

POST-OCCUPANCY EVALUATION OF PUBLIC SPACES: CASE STUDIES OF
'ITALIA' SQUARE AND THE PYRAMID IN TIRANA

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ABSTRACT

POST-OCCUPANCY EVALUATION OF PUBLIC SPACES: CASE STUDIES OF 'ITALIA' SQUARE AND THE PYRAMID IN TIRANA

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Due to the cities' development and population growth throughout the years, the design of effective public spaces has become a major urban concern. There is a great demand for people to have spaces within a city in order to socialize, relax, move freely, and enjoy being in a healthy environment. Therefore, research methods to evaluate the quality of such spaces are needed in order to increase their quality. One such method is post-occupancy evaluation, or POE. Through different means, such as direct observation or user feedback after the public space is occupied, it can prompt valuable information that can show what urban practices have worked and the reason for their success. On the other hand, it can also show what practices have not worked for that particular context and need to be improved on. This master thesis focuses on the post-occupancy evaluation of two well-known public spaces in Tirana, 'Italia' Square and the outdoor spaces of TUMO Center, or as more people know it, the Pyramid.

First, a literature review is conducted on public spaces and what POE is in detail. Then, a deep analysis of both study cases is done, starting with researching the available information about the spaces, a study on different aspects of maps including functional analysis, and the transportation means close to both public spaces. After establishing the relationship with the surrounding urban context, an analysis focusing on the selected sites with the aim of establishing the existing physical elements is carried out. After that, the POE study is done, starting with on-site observation and behavioral mapping and finishing with a questionnaire answered by the users. All of these methods aim to find out the feedback on these case studies and make a comparison between the results. After analyzing the outcomes of the implemented

research methods, it can be derived both public spaces are active spots and show positive feedback among users. Furthermore, this research emphasizes the positive areas of the public spaces e.g. socialization and connectivity, but also points out aspects that need improvement such as addition of lighting or comfortable sitting elements.

Keywords: *Post-occupancy evaluation, Public space, User feedback, Space performance, Human behavior*

ABSTRAKT

VLERËSIMI PAS PËRDORIMIT TË HAPËSIRAVE PUBLIKE: SHESHI 'ITALIA' DHE PIRAMIDA NË TIRANË

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Për shkak të zhvillimit të qyteteve dhe rritjes së popullsisë gjatë viteve, projektimi i hapësirave publike efektive është bërë një shqetësim i madh urban. Ekziston një kërkesë e madhe që njerëzit të kenë hapësira brenda një qyteti në mënyrë që të shoqërohen, të pushojnë, të lëvizin lirshëm dhe të shijojnë të qenit në një mjedis të shëndetshëm. Prandaj, nevojiten metoda kërkimore për të vlerësuar cilësinë e hapësirave të tilla, për të rritur cilësinë e tyre. Një metodë e tillë është vlerësimi I pas përdorimit. Nëpërmjet mjeteve të ndryshme, si obzervim në terren ose mendimet e përdoruesve pasi hapësira publike është përdorur, mund të sjellë informacione të vlefshme që mund të tregojnë se cilat praktika urbane kanë funksionuar dhe arsyen e suksesit të tyre. Nga ana tjetër, vlerësimi i pasbanimit gjithashtu mund të tregojë se cilat praktika nuk kanë funksionuar për atë kontekst të veçantë dhe duhet të përmirësohen. Kjo temë masteri fokusohet në vlerësimin e pasbanimit të dy hapësirave publike të njohura në Tiranë, Sheshit 'Italia' dhe hapësirave të jashtme të Qendrës TUMO, ose siç njihet më tepër, Piramida.

Së pari, bëhet një rishikim i literaturës për hapësirat publike dhe çfarë është vlerësimi i pasbanimit në detaje. Më pas, bëhet një analizë e thellë e të dy rasteve të studimit, duke filluar me kërkimin e informacionit të disponueshëm për hapësirat, një studim mbi aspekte të ndryshme të hartave duke përfshirë analizën funksionale dhe mjetet e transportit përreth dy hapësirave të zgjedhur. Pas kuptimit së marrëdhënies me kontekstin urban përreth, kryhet një analizë e fokusuar në lokacionet e

përzgjedhura me synimin për të përcaktuar elementët fizikë ekzistues. Pas kësaj, bëhet studimi pasvlerësues, duke filluar me vëzhgimin në terren, hartimin e sjelljes dhe duke përfunduar me një pyetësor të përgjigjur nga përdoruesit. Të gjitha këto metoda synojnë të zbulojnë mendimet mbi këto raste studimore dhe të bëjnë një krahasim midis rezultateve. Pas analizimit të rezultateve të metodave të zbatuara në kërkim, mund të nxirret që të dyja hapësirat publike janë pika aktive dhe tregojnë një reagim pozitiv midis përdoruesve. Për më tepër, ky studim thekson fushat pozitive të hapësirave publike, si socializimin dhe aksesueshmërinë, por vë në dukje edhe aspekte që kanë nevojë për përmirësim, si shtimi i ndriçimit ose elementet ulëse të rehatshme.

***Fjalët kyçe:** Vlerësimi pasbanim, Hapësira publike, Opinionet e përdoruesve, Performanca e hapësirës, Sjellja njerëzore*

Dedicated to my family

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CHAPTER 1

INTRODUCTION

1.1 Problem Statement

For a long time, public spaces have not been in focus of evaluations from researchers and designers, but this approach changed with the arrival of motorized vehicles, which caused the rise of vehicular-focused streets and the decrease on civic streets and squares which focused more on pedestrians (Biddulph, 2023). This shift in the main focus has given rise to a lot of criticism on public spaces, even on those developed in the late twentieth and twenty-first centuries, for failing on many aspects. The criticism goes as far as using the expression ‘dead public spaces’ to refer to office plazas that fail to intrigue social interactions among users (Zamanifard et al., 2018). The criticism does not fall solely on design, but also on the poor maintenance, lack of security, as well as lack of sports and social activities (Abdelhamid & Elfakharany, 2020).

Since the 1960s, a whole generation of sociologists and urban commentators emerged in response to inhumane urban projects (Southworth et al., 2012). As a consequence, there have been attempts to reduce traffic, enhance public transport and encourage designs for public spaces that bring human life back (Biddulph, 2023). Also, the different needs of children, elderly, disabled and other subgroups have become a bigger focus in design and planning (Southworth et al., 2012).

At the same time, the psychological, social and cultural dimensions of place, and their assessment started to get attention, thus giving rise to research methods exploring the social and psychological dimensions of urban experience (Southworth et al., 2012). The field for this type of research was called environmental behavior research. The approach that will be implemented in this thesis is post-occupancy evaluation or POE, which emerged afterwards as a way of evaluating the design of a wide range of environments from user perspectives.

The POE study will be conducted in the context of Tirana, the capital of Albania. Starting as an ottoman town, Tirana has undergone major changes throughout the years, being affected by political factors in power and foreign influences. The major projects in Tirana central part, have been designed by foreign architectural studios, which brings into question how successful and how much positive impact have they given to the Albanian community. Methods such as post-occupancy studies are yet to become part of the design process of urban public spaces in Albania, but they can help to evaluate the performance of new projects.

1.2 Motivation and Purpose

The selected case studies for this thesis to conduct a post-occupancy evaluation are ‘Italia’ Square and the outdoor spaces of TUMO center or the Pyramid. The second space will be addressed as the Pyramid afterwards, since it is most commonly used at the time of this thesis writing. Now, going to the reasons for this choice of locations. Firstly, they both are two of the most well-recognized public spaces in Tirana, and are both located in ‘Dëshmorët e Kombit’ Boulevard, so they’re really close to each other. They both have undergone transformation projects in the last decade designed by foreign architectural studios. Though, the Pyramid has been much more affected compared to ‘Italia’ Square.

Their design styles are of different origins. ‘Italia’ Square is a product of Fascist architecture, while the Pyramid is a monument from the communist period. Also, their shape and layout are different, while ‘Italia’ Square is a square cornered by buildings, in the second case the pyramid is the center of the public space. An interesting fact about the pyramid case is that the top platform and the recently added stairs function as public spaces, attracting many people. Another reason for choosing these sites is their different time of the completion. ‘Italia’ Square has been part of the social life of Tirana for quite some time. The pyramid, while it also has been part of Tirana’s social life, has undergone a transformation project from 2019 till 2023, therefore developing a new image as a building recently, but also as a public space.

These were some of the reasons for choosing these locations. Since they both have very favorable locations, and investments done on them, giving them many reasons and expectations to be successful public spaces, it will be interesting to see if these spaces can live up to their advantages. The post-occupancy evaluation aims to reveal just that, if these spaces are used by the people, and what is the users' satisfaction. The POE study will also focus on what are the positive/ negative aspects of the design, what is the users' demography and what can be fixed according to them. Then, a comparison is done between both case studies' results. By focusing on these aspects, this POE study not only shows how successful these case studies are, but also point out areas that need to be improved upon, and can also serve as a reference for design of future public spaces in Tirana.

1.3 Research Objectives, Scope and Limitations

The objective of this research, as already introduced, is doing a post-occupancy study in the city of Tirana, more specifically, 'Italia' Square and the Pyramid. To do so, first the literature review of POE, Tirana urban context, and the selected case studies, will create the base of this research. After getting an understanding of the necessary information and the common practices of POE, the focus will be in 'Italia' Square and the Pyramid.

The main purpose of this research, essentially, is to find out how satisfied are the users with the selected public spaces. Another focus of this research is to emphasize which are the most active parts, the types of activities and demographic aspects like age or gender of users. Finally, is to note the positive aspects of the designs and the negative aspects which can be improved, according to users.

Thus, the research questions can be stated as:

1. What is the level of satisfaction among the public space users?
2. What are the most active spots, the type of activities and the demographic groups that use these spaces?
3. What can be improved upon the case studies according to the users' feedback?

4. How do the selected case studies compare to each other according to different criteria?

The questions shall be answered through the use of behavioral mapping and the use of questionnaires. The behavioral mapping observations are conducted on 2 days of March 2024, one Sunday and one Monday, during three different time intervals, in total of 6 times of observations. The processing of the information is also done during March. The questionnaire is conducted online and on-site during April 2024 with sample size of 200 respondents. Afterwards, the information of these research method than is broken down in different criteria of physical elements of the sites, urban principles and space performance, and is accompanied by a comparison between both studies.

As per limitations, for the behavioral mapping, even more accurate and valuable outcomes could be developed, if the observations would be done on more days and more times of the days, but this would need more time or more people working on the task. Another limitation is the fact that not every person on-site would agree to answer the questionnaire. Especially the Pyramid, which had a bigger number of tourists. Additionally, even adults and elders were more reserved compared to youngsters in answering the questionnaire, leading to an unequal number of age groups participating in the study. While the total number of responses is 200 for both questionnaires, a bigger number would generate even more accurate results and would point out even more negative and positive aspects of the public spaces.

1.4 Organization of the thesis

This thesis is divided into 5 chapters. The organization is done as follows:

Chapter 1 provides an introduction for this research, which is divided into the problem statement, motivation and purpose, research objective, scope of work and limitations.

Chapter 2 includes the literature review which focuses on what post-occupancy evaluation is, and gives a background of 'Italia' Square and the Pyramid.

Chapter 3 focuses on the methodology followed in this study, by explaining each research method.

Chapter 4 shows the results and work from all the implemented methodologies, starting with the context understanding, the spatial analysis, and every result from the behavioral mapping and the questionnaire. Altogether with comparative discussions between each research method and public spaces.

Chapter 5 states the conclusions of this thesis about the two selected case studies, 'Italia' Square and the Pyramid, and recommendations for further research on evaluation of public spaces of the case studies, but also of Tirana.

Appendix chapter includes the physical questionnaire form, as given to the users on-site.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

As already mentioned, with urban development there's been an increasing need for comfortable and effective urban public spaces. Researchers from different disciplines have been studying to understand how the built environment shapes human behavior. This study field is defined as environmental-behavioral sciences, and one of the research methods used in this field is Post-Occupancy Evaluation (Torun et al., 2020). Therefore, the first topic that this literature review will focus on is POE in urban public spaces. Afterward, the literature review will consist of a brief summary of urban development of Tirana, in order to give enough context for 'Italia' Square and the Pyramid, followed by a literature analysis for each of them.

2.2 Public Spaces' Post Occupancy Evaluation

2.2.1. Public Spaces

In urban settlements, public spaces have always played a big role in their use of social activities. Public spaces are defined as areas where all the facilities required by collective life can be maintained and which people of any age, gender or professional group can use (Malkoc & Ozkan, 2010). These spaces can be used for many human activities, be it social, cultural, commercial, religious, educational or sporting (Malkoc & Ozkan, 2010). Urban public spaces also reflect the cultural, historical, economic and socio-political state of the city, as manipulated and understood by designers, politicians and users (Malkoc & Ozkan, 2010). Examples of public spaces are streets, squares and parks, and as such they should fulfill different criteria which can satisfy the users. There are different lists of criteria, but one is the

list from Jan Gehl as can be seen in *Table 1*. These public spaces give a dynamic aspect to settlements, compared to the usual patterns of work and home life.

Table 1. 12 Quality Criteria Concerning the Pedestrian Landscape (Gehl, 2010)

PROTECTION	<p><i>PROTECTION AGAINST TRAFFIC AND ACCIDENTS</i></p> <ul style="list-style-type: none"> - <i>FEELING SAFE</i> - Protection for pedestrians - Eliminating fear of traffic 	<p><i>PROTECTION AGAINST CRIME & VIOLENCE</i></p> <ul style="list-style-type: none"> -<i>FEELING SECURE</i> -Lively public realm - Eyes on the street -Overlapping functions day and night - Good lighting 	<p><i>PROTECTION AGAINST UNPLEASANT SENSORY EXPERIENCES</i></p> <ul style="list-style-type: none"> - Wind - Rain/snow - Cold/heat - Pollution - Dust, noise, glare
COMFORT	<p><i>OPPORTUNITIES TO WALK</i></p> <ul style="list-style-type: none"> - <i>Room for walking</i> - <i>No obstacles</i> - <i>Good surfaces</i> - <i>Accessibility for everyone</i> - <i>Interesting facades</i> 	<p><i>OPPORTUNITIES TO STAND/STAY</i></p> <ul style="list-style-type: none"> - <i>Edge effect/attractive zones for standing/ staying</i> - <i>Support for standing</i> 	<p><i>OPPORTUNITIES TO SIT</i></p> <ul style="list-style-type: none"> - <i>Zones for sitting</i> - <i>Utilizing advantages: view, sun, people</i> - <i>Good places to sit</i> - <i>Benches for resting</i>
	<p><i>OPPORTUNITIES TO SEE</i></p> <ul style="list-style-type: none"> - <i>Reasonable viewing distances</i> - <i>Unhindered sightlines</i> - <i>Interesting views</i> - <i>Lighting (when dark)</i> 	<p><i>OPPORTUNITIES TO TALK AND LISTEN</i></p> <ul style="list-style-type: none"> - <i>Low noise level</i> - <i>Street furniture that provides 'talkscapes'</i> 	<p><i>OPPORTUNITIES FOR PLAY AND EXERCISE</i></p> <ul style="list-style-type: none"> - <i>Invitations for creativity, physical activity, exercise and play</i> - <i>By day and night</i> - <i>In summer and winter</i>
DELIGHT	<p><i>SCALE</i></p> <ul style="list-style-type: none"> - <i>Building and spaces designed to human scale</i> 	<p><i>OPPORTUNITIES TO ENJOY THE POSITIVE ASPECTS OF CLIMATE</i></p> <ul style="list-style-type: none"> - <i>Sun/shade</i> - <i>Heat/coolness</i> - <i>Breeze</i> 	<p><i>POSITIVE SENSORY EXPERIENCES</i></p> <ul style="list-style-type: none"> - <i>Good design and detailing</i> - <i>Good materials</i> - <i>Fine views</i> - <i>Trees, plants, water</i>

There are many types of different public spaces categorizations according to different traits. Some criteria can be in terms of design, socio-cultural and political-economy viewpoint (Carmona, 2010). According to the design public spaces can be categorized in: public parks, square and plazas, memorials, markets, streets, playgrounds, community open spaces, greenways and parkways, atrium/indoor marketplaces, found spaces/everyday spaces and waterfronts (Carmona, 2010). In the socio-cultural sense the public spaces are divided into: everyday places, places of meaning, social environments, places of retreat, negative spaces, though in this sense, there is no clear-cut characterization because a public space can be considered as two types at the same time (Carmona, 2010). Politically, spaces can be divided into: public property, semiotic and public sphere (Carmona, 2010)

The four main functions of urban public spaces are serving as a stage for: individual development and pleasure; the use of all members of the society; social and collective events; demonstration of art, culture and politics (Zamanifard et al., 2018). Benefits that public spaces include are: relaxation, circulation, random encounters and purposeful gatherings (Torun et al., 2020). The main criteria that can show how successful a public space is the use of space by people (Torun et al., 2020). If a space is used by people, it will attract other people, thus becoming more successful. A high number of people, especially the number of couples/groups and women, means that there is more selectivity and more social life, thus making these places more attractive (Whyte, 1980). Increasing the possibilities of people to come together randomly is also important to create sustainable, safe and healthy cities by creating active spaces through design. (Torun et al., 2020).

2.2.2 Post Occupancy Evaluation

Post-occupancy evaluation or POE approach is a systematic assessment to understand the effectiveness of certain design elements in an occupied space, by investigating, analyzing, and reporting on the successes and weaknesses of such spaces (Rajaei et al., 2019). POE's focuses range from physical concerns of the spaces to socio-psychological interests (Hadjri & Crozier, 2008). Therefore, post-occupancy evaluation, also assesses if these spaces meet users' needs, based on the users'

perception and feedback (Rajaei et al., 2019), thus the main center of attention in this field of study is the relationship between users and spaces (Torun et al., 2020). Few post-occupancy studies have been conducted on public spaces to find deficiencies in its process of design or construction, compared to studies on buildings (Zamanifard et al., 2018).

POE can lead to many favorable results like: identification and finding solution to problems, improving space utilization based on users' feedback, improvement in design quality (Rajaei et al., 2019), providing knowledge for design guides and regulatory processes (Hadjri & Crozier, 2008). It is suggested that POE forms a "logical final step" in the design process, and as already mentioned, it can provide a knowledge base of "lessons learned" from users in completed projects which could then be used to either improve existing spaces or serve as a reference for future projects (Hadjri & Crozier, 2008). It has also been suggested that POE can lead to creating a "virtuous circle of improvement", when used throughout the design cycle, creating a continually improving knowledge base that allows continuous improvement to be achieved (Hadjri & Crozier, 2008).

One of the most well-known and earliest cases of public spaces studies is that of William H. Whyte, who observed 16 plazas and 3 small parks in New York, and compiled his findings in the book 'The Social Life of Small Urban Spaces' (Whyte, 1980). The elements he considered during his public space analysis that impacted social life were: the sunlight, wind barriers, trees, water features, food stands or similar, entertainment, the relationship with streets, landmarks, and most importantly the sitting spaces (Whyte, 1980). As a result of his observations, he created some recommendations, which were incorporated by the City Planning Commission in the open-space zoning code in May 1975 (Whyte, 1980).

Even though post-occupancy evaluation can provide several benefits, and social and behavioral perspectives are routinely accepted by practicing and teaching designers (Southworth et al., 2012), there are still some barriers that stop it from becoming a common practice. One of the reasons POE is not used commonly, is the lack of payment to support these studies after the completion of the project, but also the cost of implementing the findings (Hadjri & Crozier, 2008). Another reason is the absence of POE on the curriculum of architecture and urbanism education (Hadjri &

Crozier, 2008). Furthermore, the potential harm to the reputation of the designers coming from negative criticism and the possibility of professional liability as a result of defective design may be the biggest obstacles in implementing POE studies (Hadjri & Crozier, 2008).

2.2.3 Types of Post-Occupancy Evaluation

There are two types of post-occupancy evaluation: comparative POE and generative POE. Comparative POEs make comparisons among spaces, while Generative POEs identify problems and foster ideas for solutions and improvements (Wener et al., 2016). The former type is more likely to use objective methods, such as in standardized questionnaire scales, while the latter requires more open-ended techniques and questions (Wener et al., 2016). Another method of categorizing POE are levels, which are three: indicative, investigative and diagnostic.

Indicative POE, it is the most brief, broad and shallow level (Wener et al., 2016). It includes quick analyses like structured interviews, group meetings or inspections (Hadjri & Crozier, 2008) and it can identify positive/negative spots in an environment (Wener et al., 2016). The findings of the indicative level can lead to higher levels like Investigative POE, which are more in-depth analyses, utilizing interviews and questionnaires, usually across a number of spaces of the same or similar type (Hadjri & Crozier, 2008). Diagnostic POE is regarded as the most sophisticated. It tends to have a broad, system wide focus on a number of comparable spaces, focusing on a particular issue of technological and anthropological areas of research (Hadjri & Crozier, 2008). It has high validity and can have the potential to be used for the formation of guidelines for use in the public realm (Hadjri & Crozier, 2008).

2.2.4 Post-Occupancy Evaluation Methodologies

There are several steps and methods used in post-occupancy evaluation studies. The research methods can be both quantitative and qualitative to get a holistic understanding of the site and the user groups (Wener et al., 2016). The most common

first step is knowing the site. This can be done by knowing the exact locations of the site, studying it in its urban context with the support of texts, maps, drawings, aerial photos, statistical data, legislation, etc. (Tenorio, 2019). There are different steps one can follow during a post-occupancy evaluation. One way Gabriela de Souza has shown in her article, is that during POE, after learning about the place, the researcher can be focused in public life survey; public life evaluation; public space evaluation; and later even design recommendations can be developed (Tenorio, 2019).

2.2.4.1 Observation and Behavioral Maps

Public life surveys can be done by direct observations and behavioral maps. These two are very common practices in POE. The former can identify where, when and how people use these spaces, while the latter can identify the different types of activities (Torun et al., 2020). The process of observation provides an enhanced account of the activities that are performed in any given space and can provide richer contextual data about how that activity was carried out and what other interactions occurred during the process (Hadjri & Crozier, 2008). Mapping as a tool and method of inquiry helps to obtain a better understanding of the nature, patterns and dynamics of outdoor social activities (Shirazi, 2018). Some cases in which behavioral mapping has been used can be seen in *Table 2*.

The most important information is the location in which the activities take place, the types of activities, and the gender and age of users (Shirazi, 2018). It may give different results to questionnaires, because it is essentially the difference between “asking people to explain what they are doing versus watching them doing it” (Hadjri & Crozier, 2008). Public life evaluation can be done if the form of a checklist, the observer or surveyor can notice if the selected spaces include people of different ages and gender, on different times and days of the week, and if the users are doing any activity i.e., passing by, lingering, meeting other people, and other activities (Tenorio, 2019).

Table 2. Use of behavioral mapping as a research method. Courtesy of the author

Authors	Public Space Type	Aspects of evaluation
(Shirazi, 2018)	4 neighborhoods	Walking activities; Sitting activities; Cycling activities.
(Torun et al., 2020)	4 squares in periphery of Istanbul	Primary activities: walking, running, sitting, standing, lying. Secondary activities: engaged in cell phone, listening to music, reading, eating/drinking, smoking, studying, conversing, sleeping, prying around.
(Wu & Ye, 2020)	Wall relic park in Zhengzhou	Walking, exercise, sitting, entertainment, passing by
(Whyte, 1980)	Plazas and parks	Location of every sitter: X for male, O for female

The activities can be shown by letters or by symbols (*Figure 1*). Public space evaluation is about urban context: compactness, integrity, different modes of transportation and local attributes: boundaries of the space, accessibility, diversity of activities, temperature, light, sound, air quality, maintenance, identity of the specific public space, security (Tenorio, 2019).

PRIMARY ACTIVITY				SECONDARY ACTIVITY			
Woman	Man						
		Walking (group)			Siting (individual)	Engaged in cell phone - t	Studying - ç
		Walking (individual)			Standing (group)	Listening to music - m	Conversing - k
		Running			Standing (individual)	Reading- o	Sleeping- u
		Siting (group)			Lying (individual)	Eating/drinking- y	Prying around- e
						Smoking - s	

Figure 1. Behavioral map legend example (Torun et al., 2020)

2.2.4.2 Questionnaire

Direct observation from the research can lead to valuable information about the selected public space, however, it is preferred and recommended to get feedback from the space users, that is why questionnaires are also very common POE tools. Combining different methods can create a fuller understanding, because they can lead to different results. People may answer in a questionnaire that they prefer less crowded places and more privacy. However, observations often show the opposite, that people like places with more people (Whyte, 1980). Below, in *Table 3*, you may find some instances of questionnaire use in public spaces evaluations and the themes of questioning.

For the questionnaires, it is important to identify what urban design principles should be asked of users. Some principles can be: accessibility and connectivity, comfort, diversity, image, heritage, inclusiveness, livability, richness, safety, vitality. Accessibility and connectivity are related to the variety and interconnection of places and activity within a public space and how easy it is to create a sense of direction and reach people, activities and services in this space (Alhusban et al., 2019). Comfort refers to the state in which users feel safe and at ease to conveniently move around a place in a stress-free manner (Zamanifard et al., 2018). Diversity is connected to different land-uses and human activity (Torun et al., 2020). Heritage is a reflection of the urban forms at a point of time in a city (Mosler, 2019). Image is about the people's feelings and meanings that they associate with the space. Positive feelings, images and meanings motivate people to revisit the spaces (Zamanifard et al., 2018).

There are two parts in inclusiveness: publicness and universality. Publicness means that everyone can use the public spaces and universality is about the space design and managing policies that makes this publicness possible (Zamanifard et al., 2018). Livability means that the public space should be a place where users can interact comfortably (Alhusban et al., 2019). Richness is the level of the senses an individual can experience in a space, achieved by a variety of elements and activities (Alhusban et al., 2019). Safety is how free of harm and comfortable someone feels in a place. Good visibility increases the feeling of safety (Alhusban et al., 2019). Vitality is evaluated by: collective and cultural events, festivals and public performances, active

and safe street life during the day and night, the existence of playgrounds etc. (Zamanifard et al., 2018).

Table 3. Use of behavioral mapping as a research method. Courtesy of the author

Authors	Public Space Type	Aspects of evaluation
(Rajaei et al., 2019)	Eram Campus, Shiraz University	Overall Quality and Appearance; Identity; Accessibility; Flexibility; Comfort; Safety.
(Torun et al., 2020)	4 squares in periphery of Istanbul	Demographic questions such as education and gender; The purpose and the frequency of using the square; Access mode and if accessed on foot, the distance walked; Level of satisfaction with the square in terms of safety, accessibility, walkability and design/maintenance.
(Wu & Ye, 2020)	Wall relic park in Zhengzhou	The source of the visitors; Visitor's age and gender; Users' transportation methods; The purpose of users coming to the park; Natural environment factors; Artificial facilities factors; Historical cultural factors.
(Alhusban et al., 2019)	Campus of Hashemite University	Site and context; livability and vitality; accessibility and connectivity; public realm; density; safety; character; legibility and imageability; walkability; urban structure; richness; continuity and enclosure and sense of space.
(Özkan et al., 2015)	Trabzon Coastal zone	Preferred and non-preferred spaces in Trabzon coast in terms of technical, functional and aesthetic performance; most used region by the user; how often the area is used; how much time is spent in the area.

A questionnaire can also ask users about physical characteristics of a public space like: natural elements, artificial elements, and historical cultural elements (Wu & Ye, 2020). Natural elements are very important due to their benefits like: improving

human physical and mental health, improving air quality and preserving biodiversity (Abdelhamid & Elfakharany, 2020). As for improvements of mental health, connecting with nature can enhance human cognition, creativity, and positive social behaviors (Abdelhamid & Elfakharany, 2020). Artificial elements are man-made elements with the purpose to increase the quality of the public spaces. Artificial elements can impact the cultural and social life of the space, but also the recreational aspect (Abdelhamid & Elfakharany, 2020). The historical cultural elements are the heritage of the site, which should be preserved and can increase citizens' interest and can also educate them about the history of the site (Abdelhamid & Elfakharany, 2020).

Furthermore, it can also measure the different types of space performance concepts. Performance concepts are defined as the degree to which user needs and requirements are met, and are indicative of space quality, hence, user satisfaction (Özkan et al., 2015). Different types of performances are: technical performance, functional performance and aesthetic performance. Technical performance is about technical aspects like cleanliness, maintenance etc. of space elements (Özkan et al., 2015). Functional performance is about activities like, variety, equipment, access, green areas etc. (Özkan et al., 2015). Aesthetic performance is about harmony of different elements and green areas in terms of pattern, texture and color (Özkan et al., 2015).

2.3 'Italia' Square and The Pyramid

2.3.1 Tirana Urban Context

Before delving through the selected case studies for this research, it is important to their historical context. For this reason, this subsection focuses on giving a brief historical and urban context for the city of Tirana, giving a bigger attention to the development of the central part.

2.3.1.1 Ottoman influence

Tirana originated in 1614 as a typical Ottoman town with only 15,000 inhabitants (Daly, 2023). The mosque, the hamam and the bazaar were the most important part of Tirana (Prifti, 2022). The buildings and space surrounding the Old Mosque of Sulejman Pasha (*Figure 2*) represented the economic and political center of the city (Prifti, 2022). In 1908, there was the first planned intervention in which the streets close to the Old Bazaar were expanded and the shops were reorganized by decision of Esad Pasha Toptani (Nepravishta, 2019). The unused space around the Old Bazar would later become the main square of Tirana (Nepravishta, 2019). On February 11,1920, Tirana became the capital of Albania (Fagu & Nepravishta, 2022).

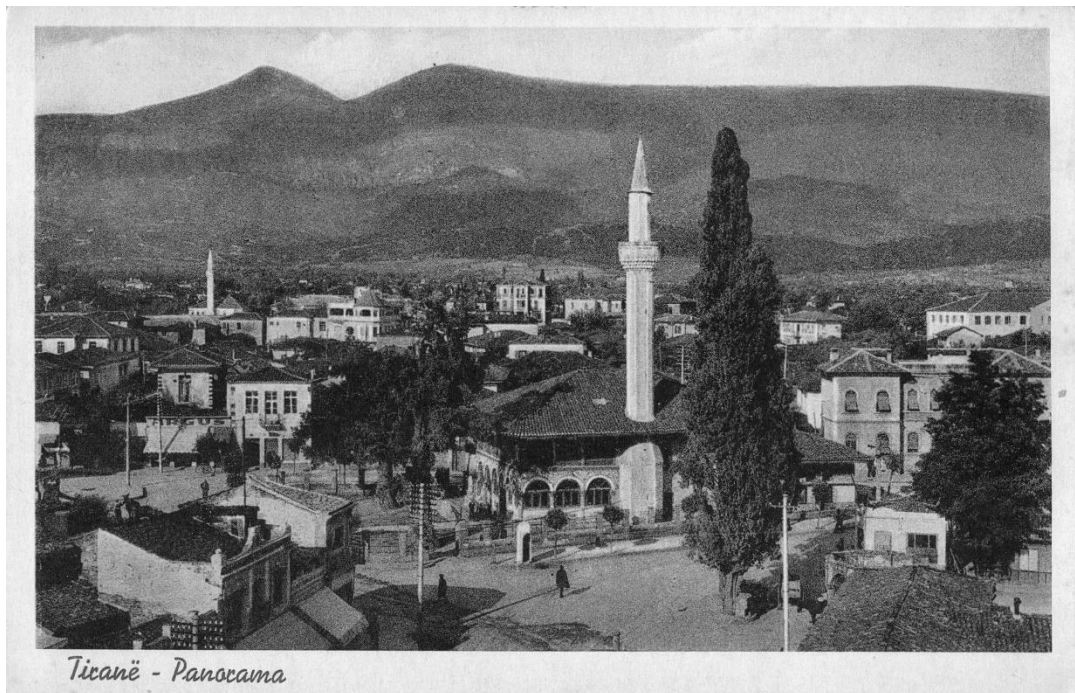


Figure 2. Mosque of Tirana (Source: Jacques Collection)

2.3.1.2 Italian Influence

From the time of Ahmet Zogu's rule till the end of Italian occupation of Albania, Tirana was impacted a lot by Italian architecture. Even during Ahmet Zogu's

time, a lot of Italian architects impacted urban and architectural design of the city, and of course, after the fascist occupation during World War II, the impact was even greater (Daly, 2023). Though not impactful, Tirana's urban planning was also affected a bit by Austria-Hungary, in which for the first time there was an urban plan, designed by Austrian engineer Köhler in 1917. Though it was more like a mapping of existing roads than a true urban plan (Kodra, 2017).

