THE DEEP WEB OF TIRANA'S URBAN LAYERS NETWORK

A STRATEGY TO ENHANCE THE ACCESSIBILITY TO THE
HISTORICURBAN FABRICS

A THESIS SUBMITTED TO

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ALBERT GJIMI

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR

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Approval sheet of the Thesis

This is to certify that we have read this thesis entitled "The Deep Web of Tirana's Urban Layers Network. A strategy to enhance the value of the historic urban fabric" and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

THE DEEP WEB OF TIRANA'S URBAN LAYERS NETWORK.

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As the AEC industry is focused on new buildings, the old ones are left behind in a poor condition. Leaving the old buildings in poor condition and destroying them to build new objects leads to the extinction of architectural heritage. This thesis analysis the situation and proposes a new approach where the main focus will be old buildings. Revitalizing the abandoned buildings in one of the oldest neighbourhoods in Tirana named "Selvia" and regeneration of the neighbourhood by improving walkability, safety, qualities of open spaces, increasing microeconomy and a new circulation plan designed by walking and bringing old buildings in the focus of pedestrians. A deep analysis is made through advanced software like QGIS and also in the site visit.

KEYWORDS: *Cultural heritage, old buildings, urban strategies, analysis, QGIS, protected buildings, monuments, opening space.*

ABSTRAKT

THELLËSIA E RRJETIT TË SHTRESAVE URBANE TË TIRANËS

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Master Shkencor, Departamenti i Arkitekturës

Udhëheqësi: Dr. Fabio Naselli

Ndërkohë që industria e Arkitekturës, Inxhinierisë dhe Ndërtimit është e fokusuar në ndërtesat e reja, ndërtesat e vjetra janë lënë pas në kushte të mjerueshme, Duke lënë ndërtesat e vjetra në kushte të mjerueshme dhe duke i shkatërruar ato për të ndërtuar objekte të reja, çon në zhdukjen e trashëgimisë kulturore arkitekturore. Kjo tezë analizon situatën dhe propozon një qasje të re ku fokusi kryesor janë ndërtesat e vjetra. Rijetësimi i ndërtesave të vjetra në një nga lagjet më të vjetra të Tiranës, e cila quhet "Selvia" si dhe rigjenerimin e lagjes duke përmirësuar ecjen, sigurinë, kualitetin e hapsirave të hapura, rritjen e mikroekonomisë dhe një plan të ri qarkullimi dizenjuar për ecje për të nxjerrë ndërtesat e vjetra në fokusin e këmbësorëve. Një analizë e thellë është bërë nëpërmjet programeve kompjuterike të avancuara si QGIS si dhe vizita në zonë.

FJALËT KYÇE: *Trashëgimi Kulturore, ndërtesa të vjetra, strategji urbane, analizë, QGIS, objektet e mbrojtura, monumente, hapja e hapsirave.*

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CHAPTER 1

INTRODUCTION

1.1   Problem Statement

Since when urban territory is changing from day to day due to natural and human interventions there should be an alert for observation and restauration of old fabric in Tirana which represents our cultural heritage. There are natural factors which affect building materials and need to be restored in order to keep the object in good conditions, but there is another hazard even more dangerous than nature which we can refer as human interventions. By human interventions I mean new objects built over old buildings and monuments. To prevent this from happening, there are laws that are approved from government which protect old buildings and monuments that has cultural heritage values. Even that they take protection status from government, there are cases that show that this law is not enough to protect them from destruction. So, protection status alone, can't prevent this phenomenon from happening. There should be something more that supports this protection status and provides safety and consistency for these buildings and monuments. In this research study you will find an analysis of the situation and an urban strategy that can save old fabric from destruction.

1.2   Aims and goals of the research study

Prior to this, there was an initial aim which had on purpose analyse and restoration of old fabric using the integration of two of biggest platforms used in architecture and urban design which are BIM and GIS. This approach is still in an experimental stage and there are a lot of gaps and lack of technology to apply in our case. So, the aim and goals of the research study were shifted to analysing of old buildings and monuments in Tirana. To stress the value of the informal vernacular and historical heritage. Finding

ways to preserve, maintain and give the right value to the selected area's historic urban fabrics, so that the neighbourhood will not lose the traces of history. To protect the minor old fabric through a plan design where it will be proposals including: cultural aspect, social aspect, economic aspect and environmental aspect. Understanding the real problems of urban development within the inner neighbourhood off Tirana by analysing the site conditions using QGIS as a mapping tool. Generating percentages to better understand the ratio of old fabrics and new buildings on the site. Full accessibility by stressing the importance of the open green area and pedestrian mobility. Also, along the study there will be a short part talking about this integration which can be developed in a future study.

1.3   Research Questions

How rich is Tirana in terms of cultural heritage? What are main dangers that threaten Tirana's old fabric? Why are these dangers happening? How can we protect old Buildings and monuments? Why protection status guaranteed from Albanian Government is not enough to protect these old buildings? How can an urban strategy decrease the risk of demolishing an old building?

1.4 METHODOLOGY

1.4.1   THE ADOPTED HYBRID METHODOLOGY.

My research is based on "Quantitative Research" and "Qualitative Research" to have a well-structured thesis and also propose solutions based on that analysis. If we separate the thesis into two parts, we can say that the first part is "Quantitative Research" which mainly explains the current situation of the Selvia neighbourhood, and the second part is "Qualitative Research". Both are equally vital and provide information that aids in the construction of the thesis.

Table 2: Methodology. (Source: Author)

QUANTITATIVE RESEARCH	QUALITATIVE RESEARCH
• Case Studies • Theoritical Background • Site analysis • Evaluation of Analysis	• Site Surveys • Observations • Online Questionnaires • On Site Interviews

The study's findings and topics must be assessed and described using acceptable scientific literature and concepts relevant to the subject. The conceptual analysis was carried out by gathering various books, papers, and articles about the chosen topics, and it was based on the conceptualization of concepts and their meanings. It is critical to research and understands the theories of various urban planning and architecture academics who have long studied the concepts I am studying.

Firstly, I started research for BIM and GIS integration, collecting information from different research showing attempts to integrate this two different software which seems to be the future of AEC and Urban industry, but unfortunately, there is not an official and completed software. The work is still ongoing by relevant worldwide experts. In the figure below is a villa made in Revit, but it was impossible to do all the neighbourhood including the territory, because of the reasons mentioned above so I changed the focus to only in the old fabric and not anymore in the integration of these two advanced software with rich data.
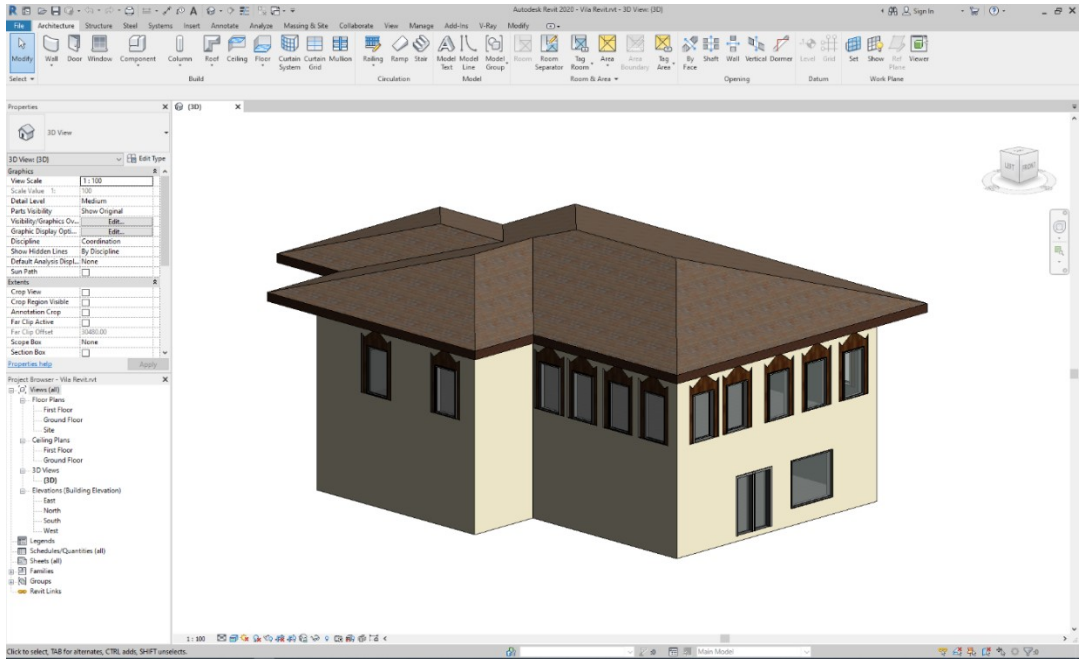
Figure 1: Old villa 3D made in Revit. (Source: Author)
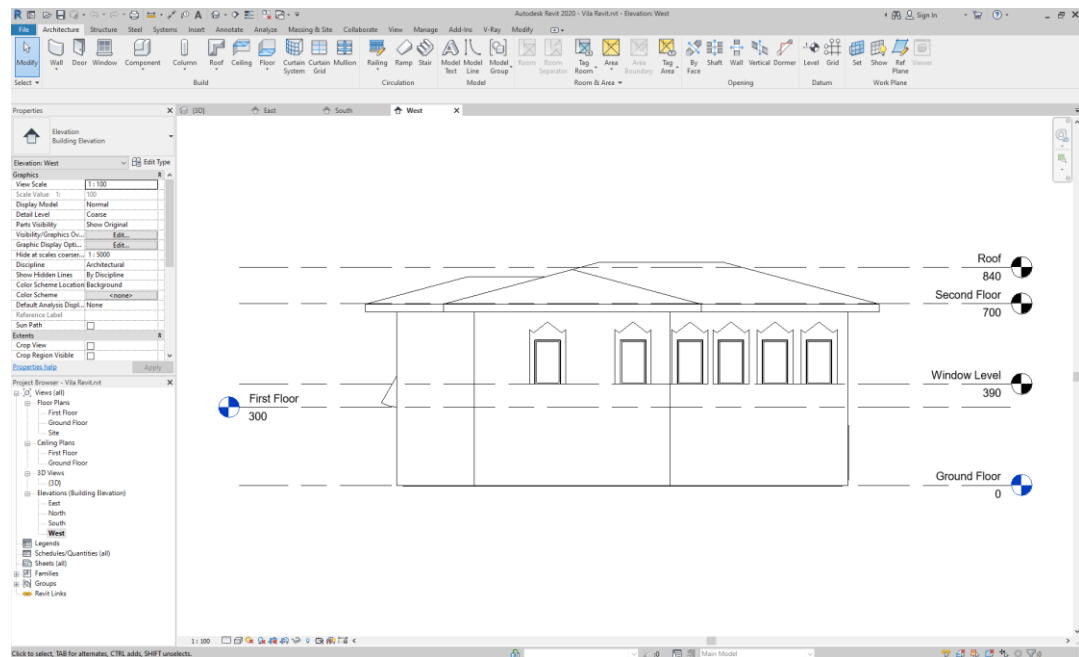
Figure 2: Old villa Elevation extracted from Revit. (Source: Author)

After this, I changed our focus to the minor old fabric located in Tirana. As a site, I choose Selvia because it is one of the oldest neighbourhoods in Tirana and it is one of the richest regarding this aspect. Several authors have been studied such as Jane Jacobs, Christopher Alexander, Jan Gehl, Michael Thomson, Giancarlo De Carlo and many

others. After extracting all the principles start analysing the site through advanced software such as QGIS. Mapping the surfaces and extracting data. Through this data extracted are build charts which shows the ratio of the percentage between different layers such as old fabric and new buildings, public space and private space, greenery and built surfaces etc. The next step after site analysis is qualitative research which includes the questionnaire, site surveys and observations. One hundred people have been asked and because of the current situation caused by the pandemic COVID-19 the questionnaire is made in two forms:

1.   Online, which is the most with 68% of the overall answers. The process is made via social media and Google Forms.
2.   On-site interviews which are 38% of the overall. On-site interviews are made respecting the protocol of the COVID – 19 by wearing a protective mask and keeping the distance during the interview.

1.4.2   Issues faced during the research

Some challenges were discovered and dealt with during the study development process. These concerns have hampered the entire project, beginning with the fact that there is insufficient data for the city of Tirana. The history is poorly researched, and few studies have been published on the issue of the city's urban evolution; essentially nothing has been done about the inner section of Tirana's districts. Apart from a few recent edited publications about the dynamic ground-zero uses and activities, there aren't enough scientific research or analyses regarding the genuine problems inside the blocks.

There is a distinct shortage of basic data linked to both urban planning and design procedures, as well as a scarcity of materials in CAD file format for Tirana, most of which are irrelevant. We don't have the real values or percentages of urban land use since advanced software has never or seldom been employed for social-physical analysis of urban and economic dynamics or to know the urban land cover. When it comes to old private or public structures, the vast majority of them lack plans, sections, or elevations, and only a few details concerning the history of each house or structure can be unearthed. This has forced the initial research to be enforced,

resulting in a difficult but interesting data collection process that has never been done before and may be considered an additional output of the entire project.

CHAPTER 2

LITERATURE REVIEW

2.1 The deep Web of Tirana's urban layers network.

The deep web is that part of the World Wide Web not indexed by common search engines. It concerns all those web pages (those deep layers) that cannot be identified by conventional search engines (being areas neglected from any kinds of the conventional interests), exactly as neglected are some of the deep layers of the historic urban fabrics of the city of Tirana, which compose a spread network of "vacuums" out of any researchable index within the usual city development interests.

Most Mediterranean cities are often structured into overlapping layers arising from the several different civilizations rooted over the millennia of that complex and intricate history to which they belong. Tirana, indeed, seems struggling against the oldest parts of the city that are out of any interest led from the formal matter of the current "modernization" process. The city is structured in layers (pre-Ottoman, Ottoman, pre-Italian, Italian, Socialist, post-Socialist, and contemporary, at least) and any sustainable and suitable process of progress the city, development, re-development, or urban transformation should pass through a holistic integrated urban regeneration of all these cultural/historical/physical layers. But it is not. The most of actions in force (big projects, competitions, master, and strategic plans) are nowadays oriented to totally shape the next city into a copy of several other standardized and anonymous cities worldwide. In this losing the peculiarities and own features of this unique city.

At the same time, new practices are shaping new digital tools useful to define new ways to approach city planning processes, in terms of both city management and city-forming tools. e-Tools are able to open us to new rooms of real participation and co-planning in shaping the next cities, guaranteeing an open process and full adherence to real inhabitants' needs and wishes.

e-Tools as BIM (for the buildings and settlements management), GIS (for the neighbours and the whole city management), and BDM, Big-Data Management (for the involvement and participation in any city choices), are today able to open a new door in terms of the more reliable city-forming process.

The initial aim of this research work was to find an integration way between two different giant software such as GIS which is used for urban planning, and BIM which is used for building construction and management. This integration would be used in a proposal for renovating old buildings and planning in a way that exposes their values. But unfortunately, there is a huge gap and the technology is still trying to reach this integration through software. For this reasons the aim was shifted. The main aim of this research work is to figure out as to update the ongoing development strategies for Tirana (which must involve all the layers of the contemporary city, as well as to add new crucial concepts in between the in-force ones, i.e.: the historic roots, the human dimension, and the cultural identity), as well as how to link this new city-forming set of actions to the new digital tools (which can ease both planning and governance in future city management, enabling all the urban stakeholders in shaping next visions and scenarios, changeable and flexible to be adaptable to usual changing in perspectives and goals).

Furthermore, the surveys, the site analyses, the proposals, growing out from this work, would aim to shape the first steps for a new e-co-planning hybrid process of both physical/real and digital/virtual understanding of the city reality, through a hybrid City Users Sentiment Analysis (CUSA), suitably implementable for many (the most) of the Mediterranean cities located around the Sea's basin of this "liquid land".

2.2   The layered frame of Tirana.

Urbanization is a global phenomenon that transforms the physical structure of the planet quickly. Like numerous cities around the world, Tirana also has physical and social implications of overcrowding due to the rapid growth in the short term. The major factor in the huge demographic and structural changes was that Albania has long been under communist rule and only following that time did Albanians finally have the freedom to move and transform their homes based on their preferences of living and everyday life. Before the 1990s, Tirana was a clustered city with a population of

225,000, while according to the General Directorate of Civil Status during 2020 Tirana is a city with 850,530 inhabitants, with a growth of 1% from 2019 and with more than 1 million inhabitants considering non-resident users throughout the city.

To accommodate a large number of migrants, the city was being overbuilt, and the urban expansion in a casual and somehow chaotic way was compounded by an overwhelming need for new construction and the initial lack of rules. Indeed, this demographic increase was not accompanied for a very long time by any government initiatives or strategies for urban development, allowing private initiatives to lead the process in their interest. (Dino 2017)

Tirana is therefore a town that has evolved organically. Instead of developing policies and development strategies, it was guided by individual intuitions and wishes. There was constant institutional absence (or public-private collusion) over many years in Tirana and all of Albania that allowed people to build up without built-up permission and without respecting land ownership (both public and private). For many developed countries in the world, this is an unknown approach, while in Albania this approach was not only widely abused, but also commonly suggested as the best method if you wanted to build a house within a very short time. This led to a developmental imbalance in the city with significant public and private spaces ratio gap.

Where people spend time in the city and where people meet are at the core of what makes a city work **Invalid source specified.**. There are no basic spaces in Tirana which give the city life and create a healthy social environment. The population has grown overwhelmingly in conjunction with poor public transport infrastructures. A car in Albania as in many other ex-communist countries is a status symbol **Invalid source specified.**. Originally, the town is not designed as a large number of vehicles but instead as an auto-oriented town, even in city areas, in which the majority is made up of pedestrians. These few public areas in the town which were not occupied by informal buildings have become parking lots that leave almost no room to take part in important daily activities such as walking or biking. In the neighbourhoods, there are virtually no footpaths. The quality space that the neighbourhood must-have, the urban spaces that are vital to the improvement of quality of life for the people, are disappearing as informal concrete buildings and self-proclaimed car parks.

In the last few years, there has been a slight improvement in the development of new projects, but they are mainly oriented and concentrated on core axes and rings that have become "representative" places of the city while if we go just a few meters from the centre, inside the neighbourhoods of Tirana where the real-life takes place, we can touch the unbalanced development of the city. It appears that these projects are only focused on these "representative" zones so they can define and enforce the formal city while hiding and covering the informal one **Invalid source specified.**

It would be better to develop Tirana if we designed and worked in the same intensity within such the informality of the blocks of the City as in the formal city's facade. Tirana must take immediate action to improve living conditions for the citizens of the city blocks in these circumstances. In these blocks, the lack of development strategies leads to several negative effects, which affect the economic and environmental as well as cultural and social aspects and the quality of life within the urban context in general.

2.3   The need to protect and enhance the identity legacy.

In addition, this poorly managed urbanisation affects our historically/cultural legacy, apart from all the negatives mentioned above that affect health as well as the quality of the lives of the citizen. We tend to forget the consolidated past often with the main objective of building new huge apartment buildings to meet as many people as possible due to rural and urban migration. Vernacular architecture, historical buildings and the wealth of traditions and customs form part of a legacy that we must continue to build into future generations. But as we often focus on modernizing architecture, we are used to forgetting and neglecting a significant part of our history and identifies because we are forced to give urgent answers to the most urgent enquiries. Historic buildings, such as museums, theatres, mosques, and so on, which commonly reflect a significant part of our history, are given certain importance and they are listed on the national heritage list. But traditional dwellings, together with the large urban historic fabric, have not taken the importance that they truly deserve. They are a huge portion of the city that fill the most endangered forms of cultural and built heritage in Albania **Invalid source specified.**

"Cities need old buildings so badly it is probably impossible for vigorous streets and districts to grow without them." **Invalid source specified.**

Traditional buildings maintain both the mastery of buildings and traditional cultural values. These houses are important because over the years they are witnesses the city's social, political and economic growth. In the city or part of a more complex and articulated urban fabric system, historic structures can also be isolated and dispersed. In this case, it may be read like a box containing the cultural and natural heritage of a local population over the years. As it was built by the historic events that took place there. In a word, it leads the entire local cultural identity to the contemporary and the modern city in its continuous development. Although historical legacy bears such important testimonies of our past, the importance that it needs is not always addressed.

