## A PROJECT PROPOSAL FOR A PUBLIC LIBRARY IN ELBASAN

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## IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR

THE DEGREE OF MASTER OF SCIENCE

IN

ARCHITECTURE

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## **ABSTRACT**

#### A PROJECT PROPOSAL FOR A PUBLIC LIBRARY IN ELBASAN

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This project envisions establishing a new public library in Elbasan, addressing the critical need for a cultural and educational cornerstone within the community. Elbasan currently lacks a public library, and this initiative aspires to create an invaluable sanctuary for all residents, functioning as a vibrant community centre where students, children, and adults can read, learn, and engage in enriching activities. The library will be an architectural marvel, blending modern design with elements that reflect Elbasan's rich cultural heritage. It will offer a welcoming and inspiring environment, housing an extensive collection of books and periodicals, thereby providing everyone with unfettered access to knowledge and educational opportunities. Moreover, the library will be a bustling hub of community activity, hosting public readings, literary clubs, educational workshops, and author events. These activities will foster social interaction, personal growth, and a deepened engagement with cultural and intellectual pursuits. By establishing this public library, we aim to significantly elevate the quality of life in the Elbasan Arena zone and contribute to developing a more educated, connected, and inspired populace. This project promises profound benefits to the community, offering a dedicated space for learning, creativity, and collaboration, and nurturing a vibrant culture of reading and intellectual curiosity.

**Keywords:** Public Library, Educational Centre, Community Hub, Social Interaction, Space for Learning, Quality of Life.

#### **ABSTRAKT**

NJË PROPOZIM PROJEKTI PËR NJË BIBLIOTEKË PUBLIKE NË ELBASAN

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Ky projekt synon ndërtimin e një librarie publike të re në qytetin e Elbasanit, duke adresuar nevojën e madhe për një qendër të tillë kulturore dhe edukative në komunitet. Meqenëse aktualisht Elbasani nuk ka një librari publike, kjo iniciativë do të krijojë një hapësirë të vlefshme për të gjithë qytetarët, duke u shërbyer si një qendër komunitare ku studentët, fëmijët dhe të rriturit mund të lexojnë, të mësojnë dhe të kalojnë kohë cilësore. Libraria do të dizajnohet si një hapësirë moderne dhe funksionale, që reflekton identitetin dhe trashëgiminë kulturore të Elbasanit, ndërsa ofron një ambient të ngrohtë dhe mikpritës. Ajo do të përmbajë një koleksion të pasur librash, revistash duke ofruar akses të lirë në dijen dhe edukimin për të gjithë. Përveç kësaj, libraria do të shërbejë si një qendër aktivitetesh komunitare, duke organizuar lexime publike, klube leximi, punëtori edukative dhe takime me autorë. Këto aktivitete do të inkurajojnë ndërveprimin social, zhvillimin personal dhe angazhimin e qytetarëve në aktivitete kulturore dhe edukative. Duke krijuar këtë librari publike, synojmë të përmirësojmë cilësinë e jetës në zonen e stadiumit, Elbasan dhe të kontribuojmë në zhvillimin e një komuniteti më të arsimuar, të lidhur dhe të frymëzuar. Ky projekt do të sjellë një përfitim të madh për qytetarët, duke ofruar një hapësirë të dedikuar për mësim, krijimtari dhe bashkëpunim, dhe duke nxitur një kulturë të re leximi dhe mësimi në komunitetin tonë.

Fjalët kyçe: Librari publike, Arsimi, Qendra e komunitetit, Ndërveprimi social,

Hapësira për të mësuar, Zhvillimi i arsimit

Dedicated to my parents and my little brother.

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## **CHAPTER 1**

## INTRODUCTION

#### 1.1 Problem Statement

The number of libraries and readers in Elbasan is declining. Today, libraries are confronted with the challenge of meeting increasing user expectations for digital resources. This thesis will explore how to design a library that caters to the needs of families and supports learning and social interactions through its architectural design.

It will illustrate how libraries can serve as public community spaces where people choose to spend time after school for the joy of learning rather than out of obligation. Additionally, the project aims to create a cultural and social hub for the local community, promoting knowledge and culture sustainably.

## 1.2 Thesis Objective

This project aims to achieve several objectives by proposing an architecturally sound library building that addresses most of the aforementioned issues.

