - Road sections of Differnt Paths [Source: Own illustration]

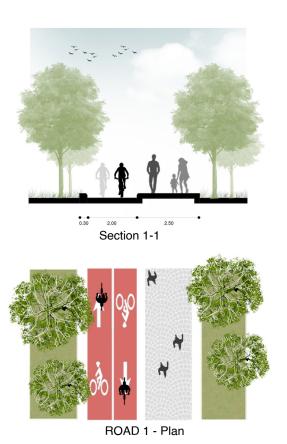
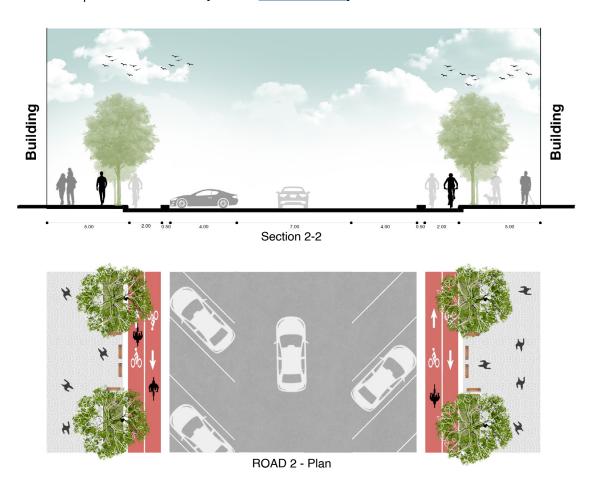
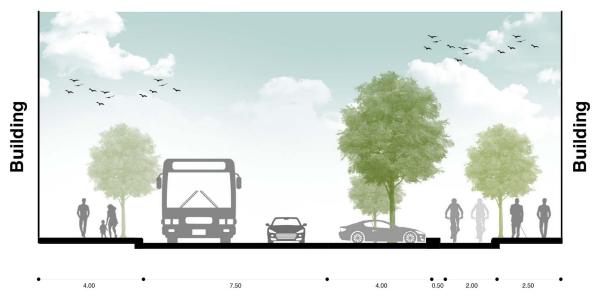


Figure 103 - Path in park

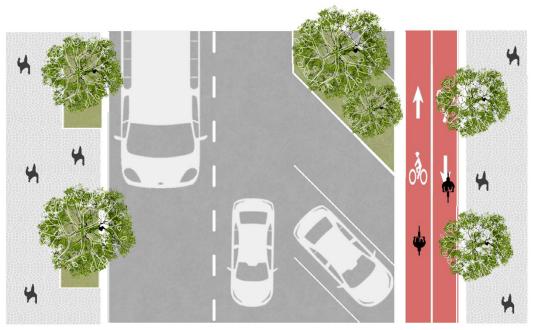
[ Source : Own illustration ]



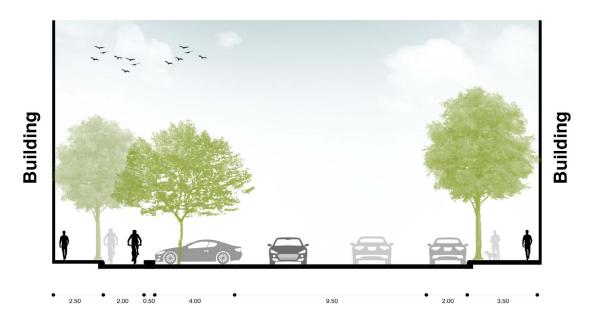
[ Source : Own illustration ] Figure 104 - Narrow profile one way



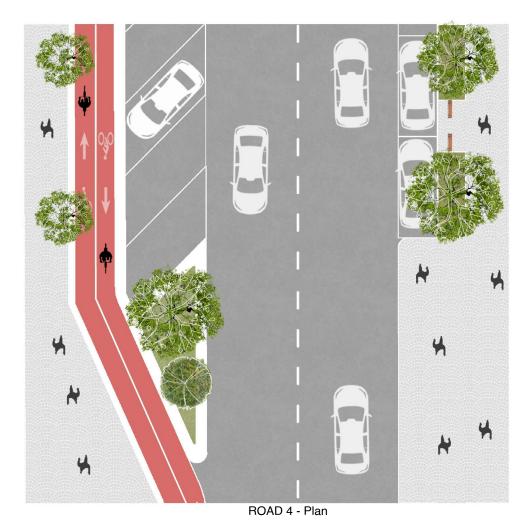
Section 3-3



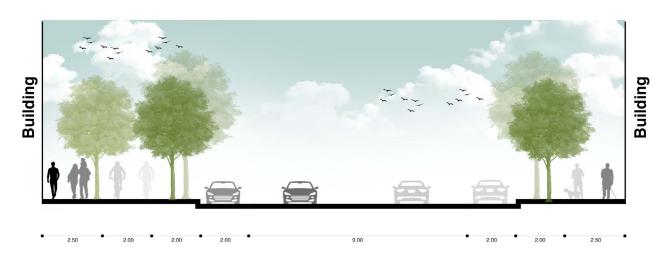
ROAD 3 - Plan



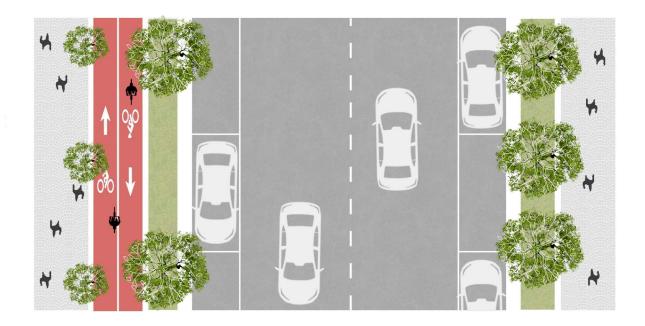
Section 4-4



[ Source : Own illustration ] Figure 106 - Narrow profile two way

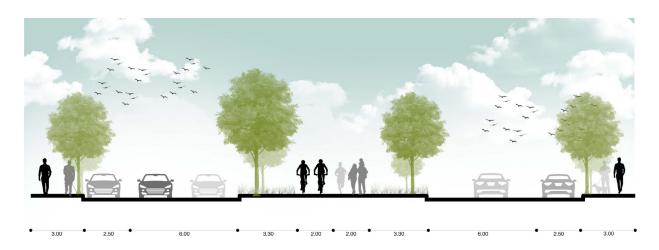


Section 5-5

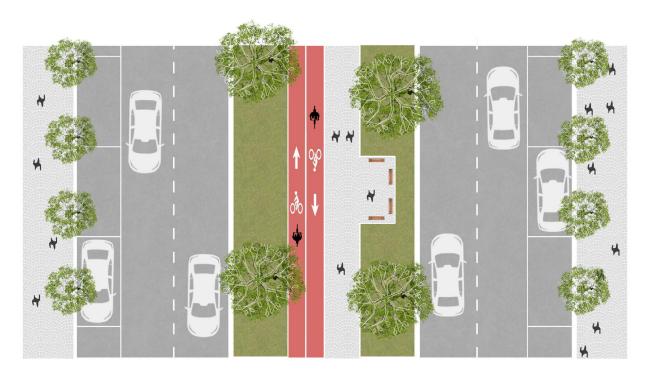


ROAD 5 - Plan

Figure 107 - Narrow profile two way [Source : Own illustration]



Section 6-6



ROAD 6 - Plan

Figure 108 - Wide profile two way

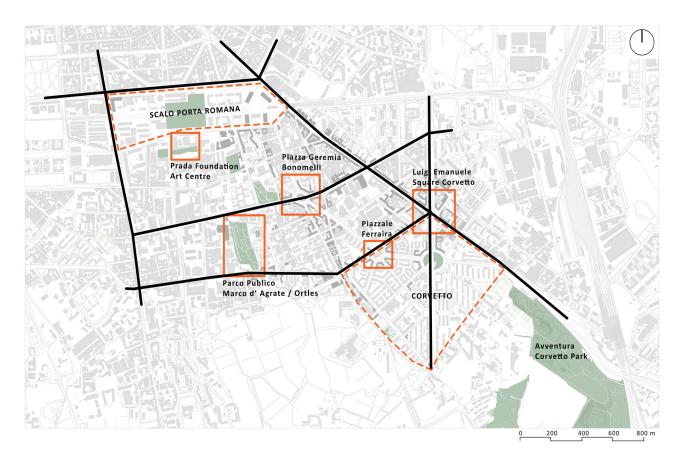
# 6.4.2 Connection to the current systems

The network connects Scalo Porta Romana and Corvetto, as well as the main infrastructure of the surrounding areas. According to the analysis, people nowadays walk and cycle primarily along the larger streets that cross the area from southwest to northeast. People can easily access the route and move to points within the route or use the route to travel to points outside the project area by connecting to those larger roads (see figure 109). Because of the good facilities for slow traffic along the route, using the network connections will be more pleasant than using the existing ones.