In Albania, modernity started suddenly, causing a cultural shock, neglecting the obtained legacy in an impetus of modernization that looked to the future, occulting the past (and the past experiences) as it was a heavy and unpleasant backpack to forget in the opening to new sights. Nowadays, most of these buildings and old fabrics are randomly but homogeneously spread within the urban body of Tirana and instead of giving the neighbourhood an added value, they have often been considered "undesired" regardless of the qualities they contain. **Invalid source specified.**. Everyone can testify how day after day, this heritage is under constant degradation, only waiting to be replaced by a contemporary high-rise complex by a new reconstruction project Naturally it will slowly remove the values that have given the City its distinctive characteristic and distinction from other cities within the Mediterranean basin and Adriatic band by not intervening in time for mitigating this ongoing degradation.

Indeed, many isolated structures around the city and whole portions of peculiar city buildings containing clear cultural, architectural, and historical values are being demolished to create a modern idea for a 'grand good.' Tirana seems to be developing as a town that has to destroy existing construction structures to rebuild them to reinforce the representative, modern city of form. We often sacrifice national treasurers for the benefit of some private owners who are not interested in the public interest. These buildings reach this stage because we rarely use the practices necessary for the longevity of cultural heritage like preservation, conservation, maintenance, reuse or restoration.

Though we have a long-range of secluded buildings declared "monuments," preserved and kept by law, there are several other, small and important, buildings that makeup, from centre to the periphery, a large homogenous historical structure with important architectural and cultural characteristics that not only must not be forgotten. Systematic institutional and cultural care, as well as protection, are lacking. Albania listed 210 rural buildings that were protected 30 years ago, especially at the fall of the Socialist regime. It is disturbing that we do not even have today an accurate number and information about the protected buildings in Tirana and all of Albania and whether the old ones listed are still present. Cultural identity legacy is an important part of our history because it has high values that must be respected and protected. By not taking care of this legacy we are losing a part of our identity, Civilizations are lost when they forget where they come from. It is a matter of Civilization Rights we must preserve (Rasheed, 2020).

2.4   BIM & GIS Integration Approach

2.4.1   3D City Approach

3D city models have evolved so rapidly in recent years that they have to satisfy numerous customer requirements. Some 3D model applications are distinguished by the fact that their effectiveness that not only depends on the view but also on the annotation of the model's features and the assignment of good quality to allow these details to be correlated with images displayed or represented to us. Most existing 3D models, however, are semantically relatively inefficient. A term derived from DE (digital earth) is the 3D city model, and some great attempts have been made. Data-based models can be differentiated between concepts and real-world models inside the current 3D city model on the surface of the city and its related spatial objects in this city. Build models are engineering models designed to meet AEC industry standards and to display the highest degree of detail in geometric representation. In the context of geospatial data systems, however, current objects are often represented in reality models. (Brenner&Geiger,2005)

Most of the 3D city modelling effort, including web services, focuses on the representation of graphic or geometric models, but semantic and topological aspects are often ignored. Today, our cities are experiencing an unprecedented scale of urban development along with the unprecedented scale of urban construction. Ground resources are increasingly scarce; the city continues to evolve from height and depth into extensive three-dimensional space use. In addition to building construction, a large number of urban infrastructure projects including the Integrated Transport Hub and the Underground Transport Hub were extended daily. These infrastructures are spread in different sectors and areas, resulting in several issues such as sunlight calculation, landscape indivisibility, underground tube network management, subterranean space management and so on, not solvable simply by relying on two-dimensional plane data, so it is essential to building the 3D urban model. The new smart–city model is an urban information resource model based on urban network geospatial information using GIS technology. Many researchers have been interested in the creation of 3D city modelling as it is gradually being applied. This is critical in some applications, such as urban planning, land use management, traffic management, etc. While a lot of problems have been exposed in the use of 3D cities, the most important is the sharing of information among various details. The setting of relevant standards and standards is therefore urgently needed as guidance for the building of digital cities and support for authoritative scientific evidence for urban planning decisions. (Laat&Berlo2011)

By this thesis is proposed different thinking of the 3D digital cities. Building parts or other city functional parts can be assisted by BIM modelling in terms of information gaps in these approaches. For fast updating and sharing, BIM-tech may store the design data in the database in digital form. It can also establish a real-time and conforming relationship between data to present a relative phenomenon if those data have changed. The effectiveness and qualification of the projects can be guaranteed by BIM. While the BIM application is limited in the building industry, it does not cover transport and other industries and does not represent geospatial data. GIS is also used widely in the field of 3D data modelling, laser scanning can obtain most of the GIS information, so that fast modelling is beneficial; it can easily create a city surface model. However, the contents have to be represented by GIS without maps when it comes to internal modelling. In this situation, we try to integrate BIM and GIS so that the modelling of city information can be effectively solved. (Kainz, 2017)

2.4.2 Building Information Modelling (BIM)

What is BIM? Building Information Modelling (BIM) is a smart 3D model process that provides insights and tools to architecture, engineering and construction (AEC) professionals to plan, design, build and manage buildings and infrastructure more efficiently. BIM is used for designing and documenting construction and the design of infrastructure. Every detail is modelled on the BIM structure. The model can be used for analysing design options and for creating visualizations that help stakeholders to understand the look of the building before its construction. The model will then be used for building design documents. What is the process of BIM? The BIM process supports the generation of smart data that may be used throughout a building or infrastructure project's life cycle. Building or infrastructure project's life cycle includes: plan, designing, build and operating. (Wikipedia)

Plan: Inform project planning by combining real-world capture and data to generate existing built-in and natural environment context patterns.

Design: Conceptual design, analysis, detailing and documentation are carried out during this phase. BIM data inform planning and logistics start the pre-construction process.

Build: The manufacture begins with BIM specifications during this phase. To guarantee optimum timing and efficiency, project construction logistics will be shared with trade and contractors.

Operate: The operation and maintenance of finished assets are carried out through BIM data. During economic refurbishment or effective deconstruction, BIM data may also be used along the way. (Wikipedia)

Why is BIM important? According to the UN, the population of the world will reach 9.7 billion by 2050. The global AEC industry has to strive for intelligent and more efficient ways of designing and building not only as a means of meeting global demand, but also to help build smarter and stronger rooms. Not only does BIM enable design and building teams to work more effectively, but it also enables them to capture data

they generate during the process in favour of operations and maintenance. BIM's mandates, therefore, grow worldwide. (Azhar, 2021)

2.4.3   Geographic Information Systems (GIS)

A GIS is a framework for the collection, management and analysis of data. Rooted in geographic science, GIS integrates a wide range of data types. It examines the location of space and organizes information layers into maps and 3D scenes into visualizations. GIS offers a deeper perspective on data such as patterns, interactions and situations with this unique capability – to help customers make smarter choices. In almost every field, hundreds of thousands of organizations use GIS to map communication, analysis, information sharing and the solution of complex global problems. The way the world works is being changed. By using GIS, we can:

Identify problems: Use GIS to focus attention on geographical issues. This map shows the geographical patterns emerging when the data are well mapped.

Monitor Change: If one image has a thousand words, a map has a thousand images. a thousand images. This map shows the scope of the Southern Hemisphere glacier retreat.

Manage & respond to events: GIS provides situational awareness in real-time. This cyclone and hurricane map show potential consequences for individuals and businesses, likely track of storms and storms.

Perform forecasting: To predict traffic, use GIS. The map shows the challenges of a crossroads in Fort Mitchell, Kentucky, where traffic is forecast to worsen due to changes in land use.

Set Priorities: To predict traffic, use GIS. The map shows the challenges of a crossroads in Fort Mitchell, Kentucky, where traffic is forecast to worsen due to changes in land use.

Understand Trends: GIS helps you learn about data that could be missed in a tablet. This map measures employment growth and losses in various industries and measures the competitive advantage of the local economy.

Geographical science with tools for understanding and cooperation is applied by GIS technology. It helps people to achieve a common objective: obtaining effective information from all kinds of data.

Maps: Maps are the geographical container in which you want to work and analyse the data layers. GIS maps are easily shared and integrated into apps and accessible throughout virtually everybody.

Data: GIS integrates many different types of spatially located data layers. There is a geographical component in most data. GIS information includes images, functionalities and basic maps linked to tablets.

Analysis: Spatial analysis enables you to assess appropriateness and capacity, evaluate and predict, understand, and much more to give your insight and decision-making a new perspective.

Apps: Apps provide user-focused experiences to do business and make GIS live for all. Virtually everywhere GIS applications work: on desktops, mobile, tablets and web browsers. Modern GIS concerns engagement, sharing and cooperation. This technology builds relationships, drives efficiency and opens communication channels in your community. (Website, QGIS Official)

2.4.4 Case Study: BIM in the old thermal power plant of the Politecnico di Torino.

Politecnico di Torino's ancient thermal power plant is an old building in Turin, Italy. It is a square structure built in the mid-50-s.

Figure 3: Location of the old thermal power. (Source: DISEG)

During the first phase of the InnovANCE project, the methodology was defined to follow the future project and the parametric model began to develop. More testing in particular applications to test the 3D model, to broaden interoperability, to develop guidelines for the correct use of BIM for the renovation of existing buildings are needed. Although there are several main difficulties in existing buildings than in new ones, the use of new technologies allows professional data management to consult the 3D model using iterative and interactive steps to characterize the BIM process. The case study analyzed involves the restoration of the former Politecnico di Torino thermal power plant. This option is also part of the existing need for a priority in government policies

on the issue of the restoration of buildings. In addition, the number of rooms that may be used for educational purposes must be increased by the university.
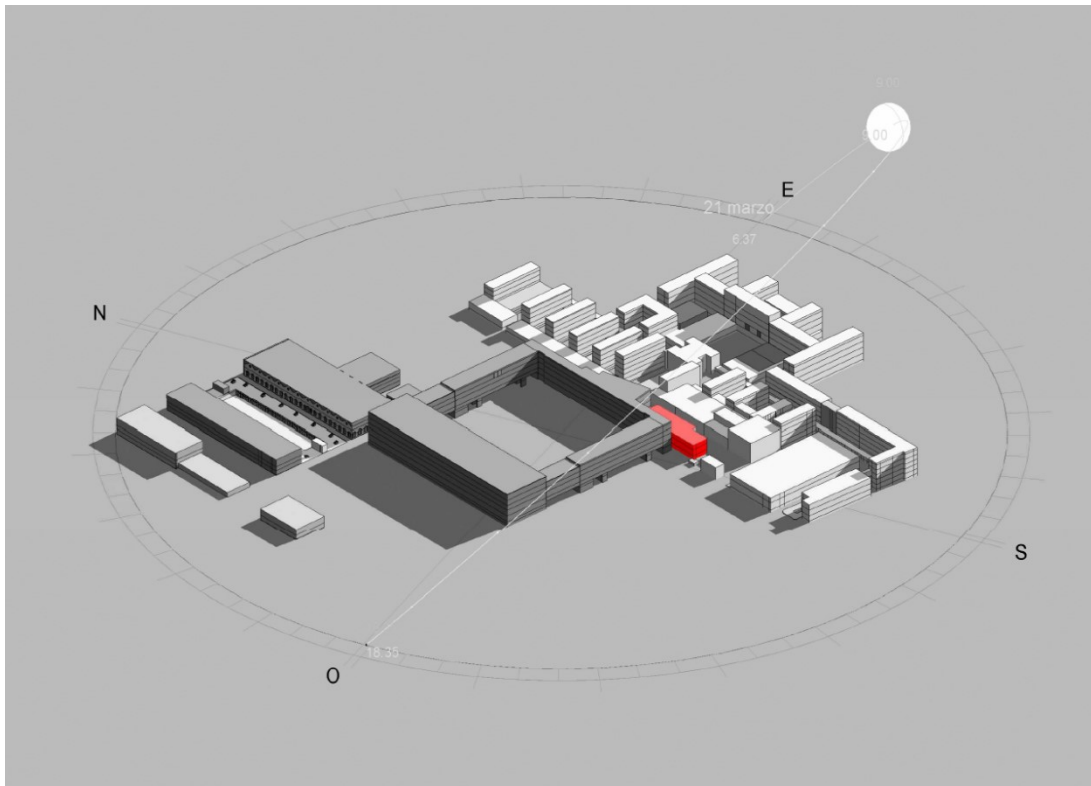
Figure 4: 3D Massing Model of Politecnico di Torino for shading study.
(Source: DISEG)

The building is next door to the newly built university building. It is East-West oriented and can be used during the design phase for natural structures. The structure will change its native function, as it contains four large teaching rooms.

Based on the information of the research, three essential elements were developed:

- The operational methodology is based on interoperable data exchange and problem-solving;

- The data hierarchy in the various design phases and the role of experts in the 3D model data filling stages;

- The current rules and need for them to be updated.

Thus possible areas of project management were identified, to organize the work to be carried out, in which information must be shared to develop the entire BIM.
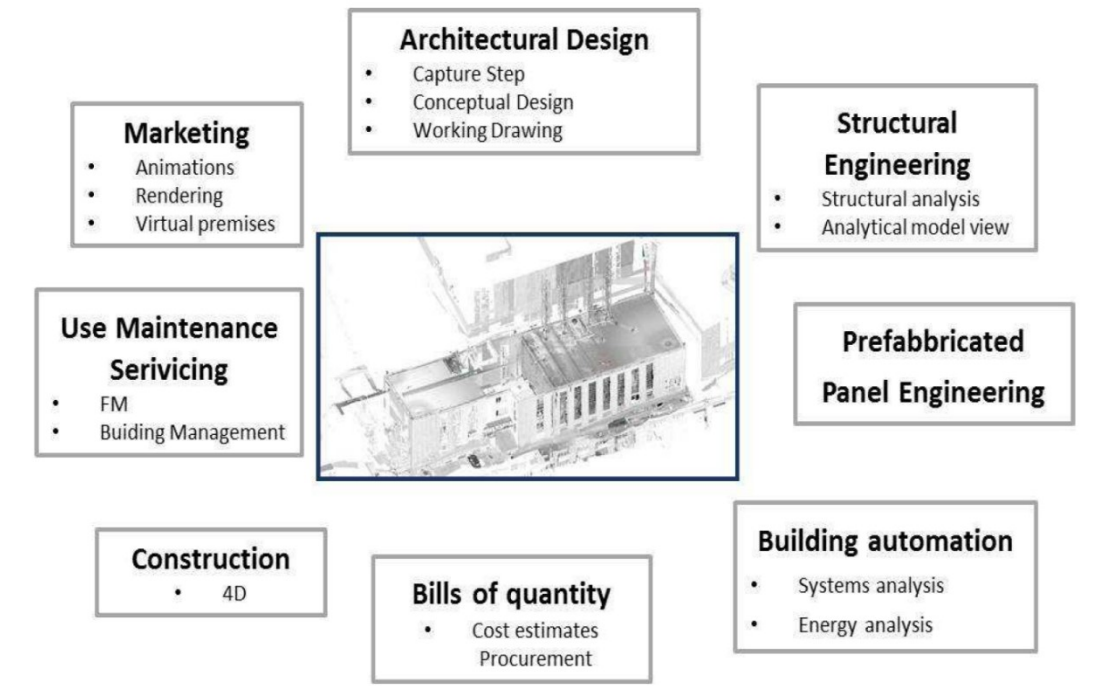
Figure 5 : Organization of the building process (Source: DISEG)

As illustrated in the previous figure, eight areas were identified; the architectural design stage is currently the focus. First, a survey based on archival documents and a geometric survey was made because of the importance of context analysis. The geometric data collection required to develop Autodesk Revit's parametric model. The first was a topographical survey using a total station, which measured key elements of the external facades, and the second by the use of a laser scanner for the external and internal parts of the building. The second was by a laser scanner.

In the same way but in a bigger scale can this work serve as initial concept for future works hopping that technology will advance in this aspect and there will be an official integrated software which can be used assisting this approach. (Giudice&Osello,2013)

2.5 Tirana's Cultural Heritage

Tirana as Capital of Albania has gone through a lot in its past and every event has let marks in the city. Marks that through time, transformed Tirana into one of the richest city according cultural heritage values. Tirana nowadays count a number of 260 cultural monuments and almost half of them are villas and private buildings, but they are in poor condition or uninhabitable

PRE WAR ERA
1400 - 1939

WORLD WAR ERA
1939 - 1946

SOCIALIST ERA
1946 - 1991

CURRENT ERA
1991 - Present
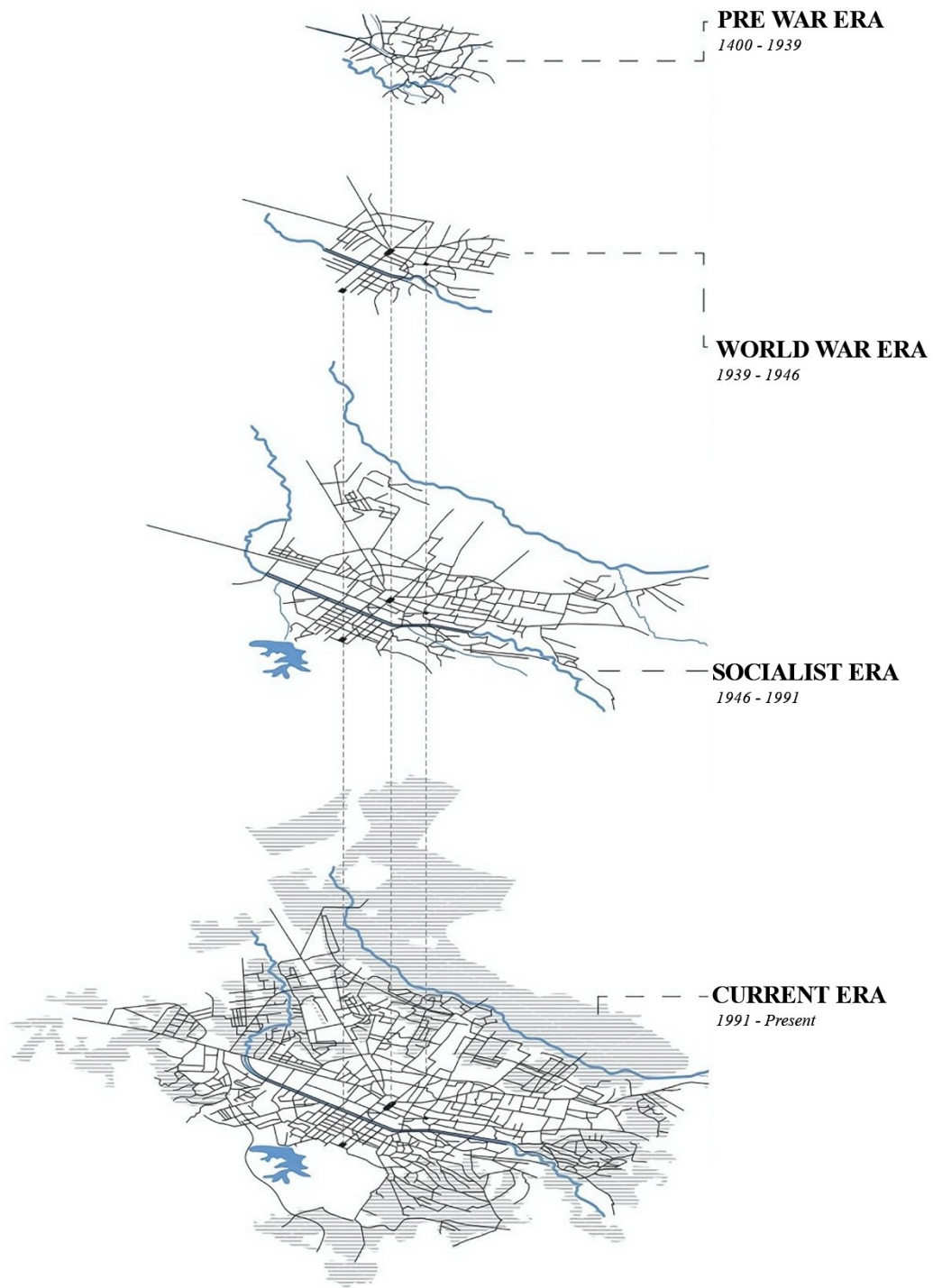
Figure 6: Tirana's Urban Expansion (Source: Mark Spaan 2018)

As the largest city of Albania has the richest Heritage within the deepest urban fabric. The expand of the city has come in an informal way and it has demolished or isolated the value of cultural heritage. Some of the neglected heritage within the urban fabric are shown in the figure below. Selvia is the neighborhood that this research work.

