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ABSTRACT

This Neighbourhood Analysis booklet contains a variety of material pertaining to Tiburtino in the form of land use maps, street section drawings, building elevation drawings, statistical data, citizen interviews, and citizen map drawings known as Lynch maps. The hope is that this material will further the public's understanding of the neighborhood while also guiding us in determining and implementing our future Design and Policy intervention within the neighborhood.

Tiburtino is located approximately 5 kilometers outside of Rome's Historic Center and is near the Tiburtina Train Station, one of Rome's main transportation hubs. The name Tiburtino refers to the Istituto Case Popolari (Public Housing Institute, ICP) public housing complex located within our focus area. The neighborhood is interesting in that it contains a vast amount of diversity, both physical and social. Different building typologies along with different demographic groups occupy this dense neighborhood. This causes each block within the neighborhood to have its own distinct character and makes the neighborhood an excellent venue for urban analysis.

ACKNOWLEDGEMENTS

As a group we would like to acknowledge the Cornell University in Rome staff and Faculty members and offer a great word of appreciation for their unlimitied efforts. More specifically we would like to recognize the efforts of our professors, Gregory Smith and Carlotta Fioretti along with our teaching assistants, Viviana Andriola and Serena Muccitelli for their hours of instruction and assistance in areas we have fallen short. We would also like to thank the residents, employees, business owners and children of Tiburtino for willingly cooperating and adding to the quality of our research.

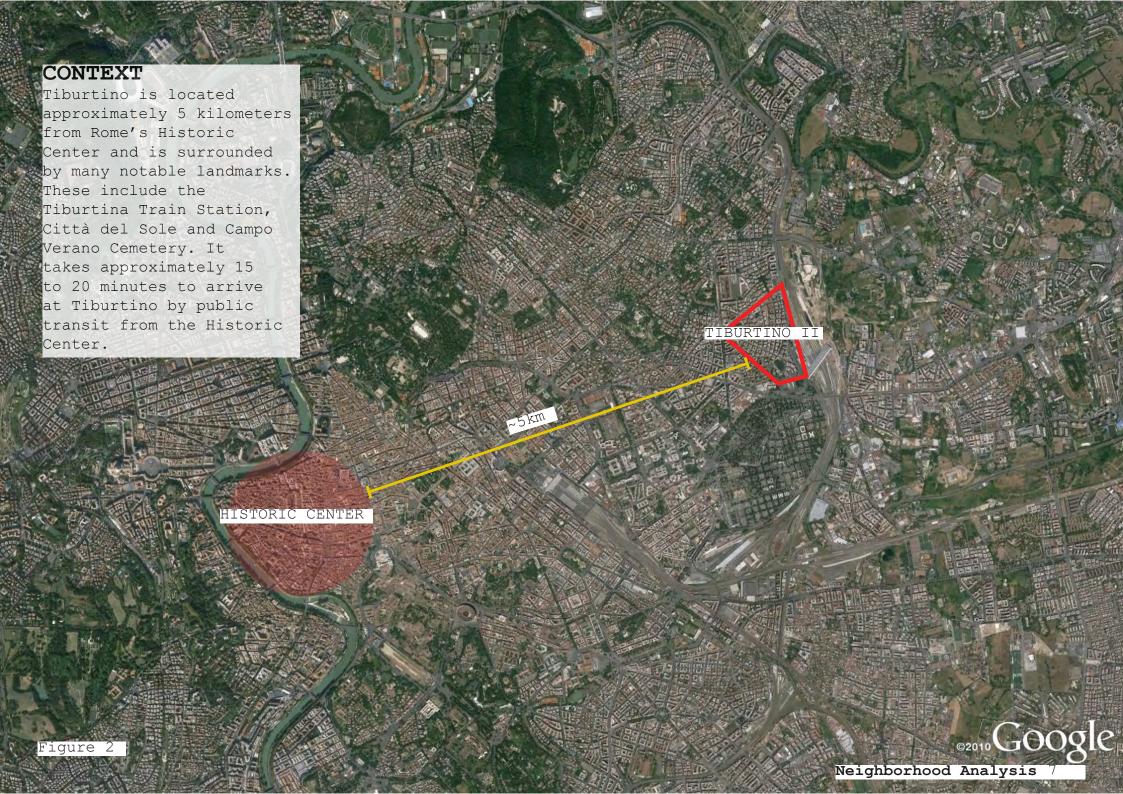


Figure 1

INTRODUCTION



- Where is Tiburtino?
- What is in our Focus Area?







PRIMARY AND SECONDARY AREA

Within our focus area, we determined one primary area and two secondary areas. Our Primary Area, highlighted in red (Figure 5), was selected primarily because it includes the historic Tiburtino II ICP housing project and the area near Stazione Tiburtina (Tiburtina Station). This area includes many points of interest, such as an informal area adjacent to the ICP housing project and a new modern development site. This area can be considered the neighborhood's center of contemporary transformation.

One part of our Secondary Area includes Piazza Bologna and the portion of land leading down into our primary area while the other part includes a fragment of buildings west of our primary area that leads down to the University 'La Sapienza'.





Figure 6

- What were the methods we used?
- What did we include in our Street Surveys?
- How did we conduct Interviews?
- How did we use Statisical Data?

STREET SURVEYS

By conducting **street surveys** and **interviews**, as well as using **statistical data**, we gathered a better insight on how residents view their Quartiere and its relationship with Stazione Tiburtina.

Our research began with identifying our area of study and firstly distinguishing the primary and secondary areas. This was done by taking into account the various building and street typologies that the area is composed of. After two visits to the neighborhood, it was easy to establish the borders of our Primary Area. The Primary Area starts at Stazione Tiburtina and is surrounded by Via Tiburtina, Viale delle Provincie, Via di Sant Ippolito, Via Giovanni da Procida and back down to the Stazione. While the first Secondary Area is enclosed by Viale delle Provincie, Piazza Bologna and Via Lorenzo il Mangnifico and the second is enclosed by Viale Ippocrate, Viale Regina Margherita and Viale Delle Provincie.

After having a clear idea as to what area we were going to focus on, we started conducting our street surveys.

We analysed 23 streets confirming that no two streets are alike. Our main streets: Via Tiburtina, Viale delle Provincie and Via Lorenzo il Magnifico have similar mixed-use provisions with medium to high traffic intensity and noise levels. At the same time, the inner streets from Via di Sant Ippolito down towards Tiburtina have low to medium traffic intensity and noise levels. On all streets the main source of noise were cars. Overall we concluded that most of our streets were well designed integrating handicap accessibilty, walkable areas and car traffic creating a permeable environment for all. The previously listed areas will be elaborated on in the coming chapters. We also drew sections and took photos while in the field



Figure 7

Neighborhood Analysis 13

INTERVIEWS

To truly understand the neighbourhood, we conducted interviews with several individuals. Some examples of these individuals include business ownwers, residents, employees, preteens, elderly residents, immigrants and members of neighborhood-focused organizations such as Cittadinanzattiva and Rinascita Tiburtina. Many of the interviews conducted were spontaneous, giving us as researchers a more genuine, unscripted understanding of the area.

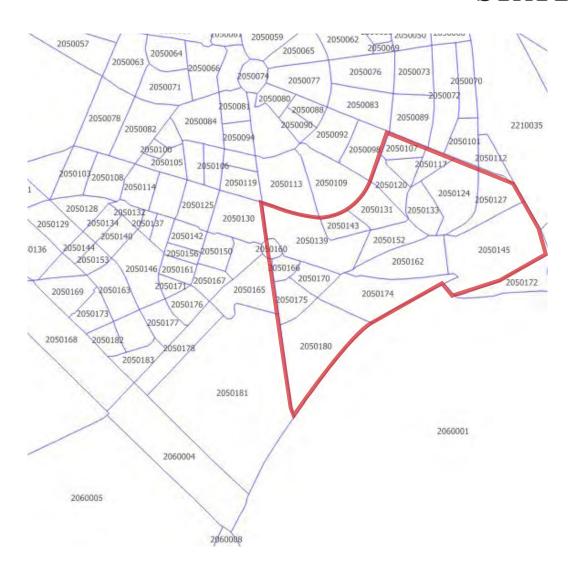
We conducted our interviews in different areas of Tiburtino in attempts to broaden our study and avoid limiting our research. After our interviews we asked individuals to draw a Lynch Map, inspired by Kevin Lynch. These maps depict their neighborhood drawn from memory and include five important features: Paths, edges, districts, nodes and landmarks.



Figure 8

Overall we conducted 10 interviews with 12 General Questions, gathered 7 Lynch maps and 1 design proposal from Rinascita Tiburtina.

STATISTICAL AND HISTORICAL DATA



Data taken from 18 Census Tracts

2,381,916 Sq. ft

~90 Buildings

2,976 Residents

Our statistical data is taken from the Italian National Institute for Statistics (ISTAT) database. Our data is extracted from both 2001 and 2011 ISTAT database files through the use of ArcGIS. We used data from both 2001 and 2011 in our data as the 2011 data is not as detailed as the data from 2001.

Figure 9

DIVISION OF NEIGHBORHOOD

As we gathered more data about Tiburtino, it became obvious that the neighborhood has so many differences that analyzing it as one unit would hinder the amount of knowledge we would gain.

As such, we decided to look at the neighborhood as a sum of different units, divided by their building typologies. This resulted in four different areas:

-the Palazzi Area, which is named after the 10-13 story mixed-use buildings, or palazzi, found throughout the area

-the ICP Housing Area, which is named after the public housing units found in the area

-the New Development Area, which is named after the newly constructed modern buildings located in the area

-the Informal Area, which is named after the single-story buildings often refered to as "barachette" by inhabitants of Tiburtino





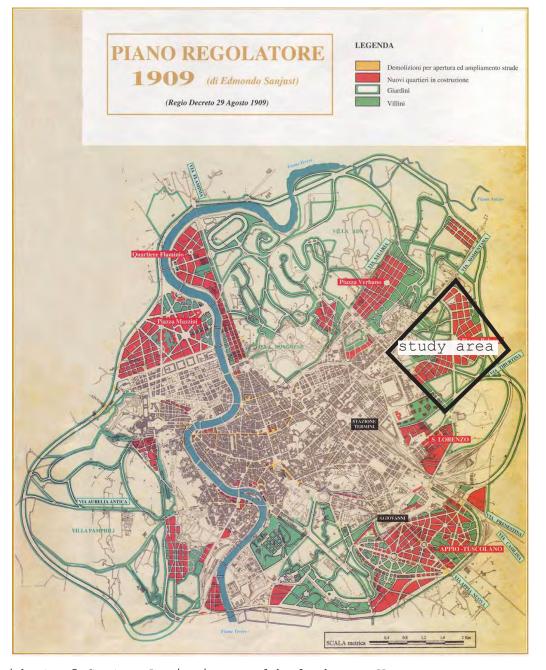


- How has Tiburtino changed?
- What is Tiburtino like in the present?

In 1870 when Rome became the capital city many people worked in the public sector because Rome was never an industrial city. Due to the high influx of people in the area, during the fascist period there were high construction rates of the 'borgate ufficiali' to host people that were evicted form the city Centre and the area surrounding Piazza Bologna was a Fascist neighbourhood built for the middle class (Masini, 2009, 11). Piazza Bologna has always had a strong symbolic reference in the mind of Tiburtina II's inhabitants.