This is accomplished, for example, by connecting new bicycle paths to existing ones and using the same materials. The red color used to indicate cycle lanes

is used in the new design for bicycle lanes, so people can easily identify which lane is mend for certain types of traffic. The new path will be distinguished from the existing ones by the curb that runs alongside the lane. The same holds true for pedestrian lanes. The new ones will be linked to the existing network between the Scalo Porta Romana and Corvetto connections and the others.

Routes connecting Corvetto to Scalo Porta Romana are highlighted by using the path and path markers in the existing urban fabric between the intermediate goals. This enhanced the route's vibrant and lively character, forcing people to take the slow traffic route. Figure 110 depicts the map of the various routes.



MAJOR INFRASTRUCTURAL ROADS TO WHICH THE NEW ROUTES CONNECT

Figure 109 - Major roads to which the new routes that connect to [Source: Own illustration]

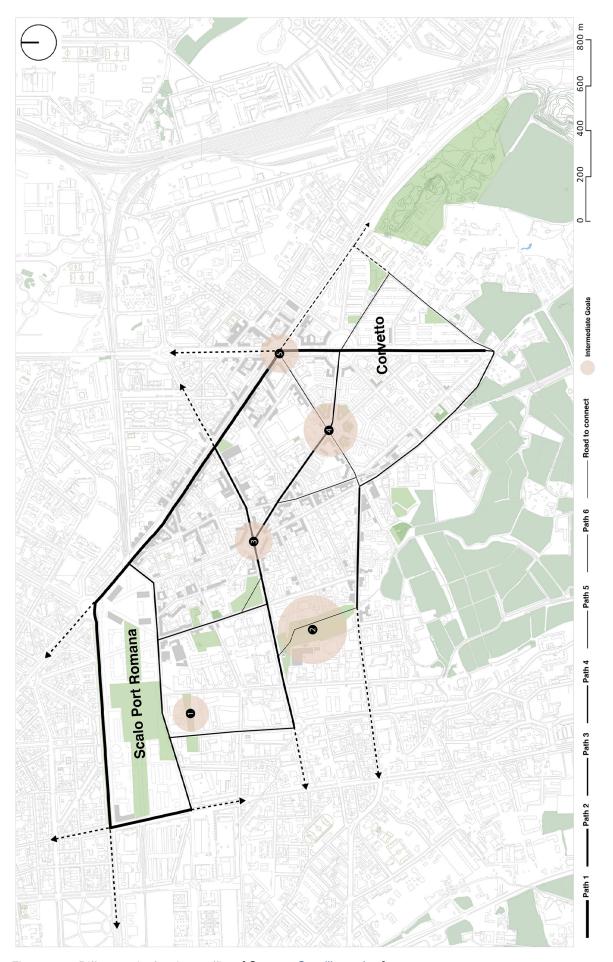


Figure 110 - Differnt paths for slow traffic [Source : Own illustration]

# 6.4.3 Public transport and Bike points in between Scalo Porta Romana and Corvetto

Apart from a slow traffic network, the site's public transportation network is well connected with all areas in between Scalo Porta Romana and Corvetto, allowing for quick access throughout the site. Almost all of the bus stops are within 500 meters of one another. Some areas require the addition of bus waiting sheds, while others require improvements. A frequent running metro line connects the eastside of Scalo Porta Romana and Corvetto. A few more bike points should be added to the current network to make it easier for people to travel by bike (see figure 111)

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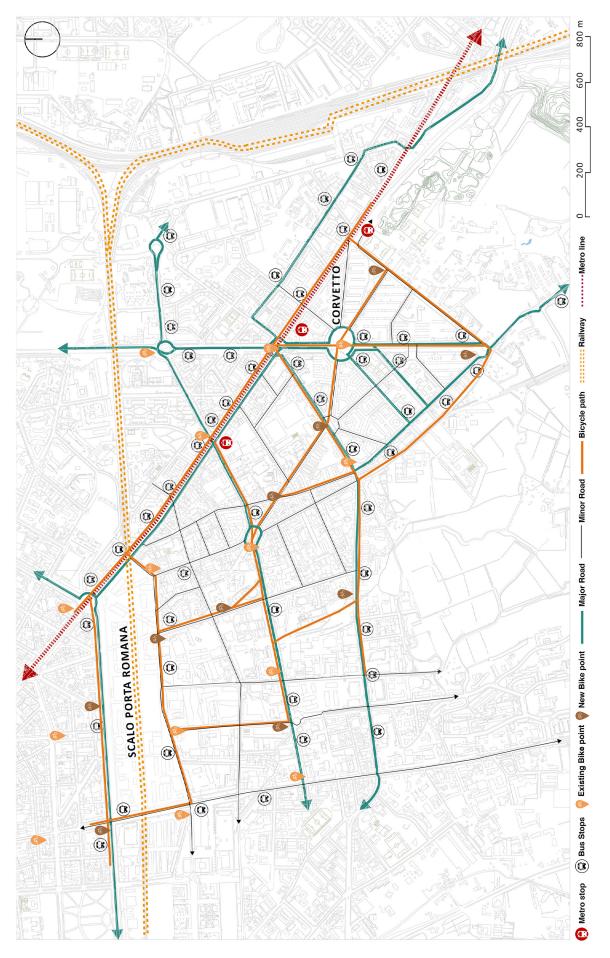


Figure 111 - Proposed mobility network [ Source : Own illustration ]

# 6.5 Creating more green public space

According to the findings, the area between Scalo Porta Romana Corvetto has a limited number of public green spaces. The largest park in the area is Parco Publico Marco d' Agrate / Ortles, and there are a few smaller gardens. Aside from that, some streets lack trees, and some apartments are fenced, limiting public access. A closer examination of the urban fabric revealed several opportunities for creating green public spaces along the routes without demolishing buildings. These opportunities are used, resulting in three types of interventions that will increase the quantity and quality of the project area's (public) green spaces. Those different kinds of interventions are (see figure 112 & 113):

- 1. connecting courtyards to public space;
- 2. transforming low-traffic routes into communal spaces for the neighborhood;
- utilizing unoccupied locations to generate public space

Creating more green public spaces and improving existing ones will strengthen the network by making the surroundings of the route more diverse and enjoyable, increasing the willingness to use the route.

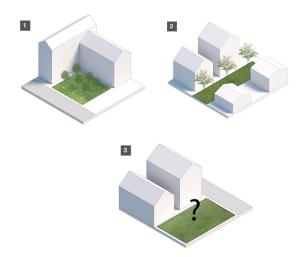


Figure 112 - Different types of interventions to develop green public areas [Source: Own illustration]

Perhaps importantly, those more improvements benefit the residents of the surrounding areas. Because of the improved green spaces within the urban fabric, people will be more willing to use the spaces and will use them more frequently. The use will have a positive impact on the health outcomes of the surrounding residents because it will provide good air quality, create or strengthen social ties, stimulate them to be physically active, and reduce stress and fatigue.

Because the places are primarily upgraded for the residents, it is critical that the space and its amenities meet the needs of the people so that the improvements have a good impact on the residents. As a result, residents should be involved in the ideation process in order to discover what those needs are. This participation can take several forms depending on the type of intervention and the willingness of the individuals to participate.