Figure 7: Old fabric area located inside the ring of Tirana (Source: Author)

In figure 7 is done a mapping areas that shows main zones where old fabric is located inside the ring of Tirana. There is a huge numbers of old building in these areas that should be investigated and analysed for traces of cultural heritage. The official number of building and monuments with protection status in Tirana is 261, which is a small number if we compare to the quantity of old fabric in total. Below are listed all protected buildings from IKTK (National Institute of Cultural Heritage) that are inside the ring of Tirana city.

Figure 8: Demolished Protected Villas&Monuments, (Source: Tirana 2031)

Figure 8 shows all the demolished villas inside 3.5 km radius from centre of the city. But the question is why do those villas lose their protection status and get destroyed in order to build a new w apartment building?

According to National Institute of Cultural Heritage in Albania (IKTK) reports, the main reason behind this phenomenon is the degradation of the building and the lack of investing from the owners

Figure 9: Proposed Villas&Monuments for removal of the protection status:
(Source: Tirana 2031)

Figure 9 shows location of all villas that are proposed for removal of the protection status. There are different reasons for different cases but most of the reasons behind this proposals are for un fucntionality, lack of invesment and degredation of the building.

Figure 10: Buildings that were removed from protection status (Source: Author)

According to analyse made by Citizens Channel, for a total of 45 buildings and monuments during 2015-2020 there are 36 orders mandatory for removal of the protection status which leads to destruction of 17 villas and monuments to build multi-storey residential and commercial buildings.

2.6   Protected Building Case Study

As we can see from reports listed before, only the protection status it's not enough to help old urban fabric survive time. This case study shows how a second category protection building has lost its protection status and then transformed into a construction site to build a new multi storey apartment building.

Figure 11: Villa with protection status II category, (Source: IMK)

In figure 11 is shown a two-storey villa located between "Kont Urani" road and "Mihal Duri". It has a strategic location which is in the intersection of 2 roads and its volume creates the angle between them.

KARTELA PËR TRASHËGIMINË KULTURORE TË PALUAJTSHME				
TË DHËNA ADMINISTRATIVE				
NR. I SKEDËS	111			
EMËRTIMI	BANESË TIP VILË, 2 KATE, RR. "KONT URANI" (II-149)			
FUSHA	Arkitekturë			
GJINIA	Ndërtesë e projektuar			
TIPOLOGJIA	Rezidencë individuale			
KODI I ARKIVIT	-			
ADRESA	Lgj.7, Rr. "Kont Urani"			
VENDNDODHJA	RRETHI	BASHKIA	NJËSIA ADMINISTRATIVE	FSHATI
	Tiranë	Tiranë	-	-
STATUSI I MBROJTJES (KATEGORIA I, II)	Kategoria II			
NR. I VENDIMIT , DATA E SHPALLJES	Urdhër nr. 276, dt. 16.07.2015			
INSTITUCIONI I SHPALLJES	Ministria e Kulturës			
DATIMI (VITI / SHEK)	Shek. 20			
INSTITUCIONI, ADMINISTRUES / DRKK	DRTK - TIRANË			
PËRDORIMI FILLESTAR	Banim			
PËRDORIMI I TANISHËM	Bar-restorant			
A KA RRETHIM OBJEKTI? / GJENDJA E TIJ	Po / E mirë			
ZONA E MBROJTUR	Nuk ka zonë të mbrojtur të miratuar / Është subjekt i Urdhërit të Ministrit Nr. 297, datë 31.07.2015 "Për shpalljen e zonave të mbrojtura të monumenteve të kulturës"			
KOORDINATAT GJEOGRAFIKE TE MONUMENTIT	41°19'45.61"N 19°48'44.01"E			
KOORDINATA GJEOGRAFIKE TË ZONËS SË MBROJTUR	-			
PRONËSIA	Private			
EMRI I PRONARIT (-VE)	S`ka info			
NR. I PRONËSISE	2/110			
ZONA KADASTRALE	8380, TR – O - 10			
SIPËRFAQJA E NDËRTIMIT / LARTËSIA E OBJEKTIT	Sip = 150 m² / h = 8 m			
SIPERFAQJA E PËRGJ. E RRETHIMIT	Sip = 675 m²			

SIPËRFAQJA E ZONËS SË MBROJTUR	-			
A KA RRUGË AUTOMOBILISTIKE DERI NË MONUMENT? / GJENDJA E SAJ	Po / E mirë			
TË DHENA TEKNIKE				
PËRSHKRIMI ARKITEKTONIK	Banesë tip vilë 2 katëshe, me bodrum dhe mbuluar me çati me tjegulla të kuqe, e cila zhvillohet sipas një artikulimi të thjeshtë në fasadën e jashtme. Objekti vendoset në kryqëzim të 2 rrugëve duke formuluar me vëllimin e tij, këndin mes tyre. Pjesa e poshtme e çatisë përfundon me një kornizë të suvatuar. Vërehet respektimi i pozicionit të çarjeve në fasadë në katin përdhe dhe në katin e parë. Në këndin që përkon me cepin e rrugës "Kont Urani" me rrugën "Mihal Duri" është i pozicionuar ballkoni i rrethuar me kangjella horizontale metalike, tejet transparent. Fasadat e brendshme të ndërtesës janë të trajtuara thjesht dhe me linja të rregullta. Në këtë vilë me kalimin e viteve janë bërë ndryshime në interier dhe në fasada nga planet origjinale. Aktualisht godina ka pësuar ndryshime në fuksionin e saj dhe sot përdoret si ambient bar-restorant duke shfrytëzuar edhe oborrin e objektit.			
PËRSHKRIMI KONSTRUKTIV	Konstruksion i kombinuar mure mbajtëse-beton/arme, me tulla të kuqe të lidhura me llaç.			
NDËRHYRJET KONSERVUESE / RESTAURUESE NË VITE	VITI	VITI	VITI	VITI
SHKALLËT E NDERHYRJES / 1 / 2 / 3 / 4 / 5 / (nga nderhyrja me e lehtë tek me thellë)	-	-	-	-
GJENDJA E KONSERVIMIT	ÇATIA / MBULESA	DYER / DRITARE	TAVANI/ NDERKATI	STRUKTURA E DRURIT NE AMBIENTET E BRENDSHEM (MAFILI, KOLONA, etj
SHKALLËT E GJENDJES / 1 / 2 / 3 / 4 / 5 / (nga problematika me e lehtë tek me rendë)				
	AFRESKU	IKONOSTASI	MINARJA / KEMBANARJA	DYSHEMEJA/MOZAIK
	-	-	-	-
NDËRHYRJET KONSERVUESE / RESTAURUESE QË PROPOZOHEN	1. Propozohen ndërhyrje sistematike mirëmbajtëse.			

Figure 12: Technical file for protection status II category, (Source: IMK)

In figure 12 is shown technical file filled with all elements by institution and approved by Ministry of Culture as a villa with cultural heritage and giving a second category protection status.

In December 2020 was sent a report to the IKTK (National Institute of Cultural Heritage) for removal of the protection status. This request for removal of the villa from the protection list was made form the owners. They requested a revision of building status because it has lost architectural elements and has been degraded over the years.

After this request was taken into consider and the building was revised by institute, within the month that report was sent, villa "Harxhi" with the code II-149, was removed from the protection list.

Later on, in February 2021, immediately after removal of the villa from the protection status, Municipality of Tirana approved detailed local plan (Figure 13) where was predicted an eight-storey apartments block building right in the location of the villa (Figure 14).
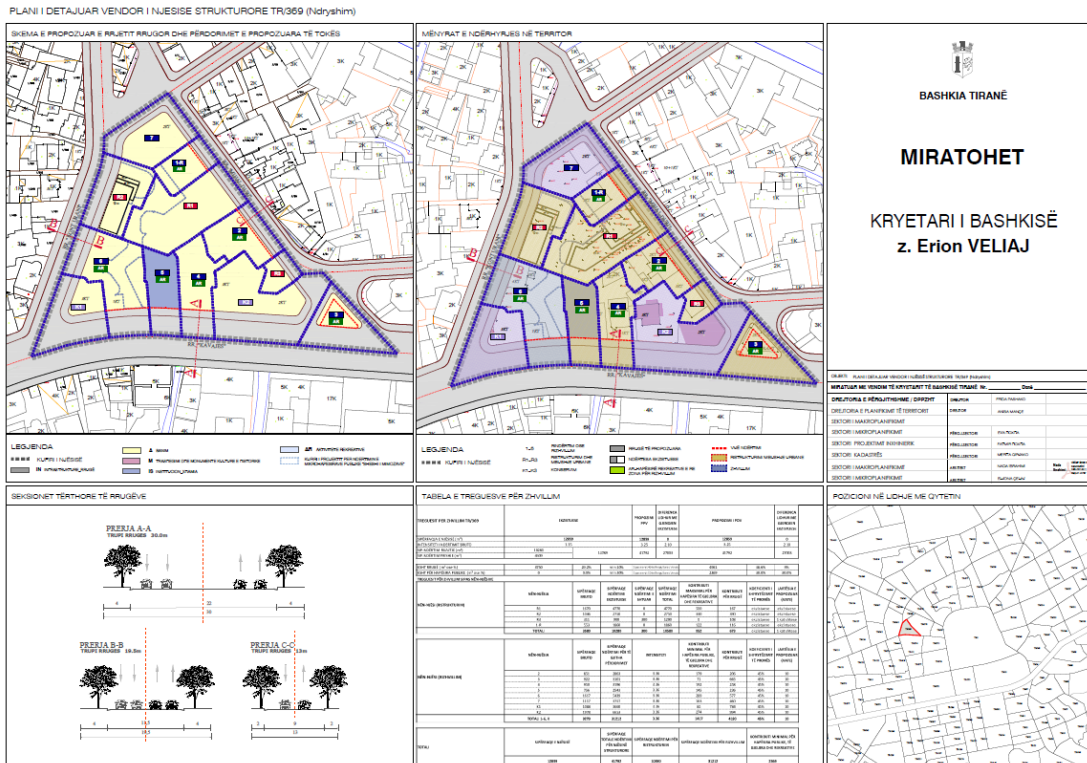
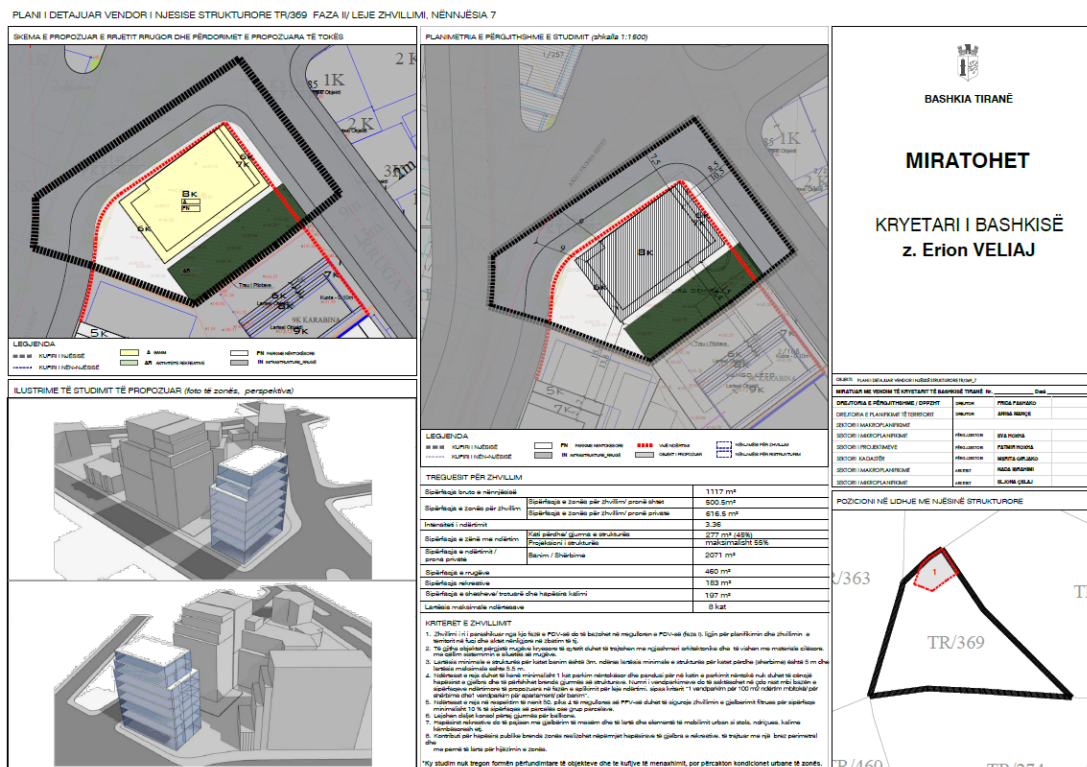*Figure 13: Detailed Local Plan, (Source: IMK)*

Figure 14: New building project approval, (Source: IMK)

CHAPTER 3

STUDY AREA

3.1 Site Analysis - Selvia

Figure 15: Study Area (Source: Author)

Among all of the neighborhoods in Tirana, Selvia is one of the richest zone regarding cultural heritage. Becouse of its strategic position, Selvia have been through different invasions and activities that coused its informal growth. For these reasons it has past through cycles and changes since century 19 until present. Figure 16 up to 21 shows these changes in different time frames.

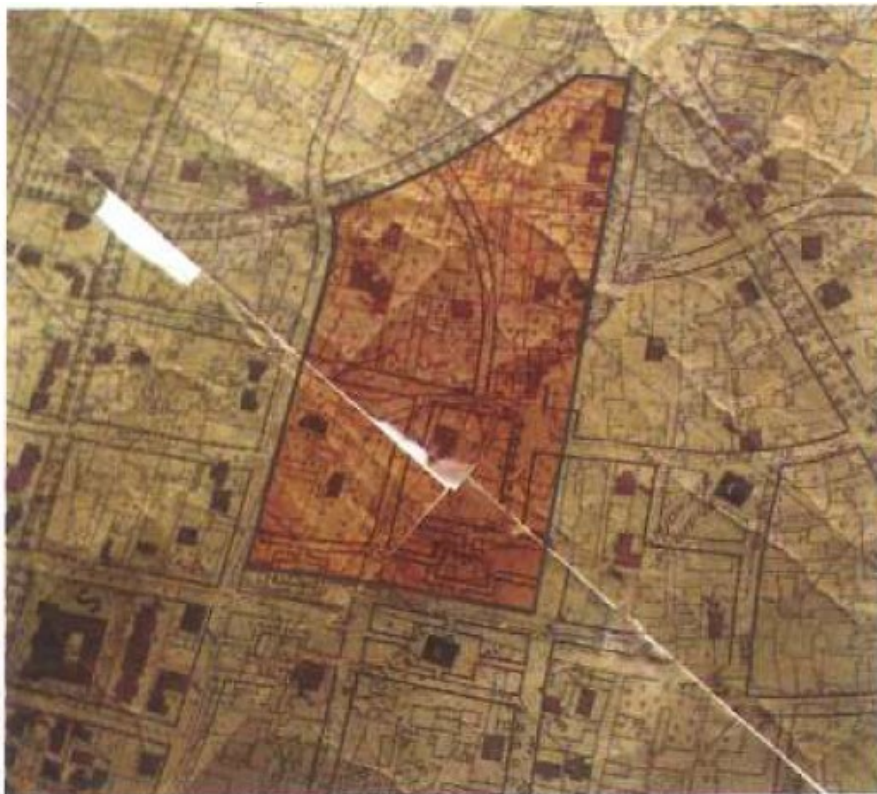*Figure 16: Site map in 1937, (Source: Vilat e Tiranës, Dr. Vera Bushati)*

Figure 17: Site map in 1943 (Source: Vilat e Tiranës, Dr. Vera Bushati)

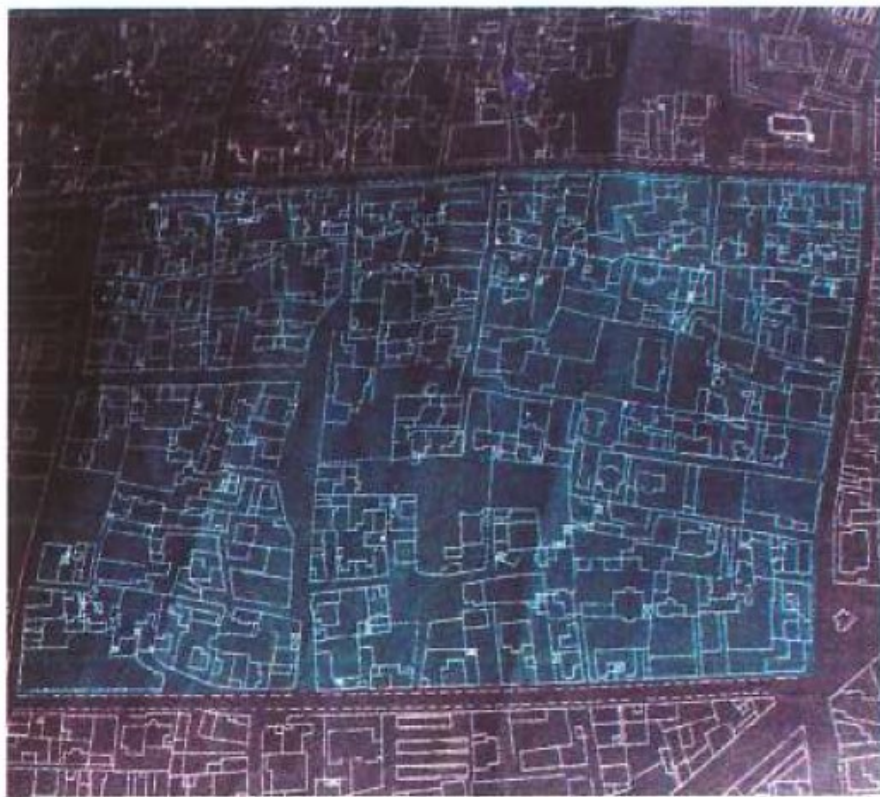*Figure 18: Site map in 1953 (Source: Vilat e Tiranës, Dr. Vera Bushati)*

Figure 19: Site map in 1958 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Figure 20: Site map in 1990 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Figure 21: Site map in 2018 (Source: Author)
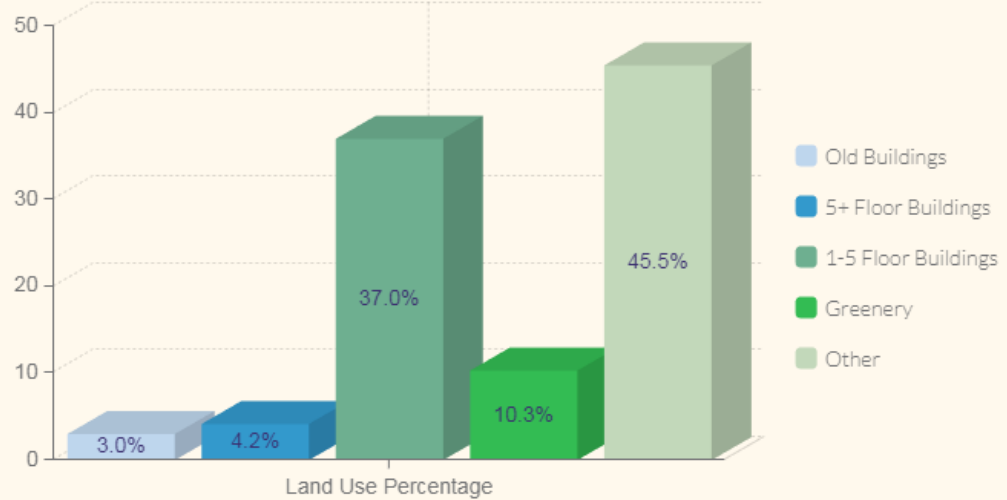
LAND TYPOLOGY

Table 2: Selvia Site Land Typology (Source: Author)

A deep analysis was made using GIS software to better understand the land typology and whats the ratio of the old fabric compared with other part of the study area. All the surface of the study area is 151,503 m2 and main layers of the analysis were old buildings, 5+ floor buildings, 1-5 floor buildings, greenery and other surface left which represents circulation, pavements etc. From the Table 2 we can see that 3% or 4,554 m2 of the total area is old fabric. There is not much change comparing with apartment blocks that are 5 floors or more. Total surface of 5+ floor buildings is 6,306 m2 and by that we can see this minor difference in area. 10.3% of total area is greneery which truly a good ratio, counting a surface of 15,620 m2. Most of this greenery is located in the backyards of old villas and is hardly or impossible to acces. Selvia also has good surface with residential villas that are 1-4 floors which count a surface of 56,126 m2 and occupies 37.0% of the total area. Other 45.5% left are circulation like roads, pavements and areas with no function that count a surface of 68,897 m2. These datas were all generated from GIS.