Tiburtino was included in 'Piano Regolatore Del 1909', strategically positioned between the two major hubs; San Lorenzo and Piazza Bologna. The original area of Tiburtino (known as Piazza Pontida) has 28 buildings and 600 apartments. The Istituto Case Popolari (Public Housing Institute, ICP) housing complex is built in two distinct isolated blocks, separated by Via Eleanor. The first complex, to the south, was completed in 1927 and has at the Centre, piazza Pontida which consists of four blocks; mainly characterized by apartments of two or three rooms as well as one room apartments with a bathroom. The second block is formed by two complexes adjacent to Villa Narducci.

Figure 12. 1909 Piano Regolatore



^[1] Luigi Lorenzo is an eighty year old resident and president of Centro Anziani, an elderly home. We interviewed him with Professor Carlotta Fioretti who translated his thoughts into English. He is an historical inhabitant of the neighbourhood who was born and still resides in this area.

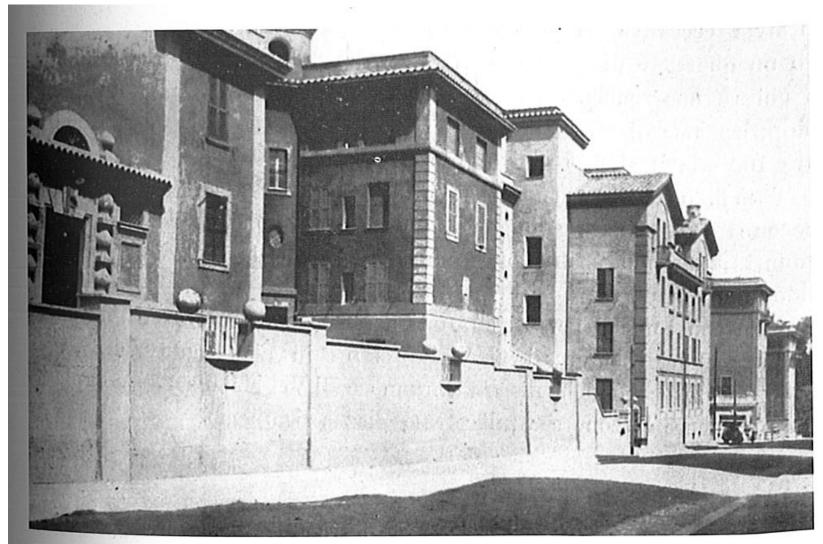
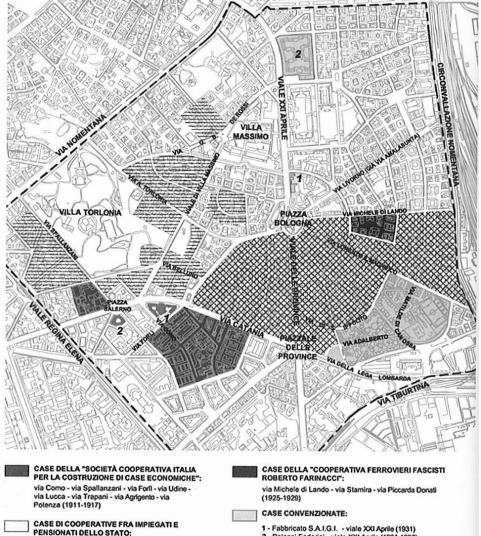


Figura 8 – Intervento Istituto case popolari al Tiburtino II (ibidem)

Figure 13: Masini, Eva. Piazza Bologna: Alle Origini Di Un Quartiere "borghese" Milano, Italy: FrancoAngeli, 2009. Print ICP housing buildings in 1927, taken in Tiburtino II.



- 1 Fabbricato S.A.I.G.I. viale XXI Aprile (1931)
- 2 Palazzi Federici viale XXI Aprile (1931-1937)

INTERVENTO I.C.P. TIBURTINO II: via Gallonio - via Nibby - via Verona (1919-1936)

via Belluno - via Spallanzani - via A. Torlonia - via G.B. De Rossi - via Cosenza - via di Villa Massimo -

1 - Edificio del Dopolavoro ferroviario (1925-1929)

2 - Edificio residenziale per i dipendenti del Ministero

EDIFICI DELLE FERROVIE:

piazza Salemo

via Bari - via Como - via Forli

dei trasporti (iniziato nel 1925)

via Adalberto - via Berengario - via Matilde di Canossa - via Arduino via Teodolinda - via Ludovico II - piazza Pontida - via Adalberto da Intimiano - via della Lega Lombarda (1925 - 1930)

AREA DEI PRIVATI:

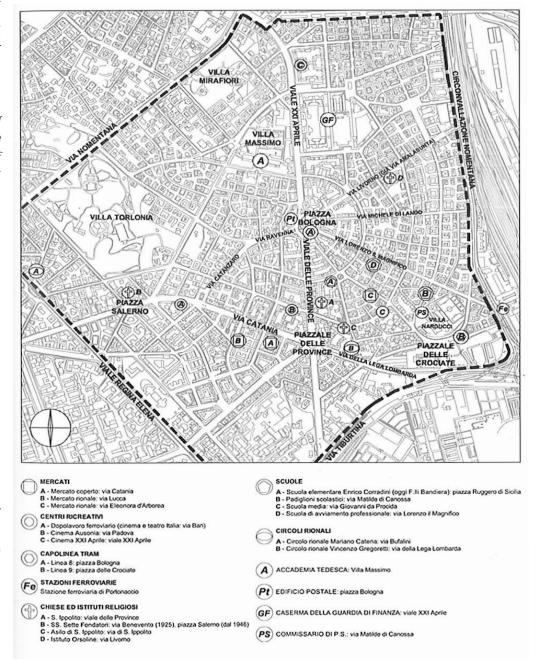
Convenzione con la Società nazionale edilizia per la creazione di un nuovo quartiere fra la via Nomentana e la stazione di Portonaccio

Tiburtino II was built from 1925-1930. This neighbourhood was recognizable in comparison to Piazza Bologna because of its difference in building typologies and general character. The neighbourhood has a special topography and the building typologies reflect this. The presence of green spaces have always created meeting points for inhabitants and especially for children, stimulating communication and social involvement. Ultimately ICP houses were an instrument for social education and suitable for different social classes including: the working class, middle class and the lower class creating an image of economical houses. The original buildings are designed by Ignazio Guidi, upon construction, the architect tried to create a visual barrier between Piazza Bologna and the cemetery, using Tiburtina II as a partition between the two quarters.

Figure 14(Left): A 1914 Plan of the area showing the different housing types. Translation into English from top to bottom: Cooperative houses- economic houses, Cooperative houses for people working or retired from private sector railway buildings, Cooperative houses for people working in the railway company, private/ public housing, ICP Tiburtino II building complex and Private development area

The biggest changes in the area came about after WWII. At the beginning of Tiburtino II (before it received this name) there were only a few buildings and unused field grounds around Via Magnifico. Around 1944 a U.S airplane landed in the field, demonstrating it's appearance of an airport. According to Luigi Lorenzo[1], "In general the area was well served since the beginning of its conception. There has always been the presence of markets and small shops to cater to the needs of its residents (...), " along with the train station, of course, which was there before Luigi can remember.

Figure 15: A 1914 Plan of the area showing places of social services. Translation into English from top to bottom: Market, community buildings, final stop of tram, railway station, churches and relgiious buildings, schools, community centres, german Academy, Post Office and Police office

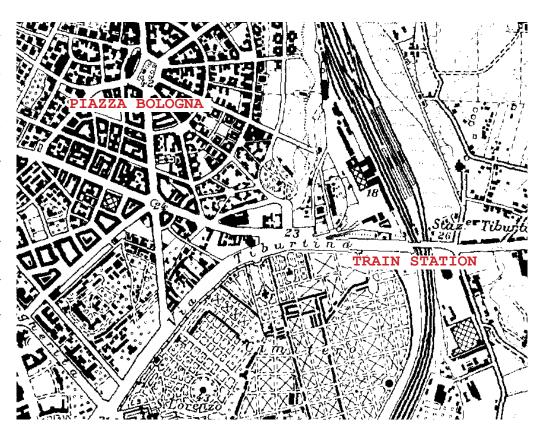


A Brief History of the Station

Via Tiburtina is the name of the ancient road that is still in use today, connecting Rome with the town of Tivoli. A journey along Via Tiburtina shows the key role that a road can play in relation to city development. [2] Which is also seen in the role of the train station, the old Roma Tiburtina station was established in 1866.

It's history has progressed overtime from just a localsmall scale train stop to the future main station of Rome, according to commuters and residents of the general area the quality of life has declined over time. One owner of a mechanic shop says, "(He) started working here in 1975 when old station was much nicer with trees and well designed landscape making the area beautiful." When asked about the chief monuments of the area, a local citizen says, "The station is not a monument, it is a cathedral in the desert. The train station has brought grater hardship on the residents, for example higher rates of traffic and more issues with parking." Another resident and employee of the area says that, "until they turn Tiburtina station into the chief transportation area of the city, this area will be a waste."

Figure 16: 1936 plan showing Via Tiburtina in relation to Stazione Tiburtina and Piazza Bologna, with our research area in bewteen the two Landmarks.



^{[2] &}quot;Via Tiburtina -- an Interdisciplinary Journey through Rome's Urban Landscape." Via Tiburtina -- an Interdisciplinary Journey through Rome's Urban Landscape. N.p., n.d. Web. 15 Apr. 2015.