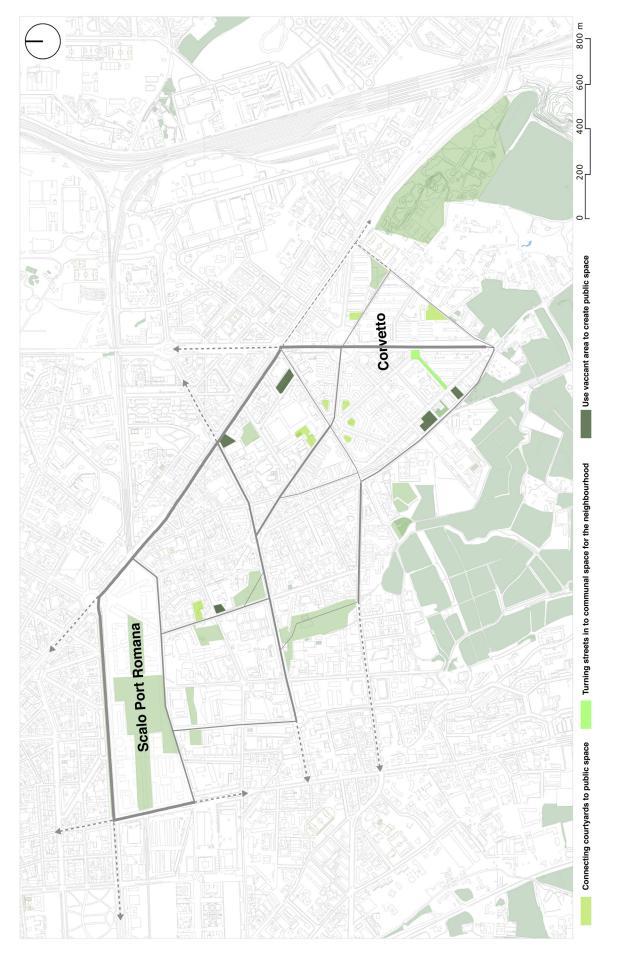


Figure 113 - Map showing ifferent types of interventions to develop green public areas

[ Source : Own illustration ]

## 1. Connection of the courtyards to the public space

The connection of courtyards to public space is the first intervention to increase the amount of green public space. Many courtyards are no longer used by residents, and most do not have direct access to the space and must walk around the building to enter the courtyard (see figures 114–117).



Figure 114 - Location map [Source: Own illustration]



Figure 115 - One of the areas marked as potential location to connect the courtyard to the public space [Source: Google Earth]

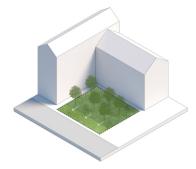


Figure 116 - Extend the courtyard to the street [Source: Own illustration]



Figure 117 -Before and after images of how the area might look after the intervention : Transformed to public space [Source : Own illustration]

Because of the large number of unused courtyards, some of these spaces might be enhanced to draw residents of the neighboring buildings and people from the neighborhood to these areas. This can be accomplished by constructing new building entrances on the courtyard's side so that people can enter the spaces directly, as well as by adding interesting facilities. Furthermore, the parks might be made more public by eliminating the fence that surround them, allowing inhabitants of the surrounding districts to enjoy the space as well. If a semipublic space is required for only persons from the neighborhood, bushes might be used to create an informal boundary that makes the place more private. It is likely that residents of apartment buildings do not want individuals from outside using "their" space because they believe it would cause nuisance. This may be partially accurate, but the courtyards will not serve as intermediate targets on the path and will mostly be of interest to residents, thus the disruption will be minimal. Furthermore, the presence of other individuals will make the place more dynamic.

When the courtyards are ready for renovation, the interventions could take place. There are several regenerated semi-public places in the region where housing community are attempting to improve living conditions.

#### **Stakeholders**

- 1. Residents of the surrounding buildings and residents with similar interests (participation).
- 2. Housing community (capital)
- 3. Municipality (initiator and part of the capital)

#### Possible examples of amenities

- 1. Elements to sit in order to rest and enhance social connection.
- 2. Elements for physical activity and play, such as swings, seesaws, and football court.
- 3. A communal garden where people can gather and arrange activities.

# 2. Transforming low-traffic streets into communal spaces for the neighborhood

The second intervention also makes use of rarely used roads in the project area. Those roadways could be changed into public spaces with attractive amenities for the people who live nearby. This intervention will be relevant to residential areas with a lack of public space and roadways that are not important to the network (see figures 118-121).

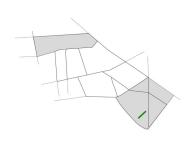


Figure 118 - Location map [Source: Own illustration]



Figure 119 - Areas marked as potential location to change the street into a public space

[ Source : Google Earth ]

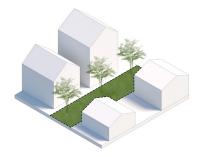


Figure 120 - Turn the street in to communal space

[ Source : Own illustration ]



Figure 121 -Before and after images of how the area might look after the intervention : Transformed to communal street [Source : Own illustration]

The example seen here is in a residential neighborhood near Corvetto. Because there is little traffic in this area, certain streets serve no use in the network and are rarely utilized by cars. This opens up the possibility of converting the street into a public place. These modest new public spaces will primarily serve the local community, and the space's infill should be designed to the requirements of those who utilize it.

However, it is critical that the space does not lose its linking function for slow traffic, so that walkers and other types of slow traffic can continue to utilize it and the permeability of the urban fabric does not decrease.

Because of the benefits of green spaces, replacing paved areas with non-paved areas will have a good impact on health. Furthermore, the material modification will have a good influence on the urban heat island effect and will allow rainwater to infiltrate into the soil.

#### **Stakeholders**

- 1. Municipality (initiator and capital)
- 2. Residents (participation)

#### Possible examples of amenities

- 1. Elements to sit in order to rest and enhance social connection.
- 2. Elements for physical activity and play, such as swings, seesaws etc.
- 3. A communal garden where people can gather and arrange activities.

# 3. Utilizing unoccupied locations to generate public space

There are some unoccupied sites in the urban fabric between Scalo Porta Romana and Corvetto that will be redeveloped and utilised for future residential/commercial constructions; this will be the third intervention. Because certain locations are frequently vacant for a period of time, they might be used for temporary amenities (see picture 122-125).

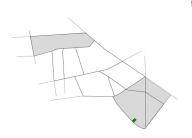


Figure 122 - Location map [ Source : Own illustration ]



Figure 123 - One of the areas marked as space that can be used for temporary uses

[ Source : Google Earth ]

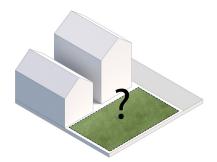


Figure 124 - Using vacant spaces [Source: Own illustration]

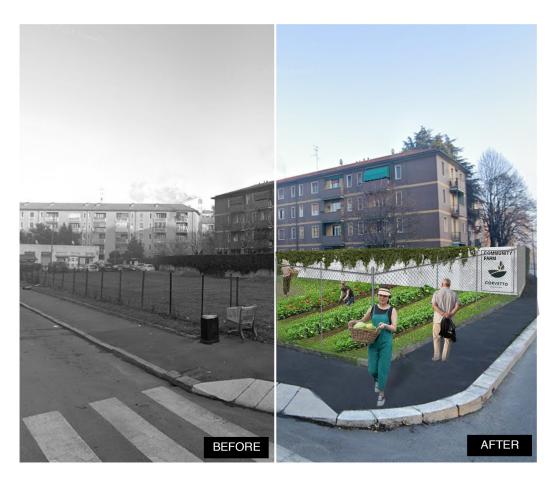


Figure 125 -Before and after images of how the area might look after the intervention: Transformed into urban farming [Source: Own illustration]

A vacant land in the Corvetto area that is not properly managed is one example. Because there are no definitive plans for the site's renovation, the area could be given a temporary use, allowing the plot to be preserved while it is in use.