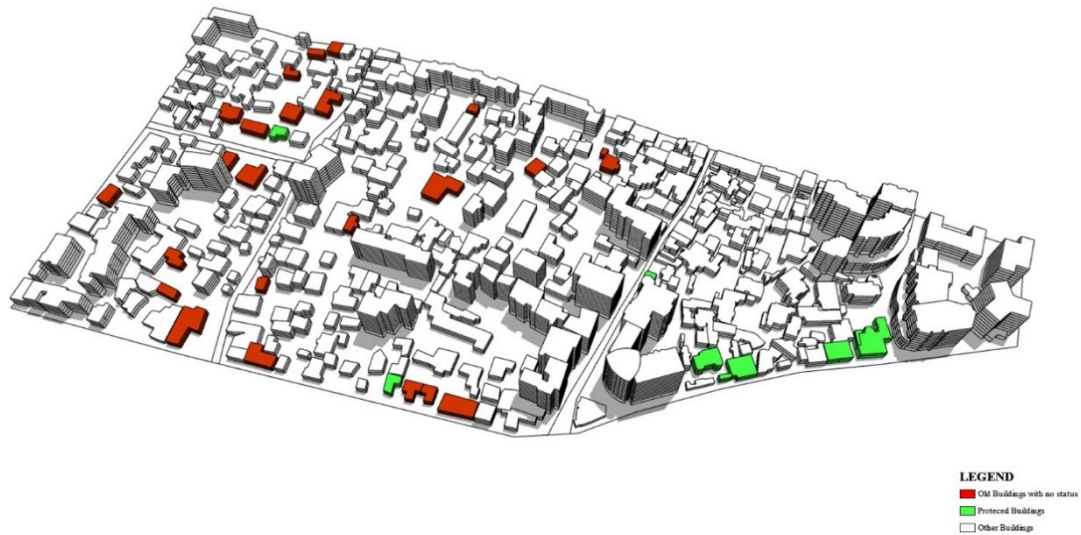## 3.2 Villas and Monuments in Selvia

Figure 22: Selvia Site 3D (Source: Author)

Figure 23: Old Fabric In Selvia (Source: Author)

In figure 22 & 23 is shown selvia and the location of old fabric. It is done via sketchup and it shows the visual ratio of old fabric and other buildings in the study area. Buildings in red are old buildings with architectural values but that has no protection

status. Buildings in green are old buildings with architectural values but that has a protection status from government.

Villa nr.06, Rr. Tafaj

Figure 24: Villa nr.06 (Source: Author, 2022)

Villa J.TAFAJ is built in 1931 and has been inhabited by Tafaj family, one of oldest native family in Tirana. Even that the building was built in 1931, Tafaj clan has lived there for four centuries in their one floor homes. Later they come up with this old modern villa. The road along the villa also is called Tafaj. Villa is located directly on the road and has no courtyard and surrounding walls like many villas have. It has two balconies and two entries which define a composition of similarity. Windows and entrances are associated with decors and the roof is a bit damaged as we can see in top

first picture. The villa now is used as a hotel for tourists and also is used as a landmark from neighbourhood.

Villa nr.16, Rr. 4 Dëshmorët

Figure 25: Villa nr. 16 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr. 16 is located along road "4 Dashmorët". It belongs to Ismalaj family and its builded from engineers Arqile Prifti and Emin Toci. It is one storey Villa with an area of 95 m2 and a style that has similarities with traditional villas in Korçë. Entrance in Villa is made through a balcony with stairs in both sides as shown in right bottom figure 25.
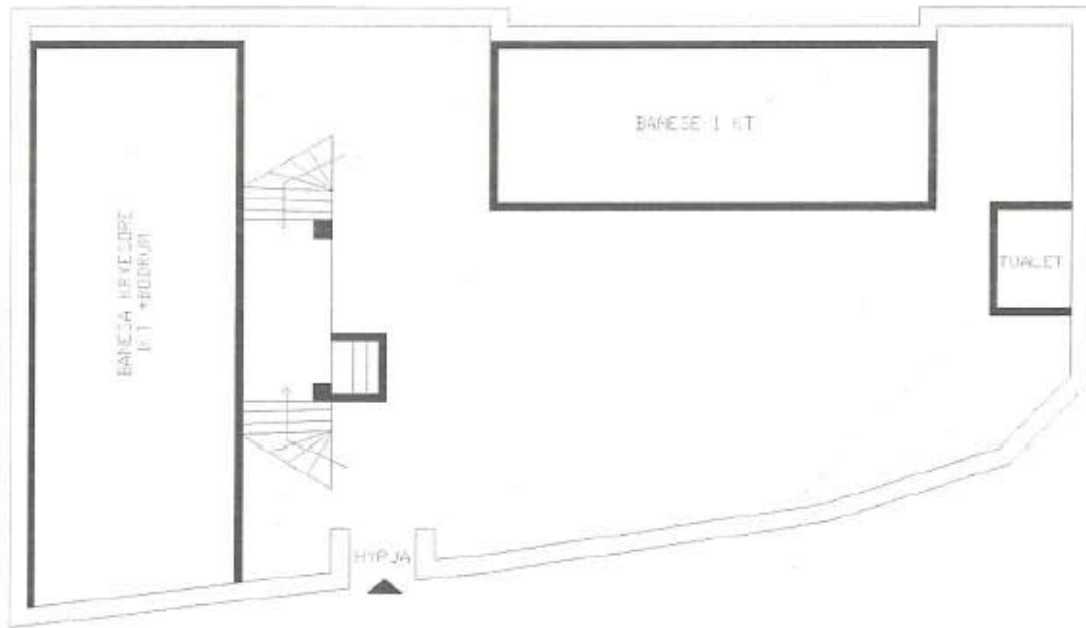
Figure 26: Ground Floor Plan (Source: Vilat e Tiranës, Dr. Vera Bushati)
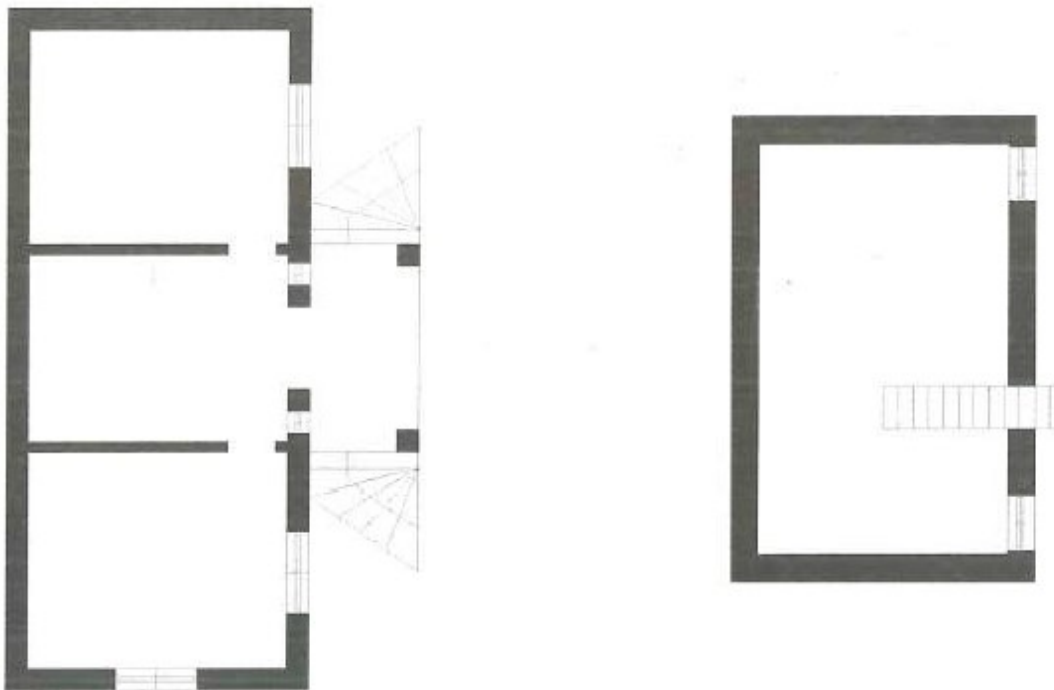

Figure 27: First Floor Plan (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa is composed of 2 buildings where the main building is composed of living room, dining and two bedrooms. Other functions like kitchen and toilets are located in the second building which is located in the left of the main building. Villa has a nice landscape with greenery and a well.

There are a lot of old fabric in Tirana so the full list associated with site photos can be found in appendix.

3.2.1 Architectural Details

Figure 28: Adobe with linear beams

Figure 29: Adobe with linear beams   *Figure 30: Adobe with crossed beams*

Generally, in these villas are used adobe construction techniques with crossed (figure 30) or linear beams(figure 28&29). Production of adobe blocks were made in summer by locals, since it didn't require a specialization in this field. There was not any special requirements according to quality of the mud and argil used for cutting adobe. Ofen, in the mixture of the mud were added straw thread for e better bond. The blocks

were dried in the sun. Adobe walls usually were raised in a high strip made with rocks which covers a considerable part of the ground floor. Reinforcement of the adobe wall were made with wood strips which were located every 80-100 cm. Usually were used 2 strips in both faces of the wall, connected with each other through transverse binary, but there were cases that were used even 3 strips. For strips were chosen durable materials such as oak or pine and the bond was made really carefully. There were
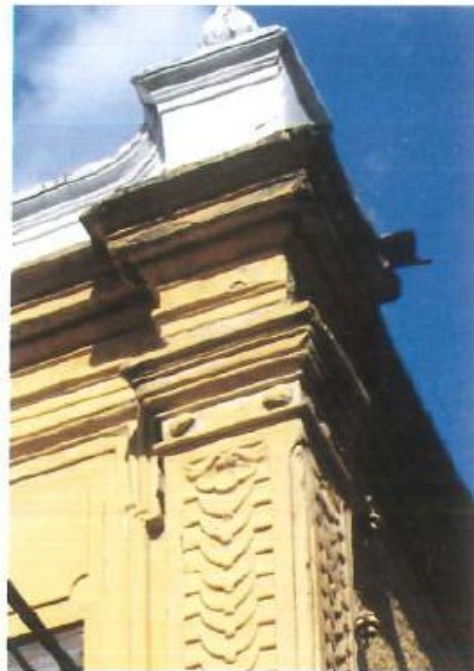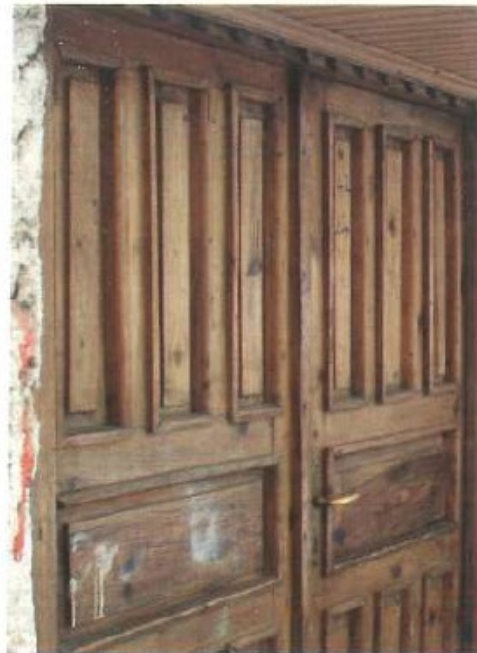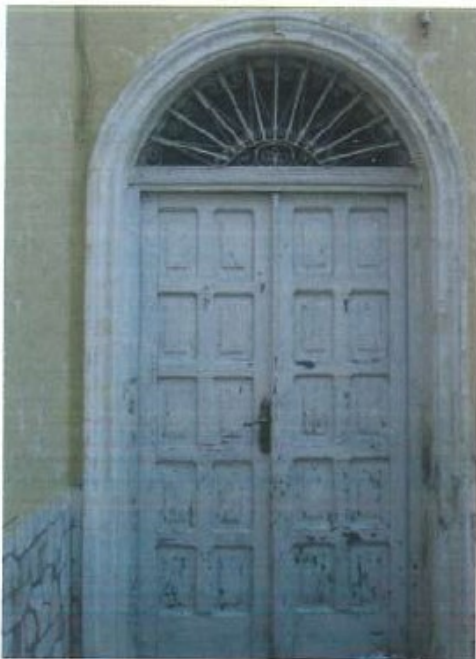
captured through brackets and braced with blacksmith nails. Wooden strips were also used for leveling of the wall and in the same time as anti seismic belt.

Figure 31: Collection of Architecture details applied in villas

In figure 31 are shown a collection of 6 photos whith architectural details that are aplied in villas listed above. Along period 1930-1944 there have been noticed some decoration details along porches and windows frames. This ornament range comes as a result of different styles of constuction and to make a difference from other common buildings.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Discussions

Past centuries, historic districts were seen as major obstacles to urban redevelopment. The areas were threatened with demolition and reconstruction due to insufficient infrastructure, deteriorated living equipment, dilapidated building conditions, and misuse. Urban redevelopment of historic areas continues to place significant stress on architectural heritage. Promoting awareness of *genius loci*, which in classical Roman religion was the protective spirit of a place provides a methodology of maintaining the significance of the place. On the other hand, it arouses nostalgia for antiques, leading to rapid tourism development and radical changes in tangible and intangible elements. Important monuments were transformed into museums and historic quarters were "purified" and disneyfied. As an example we can take "Kalaja" located in Tirana's walkway near center. It was a ruined and degradated zone but with an investment it becomes one of the most frequented zones and it increased the value of the sorroundings. Therefore, the historic districts are often criticised as being retro styles and being restored with "improper methods" (Shin 2010). It is believed that after urban conservation, there was a significant loss of the local community and the characteristics of tangible heritage in the urban area. Nowadays, it is no longer a challenge to make a proposal of preserving a monument or historic building. The main challenge is to find methods and manage the whole historic area, except for a single monument. The problems remain the loose limitations on transforming the functions and layouts of architecture, as well as the stereotyped commercial activities.

4.2   The Piano Programme for Palermo and the Program for Urbino

Figure 32:Orthophoto of Historic Center (Source: Google Earth 2017)

Twenty-four volumes were published in the collection 'Struttura e Forma Urbana' published by Giancarlo de Carlo between 1967 and 1981, of which three seem to have the common denominator and to represent the study of architecture as science on different scales. One of three is Community shape: The realization of human potential by Sergius Chermayeff and Alexander zones, which identifies an analogy between crystalline and urban structures, which are part of a single process of interaction and change. A regionwide line of reasoning already beginning in the two previous studies, this study ends at the following: community and confidentiality on the sphere of residence by Serge Chermayeff and Christopher Alexander and synthesis notes on the micro-urban dimension by Christopher Alexander.

Comparing the three studies, the crucial factors in terms of the distributive organization "within the anatomy of the urban structure," are founded on the areas and transitions between these in each scale of the architectural hierarchy. The objective seems to be an urgent request for a science of design that is capable of defining, by an appropriate route strategy consisting of diaphragms and hierarchies, relevant spaces, subdivided into private and collective spaces, with which an esthetic component plays a final role. It is noticeable how the three volumes, which de Carlo initially translated and republished in Italy, support his method of design.

the Progetto-guida per il risanamento dell'area Albergheria-Ballarò was part of the more extensive Piano Programma for the historic centre of Palermo, with Giuseppe samonà, Umberto di Cristina and Anna Maria sciarra borzì. the Piano

Programma, like the Piano for Urbino, was an innovation on the Italian panorama because they both tackled emerging problems in a completely new and different way: for example, they started with the morphology and portrayal of the city using sections making clear the altimetric and volumetric trends. The assumption shared by samonà and de Carlo was that it was not possible to deal with architecture and town planning separately. the ambitious goal of this project, as also the Urbino Plan, was the transformation of the historic centre into a contemporary space using a recovery, anticipating real needs with appropriate adjustments of the urban fabric to this end.

Figure 33: Old photo of Palermo, (Ph. C. Ajroldi, 2014)
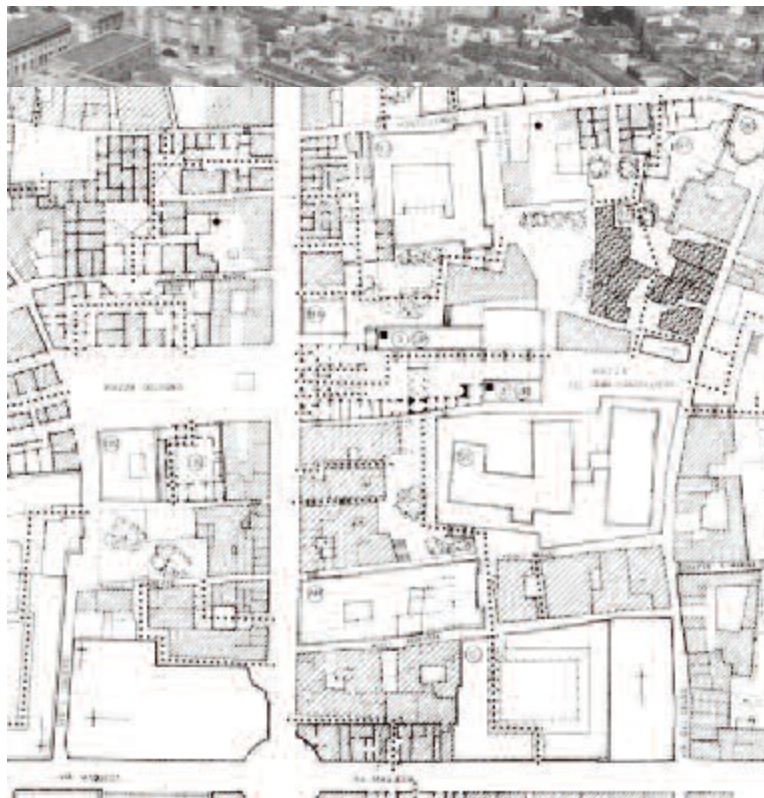
Figure 34: Detailes from program plan (Source: C. Ajroldi, 2014)

About the Piano for Palermo, it is widely known that samonà's personality ended up prevailing over that of the other group members, his central position manifesting itself immediately. At a later period de Carlo admitted that he chose to accept samonà's historical relationship with Palermo, and on his part, samonà listed a series of points on which he had yielded to proposals by de Carlo. the main point of disagreement between

the two of them was about tools and ways of confronting problems: samonà aimed at working on the whole historic centre - a complex operation which he succeeded in making explicit thanks to the numerous illustrative charts he drew up - while de Carlo would have preferred to devote himself to a defined ambit to work both on an urban scale and an architectural one. As is reported in the introduction to the volume Lettere su Palermo, samonà, from the start formulated a theoretical approach which was morphological, marked by specific declensions: contexts and morphological systems, iconology6 and comic strip design; while de Carlo was interested in the common definitions of the context and role of the whole historic centre as well as its parts. such terms constitute only some of the keywords which the authors resorted to making the project clear. Others were added: widespread centrality, solidarity between buildings and streets and the porosity of the urban fabric. The latter terms refer to the ambits and the transition between public and private space, where routes are considered to be potential factors for influencing urban forms. In the general planimetry of the project, a series of small dots indicating pedestrian routes are evident, which travel along streets, across piazzas, courts and courtyards, even those belonging to privately owned buildings, connecting them with the public ambit7. this new strategy of routes opens up the debate regarding three types of circulation: around, into and across, eliminating the latter. «streets are the fundamental elements of the contexts, upon which the relationships between the parts are founded», so the routes are distinct and are either pedestrian or vehicle carrying, a state of the relationship between things and people, which had been lost since ever-increasing private vehicle mechanization had destroyed the possibility of more frequent relationships between individuals and groups. some of these aspects had already been investigated by de Carlo at Urbino, in particular: the permeability of the pedestrian routes to integrate the relationships between streets and buildings, the subdivision of the territory into sections and the identification of roles. In Palermo the contexts permit a new subdivision of the historic centre, replacing the existing one of Four Districts with a subdivision of eleven precise design situations provided with appropriate intervention criteria; these, together with the probable functions, represent the operative document of the Piano, whose design charts explain analytically the indications for intervention and the regulations and methods for its realization. the context, no. 4 in the second stage of the drafting of the Piano, was entrusted to de Carlo. this was the purpose of the realization of the Progetto-Guida per il risanamento dell area Albergheria-Ballar., with its twofold aim: that of elaborating a

43

pilot model to interpret the Project and of establishing formal references which would obviate the schematism of town planning tools. the role of the area was defined as predominantly residential and closely linked to the activities of the market. to this end, an expansion of auxiliary services was provided for, using the re-use of many ground floors which for some time had been in increasing disuse coinciding with the widespread decision to assign only the upper floors for habitation. In both the Piano for Palermo and the one for Urbino, besides the interventions for the recovery and transformation of the patrimony of existing buildings, the construction of new volumes was anticipated: in Palermo for re-establishing the residential character of the area and a new functional hierarchy and in Urbino to confirm its role as a University City. the two Projects today represent a model with specific indications about how and what to do, because «by now it is time to accept that, besides the restoration and recovery of buildings, something else is needed, the idea of a superior order is needed which focuses on the theme of urban [and human] relationships, i.e. the very life of the city».[11] the 1960s PRG for the City of Urbino thus continues the process begun in Palermo in the 1980s, implementing the same strategy, above all about the idea of the inseparability of architecture and town planning, as manifested not only in its altimetric representation but also in its subdivisions into contexts and roles, its porosity and widespread centrality. to these is added the instrument of participation, experimented with in Urbino by de Carlo in a scientific manner, through what the author himself defined as analyses of the social-economic and spatial characteristics of the territory and an outline of the trends. these were fundamental tools within the definition of a method, as the author himself asserts, and can be utilized again in other cities for two reasons: the tools don't allow the method to be subjected to schematization and they cannot be reduced to formulae. they are also a help in understanding possible future transformations in the case of continued development without the intervention of new actions; moreover, they can indicate where it may be necessary to intervene and also to direct development to improve the actual state of things. this method allows for the identification of a range of intervention tools that are varied, differentiated and appropriate to particular situations. within this synthesis specific problems are identified and investigated:

1) The consciousness and memory of urban images;

2) The perception of the values of the landscape;

3) The conservation and the corrosion of structures and urban forms;

4) The cohesion and separation between the historic centre and area of expansion;

5) The destiny of any activities and its architectural-urban reflections.