- To design a suitable space that includes all the necessary facilities for reimagining the library for the 21st century and revitalizing it as a public space.
- To ensure easy access to resources for everyone, regardless of caste, class, or gender, since learning materials are not always accessible and affordable to all.
- To create a well-constructed environment using open spaces and buildings that serve as common grounds for public interaction.

## 1.3 Scope of works

Elbasan City currently lacks public libraries. Therefore, proposing a public library that aligns with the current societal trends is crucial for community development and encouraging library use. However, this study has certain limitations. Many library records have not been updated for a long time, and nearly half of the libraries have closed. Observations and surveys will focus on user groups within the Elbasan Arena. Additionally, the absence of substantial primary data on modern public libraries in the local context may present a challenge throughout the study.

## 1.4 Study Methodology

Qualitative Research is primarily exploratory and is used to understand underlying reasons, opinions, and motivations. This approach allowed us to conduct an in-depth study on the topic, providing insights into the problem and helping to develop ideas or hypotheses for the research. It is also used to uncover trends in thought and opinions, delving deeper into the issue. Qualitative methodologies offer the opportunity to gather data through case studies. Initially, various types of information were collected, and different spaces were studied through case studies and data analysis. Literature reviews were conducted, and a proper program formulation was prepared. Subsequently, the feasibility of the program on the site was evaluated.

#### - Data collection

The required information for the project is gathered through the literature review of books, reports, articles, and research works.

#### - Literature Review

The part will comprise guidelines to be considered while designing any built forms. Thus, necessary national and international standards related to architectural books of standards to be consulted.

#### Case studies

It is collecting data from national and international projects which will help to solve the problems of the project. Interviews with different target of group on the site.

## **CHAPTER 2**

#### LITERATURE REVIEW

#### 2.1 Introduction

A library can be described as a place where literary, musical, artistic, or reference materials (such as books, manuscripts, recordings, or films) are kept for use but not for sale. However, this traditional definition often restricts the library's roles. A more accurate definition might be a building designed to house various knowledge materials and an institution that facilitates easy access to these materials without requiring purchase.

By broadening our understanding of libraries to include places where people can interact, engage, and access resource materials for reference and learning, we can evolve the role of libraries and their significance in society

## 2.2 Library

The term "library" can refer to a place where various forms of reference and literary materials, such as books and recordings, are kept for use but are not for sale. (Merriam-Webster, 2019). Unfortunately, this definition often limits the scope of the institution's activities. A more realistic term would be a building that is designed to contain multiple types of knowledge materials, which can be accessed easily by anyone. (Edwards, 2009). Extending the definition of libraries to include places where people can gather and interact with one another has the potential to transform the role of these institutions. They have typically been categorized according to their collections and materials. Due to the increasing number of resources within libraries, the distinction between them has not been very helpful today. Instead, they have been categorized into four different kinds based on their accessibility.

**Academic Library** - An academic library is a component of an academic institution, such as a university or school. It primarily serves the needs of students, faculty members, and research scholars.

**Special Library** - A special library is a type of facility that serves a specific group of people. It can be a branch of a government department or a research organization, or it can be a facility for individuals who work for a certain firm.

**National Library** - A national library is a government-established institution that's responsible for preserving and disseminating information about a country. It collects and stores information about that country outside of the country and within it.

**Public Library** - A public library is considered a common good since it provides the public with a wide variety of resources to meet their needs. Unlike other institutions, it doesn't focus on a specific collection and instead encourages lending and borrowing practices. As such, it plays a significant role in the community and acts as a gathering place for all.

## 2.3 Historical Overview of the Library

Until writing was first invented in Egypt and Mesopotamia around 5,500 to 6,000 years ago, libraries were not possible. Other scripts were made by the Hittites in Turkey around 4,000 years ago, and the Minoans in Crete around 5,000 years ago. (Vaughan, 2021).

*Earthenware Library* - The first libraries were made. They contained archives of the earliest known forms of writing, such as the clay tablets found in Sumer, which date back to around 2600 B.C. The collection included various works ranging from history to astronomy and legal records.

**Papyrus Library** - The term papyrus is often associated with writing, and the English word "paper" is derived from the word "papyrus." One of the most significant libraries that can be found in the ancient world is the Great Library of Egypt in Alexandria, which was built in 285 BC. It was reportedly full of meeting rooms, laboratories, dining areas, and gardens.