There are a variety of amenities that could find a home in these space, but it is crucial to remember that this use is only temporary and will be removed once the site will be built. As a result, a bottom-up approach could be effective in locating a suitable infill that meets the needs of the people while keeping the costs of this temporary intervention low.

#### Stakeholders

- 1. Municipality (initiator and part of the capital)
- 2. Residents (participation and bottom-up process)
- 3. Owner of the vacant site (providing space)

#### Possible examples of amenities

- 1. Elements for physical activity and play, such as swings, seesaws etc.
- 2. Sports courts
- 3. Site for urban farming
- 4. Temporary market site

# 4. Improvement of the green public space

In addition to creating additional green public spaces, existing places will be enhanced to attract more people. A list of eight reasons why public space fails is provided to help determine what features of existing spaces may be improved. The Project for Public Space (also known as PPS) is used to analyze the public areas located between Scalo Porta Romana and Corvetto. PPS assembles these eight features utilizing data from their own research as well as the work of prominent authors they designate as "placemakers" such as Jacobs, White, and Gehl (Project for Public Space, 2014). This list will be used because, unlike many other approaches that summarize what the basics are for a decent public space, it highlights the things that frequently go wrong in real circumstances, making it easier to assess the spaces.

According to the Project for Public Space, the following are the eight reasons why public places fail:

- 1. the lack of places to sit;
- 2. the lack of places to gather;

3.poor entrances and visually inaccessible spaces;

- 4. disfunctional features:
- 5. paths that do not go where people want to go;
- 6. domination of a space by vehicles;
- 7. blind walls or dead zones around the edges of a place;
- 8. and inconveniently located transit stops.

# 6.6 Future developments along the route

# 6.6.1 Development of amenities along the route

When people utilize the route frequently, chances will arise to establish new amenities along the network, such as the creation of businesses, cafés, workshops, restaurants, and so on. These additional amenities should be concentrated in areas where there are more of the same kind of amenities to increase the readability of the area. Aside from improving the area's readability, the areas where amenities are concentrated will be more appealing to visitors because the supply of amenities is greater and the area is more vibrant (see figure 126).

Scalo Porta Romana provides area for more upscale shops and amenities that cater to higher socioeconomic classes. Examples include department carrying high-end brands and restaurants serving upscale cuisine. Small businesses for daily necessities will be concentrated around the Luigi Emanuele square Corvetto, Piazza Geremia Bonomelli, and Piazza Ferraira. The concentration will be on Piazza Geremia Bonomelli because it is well served by public transportation. Furthermore, the center has the most prospects for enterprises to settle down because it has several vacant the business spaces .All small businesses that are not typical and contribute to the identity of Corvetto, such as workshops, specialized restaurants. businesses that cover a specific niche, should locate in the center of Corvetto.

At the moment, the only active park with various recreational activities is Avventura Corvetto Park, which is located outside our site. New recreational facilities should be established in Parco publico Marco d'agrate / Ortles or one of the new green public areas. The difference between Parco publico Marco d'agrate / Ortles and other new green public spaces is that Parco publico Marco d'agrate / Ortles focuses on large-scale active recreation, whereas other new green public spaces small-scale and recreation. Cafes and playgrounds, for example, may establish themselves along the entire path.

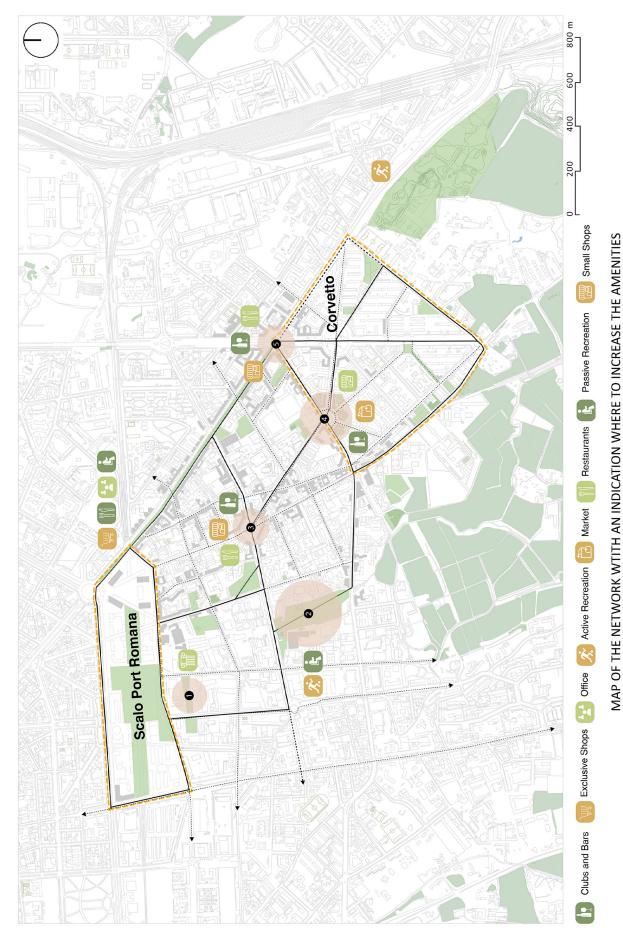


Figure 126-A network map indicating where amenities could be improved [ Source : Own illustration ]

# 6.7 How the framework affects individual outcomes

The framework's goal is to improve the individual health and employment outcomes of persons living in the deprived area surrounding Corvetto (see figure 127). As a result, this section summarizes the framework's effects on those two domains and elaborates on the limitations of these physical interventions.

## 6.7.1 Health

The framework focuses on improving health outcomes in addition to improving employment results. To do this, the framework focused on improving public green areas, as using green spaces has a good impact on health. The first proposed intervention is to improve the public green spaces themselves. These enhancements intended to meet residents' are expectations for public green spaces and to meet the needs of users. The green spaces will be more appealing as a result of these improvements, and residents will be encouraged to use them.

Aside from improving the public green spaces themselves, the connections to those spaces are improved. The addition of wide pavements and cycle lanes that connect to the current main lines of the urban fabric will increase residents' willingness to use green spaces because the routes to the spaces will be more easily accessible. In this case, the movement to public spaces will have a positive effect on the users' health outcomes because they will be physically active. Furthermore, the route itself will encourage people to be physically active. The current fabric lacks wide continuous lanes for cycling or walking, resulting in unclear and dangerous situations. The path will improve the conditions, and people will be encouraged to use it. For instance, wide, continuous, and safe cycle lanes. This is not only for cycling, but it will also encourage people to jog, run, skate, and so on.

# 6.7.2 Employment

The development of the connection Scalo Porta Romana between Corvetto intends to improve the job opportunities of unemployed residents of Corvetto. This connection will encourage visitors from Scalo Porta Romana to visit Corvetto and take advantage of its amenities, such as small stores and specialized restaurants. This increase in the number of individuals using Corvetto's center will create new opportunities for new businesses to open. If the people in the area take advantage of these opportunities, employment rates will rise, affecting individual results. Furthermore, as people use the connection, opportunities for new businesses such as restaurants. small stores, galleries, and so on will be formed along the routes. People in the neighborhood can take advantage of these opportunities, which can benefit residents job outcomes.

## 6.7.3 Limitations

The framework's limitations in terms population empowerment is that urbanist can only influence the environment. They can only physical empowerment provide spaces for to occur and physical conditions to support this empowerment. To increase framework's effectiveness. disciplines should be included in the process that can directly influence empowerment, such as more social disciplines that can improve population skills and help to stimulate people to take advantage of the opportunities that are provided.