The first true plan was designed afterwards. The most important urban development from the Italians was the design of the Imperial axis, or 'Dëshmorët e Kombit' Boulevard (*Figure 3*) as known today; and the new political and cultural centers which today are known as Skanderbeg Square and Mother Theresa Square. This urban project was started by Armando Brasini during the monarchy of King Zog I, in which he developed Köhler's plan by adding the axis of the boulevard and then continued by Florestano di Fausto, which turned this axis as a fusion between the old ottoman and new architecture (Fagu & Nepravishta, 2022). This urban practice of creating a main axis to join the old and new architecture has also been used in several other cities, especially in Africa, colonized by the Fascists (Kodra, 2017).

Di Fausto's work includes the Skanderbeg Square, six ministry buildings and the town hall, whose style was similar to Italian Renaissance (Daly, 2023). After di Fausto, Gherardo Bosio took charge of the boulevard project. Bosio extended the boulevard southwards, creating a square called Piazza Littrio, which was surrounded by Casa del Fascio, the Casa del Opera del Dopolavoro Albanese and Casa della Gioventù Littoria Albanese and a stadium (Daly, 2023). This urban intervention can be considered a bold one, because the arrangement that resulted, looked like a fascist symbol, the "fascio littorio", which is essentially a bundle of sticks with an axe (Daly, 2023). The boulevard was the bundle and stadium represented the head of the axe (Daly, 2023).

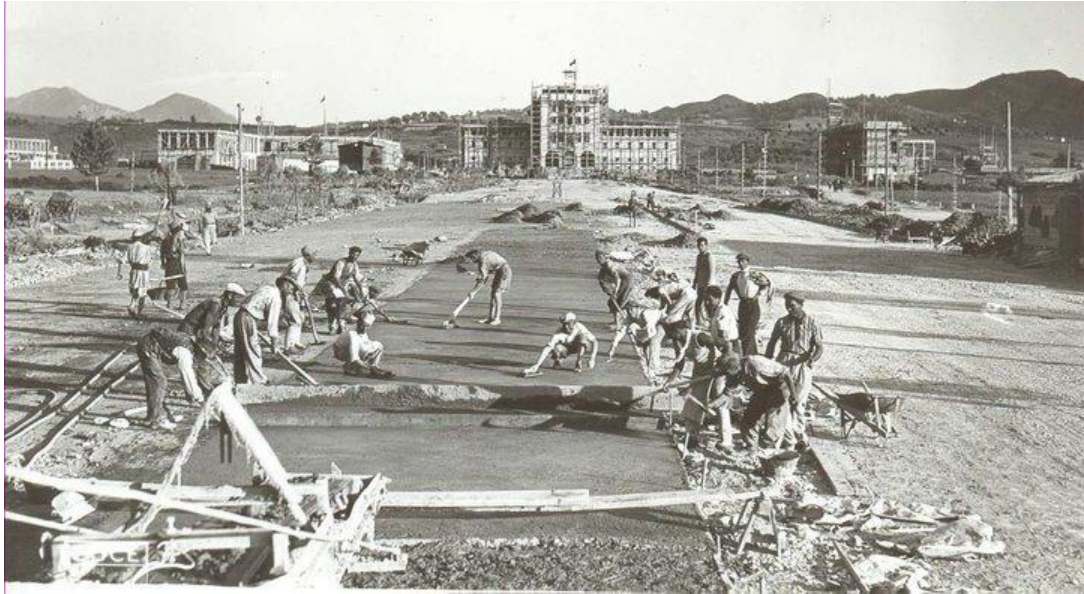


Figure 3. ‘Dëshmorët e Kombit’ Boulevard construction (Source: Arkitektura)

Bosio was also the author of the new regulatory plan on Tirana (Fagu & Nepravishta, 2022). It included indications on height, green areas, distance from the street, the use of porticos, as well as the materials and colors of the facades (Kodra, 2017). He was also responsible for the organization of new residential neighborhoods for Italian colonels and officers, which would be known afterwards as ‘Blloku’ and be used by important higher-ups of the communist party (Kodra, 2017).

2.3.1.3 Communist Regime Influence

After the war, the communist party was the leading political power in Tirana, so the main architectural style became socialist realism, which came as a result of Albanian students’ experiences in Moscow and their knowledge of Stalinist architecture (Fagu & Nepravishta, 2022). The urban decisions of this style included: regular geometry which brought the creation of ‘superblocks’; and monumental axis (Fagu & Nepravishta, 2022). The communists had similar principles to fascism like using political propaganda in the city design, and also used the existing infrastructure and architecture, like the neighborhood that was designed for Italian officers, the boulevard and some existing buildings around it (Kodra, 2017).

Though the Italian urban legacy was preserved, the new party renamed and repurposed them, i.e., the main boulevard Viale dell'Impero was renamed 'Dëshmorët e Kombit' Boulevard, Piazza Littorio became University Square and so on (Daly, 2023). There were also new important buildings along the boulevard like the Presidential Palace and the Palace of Culture (Kodra, 2017). A big difference to the fascist period is that during communism period, there was a big intervention in the north-eastern side of the boulevard, in which the old ottoman bazaar was destroyed and the old ottoman city was reduced by more than a half, making most of the ottoman heritage in Tirana disappear as mentioned before (Kodra, 2017).

2.3.1.4 Post-regime situation

Tirana is a rare case since fascism, socio-realism and contemporary neoliberal architecture coexist at the same place (Kodra, 2017). 'Dëshmorët e Kombit' Boulevard is a perfect example of the three architectural layers, but also of the monumentalizing during different years. After the fall of the regime the most widespread urban development ate the informal buildings, which came as a result of inaccuracies from the Municipality (Kodra, 2017). It is estimated that 70% of buildings constructed in Tirana between 1990 and 2003 did not have the required permits (Daly, 2023).

However, that was followed by a demolishing operation of the illegal buildings on the Lana River and other parts of Tirana, and the painting of facades of Tirana's main streets buildings during the mandates of Edi Rama as mayor of Tirana (Kodra, 2017). Another urban proposal that has impacted a lot the city center especially, is the French Master Plan designed by Atelier Studio-Paris, in which it proposes redesign of collective spaces and the addition of high-rise buildings which will surround the main square of the city (Nepravishta, 2019). Nowadays, great projects have been designed by international architectural studios, including towers (*Figure 4*), which are changing Tirana, and making it a sort of 'open-air laboratory' (Prifti, 2022).



Figure 4. Skyscrapers in Tirana's center (Source: Archdaily)

2.3.2 'Italia' Square

'Italia' Square (*Figure 5*) is a remnant of Italian architecture. It is a square surrounded by Tirana National Archeological Museum, Tirana University Rectorate and Air Albania Stadium. The museum and the library were formerly known as Casa Delle Organizzazioni Giovanili, which was dedicated to sports activities, while the stadium was known as Qemal Stafa Stadium. The portico of the colonnades of Tirana National Archeological Museum serves as a filter between Mother Theresa Square, formerly known as Piazza del Litorio, and the stadium (Npravishhta, 2019).



Figure 5. 'Italia' Square borders (Source: Google Earth)

2.3.2.1 Design

The stadium was designed by the Italian architect Gherardo Bosio, and its construction began in December 1939, and finished in 1946 during the development of the Balkan Olympics Game in Tirana (Nepravishta, 2019). By that time, 'Italia' Square was completed too (Nepravishta, 2019). The square is typical of Italian architecture. It is perpendicular to Mother Theresa Square, and the entrance to the square is monumental. This monumental appearance is made possible by the symmetrical façade and colonnades of Casa Delle Organizzazioni Giovanili (Nepravishta, 2019). The appearance of Casa Delle Organizzazioni Giovanili has not changed much throughout the years, its distinct façade material has always been travertine.

The stadium, though it had the status of "National Monument of Culture" of the second category, went through a demolition and reconstruction project in 2016 in order to satisfy UEFA standards and increase the stadium's capacity (Archea Associati, 2019). The project was designed by Archea Associati, which is an Italian architectural studio, and interestingly, the architect Marco Casamonti, is from Florence, like the original's building architect, Gherardo Bosio (Nepravishta & Nepravishta, 2021) The first stadium's main entrance was covered with 'bugnato', which are carved decorative stones in the façade (Nepravishta, 2019). The new stadium kept this appearance of the entrance, but changed drastically in the rest of the building. Additionally, there was an addition of new functions and activities like: hotel, parking, shops, offices, restaurants, cafes, to make the stadium an active place throughout the year (Archea Associati, 2019).

2.3.2.2 Intervention

The first intervention for the rehabilitation of the 'Italia' Square was done with the occasion of Pope Francis visit in Tirana in 2014 and in 2018 the Municipality of Tirana transformed it into public underground parking (Nepravishta, 2019). The plan of the square was also changed by the new Stadium project designed by ARCHEA Studio (Nepravishta, 2019). As can be seen from *Figure 6* there was a road between the square and the stadium, but afterwards the stadium and the square became more integrated and became connected as can be seen from *Figure 7*.



Figure 6. Qemal Stafa Stadium and 'Italia' Square December 2012 (Source: Flickr)



Figure 7. Qemal Stafa Stadium, 'Italia' Square and Mother Theresa Square, November 2020 (Source: Salillari Group)

The connection includes a 'red carpet' of tiles starting from the colonnade till the main entrance of the Air Albania Stadium (Nepravishta, 2019). The project, also changed also the view of the square, giving to the stadium façade vertical shading and decorating panels using the national colors of Albania, red and black (*Figure 8*), which gives the image of 'Albanian rugs and clothes' (Archea Associati, 2019). Air Albania stadium, different from Qemal Stafa Stadium, includes concave reverse curves in its

plan, creating new spaces that can be used by bars and cafes, improving the quality of public life around the stadium (Archea Associati, 2019).



Figure 8. ‘Italia’ Square together with Air Albania Stadium. Courtesy of the author

2.3.3 The Pyramid

The Pyramid is one of the most known monuments of Tirana. Its original purpose was being a museum for late dictator Enver Hoxha (*Figure 9*). The museum was built in 1988, 2 years after his death, and it served as a museum only for four years (Kodra, 2017). It is located in ‘Dëshmorët e Kombit’ Boulevard close to important state buildings. The architects chosen for this monumental project were: Vladimir Bregu; Pranvera Hoxha, who was also the dictator’s daughter; Klement Kolaneci, who was Pranvera Hoxha’s husband; and Pirro Vaso (Kodra, 2017). Throughout the years, it has gone through many temporary functions, however it failed to attain a permanent one, thus becoming neglected and decayed throughout the years (Nientied & Janku, 2019). In May 2018, it was decided that the Pyramid would turn into a multi-functional youth center (Nientied & Janku, 2019).



Figure 9. The Pyramid during its inauguration (Source: Iacono & Këlliçi, 2016)

2.3.3.1 Design

The museum (Figure 10) was made possible through the collective work of different professionals including the 4 already-mentioned architects, historians, artists, decorators, museum specialists and many volunteer workers (Iacono & Këlliçi, 2016). The exterior appeared as a concrete octagon with sloping walls, marble cover and long windows extended on the octagon's sides (Iacono & Këlliçi, 2016). This form choice is in harmony with Dajti mountain's shape according to the architects (Miho et al., 2018). The interior was defined by a giant hall and many mezzanines (Miho et al., 2018). The building also contained a marble statue of Enver Hoxha in the center of the hall and the different artifacts and materials placed along the perimeter of the hall (Iacono & Këlliçi, 2016). The Pyramid was different to other buildings in 'Dëshmorët e Kombit' Boulevard in: linearity to the Boulevard's axis, change in walls verticality, the combination of marble and glass as materials, and the performative exchange with the public, one example being that after the fall of the regime many people would climb daily on the top of the building (Kodra, 2017)

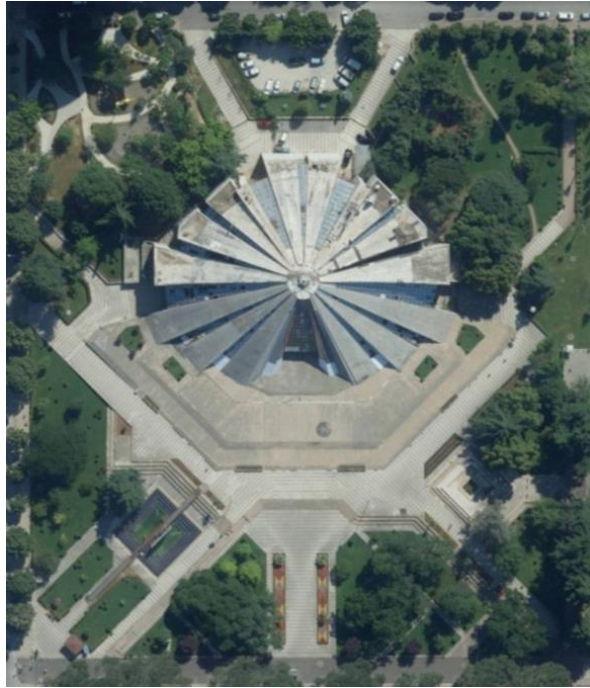


Figure 10. Top view of the old Pyramid, 2018 (Source:Asig)

2.3.3.2 Functions

After the fall of communism in Albania, the numerous temporary functions that the Pyramid had, include: exhibition hall, conference center, gallery, night club, TV studio office, and even as a NATO base during Kosovo war in 1999 (Nientied & Janku, 2019). There have also been many proposals for the future of the Pyramid, which were never realized, including turning into an opera; a national library; international cultural center; even a parliament in 2011 (Nientied & Janku, 2019). There were different proposals for the future purpose of the pyramid including a new parliament and a theatre (Rocker, 2017). However, they were never put to motion, so the Pyramid was left to decay with its peeled marble coat leaving only the concrete structure covered with graffiti and shattered windows (Rocker, 2017). Finally, in 2018, the city's mayor revealed a transformation project for the pyramid designed by the Dutch architectural studio, MVRDV (*Figure 11, Figure 12, Figure 13*), which would transform the pyramid into a multi-functional technological education center (Miho et al., 2018).



Figure 11. Plan of TUMO Center (Source: MVRDV)



Figure 12. Section of TUMO Center (Source: MVRDV)



Figure 13. After completion situation (Source: MVRDV)

2.3.3.3 Transformation Project

The new design keeps the old structure of the pyramid, adding steps to the sloping walls, in order to make it more accessible to the public, leaving only a small sloped section so people can slide like in the case of the old pyramid (MVRDV, 2018). Also, an elevator will give access to the top of the Pyramid to people who cannot climb the stairs (MVRDV, 2018). There is an addition of colorful boxes placed inside, over and outside the building (MVRDV, 2018). These boxes create a small village of cafés, studios, workshops, classrooms where technology courses are taught for free to children (MVRDV, 2018). Courses include: software, robotics, animation, music and film (MVRDV, 2018). The surrounding landscape has kept the general shape but there are many adjustments with box additions or greenery, and water features removal, as can be seen from *Figure 10* and *Figure 14*.

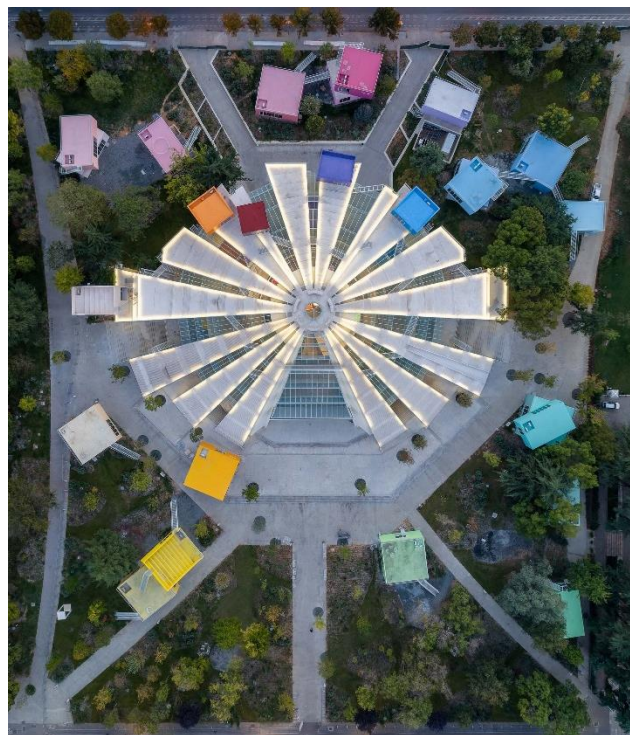


Figure 14. Top view of the new Pyramid (Source: MVRDV)

2.3.3.4 Public reaction

The Pyramid is one of the most well-known landmarks of Tirana (Iacono & Këlliçi, 2016). Throughout the years it was able to create a somewhat positive image

among the citizens, as can be seen from the ‘Protect the Pyramid’ movement as a response to the parliament project proposal (Rocker, 2017). As of summer 2017, in Kailey Rocker’s observations, the surrounding space around the pyramid was actively used by the citizens and tourists as a public park. Also, climbing up the slopes (*Figure 15*) of the pyramid was a very preferred activity among children and young adults (Rocker, 2017). Years later, in the context of the new TUMO center opening (*Figure 16*), the transformation project has taken notice from foreign media like The New York Times, in which it was stated that it could motivate the Albanian youth, give new job opportunities and hope for future of Albania (Higgins, 2023).



Figure 15. The Pyramid’s surroundings as a social space, 2017 (Source: Dan Volkman)



Figure 16. Social life after the transformation project (Source: MVRDV)

Two of the surveys for the Pyramid were conducted from December 2013-February 2014 by Francesco Iacono and Klejd Këlliçi, and the other in March 2018 by Peter Nientied and Eranda Janku. In the first survey, the most important results were that the old generation had a bigger attachment to the monument; the young generation considered the Pyramid as a symbol of Tirana, instead of communism, which was speculated by the authors to have as a reason the short period of functioning as Enver Hoxha's museum during communism and its distinct appearance; and lastly both generations were against the demolishing of the Pyramid (Iacono & Këlliçi, 2016). In the second survey conducted in 2018, one important result was that the Pyramid should undergo a transformation project (Nientied & Janku, 2019).

CHAPTER 3

METHODOLOGY

The focus of this thesis is post-occupancy evaluation or POE for short. It is an investigative POE since it is conducted during a decent amount of time, and includes methods such as questionnaire and behavioral maps in order to give a more thorough understanding of the performance of public spaces. The chosen research strategy for this thesis is a mixed method, including both qualitative and quantitative. *Table 4* shows a summary of the methods used in this thesis.

Table 4. Used Research Methods. Courtesy of the author

<i>Method</i>	<i>Analysis</i>
<i>Spatial analysis</i>	Functional and transportation maps in 800m radius from the case studies.
<i>Physical characteristics</i>	Map showing physical elements of the sites like: trees, sitting areas, distinct objects like sculptures, lighting elements, stairs, paving material, green areas.
<i>Behavioral map</i>	Location, age, gender of users, and their activities: sitting, walking, standing, running, playing etc.
<i>Questionnaire</i>	Different aspects asked to users like the level of: comfort, safety, greenery, connectivity.

3.1 Data collection

The data that will be used in this thesis are from online sources and on-site sources. The online part consists of maps of Tirana from Google map, aerial photos from ASIG, businesses information from Google map, architectural drawings from Archea Associati and MVRDV, drone photos and videos available online. While the on-site part includes observations, notes, sketches, photos and videos. The on-site data collection is conducted on different days for more detailed understanding of the physical and social characteristics of the case studies. Another important data source is the feedback from the users which is received through on-site and online questionnaires.

3.2 Spatial analysis

For the qualitative part, the first step of this methodology is understanding the relationship of the chosen case studies with their surroundings. To do so, a spatial analysis method is done, showing maps of two locations and their surroundings, with a radius of 800m, since it's a proper threshold that people are likely to walk between locations (Rajaei et al., 2019).

The maps' focuses are to show the different functions around the locations, and the possible modes of transportation. This type of analysis helps to understand more the reason for the performance level for these public spaces. If there are no appropriate means of reaching the site, there is bound to be less people. Even the different functions and activities surrounding the sites can affect the number of people using the site. This analysis can also lead to some expectations for the questionnaire results.

After analyzing the relationship with the outside part of the case studies, the focus is what happens in the inside part. First, the physical elements are shown in map. Elements such as: trees, sitting areas, distinct objects like sculptures, lighting elements, bins, bike racks, stairs, paving material and green areas. These features can impact the presence of people, thus showing what spots are active and inactive.

3.3 Behavioral map

Afterwards, the behavioral map is created by using direct observations, photos and videos. The on-site observations are done on a weekday and during the weekend, three times per day, in different points of the sites. For spots that have constant movement like entrances of 'Italia' square or paths and stairs of the Pyramid 5-minute videos have been used to collect the data, for the rest of the areas, photos have been used. The chosen days are Sunday, March 10 and Monday, March 18. Both of these days had good weather, in order to properly show how much are the selected public spaces used by the people. The chosen day times are morning (10:00-12:00), early afternoon (13:00-15:00), and late afternoon (16:00-18:00). By making this choice the behavioral map shows also the changes the sites undergo during a day. After getting the necessary information on the site, each data is represented with a respective symbol in the behavioral maps. This information is processed in the ArcMap program. This

program can store each information, it can create different maps on different categories e.g. gender. All the information can be accessed in the ‘table of attributes’ and it can lead to many different charts e.g. the gender percentage among users.

The behavioral map shows where users are located; how many users in one spot i.e. individual, groups; the age (children, teenagers, adults, elders), the gender of the users and if the place is frequented by people with disabilities; and the different types of activities i.e. sitting, walking, standing, running, playing etc. This information can show which spots in the sites are used and unused, and emphasize successful or problematic areas. Below in *Table 5*, you may find the table of activities considered during the site observations.

Table 5. Table of behavioral mapping aspects. Courtesy of the author

<i>Aspect</i>	
<i>Age group</i>	Child; Teenager; Adult; Elder
<i>Gender</i>	Male; Female
<i>Number of people</i>	Individual; Group; Big group (more than 10 people)
<i>Primary activities</i>	Sitting; Standing; Walking; Running/Exercising; Biking/Scooter; Climbing (for the Pyramid only); Playing; Sitting in café.
<i>Secondary activities</i>	Staying in cell phone; Taking photos; Reading; Eating/Drinking; Buying tickets (for the square only); Maintenance/Cleaning.

3.4 Questionnaire

The next research method implemented in this thesis is the questionnaire, which asks users of both sites. The questionnaire is answered part on-site, part online, in order to make the data collection more convenient. The types of questions are multiple-choice question, Likert scale questions and 2 open-ended questions at the end. The questionnaire asks the users about their age, gender, reason for going to the site, from where and how they accessed these locations, the like/dislike for different aspects of the sites which can be asked using Likert scale questions. The aspects that are asked are: comfort, diversity, image, safety, greenery, places to sit, shade, lighting, aesthetics, heritage value. The questionnaire measures the level of satisfaction for both case studies and also highlights aspects that need improvement. The target sample size is 200 responses in total.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Spatial analysis

Part of the methodology employed in this thesis is the functional and transportation analysis within an 800-meter radius surrounding both the Pyramid and ‘Italia’ Square. The functional analysis (*Figure 17*) emphasizes which buildings are solely commercial, state institutions, educational facilities, religious buildings and areas characterized by a blend of residential and commercial functions, thus labelled in the analysis as mixed residential function. The main purpose of this map is to give a visual depiction of the proximity of residential zones, a factor that typically affects the number of users in an outdoor public space.



Figure 17. Functional analysis in 800m radius. Courtesy of the author

Both the Pyramid and 'Italia' Square are located along 'Dëshmorët e Kombit' Boulevard, which is a principal axis in Tirana. From Skanderbeg Square till Polytechnic University of Tirana, the boulevard is surrounded by commercial, educational, cultural and state buildings. Some of them include the parliament, ministries, embassies, universities, The Palace of Congresses and more. So, in the north-south direction, in a distance of 1.35 km, the boulevard does not have any residential function. If we include the Tirana Lake Park in calculation, the whole north-south direction has a lack of residential spaces. In the west side there is a whole block with a width of 220m. So, after that distance, there are residential areas which include low-rise, mid-rise and high-rise buildings. While in the east direction, there is a closer proximity to residential areas, compared to the west direction, which also include buildings of different heights.

Another aspect that is shown in the functional analysis, is the green spaces. As can be seen from the map, the residential areas do not have many green spaces, but close to the boulevard and Skanderbeg square there are some, which include "Viktor Eftimiu" Park, Europa Park, Rinia Park, La Radura, Ismail Qemali Park, and the biggest green space inside the city, Park on the Artificial Lake. Popular public spaces close to the Pyramid and 'Italia' square also include Skanderbeg Square and Murat Toptani Promenade.

Another external factor that is considered in the analysis is public transportation. (*Figure 18*) shows the available bike paths close to the Pyramid and 'Italia' Square. As can be seen from the map, both case studies have bike paths near them, which makes cycling a possible means of transportation to reach both locations. In Figure are shown the bus stations and the path that they take. Both case studies have bus stations near them and can be immediately reached by 'Tirana e Re' and 'Teg - Kopështi Zoologjik - Ish Stacioni i Trenit' bus line, making travelling by bus a possible mean of transportation for both, the Pyramid and 'Italia' square. Thus, users have multiple transportation options, including walking, automobile, bicycling, and public bus transit, for reaching these public spaces.



Figure 18. The bike paths close to the case studies. Courtesy of the author



Figure 19. Bus city transportation path and stations close to the selected case studies.
Courtesy of the author

4.2 Site mapping

The context analysis is followed with a thorough analysis of the physical elements of the selected case studies. These elements will be shown through spatial analysis which is represented through different maps done by the author.

4.2.1 'Italia' Square

The first case study is 'Italia' Square. In the (*Figure 20*) it is shown the ground floor of the square. It is an open square paved with stone, surrounded by Tirana National Archeological Museum, Tirana University Rectorate and Air Albania Stadium. As also stated in the literature review there is a 'red carpet' of pavement connecting the rectorate with the stadium. At first look, 'Italia' square can be divided into two parts. One is the space enclosed by the colonnade of the rectorate and museum, and the other part is the open square in front of the stadium. The elements of the square are one ticket stand, café sitting, 2 parking ramps, 2 canopy structures that cover the staircases towards the underground parking (*Figure 21*), four trees, 'Big Bang' sculpture, 4 ventilation grilles spread in the square and four bins and 10 street lights in the corners of the square. The handrail on the parking ramps is used also as bike racks (*Figure 22*).

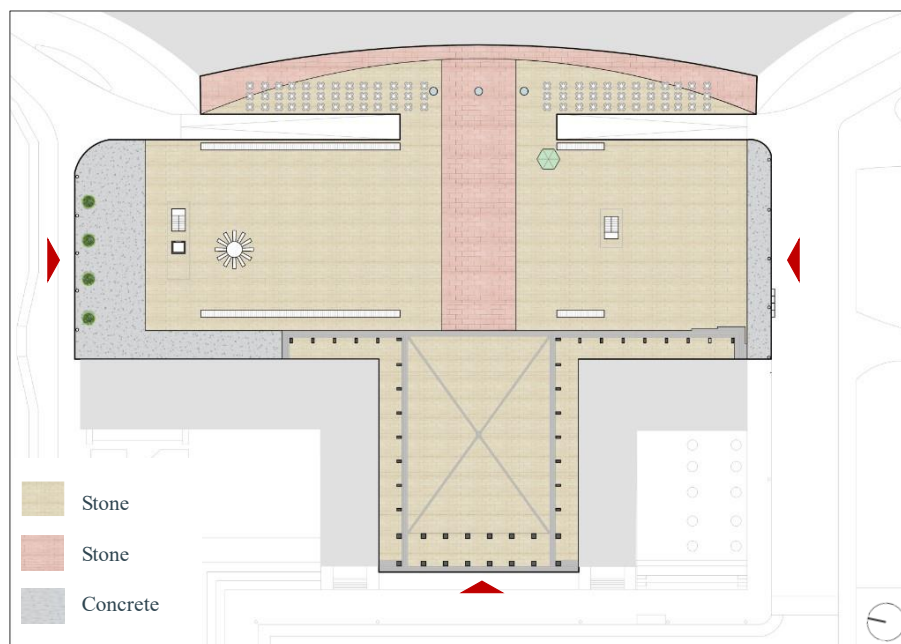


Figure 20. The plan of 'Italia' Square and entrances. Courtesy of the author



Figure 21. The ticket stand, the café's outdoor and the stairs' canopy. Courtesy of the author



Figure 22. The handrail used as a bike rack, the canopy, the 'Big Bang' statue. Courtesy of the author

There are 4 café/restaurants in the stadium ground floor, facing the square, which have outdoor seating. The steps in the colonnade of the rectorate and museum are also used for sitting by the users (*Figure 23*). In the aspect of lighting (*Figure 24*), there aren't any street lights inside the square, but the lighting is achieved through other light types. For example, the four mentioned trees each have three small ground spotlights. The rectorate and the museum have outdoor wall lights, which lighten up the buildings and the surrounding space. The stadium itself is a source of light, due to the canopy which covers the ground floor of the stadium, with its numerous small lights, and the color changing façade lighting of the stadium. (*Figure 25*) shows different types of lighting in the square.

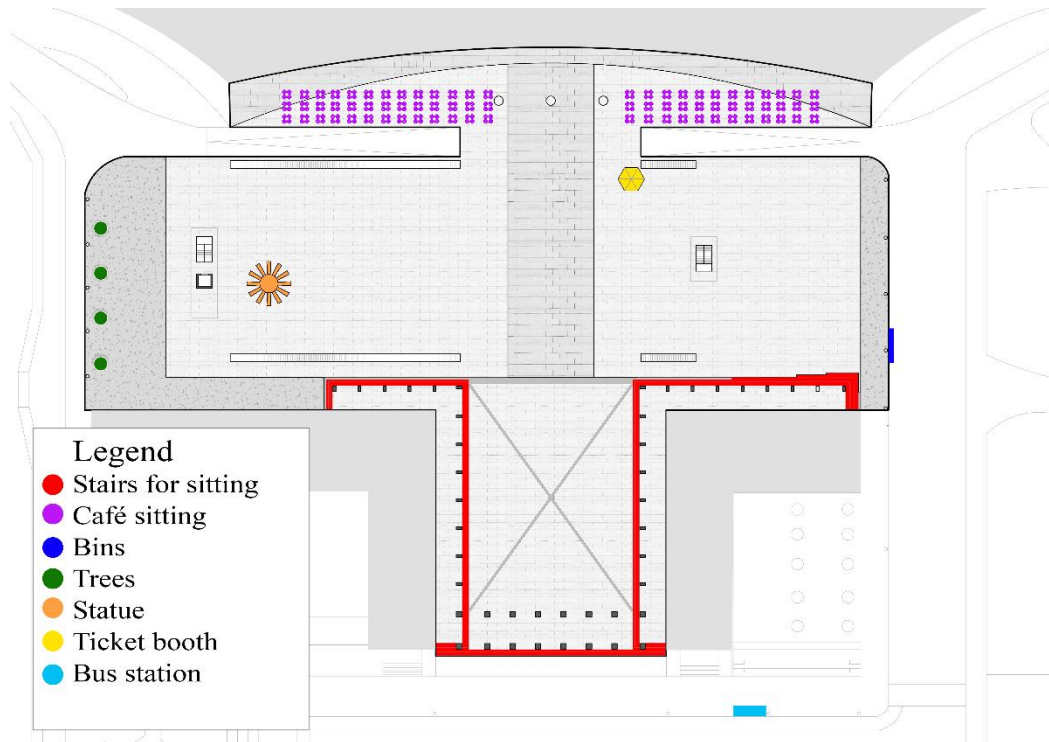


Figure 23. Elements of the square. Courtesy of the author

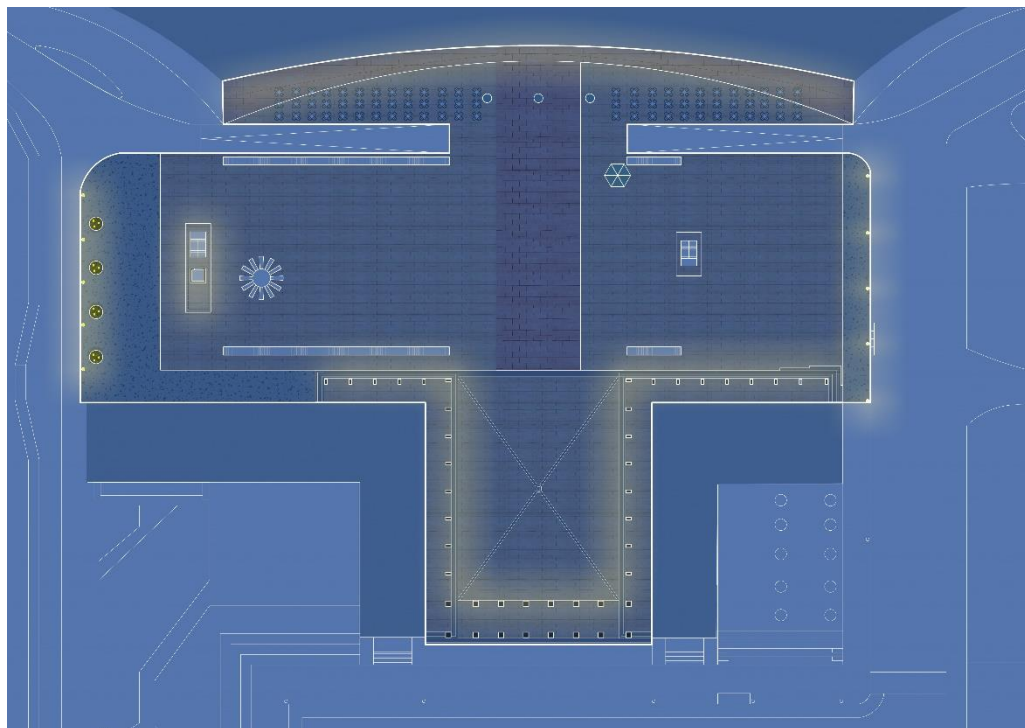


Figure 24. Lighting plan of 'Italia' square. Courtesy of the author



Figure 25. Different types of lighting in ‘Italia’ square. Courtesy of the author

4.2.2 The Pyramid

The current situation of the Pyramid’s landscape design is a result of a transformation project designed by the Dutch Studio, MVRDV. In (*Figure 26*), the softscape and the hardscape sections are displayed. The hardscape parts, which are indicated with color grey, include the paths that take you to the center of the site, i.e. the Pyramid, and the gravel zones which are incorporated in greenery. The softscape includes many grass zones which inside them have some sort of ‘planting islands’, in which flowers or bushes are planted (*Figure 30*). Another important element are the trees, which include big trees and small planted trees (*Figure 30*). And finally, a very big addition in the Pyramid’s surroundings is the 26 colored cubes (*Figure 26*), with different functions (*Figure 27*). Each cube has its own entrances (*Figure 28*). In the same figure, the entrances to the Pyramid zone can also be seen. There are three main paths in front of the Pyramid, where the visitors can enter. There is a road alongside the ‘Lana’ River which is mostly used by people who walk by the zone. In the back of

the Pyramid there are two vehicular roads, and one path for the visitors (upper-right corner).