**Parchment Library** - The producers of parchment came up with the idea of using animal skin as a substitute for Egyptian papyrus due to the lack of supplies in the region. Even though the process of making the product was rather messy, it was still viable. The porticoes of Rome's Octavia, which enclose the temples of Juno and Jupiter, were designed to feature colonnaded walkways.

Library of Handwritten Books - In China, the invention of paper during the 105 A.D period allowed the Chinese to make an early printing process. Since books were handwritten notes, they were given more importance. The Laurentian Library in Florence, which resembles a prayer hall, had books that were chained to wooden benches.

**Library of Printed Books** - Johannes Gutenberg, a goldsmith in Germany, developed the movable type of press in 1440, which helped in the development of the Printing Revolution. The price of books went down as production increased, which led to a larger number of readers.

*E-Library* - The concept of e-library refers to the collection and organization of digital materials. Although it allows users to access these materials online, some of the earliest examples were made in the 1980s and 1990s, such as collections of DVDs and CD-ROMs. In the 21st century, libraries are still adapting to the changing trends related to the way people consume media and books.

## 2.4 Library in the Past, Present and Future

#### **2.4.1 Present**

A change in the library's user experience resulted in the tables being relocated to the periphery to gain natural daylight. As the buildings got taller, the reading areas near the facade were also expanded, providing more expansive views. The stacked shelves moved toward the centre of the floor, which indicates that users are more important than books. This was a valuable change, as it showed that they were more concerned with the users than the content. Similarly, libraries were designed with deep floor plates that were arranged on rectilinear grids. The library's ground experience became a vital part of the design process, as it emphasizes the interaction between the street and the facility (Figure 1).

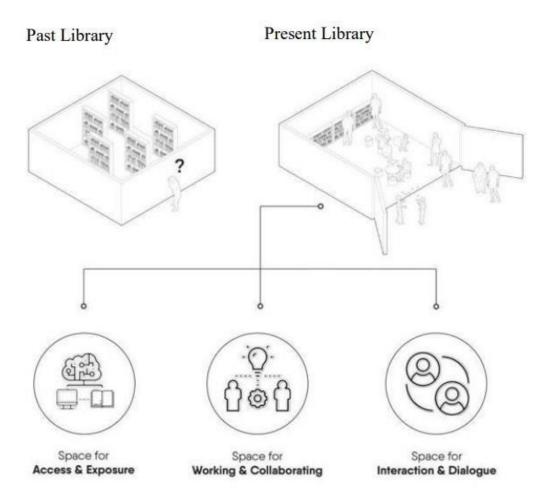


Figure 1. Past Vs Present Library Model

The library's layout has been changed to accommodate the needs of its users. Wallless bookshelves have been removed, allowing large glass windows to be incorporated.

This also allows the building's form to be altered.

#### **2.4.2 Future**

It is very challenging to predict the future of libraries. However, it is also very interesting to learn about their history and how they have changed over time. The different generations have transformed the image of the institution, with new buildings and intellectual agendas that reflect the community's priorities. (Pettegree, 2021)

The goal of libraries is to provide a variety of activities that are designed to promote learning and leisure (Figure 2). They will also help people use their time more efficiently by allowing them to interact with others. Some of these include digital literacy programs, cooking classes, and virtual reality storytelling.

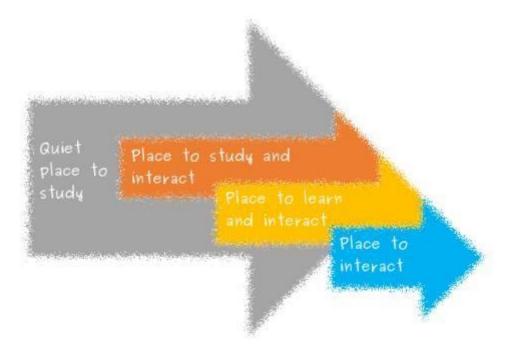


Figure 2. Perception of library over time.

Physical spaces and librarians will not change much. This has been the case for thousands of years now, and it will continue to be the same regardless of how strange the future may get. (Weller, 2016)

## 2.5 Zoning and layout of library

#### 2.5.1 Zonal Arrangement of a Modern Library

According to Palaces, most libraries have four zones: learning, experiencing, creating, and meeting. These areas are mixed and outworked. (Palaces, 2016).