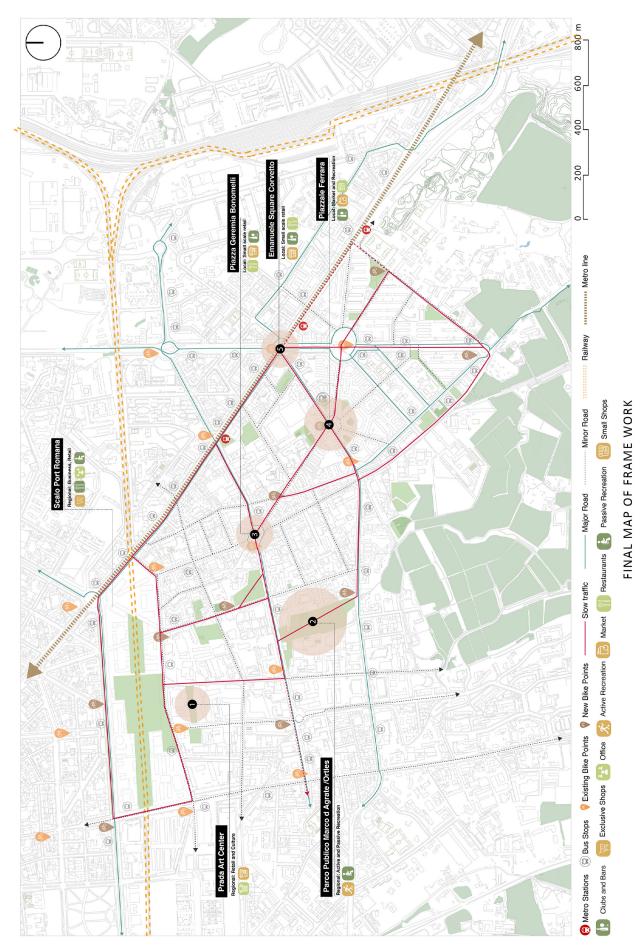


Figure 127 - Final Map of Framework [Source: Own illustration]

# Chapter 07



Figure 128 - Photo of Communal market from Piazza Ferrara [ Source : urbanfile.org ]

# **CLOSER LOOK**

- PIAZZALE FERRARA



The thesis provides a detailed examination of Piazza Ferrara in Corvetto, recognizing its pivotal role within the framework and its capacity to empower the surrounding residents. By addressing the challenges, identifying opportunities, and emphasizing the significance of the piazza, the thesis lays the groundwork for implementing effective strategies that will enhance the functionality, livability, and economic prospects of Piazza Ferrara, ultimately benefiting the entire community.

# 7.1 Introduction to Piazza Ferrara

Piazzale Ferrara, the heart of Corvetto is a place with many facets: the arrival crossroads of the streets that characterize the Mazzini - Corvetto Public Residential Building district - in the center it houses the historic Municipal Covered Market. The market island was subject to unregulated parking and inhabited by the local market on Tuesdays, as well as by sections of the social fabric linked to petty crime. Piazzale Ferrara is surrounded by small shops and restaurants and there is an outdoor open market via Giacinto mompiani which open on every sunday (see figure 129).

The Municipal Market in the Corvetto area, previously known as the local markets, was once home to a variety of shops catering to different needs. These included a poultry shop, greengrocer, baker, delicatessen-gastronomy, dairy, household outlet, stationery shop, equine butcher, and a bar. However, over time, some of these shops have closed down. The vacant spaces within the covered market can be utilized to create job opportunities and revitalize the local economy.

The presence of new businesses in the Municipal Market can bring economic benefits to both the business owners and the local community. The availability of diverse shops and services not only improves convenience for residents but also attracts visitors to the area. This increased foot traffic can have a positive impact on the economic condition of the business owners and contribute to the overall development and vibrancy of the Corvetto area.

" The Carpet of Piazzale Ferrara ", one of the projects presented in response to the public notice " Open Squares in every neighborhood ", co-designed in November 2019 and built starting from summer 2020 by the Muncipality. Open Squares provides for the temporary experimentation of new public places, of collaboration through the use application agreements and the tactical urbanism. Piazzale Ferrara is a place for meeting, resting, for dialogue as well as an area promoting cultural and creative actions and actions to take care of proximity. Thus Piazzale Ferrara embraces and gives new life to this place of the Corvetto.

The thesis proposes interventions to address the issues of inadequate maintenance and the occurrence various crimes in the areas surrounding Recognizing Piazza Ferrara. importance of improving the physical condition of the piazza, the thesis suggests measures to enhance its overall appearance and functionality. This may involve refurbishing the infrastructure. ensuring proper cleanliness. implementing maintenance to create a more welcoming and safe environment.

Moreover, the thesis acknowledges the potential for job creation within the Municipal Covered Market, aligning with the character and needs of Corvetto. By revitalizing the market and attracting new businesses, there is an opportunity to generate employment opportunities for local residents.

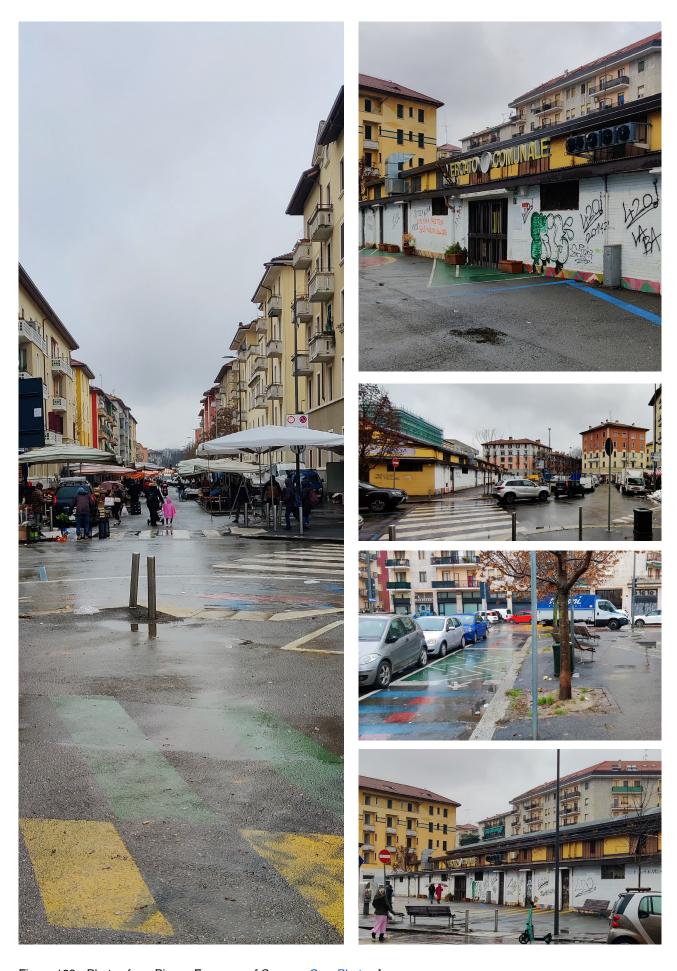


Figure 129 - Photos from Piazza Ferrara [Source : Own Photos]

# 7.2 Interventions proposed for the Piazza Ferrara

The proposed intervention for Piazza Ferrara as an intermediate goal holds great potential for business development and the creation of vibrant recreational spaces. This holistic approach aims to foster economic growth, promote social gatherings, and provide residents and visitors with more opportunities to enjoy leisure activities. Through these efforts, Piazza Ferrara will emerge as a dynamic and inviting destination that enriches the lives of the local community and enhances the overall appeal of the area.

## Connection to the Piazza Ferrara

The Piazza Ferrara holds a central position within the Corvetto area, making it a crucial hub for community activity. By enhancing the connectivity to this vibrant square, the potential for increased user engagement becomes significantly higher. To accommodate this anticipated increase and improve the connectivity to the piazza, various measures have been taken.

One key improvement is the enhancement of the bike lane infrastructure, allowing for seamless access to different areas within the site. By upgrading the bike lane network, users can easily navigate the surroundings, making Piazza Ferrara a more accessible and desirable destination. This encourages the use of bicycles as a convenient mode of transportation, promoting eco-friendly practices and reducing congestion. For this, numerous bike points have been strategically installed throughout the network.

Additionally, public transportation options are readily available throughout the area, ensuring that individuals have convenient alternatives for reaching Piazza Ferrara. The integration of efficient and accessible public transport networks facilitates seamless movement for residents and visitors alike, providing them with multiple transportation choices.