Figure 26. Top view showing the pavement materials around the Pyramid. Courtesy of the author

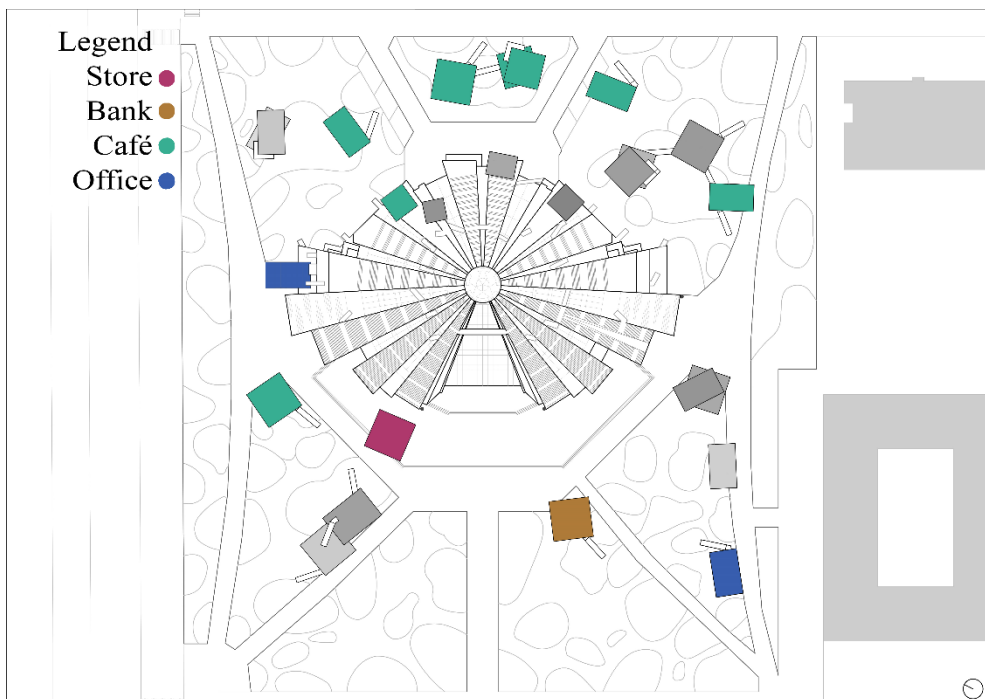


Figure 27. Functions of the cubes around the Pyramid, as of May 2024. Courtesy of the author

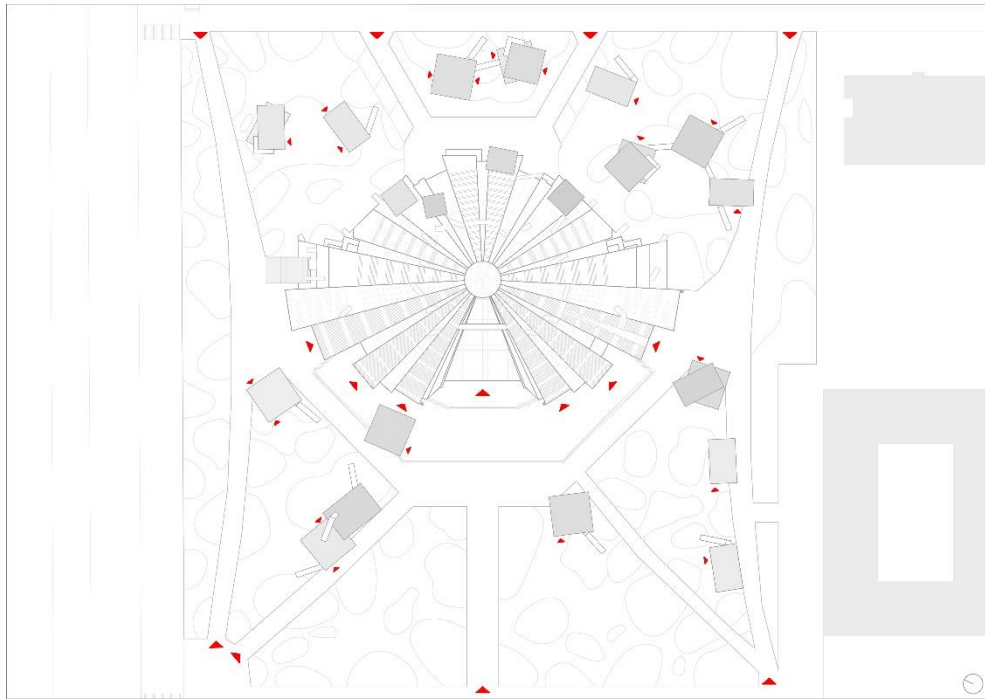


Figure 28. Top view showing the entrances in the Pyramid site and the cubes around the Pyramid. Courtesy of the author

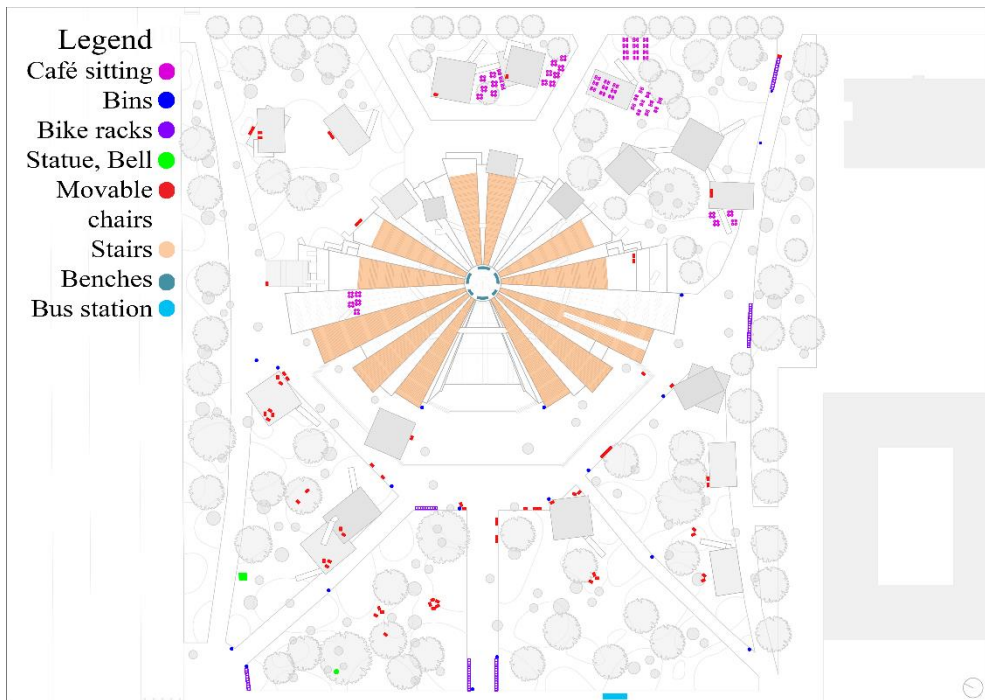


Figure 29. Physical elements around the Pyramid. Courtesy of the author



Figure 30. Gravel, grass, and planted zones, as well as different types of trees.

Courtesy of the author

In the Pyramid’s surroundings there are also many physical elements (*Figure 29*), including bins, bike racks, sitting, and cultural objects such as the ‘Peace’ bell and ‘Papa Francesco’ statue (*Figure 31*). It is worth mentioning that the sitting in the Pyramid can be divided into two parts: movable chairs, which are scattered around the public space and are moved by the users themselves, and the sitting in cafes, which are used by the businesses’ clients. The movable chairs, the bins and the bike racks (*Figure 31*), are the same model repeated several times in the space. In (*Table 6*) are shown the numbers of each element, which have resulted from the on-site observations in March 2024.

Table 6. Number of physical elements. Courtesy of the author

Element	Number
Movable chairs	70
Bins	14
Bike racks	5

The location of the movable chairs is constantly changing, by the locals and by the tourists. The map in (*Figure 29*) shows the situation of the chairs in March, however as of April, it seems that the chairs in front of the Pyramid have been relocated. Many chairs have been moved to the top of the cubes around the Pyramid.



Figure 31. Physical elements: the ‘peace’ bell, ‘Papa Francesco’ statue, movable chairs, bin and bike rack. Courtesy of the author

Another important element in the public space around the Pyramid is the lighting (*Figure 34*). There is a variety (*Figure 32*) of lighting including: lighting in the handrails of the Pyramid steps (*Figure 33*), small scattered ground spots, street lights and hanging lights from the trees and the cubes.

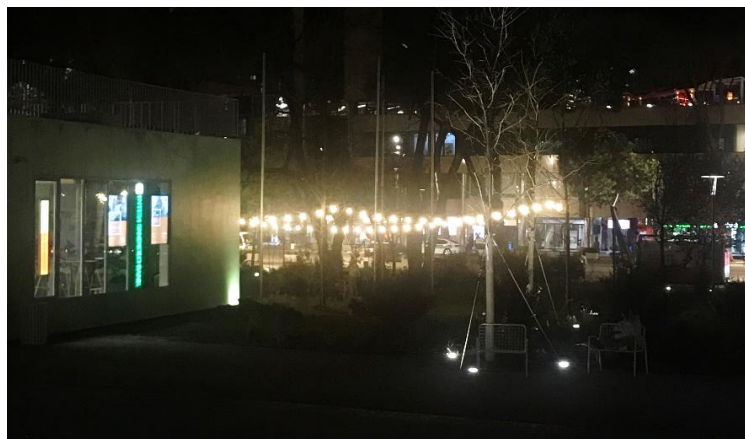


Figure 32. Different types of lighting around the Pyramid. Courtesy of the author



Figure 33. Lighting in the handrails of the Pyramid steps. Courtesy of the author



Figure 34. Lighting plan in the Pyramid. Courtesy of the author

4.3 Behavioral mapping

The behavioral map is the third step implemented in the methodology of this thesis. It shows where people are located in the site during observations and it categorizes them in different aspects like: gender, age, activities etc. The mapping is done on both case studies: ‘Italia’ Square and The Pyramid.

4.3.1 ‘Italia’ Square

The first map (*Figure 35*) shows every person recorded in different times and days. As explained in the Methodology sections, the observations are done on two days: one weekday, Monday and one weekend day, Sunday; during three times in day: morning (10:00-12:00), early afternoon (13:00-15:00) and late afternoon (16:00-18:00). (*Table 7*) shows every date and specific time, so the difference during one day and between the days can be seen more clearly. In total, 1315 people were recorded.

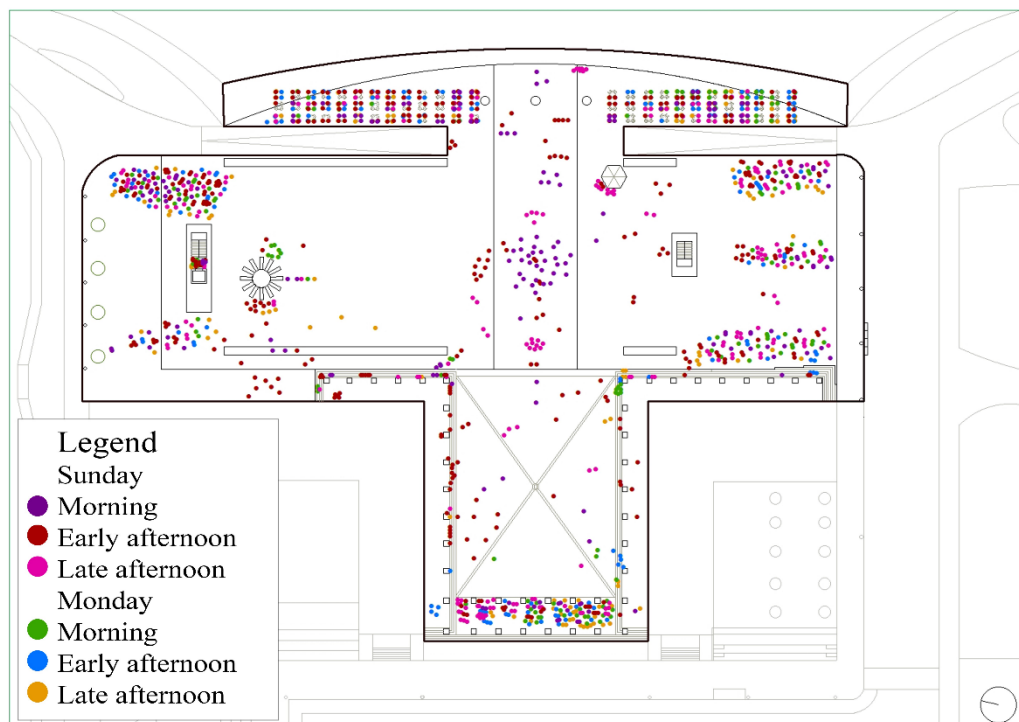
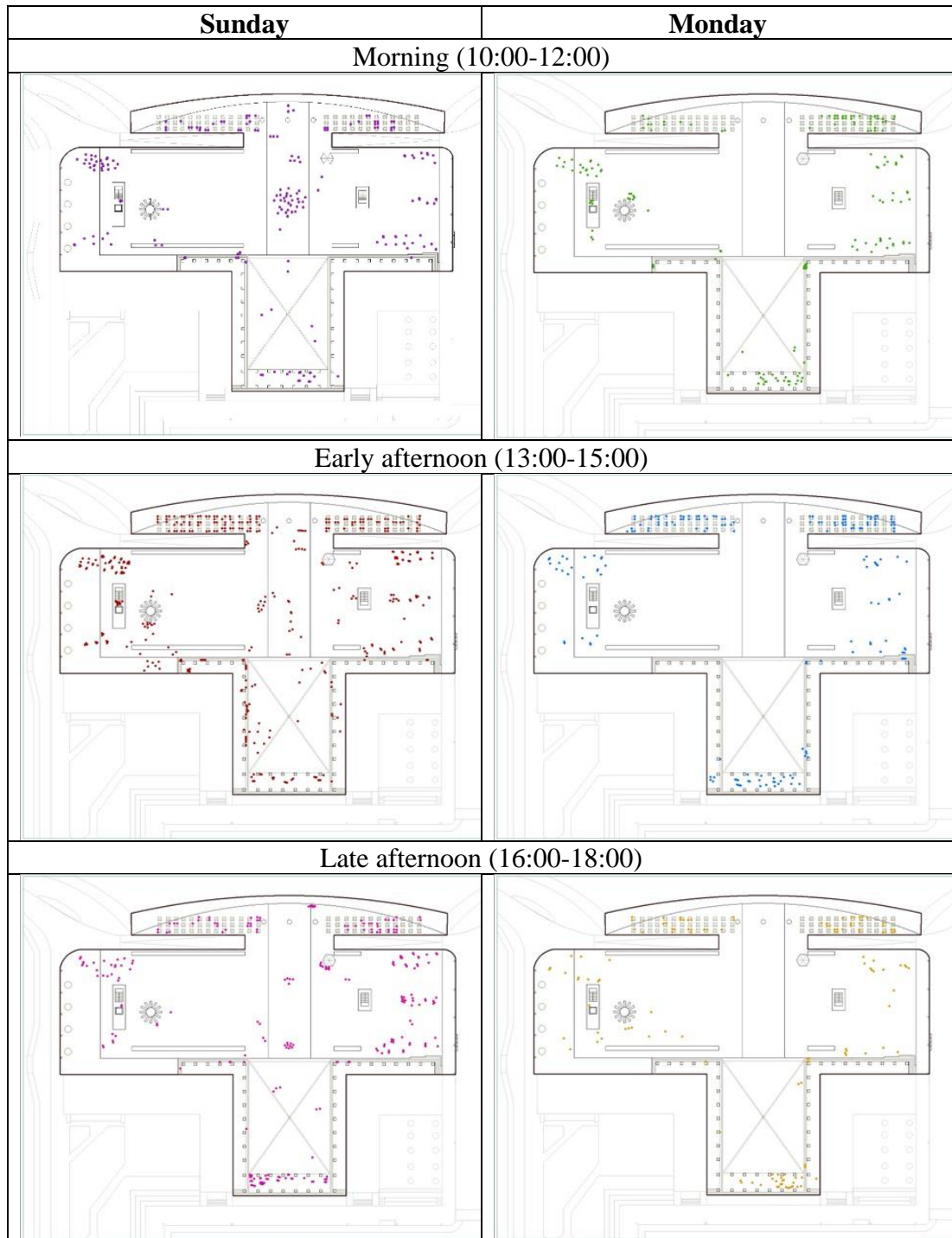


Figure 35. ‘Italia’ Square, every date and time together. Courtesy of the author

Table 7. Each day and time results. Courtesy of the author



The second map (*Figure 36*) shows the different zoning done on the square and the total number of people recorded during the observations in every time and date. The ‘entrance’ zone includes the total number of people entering and leaving the site,

on 5-minutes intervals. The ‘cafe’ zone shows the people sitting in cafes. And the ‘activity’ zone shows the people playing, biking, or standing.

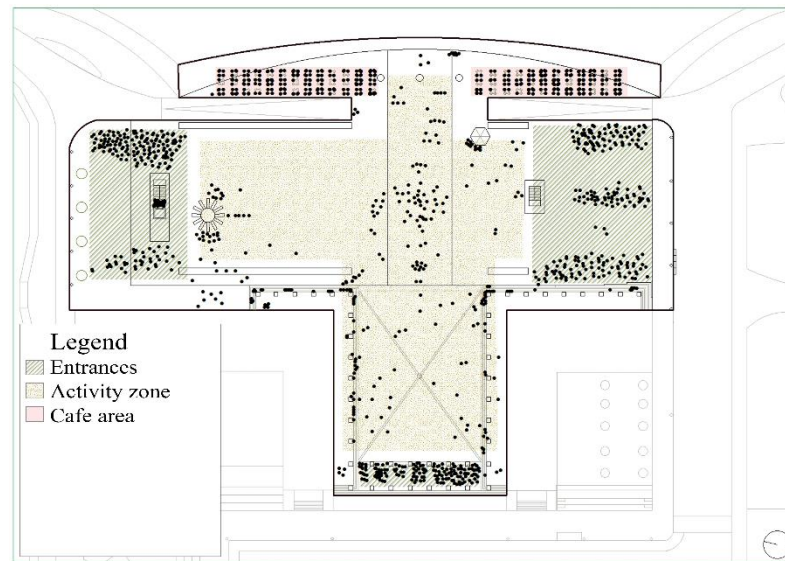


Figure 36. ‘Italia’ Square, zoning and total number of people. Courtesy of the author

Dividing the square in three zones is helpful in categorizing people who ‘visit’ the square from people who are just ‘passing-by’ (Figure 37). The people in the ‘entrance’ zone are characterized as people who are passing-by, while the people in the other zones are considered as visitors. This is not completely accurate since they may be people coming to stay instead just to pass through the square, but it is a good way to create an idea of the ratio between people who stay and people who leave.

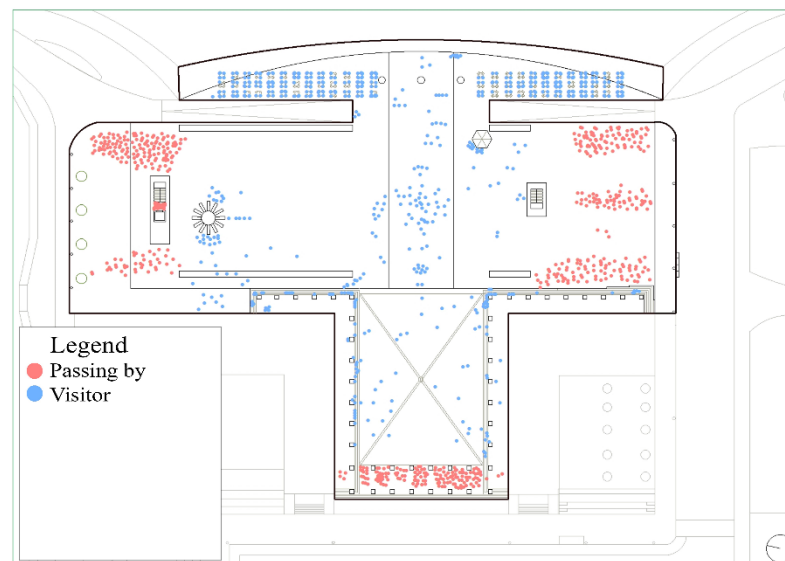


Figure 37. ‘Italia’ Square, passing and visiting people. Courtesy of the author

The people added in the behavioral maps are analyzed by different aspects, including: the day and time they frequent the square (*Figure 35*), gender (*Figure 38*), age group (*Figure 39*), whether they are alone or in group (*Figure 40*), whether they have visible disabilities (*Figure 41*), their primary activity e.g. walking, standing (*Figure 42*), and secondary activity e.g. taking photos, staying on cellphone (*Figure 43*).

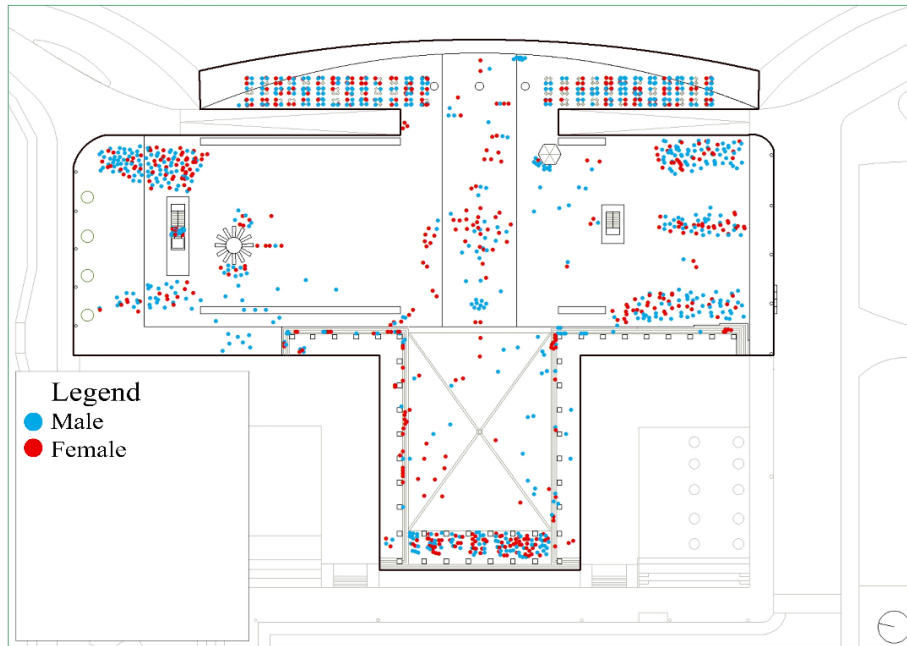


Figure 38. 'Italia' Square, gender category. Courtesy of the author

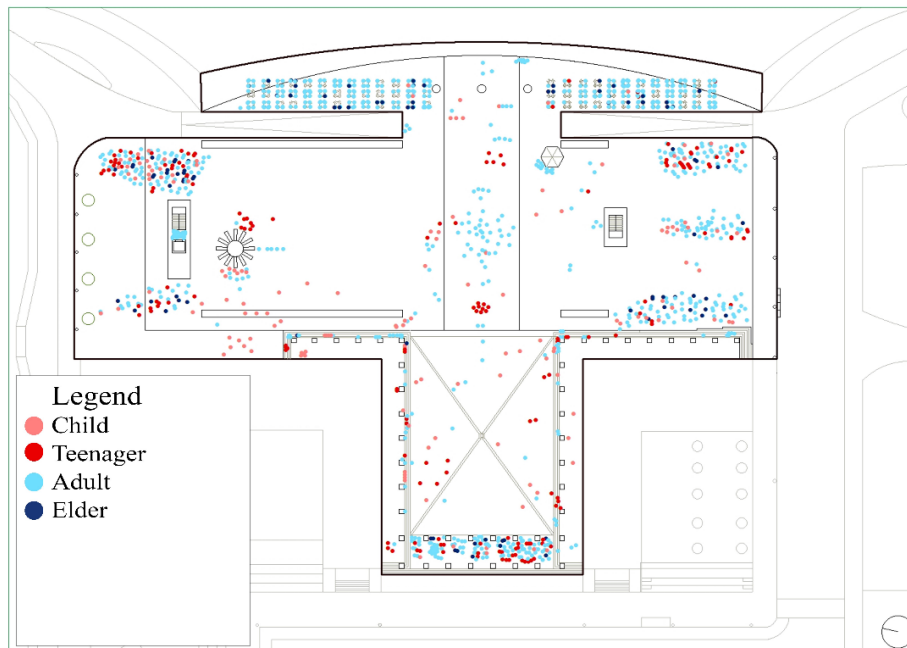


Figure 39. 'Italia' Square, age category. Courtesy of the author



Figure 40. 'Italia' Square, individuals and groups. Courtesy of the author

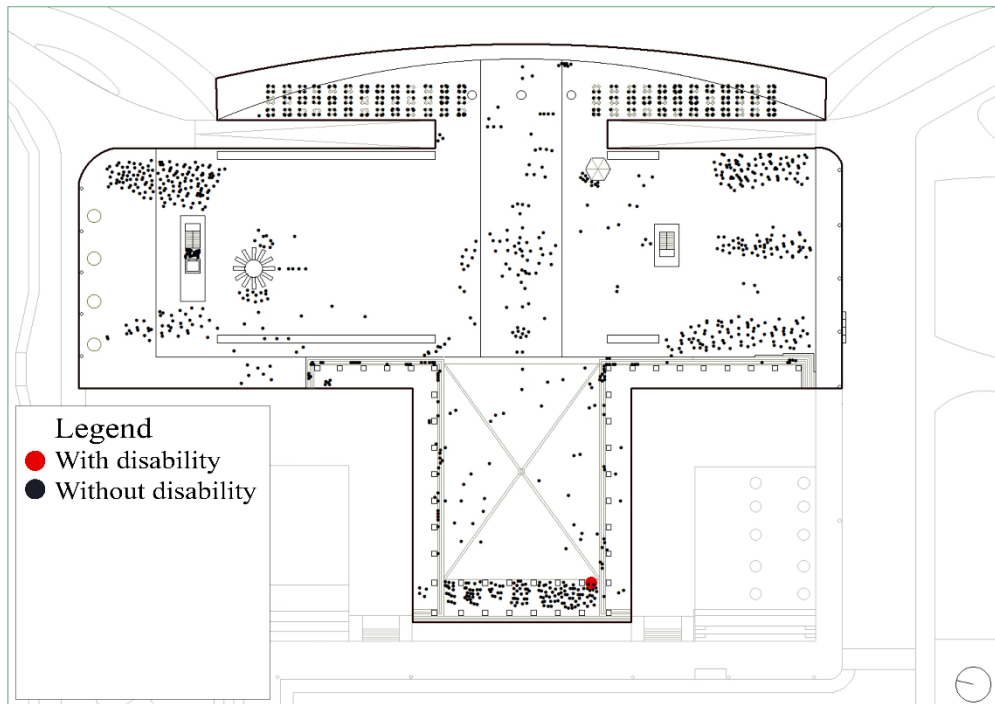


Figure 41. 'Italia' Square, people with disabilities. Courtesy of the author

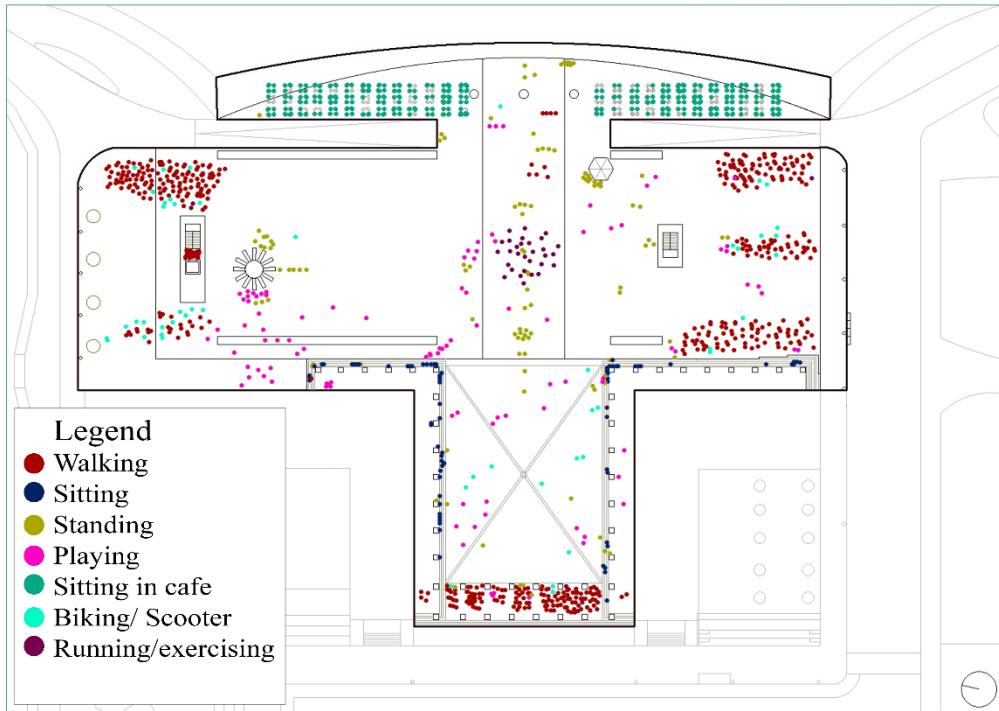


Figure 42. 'Italia' Square, primary activities. Courtesy of the author

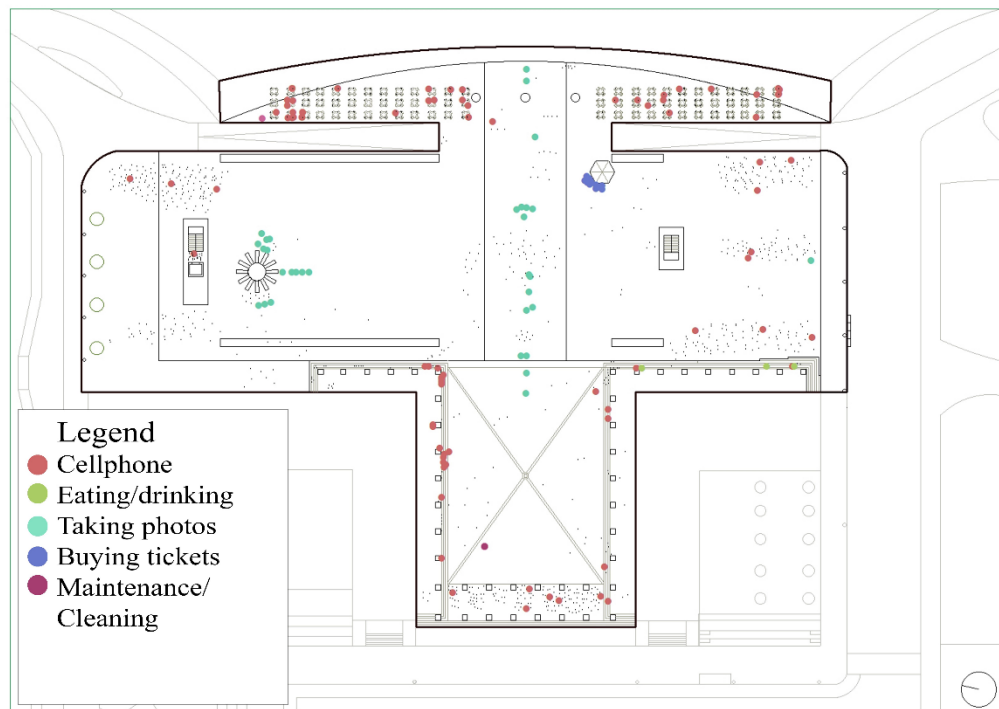


Figure 43. 'Italia' Square, secondary activities. Courtesy of the author

4.3.2 Behavioral Mapping of 'Italia' Square - Discussions

In (Figure 35) and (Table 7), it can be seen that on the weekend there are more people than during the week. The most frequented period is early afternoon on Sunday (Figure 44), which has more people walking, standing and kids playing in the site. Different trends or patterns can be seen from each map. In (Figure 35), it can be seen which entrance people prefer more. If we consider the entrance on the left in the figure, it seems that the upper part is more frequented, which is probably due to leading to a main street full of businesses and residential buildings, while on the lower part there is only the Congresses Palace (Pallati i Kongreseve). If we consider the entrance on the right, the lower part and the upper part are mostly balanced, both have a similar number of people entering/leaving. If we consider the entrance by the columns, it seems that the right half has more people than the left part, which may come as a result from the presence of the bus station. It also seems that the most frequented parts by the people are the cafes, the small square surrounded by the museum and rectorate, the middle part of the square in the 'red tiles carpet', and the vicinity of the 'Big Bang' statue.