#### (i) The Learning Space

Library usage becomes a dialogue as it becomes a place where people can discuss their concerns. Contemporary libraries have to create multi-use spaces while

still maintaining a quiet and delimited environment that complements the rest of the facility.

- 1. *Connection with nature:* Semi-open, open spaces created for learning.
- 2. **Bring the outdoors in:** Courtyard planning, internal landscaping.
- 3. *Visibility:* Visual connection between different spaces provided and with the outer world through glass facades.
- 4. *Ambience:* By proper light, flexible furniture, color, and view of either the outdoor gardens or hills can create a comfortable ambience.
- 5. **Different spaces:** Solo study carrels, group study, homework cafes, learning through experience and creation i.e. makerspace.



*Figure 3*. Outdoor Reading Park of a library.

## (ii) The inspiration space/Experience Zone

An inspiration space is a type of facility that is designed to provide people with a variety of resources (Figure 3). It can be used to enhance learning and leisure, or it can act as a venue for events.

#### (iii) The Meeting Space

When thinking of a library as a meeting space, the third dimension is often brought up. This concept suggests that there should be three elements to consider when designing a meeting space.

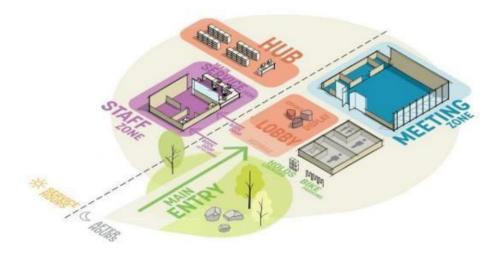
- 1. The square is almost private, and it's completely open.
- 2. Informal gatherings and organized instruction take place in this meeting space.
- 3. A scaling room can be used for large or small meetings.

#### (iv) The performative space

The concept of the performative space refers to the activities that the users can carry out in this meeting space, such as writing workshops, film workshops, and innovation workshops. It can also be used to host exhibitions and screenings. There are a variety of different types of meeting spaces that can be used for different kinds of activities.

#### (i) The arrival

The arrival area is the part of the library that users pass through to get to the collections and other areas of the facility. Its main function is to make the visitors feel like they're in the experience spaces of the library (Figure 4).



*Figure 4*. The entry zone of a library.

#### (ii) The meeting zones.

The meeting room should be near the entry, and it should be able to function when the library is closed. The restrooms should be located in the same zone, which will allow for independent operations (Figure 5).

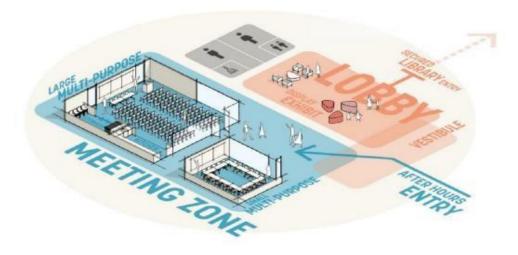


Figure 5. Meeting zone illustrative of a library

## (iii) The staff zone.

The staff areas can be made more flexible by allowing them to work in groups or distribute their work across the library. Books can be brought in and entered into the data system as indicated by the alphabet in the Dewey decimal system or fiction. These items can then be placed on the shelves(Figure 6).

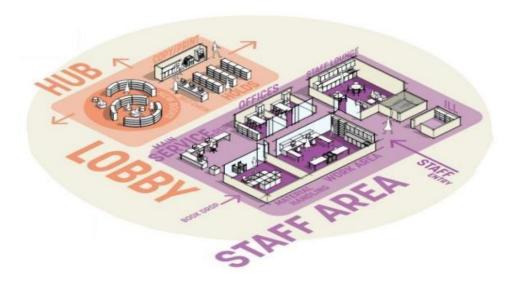
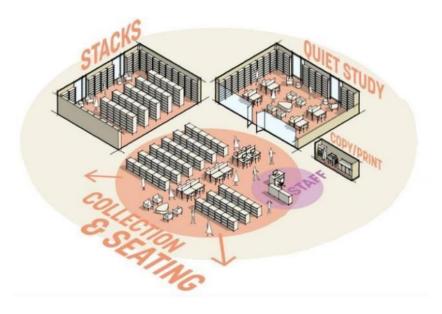


Figure 6. Centralized staff zone

## (iv) Collection and Seating Zone.

The seating and collection spaces are often combined. This arrangement can be made more effective by having sightlines through the stacks. Since staff members are responsible for the supervision of computer seats and reader seats, having sightlines through the stacks is important(Figure 7).