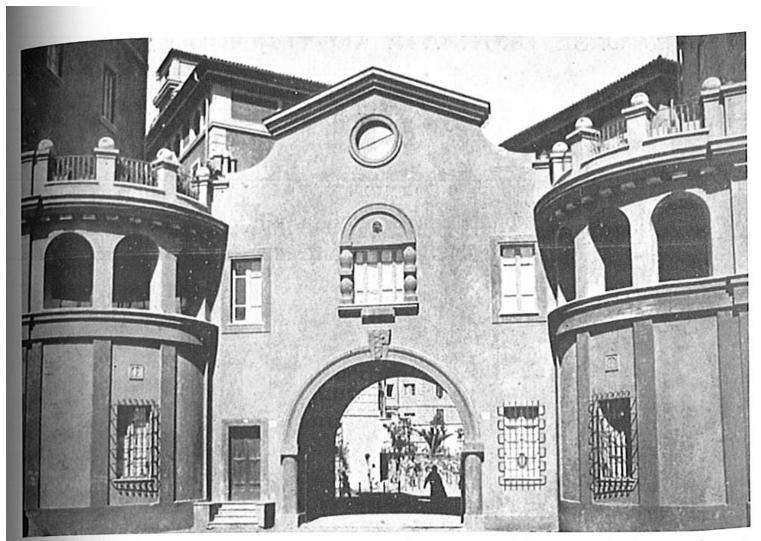
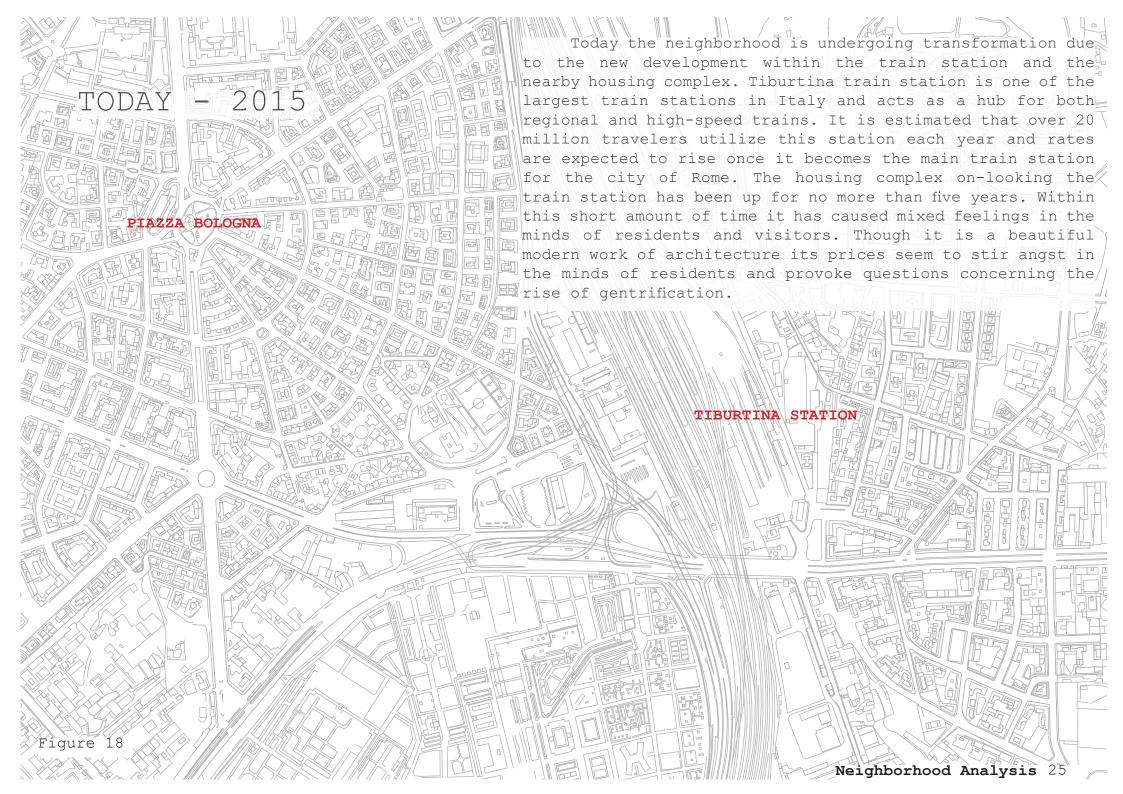
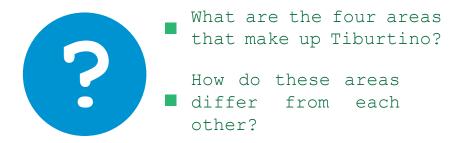


Figura 7 – Intervento dell'Istituto case popolari al Tiburtino II (A. Calza Bini, Il fascismo per le case del popolo. L'opera dell'Istituto per le case popolari in Roma nel primo quadriennio d'amministrazione Fascista, Roma, 1927; Biblioteca dell'ASC, collocazione 14916 (6))

Figure 17 (Above): Masini, Eva. Piazza Bologna: Alle Origini Di Un Quartiere "borghese" Milano, Italy: FrancoAngeli, 2009. Print ICP housing building in 1927, taken in Tiburtino II.







BUILDING ARRANGEMENT

This figure-ground representation shows Tiburtino's unique building positive-negative and arrangement space distribution. One can distinguish between areas of high density and areas of low density as well as differtiate developed land from openn space. The Barachette, otherwise known as the informal area to the south, clearly is an area of high density. 1 to 2 story buildings crowd this block. On the other hand, the ICP public housing complex, located in the center of our focus area, is not as dense and has a significant amount of negative space in the form of open public space, such as park space. In addition, the large open space to the west contains two soccer fields and a dog park.

The figure ground representation also gives us a better idea of how our four areas were classified, as each area's unique building arrangement shines through.



Figure 20



Figure 21

BLOCK STRUCTURE

STREET STRUCTURE

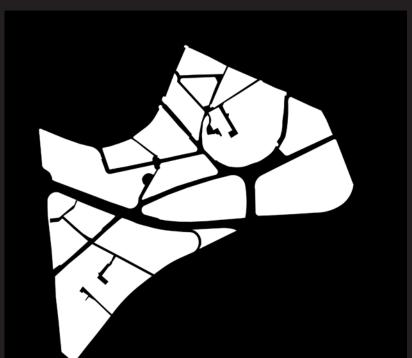
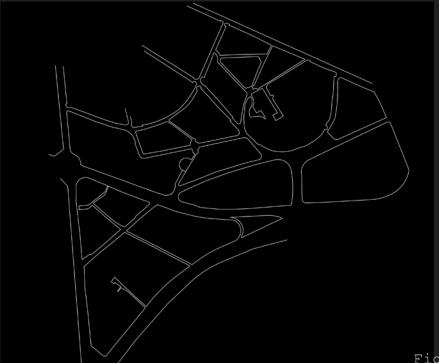


Figure 22





PALAZZI AREA

The region known as the Palazzi Area is found along both the western and eastern edges of the neighborhood. We have named it the Palazzi Area as both sides contain one predominate feature; they are both the home of the neighborhood's palazzi, or buildings taller than five stories. These particular palazzi can range from 8 to 13 stories high and are mostly mixed use, although some that are purely residential can be found on the western side of this area. The ground floor of the mixed use palazzi are home to various types of stores, from home goods to bars.

Data extracted from the 2001 ISTAT shows that there are about 45 buildings located in this area. Further research using ISTAT data has revealed that the majority of palazzi built in this area were built between the years of 1919 and 1945. According to the same source there has been no recent construction in the area.



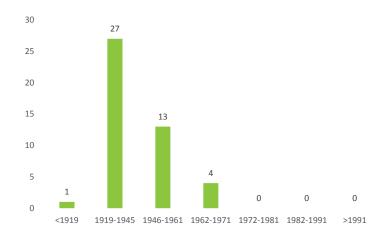


Figure 25



POPULATION

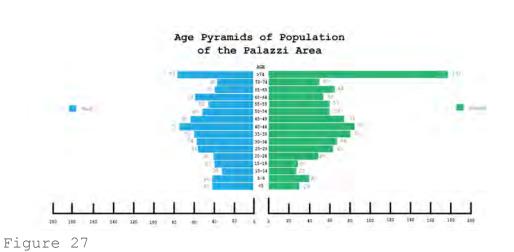
The Palazzi Area is home to 1736 men, women and children. The population includes a higher percentage a high school diploma, as this group of people equate of women compared to men, with women making up 56% of the area's total population. This is evident even in the area's population pyramid. Furthermore, the largest population age group is the elderly, or those above the age of 74, followed by family-aged residents, or those between the ages of 40 and 44.

Comparing data from both 2001 and 2011 reveals that the population has decreased over ten years. All groups of population has experienced loss over time aside from children-aged groups and family-aged groups, which has increased. This suggests that while people are leaving, the area is still attracting young familites.

EDUCATION

The majority of residents in this area have attained to 36% of the total population of the Palazzi area. Only 20% of the population have attained a university degree or tertiary education degree.

It is important to note that there are eight people living in this area who are illiterate. Of these, three are male and five are female.



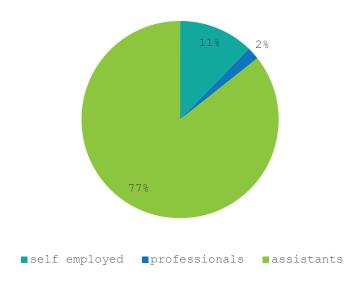


WORKFORCE

Analysis of the Palazzi area's population revealed that 48% of the population of the area does not participate in the work force. Of these, 40% are retired workers, 29% are homemakers (such as housewives) and 18% are students.

Yet, at the same time, the majority of residents actively participate in the work force. Out of these participants, 90% are employed while the rest are a mixture of those unemployed and persons searching for work. The largest sector of employment involves Public Administration, followed by Commercial.

With a large percentage of 77%, many residents of the palazzi area are self-employed workers. At 11%, a good number of residents in the area are professionals, while only 2% are assistants.



HOMEOWNERSHIP

Within the Palazzi Area, there are numerous apartments available to live in. Those who choose to call this area their home have the choice to either rent or buy their new home. ISTAT data reveals that both the renter population and homeowner population make up 48% of the total Palazzi Area population. The remaining inhabitants are classified as "other title."

It is also important to note exactly how many residences are inhabited. Within the Palazzi area, 82% of the total residences are occupied by their intended resident. An additional 11% of residences are inhabited, but not by their intended resident. Only 7% of residences are empty.

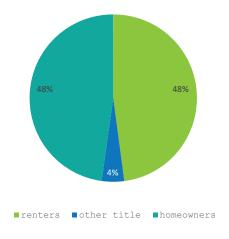


Figure 29

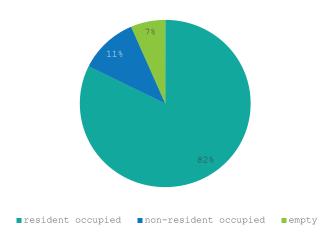


Figure 30

ICP HOUSING AREA

The area described as the ICP Housing Area is found in between the two halves of the Palazzi area. We have named it the ICP Housing Area due to the history of the buildings found within this area. This area is the location of the original Tiburtino II public housing development, built during the late 1920s. The buildings found in thsi area are also palazzi, but are only four to five stories in height and have a distinct architectual style. These palazzi are mostly residential amd each block in this area has a distinct layout with a central circular open space located in the center of the block.

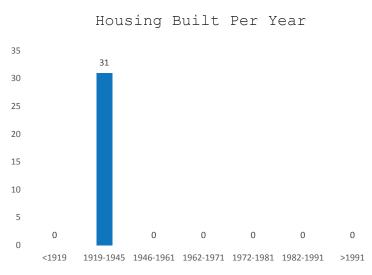


Figure 31











POPULATION

The ICP Housing Area contains 744 inhabitants. This area also includes a higher percentage of women compared to men, with women making up 53% of the total population of the area. Moreover, another trend similar to the palazzi area involves the largest age groups within the population. The largest population age group is also the elderly followed by older family-aged residents between the ages of 45 and 49.

This area has also experienced a decrease in total population, as it changes from 917 inhabitants to 744. All age groups have experienced a decline unlike the age groups in the palazzi area.

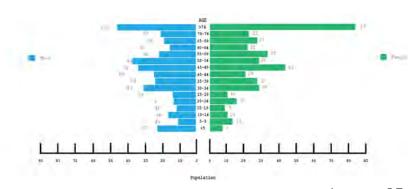


Figure 37

EDUCATION

Many people within the ICP Housing Area have earned a hgih school diploma as their highest level of education. At the same time, there are few people who have attained a college degree or a college degree equivalent. At 9%, the number of college graduates living in this neighborhood is low compared to the groups of graduates of other educational levels.