It can be asserted that the research carried out in the PRG of Urbino is de Carlo's contribution to the Piano for Palermo. In Palermo there is neither explicit nor evident participation; rather, it is veiled in the attention given to the dwellings of ethnic groups and about actions supporting the activities of the market. In the Piano for Urbino of the 1960s, de Carlo had anticipated a series of interventions linked to the physical structure of the territory. this neither modified nor eliminated specific functions, but they were rather interventions in the organizational systems of space which the community had chosen to accept over the years regarding development trends, attitudes and aspirations of social groups. At the same time, he had outlined the consequences of such a choice on a territory, the operations to be carried out and the commitments to be undertaken so that it could be realized in three-dimensional space. this resembled an organizational frame, an instrument of control and for territorial action which included standards, obligations, incentives, regulations and solicitations. In the second Piano for Urbino of the 1990s, de Carlo proposed a change of perspective, in other words, a view of the city starting from the territory. these are the years in which he carried out the tentative design, a subject he often discussed in his journal Spazio e società. In no. 71 of 1995, he defines it as a process that starts with a 'reading' of the territory including some initial discussions with the inhabitants, gradually leading on to a changeable architectural design in which physical space is a natural articulation of social space. de Carlo writes: «by proceeding alternately with 'readings' and tentative design, one ends up discovering the existence of a genetic code governing the birth and development of the place where an intervention is desired, and that any intervention which is inconsistent with the reasons for that code would produce town planning, architectural and social alienation In both Plans, Palermo's and Urbino's, the objective was to enable the historic city and the territory "to be in a position to re-enter the modern world", using design and the "rediscovery" of a system of routes able to establish diaphragms between private and relational space and linked to the flows of interest to eliminate the causes and consequences of segregation and to integrate the formal context with the

social-economic one, thus transforming it into a factor for development. In conclusion, the relationship between the theme of the safeguarding and development of the cultural heritage and the problem of the new communities which at present inhabit the historic centre, if clearly explained as to strategy and methodology, could be revealed to be useful for a new 'design culture' and the management of the historic and contemporary patrimony, in which social inclusion and new models of participation could offer the basis for transformations. This could also set in motion an ever-increasing process of toleration and respect for ethnic and cultural diversity in local areas intended as «places to celebrate the rebirth of the city, starting from neighbourhoods with their often confrontational, yet inevitably, human relationships. An in-depth investigation, which suitably compares the Piano Programma for the historic centre of Palermo and the Piano Regolatore of Urbino, could generate a strategy from which to extract a clear methodology to apply, where necessary, in other cities. the starting point would be the keywords tried out in Palermo and the declension of the structured participation in Urbino: the subdivision into contexts and roles, iconology, the idea of porosity and widespread centrality, the analysis of social-economic and spatial characteristics of the territory, the outline of trends and tentative design. Furthermore, in the adjustment of dwellings to specific housing models linked to ethnic origins - within contexts and roles (the redesign of Urbino as a university city, Palermo as a developing university city) - and in the introduction of new functions of a social nature, there is great value in terms of the conquest of the right to the city. As a practical consequence, there is the development of an ethical conscience conducive to a positive outcome in urban politics when carried out in the logic of social inclusion. Following along the same wavelength of recent interpretations of participation, the process of the recovery of public and private property should not alter the existing fabric, but rather integrate it with new space in which the recognition of its historicity would have the capacity to unite citizens and strengthen the sense of belonging to a place, while at the same time restoring its identity. the personal histories of families resident there could in this way be linked to the wider sense of the history of the city, to be recounted, improved, defended and in a certain way preserved, even with the transformation of usages and space. the recent restoration of Palazzo Butera in Palermo (2016) could serve as an example: the Valsecchi family, who had acquired the property some years earlier, decided to move into the part of building traditionally reserved for domestic staff and to transform the remaining part into a large museum open to the city. Just as in Urbino, today in Palermo

private courts are becoming public and always - despite the torpedoing received - it seems that the vision of the Piano Programma is being realized. However, there remains the need for it to become effective in all its complexity. (Daidone,2017)

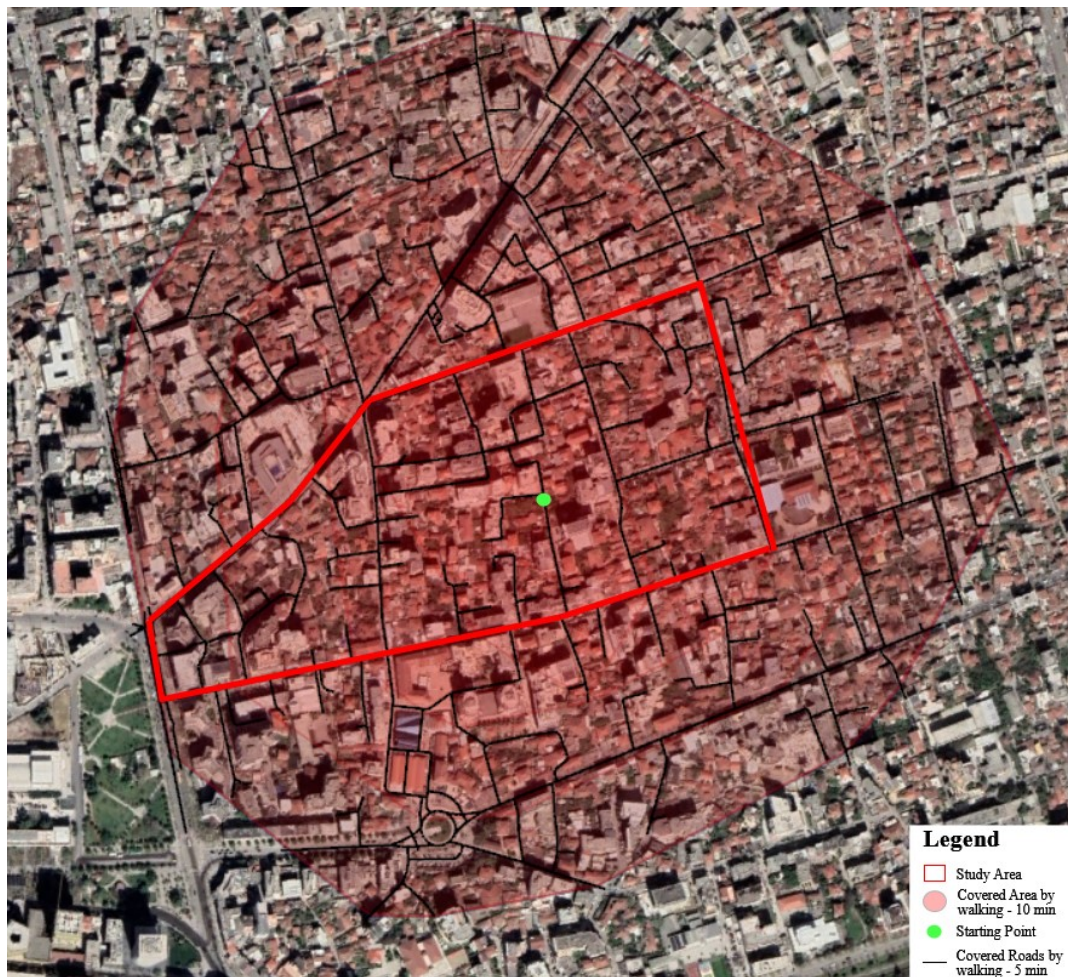## 4.3 Piano Programme Implementation in Selvia

Figure 35: Study Area with 10 minutes walking coverage (Source: Author)

In figure 35 is shown a walkability analysis done by an software created by PhD. Marcus White called pedcatch. Through pedcatch is generated maximun walkability and coverage following existing roads and paths. As shown above the red layer represents the total area coverage which is 660,089 m2. Black lines are existing streets and paths that are reached by human walkability in a time frame of 10 minutes and a speed of 1.12 m/s. Maximum distance reached in 10 minutes in whole area is 1,413,744 meters.

Figure 36: Study Area with 5 minutes walking coverage (Source: Author)

In the same way is done the analysis but at time of 5 minutes. The total coverage area is 156,682 m2. Maximum reached distance is 353,436 meter at a speed of 1.12 m/s.
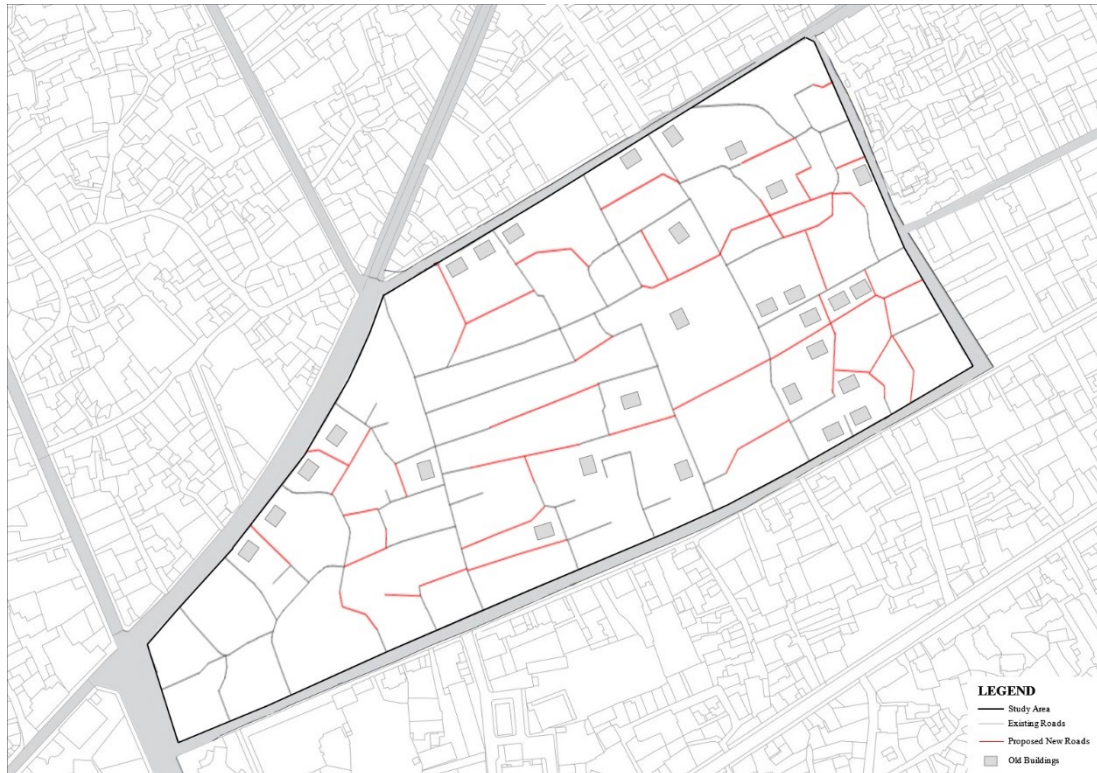
Figure 37: Study Area with new proposed paths (Source: Author)

Following the Piano Programme methodology, in figure 37 are shown proposed new paths that go through old villas yards and backyards which aim to give them full accessibility where the main beneficiaries are not only the villas, but also the whole inhabitants they can go in the same place but in a shorter time.

Through GIS we can link the existing paths with the proposed ones and can do again the test with new paths included.
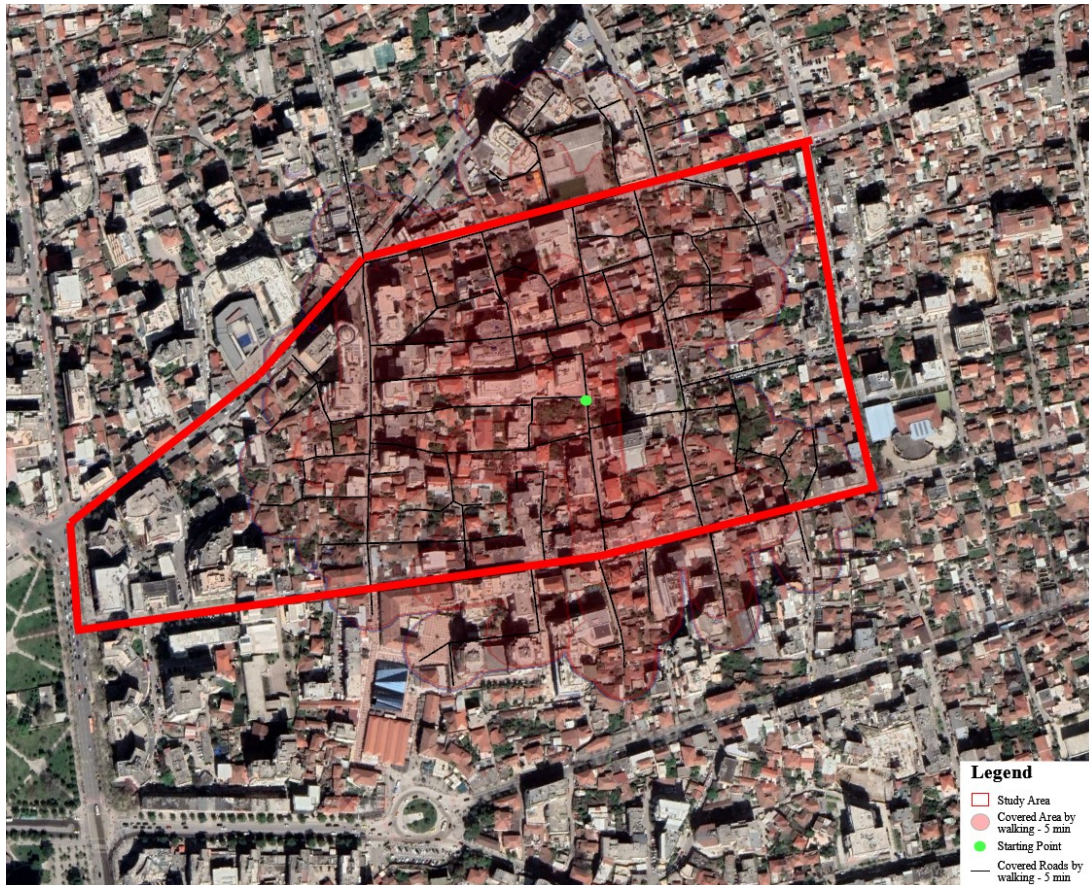
Figure 38: Study Area with 5 minutes walking coverage including new proposed paths (Source: Author)

In figure 38 is shown total coverage area within 5 minutes walking. Total coverage at the same speed of 1.12 m/s is increased by 15.6% with a total area of 181,256 m2 from 156,682 that was before implemented paths.

Figure 39: Study Area greenery and circulation (Source: Author)

In figure 39 is shown schematically greenery and circulation in study area. Main flow of circulation inside the area is concentrated in vertical pink arrows. The methodology is providing new paths through greenery areas in order to expose old buildings. These new paths are shown in the map as horizontal lines that are connected with the main vertical flow, using main greenery area as intersection and creating new areas for potential development.

Figure 40: Study Area exposing main positively effected areas (Source: Author)

As shown above, blue circle shows main potential areas that can benefit form new accessibility proposal. They can become qualitative areas that can produce gatherings and bring life inside those "isolated" zones. In Figure 41 and 42 are shown schematically how this approach can work.
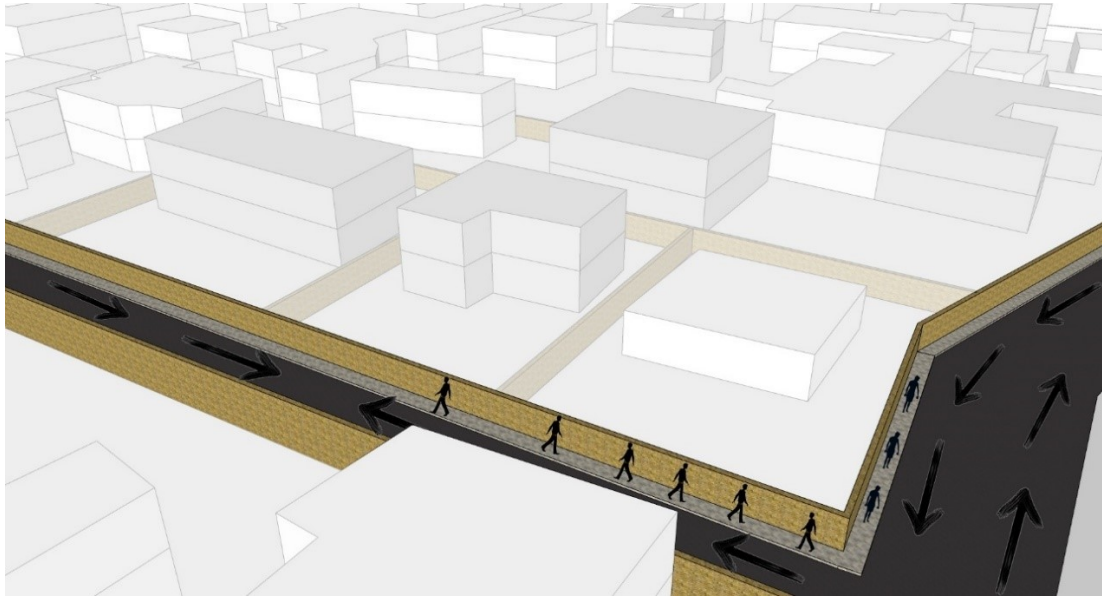
4.3.1 Implementation Effects

Figure 41: Existing circulation atmosphere (Source: Author)

In figure 41 we can see how those huge walls prevent the connection of the building with the road. Without this connection, the quality of street is really poor, and this effect also the buildings that are in these streets, especially the old fabric that has values to show.