*Figure 7*. Intermingled collection and seating zone.

# (v) Addition of Spaces.

In addition to the seating and collection spaces, different programs will be added. These include group study, local history, teen fiction, and the maker space (Figure 8).

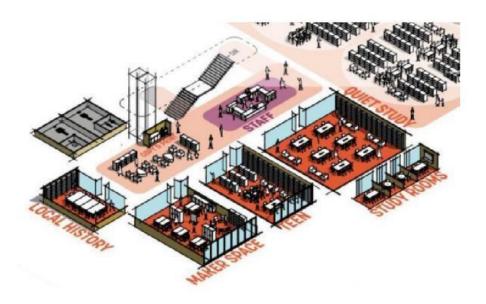


Figure 8. Quiet and Noisy study area in a library

## (vi) Children zone.

Children's libraries are often the best place for creative and playful learning, as this approach is more inclusive than the traditional closed space. The furniture is also more appropriate, and the stack heights are lowered. These areas can be used for various events and activities, and they should become interactive (Figure 9).



Figure 9. Interactive children zone

## 2.5.2. Changing roles of today's Libraries

The rise of digital technology has drastically changed the appearance of libraries. In the past, books and other printed materials were the main components of these facilities, but now they are full of information resources that are not only more complex to access but also more varied. This makes them more difficult to use and requires the latest guidance and technology.

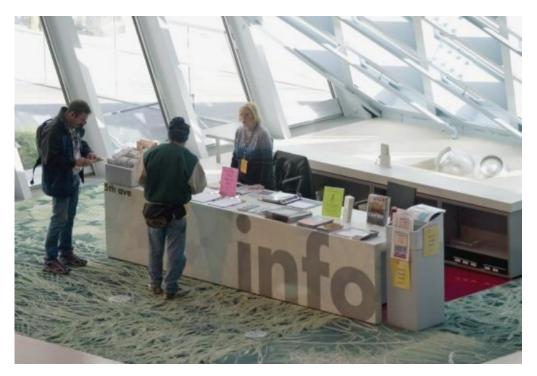


Figure 10. SPL Information Desk.

Today, there are many roles in libraries, such as asset keeper. Apart from acting as a learning space, the library also serves as a meeting place for people.



Figure 11. SPL Reference Area.

## 2.5.3. The Library as an Information Market

A library is a place where people can access all kinds of information. In the past, people could explore other worlds by reading books. Nowadays, they can act as a sort of gateway to various resources that can be found all around the globe. According to the Benton Foundation, in the future, libraries will be hybrid institutions that house both book and digital collections. The role of the librarian will be to guide users to the most relevant sources and unlock the knowledge in the vast amount of information that can be found in the internet's information superhighway. (Benton Foundation, 1996). Unlike the internet, libraries provide quality information. They also help users navigate through the vast amount of information that can be found in the information jungle. (Infas, 2002). The librarian can be a guide who helps users find the most pertinent information. (Lang, 2001). Information literacy is a vital skill that the library can teach and provide.

#### 2.5.4. The library as a working and living environment

Library settings should be relaxing and comfortable environments where people can feel at ease. People want to be able to study or collaborate with others, check the catalogue, attend a lecture or cultural event, or just relax. A suitable environment should also be designed to accommodate different communication and working styles. As people spend their entire day in a library, "soft services" such as a cafe or a day nursery are becoming more important.



Figure 12. IS London Café.

Although there are many images that a library building can exhibit, it is not the one solution to design a facility. Instead, it should be considered as a combination of elements that can be used to create a unique environment. Examples of successful library designs include the Gottingen State University and Dresden Library, the Seattle Public library, and the Idea Store located in London. These three institutions provide a glimpse into the future of library design. These are some of the characteristics that make libraries appealing to the public.

- (i) The ability to access information is also one of the most important factors that sets libraries apart from other facilities.
- (ii) The ability to educate and guide individuals is another important attribute that sets libraries apart from other establishments.
- (iii) The working environment should also be conducive to the employees' comfort.

- (iv) The soft services and communication capabilities of the facility should also be considered.
- (v) Inspiring atmosphere.