It is important to note that there are 5 people living in this area that are illiterate.

WORKFORCE

Results show that of the ICP Housing Area's population, 51% of residents do not actively participate in the workforce. Of these non-participants, 40% are retired workers, 30% are homemakers and 10% are students.

The number of residents participating in the workforce is slightly less than half of the population. Within this group of individuals, 87% are employed. The largest sector of employment among residents in the ICP Housing Area is Commerical work, followed by Industry.

At 81%, many of the residents of this area are assistants. The remaining working residents are divided: 8% of them are self-employed, while only 1% are professionals.

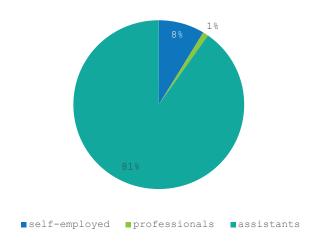


Figure 38

HOMEOWNERSHIP

While the ICP Housing Area does not have as many residences as the Palazzi Area, it is still important to note the rates of homeownership. Within this area, the majority of residents are not property owners-66% of the population are renters. Homeowners make up only 32% of the area's population, while 2% are classified as "other title."

The majority of residences in the ICP Housing Area are occupied by their intended residents. Eight percent of these residences are empty while 2% are non-resident occupied.

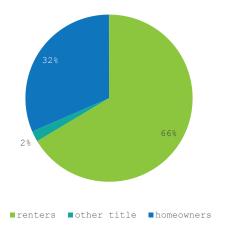


Figure 39

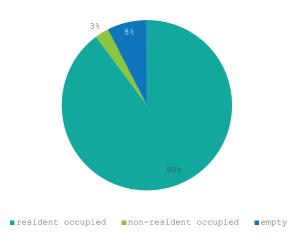


Figure 40

NEW DEVELOPMENT AREA

This area is appropriately named the new development area: new buildings were constructed here recently while another one is undergoing restoration. The new modern buildings range from 7 to 12 stories in height and are designed in a deconstructivist modern architectural style. Additionally, these buildings serve as mixed-use buildings, as they house both apartments and office space.

Many residents have expressed disappointment in the architectural style of the newly constructed buildings, commenting that they do not fit in well and refer to it as il monstro (monster). Some of the apartments are selling for over \$1 million USD.

Because this area contains only **three** residents, we have decided to not provide a statistical analysis on the area.







INFORMAL AREA

The Informal Area is located to the south of the Palazzi Area and to the West of the New Development Area. It is composed of a variety of building types and uses. There are one-story mechanic shops, residential buildings, Tunisian community center and retail. The area is unique in that there are no formal sidewalks and parking. This differentiates it from the rest of the neighborhood. This character also disconnects it from the other areas. Due to this, we found that not many people were walking through the area and that many buildings in the area were abandoned. In addition, there are no green spaces or trees located in this area.

Housing Built Per Year

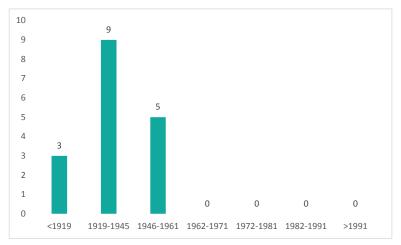


Figure 44



POPULATION

The Informal Area contains 70 inhabitants in total. Unlike the other two areas analyzed, this area contains a higher percentage of men (56%). The largest age group in this area are much younger than the areas discussed 42% are retired workers. previously: 20-29.

area and the other areas of the neighborhood, it is also the only area that has seen an increase in population. The total population has increased from 31 in 2001 to 70 in 2011.

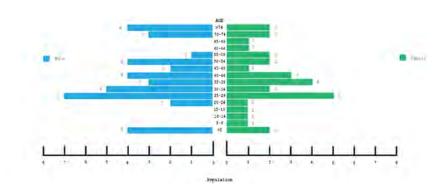


Figure 46

EDUCATION

There are an equal amount of high school and univeristy graduates living within the informal area. Both groups make up 23% of the population.

Unlike previously mentioned areas, there are no illiterate people inhabiting this area.

WORKFORCE

Within the Informal Area, 61% of the population actively participate in the workforce. Of the nonparticipants, 17% are homemakers, 33% are students and

Of the 61% of the population that are in the To futher illustrate the difference between this workforce, nearly all of them are employed. Only 5% of the workforce currently do not hold a job. The largest sectors of employment in this area area Commerical and Brokerage.

> At 77%, most of the residents of this area area are assistants. Another 11% of the working population are self-employed and the remaining 2% are professional workers.

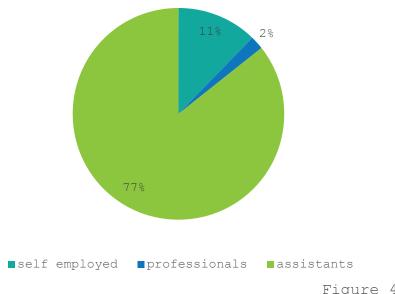


Figure 47

HOMEOWNERSHIP

The Informal Area has few homes, but it is still important to analyze the trends of homeonwership in this area. Seventy-one percent of residents in this area are not renters, but homeowners. Twenty-four percent of inhabitants are renters, while 6% are classified as "other title."

The majority of residences in the Informal Area are occupied by their intended residents, but there are also many residences in this area that are empty. Thirty-seven percent of these residences are empty while 20% are non-resident occupied. The remaining amount, 42%, are resident occupied.

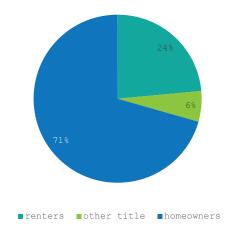


Figure 48

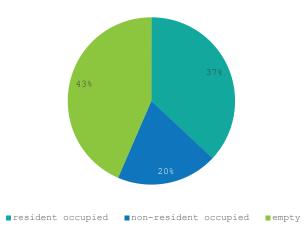
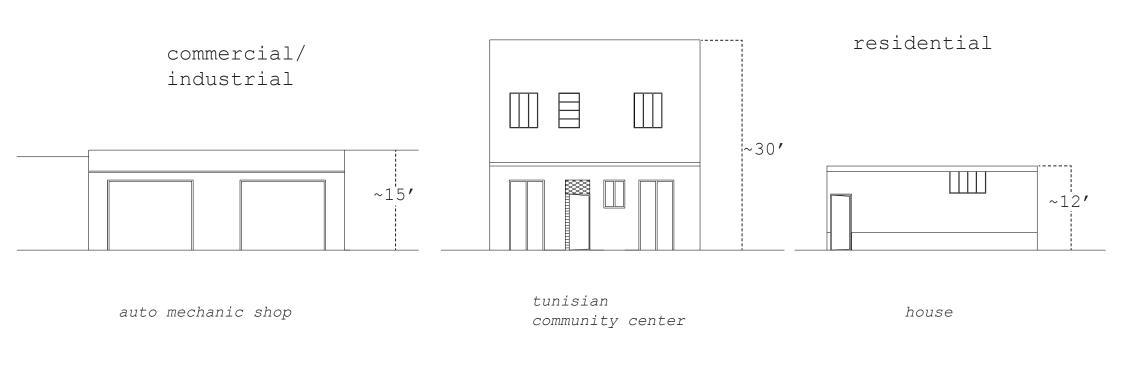


Figure 49



 ${\bf Neighborhood\ Analysis}\ 51$

public/community



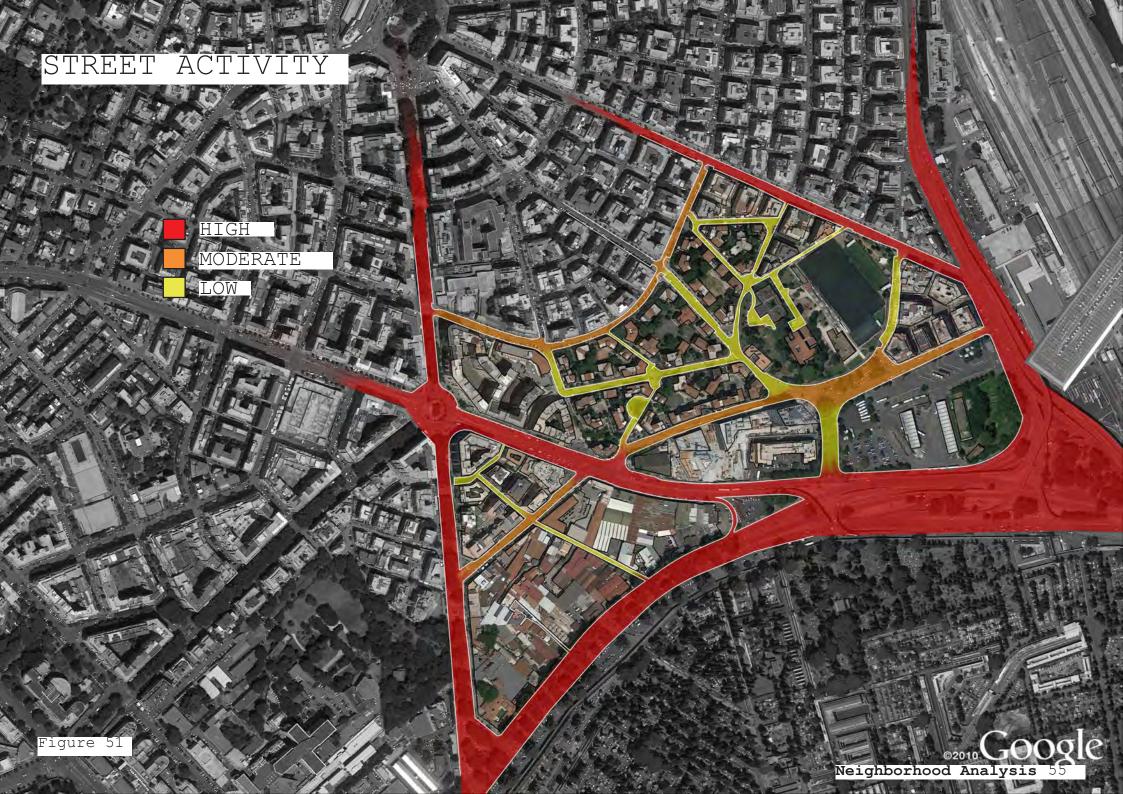
10′ 20′



INFRASTRUCTURE

STREET TYPOLOGY

Tiburtino is home to three different street typologies: main roads, secondary roads and tertiary roads. These roads are classified according to street width, pedestrian traffic, car traffic and number of car lanes. Main roads feature wide streets with more than two car lanes. These roads also are home to a lot of foot and car traffic. Some examples of this kind of street typology would include streets such as Via di Lorenzo il Magnifico, Via delle Province and Via Tiburtina. Secondary roads, on the other hand, feature slightly narrower roads, less car and foot traffic, as well as no more than two car lanes. An example of this kind of street typology is Via della Lega Lombarda. Tertiary roads are the smallest of the three types of streets. They involve narrow roads with one car lane. The best example of these kinds of streets is the smaller streets near the Public Housing Area, such as Via Adalberto.