Figure 44. Social life in the square, photo taken during early afternoon, on Sunday, March 10, 2024. Courtesy of the author

From (Figure 38), it is apparent that there are more males than females that frequent the square. It looks like the cafes are more frequented by the male gender,

while the stairs in the rectorate/museum buildings are frequented more by the female gender. In (*Figure 39*), it can be seen that the most recurring age that frequents the square are adults. Kids are mostly concentrated in the square between the museum and rectorate and near the ‘Big Bang’ statue. In (*Figure 40*), it is very visible that most of the people frequent the square in groups, instead of individuals. As for disabilities, (*Figure 41*) there is only one recorded person with disability.

For primary activities (*Figure 42*), most people enter and leave the square in the ‘entrance’ zones by walking. The lower part of the left entrance has the most people entering/leaving by bike or scooter, which may be as a result of the existing bike infrastructure nearby (*Figure 18*). All people sit in the cafes or on the stairs in the rectorate/museum, which is reasonable, since there are no other places or urban furniture to sit (*Figure 23*). Most people are standing near the ‘Big Bang’ statue and the central axis of the square. A part of them standing in order to take photos (*Figure 43*).

During Sunday morning, there was an activity in which people were gathered to exercise (*Figure 45*) in the middle of the square, which lasted for around ten minutes. As for playing, most of the people who were playing are kids, which as previously mentioned, are located near the statue and near the small square. The games that were viewed during the observations involve: playing with ball, biking, roller skating, using a kick scooter, playing with electric mini-cars for kids, flying kites, skateboarding. For secondary activities (*Figure 43*), cellphones are used by people sitting in the stairs, café and people walking through the square. There’s a ticket stand where people buy tickets. And sometimes people choose to eat, sitting on the stairs. There was also an adult female cleaning the square on Monday morning.



Figure 45. People exercising as a big group, photo taken during morning, on Sunday, March 17, 2024. Courtesy of the author

4.3.3 The Pyramid

The same approach that is used in the case of ‘Italia’ Square is also followed in the case of the Pyramid. In the first map (*Figure 46*) are shown the total number of people recorded in different times and days. Just like in the case of the square, the observations are done on two days: one weekday, Monday and one weekend day, Sunday; during three times in day: morning (10:00-12:00), early afternoon (13:00-15:00) and late afternoon (16:00-18:00). Similarly, in (*Table 8*) is shown each date and specific time situation, to see better the difference during one day and between the days. In total, 1817 people were recorded.

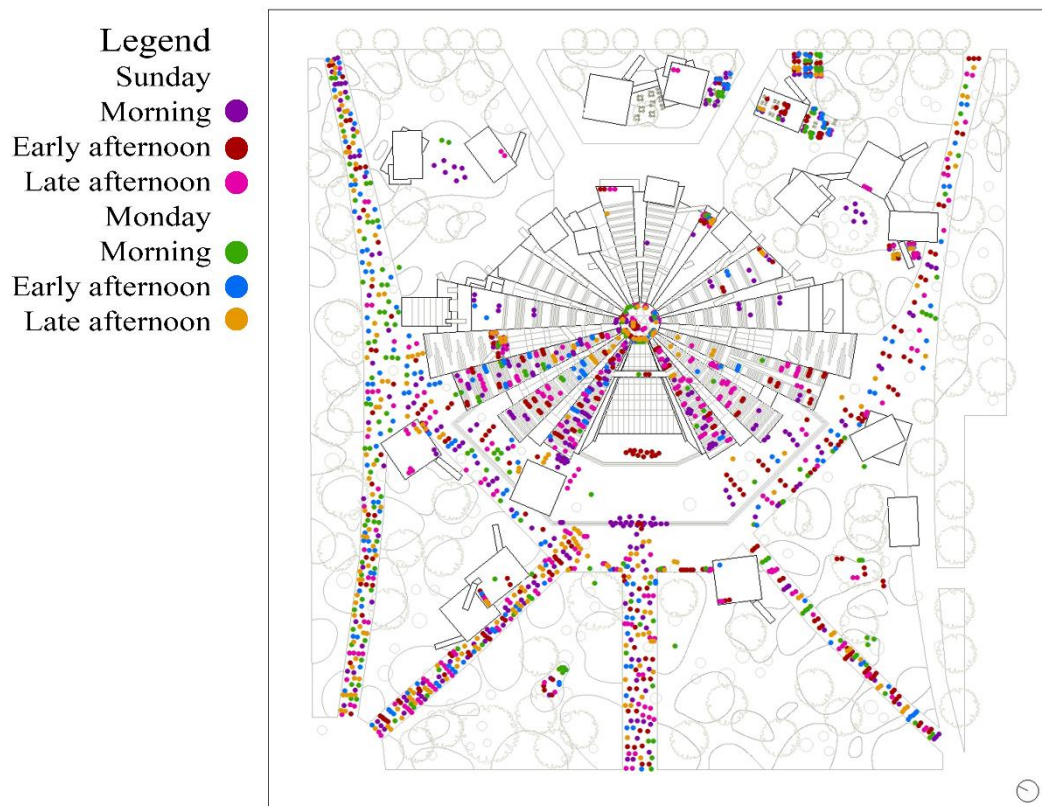
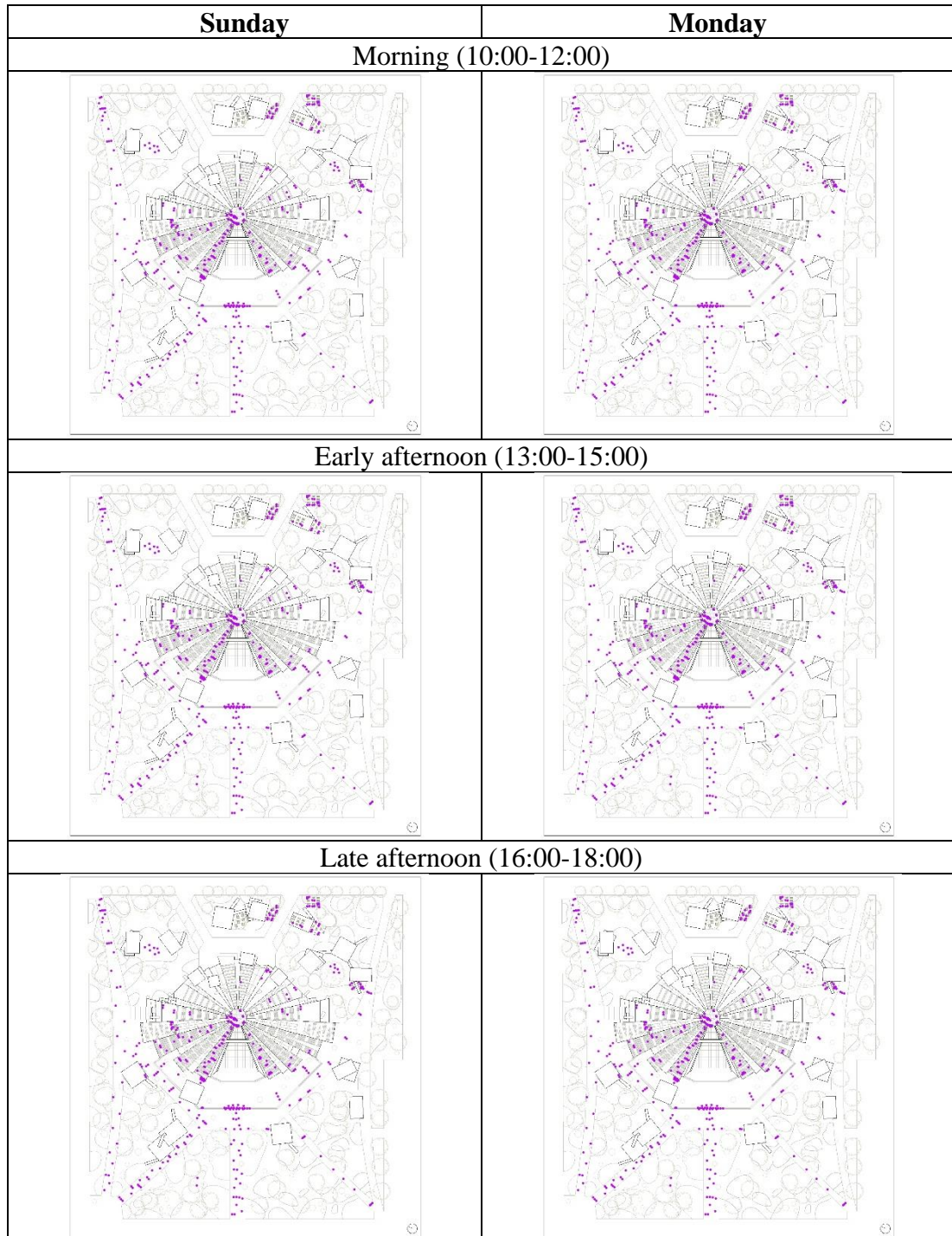


Figure 46. The Pyramid, every date and time together. Courtesy of the author

The second map (*Figure 47*) shows the different path categorization done on the Pyramid and the total number of people recorded during the observations in every time and date. The paths include the total number of people entering and leaving the site, on 5-minutes intervals. The path labelled as ‘passing by’, is about people just passing along, while the other paths which lead to the center of the site, the Pyramid, labelled as ‘visiting’, show people who enter the site to stay at least for a short time

for different reasons. This way of categorizing, is useful in creating a ratio of people who use the site to stay and people who just walk by (Figure 48).

Table 8. Each day and time results. Courtesy of the author



Just like in the square's case the people added in the behavioral maps of the Pyramid are analyzed by different aspects, including: the day and time they frequent

the square (Figure 46), gender (Figure 49), age (Figure 50), whether they are alone or in group (Figure 51), whether they have visible disabilities (Figure 52), their primary activity e.g. walking, standing (Figure 53), and secondary activity e.g. taking photos, staying on cellphone (Figure 54).

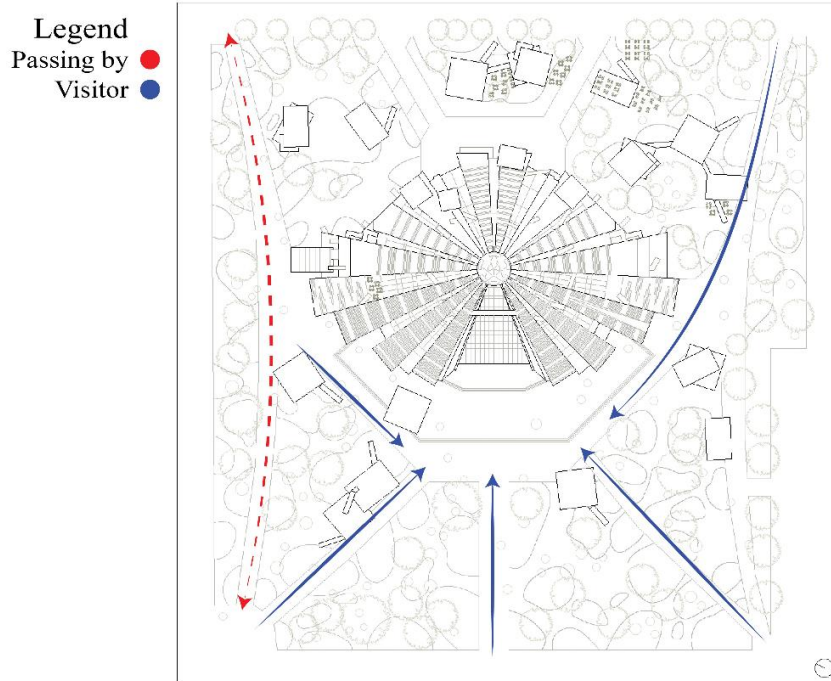


Figure 47. The Pyramid, categorization of paths. Courtesy of the author

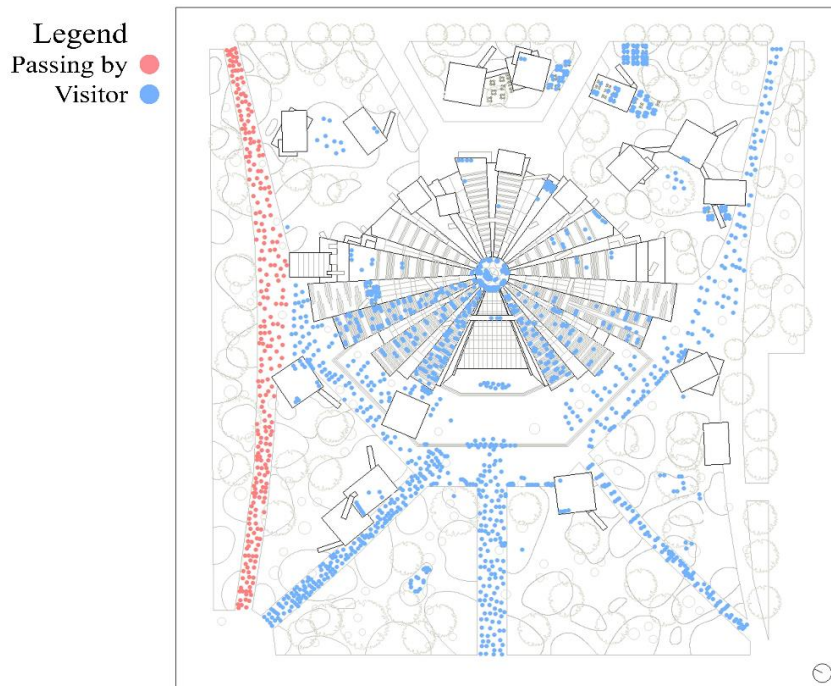


Figure 48. The Pyramid, passing and visiting people. Courtesy of the author

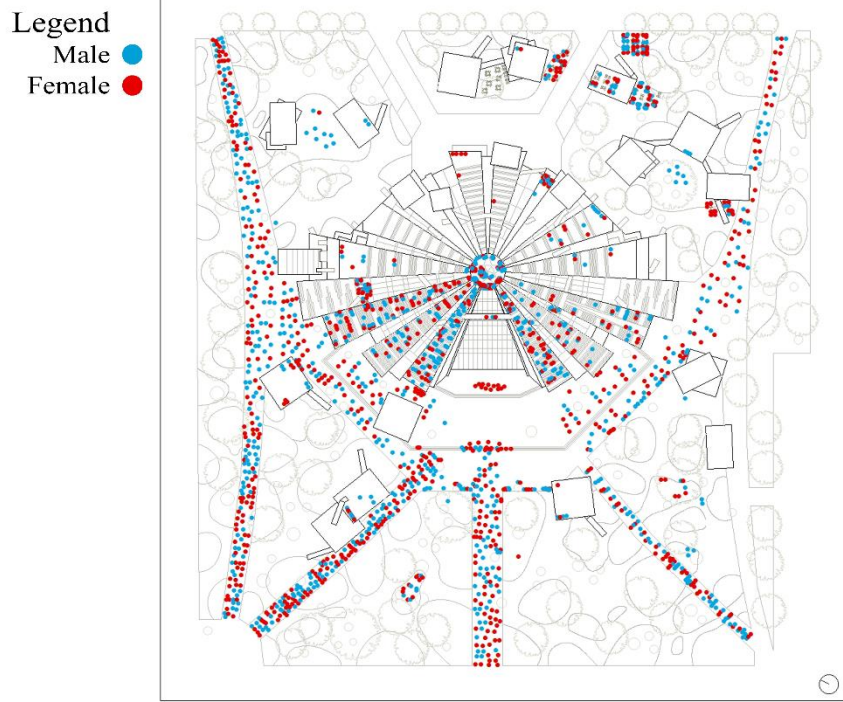


Figure 49. The Pyramid, gender category. Courtesy of the author

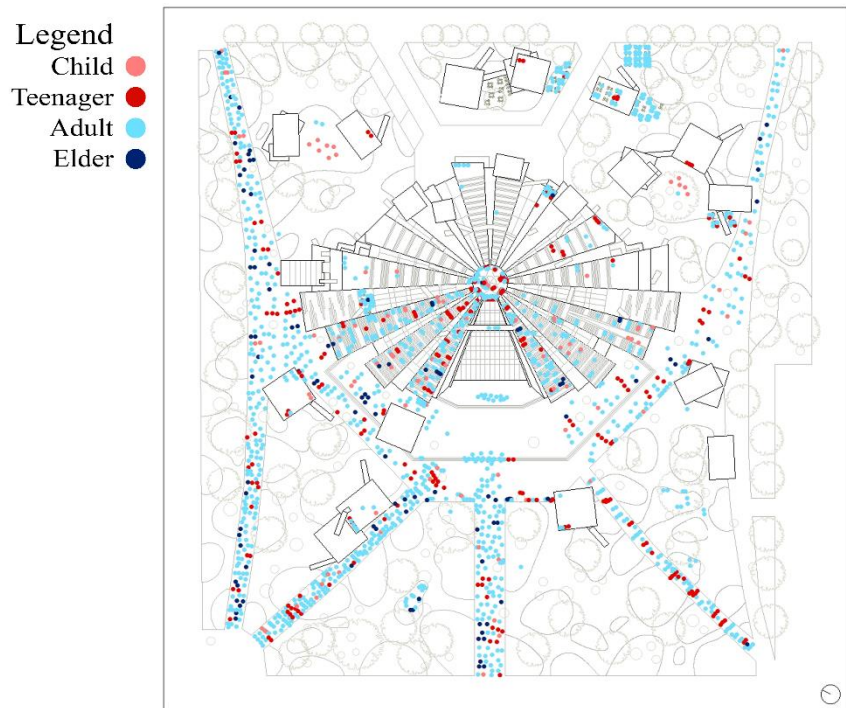


Figure 50. The Pyramid, age category. Courtesy of the author

Legend
Individual ●
Group ●
Big Group ●

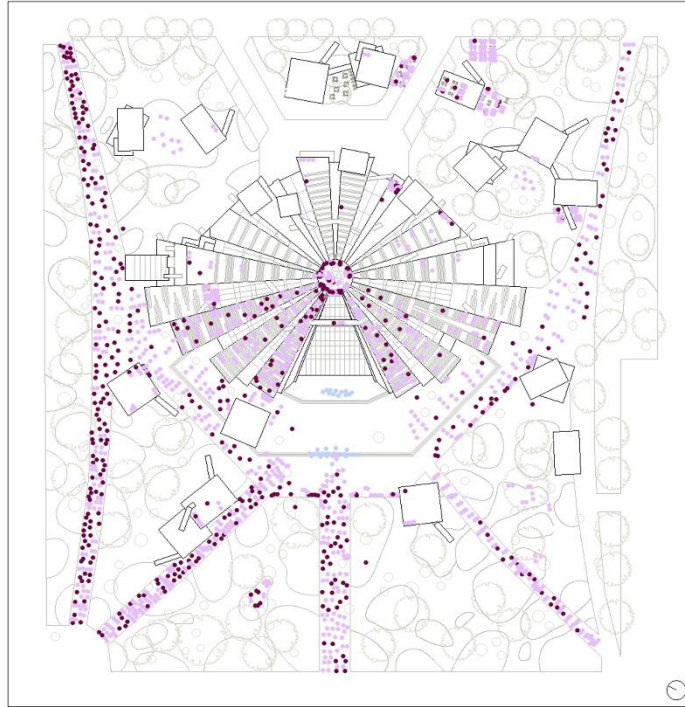


Figure 51. The Pyramid, individuals and groups. Courtesy of the author

Legend
With disability ●
Without disability ●

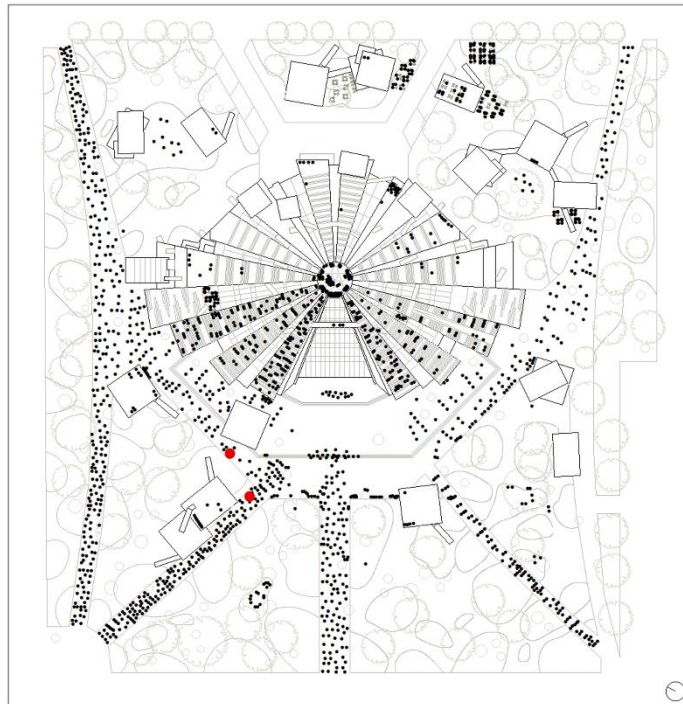


Figure 52. The Pyramid, people with disabilities. Courtesy of the author

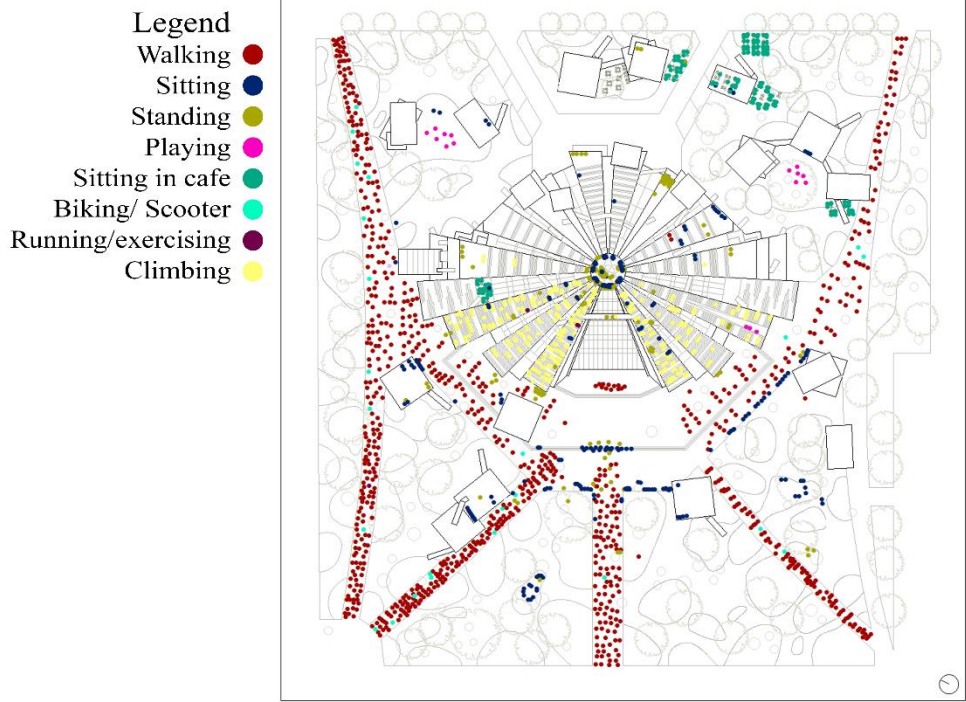


Figure 53. The Pyramid, primary activities. Courtesy of the author

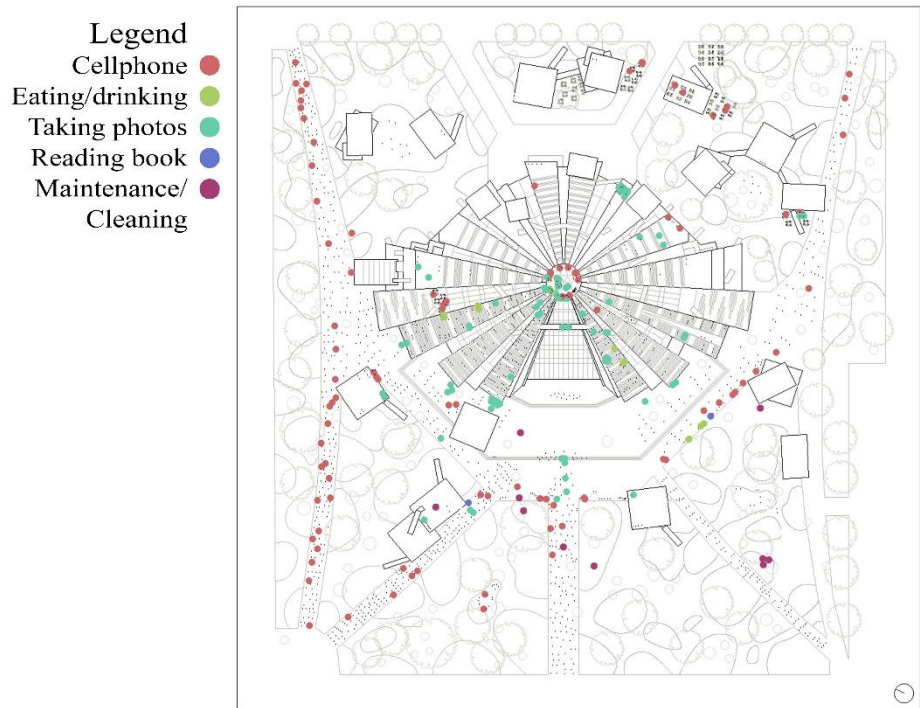


Figure 54. The Pyramid, secondary activities. Courtesy of the author

4.3.4 Behavioral Mapping in the Pyramid - Discussions

In (Figure 46) and (Table 8), can be seen that during the weekend there are more people than during the day. The most frequented periods are morning and early afternoon on Sunday (Figure 56), which has more people walking, standing and kids playing in the site. Different trends or patterns can be seen from each map. As previously mentioned, the people are divided in the category of ‘passing by’ or visiting. As can be seen from the map (Figure 48), the number of visitors far outweighs the number of people who are just passing by. It should also be noted that the Pyramid is a preferred location for organized touristic guides to present (Figure 55), which as a result may also bring an additional number of people visiting the site, excluding Tirana’s citizens.



Figure 55. The Pyramid, tourists’ group. Courtesy of the author

In (Figure 48), it can be seen that all entrances are used a lot by the people. It may be a bit difficult to notice at first glance, but the path with the most people is the one on the left. Which may come as a result of the favorable location of being close to the intersection of ‘Bajram Curri’ boulevard and ‘Dëshmorët e Kombit’ boulevard. Each entrance benefits from a favorable position. For example, the middle one may be used more by the people who stop at the bus station. While the right entrance may be used more by people coming from ‘Mother Theresa’ square. It also seems that the most frequented parts by the people, if we do not take into consideration the paths, are the pyramid steps and the cafés scattered around it. For clarification, the activity on the steps of the Pyramid was also measured during 5-minute intervals similar to the paths.



Figure 56. Social life around the Pyramid. Courtesy of the author

From (Figure 49), it seems that the number of women is similar to men. Actually, from the statistics, it turns out that the Pyramid has a bit more of the female gender than male gender. It looks like the cafes are more frequented by the female gender, while the stairs of the Pyramid are more balanced gender-wise. In (Figure 50), it can be seen that the most recurring age that frequents the square are adults. The second most frequent age seems to be teenagers. In (Figure 51), it is very visible that most of the people frequent the square in groups, instead of individuals. The path that is used for 'passing' has the most individuals. As for disabilities, (Figure 52) there are only two recorded people with visible disabilities.

For primary activities (Figure 53), most people enter and leave the Pyramid's site by walking. In the same figure it can also be seen some instances of people using bikes or scooters. However, considering the Pyramid has available bike infrastructure (Figure 18), and available bike racks (Figure 29), it seems the more people prefer walking over biking. All people either sit on the movable chairs (Figure 53), the cafes, the Pyramid's stairs and top. It seems that the movable chairs in the front are used more than the back of the Pyramid and are often relocated by the users e.g. being moved on the top of the cubes (Figure 57). As for cafes, they're mostly located in the back of the Pyramid, so that is also where the people are sitting. The top is more used for sitting than the stairs. The stairs are used for climbing and it seems that the left side is used more than the right side. It seems that there are not so many people standing but this may also come as a result of having means of sitting. When people choose to

stand is either on the top of the Pyramid or in front of it. There are not many cases of exercising. The only cases are three people running towards the stairs of the Pyramid. Additionally, there are also not many cases of playing. The preferred places to play seems to be the open fields in the back of the Pyramid for playing with the ball and the only remaining sloped wall which is used by kids to slide (*Figure 58*).



Figure 57. The Pyramid, movable chairs over the cubes. Courtesy of the author

For secondary activities (*Figure 54*), cellphones are used by people walking and sitting in cafes. People are usually taking photos of the Pyramid, taking photos of themselves in front of the Pyramid, or taking photo of the view that the Pyramid offers. There's also a recorded case of a man reading a book sitting in a chair. Sometimes people choose to eat, sitting on the stairs of the Pyramid or the movable chairs. There was also adults cleaning and maintaining the surroundings of the Pyramid.



Figure 58. The Pyramid, the remaining slope used by a kid. Courtesy of the author

4.3.5 Behavioral mapping statistics – Results and Discussions

Each point that was added in ArcMap represents a person, with their specific attributes that it could be gender, age etc. Those attributes were exported in order to create charts which give a different kind of visual representation compared to the maps viewed previously. The purpose of this section is to display the results of the observations in a charts approach.