New planning principles are needed to accommodate the changing needs of library users in the future. The design should be based on these principles.

- (i) The design should make accessing the library as easy and obvious as possible.
- (ii) The library should feature a large space that can accommodate informal and formal communication between staff members and customers.
- (iii) The interior should be designed to provide a relaxing and attractive environment for staff members and customers.
- (iv) The building's design should also reflect the institution's objectives and philosophy.
- (v) The building's structure, appliances, and building design should also be considered sustainability.

#### 2.5 Access and Orientation

The media and facilities of a library should be easy to use and accessible for everyone. Ideally, it should be situated somewhere in the center or on the right routes or interconnections. Its entrance hall should also be big enough to accommodate the number of people who use it during peak times. The building's interior should also be easy to navigate. If the facility is too big, it might make it hard for visitors to find what they are looking for. In addition to clear circulation patterns, the building should have attractive and functional signage. The design of the library should also take into account the various factors that affect its usage. For instance, the space allocated for short-term use activities and meeting points should be near the entrance. On the other hand, areas that are less frequently used, such as studying and reading, should be further away. There are plenty of ways to work together in a study room or open areas.

A good orientation point for visitors can be found in strategically placed help desks.

## 2.6 Multifarious Space

The library's future environment will integrate electronic services and provide different zones for users depending on their working styles. The use of wireless LAN technology will allow users to access various resources in the building, making it easier for them to use all types of media. The Gottingen University and State Library is located on a direct link between the town center and the university(Figure 13).

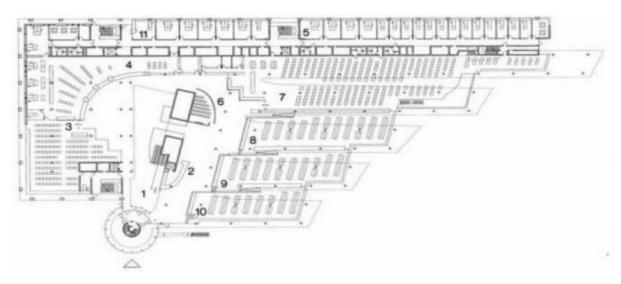


Figure 13. SUB Floor plan.

The various functions of a library are organized in distinct parts of the building. If we look at the building, the book stack and administrative areas are located on the outer edge, while the reading areas are in the fingers. The central circulation hall is the main access point to these parts. The library's interior design features a logical space arrangement based on the frequency of its use. Public areas, such as the circulation desk and the catalogue, are near the entrance. On the other hand, the less-used areas are situated in the corners. The reading areas are organized according to the type of media that's available in the facility. These areas are divided into three areas: the first, the second, and the third. This allows people to work on a certain subject while staying in one area. The facility also has wireless LAN connectivity, which allows users to access digital content. The design of the building is open and has a strong relationship with the surrounding environment.

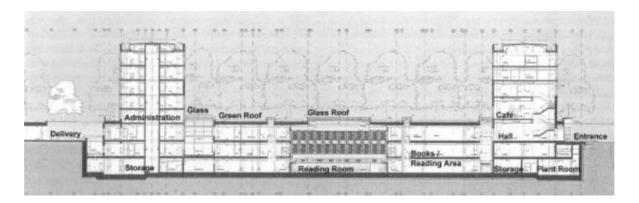


Figure 14. SLUB Section

Although the building's reading areas are underground, they provide a central landmark. The three-story reading room, located in the middle section of the building, is designed to help visitors identify their location. This type of design also requires noise management. According to Graham Fisher, libraries should improve their displays and signage, as well as remove the institutional feel of their establishment. (Graham Fisher in: Worpole, 2004, p.12) (Figure 14). The products and services offered by the various businesses should be displayed in a way that's appropriate for people with visual impairments. For instance, the numbers on the floor of the Seattle Public Library's Book Spiral are part of the Dewey system. This exhibit serves as an example of how a modern and accessible approach to signage can be used. The use of vibrant colours and a striking design helps make these buildings both appealing and easy to read.

#### 2.7 Comfort

The interior design of the building should be attractive and comfortable to help employees and users focus on their work. To create a relaxing environment, the different senses should be addressed.