8 story palazzi



Figure 54 Neighborhood Analysis 57





4-story palazzi

parking 2-lane road burkarang deway (angled)

is parking 2-lane road burkarang deway (angled)

6-story palazzi

Figure 57





Figure 59

Figure 60
Neighborhood Analysis 61





2-story barachetta

one-lane road informal parking and

20′

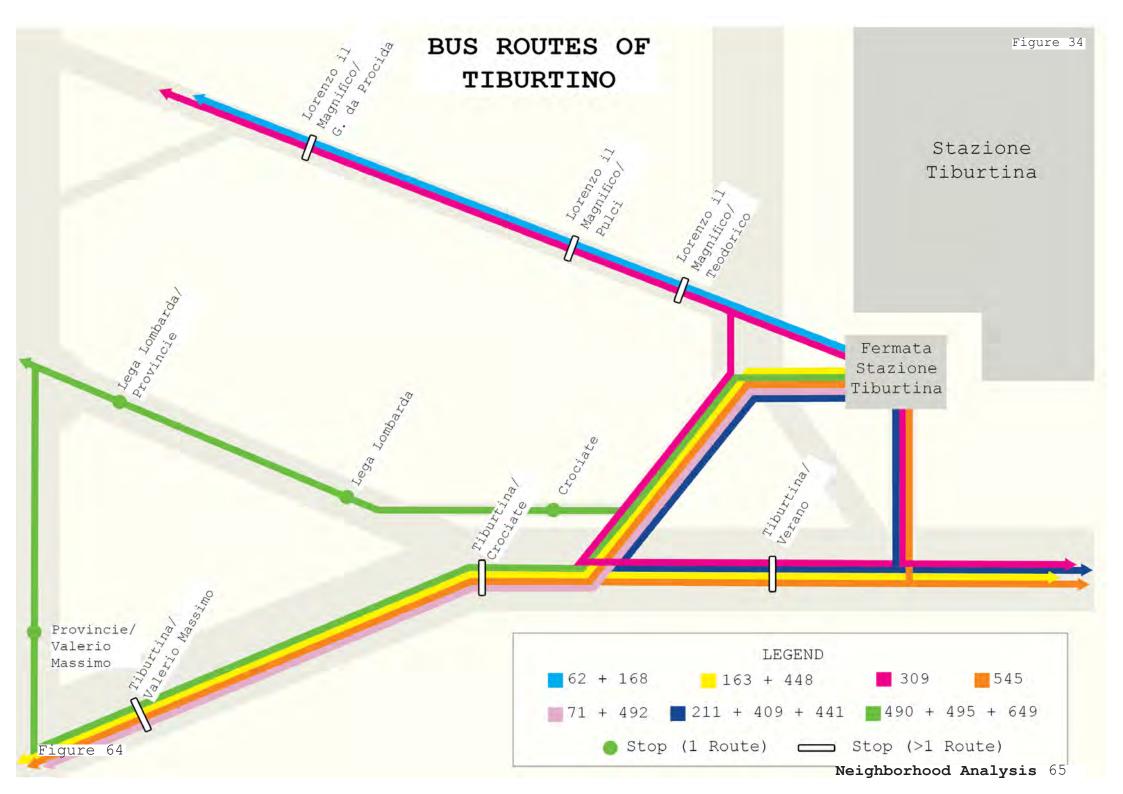
sidewalk

10′

PUBLIC TRANSPORTATION

Because of its location next to Stazione Tiburtina, a major transportation hub, Tiburtino is home to various forms of transportation. Residents and visitors alike enjoy the convienence of having access to buses, one metro line and various forms of rail transportation ranging from local to high-speed rail.

There are 14 ATAC bus lines that serve the area, making stops along the various main streets located in the neighborhood with many ending their route at Stazione Tiburtina. The metro line that serves the neighborhood, Line B, gives residents and visitors access to various parts of Rome, such as Rebibbia, Termini and Laurentina.

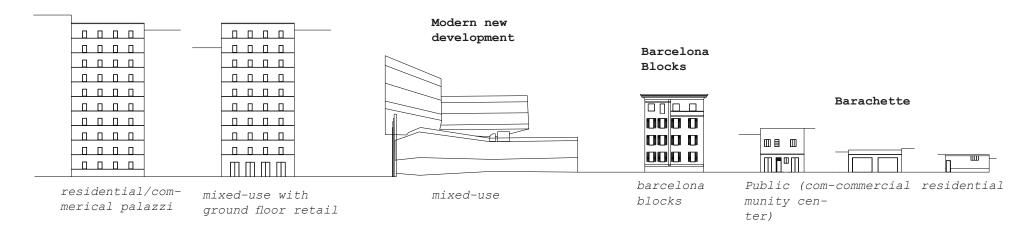


OTHER MAPS AND DRAWINGS



ELEVATIONS WITH BUIDLING USE

Palazzi





"There is no dialogue between the modern new development and the rest of the buildings."

- PRESIDENT OF CITTADINANZATTIVA

Another important method in analysing our neighbourhood is interviews. In order to understand what citizens in Tiburtina think about their neighbourhood, we conducted 10 interviews, both formal and informal. Our interviewees cover a broad age range, from pre-teens to the elderly. We interviewed both men and women with different professions, such as local association presidents, pre-teens and an architect. Our interviews were based on the following questions:

- How long have you lived/worked in this neighborhood?
- What do you think about this neighborhood?
- What do you like/not like about this neighborhood?
- Is this area easy to reach by public transportation?
- Do you feel safe in this neighborhood?
- Does this neighborhood cater to your needs?
- In what way has this neighborhood improved/not improved?
- Do you think there is a (n) strength/weakness/opportunity/threat of the neigh bourhood?
- What is your opinion of the informal area/new housing project?

While each interviewee has their own perception of living or working in this neighbourhood, many of them voiced similar ideas and generally had some positive outlook on Tiburtino II.

Many residents of the neighbourhood genuinely enjoyed what their home had to offer them. One big agreement revolves around the accessible modes of transportation found within the neighbourhood. Thanks to the train station and the bus terminal, this neighborhood is easily accessible from everywhere via public transportation. Another commonly shared view involved green space found within the neighbourhood. One man who we interviewed within the local dog park, Danielle, likes the parks and inner gardens found in the residential building blocks. Furthermore, people enjoy living in Tiburtino thanks to the connections established between those who lived in in the area. The architect Giampiero Sanguigni, for instance, enjoys living in here partly thanks to the network he has established.



Figure 67

As always, not everyone finds every part of their neighbourhood enjoyable. One example involves the same train station that had been praised by others. The president of an association called Decoro Urbano had disclosed to us his concern over the heavy traffic the train station, along with the bus terminal, causes. Moreover, residents have found that transportation can also lead to social issues. The homeless, usually Roma, and drunk people dwell under the elevated highway in front of the train station, using the space as their bathrooms.

Furthermore, in addition to the noise and pollution that the elevated highway has caused, the inhabitants told us that the neighborhood would like to either demolish it or transform it into a park inspired by parks such as the High Line Project in New York City. When asked about which project they prefer, most of the interviewees are inclined to demolish it for two main reasons. The first one is that the homeless will probably still reside in the transformed park, troubling the residents even more. The other reason revolves around the lack of funding needed to restore the highway to a more pedestrian-safe condition as well as the funding needed to create the park on the highway.

Apart from the elevated highway, another dispute involves the **informal area**, the location where mechanical shops, a Tunisian activity center and some abandoned buildings can be found. Some of our interviewees **know little about this area**, indicating that it is not only **physically different** from other building blocks, but also somewhat **socially segregated** from the rest.

Many other disadvantages of living in the neighbourhood involve much more than the train station. Some other downsides of this neighborhood include a scarcity of green space, as indicated by the president of Renascita Tiburtina. Although there are a number of inner gardens in Tiburtina residential building blocks, numerous gardens are intended to be private, and not accessible to the public. Therefore it is necessary to bring Tiburtina more green space. Another disadvantage involves parking pressure. Mentioned by both the president and the porter of a fashion design school, we have discovered that nearly every designated parking spot along the streets is occupied. Many cars park in forbidden areas, regardless of laws, thanks to the lack of law enforcement.

The weak enforcement of the law in Tiburtino also manifests itself in the issue of trash collection. Danielle, our interviewee from the dog park complains that young people, such as students, do not use trashcans. They throw their bottles and cigarette butts all over the ground. Even though the local government has increased the number of trash collection cans, there is still little improvement. This problem, in our mind, can be further related to another threat, which the president of the center for the elderly points out. That is, due to the train station and university, more and more foreigners and students arrive here. Since they are not the original inhabitants, they care less about Tiburtino. It is the problem about the attitude of current citizens.





Figure 68

Figure 69

In general, the biggest advantage of this neighbourhood is Stazione Tiburtina, thanks to the convenience of transportation. Two potential transformation projects can occur at the elevated highway and the informal housing area. They consist of huge opportunities that can bring benefits to this neighbourhood, but, at the same, time bear controversies. The complication lies in the potential displacement of the homeless people, and the tight funding budget. Besides, we think it is crucial to get citizens to participate in the projects. Listening to their thoughts and making them feel as if they are part of the project helps contribute to the success of the project.

In addition to interviews, we also asked the inhabitants to draw their lynch maps, in order to further perceive their thoughts of Tiburtino. In the following, we will present extracts from the interviews, along with some lynch maps, while the complete interview transcript is attached in the appendix.



Figure 70

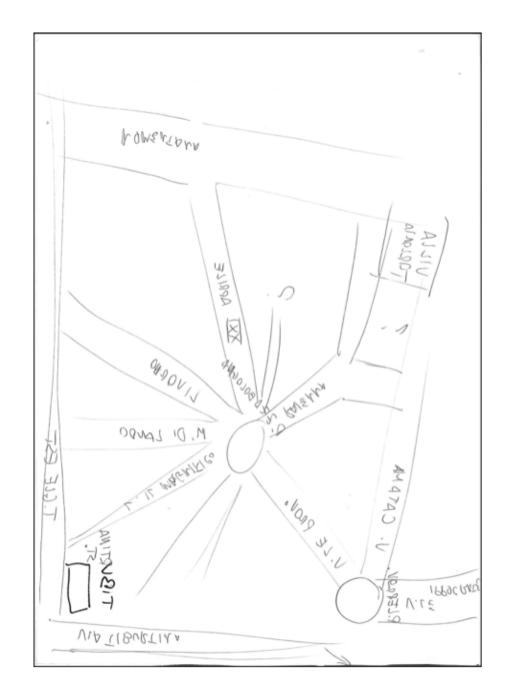
Danielle

He has lived in Tiburtino for the past 6 years. He approves of the transit, the great connection brought by the train station and bus terminal. However, he doesn't like the train station that much because it requires that he spend an extra 5 minutes to get to the platform when going to work.