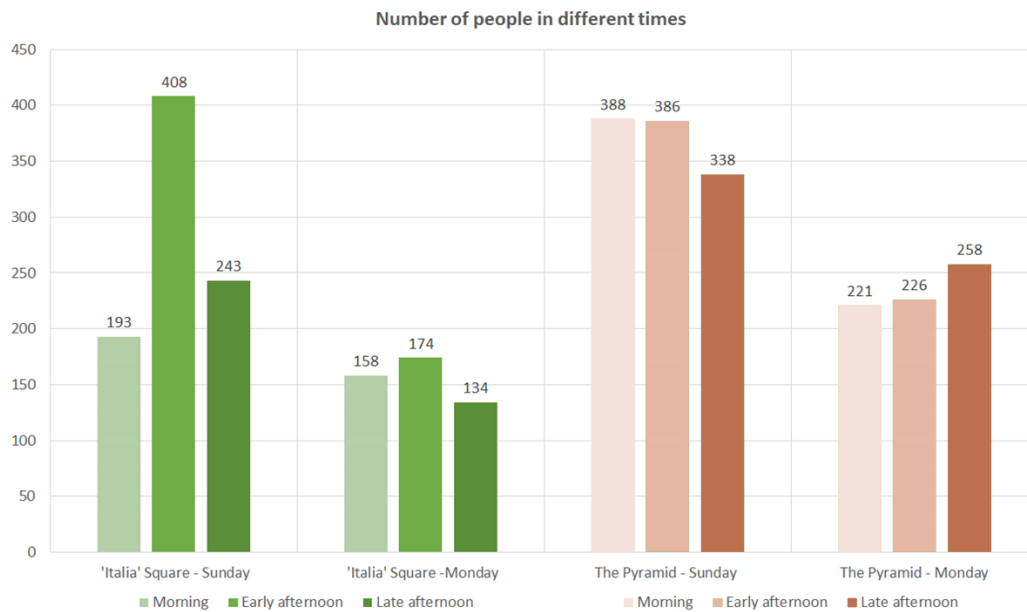


Figure 59. Number of people in different times in both case studies. Courtesy of the author

The first chart (*Figure 59*), shows the total number of people recorded each day, Sunday and Monday and each time, morning (10:00-12:00), early afternoon (13:00-15:00), late afternoon (16:00-18:00). Sunday has more people than Monday in both case studies. In 'Italia' square there is a big difference on Sunday, between morning and early afternoon, while in the other three situations, the numbers are more balanced within a day. The Pyramid has more people recorded during the observations than the square. The former has 1817 people, while the latter has 1315 people. It is worth noting that the Pyramid is more frequented by tourist guides affecting the numbers of the users.

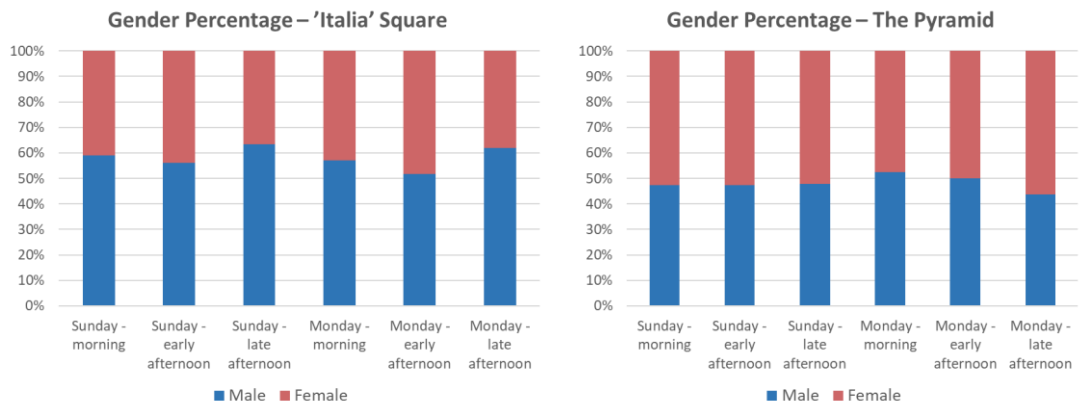


Figure 60. Gender percentage during each day and time in 'Italia' Square (on the left), and the Pyramid (on the right). Courtesy of the author

In (Figure 60), it can be seen how the gender percentage changes within both days. In the total of the recorded people, in the case of the square male gender consists of 58% of total people and female gender consists of 42%. In the case of the Pyramid, the male gender consists of 48% of total people, and the female gender consists of 52%. So, the Pyramid has more women frequenting the space than the square, according to observations. According to Whyte, a high number of women and groups in a public space, means that the public space is more selected and has higher social life (Whyte, 1980), so in terms of gender percentage, the Pyramid succeeds over the square. However, if we consider in terms of groups (Figure 61), 'Italia' square is doing better than the Pyramid. In total, according to the on-site observations, the square consists of 75% people in groups or couples and 25% individuals, while the Pyramid consists of 70% people in groups or couples and 30% individuals.

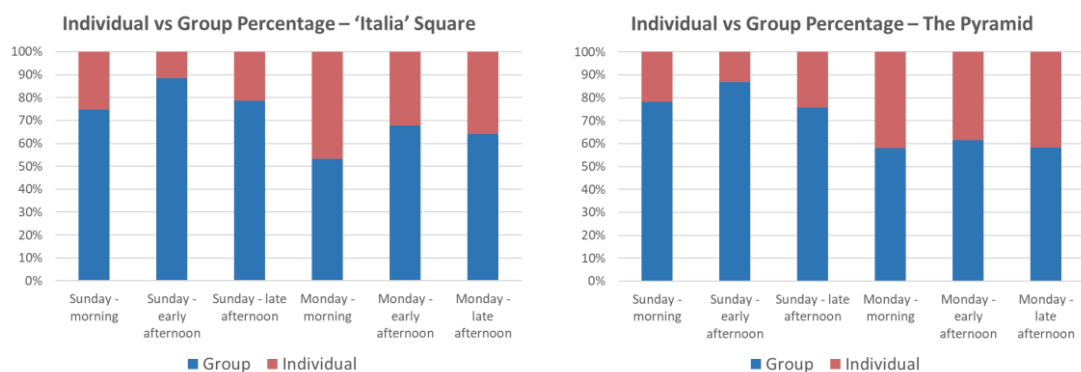


Figure 61. Individual/Group percentage during each day and time in 'Italia' Square (on the left), and the Pyramid (on the right). Courtesy of the author

(Table 9) shows how the percentage of individuals/groups changes during different days. In both cases, the percentage of individuals is higher compared to Monday, one reason could be the fact that weekends are generally for activities with friends and families, while on weekdays, work and school take priority.

Additionally, another analysis is done in terms of individuals/groups. From the observations, it resulted that men make a bigger percentage in individuals compared to women, more specifically 63% in ‘Italia’ square and 55% in the Pyramid. So, from the results of observations, it came out that men are more likely to frequent these spaces individually than women.

Table 9. Individuals and Groups percentages on Sunday and Monday. Courtesy of the author

	Individual	Group
‘Italia’ Square		
<i>Sunday</i>	<i>18 %</i>	<i>82 %</i>
<i>Monday</i>	<i>38 %</i>	<i>62 %</i>
The Pyramid		
<i>Sunday</i>	<i>17 %</i>	<i>83 %</i>
<i>Monday</i>	<i>41 %</i>	<i>59 %</i>

Another aspect of observation is the age of the users, shown in (Figure 62) and (Figure 63). The age categories include: children, teenagers, adults and elders. ‘Italia’ square and the Pyramid have some common patterns, that are: on every day and time, adults make the most common age group; more children frequent the public spaces during Sunday; more teenagers frequent the spaces during late afternoon. If we compare both case studies, it can be seen that: the square is frequented by more children, which makes sense since they have more space to play in the square; in the square elders are more likely to frequent it during mornings while in the Pyramid, there isn’t a clear-cut pattern for elders’ frequency.

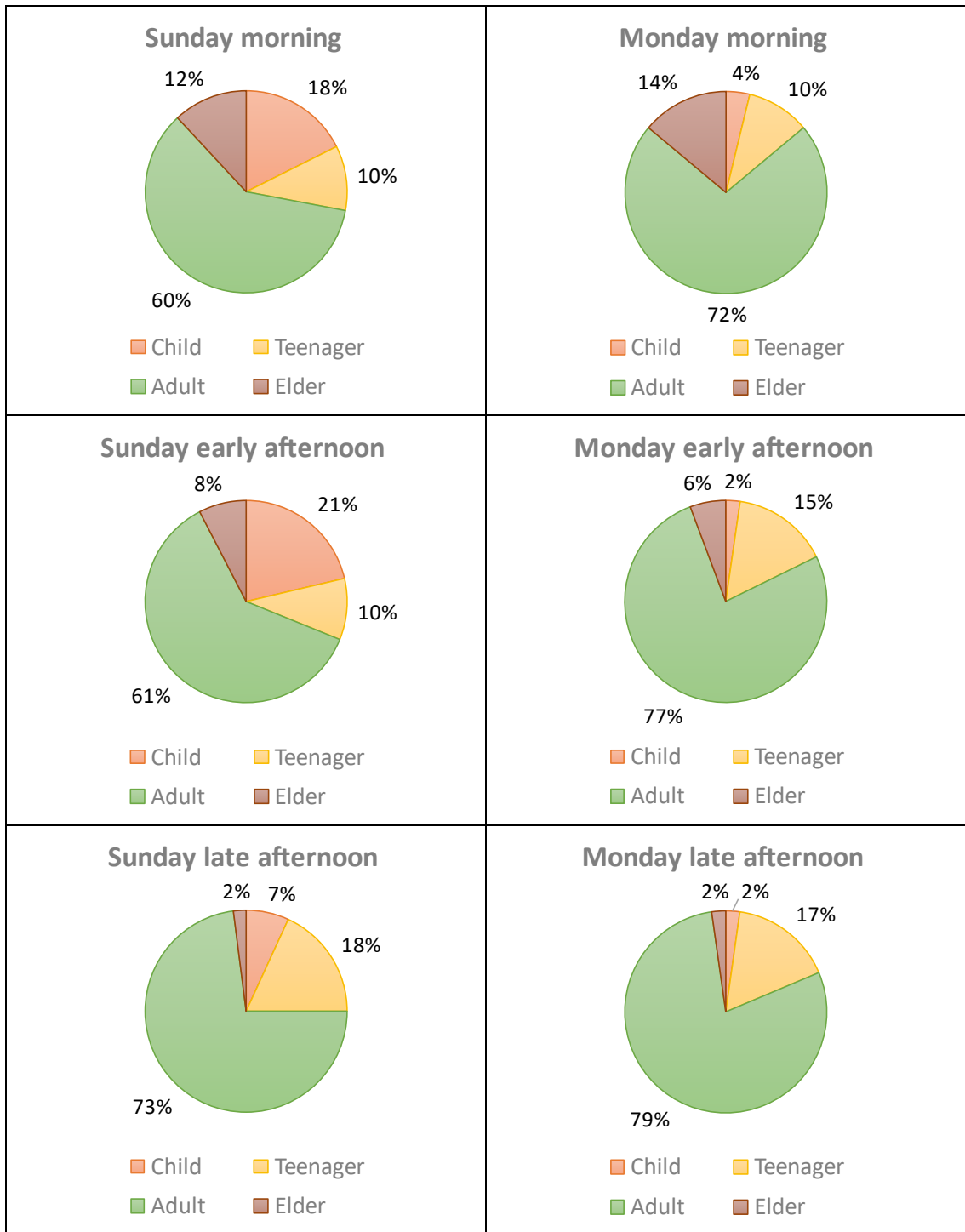


Figure 62. 'Italia' square - Age groups during different times. Courtesy of the author

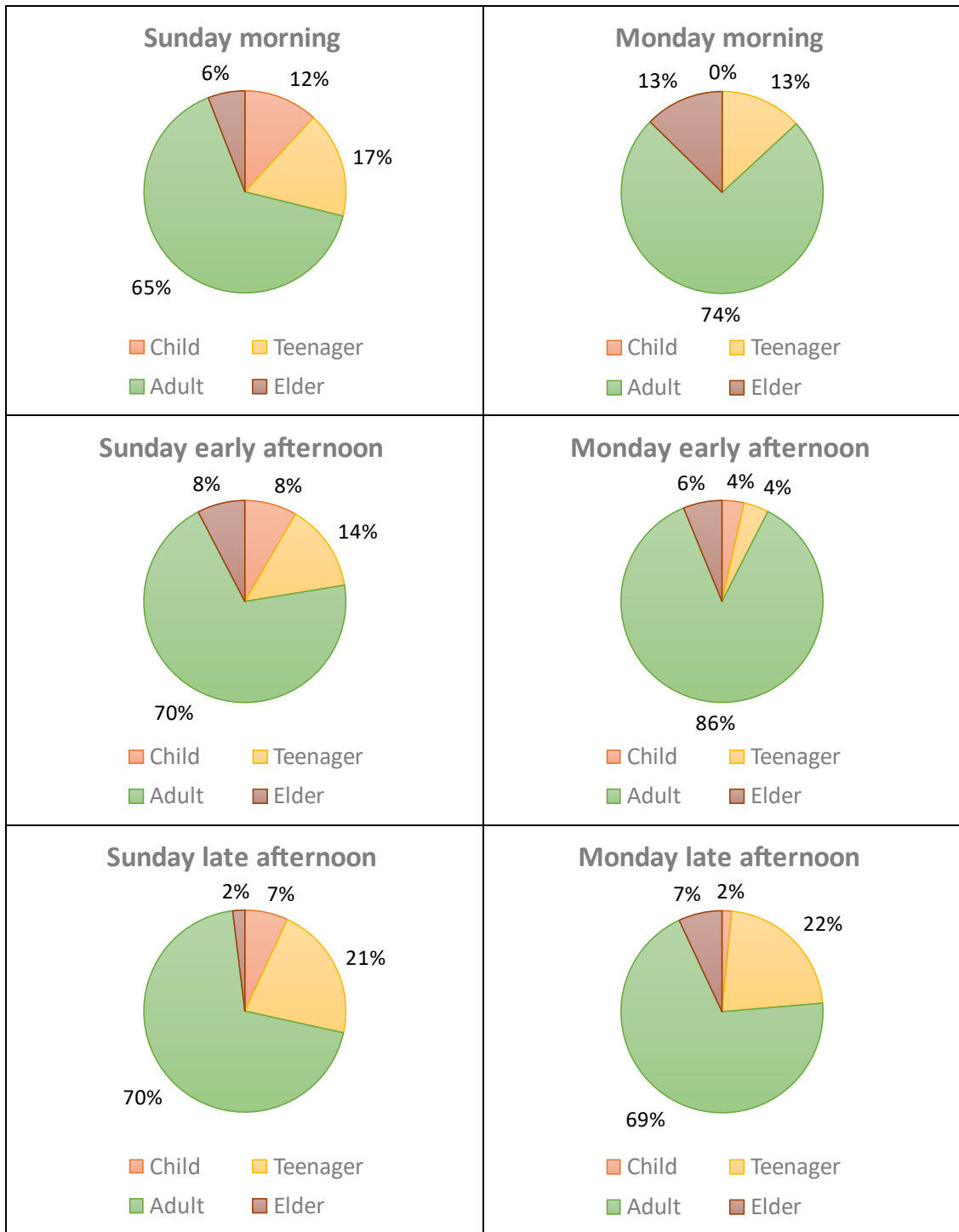


Figure 63. The Pyramid - Age groups during different times. Courtesy of the author

Furthermore, (Figure 64) shows the total number of children, teenagers and elders to make it clearer in which space came more people. The adults were excluded from this chart, since the purpose of this chart is to display the less common ages, since it's clear that adults frequent both public spaces during all day. According to (Figure 64), from the observations it has resulted that more children frequent the square than the pyramid, more teens frequent the pyramid than the square, and slightly more elders frequent the pyramid than the square.

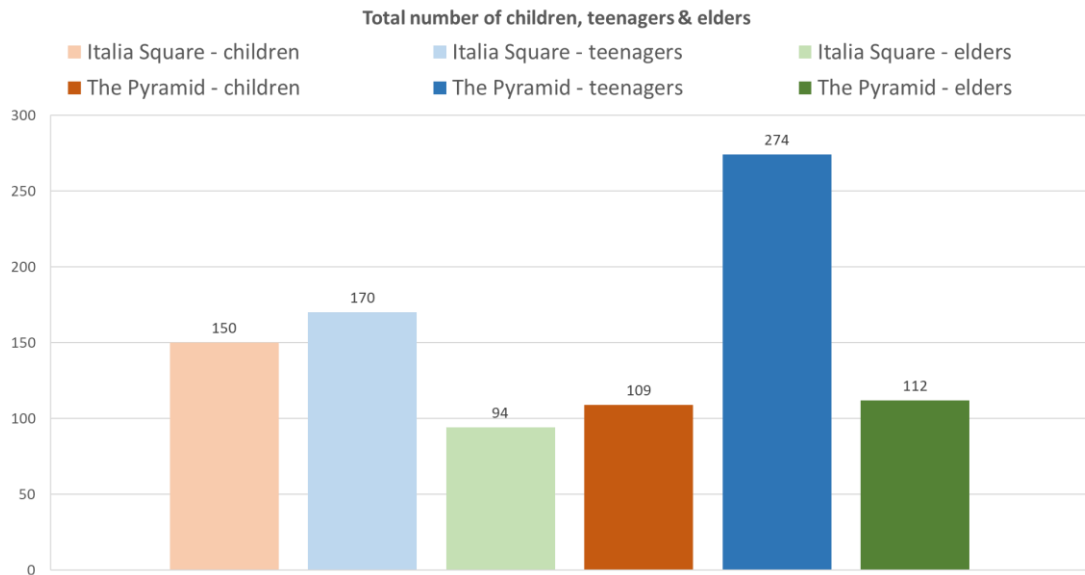


Figure 64. Total number of children, teenagers and elders in both case studies.

Courtesy of the author

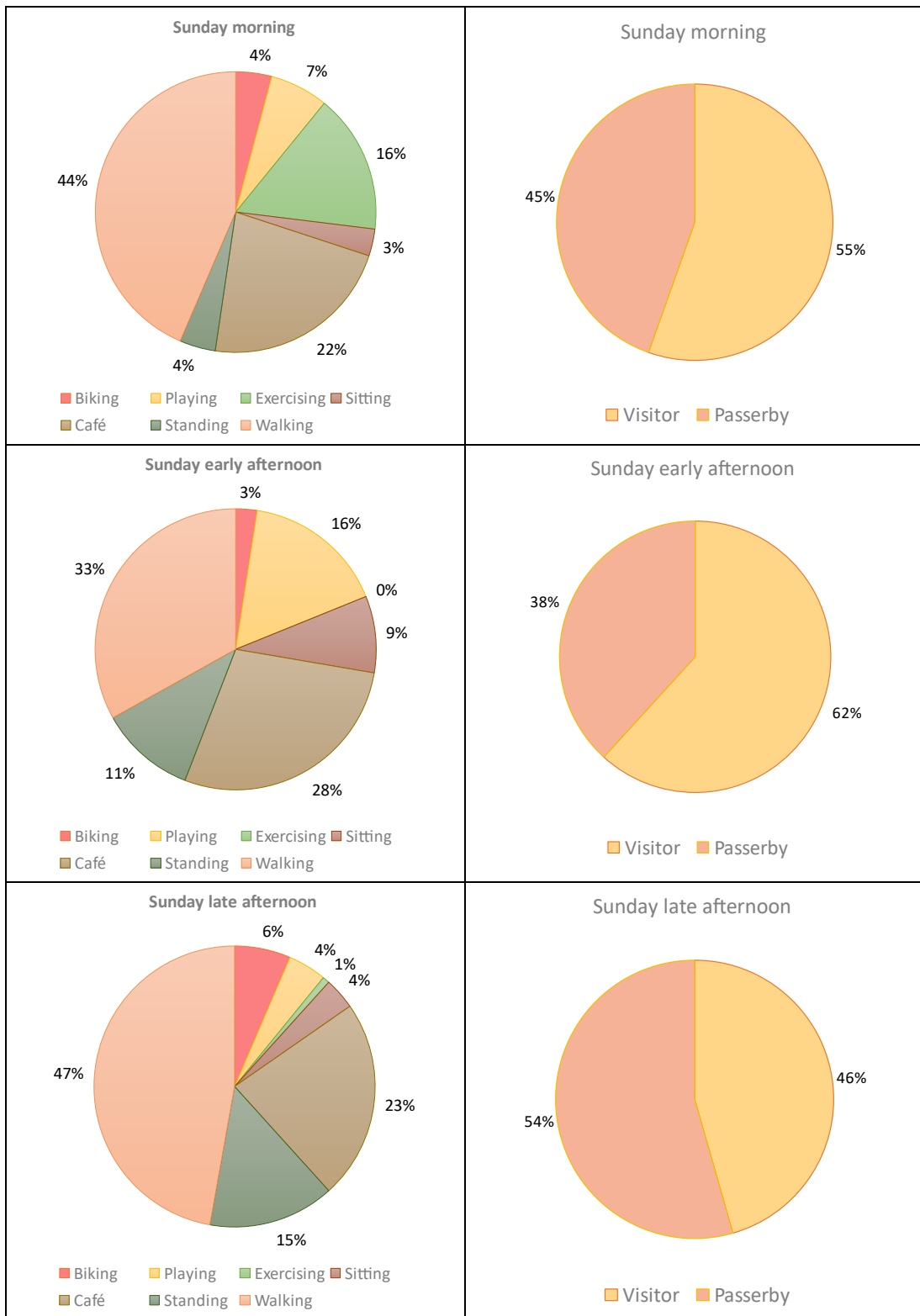
As for primary activities, as already stated, the categories are: walking, biking, sitting, sitting in café, exercising/running, playing, standing, and climbing which is unique for the pyramid. If we consider (Table 10) and (Table 11), we can see the primary activities percentages, and the ratio between people who ‘pass-by’ and visit the site, on each day and each time for both case studies. If we consider only ‘Italia’ square on Sunday, it can be seen that the most common activity is walking, then the second most common activity is sitting in a café during the whole day. The third most common activity is standing which increases as a percentage during the day. The fourth and fifth most common activities are playing and sitting, which are deeply correlated with each other, since most of the people sitting in the stairs are parents watching as kids play, that’s why during the day when the ‘playing’ percentage increases, so does

the 'sitting' percentage. As for exercising, the big percentage in the morning is a result of the group activity that happened during observations (*Figure 45*). On Monday there is an increase of percentage in walking and sitting in café, and a decrease in other primary activities.

In the Pyramid's case, during Sunday, similar to the square, the most common primary activity is walking. Unlike the square where the second most common activity is sitting in a café, in the case of the Pyramid, climbing to the Pyramid's stairs comes second to walking. If we compare 'sitting' with 'sitting in café', the former has a higher percentage, which may suggest that the Pyramid has a higher quality in terms of sitting compared to the square. Another factor to consider in this result is that most cafes in the Pyramid were recently opened in the time of observations. Biking and playing consist of a very small percentage compared to 'Italia' square, especially considering that the Pyramid has appropriate infrastructure and means for both activities to occur. Similar to 'Italia' square, exercising consists of a very small percentage too, with the exception being Sunday morning.

As for the 'passerby' and 'visitor' charts in (*Table 10*) and (*Table 11*), they are deeply related to the primary activities. In the case of 'Italia' square, the addition of walking and biking's percentages is almost equal to the 'passerby' percentage, while the other primary activities add up to the 'visitor' percentage. In the case of the Pyramid, the 'passerby' percentage is more related to their location than their primary activity. For reference, you can see (*Figure 47*), which shows which paths are taken by people who are passing by, while the other locations are considered to be used by visitors. Therefore, the correlation between the primary activities and the passerby/visitor percentage in the Pyramid is not as strong as in the case of 'Italia' Square. The Pyramid has a bigger variety of reasons for staying, and that's why the percentage of visitors is bigger in the pyramid than in the square. Additionally, the visitor/passerby ration changes between days. During Sunday there are more visitors than Monday, for both case studies.

Table 10. ‘Italia’ square – Primary activities & Passing/Visiting. Courtesy of the author



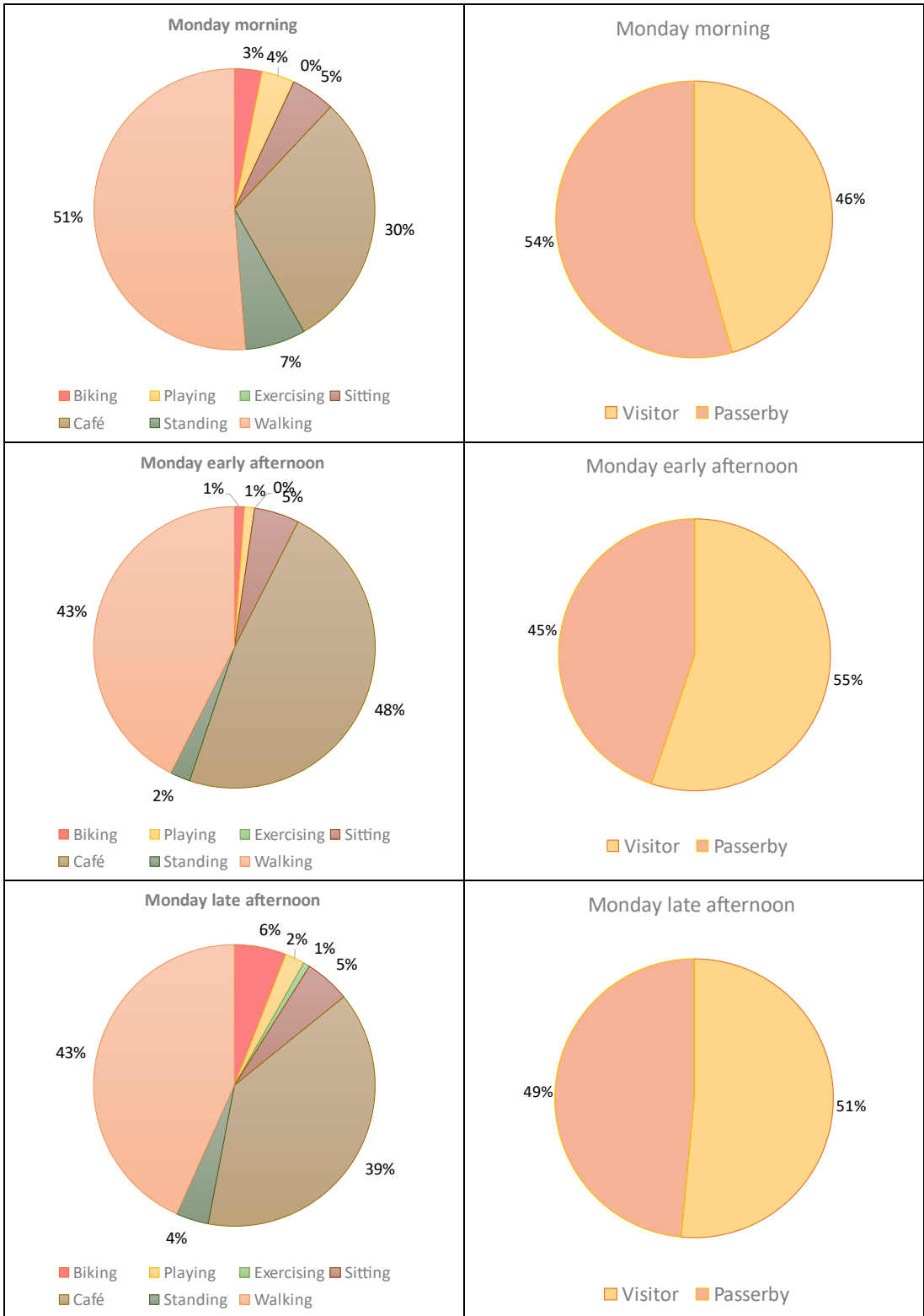
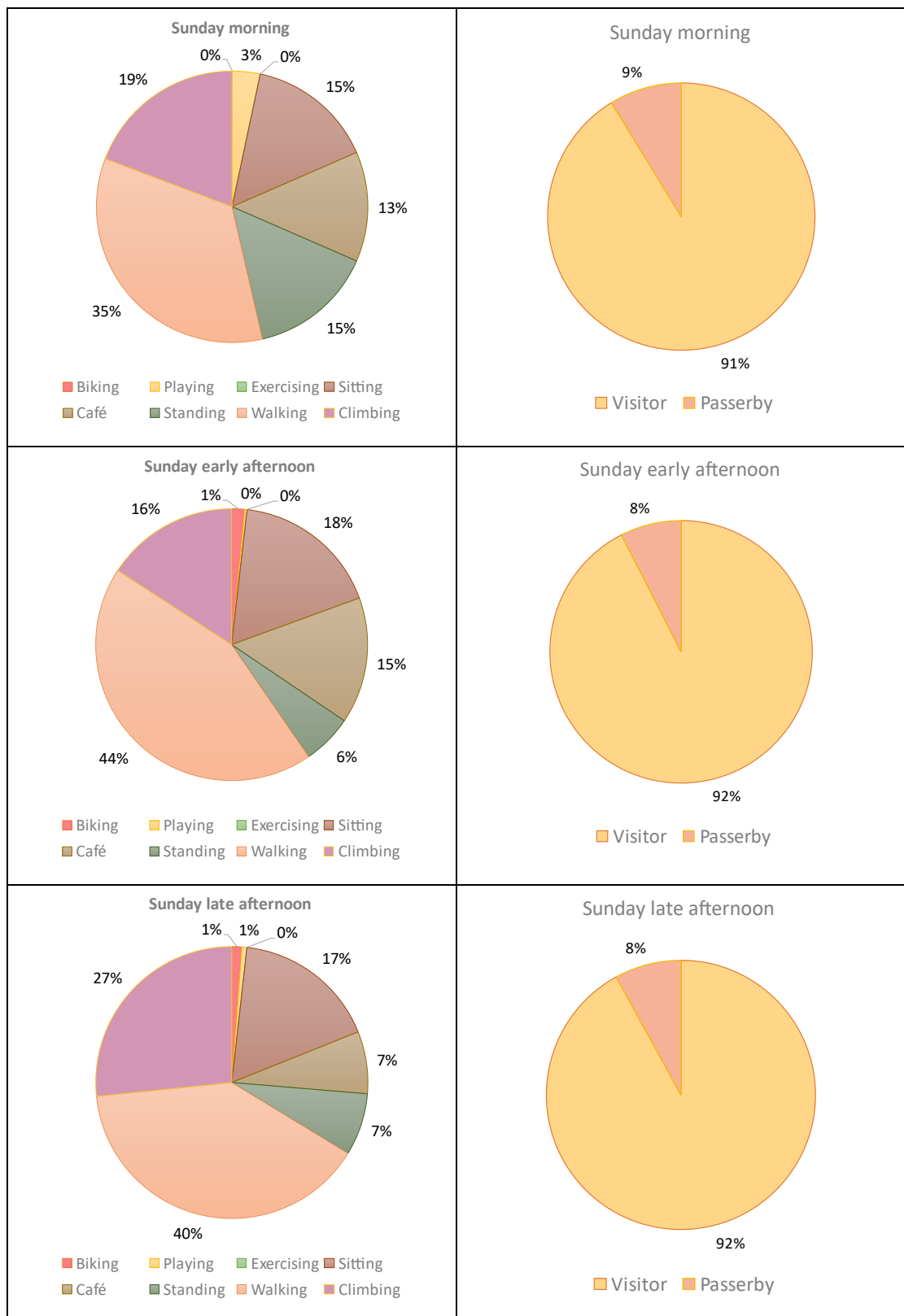
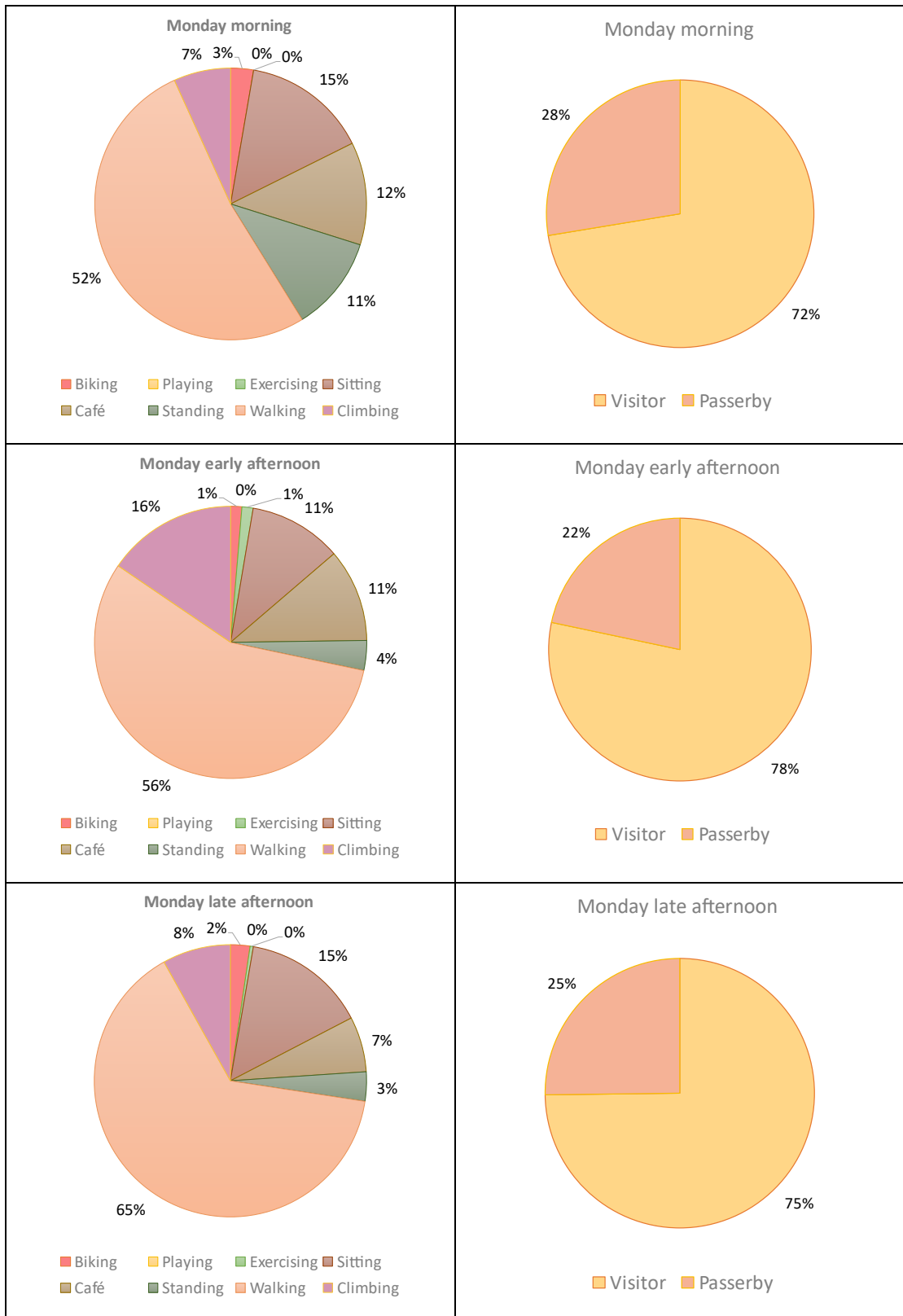


Table 11. The Pyramid – Primary activities & Passing/Visiting. Courtesy of the author





The chart for secondary activities (*Figure 65*) shows the total number of secondary activities registered during all observations. For both 'Italia' square and the

Pyramid, using the cellphone is the most common secondary activity, while taking photos comes in second. Though, the Pyramid has more people taking photos than the square by far. Also, for eating/drinking and maintenance, the Pyramid has more people. A reason could be since the Pyramid has more people sitting in chairs or the stairs, they're more likely to eat a take-out. As for maintenance/cleaning the Pyramid is yet not completely finished during the times of observation, that is March 2024. Since the square has a ticket booth, a secondary activity is buying tickets. Another secondary activity is reading a book, which is registered only one time on the Pyramid site.