#### **2.7.1. Climate**

The climate is composed of various factors such as temperature, humidity, and thermal radiation. In libraries, these can compromise the ideal working conditions for people and books. When the temperature gets too hot, printed materials tend to deteriorate. Also, the amount of direct sun can affect the quality of the materials. Ideally, the book stack is situated underground, as it can maintain consistent

temperature levels. Working areas, on the other hand, have similar requirements to offices. Mechanical ventilation can help people feel more comfortable, as it allows them to regulate the temperature of their surroundings. The book store's ventilation and heating system should be centrally regulated. On the other hand, in study rooms or offices, the fresh air and temperature can be adjusted. These guidelines can be found in DIN-Fachbericht (13.DIN, 1998).

#### 2.7.2 Acoustics

People often find the noise levels in academic libraries disturbing. When it comes to providing areas where people can communicate, it's important that there's enough space so that everyone can study in a quiet manner. The geometric shape of the room and the surfaces can influence the acoustics. When implementing an openplan layout, sound-absorbing surfaces should be included to minimize the noise levels in the building. Acoustic engineers can help design a concept that fits to the different activities within the facility. In Gottingen, the management of noise is carried out by zoning the areas depending on the length of stay.

The areas adjoining the building provide a higher noise level for certain activities, such as group working and accessing information resources. The facility for long-term stay and individual working is located at the building's far end. In Dresden, the noise level on the ground floor is quite high, with a central information desk and meeting point for visitors. The noise level should gradually decrease in the areas surrounding the central reading room and in the reading room itself. However, the room is almost finished with wooden lining and parquet floors, as well as glass ceilings and sound-absorbing ceilings.

#### 2.8 Light

The orientation and aesthetics of a building are enhanced by varying levels of lighting. They can create a welcoming atmosphere and improve the understanding of the building's environment. The view from the outside is also a great alternative to studying indoors. In addition, it allows the building to display the time of day and weather. Artificial lighting should complement the room's design. This can be done through a combination of individual and uniform spotlights. Bookshelves and desks should also have integrated lighting, which can provide light where it's needed most.

In addition, computers should be placed in the study area. Various design features can be used to prevent glare. Some of these include using blinds, indirect artificial lighting, and non-transparent glass.

#### 2.9 Colours

The appearance of a room can be influenced by its colours, which can also have a psychological effect on visitors. Yellows and reds are commonly associated with proximity and warmth, while blue and green tones represent distance and cold. In the Whitechapel Idea Store, strong colours can help improve the orientation of visitors. Usually, the use of contrasting and harmonious colours is used to inspire and motivate (Daniels, 1998).

#### 2.10 Material

In all of the examples, materials support the concept of the design. They are able to address both the visual and tactile needs of people. High-quality finishes and materials can last longer and provide a positive image. Their impact on the maintenance and cleaning of a building is significant.

#### 2.11 Communication

The library provides an environment where people can discuss and process their knowledge. The architecture of Seattle Public and Whitechapel libraries encourages informal and formal interactions between staff members and customers. The entrance hall of the Dresden Library features a central information table where people can ask questions. There are also information points throughout the building that can help with more complex inquiries. In Seattle, a wireless communication network provides a different approach to the user experience. Although there are still information desks, reference librarians prefer to work in the areas that have the most variety of reference materials. People can call the library's help desk using their wireless communication sets (Figure 15). There must be enough study rooms of varying sizes so that students and staff members can work together. Although there are usually designated rooms or open areas where informal group work can take place, it's important to consider the noise level when making decisions.



Figure 15. SPL Communication

In Gottingen, staff members can use the library's castors near the information desk to set up temporary work areas. Having a good relationship between staff members can help improve the service that the library provides. As libraries become more of a second home, they are starting to provide more soft services. These include meeting rooms, study areas, and lounge areas. In Dresden, a lounge area outside the reading room provides a relaxing environment. In Whitechapel, a cafe serves as a social space that encourages people to discuss their ideas. The concept of soft services can be used to attract customers. For instance, the Idea Store in Whitechapel is very popular because its top floor café has a fantastic view of the street.



Figure 16. IS London Café.

Having a positive relationship between the staff members can help the service the customers receive. The library offers various flexible working areas, meeting rooms, and staff rooms (Figure 16). It also has informal areas where people can communicate.