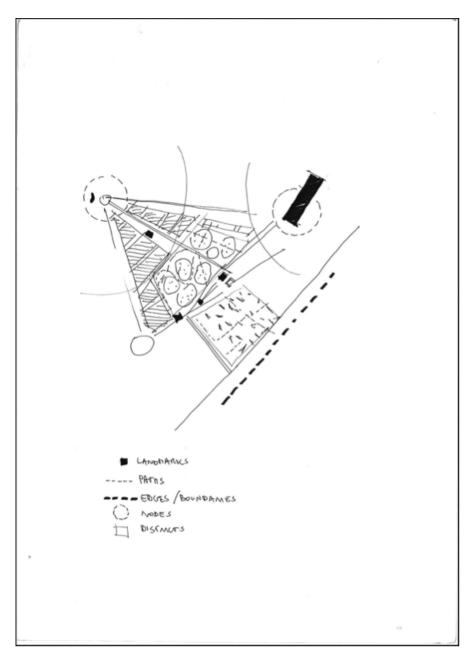
While speaking to us, Danielle told us of an issue of cleanliness. Young people, especially students, as well as some tourists, do not like to use the trash bins set up around the neighborhood.

When asked about the new housing projects, he tells us that he thinks it is ugly and cage-like but it may look beautiful to architects. Moreover, it's been 2 years since its completion (phase 1) and it did not sell as much as it was expected due to its high vacancy.

Danielle drew his lynch map in the dog park. He first drew Piazza Bologna as the center of his lynch map. Diverging from it are the several main streets drawn after. He identifies Tiburtina station and Villa Torlonia as two landmarks. He interprets the neighborhood's boundaries as V. Catania, Via Tiburtina, T.GLE EST and Nomentana. Because he works outside of our primary area, his definition of this neighborhood is more extended than others.



Giampiero Sanguigni



The architect Giampiero Sanguigni started his lynch map from Piazza Bologna, then extend from it by drawing high-income housing blocks near Piazza Bologna. Then he drew down to the lower income residential housing blocks in our primary area. Later he drew the informal settlement area, and finally extended his map to the cemetery. He identifies Piazza Bologna, Tirbutina train station, and the new modern housing project as landmarks. He considers the cemetery as the only boundary as he believes that aside from the cemetery there is no exact bourder. This neighborhood and its adjacent areas, he believes, are diffusing and interactive.

Figure 72

Luigi Fabio Di Lorenzo, Centro Anziani president

He was born in the neighborhood of Tiburtino 80 years ago. Since the 70s, newcomers have arrived, causing a high population turnover. The original citizens took care of Tiburtino but the new population does not. Due to the social changes involved in the integration of a new population, the attitude of residents has also changed.

One other problem he thought of is maintenance. For example, every time after the garden in Piazza Bologna gets maintained, it gets messy shortly thereafter.

The president drew his lynch map in the centre for the elderly, or Centro Anziani. He first drew Piazza Bologna, then two main streets, Via Lorenzo Magnifico and Viale Pronvince, as paths. He identifies Cinema Dancing Hall, the Italia market, and train station as landmarks. Via Catania, Via XXI Aprile and the train station are considered as boundaries in his mind.

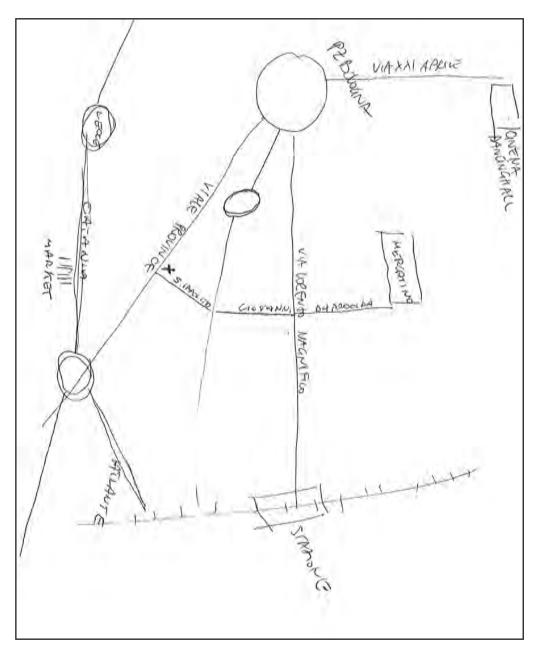


Figure 73

Pre- teens

We briefly interviewed two pre-teen schoolgirls informally on streets. They dislike this neighborhood because it is dirty. They told us that kids go to play at the garden near school. They used to play at park Massimo, but it has been closed now. There is another park, but it is filled with homeless people. They consider this neighborhood to be safe, since there are many people on the streets.



Figure 74

Decoro Urbano Association

the students."

"Most activities of Tiburtino neighborhood focus on

- MEMBERS OF DECORO URBANO

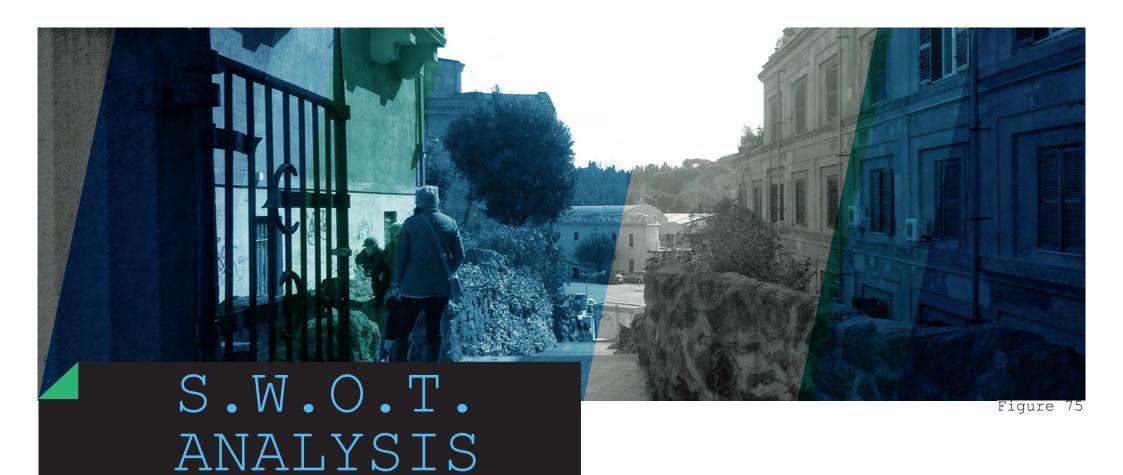
They think that the main problem in this neighborhood is the Tiburtina station, which has caused heavy traffic and crime. Such problems are even worse with the presence of the bus terminal. In regards to this situation, they are thinking of three projects to promote improvement. The first one involves taking down the elevated highway. Currently, immigrants and homeless people shelter under it, drinking and using the space as a bathroom. Their second project involves moving the bus terminal in order to resolve the heavy traffic. The third prospective project is about ITTIOGENICO, a facility where aquatic specimen were bred and informational seminars about fish were provided. In the past, the building was surrounded with lively green gardens. However, it is now abandoned. Thus they wish to restore the building.

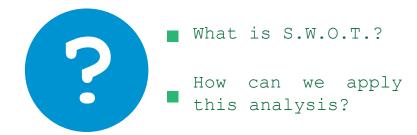
two things: the station and

When asked about the new building, they consider it unharmonious and mentioned that the project covered an archeological site.

President of Rinascita Tiburtina

This organization was created 10 years ago to combat degradation of the periphery. She said that the major problem of the elevated highway is a result of the homeless. Another two problems are hygiene and safety. She wants the elevated highway to be demolished instead of turning it into a park, because the park project will not solve the social issue. She agrees that Tiburtino should have more green areas, but it can be achieved through other ways. She mentioned the abandoned area in front of the station, which has the potential to be refurbished into a public park. In addition, in Rome, there are many associations working to preserve and reuse existing space, making her plan more realizable.





STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS

It is always important to reflect on the information gained through research in hopes of future application. Our reflection method is the S.W.O.T. analysis, which describes the strengths, weaknesses, opportunities and threats involving a certain area. This type of information is useful in helping us determine how the neighborhood could be improved and what strategies could be used to alleviate this issue.

STRENGTHS

Because of the train station and TBUS bus terminal, the biggest strength in our neighbourhood is the convenience of public transportation. In addition to mobility, the train station and terminal also brings tourists and immigrants to the neighbourhood, adding more diversity and economic profit. Moreover, there are nice internal gardens in the residential housing blocks, and organized trees along the streets. Some sidewalks are well designed and handicapped-friendly.



WEAKNESSES

One of the weaknesses lies in the elevated highway. Not only does it cause noise and pollution, but also the homeless and drunk people sheltering below it results in uncontrolled social issues. Having large transportation hubs such as the train station and bust terminal can lead to heavy traffic and crime. Existing parking lots in the area are not enough for the residents' needs. Another weakness discovered was the weak application of regulation. We noticed that people do not use the trash bins provided by the city and they park in forbidden areas. Additionally, although there are nice inner gardens located in the neighbourhood, they tend to be private rather than publicly accessible. Thus, this neighbourhood still lacks green spaces.



Figure 77

OPPORTUNITIES

Opportunities for this neighbourhood can be found in various parts of the neighbourhood which have been previously neglected. For example, two major potential transformation projects can occur in the elevated highway and the informal settlement area. For the highway, the city of Rome can either demolish it or reinforce in in order to turn it into a park. For the informal area, the neighbourhood can consider making it more culturally and economically lively. However, both projects need to deal with displacement and funding issues. Another opportunity lies in the cemetery to the south of the neighbourhood, across Via Tiburtina. As the cemetery becomes more monumental than functional, it becomes easier to transform it into a public park for more green space in this neighbourhood.



Figure 78

THREATS

There are social problems regarding the homeless dwelling under the highway. Due to the lack of regulation, there is a dire need for control over the actions of certain individuals. Furthermore, as more and more foreigners and students arrive, the attitude of inhabitants change. The original citizens care about this neighbourhood but not about the new population.



Figure 79

CONCLUSION

Our research has enabled us to understand Tiburtino from the viewpoint of an elderly resident, pre-teen, architect, business owner and immigrant. Through understanding the neighborhood from various perspectives we've gathered adequate information to propose a well-versed recommendation for the future of our neighborhood. It is very apparent that the area possesses great diversity due to the presence of the University and the train station. Because of this a number of immigrants, tourists, and students pass through, making it a meeting point for different cultures and countless amounts of traffic. Due to this reality our focus is on creating a pedestrian oriented area through improving the quality of already existing streets and installing pedestrian corridors. By doing so we will not only improve the physical environment for visitors and residents but we will also add to the environment through the planting of trees and flowers connecting all four areas of Tiburtino, ultimately creating an integrated living atmosphere.



Figure 80

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Fashion School Director

She moved to Tiburtino neighborhood with her fashion design school 5 years ago. The fashion school was used to be behind St. Peter. Tiburtino is an important location, which is easily reached by public transportation. This building where the fashion school is was the office of city of Rome founded by the region. To accommodate her fashion school, the original public offices were transformed in order to comply with regional laws. This apartment is perfect for her needs. It is difficult to find a flat elsewhere for a school and that is why she ended up here. However, there are some downsides of this area. She is not happy to come here actually, because it is dangerous at night. Security issue exists near the train station. Too many homeless and drunk people are under the elevated highway in front of the station. There is police permanently under the highway but they cannot control the situation. Her private parking area is occupied by some people who use it as bathroom. People also come to her garage to steal wallets. High-income classes gather at Piazza Bologna, but the situation is opposite here. For the elevated highway, one plan is to demolish it, while the other one is to regenerate it as the High Line Project in New York City. She is against the High Line project, because she does not think it helps with the social issue here. Homeless people would still take the public park as a shelter, and drinking people would also use it. There is no real law so it is hard to control. In addition, parking is a big problem. Parking areas are not enough to people's needs. In all, she is happy with the diversity here, but thinks that it needs control. The local government should put more efforts to regulate the diversity.