Figure 42: Created Atmosphere with implementation of piano programme methodology (Source: Author)

Atmosphere created in figure 42 shows the huge impact that this opening and this connection to the road can have. An impact that not only rises the quality but also explore and generate new opportunities that can make an abandoned space liveable and rise the local economy. Since the quality of the road is linked with the connection that this road has with the buildings, those new paths can rise also the quality of the land and not only the buildings

Following the same methodology, Piano Programme could save old fabric form human hazard. Since it is proven and it is working becouse that strategy transformed historic area in one of the main and richest zones in Palermo, considering the strategic position of Selvia neighbourhood, can do the same effect there by increasing its value, giving full accessibility and attracting tourism.

CHAPTER 5

CONCLUSION

This thesis had several issues such as collecting data of the villas and fullfilling schedas, accessing private land and gardens. Therefore this thesis can be further more developed. In order to implement pianno programma strategic there could be issues with land owners wich can be solved through agreements with the benefitial of both sides.

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Appendixes

Official list of protected monuments and buildings inside the ring of Tirana City (Source: IKTK)

1. Kalaja në qytetin e tiranës – Category I – Tiranë
2. Ura e Tabakëve – Category I – Tiranë
3. Katedralja e Shën Palit në bulevardin "M. Kashen" – Category II – Tiranë
4. Kisha Katolike në rrugën e Kavajës – Category II – Tiranë
5. Kisha Ortodokse ; rruga e Kavajës "(II-135) – Category II – Tiranë
6. Xhamia e Ethem beut – Category I – Tiranë
7. Teqeja e Sheh Dyrrit – Category I – Tiranë
8. Tyrbja e Kapllan Pashës – Category I – Tiranë
9. Aksi i rrugës "Skënderbej" dhe godinat në të dy anët e kësaj rruge (blloku i ambasadave) rruga skënderbej (II -154) – Category II – Tiranë
10. Sheshi "Avni Rrustemi" – Category II – Tiranë
11. Sheshi i Teqesë; në rr. e "Barrikadave" – Category II – Tiranë
12. Kulla e Sahatit në qytetin e Tiranës – Category I – Tiranë
13. Ish banesa e Toptanasve (pasuri shteti) – Category I – Tiranë
14. Banesa e Kazanëve – Category I – Tiranë
15. Banesa e Reshat Petrelës në rrugën e Barrikadave Nr. 109 – Category I – Tiranë
16. Banesa e Shijakasve – Category I – Tiranë
17. Ndërtesa ku ka pasur qendrën Organizata Bashkimi në kohën e revolucionit të qershorit – Category I – Tiranë
18. Shtëpia e Xhezmi Dellit – Category I – Tiranë
19. Banesa ku ka jetuar familja e Nënë Terezës – Category II – Tiranë
20. Vila Bardha në rrugën "Lekë Dukagjini" – Category II – Tiranë
21. Banesë tip vilë në rr. "Lekë Dukagjinii"në krah të stadiumit "Q.Stafa" – Category II – Tiranë
22. Banesa Petrela në rr.Barikadave – Category II – Tiranë
23. Banesa kolektive - 5 kat në rr."Dëshmorët e 4 Shkurtit – Category II – Tiranë
24. Banesë tip vilë në rr. "Dëshmorët e 4 Shkurtit, ecram. – Category II – Tiranë
25. Banesa tip vilë në rr. "Dëshmorët e 4 Shkurtit, ish Vila 31 – Category II – Tiranë

26. Banesë tip vilë në rr. "Lekë Dukagjinii" ambasada e Maqedonisë së Veriut – Category II – Tiranë

27. Banesë tip vilë në rr. "Lekë Dukagjinii" Restorant Dukagjini – Category II – Tiranë

28. Banesë tip vilë në rr. "Lekë Dukagjinii" Vila Logoreci – Category II – Tiranë

29. Banesa tip vilë rr. "Donika Kastrioti" pas agjensisë Odisea – Category II – Tiranë

30. Banesa tip vilë rr. "Donika Kastrioti", OSCE – Category II – Tiranë

31. Banesa tip vilë në rr. "Dëshmorët e 4 shkurtit", Banka Botërore – Category II – Tiranë

32. Banesa tip vilë rr. "Donika Kastrioti", rezidenca e Ambasadës Zvicerjane – Category II – Tiranë

33. Banesa tip vilë rr. "Donika Kastrioti", Ambasada e Komunitetit Evropian – Category II – Tiranë

34. Banesa tip vilë në rr. "Dëshmorët e 4 Shkurtit", Delegacion e Komisionit Evropian – Category II – Tiranë

35. Banesa tip vilë rr. "Deshmorët e 4 Shkurtit" – Category II – Tiranë

36. Banesë tip vilë , rr. "S.Toptani" – Category II – Tiranë

37. Banesë tip vilë në rrugën "Ismail Qemali" në lulishten përbri presidencës – Category II – Tiranë

38. Banesa tip apartamenti, në Bulevardin "Zogu i Parë" – Category II – Tiranë

39. Banesa tip vilë, në Bulevardin "Zogu i Parë" – Category II – Tiranë

40. Banesa tip vilë, në rr. "Asim Vokshi" – Category II – Tiranë

41. Banesë tip vilë, në rr. "K.Karafili" – Category II – Tiranë

42. Banesë tip vilë, në rr. e "Durrësit" – Category II – Tiranë

43. Vilë banimi tre kate, në rr. e "Durrësit" – Category II – Tiranë

44. Banesë kolektive 6 kate, Bulevardi "Bajram Curri"(II - 114) – Category II – Tiranë

45. Blloku i vilave, sheshi "Avni Rrustemi" – Category II – Tiranë

46. Banesë kolektive 4 kate, "Pallatet e Xhenios" rruga "Ismail Qemali" (II - 115) – Category II – Tiranë

47. Banesë kolektive 3 kate, "Pallatet e Xhenios" rruga "Ismail Qemali" (II -116) – Category II – Tiranë

48. Banesë kolektive 4 kate, "Pallatet e Xhenios" rruga "Ismail Qemali" (II - 117) – Category II – Tiranë

49. Banesë kolektive 3 kate, "Pallatet e Xhenios" rruga "Ismail Qemali" (II - 118) – Category II – Tiranë

50. Banesë kolektive 3 kate, "Pallatet e aviacionit" rruga "Sami Frashëri"(II - 119) – Category II – Tiranë

51. Banesë kolektive 5-6 kate, Bulevardi "Bajram Curri" (II - 125) – Category II – Tiranë

52. Banesë tip vilë 2 kate, rruga e "Kavajës" (II -127) – Category II – Tiranë

53. Banesë kolektive 3 kate, rruga e "Kavajës" (II -128) – Category II – Tiranë

54. Banesë tip vilë 2 kate, rruga "Shyqyri Bërxolli" (II -130) – Category II – Tiranë

55. Banesë tip vilë 2 kate, rruga "Shyqyri Bërxolli" (II -131) – Category II – Tiranë

56. Banesë tip vilë 2 kate, rruga "Shyqyri Bërxolli" (II -132) – Category II – Tiranë

57. Banesë tip vilë 2 kate, rruga e "Kavajës" (II -134) – Category II – Tiranë

58. Banesë kolektive 5 kate, (ark. P.Kolevica) Rruga e "Kavajës" (II - 136)– Category II – Tiranë

59. Banesë kolektive 3 kate, rruga e "Durrësit" (II -140) – Category II – Tiranë

60. Banesë tip vilë 3 kate, rruga e "Durrësit" (II -141) – Category II – Tiranë

61. Banesë tip vilë 3 kate, rruga "Sotir Peci" (II -142) – Category II – Tiranë

62. Banesë kolektive 4 kate, rruga e "Kavajës" (II -148) – Category II – Tiranë

63. Banesë tip vilë 2 kate;Rruga "Kont Urani"(II - 150)– Category II – Tiranë

64. Banesë tip vilë 2 kate, rruga "Kont Urani" (II -151) – Category II – Tiranë

65. Banesë tip vilë 2 kate, rruga "Mustafa Matohiti" (II -173) – Category II – Tiranë

66. Banesë tip vilë 2 kate, rruga "Jul Variboba" (II -175) – Category II – Tiranë

67. Banesë tip vilë 2 kate, rruga "Jul Variboba" (II -176) – Category II – Tiranë

68. Banesë tip vilë 2 kate, rruga "Jul Variboba" (II -177) – Category II – Tiranë

69. Banesë tip vilë 2 kate, rruga "Jul Variboba" (II -178) – Category II – Tiranë

70. Banesë tip vilë 2 kate, rruga e "Elbasanit" (II -179) – Category II – Tiranë

71. Banesë tip vilë 2 kate, rruga e "Elbasanit" (II -180) – Category II – Tiranë

72. Banesë tip vilë 2 kate, rruga "Mine Peza" (II - 155) – Category II – Tiranë

73. Vila Tafaj, Hotel 3 kate, rruga "Mine Peza" (II - 156) – Category II – Tiranë

74. Banesë tip vilë 3 kate, rruga "Mine Peza" (II - 157) – Category II – Tiranë

75. Banesë tip vilë 2 kate, rruga "Maliq Muço" (II - 159) – Category II – Tiranë

76. Banesë kolektive 6 kate, rruga e "Durrësit" (II -161) – Category II – Tiranë

77. Banesë kolektive 6 kate, rruga "Ded Gjo Luli" (II -162) – Category II – Tiranë

78. Banesë kolektive (Kafe "Flora") 6 kate, rruga e "Durrësit" (II -163) – Category II – Tiranë

79. Banesë kolektive 5 kate, Bulevardi "Zogu I" (II -164) – Category II – Tiranë

80. Banesë tip vilë 2 kate, rruga "Dervish Hima" (II - 165) – Category II – Tiranë

81. Banesë tip vilë 3 kate, rruga "Asim Zeneli" (II - 168) – Category II – Tiranë

82. Banesë tip vilë 2 kate, rruga "Jeronim de Rada" (II -186) – Category II – Tiranë

83. Banesë tip vilë 2 kate, rruga "Jeronim de Rada" (II -187) – Category II – Tiranë

84. Banesë tip vilë 3 kate, rruga "Xhoxhi Martini" (II -188) – Category II – Tiranë

85. Banesë tip vilë 2 kate, Sheshi "Avni Rustemi" (II -189) – Category II – Tiranë

86. Banesë kolektive 2 kate, rruga "Hoxha Tahsim" (II -191) – Category II – Tiranë

87. Banesë tip vilë 2 kate, rruga "Hoxha Tahsim" (II -192) – Category II – Tiranë

88. Banesë tip vilë 2 kate, rruga "Musa Karapici" (II -193) – Category II – Tiranë

89. Banesë tip vilë 2 kate, rruga"Tefta Tashko Koço"(II - 194)– Category II – Tiranë

90. Banesë tip vilë 2 kate, rruga "Hoxha Tahsim" (II -195) – Category II – Tiranë

91. Banesë kolektive 2 kate, rruga "Tefta Tashko Koço" (II -196) – Category II – Tiranë

92. Banesë tip vilë 2 kate, rruga"Tefta Tashko Koço"(II -198) – Category II – Tiranë

93. Banesë tip vilë 2 kate, rruga"Tefta Tashko Koço"(II -199) – Category II – Tiranë

94. Banesë tip vilë 2 kate, rruga "Rifat Bodinaku" (II -200) – Category II – Tiranë

95. Banesë tip vilë 2 kate, rruga "Hoxha Tahsim" (II -202) – Category II – Tiranë

96. Banesë tip vilë 2 kate, rruga e "Dibrës" (II -203) – Category II – Tiranë

97. Banesë kolektive 2 kate, rruga e "Dibrës" (II -204) – Category II – Tiranë

98. Banesë tip vilë 2 kate, rruga e "Dibrës" (II -206) – Category II – Tiranë

99. Banesë tip vilë 3 kate, rruga e "Saraçëve" (II-207) – Category II – Tiranë ()

100. Banesë tip vilë 2 kate, rruga "Dervish Hekali" (II-208)– Category II – Tiranë

101. Banesë tip vilë 1 kate, rruga "Dervish Hekali" (II-209) – Category II – Tiranë

102. Banesë tip vilë 2 kate, rruga "Qemal Stafa" (II-210) – Category II – Tiranë

103. Banesë tip vilë 2 kate, rruga "Qemal Stafa" (II-211) – Category II – Tiranë

104. Banesë tip vilë 1 kate, rruga "Qemal Stafa" (II - 212) – Category II – Tiranë

105. Banesë tip vile Bar "Gloria" 2 kate, rruga "Qemal Stafa" (II - 213) – Category II – Tiranë

106. Banesë tip vilë 2 kate, Sheshi "Avni Rustemi" (II -215) – Category II – Tiranë

107. Banesë tip vilë 3 kate, Sheshi "Avni Rustemi" (II - 216) – Category II – Tiranë

108. Banesë kolektive 2 kate, rruga "Tafaj" (II -217) – Category II – Tiranë

109. Banesë tip vilë 2 kate, rruga "Tafaj" (II -218) – Category II – Tiranë

110. Banesë tip vilë 1,1/2 kate, rruga "Shenasi Dishnica" (II -219) – Category II – Tiranë

111. Banaesë tip vilë 2 kate, rruga e "Dibrës" (II -225) – Category II – Tiranë

112. Banesë tip vilë 2 kate, rruga "Papakristo Negovani" (II -226) – Category II – Tiranë

113. Banesë tip vilë 2 kate, rruga "Asim Vokshi"(II - 227) – Category II – Tiranë

114. Banesë tip vilë 2 kate, rruga "Reshit Petrela" (II -228) – Category II – Tiranë

115. Banesë tip vilë 2 kate, rruga "Mahmut Fortuzi" (II -230) – Category II – Tiranë

116. Banesë tip vilë 2 kate, rruga "Abdullah Gjinali"(II -231) – Category II – Tiranë

117. Banesë tip vilë 2 kate, rruga "Zenel Baboçi" (II -232) – Category II – Tiranë

118. Banesë tip vilë 2 kate, rruga "Siri Kodra" (II -233) – Category II – Tiranë

119. Banesë kolektive 2 kate, rruga "Siri Kodra" (II -234) – Category II – Tiranë

120. Banesë kolektive, ark. Maks Velo, 6 kate, rruga e "Dibrës" (II -237) – Category II – Tiranë

121. Banesë tip vilë 2 kate, rruga "Vaso Pasha" (II -238) – Category II – Tiranë

122. Vila Tartari në rr. e "Kavajës" – Category II – Tiranë

123. Shkolla e Mesme Pedagogjike "17 Nëntori" – Category I – Tiranë

124. Godina e parlamentit të parë Shqiptar, së bashku me ambientet ndihmëse dhe territorrin përreth saj – Category I – Tiranë

125. Parku i lodrave në rr. e Elbasanit (nuk përfshihet pjesa e territorit që ndodhet në zonën kadastrale nr. 8160, me numër pasurie 2/160, 2/161, 2/171, 2/271, 2/183, 2,184, 2/291, te cilat kane destinacion parkimi, hequr me Urdher nr. 205 dt. 15.08.2013) – Category II – Tiranë

126. Inima rr. "Lekë Dukagjini" – Category II – Tiranë

127. Universiteti i Tiranës në Sheshin "Nënë Tereza" – Category II – Tiranë

128. Stadiumi Kombëtar "Qemal Stafa" në Sheshin "Nënë Tereza" (monument kulture vetëm fasada kryesore (perëndimore) e stadiumit shpallur me Urdher nr. 127, dt. 25.05.2016 – Category II – Tiranë

129. Biblioteka e Universitetit në Sheshin "Nënë Tereza" – Category II – Tiranë

130. Muzeu Arkeologjik në Sheshin "Nënë Tereza" – Category II – Tiranë

131. Pallati i Kongreseve në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

132. Akademia e Arteve në Sheshin "Nënë Tereza" – Category II – Tiranë

133. Selia e Presidencës në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

134. Klinika mjekësore qeveritare në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

135. Radio Televizioni Shqiptar në rrugën "Lekë Dukagjini – Category II – Tiranë

136. Kryeministria në Bulevardin "Deshmorët e Kombit" – Category II – Tiranë

137. Ndërtesa e Kuvendit të Shqipërisë në Bulevardin "Deshmorët e Kombit" – Category II – Tiranë

138. Banka Arabe në rr."Donika Kastrioti" – Category II – Tiranë

139. Pallati i Shallvares nr.1 në rr."Dëshmoret e 4 Shkurtit" – Category II – Tiranë

140. Pallati i Shallvares nr.2 në rr."Dëshmoret e 4 Shkurtit" – Category II – Tiranë

141. Pallati i Shallvares nr.3 në rr."Dëshmoret e 4 Shkurtit" – Category II – Tiranë

142. Parku " Rinia" në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

143. Hotel "Dajti" në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

144. Ambasada Italiane në rr."Lekë Dukagjini" – Category II – Tiranë

145. Galeria Kombëtare e Arteve në Bulevardin "Dëshmorët e Kombit" – Category II – Tiranë

146. Kompleksi ndërtimor rr. "Murat Toptani" nr.2 (qendra kulturore e fëmijëve) – Category II – Tiranë

147. Akademia e Shkencave në rr. "Murat Toptani" – Category II – Tiranë

148. Salla e Seancave Plenare të Kuvendit të Shqipërisë në rr. e "Elbasanit" – Category II – Tiranë

149. Kabina e parë elektrike dhe shatërvani në rr. "Punëtoret e Rilindjes". – Category II – Tiranë

150. Godina e ish të përndjekurve në rr. e Elbasanit – Category II – Tiranë

151. Godina ish Biblioteka Kombëtare (ish Sarajet Toptanet), lagjia 28 nëntori, nr.7, rr. "Alqi Kondi" – Category II – Tiranë

152. Biblioteka Kombëtare e vjetër (fondi), rr. "Punëtoret e Rilindjes" – Category II – Tiranë

153. Godina ish Hosteni rr. "Punëtoret e Rilindjes" – Category II – Tiranë

154. Ministria e Turizmit, Kulturës, Rinisë dhe Sporteve rr. "S.Toptani" – Category II – Tiranë

155. Bashkia e tiranës në "sheshin skenderbej" – Category II – Tiranë

156. Ministria e Punëve Publike, Transportit dhe Teleko - munikacionit rr. "Dëshmorët e Kombit" – Category II – Tiranë

157. Ministria e Brendshme në Bulevardin "Dëshmoret e Kombit" – Category II – Tiranë

158. Ministria e Mbrojtjes në Bulevardin "Deshmorët e Kombit" – Category II – Tiranë

159. Ministria e Bujqësisë në Bulevardin "Dëshmorët e Kombit". – Category II – Tiranë

160. Ministria Financave në Bulevardin "Dëshmorët e Kombit". – Category II – Tiranë

161. Selia e Partisë Socialiste Sheshi "Skënderbej" – Category II – Tiranë

162. Gjykata e Lartë në rr."Myslim Shyri" – Category II – Tiranë

163. Postë Telegrafa në rr. "Dëshmorët e 4 Shkurtit" – Category II – Tiranë

164. Laboratori i Kriminalistikës rr. "Dëshmorët e 4 Shkurtit" Muzeu Kombëtar i Përgjimeve "Shtëpia e Gjetheve" – Category II – Tiranë