By improving the bike lane infrastructure, incorporating bike points, enhancing the pedestrian experience with trees, and maintaining a reliable public transportation system, the connection to Piazza Ferrara is optimized. These measures encourage sustainable and efficient modes of transportation, reducing congestion and enhancing the overall accessibility and attractiveness of the area.

## Providing space for new businesses

Due to the expected surge in the number of people utilizing businesses within Piazza Ferrara, as well as the anticipated increase in users resulting from the establishment of the network, it becomes imperative to provide additional spaces where small businesses can thrive. To address this need, the closed covered market and vacant shops in and around the piazza should be repurposed to create new opportunities for businesses.

The conversion of the closed covered market and vacant shops presents a unique chance to infuse vitality into the area. By repurposing these spaces, new businesses can be established, contributing to the overall character of Corvetto and catering to the needs and preferences of the targeted demographic.

To foster engagement and provide a diverse range of activities, the covered market could house a variety establishments such as cafes, restaurants, and workshops. This strategic approach will enhance the appeal and relevance of the area, creating a dynamic and vibrant atmosphere that resonates with both residents and visitors.

## Create places to sit and rest

The addition of new functions and Piazza activities to Ferrara opens possibilities for creating up exciting public spaces and increasing the availability of seating areas. By incorporating recreational features within the piazza, we can promote an active lifestyle that contributes to improved health and well-being.

One of the key opportunities presented by this expansion is the creation of public spaces. These spaces can be designed to cater to different needs and interests, providing areas for relaxation, socializing, and engaging in various activities. By incorporating green spaces, urban plazas, or designated gathering spots, we can establish inviting environments that encourage people of different ages and interests, to spend time outdoors, fostering a sense of community and connection.

# 7.3 CASE STUDIES FOR PIAZZA DESIGN

## Case study 1 - Superblock of Sant Antoni

**Architects: Leku Studio** 

Year: 2019

Project Location: Barcelona, Spain

Barcelona, with its uniform, regular, and extensive grid, represents a solid, mixed, and densely populated city with a consolidated public space that now needs to reprogram and recycle itself in order to respond to a rapidly changing social, environmental, and economic reality.

Climate change, pollution, and a lack of natural and social spaces motivate a creative transformation based on a new framework that envisions a humane, comfortable, and healthy city.

The Sant Antoni Superblock is an example of how flexible urbanization has resulted in an effective, gradual, and adaptive extension of the Superblock concept in the neighborhood.



Figure 130 - Superblock landscape in an open and participative way [Source: Arch daily]

#### Graphic style and signalling

The graphic language, signage, and color map are all determined, as is the module that creates the foundation of the new distribution as an expandable mesh. This acts as a guide and reference for the visual pattern's application and the arrangement of urban features. The new graphic tile moves along the mesh, settling and rearranging the road spaces.

#### Social, beneficial and innovative

This urban concept enabled an open and participatory gradual and gentle expansion of the new Superblock landscape. Where there was once an urban highway, there is now a healthy street full of life and greenery, and where there was once a traffic crossroads, there is now a liveable plaza. Car noise has been substituted by kids playing, joyful discussions between neighbors, or chess sessions among senior citizens. The transition continues alongside this adaptable landscape capable of incorporating new modifications resulting from urban testing and social innovation.



Figure 133 - Healthy street full of life and greenery [ Source : Arch daily ]

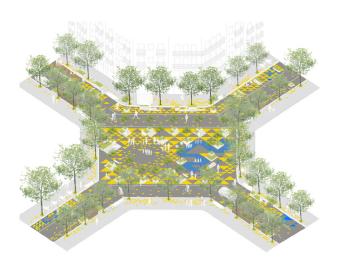


Figure 131 - New public areas are being created at the chamfer corners, as well as green-healthy paths. [ Source : Arch daily ]



Figure 132 - Flexible urban furnitures [ Source : Arch daily ]



Figure 134 - Application of the graphic pattern and placement of urban components | Source : Arch daily

## Case study 2- Superkilen

Architects: Bjarke Ingels Group (BIG)

Year: 2012

### **Project location:Copenhagen, Denmark**

Superkilen is a half-mile-long urban space that weaves through one of Denmark's most ethnically diverse and socially disadvantaged communities. It is envisioned as a massive display of urban best practice - a sort of collection of worldwide discovered things from 60 various nationalities of the people who live in the surrounding area.

# Three zones, three colors – one neighborhood

Superkilen is divided into three zones and colors, green, black, and red, as the conceptual beginning point. The various materials and colors are combined to create new, dynamic environments for everyday items. The demand for more nature is satisfied by a considerable increase in vegetation and plants across the entire neighborhood, which is organized as little islands of various tree species, blossom times, hues - and origins that mirror those of surrounding common objects.



Figure 135 - The public place Superkilen by BIG Architects [Source: Arch daily]

#### **Traffic connections**

To develop better and more transparent infrastructure throughout the area, existing bike paths will be restructured, and new linkages to nearby neighborhoods will be established, with a focus on the connection to Mimersgade, where locals have expressed a desire for a bus route. This changeover affects all traffic in the outlying Norrebro area and is part of a larger infrastructure plan. Signals, a longer middle lane, or speed bumps are among alternatives to the bus path.

#### Market/culture/sport – the red square

As an extension of the Norrebrohall's sports and cultural activities, the Red Square is envisioned as an urban extension of the hall's internal life. A variety of recreational opportunities, as well as the huge center square, allow residents to engage with one another by means of physical exercise and sports. Color and material are combined with the Norrebrohall and its new main access. where the surface mixes both indoors and outdoors in the new foyer.

Facades are aesthetically interwoven into the project by conceptually folding upwards and following the color of the surface, producing a three-dimensional People may eniov experience. afternoon sun with a view from an elevated open space beside the massive facade facing Norrebrogade, almost like a tribune. In addition to cultural and sporting activities, the Red Square serves as the site for an urban marketplace, which draws visitors from Copenhagen and the suburbs each weekend.

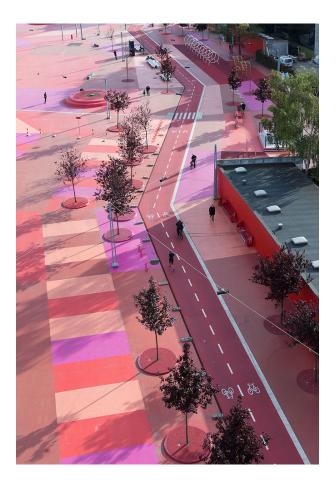






Figure 136 - Recreational activities in red square [ Source : Arch daily ]

#### Urban living room - the black square

Superkilen Masterplan The revolves around Mimers Plads. The Moroccan fountain, Turkish bench, and Japanese cherry trees that serve as an extension of the patio are where the residents congregate. Fixed tables, chairs, and grill equipment serve as an urban living room for playing backgammon, chess, and other board game fans during the week. By partially resolving the problem of height inequalities towards Midgaardsgade and enabling a bike ramp between Hotherplads and the intersecting bike path link, bike traffic is transferred to the East side of the Square. A hill to the north faces south, with a view of the square and its activity.





Figure 137 - The public gathering place in black square [Source: Arch daily]

#### Sport/play – the green park

"Sport is one of the few institutions in society where people can still agree on the rules," Bauman once said. You can always play football together no matter where you come from, what you believe in, or what language you speak. This is why a variety of sporting facilities, including the existing hockey field with an integrated basketball court, have been relocated to Green Park, creating a natural gathering area for local youth from Mjolnerpark and the surrounding school.

The Green Park's activities, with its soft hills and surfaces, appeal to children, young people, and families. A beautiful landscape and a playground where families with children can gather for picnics, sunbathing, and grass breaks, but also for hockey competitions, badminton games, and hill workout.