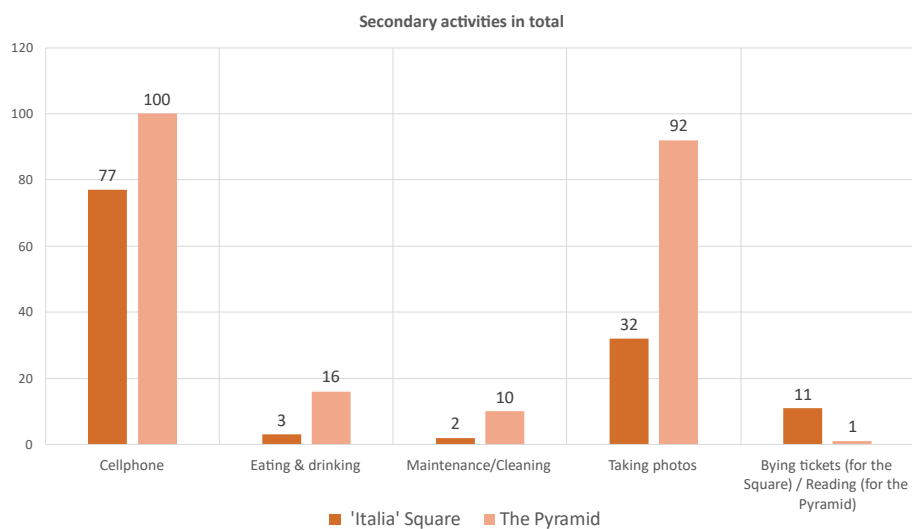


Figure 65. Secondary activities in total in both case studies. Courtesy of the author

4.4 Questionnaire

The questionnaires for both case studies were conducted during April 2024, and were answered by a total of 200 people, thus 100 people for each public space. In both cases, 40 people answered the questionnaire online, and 60 people were asked on-site. The questionnaires on-site were answered during Friday and Saturday, late afternoon. The charts presented in this section show the results of the questionnaire. The answers of the same questions from both questionnaires are placed side by side in order to achieve a better visual comparison. The charts on the left side with a red palette belong to 'Italia' square's answers, while the charts on the right side with a blue palette belong to Pyramid's answer.

4.4.1 First part – General and demographic information

The questionnaire is divided into several parts. Firstly, people were asked for general and demographic information including: gender, age group, frequency of use, the time of stay, the means of transportation to reach the public space, and the distance they have travelled to reach the public spaces. The first charts (*Figure 66*) show the gender percentage among respondents. In the case of the square 72% were women and 28% were men, while in the case of the Pyramid 83% were women and 17% were men. This coincides a bit even with the behavioral mapping for gender (figure), since even there, there were more women in the Pyramid than there were in ‘Italia’ Square.

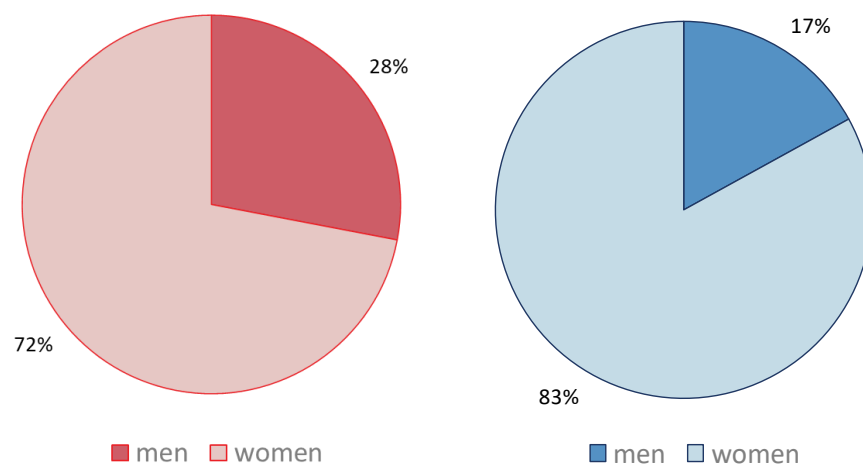


Figure 66. Gender percentage of ‘Italia’ Square (on the left) and the Pyramid (on the right). Courtesy of the author

As for the age (*Figure 67*), age groups of 26-45 and 64+ make a minority in both public spaces. Also, it looks like age below 18, more specifically teenagers, makes a greater percentage in the Pyramid (35%) than the Square (20%). This bigger percentage of teens can be seen also in the results of behavioral mapping. For the ages between 26 and 45, ‘Italia’ Square has a bigger percentage (30%), compared to the Pyramid (16%). This may come as a result of the activity of ‘playing’. For reference of this activity, you can see charts for question 17, ‘reasons of visiting’ (*Figure 83*). ‘Playing’ is carried out in the square, which includes kids playing in the vicinity of stairs, and parents sitting in the stairs looking out for them, thus giving reasons for adults of ages 26-45, to stay for prolonged times, and thus making it possible to be part of the survey.

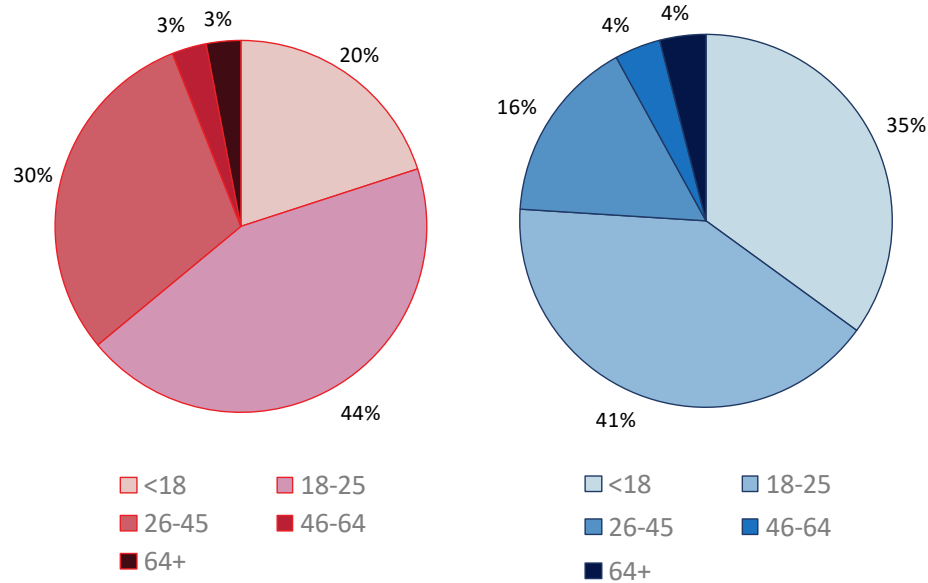


Figure 67. Age percentage of 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

The third question is about how often users come to the public spaces and the responses are as below (*Figure 68*). In this question, there was also an alternative for tourists since they live in central positions favored by tourists. As a result, three people were tourists in 'Italia' Square, and six people were tourists in the Pyramid. For clarification, these tourists were mostly Albanians from other cities, Albanians visiting from abroad, or Kosovo Albanians. Furthermore, it is worth mentioning that the Pyramid has a very big number of foreign tourists, but they were not willing to answer the questionnaire.

Going to the topic of users' frequency, in 'Italia' Square, 35% of respondents come to the public space some times a week, 48% of them come some times a month and 14% come every month. As for the Pyramid, 29% of them come some times a week, 45% of them come some times a month and 20% of them come every month. In this aspect, it seems that 'Italia' square has more regular visitors compared to the Pyramid. This is also a bit related to the adults, who accompany kids in the square, which is a 'regular family activity' according to conversations on site and questionnaire results.

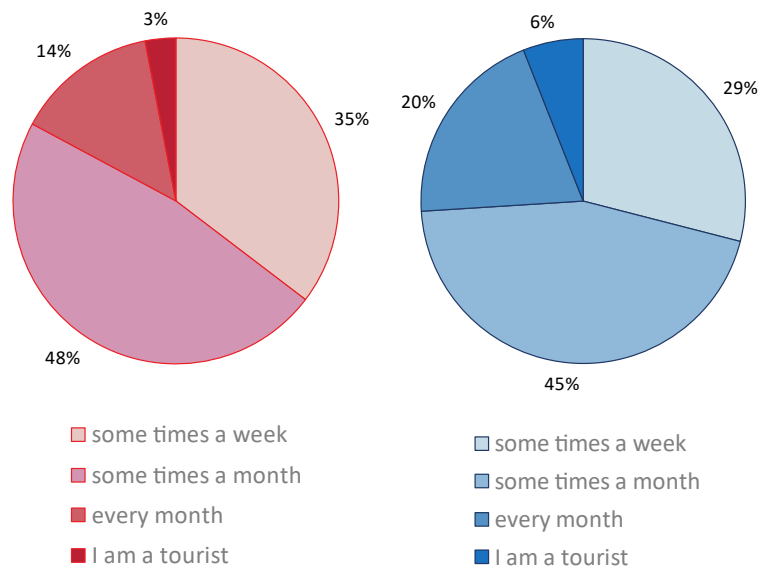


Figure 68. Frequency percentage of 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

The fourth question is about the duration of staying in the public spaces. The results (*Figure 69*) are as follows: in 'Italia' square, 19% of users stay under 10 minutes, 22% stay between 11 and 30 minutes, 24% stay between 30 and one hour and 35% stay for more than one hour; in the Pyramid, 10% of users stay under 10 minutes, 32% stay between 11 and 30 minutes, 35% stay between 30 and one hour and 23% stay for more than one hour. So, for the 'extreme' options of '0-10 minutes' and 'more than 1 hour', the square has a bigger percentage for each, while for the other two options, the Pyramid has a bigger percentage.

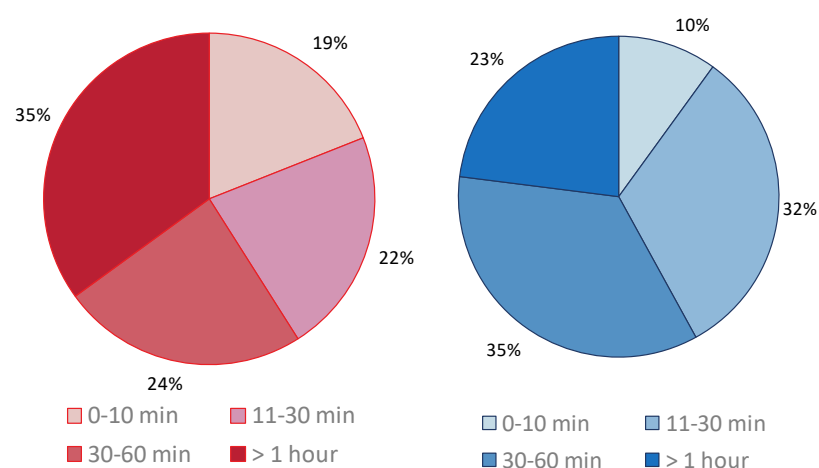


Figure 69. 'Time of staying' percentage of 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

The fifth question (*Figure 70*) is about the means of transportation respondents have used to reach the sites. The majority of answers, 74 % for the square and 67% for the Pyramid, choose to reach the sites by walking. 4% in ‘Italia’ Square and 1% in Pyramid, choose to use biking. This is a bit of a small number for the Pyramid, considering the available infrastructure and urban furniture. This coincides with results of the behavioral mapping in which the number of bikers was also small. 8% in ‘Italia’ Square and 23% in the Pyramid, use the bus. As previously shown, both sites have available bus routes and bus stations nearby, though the Pyramid has more stations closer (*Figure 19*). 14% in ‘Italia’ Square and 9% in the Pyramid, use cars or taxis as a mode of transportation. The fact that ‘Italia’ Square has a bigger percentage of cars is reasonable since it also has a bigger percentage of adults aged 26-45.

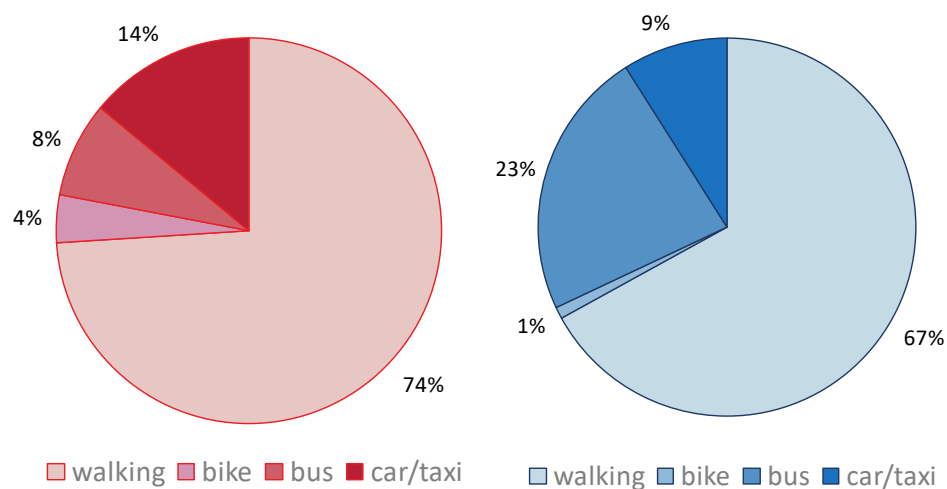


Figure 70. ‘Means of transportation’ percentage of ‘Italia’ Square (on the left) and the Pyramid (on the right). Courtesy of the author

The next question (*Figure 71*) is about how far respondents have travelled to reach the sites, in other words the distance between their place of residence to the selected locations. The distance is asked in walking time instead of km, so it could be easier to answer. There was also an option for tourists which included 4% of ‘Italia’ square’s responses, and 6% of Pyramid’s responses. 29% in ‘Italia’ square, and 12% in the Pyramid, live near the sites, i.e. under 15 minutes of walking. 38% in ‘Italia’ square, and 40% in the Pyramid, live a bit far from the sites, that is 16 and 30 minutes of walking. 29% in ‘Italia’ square, and 42% in the Pyramid, live far from the sites, that

is over 30 minutes of walking. (Figure 72) shows the relationship between distance covered and the choice of transportation mode.

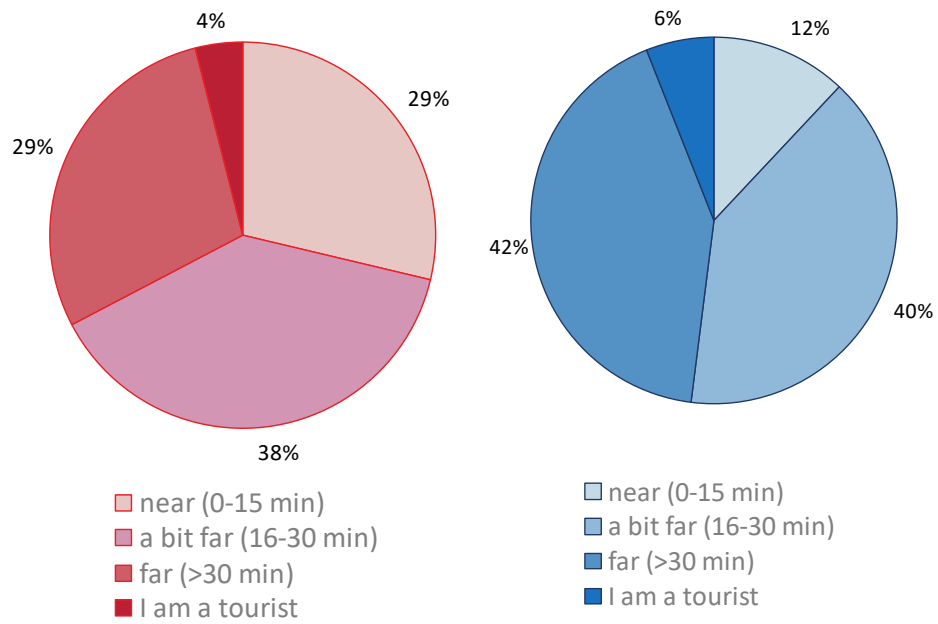


Figure 71. 'Distance covered' percentage of 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

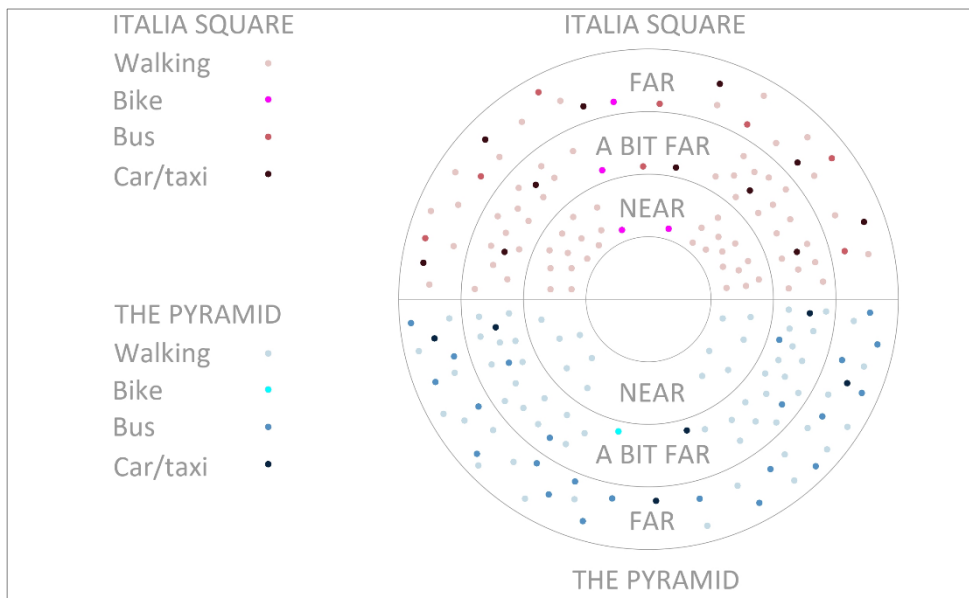


Figure 72. Relationship between location and means of transportation of 'Italia' Square and the Pyramid. Courtesy of the author

4.4.2 Second part – Evaluation of different aspects

The second part of the questionnaire is about evaluation of different aspects through Likert scale questions. The aspects that were asked are: greenery, places to sit, shade, safety, lighting, vitality, diversity of activities, design, comfort and feelings towards the public spaces. Almost each question is represented by charts for visual portrayal and by a numerical score which is the mean of all scores that the respondents have given to different aspects. While the question about ‘feelings’ of the users is asked through a multiple-choice question.

Starting with ‘greenery’ (*Figure 73*), it is the only question that is a multiple-choice for ‘Italia’ square and Likert scale for the Pyramid. This difference in questioning was decided due to the lack of greenery in the square. So instead of asking the users about the quality of the greenery, they were asked if they had a problem with the lack of it. 20% did not have any problem with the lack, but for the rest it was considered a bit of a problem (for 47%), and a big problem (for 33%). In the case of the Pyramid, it seems like the space users have a positive opinion about the greenery around the Pyramid, and the mean score for this aspect is 3,78.

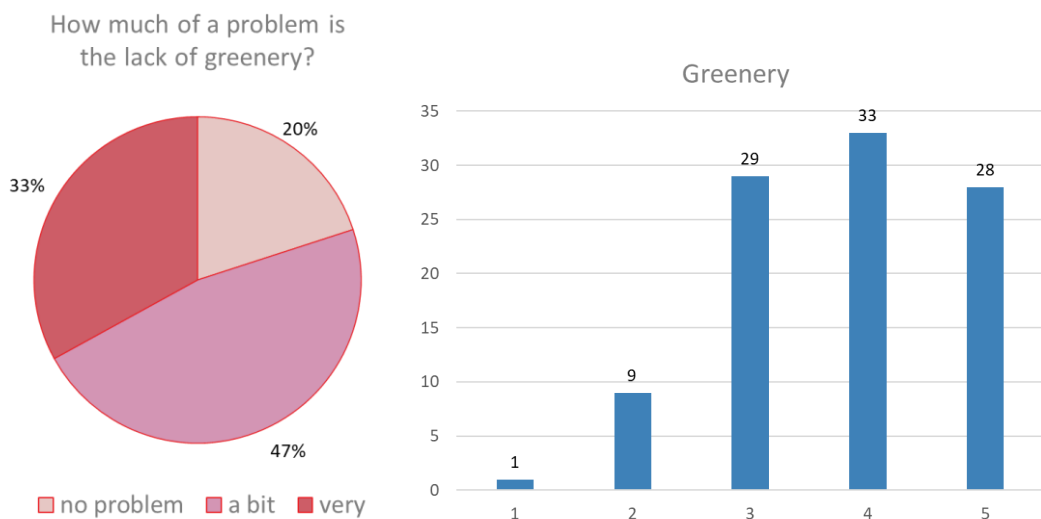


Figure 73. ‘Greenery’ in ‘Italia’ Square (on the left) and the Pyramid (on the right).

Courtesy of the author

Continuing with ‘places to sit’, charts for both public spaces are shown in (*Figure 74*). As explained in the previous sections, in the square the available sitting

consists of the stairs in the rectorate/museum building (*Figure 23*) and the outdoor sitting of cafes. While in the case of the Pyramid, the available sitting consists of movable chairs scattered around the building (*Figure 29*), café's sitting, some benches at the top of the Pyramid, and the stairs of the Pyramid. In 'Italia' Square, it has a slightly positive score of 3,07 and the Pyramid has a positive score of 3,51. This difference of score is understandable considering the difference in sitting options between the spaces.

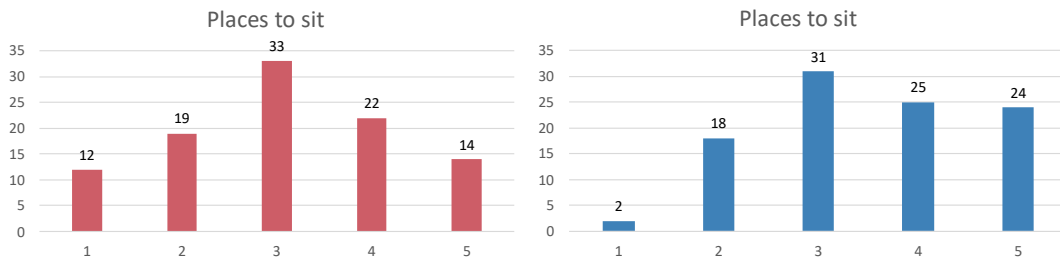


Figure 74. 'Places to sit' in 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

As for 'shade' (*Figure 75*), 'Italia' Square has a slightly negative score of 2,82 and the Pyramid has a slightly positive score of 3,12. In the square the biggest source of shade are buildings of rectorate/museum which cast shadow to the small square between them and the colonnade, and the canopies of cafes, while for the big space between the colonnades and the stadium there are no sources of shade during a big part of the day (for reference see *Figure 17* on the orientation of 'Italia' square). In the Pyramid, the sources of shade for the surrounding space are: trees, the 'cube' buildings, and the pyramid itself. While for people climbing the stairs of the Pyramid or staying at the top there is no source of shade during the day, especially on the south part (for reference, see *Figure 17* on the orientation of the Pyramid).

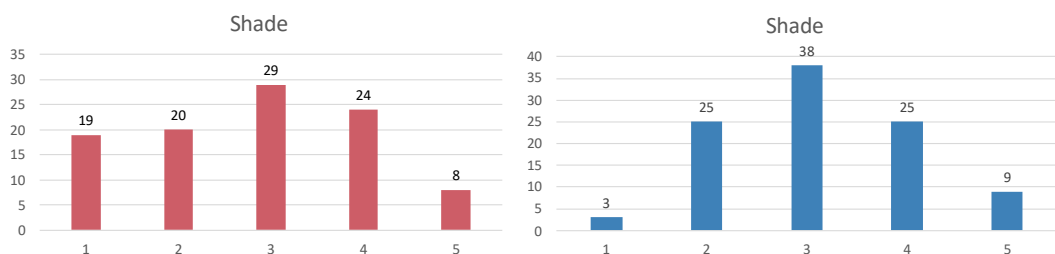


Figure 75 'Shade' in 'Italia' Square (on the left) and the Pyramid (on the right).
Courtesy of the author

The next question is about the quality of ‘safety’ (*Figure 76*). In this aspect, ‘Italia’ square has a slightly higher score than the Pyramid, more specifically a score of 3,40 for the former and a score of 3,37 for the latter. During site observations, it has been noticed that the ‘Italia’ Square has a security guard in the Stadium and 1 surveillance camera in the colonnade, while the Pyramid has 2 security guards on the premises and many security cameras scattered around the Pyramid. In conversations with respondents on site and on the open-ended questions, they have pointed out that the square is a safe space for kids to play away from the cars, but the biggest problem are teens biking or playing with a ball that could hurt smaller kids. While in conversations with respondents on site in the Pyramid and on the open-ended question, there was some criticism about the security, since there are narcotic substances being consumed by youngsters.

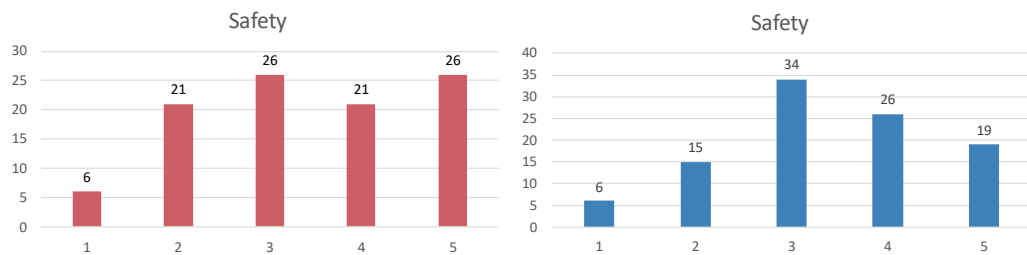


Figure 76. ‘Safety’ in ‘Italia’ Square (on the left) and the Pyramid (on the right).

Courtesy of the author

The following question asks about the ‘lighting’ quality (*Figure 77*). The lighting situation is described in the site mapping section, (*Figure 24*) for the square and (*Figure 34*) for the Pyramid. Briefly put, the square has mostly wall lighting in the stadium and the rectorate/museum and some street lights in the corner, while the Pyramid has a combination of lighting including: ground spots, hanging lighting, and lighting in the handrails of the monument. Both have good scores in this question. The square has a score of 3,84 and the Pyramid has a score of 3,91.

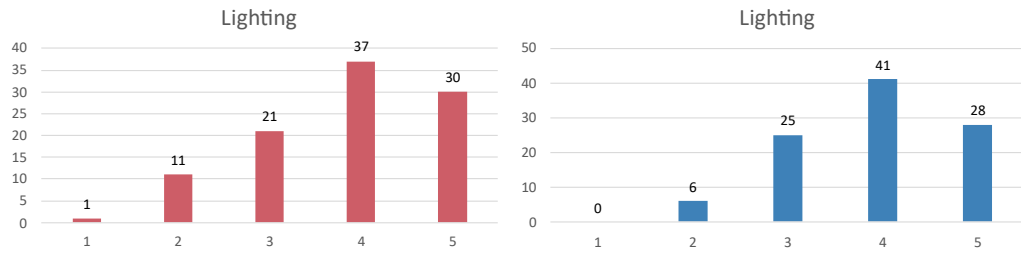


Figure 77. 'Lighting' in 'Italia' Square (on the left) and the Pyramid (on the right).

Courtesy of the author

The next aspect is about 'vitality' or in other words how active is the social life in a space (Figure 78). This is the question with the highest score in both case studies. 'Italia' square has a very positive score of 4,19 and the Pyramid also has an even more positive score of 4,41. Both have taken praise for their social life and vitality in the open-ended questions. Vitality is also affected by the 'diversity of activities' (Figure 79). However, here both cases do not score that high, but still have a positive score. 'Italia' square has a score of 3,15 and the Pyramid has a score of 3,41. Both spaces have taken criticism in the open-ended questions, for needing more activities.

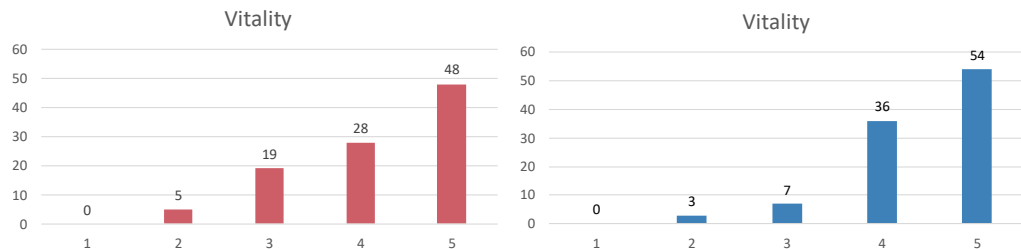


Figure 78. 'Vitality' in 'Italia' Square (on the left) and the Pyramid (on the right).