The Porter of Fashion School

He has been living here for 12 years. What he defines as Tiburtino neighborhood is the area enclosed by several streets: Via Nomentana, Via Tiburtina, Via Largo Lombardi, Via Lorenzo Il Magnifico, and the road in front of the train station which leads to Piazza Bologna, but not including Piazza Bologna. This neighborhood borders Italia neighborhood where the biggest market near Piazza Bologna is located. He doesn't consider the train station as a monument. It is a cathedral in the desert. It didn't bring development to this neighborhood, but huge traffic, parking pressure, and homeless people. There are a lot of immigrants coming too. Centro Baobab, located in the informal area, is a meeting point for Tunisians. Talking about the new housing project. He thinks it horrendous, which loses any aesthetic appeal. The building is expected to bring in high-income families, making a library in ATAC. The city of Rome starts projects but never finishes. He also mentions a building of historical interest, which is cooperative for housing railway workers, just across from the Romania market. As for the elevated highway, he thinks High Line is good for Chelsea, but not for Tiburtino, because he concerns about the maintenance. In the 70's, the neighborhood privately built the sport center, which is owned by the city but managed by a private company. There should also be a gym offering a special rate for local people but never opens. It has been here for 7 years and still remains empty. When asked about what he considers the neighborhood lacks, he lists daycare centers (although there is one but still not enough), banks, supermarkets, and recreation facilities like swimming pools.

Romania Market Manager

He has spent 6 years in this market. The owner of this building is Italian. He rents it for his market. In this building, other than the Romanian market, there are also Romanian legal services, and used to have marital services before. He approves that the bus station is important, which brings Romanians from every place here. His market embraces an average of 300 clients a day, 10,000 a month. However, Some Roma people come to steal food. He considers this as a so-so neighborhood but is getting better. There are good services; because of economic crisis, the population of foreigners decreases. Moreover, this area is accessible from other places. Other disadvantages of this area are that it is hard to find a place for parking, and that it is dangerous for women to hang out at night. For the highway problem, unlike the first two interviewees, he thinks that it should be kept since it helps with local traffic. He does not like the new housing project. Although it is beautiful, it is not harmonious with the rest of architectures.

Mechanical Shop Owner

His auto repair shop was opened in 1995, and he started to work in this neighborhood since 1975. He appreciates the great landscapes, namely the train station and trees. In the years of 1975 and 1976, the elevated highway was constructed. He doesn't like the big new building, since it doesn't speak to other architectures. Moreover, he tells us that when digging the hole for the foundation, people discovered an archeological site. However, instead of stopping the project and protecting the site, they decided to continue and covered the site. He also mentions that many shops in the train station have been closed because of high rents. When asked about why there are so many mechanical shops in this neighborhood, he responds that in the past, this area was a periphery with many auto repair shops. Later when the neighborhood began urbanization, these shop owners would need the permission of government if they want to open new shops elsewhere, so they chose to stay.

Decoro Urbano

We interviewed three faculties including the president of this local association. They think that the main problem in this neighborhood lies in the Tiburtina station, which has caused heavy traffic and crime. Such a problem is even worse with the presence of the bus terminal. The bus terminal offers both international and national services, mostly across eastern and western countries in Europe. In regard of this situation, they are thinking of three projects to improve. The first one is to take down the elevated highway so that the space below can be free from those pillars. Currently, immigrants and homeless people shelter under it, drinking and using the space as bathroom. Besides, some organizations give out food to them, making the problem even worse. The second project they anticipate is to move the bus terminal, where 300-400 buses arrive and depart every day, so that the heavy traffic can be relieved. The third project is about ITTIOGENICO, where aquatic specimens were bred, and courses about fishes were provided. In the past, the building was surrounded with lively green gardens. However, now it is abandoned. So they consider revitalizing the building. When asked about the positive sides of this neighborhood, they appreciate the presence of the public housing for railway workers, as well as the inner courtyards of those housing blocks. Talking about the transformation, they mention that first, the metro Bologna was built in the mid 80's. Then more and more elegant shops and handicrafts appear, leading to lively commercial activities. Second, in the 90's, this neighborhood attracted many students because of the University. It caused social composition change and increased housing sublets to students. In addition, because of that, more bars emerge, and shops sell things at cheaper prices. Nowadays, they conclude that most activities of Tiburtino neighborhood are around two foci: the station and the students. Furthermore, they tell us about an intriguing project that started 4 yeas ago, which is to set a little railed box with plants cultivated inside at the bottom of some organized street trees in front of shops. Shopkeepers would take care of these plants to decorate their shops and thereby contributing to the beauty of this whole neighborhood. When asked about the new building, they consider it not harmonious with the rest. What's worse, they complained about the fact that the project covered an archeological site. They also mention the lack of activities in the informal area (shacks), and that the public housing blocks are very different from areas near Piazza Bologna, where richer and more powerful people reside.

Danielle

We encountered him in the dog park. He has been living in Tiburtino neighborhood for 6 years. What he likes about this neighborhood are the parks and gardens inside each housing block. He approves the transit, the great connection brought by the train station and bus terminal. However, he doesn't like the train station much because it wastes him 5 minutes each time to get to the platform when going to work. Thinking of any improvements, he reveals an issue of cleanness. Young people, especially students, as well as some tourists, do not like to use trash bins. They throw bottles and cigarette butts all over the ground. He also wishes less noise near the highway. When asked about whether this is a safe area, he says yes, but it is still better not to hang out during the night. Regarding those evening activities, he dislikes them because he considers them messy. In addition, since he has dogs, he hates broken glasses on the ground. He says that more and more tourists come to this neighborhood, but they do not obey the regulation here. For example, they also do not use the trash bins. Some tourists, namely some from Germany, they behave politely in their home countries but not here. His opinion about the new building is the same as most other interviewees-it is ugly, like a cage, although it may look beautiful to architects. Moreover, it has been 2 years since it is completed (phase I), it didn't sell as much as it was expected, since he noticed many vacancies. We ask him about the regulation and measures taken by the local government to control the trash issue. He responds that the government has increased big mobile trash collection bins from 1 to 5 in the last years, but people still do not apply to the regulation. It is actually getting better now. It was even worse in the past.

Luigi Fabio Di Lorenzo Elderly People Center President

He was born in Tiburtino neighborhood 80 years ago. When he was a kid, there were just a few houses, and then streets were built. Villa Narducci surrounded by gardens was demolished. Huge changes occurred after WWII. Before that, there were only a few constructions. Where Via Lorenzo il Magnifico is today were just fields. An anecdote was that in the year of 1944, an U.S airplane could not land at the airport so it ended up landing at the fields here. During the WWII, there was a "war garden" used to keep fresh vegetables. After the war ended, when the allies fled to Rome, he, with some other kids brought the army fresh vegetables in exchange of cans and meat. After WWII, he started to work and witnessed many changes. More and more shops appeared, including the big Italia market, making this area a nice place to shop. In the 1950s and 60s, venues of social life were constructed, such as theaters, cinemas, and dancing clubs. As for the problems in this neighborhood, the president said that since 1970s, new population came here, causing a population turnover. The original citizens took care of Tiburtino neighborhood but the new population does not. Due to the social change, the attitude of residents also differs. Another problem he thinks of is the maintenance. For example, every time after the garden in Piazza Bologna gets maintained, it becomes messy soon.

President of Rinascita Tiburtina

This organization was created 10 years ago to combat degradation of periphery. She says that the major problem of the elevated highway lies in the homeless. Another two problems are hygiene and safety. The original idea of transformation was to demolish it and to put a square there. The neighborhood has already obtained 9 million euros for demolition, but is still waiting. The new mayor, Marino proposes to transform the highway into a park with parking lots below, because Tiburtino needs more green areas. She does not want that because, on the one hand, in that way the social issues remains unsolved. On the other hand, she doubts that they have enough funds for the park project. She agrees that Tiburtino should have more greens, but it can be achieved through other ways. She mentions an abandoned area in front of the station, which has the potential to be refurbished into a public park. In addition, in Rome, there are many associations working to preserve and reuse existing space, making her plan more realizable. At last, she said that when she was a little girl, there was no elevated highway here. So she knows it is better to get rid of it. When she heard about that the highway is going to be taken down, she was extremely happy.

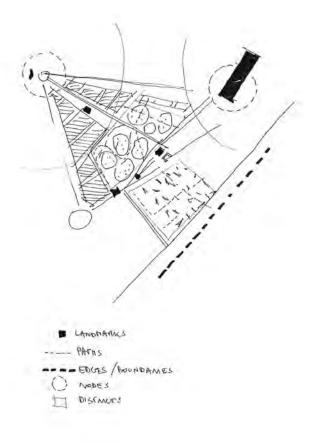
President of Cittadinanzattiva

Her association in Tiburtino is just one branch. They have different branches all across Italy. This organization was born to promote rights of people with health problems. This is why they have many lawyers working for it. In Tiburtino, her organization promotes beautification of a clean environment. They collect garbage, clean streets, and fight with illegal graffiti and posters. She considers the problem of cleanness is a result of loss of value of civility. That is the reason the organization promotes decorum. She wants to be proud of living in Tiburtino. Thinking of the new housing project, she says architects like it but she does not. She considers there is no dialogue between it and the rest of buildings. Besides, she is dissatisfied that they spent a lot of money on the new building, but little on refurbishing the old buildings.

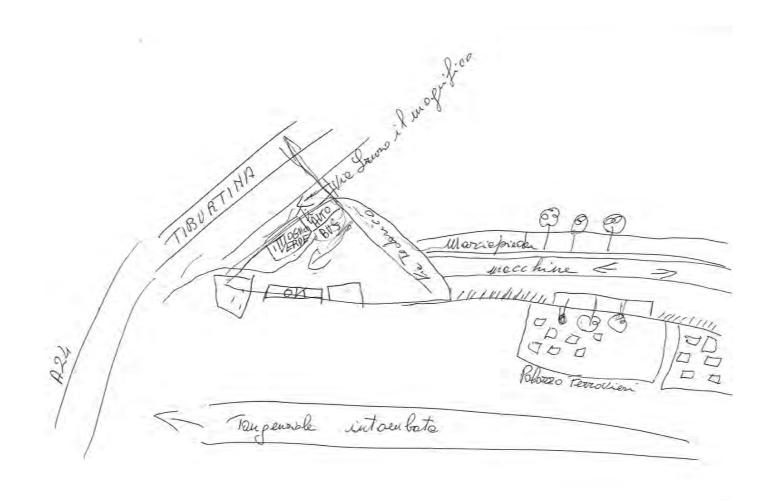
Pre- Teens

We briefly interviewed two schoolgirls informally on the streets. They dislike this neighborhood because it is dirty. They tell us that kids go to play at the garden near school. They used to play in park Massizzo, but it is closed now. There is another park, but with homeless people. They consider this neighborhood to be safe, since there are many people on the streets.