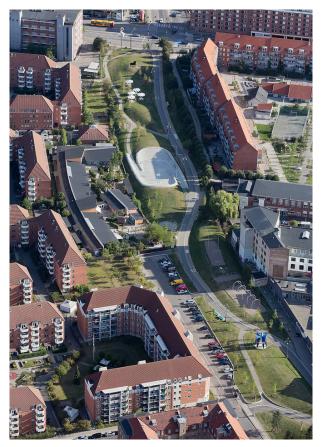


Figure 138 - Sports facilities in green park [Source: Arch daily]

## **Case Study - Inference**

#### Superblock of Sant Antoni

#### Superkilen



Figure 139 - Recreational activities in Superblock of Sant Antoni [ Source : Arch daily ]



Figure 140 - Red square of Superkilen [ Source : Arch daily ]

The addition of new street furniture. colorful graphics. and removable planters was implemented to promote walking, cycling, and social gathering. These design elements aimed to create an inviting and vibrant environment, encouraging people to engage in active modes of transportation and interact with the public space. The street furniture provided seating and resting areas, while the colorful graphics added visual interest and enhanced the overall aesthetic appeal. The removable planters added a touch of greenery and allowed for flexible use of the space. This design intervention successfully transformed the area into a more pedestrian-friendly and communityoriented space.

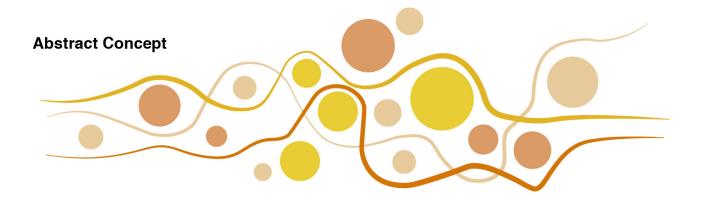
The design approach for this case study involved dividing the space into different zones, each characterized by a distinct color and specific function. This zoning strategy aimed to create a visually cohesive and organized environment while providing designated areas for various activities purposes. or example, one zone may be designated for relaxation and seating, another for social gatherings, and yet another for children's play. The different colors helped differentiate the zones and added a sense of vibrancy and visual interest to the space. By implementing this design element, the space was effectively optimized to accommodate a range of activities and cater to diverse user needs.

## 7.1.2 Piazza design - A key for urban change

By employing the theory of hyperstimulation and strategically using color (Tactical Urbanism), the urban renewal strategy for Piazza Ferrara aims to transform the project into an urbannatural landmark that gathers national and international recognition. This strategy improves the visual attractiveness, offers a memorable experience, and contributes to the area's overall success and reputation. Piazza Ferrara will emerge as a vibrant and visually captivating destination that embraces the blending of urban design and natural elements, distinguishing itself as a genuinely one-of-a-kind monument in the Corvetto area.

The plan suggests a new public framework that is more pedestrian and bicycle friendly, as well as more welcoming and stimulating, capable of reconnecting the city and its residents with the public space.

The Piazza Ferrara, Located at the heart of the Corvetto, is an engaging urban location surrounded by a well-balanced mix of recreational places and rich green which promotes community interaction and leisure.A Communal Market in the center of Piazza serves as a multi-purpose space, enabling a variety of activities and events that enrich the lives of inhabitants and visitors alike. The building has small shops, cafes, recreational places, and workshops etc.



#### **Space Subdivision**



Figure 141 - Abstract Concept and space subdivision

[ Source : Own Illustration ]

Surrounding the central building, an oasis of recreational spaces and green areas unfolds. Pathways that have been carefully planned run through the plaza, inviting pedestrians to explore and discover. Towering trees provide shade and a sense of tranquility, their canopies providing an escape from the city's restless routine.

Recreational areas that appeal to a variety of interests and age groups are scattered in the open spaces. A children's playground provides a secure and imaginative environment for children to explore and engage in active play. Seating areas are strategically positioned throughout the piazza, allowing comfortable games to relax, socialize, and take in the atmosphere.



Figure 142 - Proposed Master plan of Piazza Ferrara, Corvetto [ Source : Own Illustration ]



Figure 143 - Proposed ariel view of Piazza Ferrara , Corvetto [Source: Own Illustration]



Figure 144 - Proposed Kids play area in Piazza Ferrara , Corvetto

[ Source : Own Illustration ]



Figure 145 - Proposed Piazza Ferrara , Corvetto

[ Source : Own Illustration ]

# Chapter 08



Figure 146 - Futurability distric near Scalo porta romana [ Source : Own image ]

### CONCLUSION



## 8.1 Conclusions on regeneration minimizing displacement

The framework proposed for the area is site specific and responds to the area's current characteristics. To contribute to avoiding displacement in other regeneration areas, the recommended actions are translated into eleven findings that might be implemented in other projects that confront similar constraints. These findings are based on a review of the literature and the proposed project for the Scalo Porta Romana - Corvetto area.

### 1. New-build regeneration initiatives can create opportunity to help nearby impoverished regions.

When considering the consequences on the original population of the surrounding deprived areas, previous new built regeneration efforts are typically evaluated negatively. People who live in those regions have generally been displaced and forced to relocate to cheaper parts of the city or to other places. The thesis attempted to modify this perception by examining and reacting to the possibilities offered by new built regeneration sites. In the case of the Scalo Porta Romana area, the project responds to the new population that will settle in the area and spend more money in order to promote the Corvetto economy.

The general idea that can be drawn is that, in addition to causing displacement, new built regeneration projects can provide opportunity for poor communities to improve the individual outcomes of the local people. To discover what those opportunities are, it is necessary to explore outside the plan's boundaries and conduct a thorough examination.

### 2. Regeneration of public space can improve individual outcomes and help to reduce displacement.

Current regeneration programs frequently focus on a wide range of actions aimed at improving deprived neighborhoods. The housing stock is renovated, new amenities are installed, and old ones are upgraded, which often leads in an increase in the area's dwelling and amenity values. According to the literature, this growth in value frequently results in displacement, in which the original population does not profit from the changes in the area.

As a result, this thesis investigated how small adjustments in public spaces can contribute to the improvement of individual outcomes. The redevelopment of the region will result in a small amount of value gain while creating opportunities for people in the area to improve their individual outcomes by changing the street profiles, enhancing existing parks and communal gardens, and constructing new ones. Residents will be less vulnerable to deprivation as a result of this.

- 3. New built regeneration projects can provide facilities for nearby impoverished communities, reducing value increases in those regions.
- 4. Interventions that address issues on a larger scale can be used to affect changes on a smaller scale.

According to the data, the Scalo Porta Romana - Corvetto area has only a few of larger public places, such as squares and parks. The creation of larger public spaces in deprived areas will boost the worth of current residents. This public place will provide various amenities that will be valuable to different types of individuals, so people will be eager to travel in order to use it. Because the neighborhood is not yet occupied the public space in this new built area will not boost the value of existing residents. Furthermore, residents of this more fortunate neighborhood are more likely to resist price rises.

The design intervention can be used derive the idea that new built regeneration areas can give amenities that are appealing to the inhabitants of the surrounding deprived areas. As a result, the amenities will not generate value improvements that influence the individuals who live in poor areas while they are available for use. It is critical that the space be appealing so that people will travel to take advantage of the services.

In the Scalo Porta Romana framework, changes to the urban fabric that emphasize linkages not only build a path between the most significant centers, but also improve the quality of the urban fabric on a smaller scale. In this case, the network is made more appealing by improving public space and inserting additional interesting areas along the route. On a smaller scale, residents gain from the modifications since the public spaces in their neighborhood have been enhanced, increasing residents' willingness to use those areas and, as a result, improving the health outcomes of the local population.

The general idea that may be derived from these design interventions is that larger-scale approaches can be employed to improve local situations. As a result, support for such initiatives grows, and their implementation becomes more practical.

5. When intervening in the urban fabric to attract more people from outside the area because of its interesting characteristics, it is critical to maintain these characteristics.

Corvetto is one of Milan's most appealing neighborhoods, with Arab and Latin influences. The small shops with good gastronomy add to Corvetto's value. To ensure Corvetto's success and encourage customer growth, the proposed interventions focused on the addition of business spaces that contribute to the center's informal, small-scale identity. This will strengthen the center's identity and make it more appealing to people from other parts of Milan, such as Scalo Porta Romana.