Courtesy of the author

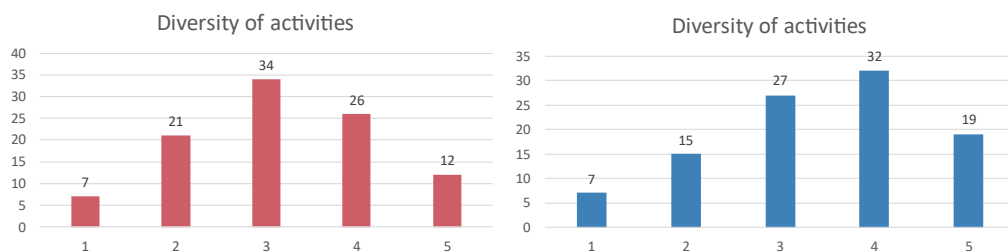


Figure 79. 'Diversity of activities' in 'Italia' Square (on the left) and the Pyramid

(on the right). Courtesy of the author

‘Design’ quality was also asked in the questionnaire (*Figure 80*). The background that led to the current design state was explained in the literature review section. In short, ‘Italia’ square is an Italian square with its biggest change being the pavement connection between the new ‘Air Albania’ stadium and the old square surrounded by the rectorate and the museum of archeology. The Pyramid was a communist monument, but recently it has been transformed into a technological center for the youth. Back to the questionnaire results, for their design, ‘Italia’ square has a score of 3,63 and the Pyramid has a score of 4,01.

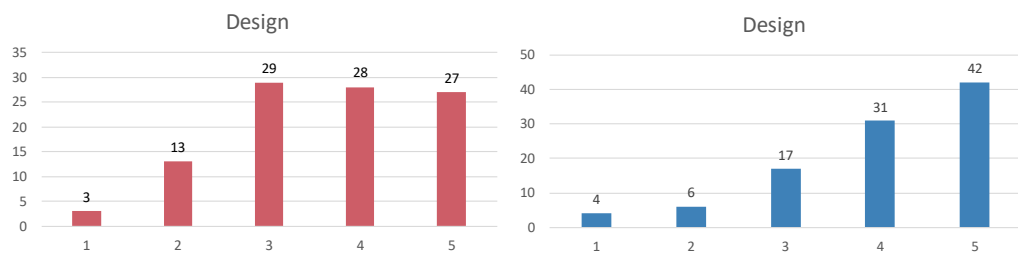


Figure 80. ‘Design’ in ‘Italia’ Square (on the left) and the Pyramid (on the right).

Courtesy of the author

The last questions in the second part of the questionnaire are about the level of users’ comfort in public spaces (*Figure 81*), and their feelings towards them (*Figure 82*). The comfort level in the square has a score of 3,82 and the Pyramid has a score of 4,04. So, both have a very positive score in this question. The next question about feelings towards the spaces, is a multiple-choice question. In the case of ‘Italia’ square, 2% of the respondents have negative feelings, 40% neutral feelings, and 58%, more than half, have positive feelings about the square. In the Pyramid’s case, 3% of the people have negative feelings, 17% have neutral feelings and 80%, the majority of people, have positive feelings towards the Pyramid. So, in both questions, comforts and feelings, both case studies have positive feedback, though the Pyramid does score higher than the square.

(*Table 12*) shows a summary of the scores that both case studies have taken through Likert scale questions. As can be seen the Pyramid has a higher score in every category except safety.

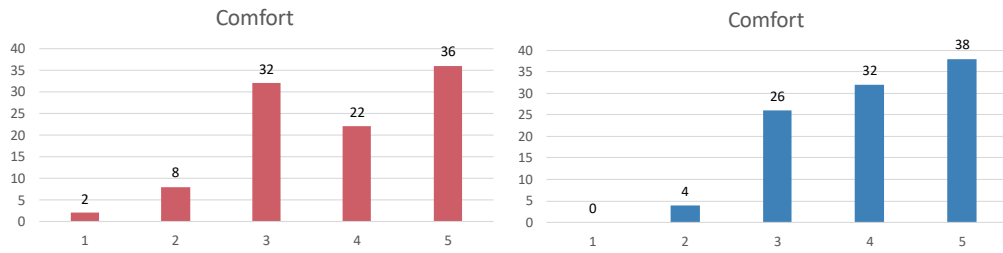


Figure 81. ‘Comfort’ in ‘Italia’ Square (on the left) and the Pyramid (on the right).

Courtesy of the author

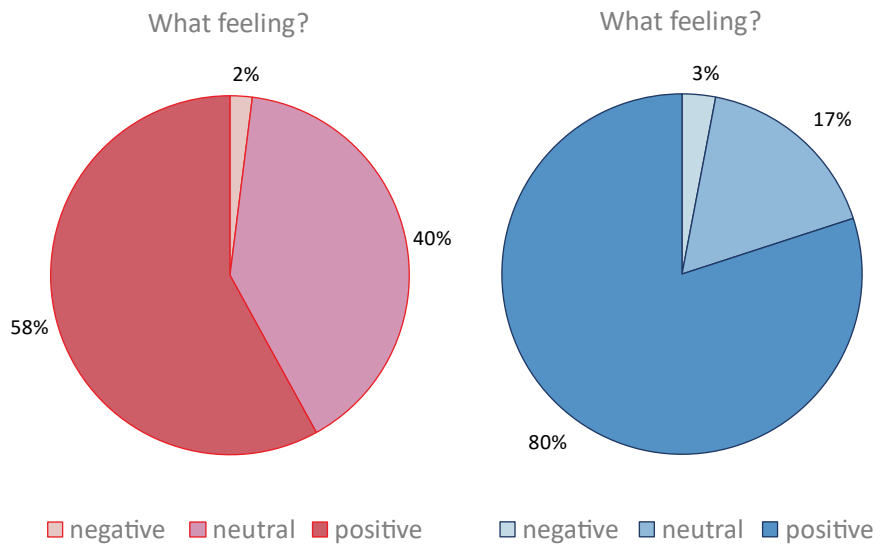


Figure 82. ‘Feelings’ about ‘Italia’ Square (on the left) and the Pyramid (on the right). Courtesy of the author

Table 12. Mean scores for both public spaces according to the questionnaires.

Courtesy of the author

Aspect	‘Italia’ Square	The Pyramid
Greenery	-	3.78
Places to sit	3.07	3.51
Shade	2.82	3.12
Safety	3.40	3.37
Lighting	3.84	3.91
Vitality and socialization	4.19	4.41
Diversity of Activities	3.15	3.41
Design	3.63	4.01
Comfort	3.82	4.04

4.4.3 Third part – Reason of visiting and Heritage value

In the question about ‘reason of visiting’ (*Figure 83*) and (*Figure 84*), respondents could choose more than one option and also give their own alternative. For ‘Italia’ Square, 11 people choose to go to the site for some alone time, 68 people to meet friends and relatives, 30 people to play or accompany kids while playing, 36 people to frequent businesses nearby, 4 people to take photos, 4 people to pass through the square or going for a stroll, 2 people to work nearby, one as a taxi driver and one as a waiter.

For the Pyramid, 11 people go to the site for some alone time, 68 people to meet friends and relatives, 29 people to climb to the top of the Pyramid, 29 people to frequent businesses nearby, 17 people to take photos, 52 people to go for a stroll. As ‘other’ alternatives given by the users themselves, one respondent gave the reason of ‘curiosity of seeing something different’, one respondent to ‘eat something at the stairs of the Pyramid’, one respondent for ‘TUMO center’, and one person for ‘working as a guide’.

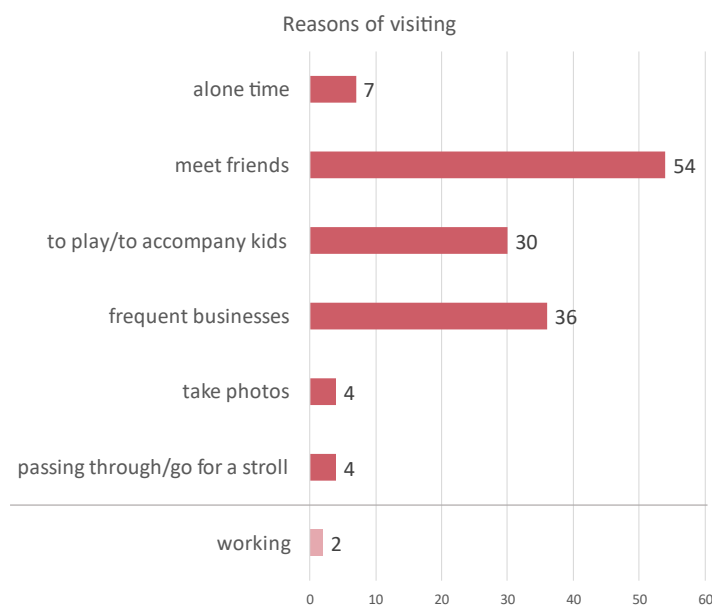


Figure 83. ‘Reasons of visiting’ in ‘Italia’ Square. Courtesy of the author

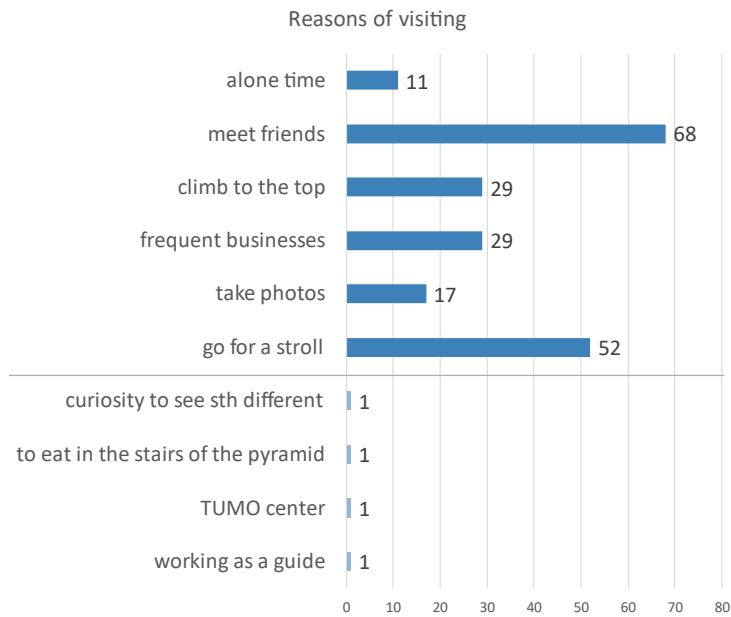


Figure 84. ‘Reasons of visiting’ in the Pyramid. Courtesy of the author

According to the results, both the spaces are preferred to meet friends and relatives, and are also used sometimes for alone time. A bigger number frequents businesses in ‘Italia’ square compared to the Pyramid. A bigger number of people take photos and go for a stroll in the Pyramid compared to the square. Since during observations for behavioral mapping there were not many kids who were playing, it was decided that it would not be asked, instead it was replaced by the activity of ‘climbing the stairs of the Pyramid’. And it seems both activities are preferred in their respective public spaces, which is also shown previously in the behavioral maps (*Figure 42* and *Figure 53*).

The last multiple-choice question of the questionnaire is about the heritage value and the satisfaction with the current situation of the spaces (*Figure 85*). In the case of ‘Italia’ square, 12% of people think that the square is not part of the legacy of Tirana, while in the Pyramid, 7% think that. From the remaining 88% that think that ‘Italia’ Square is part of the legacy of the city, 40% think that modifications and changes are needed, while 48% think that the current situation is appropriate. From the remaining 93% that think that the Pyramid is part of the legacy of the city, 13% disagree with the transformation, while 80%, hence the majority, think that the current situation is positive. This agreement among users is also shown in the evaluation of different aspects, which in general, the Pyramid achieves a positive score.

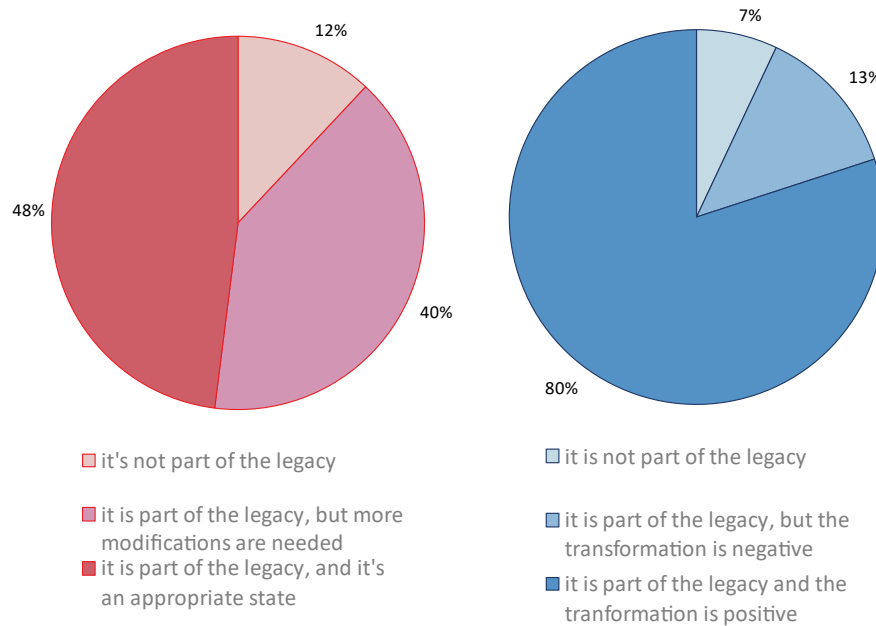


Figure 85. 'Heritage value' in 'Italia' Square (on the left) and the Pyramid (on the right). Courtesy of the author

4.4.4 Last part – Positive and negative aspects

The two last questions of the questionnaire are open-ended questions. One asks about the positive aspects of the public spaces and their favorite spots in them, while the other question asks about negative aspects of the public spaces and what can be improved upon or added. Starting with the first question in the case of 'Italia' Square, nine people have not given any comment, while the other 91 people have given their opinions on the matter.

Positive aspects

For 'Italia' square, the aspects that were praised by the users (*Figure 86*) are as follows: the diversity of activities, by 12 people; social life and the vitality of the square, by 19 people; the spaces for the kids, by 20 people; the different sport activities which include biking, scooter, skateboard, roller skate and ball games, which were mentioned by 7 people; the level of safety was mentioned by 4 people, and the lack of cars in the space which is also related to safety was praised by 9 people; and the calmness, by 5 people.

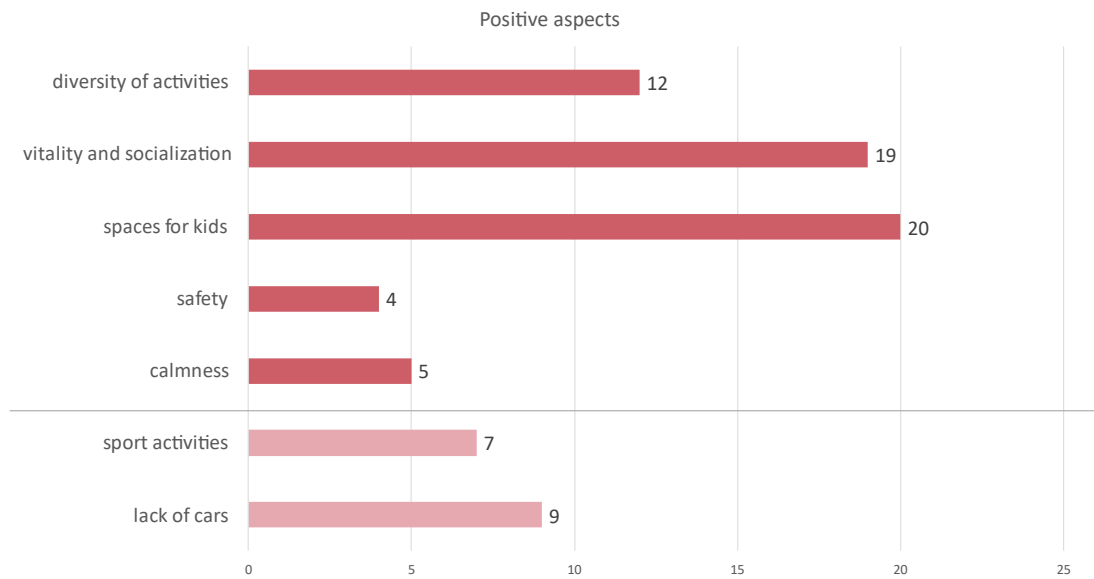


Figure 86. Positive aspects in ‘Italia’ square. Courtesy of the author

As for more physical aspects (*Figure 87*), users mentioned: the favorable location and its ease of access, by 3 people; its big size, by 12 people; which makes possible for a big field of view, by 2 people; the places to sit, by 2 people; the shade, by 3 people; the sun during winter, by 1 person; lighting quality, by 1 person; the design and organization, by 9 people; and everything overall, by 1 person.

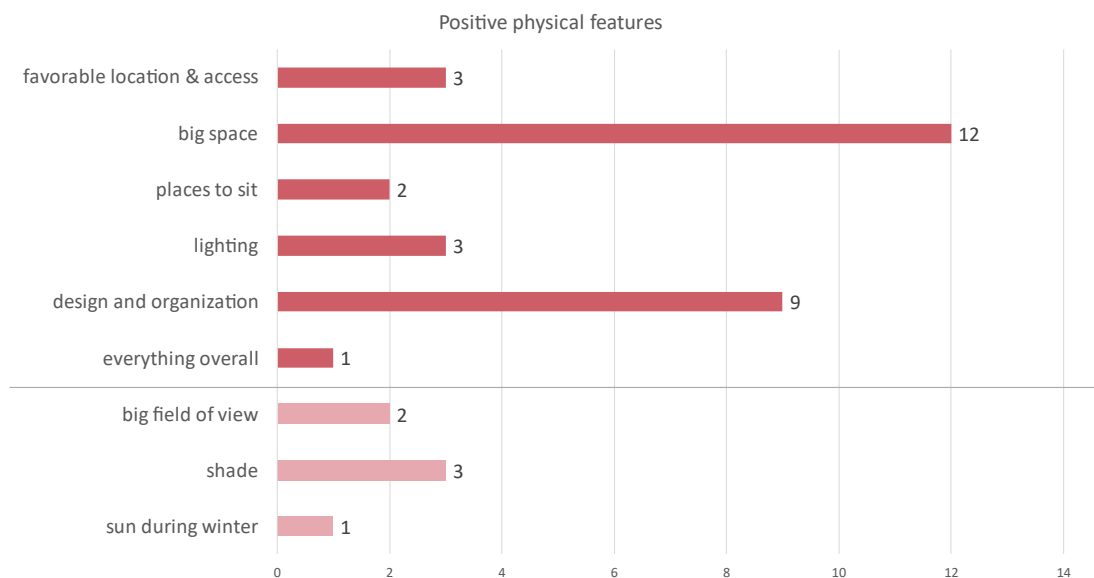


Figure 87. Positive physical features in ‘Italia’ square. Courtesy of the author

The favorite spots (*Figure 88*) as mentioned by the users are: the businesses and the stadium, by 20 people; from these 20 people 4 have mentioned Sophie Caffè to be their favorite spot; the other favorite spots are the stairs and the colonnade, which were mentioned by 15 people; and the last place mentioned by 1 person, is every spot that is in shade.

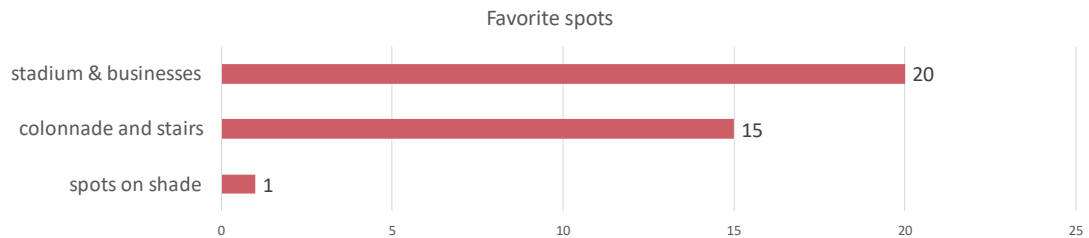


Figure 88. Favorite spots in 'Italia' square. Courtesy of the author

In the Pyramid's case, 11 people did not give any comment for this question, the aspects that were praised by the users (*Figure 89*) are as follows: the diversity of activities, by 8 people; social life and the vitality of the square, by 21 people; the spaces for the kids, by 1 person; the level of safety was mentioned by 2 people, the calmness, by 3 people. Other aspects different from the square include: the tourism attraction, by 7 people; the historical and cultural value by 2 people; the fresh air, by 1 person, and the want to go for a stroll, by 5 people.

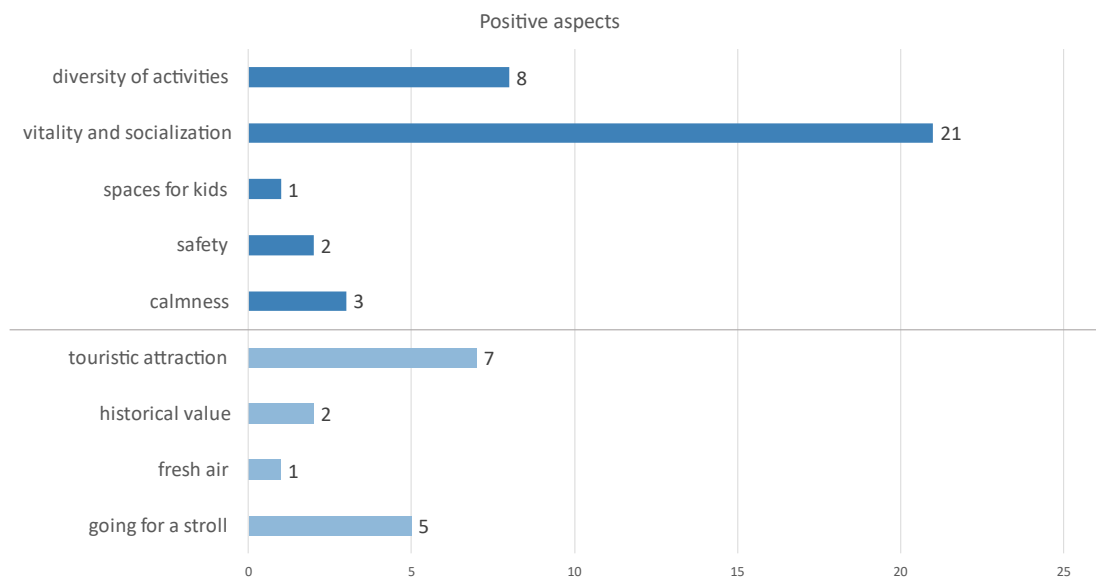


Figure 89. Positive aspects in the Pyramid. Courtesy of the author

As for more physical aspects (*Figure 90*), users mentioned: the favorable location and its ease of access, by 4 people; its big size, by 2 people; the places to sit, by 9 people; lighting quality, by 1 person; the design and organization, by 8 people, the beautiful views that are provided, by 9 people; TUMO center by 1 person; and everything overall, by 2 people.

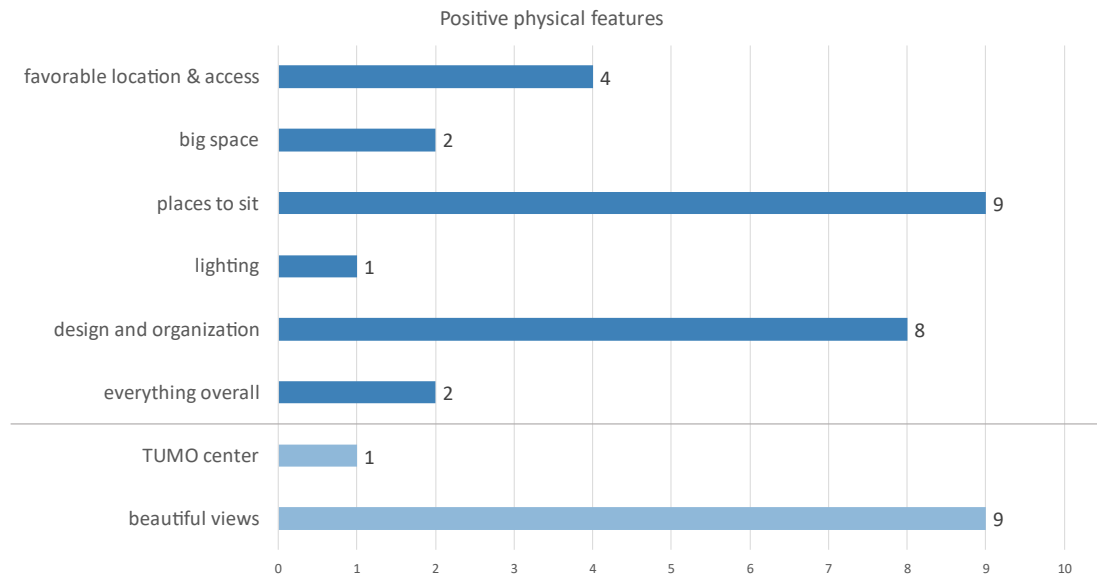


Figure 90. Positive physical features in the Pyramid. Courtesy of the author

The favorite spots (*Figure 91*) as mentioned by the users are: the businesses, by 12 people; from these 4 people mentioned SenTea to be their favorite spot and one person has mentioned ‘Pastaria’; the other favorite spot is the Pyramid, mentioned by 26 people, from these 26 people, 7 people have mentioned the stairs of the Pyramid, and 16 people have mentioned the top of the Pyramid; the cubes around the Pyramid, by 12 people; spots that are in shade, mentioned by 2 people; the main central entrance mentioned by one person for the view that it provides; and the last place mentioned by 2 people, are the quiet spots around the Pyramid. A fun result from the answers of the users is that the new volumes around the Pyramid, are called by different names which include: ‘volume’ (volumes), ‘kubat’ (cubes), ‘shtëpi’ or ‘shtëpiza’ (houses), ndërtesa (buildings), ‘dhoma të vogla’ (small rooms).

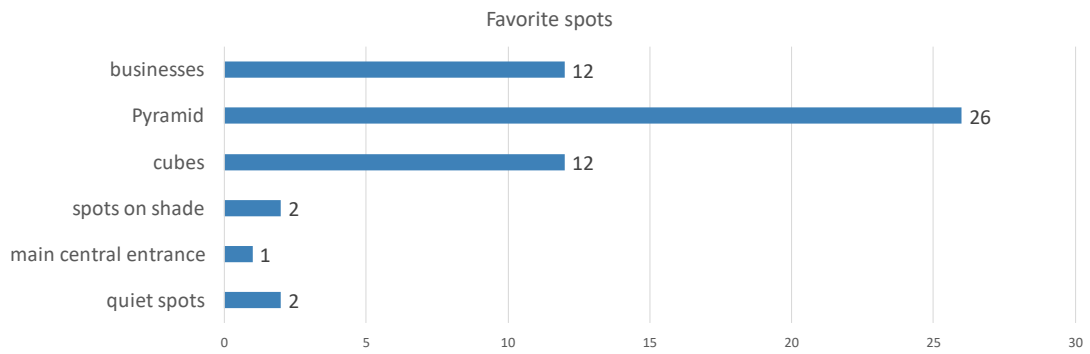


Figure 91. Favorite spots in the Pyramid. Courtesy of the author

(Figure 92) and (Figure 93), show a comparison between positive aspects between case studies. According to the open-ended question, ‘Italia’ square has more mentions for diversity of activities, spaces for kids, safety, calmness, its big space, lighting, and design. While the Pyramid has more mentions for vitality and socialization, favorable location and access, places to sit, and everything overall. So, the square has more ‘positive mentions’ than the Pyramid.

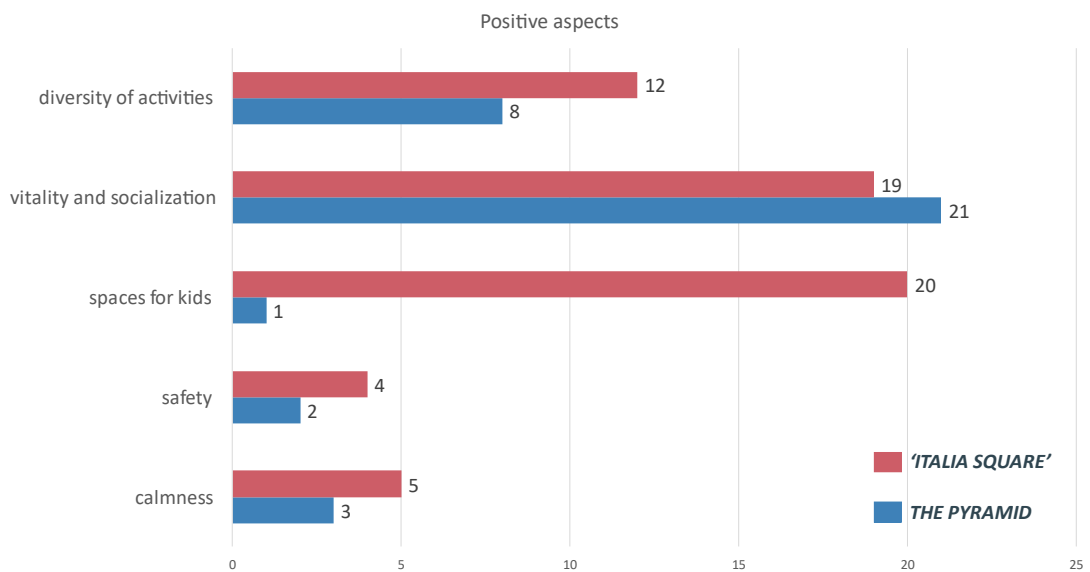


Figure 92. Positive aspects in both case studies. Courtesy of the author

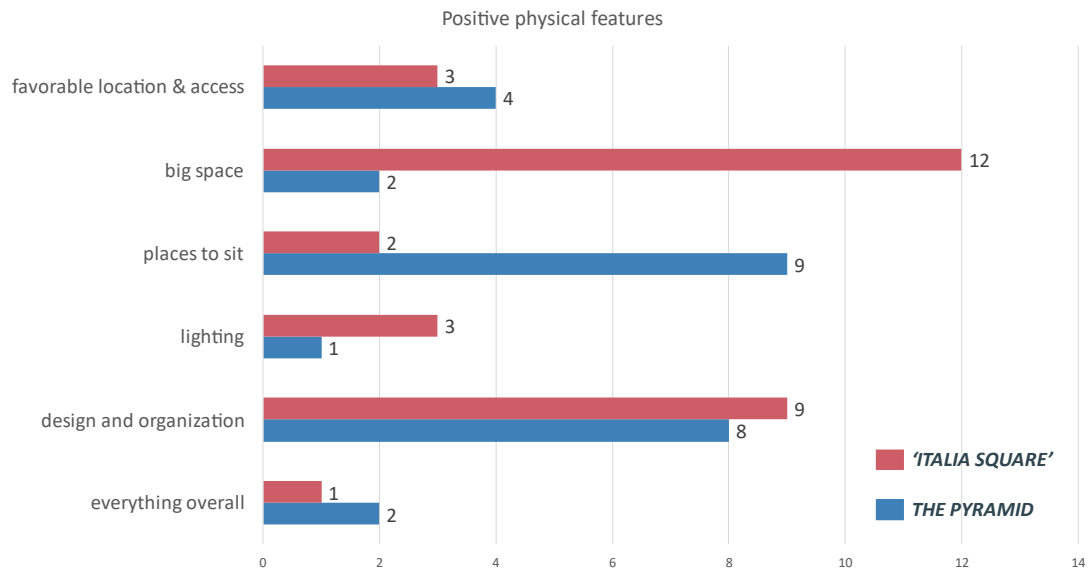


Figure 93. Positive physical features in both case studies. Courtesy of the author

Negative aspects

The second question is about the negative aspects and what users would like to change or add in the selected case studies. Starting with ‘Italia’ square, 15 people either chose to not answer the question or did not have anything to add or complain about the space. Thus, the following information comes as a result of 85 people’s opinions.

Beginning with aspects that people would like to add or change in the square (*Figure 94*): more greenery, mentioned by 28 people; more activities, mentioned by 9 people; more places to sit, mentioned by 21 people; more bins, mentioned by one person; more shade, mentioned by 12 people; less noise and disorder in the square, mentioned by 4 people; more lighting, mentioned by 4 people; more maintenance and cleanliness, mentioned by 9 people; more safety, mentioned by 10 people; more people frequenting the square, mentioned by only one person. For more clarification, in the aspect of the need for ‘more safety’, the most common cause of concern among the adults were the teenagers who bike in the grounds of the pyramid, or kids playing with a ball. These two groups can be dangerous according to the parents for smaller kids. There was also one concern about youngsters using narcotic substances.