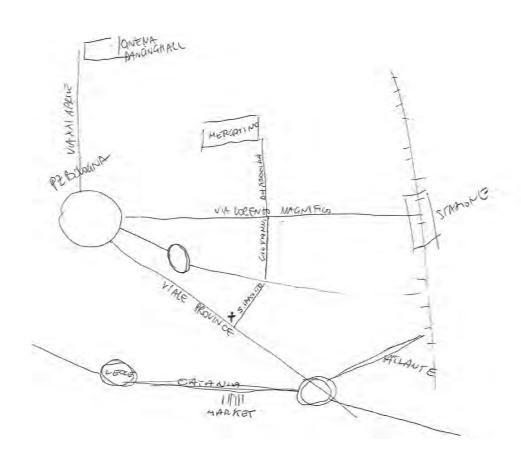
Giampiero Sanguign

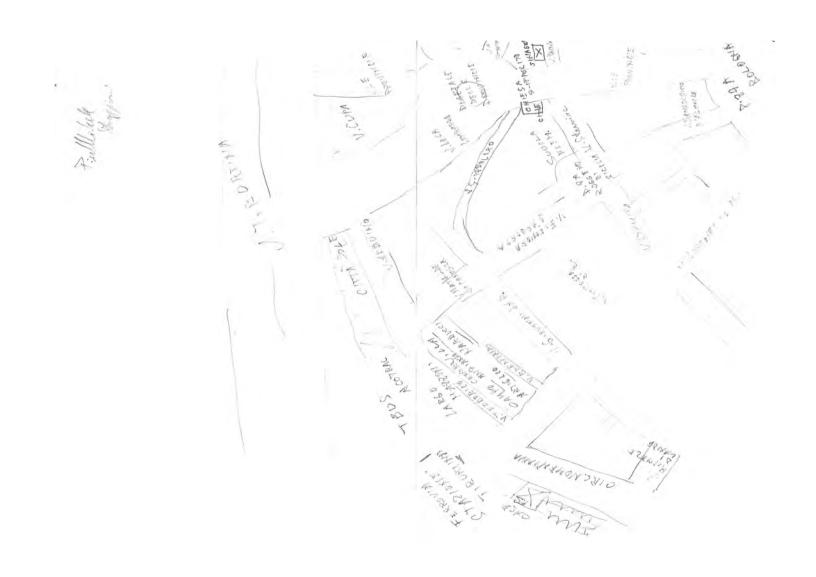


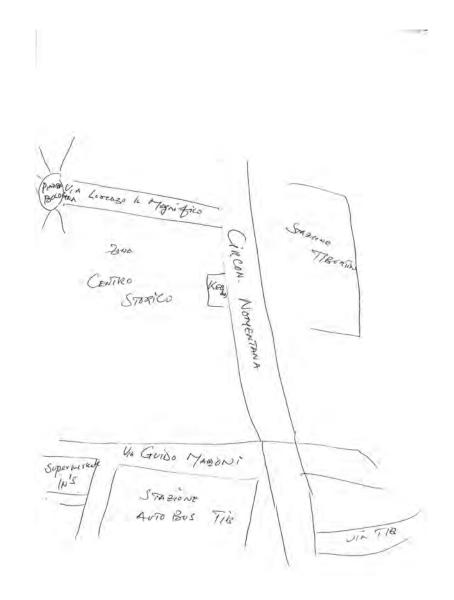
The president of Rinascita Tiburtina



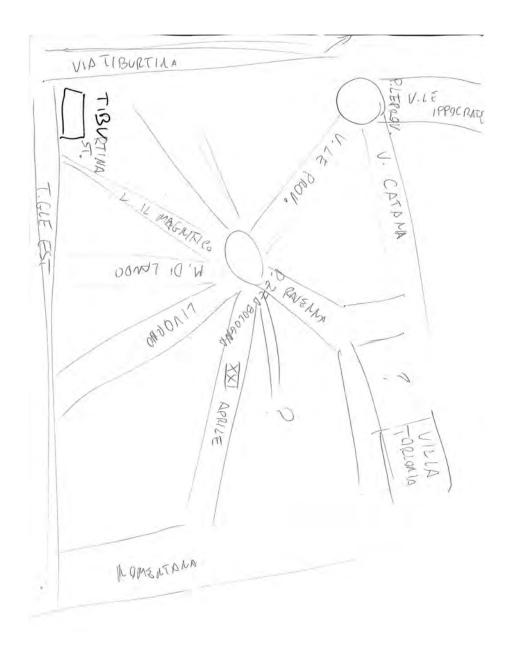
Luigi Fabio Di Lorenzo Elderly People Center President



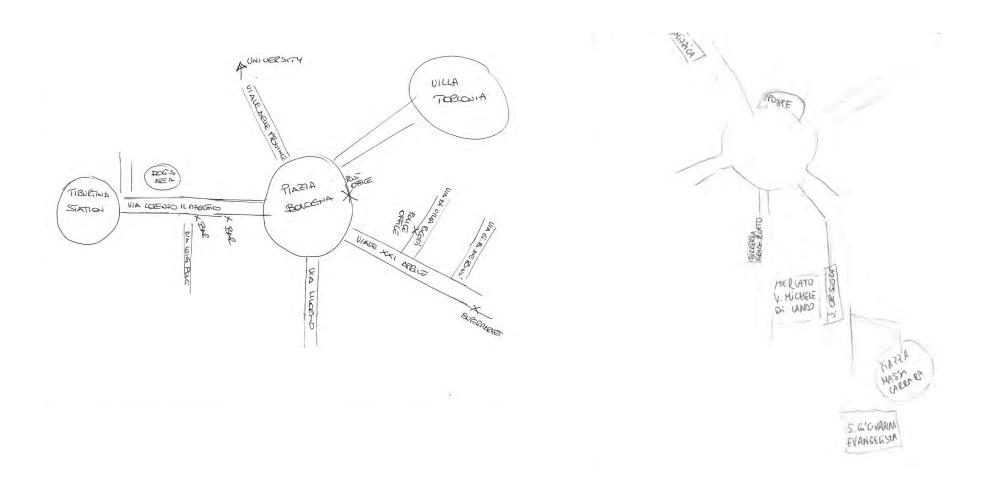




Danielle



Two other people in the dog park



- Figure 1: Taken by Jiachi Zou edited by Eileen Cuevas
- Figure 2: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 3: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 4: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 5: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 6: Taken by Jiachi Zou
- Figure 7 : Picture provided by Google Maps
- Figure 8: Taken by Ashleigh Graham-Clarke
- Figure 9: Taken by Ashleigh Graham-Clarke
- Figure 10: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 11: Provided by Google Maps and Edited by Eileen Cuevas on Photoshop
- Figure 12: 1909 Piano Regolatore
- Figure 13: Masini, Eva. Piazza Bologna: Alle Origini Di Un Quartiere "borghese" Milano, Italy: FrancoAngeli, 2009. Print ICP housing buildings in 1927, taken in Tiburtino II.
- Figure 14: A 1914 Plan of the area showing the different housing types. Translation into English from top to bottom: Cooperative houses- economic houses, Cooperative houses for people working or retired from private sector railway buildings, Cooperative houses for people working in the railway company, private/public housing, ICP Tiburtino II building complex and Private development area
- Figure 15: A 1914 Plan of the area showing places of social services. Translation into English from top to bottom: Market, community buildings, final stop of tram, railway station, churches and relgiious buildings, schools, community centres, german Academy, Post Office and Police office
- Figure 16: 1936 plan showing Via Tiburtina in relation to Stazione Tiburtina and Piazza Bologna, with our research area in bewteen the two Landmarks.
- Figure 17: Masini, Eva. Piazza Bologna: Alle Origini Di Un Quartiere "borghese" Milano, Italy: FrancoAngeli, 2009. Print ICP housing building in 1927, taken in Tiburtino II.
- Figure 18: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
- Figure 19: Taken by Jiachi Zou edited by Eileen Cuevas
- Figure 20: Taken by Gabriel Fort
- Figure 21: Taken by Gabriel Fort
- Figure 22: Taken by Gabriel Fort
- Figure 23: Taken by Gabriel Fort
- Figure 24: Taken by Gabriel Fort
- Figure 25: Constructed by Eileen Cuevas
- Figure 26: Taken by Gabriel Fort
- Figure 27: Constructed by Eileen Cuevas
- Figure 28: Constructed by Eileen Cuevas

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Figure 29: Constructed by Eileen Cuevas
Figure 30: Constructed by Eileen Cuevas
Figure 31: Constructed by Eileen Cuevas
Figure 32: Taken by Jiachi Zou
Figure 33: Taken by Jiachi Zou
Figure 34: Taken by Jiachi Zou
Figure 35: Taken by Jiachi Zou
Figure 36: Taken by Jiachi Zou
Figure 37: Constructed by Eileen Cuevas
Figure 38: Constructed by Eileen Cuevas
Figure 39: Constructed by Eileen Cuevas
Figure 40: Constructed by Eileen Cuevas
Figure 41: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 42: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 43: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 44: Constructed by Eileen Cuevas
Figure 45: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 46: Constructed by Eileen Cuevas
Figure 47: Constructed by Eileen Cuevas
Figure 48: Constructed by Eileen Cuevas
Figure 49: Constructed by Eileen Cuevas
Page 51: All pictures were taken by Gabriel Fort
Figure 50: Taken by Jiachi Zou edited by Eileen Cuevas
Figure 51: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 52: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 53: Provided by Google Maps
Figure 54: Provided by Google Maps, edited by Gabriel Fort on Illustrator, Autocad, Indesign and Photoshop
Figure 55: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 56: Provided by Google Maps
Figure 57: Provided by Google Maps, edited by Gabriel Fort on Illustrator, Autocad, Indesign and Photoshop
Figure 58: Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 59: Provided by Google Maps
Figure 60: Provided by Google Maps, edited by Gabriel Fort on Illustrator, Autocad, Indesign and Photoshop
Figure 61: Provided by Google Maps
Figure 62: Provided by Google Maps
Figure 63: Provided by Google Maps, edited by Gabriel Fort on Illustrator, Autocad, Indesign and Photoshop
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Figure 64 : Constructed by Eileen Cuevas
Figure 65 : Provided by Google Maps and Edited by Gabriel Fort on AutoCad
Figure 66 : Taken by Ashleigh Graham-Clarke edited by Eileen Cuevas on photoshop
Figure 67 : Taken by Ashleigh Graham-Clarke
Figure 68 : Taken by Ashleigh Graham-Clarke
Figure 69 : Taken by Ashleigh Graham-Clarke
Figure 70 : Taken by Ashleigh Graham-Clarke
Figure 73 : Taken by Eileen Cuevas
Figure 74 : Taken by Eileen Cuevas
Figure 75 : Taken and edited by Eileen Cuevas
Figure 76 : Taken by Jiachi Zou
Figure 77 : Taken by Jiachi Zou
Figure 78 : Taken by Jiachi Zou
Figure 79 : Taken by Jiachi Zou
Figure 80 : Taken by Jiachi Zou, Edited by Eileen Cuevas