6. Minor changes to the existing urban fabric can increase the attractiveness of public spaces, increasing the willingness to use them.

Regeneration does not always imply major changes to the urban fabric; small interventions can sometimes improve the quality of an existing public space and increase the number of people who use it. Fieldwork revealed that there are some aspects of the park that reduce its attractiveness and may limit its use. One example is the lack of benches, which makes the park unappealing not only to the elderly because there are no places to rest, but also to those who want to stay longer. By providing additional seating, the elderly can rest and people are encouraged to stay. This small intervention makes the space more appealing to users, increasing their willingness to use the park. Furthermore, such minor interventions will not result in significant value increases.

7. When upgrading deprived areas and focusing on improving the current people's status, it is more effective to focus on empowering the original population rather than developing a mixed population.

According to literature research, mixed neighborhood policies do not solve deprivation concerns, but rather shift them. Regeneration that focuses population empowerment will be more effective since it will influence individual outcomes. Employment, education, and health are three critical categories in this empowerment. The urbanist's involvement in this empowerment is limited, but not negligible. This is because urban designers can only facilitate locations where empowerment will occur construct the urban fabric in such a way that it will inspire empowerment rather than directly effect empowerment. As a result, collaboration with other disciplines is critical to ensuring that the urbanist's initiatives have the desired effect.

8. People can be empowered in terms of employment by structuring the urban environment in such a way that it encourages an increase in work.

According to the literature, empowering a population in terms of employment can be accomplished by offering occupations that fit the population's skills. In this case, an urbanist cannot generate jobs, but can only provide areas for people to work.

The redevelopment of Corvetto and the surrounding area aims to improve individual results in terms of employment and health. This improves employment within the area by connecting the new developed developments to Corvetto, allowing people to conveniently move between the centers. The increasing number of people using the center will provide an economic boost to the area. as well as opportunity to launch new businesses. It is critical that the new work opportunities fit the population's skills. This can be achieved by offering business spaces with the same dimensions as the smaller enterprises which are present in the area now, as well as by implementing rules that give people from the area preference over persons from outside the area. This will prevent larger enterprises from outside the area from occupying the newly constructed areas and will improve prospects for local projects. Furthermore, other disciplines, such as educating individuals on how to establish their own small business, can help to encourage the people of Corvetto to take advantage of possibilities and make them a success.

9. Increasing and upgrading public spaces will encourage an improvement in individual health outcomes.

Literature research demonstrates another method of empowering people through the usage of public green areas. According to research, using public space improves health; but, in order to reap those benefits, citizens must use the place. Urbanists cannot force people to use space, but they may supply green areas, improve existing ones, and increase accessibility to encourage people to use them.

The regeneration framework for the Scalo Porta Romana - Corvetto area suggests various ways to improve public areas. One of the key interventions is to integrate the courtyards into the public area and to provide facilities. As a result, the generally underutilized and unappealing public green spaces in the neighborhood become more appealing to residents, encouraging them to use them.

To encourage people to use green public spaces, pathways to those locations are being upgraded to increase people's willingness to use those spaces. The pavements have been enlarged and bicycle lanes have been constructed places. improve to the access Furthermore. because people physically active, the movement toward the spaces benefits their health.

Aside from study on regeneration that contributes to minimizing displacement, the thesis includes research on how to affect people's movement patterns, and two conclusions can be made from this research to utilize in similar initiatives.

10. Movement can be impacted by including paths and path markers into the existing urban fabric.

This thesis investigated literature on influencing people's movement in landscape design, and it identified two types of features that can be employed to affect movement. These are paths and path markers. These two factors are examined in three urban case studies. This resulted in a toolkit containing various interventions to affect movement, which are used in the Scalo Porta Romana - Corvetto project.

The interventions in the Scalo Porta Romana - Corvetto area demonstrated how existing urban fabric features can be exploited to affect movement patterns. In this case, a distinct path and path markers are used in the current street profiles to guide individuals between the many intermediate goals.

11. Existing urban fabric features can be employed as intermediate goals to boost people's motivation to walk and guide them in the proper path.

Literature study describes several methods for connecting different areas. One is the use of intermediate goals to direct people and make the trip more appealing. This increases people's willingness to move.

Because there are no continuous paths or links between Scalo Porta Romana and Corvetto in the urban fabric, existing and new intermediate goals are employed to drive movement between the two centers. In-between goals include the Marco d'Agrate/Ortles park and the area containing stores in Piazza Ferrara and Piazza Geremia Bonomelli.

### 8.2 Constraints

There are a few constraints to the interventions proposed in this thesis for the Scalo Porta Romana - Corvetto area that must be mentioned. The first limitation is the role of the urban planner in population empowerment. Designers and urbanists can create the conditions for empowerment, but they cannot direct the empowerment itself.

This holds true for the various interventions proposed in the thesis. One good example is the development of the connection between Scalo Porta Romana and Corvetto to encourage people to travel between the two centers. In this case, a designer can offer interventions to encourage use by adding wide lanes and intermediate goals in between goals, but he or she cannot force people to walk between the two centers and spend money in Corvetto.

The same is true for increasing the number of small-business spaces to provide chances for the local people improve employment results. Urbanists may create spaces for this empowerment to occur, but they cannot affect residents' behavior. To maximize the impact of physical interventions and encourage individuals to take advantage possibilities. interventions in urban fabric should be combined with interventions from other disciplines, such as those focusing on education or skill development.

Another limitation is the that empowerment of the Corvetto people in terms of employment mainly focuses on increasing jobs for particular groups within society. It is the entrepreneurs in this scenario, and it ignores others working in other areas. Part of those people may find work at Scalo Porta Romana, where numerous new employment are being established.

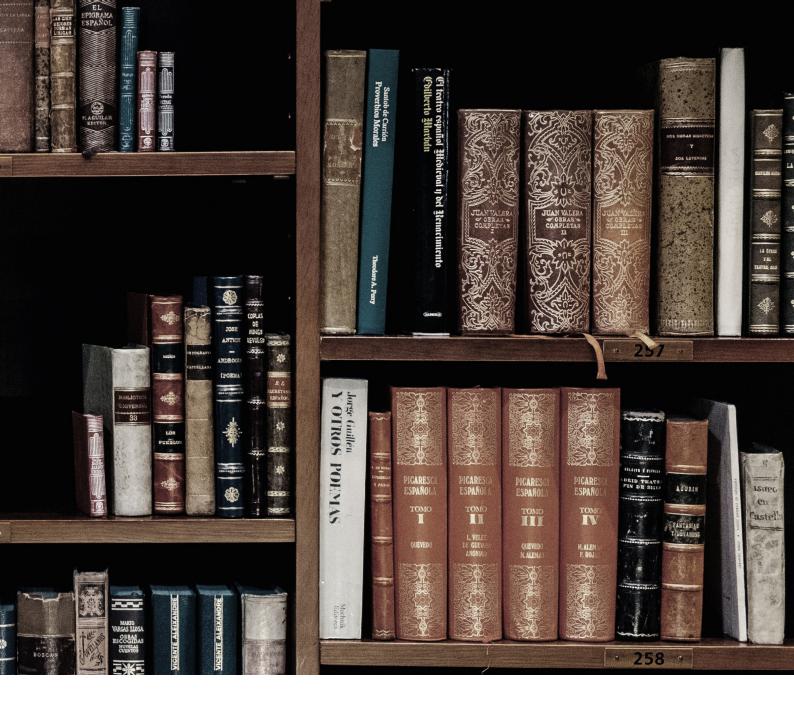
The final constraint is that empowerment will not immediately affect the outcomes of the area's population. This is especially true when it comes to empowering individuals through the addition and upgrading of public green spaces. It will not have an immediate impact on the citizens' health results, but it will take some time. The proposed population empowerment in terms of employment will move much more quickly since individuals will benefit instantly.

# Chapter 09



Figure 147 - An old book store [Source: Unsplash]

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