165. Pallati i Kulturës në Sheshin "Skendërbej" – Category II – Tiranë

166. Banka e Shtetit Shqiptar Sheshi "Skendërbej" – Category II – Tiranë

167. Qendra "Veve" në Bulevardin "Zogu i Parë" – Category II – Tiranë

168. Ish ATSH në Bulevardin "Zogu i Parë" – Category II – Tiranë

169. Pallati i hershëm në Bulevardin "Zogu i Parë" – Category II – Tiranë

170. Selia e Partisë "Republikane" në Bulevardin "Zogu i Parë"– Category II – Tiranë

171. Materniteti në Bulevardin "Zogu i Parë" – Category II – Tiranë

172. Fakulteti i Shkencave të Natyrës në Bulevardin "Zogu i Parë" – Category II – Tiranë

173. Alfa Bank në Bulevardin "Zogu i Parë" – Category II – Tiranë

174. Hotel London (ish Donika) në Bulevardin "Zogu i Parë" – Category II – Tiranë

175. Pallati "Ali Kelmendi" në Bulevardin "Zogu i Parë" – Category II – Tiranë

176. Muzeu Historik Kombëtar në Sheshin "Skendërbej" – Category II – Tiranë

177. Lidhja e Shkrimtarëve në rr. e " Kavajës" – Category II – Tiranë

178. Hotel "Internaciona l" në rr. "K. Karafili" – Category II – Tiranë

179. Ambasada e Vatikanit në rr. e "Durrësit" – Category II – Tiranë

180. Hotel Parku në rr. "Punëtoret e Rilindjes" – Category II – Tiranë

181. Pallati Kasmi në rr. "Punëtoret e Rilindjes" – Category II – Tiranë

182. Komuniteti Mysliman në rr. "Punëtoret e Rilindjes". – Category II – Tiranë

183. Selia e Partisë Social - Demokrate – Category II – Tiranë

184. Ministria e Arsimit dhe e Shkencës në rr. e "Durrësit" – Category II – Tiranë

185. Pallati i Hershëm në rr. e "Durrësit" (përballë ministrisë së arsimit) – Category II – Tiranë

186. Ministria e Mjedisit në rr. e "Durrësit" – Category II – Tiranë

187. Ish Ambasada Jugosllave në rr. e Durrësit – Category II – Tiranë

188. Ish pastërtia në rr .e "Kavajës" – Category II – Tiranë

189. Instituti i Kulturës Popullore në rr. e "kavajës" – Category II – Tiranë

190. Fakulteti i Gjuhëve të Huaja në rr. e "Elbasanit" – Category II – Tiranë

191. Posta e vjeter tek ish "Vefa", Sheshi "Avni Rustemi" – Category II – Tiranë

192. Qendra Ndërkombëta re e Kulturës "Pjetër Arbnori" (Piramida) në Bulevardin "Dëshmorët e Kombit (II -110) – Category II – Tiranë

193. SH.Q.U.P. Bulevardi "Zhan D'Ark" (II -111) – Category II – Tiranë

194. Pallati i Vëllezërve Kaceli, Rruga "28 Nëntori" (II - 112) – Category II – Tiranë

195. Ministria e Integrimit, Bulevardi "Dëshmorët e Kombit" (II -113) – Category II – Tiranë

196. Ish Shtypshkronja (ЁolskЁeagen), 3 kate, rruga e "Kavajës"(II -152) – Category II – Tiranë

197. Instituti I Sigurimeve Shoqërore, 3 kate; rruga e "Durrësit"(II -153) – Category II – Tiranë

198. Godinë e Institucionit të Prefektit të Prefektit të Qarkut Tiranë, Rruga e "Kavajës" (II -137) – Category II – Tiranë

199. Ish kombinati Tekstil, rruga e "Kavajës" (II -139) – Category II – Tiranë

200. Godinë zyra, shërbime, 3 kate; rruga e "Durrësit"(II -146) – Category II – Tiranë

201. Albanian University, 3 kate; rruga e "Durrësit"(II -147) – Category II – Tiranë

202. Arkiva e Shtetit, 3 kate; rruga "Asim Vokshi"(II - 160) – Category II – Tiranë

203. Objekt arsimor privat, 3 kate; rruga "Asim Zeneli"(II -166) – Category II – Tiranë

204. Liceu Artistik, 4 kate; rruga e "Elbasanit"(II -172) – Category II – Tiranë

205. Fakulteti Gjeologji - Miniera, 3 kate; rruga "Gjenerali Nikols"(II -183) – Category II – Tiranë

206. Rezidenca e Ambasadës Italiane, 2 kate; rruga e "Elbasanit"(II -184) – Category II – Tiranë

207. Ambasada Amerikane, 2 kate; rruga e "Elbasanit"(II -185) – Category II – Tiranë

208. Godinë zyra, ish - Vefa, 3 kate; Sheshi "Avni Rustemi"(II -190) – Category II – Tiranë

209. Ministria e Jashtme, 4 kate; Bulevardi "Zhan d'Ark"(II - 201) – Category II – Tiranë

210. Drejtoria e Përgjithshme e Q.S.U.T., 2kate; rruga e "Dibrës"(II -220) – Category II – Tiranë

211. Fakulteti I Mjekësisë, 3 kate; rruga e "Dibrës"(II -221) – Category II – Tiranë

212. Ministria e Mbrojtjes, 3-4 kate rruga e "Dibrës"(II -222) – Category II – Tiranë

213. Oxhaku; rruga "Imer Ndregjoni"(II -223) – Category II – Tiranë

214. Medreseja në rr. e "Dibrës"– Category II – Tiranë

215. Namazgjaja në rr. e "Elbasanit" – Category II – Tiranë

216. Banesë 2 kat brenda Kalasë së Tiranës, Kompleksi i "Toptanëve" – Category II – Tiranë

217. Banesa ku ka jetuar Maks Velo, Rruga "Hoxha Tahsim", Nr. 57/2, Tiranë – Category II – Tiranë

List of villas

1- Villa nr.01, Rr. e Dibrës

2- Villa nr.02, Rr. e Dibrës

3- Villa nr.03, Rr. e Dibrës

4- Villa nr.04, Rr. e Dibrës

5- Villa nr.05, Rr. e Saraçëve

6- Villa nr.06, Rr. Tafaj

7- Villa nr.07, Rr. Tafaj

8- Villa nr.08, Rr. Tafaj

9- Villa nr.09, Rr. Riza Jasa

10- Villa nr.10, Rr. Tafaj

11- Villa nr.11, Rr. Riza Jasa

12- Villa nr.12, Rr. Musa Maçi

13- Villa nr.13, Rr. Xhemal Tafai

14- Vila nr.14, Rr. Qemal Stafa

15- Villa nr.15, Rr. Tafaj

16- Villa nr.16, Rr. 4 Dëshmorët

17- Villa nr.17, Rr. Ali Pashë Gucia

18- Vila nr.18, Rr. Ali Pashë Gucia

19- Vila nr.19, Rr. Thanas Ziko

20- Vila nr.20, Rr. Dervish Hekalli

21- Vila nr.21, Rr. Dervish Hekalli

22- Vila nr.22, Rr. Dervish Hekalli

23- Villa nr.23, Rr. Dervish Hekalli

24- Villa nr.24, Rr. Dervish Hekalli

25- Villa nr.25, Rr. Dervish Hekalli

26- Vila nr.26, Rr. Ali Pashë Gucia

27- Villa nr.27, Rr. Dervish Hekalli

28- Villa nr.28, Rr. Dervish Hekalli

29- Vila nr.29, Rr. Qemal Stafa
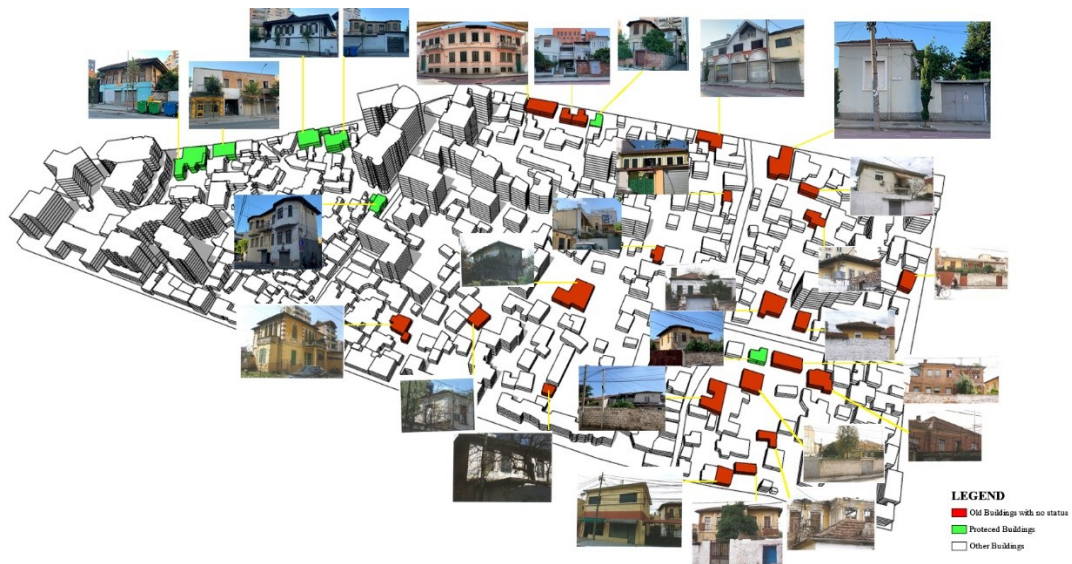
Figure 23: Old Fabric In Selvia (Source: Author)

Villa nr.01, Rr. e Dibrës

Figure 43: Villa nr.01 (Source: Author, 2022)

Villa nr.02, Rr. e Dibrës
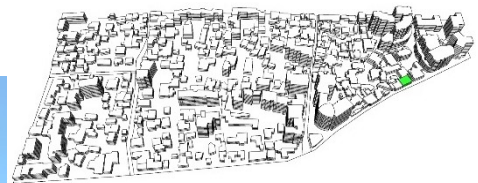
Figure 44: Villa nr.02 (Source: Author, 2022)

Villa nr.03, Rr. e Dibrës

Figure 45: Villa nr.03 (Source: Author, 2022)

Villa nr.04, Rr. e Dibrës

Figure 46: Villa nr.04 (Source: Author, 2022)

Villa nr.05, Rr. e Saraçëve

Figure 47: Villa nr.05 (Source: Author, 2022)

Villa nr.07, Rr. Tafaj
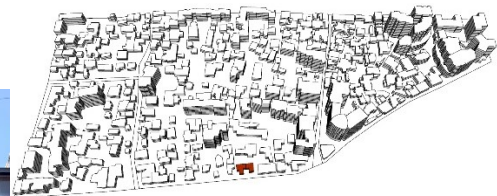
Figure 48: Villa nr.07 (Source: Author, 2022)

Villa nr.08, Rr. Tafaj

Figure 49: Villa nr.08 (Source: Author, 2022)

Villa nr.09, Rr. Riza Jasa
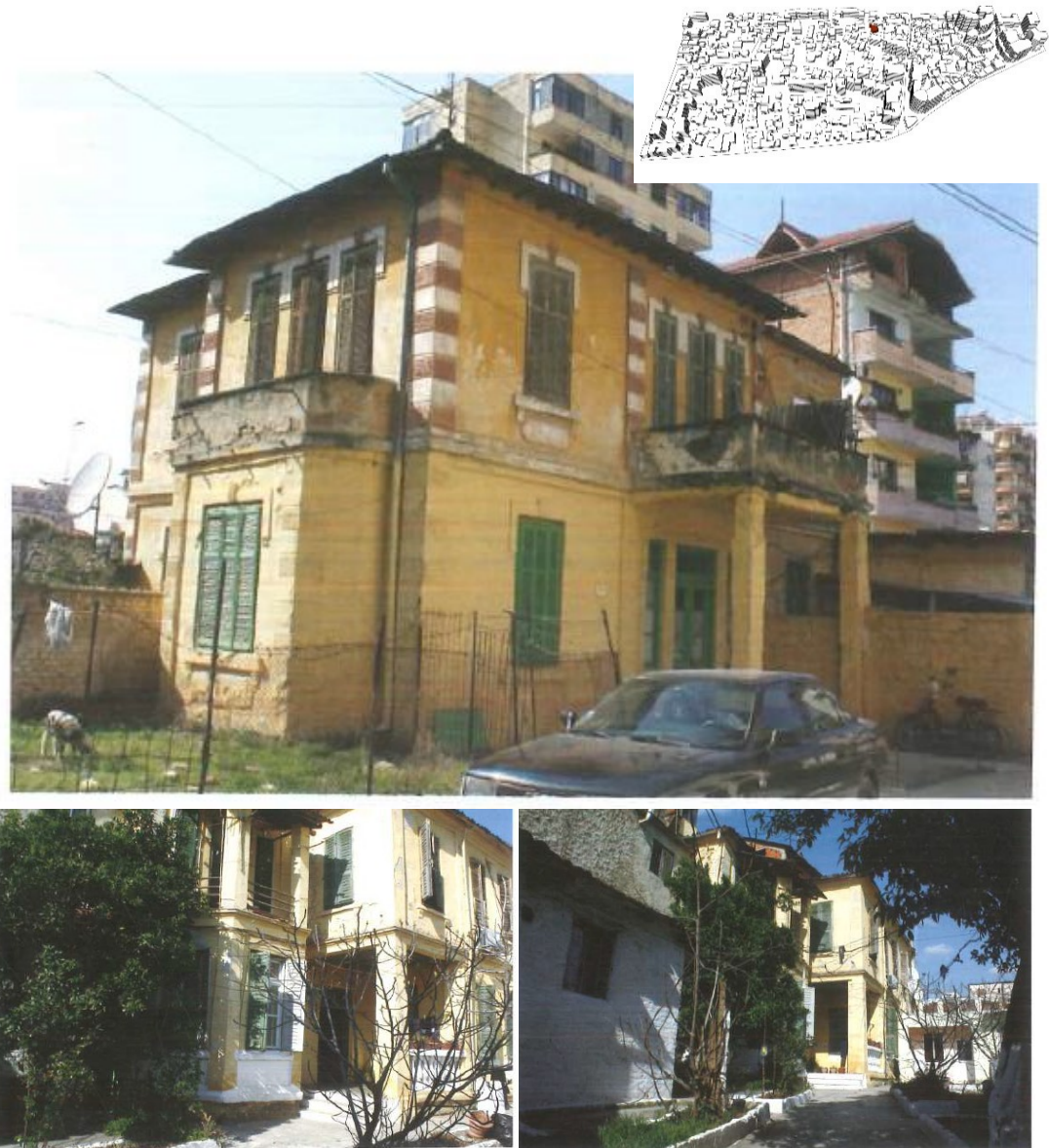
Figure 50: Villa nr.09 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.10, Rr. Tafaj

Figure 51: Villa nr.10 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.11, Rr. Riza Jasa

Figure 52: Villa nr.11 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.12, Rr. Musa Maçi

Figure 53: Villa nr.12 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.13, Rr. Xhemal Tafai

Figure 54: Villa nr.13 current condition (Source : Author, 2022)

Figure 55: Villa nr.13 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Figure 56: Architectural details applied on Villa nr.13 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.14, Rr. Qemal Stafa

Figure 57: Villa nr.14 (Source: Vilat e Tiranës, Dr Vera Bushati)

Figure 58: Villa nr.14 current condition (Source: Author, 2022)

Villa nr.15, Rr. Tafaj

Figure 59: Villa nr.15 (Source: Author, 2022)

Villa nr.17, Rr. Ali Pashë Gucia

Figure 60: Villa nr.17 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.18, Rr. Ali Pashë Gucia

Figure 61: Villa nr.18 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.19, Rr. Thanas Ziko

Figure 62: Villa nr.19 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.20, Rr. Dervish Hekalli

Figure 63: Villa nr.20 (Source: Vilat e Tiranës, Dr Vera Bushati)

Vila nr.21, Rr. Dervish Hekalli

Figure 64: Villa nr.21 (Source: Vilat e Tiranës, Dr Vera Bushati)

Vila nr.22, Rr. Dervish Hekalli
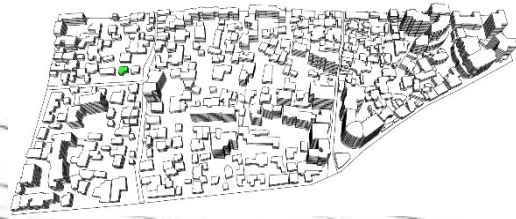
Figure 65: Villa nr.22 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Figure 66: Villa nr.22 current situation (Source: Author, 2022)

Villa nr.23, Rr. Dervish Hekalli

Figure 67: Villa nr.23 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.24, Rr. Dervish Hekalli

Figure 68: Villa nr.24 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.25, Rr. Dervish Hekalli

Figure 70: Villa nr.25 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.26, Rr. Ali Pashë Gucia
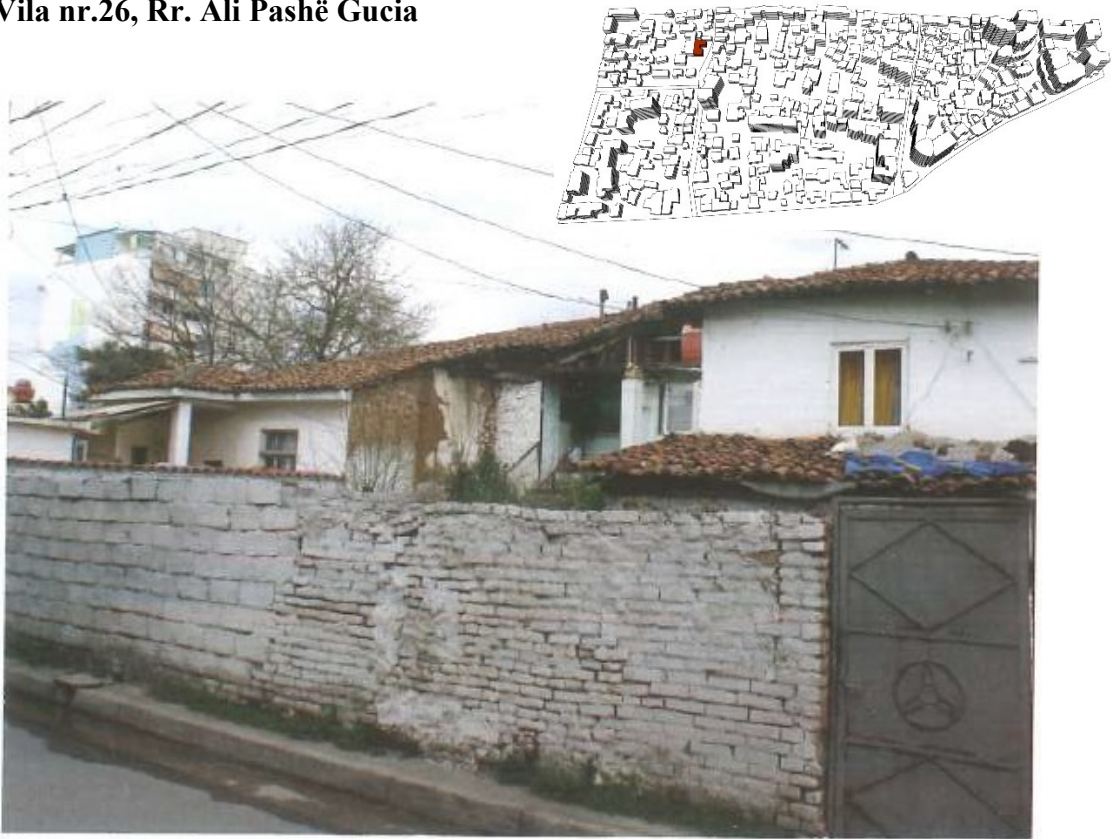
Figure 69: Villa nr.26 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Figure 71: Villa nr.26 current condition (Source: Author, 2022)

Villa nr.27, Rr. Dervish Hekalli

Figure 72: Villa nr.27 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Villa nr.28, Rr. Dervish Hekalli

Figure 73: Villa nr.28 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Vila nr.29, Rr. Qemal Stafa
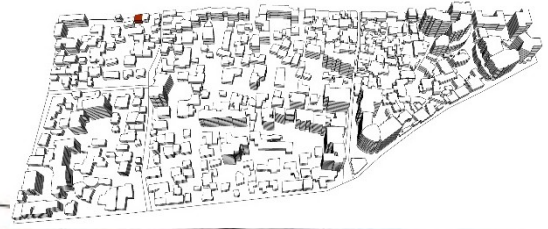
Figure 74: Villa nr.29 (Source: Vilat e Tiranës, Dr. Vera Bushati)

Questionnaire:

1- Your Gender?
2- Your Age?
3- Your Occupation?
4- Are you satisfied with the living conditions in your neighbourhood?
5- Do you think that you can find basic day care services in your neighbourhood?
6- Are you satisfied with the public spaces located in your neighbourhood?
7- Is socializing with other residents of your neighbourhood easy?
8- Do you feel safe in your neighbourhood?
9- Is there something you want to change in your neighbourhood?
10- Is your neighbourhood easily accessible and safe (by means of transportation)?
11- Is accessibility easy within your neighbourhood?
12- What is your preferred mode of transportation and why?
13- What mode of transportation do you mostly use to go to work/school?
14- Estimated time to grocery shop?
15- Estimated time to school?
16- Estimated time to work?
17- Route satisfaction?
18- On a range 1-5, how would you grade your neighbourhood in terms of safety, walkability, greenery, open spaces, public spaces, accessibility, parking, pollution, playgrounds/places for kids, public furniture, activities/services, social interaction, cycling experience, daily needs/essentials, living conditions, building conditions, privacy, streetscape pavement, disabled people accessibility, density, vibrancy?