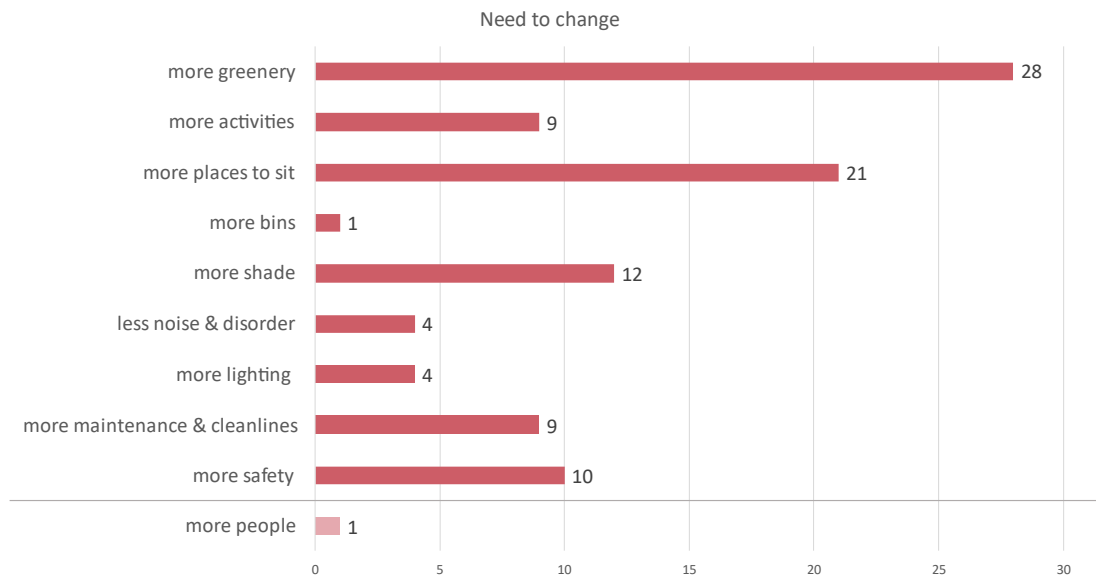


Figure 94. Aspects that need to change in the square. Courtesy of the author

There were 17 people who suggested or wanted changes in the design of the square (*Figure 95*). Two people suggested the addition of a drinking fountain or other water features to ‘break the solidity of the square’. Two people were dissatisfied with the material of the square, claiming it could be ‘dangerous for kids’ by being ‘slippery’, and it ‘reflects the sunlight during summer causing discomfort’. Three people would like a bigger importance to be given to the history of the square, by ‘perhaps adding an installation’ or ‘creating a pattern with the tiles that shows the history of the place’. Other proposals from the users include: ‘shading devices’, ‘playground for the kids’, ‘heating during winter’, ‘structures for skating’, ‘stone benches to fit better with the context’, ‘for the museum and rectorate building to be painted’.

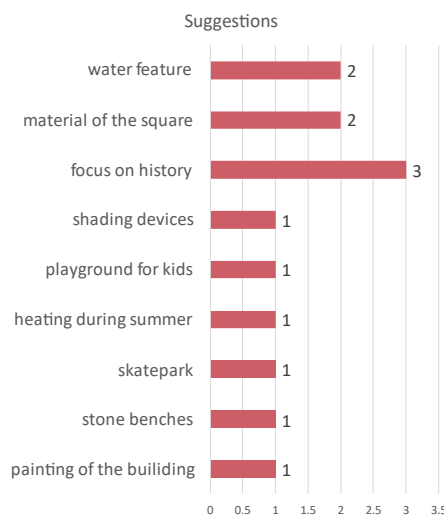


Figure 95. Suggestions for ‘Italia’ square. Courtesy of the author

On the other hand, in the answers for the questionnaire conducted for the Pyramid, 14 people either chose to not answer the question or did not have anything to add or complain about the space. Thus, the following information comes as a result of the remaining 86 people’s opinions. Beginning with aspects that people would like to add or change in the Pyramid (*Figure 96*): more greenery, mentioned by 9 people; more activities, mentioned by 5 people, one person gave suggestions of ‘more different activities like pottery, sport, painting, or music’; more places to sit, mentioned by 20 people; more bins, mentioned by one person; more shade, mentioned by 4 people; less noise and disorder in the square, mentioned by 2 people; more lighting, mentioned by 7 people; more maintenance and cleanliness, mentioned by 4 people; more safety, mentioned by 11 people, from which 4 people claimed that the Pyramid is frequented by ‘rude’, ‘weird’ or ‘littering’ people or ‘people that consume narcotic substances’.

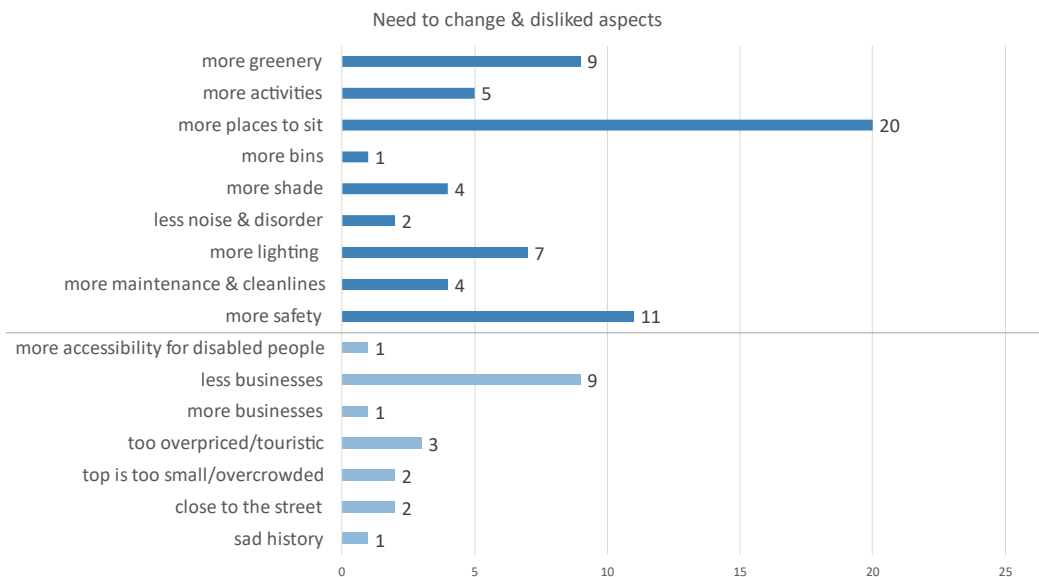


Figure 96. What needs to change and disliked aspects in the Pyramid. Courtesy of the author

There were also concerns unique to the Pyramid: more accessibility for disabled people; less businesses, by 9 people; more businesses by one person; complaints about how the Pyramid is too focused on tourists and how the place is overpriced, by three people; how the top of the Pyramid is too small and too overcrowded by people which ‘can seem like it could lead to safety problems’, by two people; the location close to the streets, mentioned by 2 people; one tourist also commented that the Pyramid holds a ‘saddening background’. Concerns about the new project’s function have been communicated: 3 people do not like the new function as a technological center, and

one person states that the Pyramid should have preserved its heritage value. 8 people were dissatisfied with the design of the space, expressing discontent with ‘disorganized volumes’, ‘messy placement of trees’, ‘the removal of the sloping walls of the Pyramid’.

Lastly, the suggestions (*Figure 97*) from 5 users include: ‘water features’, ‘spaces for kids’, ‘free internet’, ‘maybe some music to enjoy the views’, ‘the surrounding volumes to have been more transparent rather than the solid form that they have’.

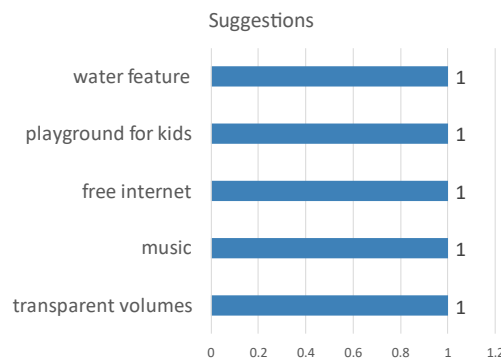


Figure 97. Suggestions for the Pyramid. Courtesy of the author

(Figure 98) shows a comparison between aspects that need change between case studies. According to the open-ended question, ‘Italia’ square has more mentions for more greenery, more activities, more places to sit, more shade, less noise and disorder, and more maintenance and cleanliness. While the Pyramid has more mentions for more lighting and more safety. So, the square has more ‘negative mentions’ than the Pyramid.

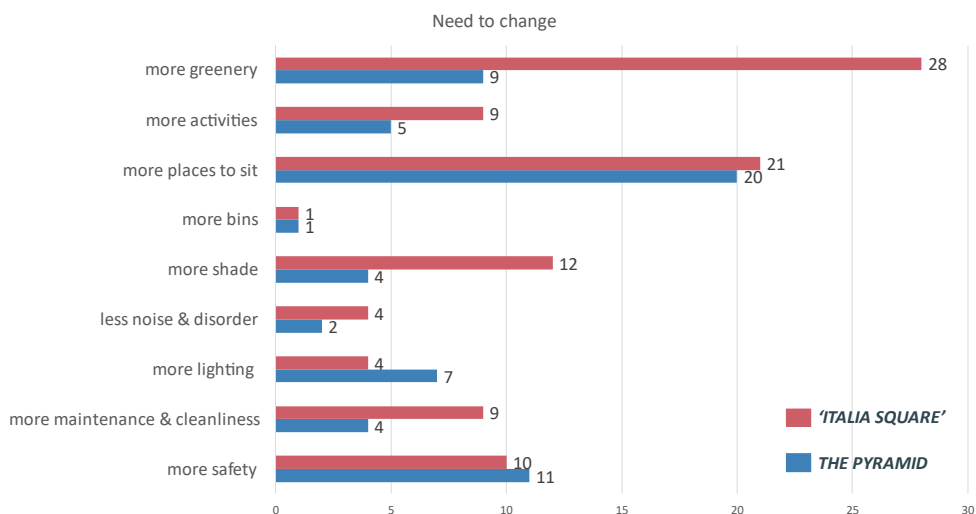


Figure 98. What needs to change in both case studies. Courtesy of the author

4.5 Final Discussion - Comparison between research methods

This thesis section focuses on discussing the findings of each research method and comparing both case studies. The findings and discussions are organized by paying attention to different properties that make up a public outdoor space. To begin with, the criteria of this comparison include physical characteristics of the site like: places to sit, greenery, shade, lighting. Additionally, it includes urban principles that were described in the literature review, like: accessibility and connectivity, comfort, diversity of activities, inclusiveness, safety, vitality, heritage value. Finally, it also includes space performance concepts like technical performance and aesthetic performance. A summary of the points made in this section can be found in *Table 13*.

4.5.1 Physical elements

1. *Places to sit*. Sitting elements were shown firstly in the site mapping section (*Figure 23* and *Figure 29* for reference), which shows how 'Italia' Square has only the stairs in the museum/rectorate colonnade and the outdoor sitting of cafes. While the Pyramid has a bigger number of sitting like movable chairs, the stairs of the Pyramid, the benches at the top of the Pyramid, and the outdoor sitting of cafes. From the behavioral mapping, in the context of 'Italia' square, in total 397 people were sitting in cafes and 75 people were sitting in the stairs. In the context of the Pyramid, in total, 203 people were sitting in cafes and 281 people were sitting in the other sitting elements. While the total number of people sitting is similar to both public spaces, the ratio between sitting in cafes and sitting elsewhere is very different. In the square people use cafes more for sitting, while in the Pyramid cafes are used less than the other sitting elements. In the questionnaire, from (*Table 12*) can be seen that the Pyramid has a higher score in 'places to sit' (3.51) compared to the square (3.07), so from this information it can be said that the Pyramid offers more than the square in terms of sitting. Though, in the last open-ended question about negative aspects, 21 people asked for more places to sit in the square, and 20 people asked for places to sit in the Pyramid, showing that both public spaces need improvement in this aspect.

2. *Greenery*. Greenery was also shown firstly in the site mapping section (*Figure 23* and *Figure 29* for reference). The site mapping displays how 'Italia' square

has very limited greenery, that is only 4 trees in the corner of the square, while the Pyramid has much more green areas and trees. In the questionnaire, the Pyramid has taken a good score of 3.78. In the square, users were asked a different question about greenery which shows that 80% of respondents have a problem with the lack of greenery. This dissatisfaction was shown in the open-ended question, where 28 people wanted greenery to be added in the square. Surprisingly, even in the Pyramid, 9 people suggested the addition of more greenery. On the other hand, 14 people mentioned greenery as a positive aspect of the Pyramid, showing that the Pyramid has a good quality of greenery, while the square needs a lot of improvement.

3. *Shade.* 'Italia' square has a source of shade the stadium and the buildings of the rectorate and museum, while the public space in the Pyramid has a source of shade the Pyramid itself, the trees and the new volumes. From the results of the Likert-scale question, the square has a slightly negative score of 2.82 and the Pyramid has a slightly positive score of 3.12. This is the lowest score category for both public spaces. On the open-ended questions, 3 people praised the shade in the square while 12 people would like more shade in the square. For the Pyramid, 2 people mentioned the places in the shade as their favorite spot, and 4 people would like more shade in the public space. So, both places need improvement in the aspect of shading.

4. *Lighting.* Lighting was shown in the site mapping section (*Figure 24* and *Figure 34* for reference) and the respective type of lighting has been explained there. In the Likert-scale questions, both public spaces have taken a good score, 3.84 for the square and 3.91 for the Pyramid. Lighting has been mentioned as a positive aspect in the open-ended question by 1 person per public space. However, in the 'negative aspects' question, 6 people would like more lighting in the square, and 7 people would like more lighting in the Pyramid. Even though, both public spaces have a positive score, improvements on lighting can still be done.

4.5.2 Urban principles

1. *Accessibility and Connectivity.* The 800m radius map shows the bus paths and the bus station near the sites (*Figure 19*) and the available bike infrastructure (*Figure 18*). In the site mapping, the bike racks of the Pyramid are highlighted (*Figure 29*). Both sites are situated close to main streets, making access very straightforward.

The favorable position and accessibility were also praised in the open-ended questions, by 3 people in the square, and 4 people in the Pyramid. According to the questionnaire, 4% of people come to the square by bike, and 8% by bus. In the Pyramid, 1% came to the Pyramid by bike and 23% came by bus. In the behavioral mapping, a total of 49 people who bike, were recorded in the square and 24 people were recorded in the Pyramid. It seems that biking is a more common activity in the square not only for transportation, but also as a passing time activity inside of it. While the Pyramid has more people using the bus as transportation means, even though it has more available bike infrastructure compared to the square.

2. *Comfort.* Comfort was one of the aspects asked in the questionnaire. Both case studies took a positive score in the Likert-scale question, 3.82 for 'Italia' square, and 4.04 for the Pyramid. The comfort was expressed also in the words of open-ended questions. Additionally, the fact that they are frequented by a lot of users, as shown in the behavioral mapping, shows that both spaces cause feelings of comfort in people. An improvement in terms of comfort as stated in the open-ended questions could be a change of sitting elements. Both the stairs of the colonnade and the chairs of the Pyramid have been described as hard and uncomfortable by the elders, so both public spaces need not only more sitting elements but also more comfortable ones, according to the users' responses.

3. *Diversity of activities.* This was also asked as a Likert-scale question, and the mean scores are 3.15 for the square and 3.41 for the Pyramid. Activities were also praised in the open-ended questions by 12 people in the square and 8 people in the Pyramid. On the other hand, people also asked for more activities, more specifically 9 people in the square, and 5 people in the Pyramid. So, the positive opinion's number outweighs the negative number in this respect. Nevertheless, both public spaces have been mentioned to have potential for more activities.

4. *Inclusiveness.* The behavioral mapping showed that different age groups and genders frequent the two selected case studies. Though there are different age groups frequenting the public spaces, the most common one is adults. In the open-ended question the fact that the public spaces were frequented by different age groups have been praised in both case studies. Something that was noticed was the lack of people with disabilities in the public spaces. One person even commented on this topic in the

open-ended question for the Pyramid, that there should be more ease of access for people with disabilities.

5. *Safety.* Safety was asked as a Likert-scale question, but was also discussed on the open-ended questions. On the aspect of safety, 'Italia' square has taken a score of 3.40, and the Pyramid has taken a score of 3.37. This is the only aspect where the square has a higher score than the Pyramid. The square was praised 4 times for its safety, 9 times for its lack of cars, 20 times for it being an appropriate space for kids, and 2 times for having a big field of view so it can be easier to look after the kids. The Pyramid was praised 2 times for its safety, and 1 time for being an appropriate space for kids. So, if we consider positive opinions the square far outweighs the Pyramid. If we consider the question about negative opinions, there were 10 mentions in the square and 7 mentions in the Pyramid for a need for more safety. The most common safety problem mentioned in the square is the fact that adults or elderly should look after the small kids, while in the Pyramid the most common safety problem mentioned were the 'problematic' people that frequent the space, so the source of safety concerns are different for the case studies.

6. *Vitality and socialization.* From the Likert-scale questions, the square has taken a score of 4.19 and the Pyramid a score of 4.41. This was the question with the highest score for both case studies. This approval was also showcased in the open-ended questions. The social life was praised 19 times in the square, and 21 times in the Pyramid. Even the behavioral mapping shows that both public spaces are frequented on different times of the day, and are mostly frequented by couples and groups.

7. *Heritage value.* A multiple-choice question was asked to the users, and it resulted in 88% thinking that 'Italia' square is part of Tirana's heritage, and 93% thinking that the Pyramid is part of Tirana's heritage. The pyramid has been considered as a cultural heritage by two people in the open-ended questions and the fact that more tourists frequent the space was also mentioned 7 times. In the case of 'Italia' square 3 people would like more focus to be put on the historical value of the square, and in the case of the Pyramid, 1 person would like the Pyramid to preserve the historical identity. So, both case studies have a lot of potential in this aspect.

4.5.3 Space performance

1. *Technical performance.* In the behavioral mapping, during observations, there was one person cleaning the square, while in the Pyramid, there were 10 people cleaning or doing maintenance. The topics of cleanliness and maintenance have been brought up by the users themselves in the open-ended questions. 9 people mentioned cleanliness and maintenance as a problem in the square and 4 people in the Pyramid. The problems mentioned in the square are the lack of cleanliness in the stairs of the colonnade, the cracks on some of the ground tiles, and the buildings of the museum and rectorate do not look clean. The problems mentioned in the Pyramid are the littering in the space, writing on the Pyramid made by users, and the maintenance of the greenery. Since the problems of maintenance and cleanliness have been brought up by users themselves, it seems that both public spaces need big improvements in terms of technical performance. Furthermore, in both cases, one respondent per questionnaire has mentioned the addition of bins in the public spaces.

2. *Aesthetical performance.* Users were asked about their opinions on the appearance on the questionnaire. According to the Likert-scale question, ‘Italia’ square has a score of 3.63 in terms of appearance and the Pyramid has a score of 4.01. The public spaces’ appearance was also commented on in the open-ended questions where 9 people praised the appearance of the square and 8 people praised the appearance of the Pyramid. Though both had proposals for modifications in the public spaces, it seems that both public spaces have a positive aesthetical performance.

Table 13. Comparison between ‘Italia’ square and the Pyramid. Courtesy of the author

	‘Italia’ Square		The Pyramid	
Physical elements				
Places to sit	+	Stairs and Cafes	+	Big variety of sitting
	—	A big need for more seating	—	A big need for more seating
Greenery	—	Very limited greenery	+	More green areas and trees
	—	A very big need for more greenery	—	A request for more greenery
Shade	—	A need for more shade	—	A need for more shade

Lighting	+	Different sources of lighting	+	Different sources of lighting
	—	A need for more lighting	—	A need for more lighting
Urban principles				
Accessibility and Connectivity	+	Bus stations nearby	+	Bus stations nearby
	+	Bike lanes	+	Bike lanes and racks
	+	Close to main streets	+	Close to main streets
	+	Biking used for transportation but also as a spare-time activity	+	Biking used for transportation
Comfort	+	The comfort of users is expressed in the survey	+	The comfort of users is expressed in the survey
	—	Needs more comfortable seating	—	Needs more comfortable seating
Diversity of activities	+	The satisfaction of users for the activities is expressed in the survey	+	The satisfaction of users for the activities is expressed in the survey
	—	May need more activities	—	May need more activities
Inclusiveness	+	Both genders frequent the public space	+	Both genders frequent the public space
	+	Different age groups frequent the public space	+	Different age groups frequent the public space
	+	This diversity of age groups has also been praised in the questionnaire	+	This diversity of age groups has also been praised in the questionnaire
	—	The public space is not frequented by people with disabilities	—	The public space is not frequented by people with disabilities
Safety	+	Lack of cars	+	Presence of guards and surveillance camera
	+	Big field of view	—	‘Problematic’ people frequenting the space
	+	Frequented by adults and kids	—	Use of narcotic substances
	—	Small kids can be hurt by teenagers who bike	—	In the questionnaire people requested more safety
	—	In the questionnaire people requested more safety		

Vitality and socialization	+	This aspect was praised in the questionnaire	+	This aspect was praised in the questionnaire
	+	The behavioral mapping shows that the space is very frequented	+	The behavioral mapping shows that the space is very frequented
Heritage value	+	Users think that the space is part of Tirana's heritage	+	Users think that the space is part of Tirana's heritage
	—	More focus on the historical value according to respondents	+	Touristic attraction
			—	More focus on the historical value according to respondents
Space performance				
Technical performance	+	One person cleaning (in the behavioral mapping)	+	10 people cleaning or doing maintenance (in the behavioral mapping)
	—	Needs more maintenance	—	Needs more maintenance
	—	Needs more cleanliness	—	Needs more cleanliness
	—	Cracks on the tiles	—	More bins
	—	More bins	—	Littering by people
	—	The museum/rectorate does not look clean		
Aesthetical performance	+	The appearance was praised in the questionnaire	+	The appearance was praised in the questionnaire

CHAPTER 5

CONCLUSIONS

5.1 Conclusions

The aim of this thesis was to make a post-occupancy evaluation of public spaces of Tirana, more specifically 'Italia' Square and the Pyramid. The objectives of this research, as stated in the Introduction, are essentially to find out who uses these public spaces, the most used spots, their activities, their level of satisfaction, and aspects that need improvements. After this analysis, a comparison is done according to different criteria. The outcomes of this thesis came as a result through means of observations and questionnaires. The findings can create a list of positive and negative aspects of the case studies as urban public spaces which are as follows:

Positive aspects for both case studies:

1. Accessibility and connectivity. Both have a very favorable location and can be reached by different means of private and public transportation.
2. Comfort. The public spaces have been praised for its comfort, though they both need improvements in terms of shade and comfort of sitting elements.
3. Diversity of activities. Users also praised the different activities happening in the vicinity of the case studies. However, both could use more activities.
4. Inclusiveness. Different age groups and genders use the public spaces, as seen from the behavioral mapping and the feedback from the questionnaire respondents. An improvement would be more focus on design that facilitates the use from people with different abilities and elders.
5. Vitality and socialization. Similar to 'inclusiveness', the behavioral mapping and the questionnaire both prove that the public spaces are used, especially by groups of friends and family.

6. Heritage value. Both case studies are considered part of the city's heritage by the questionnaire respondents. Some respondents even expressed their wish for more emphasis on the historical background of the spaces.

7. Aesthetics performance. The appearance has also been praised by the users. Even though some people asked for changes in design, this aspect can be considered positive for both cases.

Positive aspects for only one case study:

1. Greenery. It has been considered a strong point of the Pyramid among users. On the other hand, many users have asked for greenery in the square.

2. Safety. Although some users want more safety in the square, it has been considered a positive aspect of 'Italia' square, since a lot of adults spend their time with kids there. While the Pyramid, even though in the Likert-scale question, has a good score, the open-ended question raises problems in safety that need to be addressed.

Negative aspects for both case studies:

1. Places to sit. Even though the Pyramid has a variety of places to sit, there is still a need for more sitting elements and more comfortable ones, expressed by the users. The same case is also in the square, where users want more comfortable sitting elements.

2. Shade. In both case studies users have expressed criticism about shade, and have expressed the need for more shade in order to make the space more comfortable.

3. Lighting. According to the questionnaires, both public spaces need more lighting in order to make the public spaces feel safer and more comfortable during the night.

4. Technical performance. The problem of maintenance and cleanliness has been raised by respondents of both questionnaires, so more improvement needs to be done in this respect.

These last four points, the need for comfortable sitting elements, absence of shade, need for more lighting, and problems of maintenance and cleanliness, are the

areas the need the biggest improvement, but also the positive aspects can be improved as already explained above.

In summary, this thesis concludes that both case studies have shown good quality in this post-occupancy study, and big potential as urban public spaces. Even though there are features that can be improved upon, in general, both case studies are active and are preferred by the users, as shown in the behavioral mapping and the questionnaires conducted in this thesis.

5.2 Recommendations for future research

This study sets up a research framework for the evaluation of public spaces in Tirana and not only. As a post-occupancy evaluation, it can be further developed by urban designers and policy makers to establish a better urban design. Additionally, it also introduces the use of ArcMap as a tool for creating behavioral maps.

This thesis explores the situation of occupancy and users feedback during Spring 2024, and can be used as a reference for future research on the same topic, since both the Pyramid and 'Italia' square are popular public spaces of Tirana. More observation days and times, as well as more in-site and online questionnaires are recommended for future researchers.

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APPENDIX

Questionnaire Physical Format

Vlerësimi i hapësirave publike: Sheshi 'Italia' Të dhënat do të përdoren në temën e diplomës për master shkencor, kryer në Universitetin Epoka. Përgjigjet tuaja do të përdoren vetëm për qëllime akademike, dhe të dhënat tuaja do të mbeten anonime.

▶ Gjinia juaj: Mashkull Femër

▶ Grupmosha juaj: më pak se 18 vjeç 18-25 vjeç 26-45 vjeç 46-64 vjeç 64+ vjeç

▶ Sa shpesh e frekuentoni sheshin 'Italia'? Disa herë në javë Disa herë në muaj Çdo muaj Jam turist

▶ Sa kohë qëndroni zakonisht? 0-10 min 11-30 min 30-60 min mbi 1 orë

▶ Si keni arritur në hapësirën publike? Me ecje Me biçikletë Me autobus Me makinë/taxi

▶ Sa larg banoni nga sheshi? Afër (0-15 min ecje) Pak larg (16-30 min ecje) Larg (mbi 30 min) Jam turist

▶ Sa problem është për ju mungesa e gjelbërimit në shesh? Aspak Pak Shumë

▶ Si do ta vlerësonit sheshin 'Italia' sipas vëndeve për t'u ulur?

▶ Si do ta vlerësonit sheshin 'Italia' sipas hijezimit?

▶ Si do ta vlerësonit sheshin 'Italia' sipas sigurisë?

▶ Si do ta vlerësonit sheshin 'Italia' sipas ndriçimit?

▶ Si do ta vlerësonit jeten sociale dhe gjallërinë në sheshin 'Italia'?

▶ Sa të kënaqur jeni me diversitetin e aktiviteteve afër sheshit 'Italia'?

▶ Si do ta vlerësonit dizanjin/pamjen e sheshit 'Italia'?

▶ Sa komfort ndiheni kur frekuentoni sheshin 'Italia'?



▶ Çfarë ndjesie keni në lidhje me sheshin 'Italia'? Ndjesi negative Asnje Ndjesi pozitive

▶ Cila është arsyeja pse e vizitoni sheshin 'Italia'? (mund të zgjidhni më shumë se një opsion)

Për të kaluar kohë vetëm Për të luajtur/ Për të shoqëruar fëmijët kur luajnë Për të bërë foto

Për të takuar miqtë/ të afërmit Për të frekuentuar bizneset afër Tjetër _____

Sheshi 'Italia' ka qënë pjesë e qytetit të Tiranës që në 1946, projektuar nga arkitekti Italian Gherardo Bosio. Është shesh tipik Italian, dhe ndryshimi i tij më i madh është bërë gjatë ndërtimit të stadiumit 'Air Albania'. (Për referencë mund të shikoni fotot)

▶ A mendoni se Sheshi 'Italia' është pjesë e trashëgimisë së qytetit të Tiranës, dhe nëse po, a mendoni se gjëndja e tij ekzistuese është e përshtatshme për këtë rast?

Jo, nuk është pjesë e trashëgimisë së qytetit.

Po, është pjesë e trashëgimisë, por mund të ishin bërë më shumë ndryshime në lidhje me dizanjin e sheshit.

Po, është pjesë e trashëgimisë, dhe gjëndja e tij ekzistuese është e përshtatshme.

▶ Cilat janë aspektet pozitive të hapësirës publike dhe a keni ndonjë 'hapësirë të preferuar' në sheshin 'Italia'?

▶ Cilat janë aspektet negative të sheshit 'Italia' sipas jush dhe çfarë do të donit të ndryshonit/shtonit?

FALEMINDERIT PËR KOHËN TUAJ!

Vlerësimi i hapësirave publike: PIRAMIDA

Të dhënat do të përdoren në temën e diplomës për master shkencor, kryer në Universitetin Epoka.
Përgjigjet tuaja do të përdoren vetëm për qëllime akademike, dhe të dhënat tuaja do të mbeten anonime.

- Gjinia juaj: Mashkull Femër
- Grupmosha juaj: më pak se 18 vjeç 18-25 vjeç 26-45 vjeç 46-64 vjeç 64+ vjeç
- Sa shpesh e frekuentoni Piramidën? Disa herë në javë Disa herë në muaj Çdo muaj Jam turist
- Sa kohë qëndroni zakonisht? 0-10 min 11-30 min 30-60 min mbi 1 orë
- Si keni arritur në hapësirën publike? Me ecje Me biçikletë Me autobus Me makinë/taxi
- Sa larg banoni nga Piramida? Afër (0-15 min ecje) Pak larg (16-30 min ecje) Larg (mbi 30 min) Jam turist
- Si do ta vlerësonit hapësirën publike rreth Piramidës sipas gjelbërimit?
- Si do ta vlerësonit hapësirën publike rreth Piramidës sipas vëndeve për t'u ulur?
- Si do ta vlerësonit hapësirën publike rreth Piramidës sipas hijezimit?
- Si do ta vlerësonit hapësirën publike rreth Piramidës sipas sigurisë?
- Si do ta vlerësonit hapësirën publike rreth Piramidës sipas ndriçimit?
- Si do ta vlerësonit jetën sociale dhe gjallërinë në hapësirën publike rreth Piramidës?
- Sa të kënaqur jeni me diversitetin e aktiviteteve afër hapësirës publike rreth Piramidës?
- Si do ta vlerësonit dizajnin/pamjen e hapësirës publike rreth Piramidës?
- Sa komfort ndiheni kur frekuentoni hapësirën publike rreth Piramidës?
- Çfarë ndjesie keni në lidhje me hapësirën publike rreth Piramidës? Ndjesi negative Asnje Ndjesi pozitive
- Cila është arsyeja pse e vizitoni hapësirën publike rreth Piramidës? (mund të zgjidhni më shumë se një opsion)
- Për të kaluar kohë vetëm Për t'u ngjitur në majë të piramidës Për të shëtitur Për të bërë foto
- Për të takuar miqtë/ të afërmit Për të frekuentuar bizneset afër Tjetër _____

Nga viti 2023, Piramida është transformuar në një qendër teknologjike për të rinjtë, por Piramida ka qënë pjesë e historisë së Tiranës që në 1988. Si fillim ka qene muzeu personal I ish-diktatorit Enver Hoxha. Pas rënies së rregjimit, ka krijuar një imazh më social mes banorëve të Tiranës, ku shpesh do të frekuentonin parkun rreth Piramides ose do të ngjiteshin te muret e piramidës. (Për referencë mund të shikoni foton, për situatën e mëparshme)



- A mendoni se kjo hapësirë publike është pjesë e trashëgimisë së qytetit të Tiranës, dhe nëse po, a mendoni se transformimi në qendër teknologjike ishte pozitiv për këtë situatë?
- Jo, nuk është pjesë e trashëgimisë së qytetit.
- Po, është pjesë e trashëgimisë, por transformimi është negativ.
- Po, është pjesë e trashëgimisë, dhe transformimi është pozitiv.

- Cilat janë aspektet pozitive të hapësirës publike dhe a keni ndonjë 'hapësirë të preferuar' rreth Piramidës?

- Cilat janë aspektet negative të hapësirës publike rreth Piramidës dhe çfarë do të donit të ndryshonit/shtonit?

FALEMINDERIT PËR KOHËN TUAJ!