In which unit of the city do you live?

63 responses

Legend:
- Tirana 1 (Ali Demi)
- Tirana 2 (Bulevardi Bajram Curri, Bule…
- Tirana 3 (Brryli, Xhamlliku)
- Tirana 4 (Kinostudio, Babrru, Allias)
- Tirana 5 (Blloku, Selita, Tirana e Re)
- Tirana 6 (Kombinati, Yzberishti)
- Tirana 7 (21 Dhjetori, Ish-Fusha e Avi…
- Tirana 8 (Selvia, Medreseja e Tiranës)

1/2
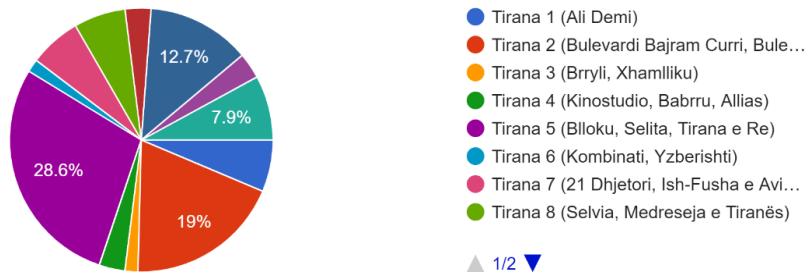
Table 3: Question 1 results

Your Gender:

64 responses

Legend:
- Male
- Female
- Other
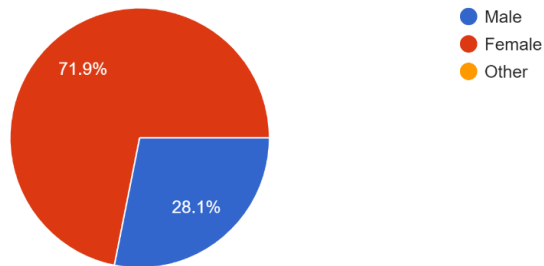
Table 4: Question 2 results

Your Age:

64 responses

Legend:
- 10-15 years
- 15-20 years
- 20-25 years
- 25-35 years
- 35-65 years
- 65+ years
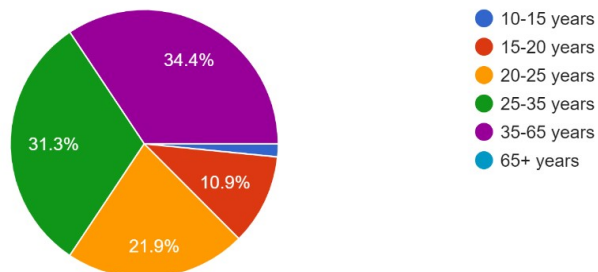
Table 5: Question 3 results

Your Occupation:
64 responses
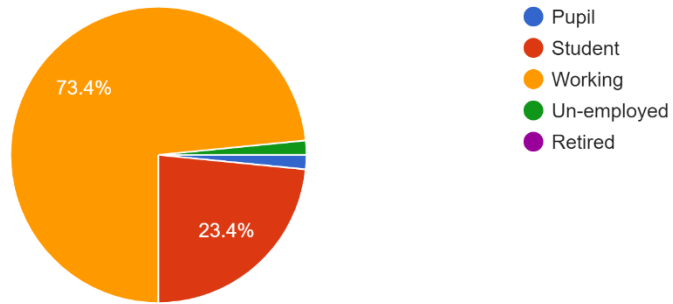
Table 6: Question 4 results

Are you satisfied with the living conditions in your neighborhood?
62 responses
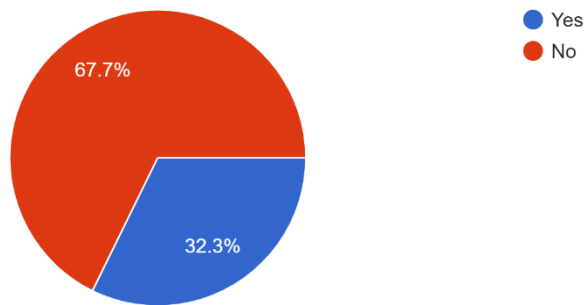
Table 7: Question 5 results

Are you satisfied with the public spaces located in your neighborhood?
62 responses
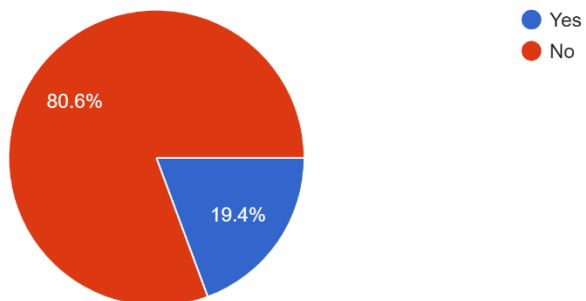
Table 8: Question 6 results

Do you think that you can find basic day care services in your neighborhood?

64 responses

- ● Yes
- ● No

23.4%

76.6%
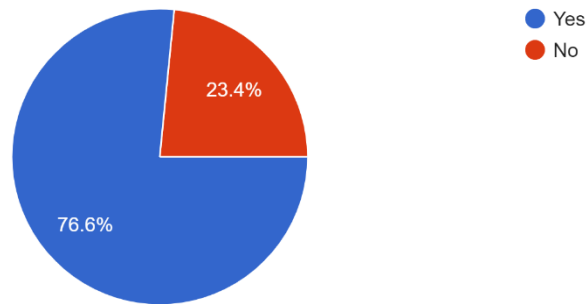
Table 9: Question 7 results

Is socializing with other residents of your neighborhood easy?

64 responses

- ● Yes
- ● No

46.9%

53.1%
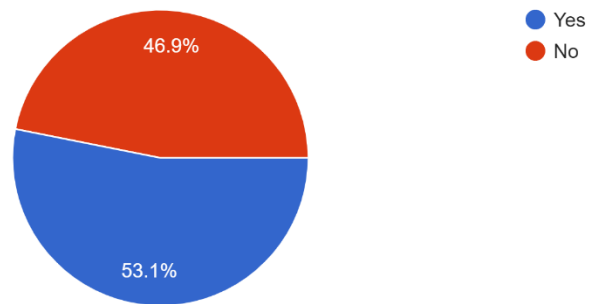
Table 10: Question 8 results

Do you feel safe in your neighborhood?

64 responses

- ● Yes
- ● No

21.9%

78.1%
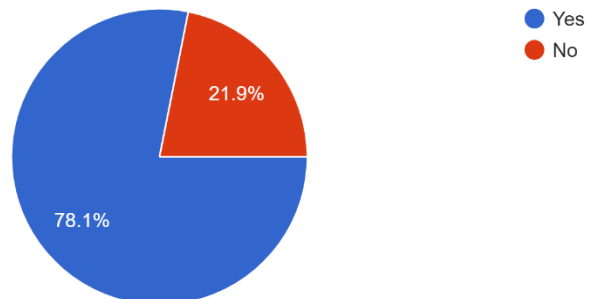
Table 11: Question 9 results

Is there something you want to change in your neighborhood?
64 responses

● Yes
● No

96.9%
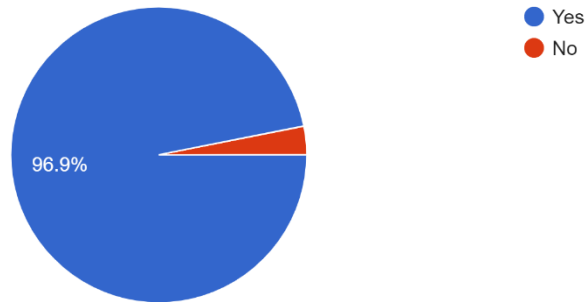
Table 12: Question 10 results

Is your neighborhood easily accessible and safe (by means of transportation)?
64 responses

● Yes
● No

32.8%

67.2%
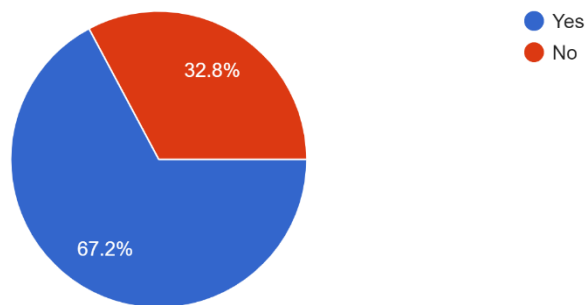
Table 13: Question 11 results

Is accessibility easy within your neighborhood?
64 responses

● Yes
● No
● Ye

32.8%

64.1%
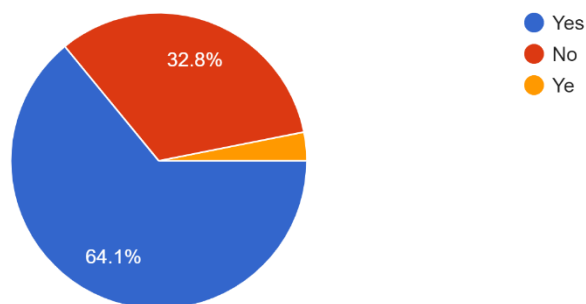
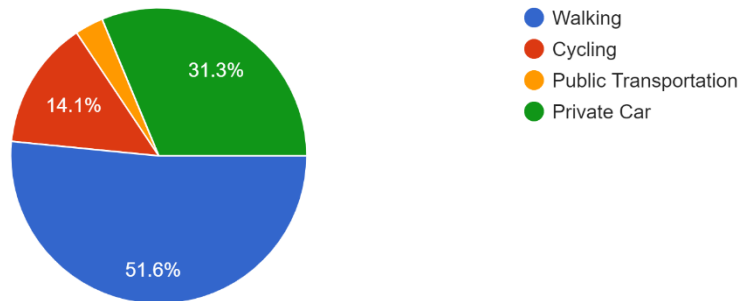What is your preferred mode of transportation and why?
64 responses

● Walking
● Cycling
● Public Transportation
● Private Car

31.3%
14.1%
51.6%

Table 15: Question 13 results

What mode of transportation do you mostly use to go to work/school?
64 responses

● Walking
● Cycling
● Public Transportation
● Private Car
● Trasport specialy for our institiution

31.3%
15.6%
45.3%
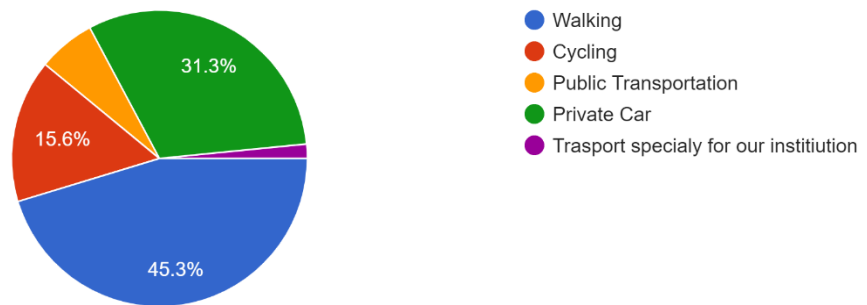
Table 16: Question 14 results

Estimated Time to Grocery Shop
64 responses

● 1-2 minutes
● 3-5 minutes
● 5-10 minutes
● 10-15 minutes
● Over 15 minutes

18.8%
9.4%
34.4%
32.8%
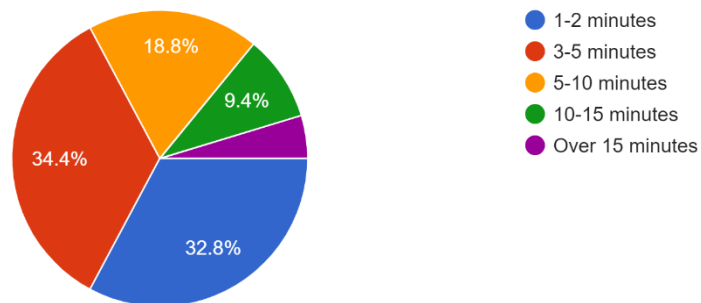
Table 17: Question 15 results

Estimated time to School
54 responses

Legend:
- 1-2 minutes
- 3-5 minutes
- 5-10 minutes
- 10-15 minutes
- Over 15 minutes

48.1%
14.8%
14.8%
18.5%
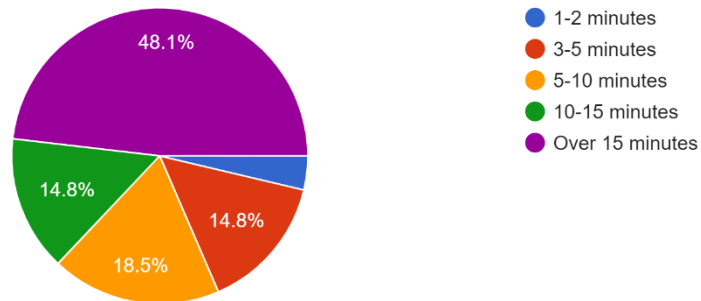
Table 18: Question 16 results

Estimated time to work
61 responses

Legend:
- 1-2 minutes
- 3-5 minutes
- 5-10 minutes
- 10-15 minutes
- Over 15 minutes

68.9%
18%
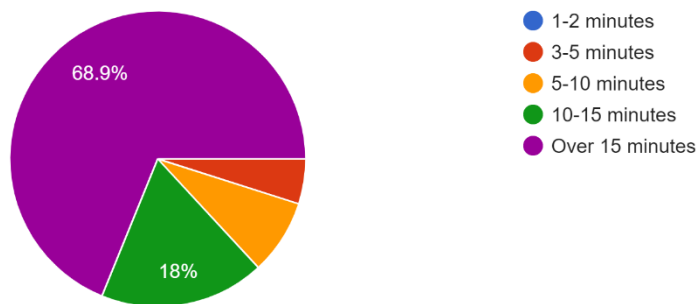
Table 19: Question 17 results

Route satisfaction
63 responses

Legend:
- Very satisfied
- Satisfied
- Neutral
- Unsatisfied
- Very unsatisfied

20.6%
11.1%
44.4%
19%
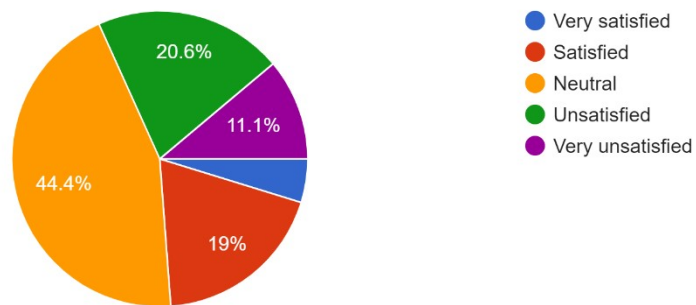
Table 20: Question 18 results

93

On a range from 1-5 (1 is poor and 5 is fine), how would you grade your neighborhood in terms of:

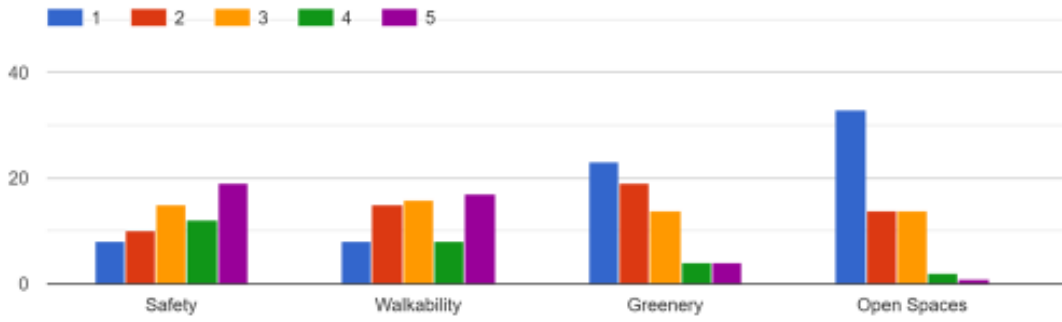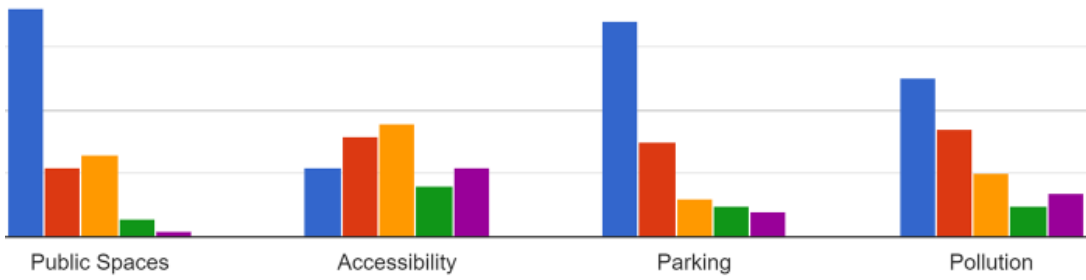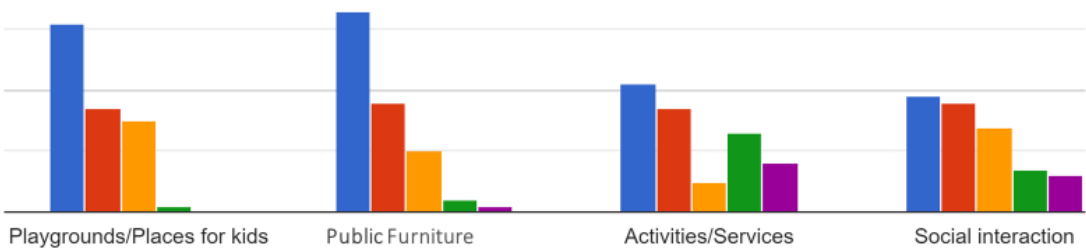***Table 21:*** Question 19 results

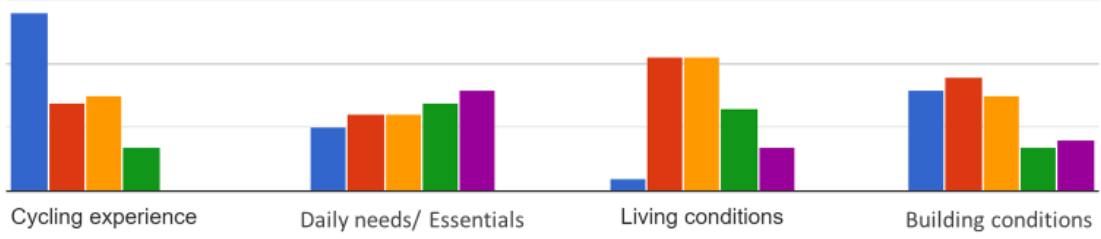***Table 22:*** Question 20 results
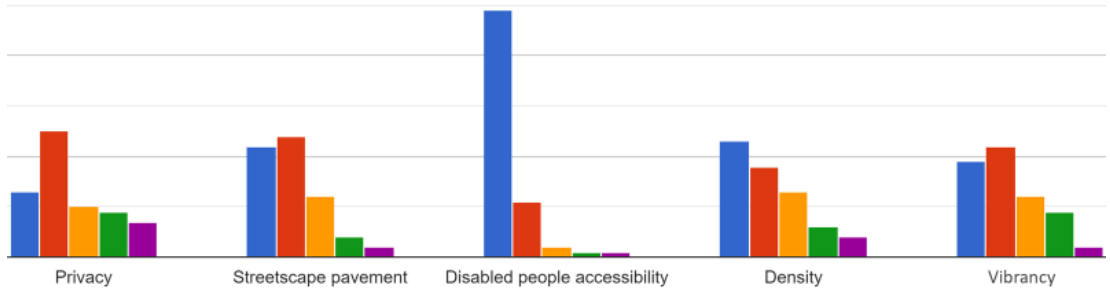

Table 23: Question 21 results

Table 24: Question 22 results

Table 25: Question 23 results

LEGEND

↕ Main flow inside study area

‒ ‒ ‒ Study area border

• • • New cutting roads

▢ Old Buildings

RR. E BARRIKADAVE

RR. E DIBRES

RR. E DIBRES

RR. TAFAJ

RR. QEMAL STAFA

LEGEND

Potential Urban Spaces

Study Area Border

Old Buildings

Figure 80

RR. E BARRIKADAVE

RR. E DIBRES

RR. E DIBRES

RR. TAFAJ

RR. QEMAL STAFA