#### 2.12 Sustainability

The increasing number of environmental concerns has prompted the need for more sustainable building design. This concept involves using resources and energy efficiently. Unfortunately, the costs of maintaining and energy consumption of public facilities are much higher than the procurement expenses. (Bundesamt, 2001). The passive aspects of a building are those that are designed to use energy efficiently. These include the building's shape and geometry, its insulation, and its energy-saving appliances. Active aspects include the use of solar panels and other technologies to produce energy. Besides these, other factors such as the building envelope and construction type also affect a building's sustainability. (Daniels, 1998). Specialized engineers are needed to develop energy-efficient building concepts. Their appointment

during the early stages of the design process can help in achieving the best outcome. (Bundesamt, 2001): This list shows the current costs of public buildings in Germany.

Artificial lighting and air conditioning are responsible for almost 30% of the total expenses, followed by the maintenance of electrical equipment at 25%, and the heating and cooling of the building at 10%. Surprisingly, the maintenace of the facility is only 10%. The wide variety of products and services that can be purchased can help lower the cost of running a public facility. Examples show how libraries can effectively integrate their various operations into a single platform. Its inspiring architecture helps protect the institution's reputation while also expressing its new identity.

#### 2.13 Design Factors

## 2.13.1 Image and Identity

The library plays a vital civic function, as it provides essential services and conveys a positive image. A facility must exhibit community spirit and be welcoming and inviting.

## 2.13.2 Flexible Building

The flexible interior design of libraries allows them to accommodate varying numbers of users at the same time. This allows them to offer a wider variety of activities.

- 1. *Flexible space dividers:* Divider elements that allow for changes in the size of the room are also useful. These can include folding doors, operable walls, and curtains.
- 2. *Flexible furniture and finishes:* The finishes and furniture elements can be flexible. They can be used for different purposes or be easily transported and reused. Examples of these include the use of wheels for storage or the creation of seating arrangements.
- 3. Curtains, blinds, and other privacy features can be utilized.

#### 2.13.3 Internal Functions of a Library Building

The design for the library is to create a space that is both functional and beautiful. The architect should consider the various aspects of the building's exterior and interior to create a sense of its accessibility and traffic flow. Some of these include the use of natural light and ventilation, as well as the design of the building's floor covering and mechanical systems.

Catalogue Area - The library's catalogue area should be located near the circulation counter and the reference and bibliographical areas. A large cabinet with 16 drawers that's filled with entries should be placed on the ground floor. It should not be more than 5 feet from the floor. The computer-based cataloguing system that's used now is very different from the card-based system.

*Circulation counter:* The circulation counter should ideally be placed near the public catalog, and it should have enough space to hold records, books, documents, and equipment.

**Reference Area** - The library's reference area should be located near the circulation counter, the main reading areas, and the public catalogue. It should also have secure office space for the staff and librarians.

**Stack Areas** - A stack area is a vital feature of any library. It can be made more attractive by arranging books in varying colors on different levels. Wall shelves in a large reading area, on the other hand, are seldom ideal because they require a lot of space. The width of the aisle should be wide enough to allow the light to be properly illuminated on the bottom shelves. In addition, users can squat down and inspect the labels on the shelves to pick and remove the books they want. This ensures that two people can easily pass each other.

**Study Area** - Library facilities should have study areas that can accommodate different needs of their users. There are various types of study areas that can be utilized in this space.

*Main Study Lounge* - The main reading room should be divided into two sections: a general study area and a subject area. The goal is to have as many seats as possible,

and each section should have at least three-square meters of space dedicated to various types of books, periodicals, and micro-documents.

**Periodical Study Area** - The study area should have a central location where the bound files and current issues can be located. The bound volumes should be grouped under the related topics in the stack. The area should also have enough space to accommodate the operations and display of the bound and current issues.

*Individual Study Carrel* - The individual study area is composed of a carrel. These can be used for either one-seater or double-seated studies. The dimensions of the carrel are dependent on its features, such as a table, a bookshelf, and a chair. Usually, a carrel measures about 1.60 square meters. For double-seated studies, the minimum space is 2.60 square meters.

**Collaborative Study Area** - A collaborative study area is a small area where several people can gather to study. It should have seating arrangements that accommodate five or more people, and it should have a writing board and a side bookshelf. The study area should be about 1.8 square meters.

#### 2.14 Library Furniture

The furniture that libraries use should be functional, attractive, and comfortable. It should also be done to meet the needs of their users.

#### **Bookshelves**

The books are arranged in a way that makes them easy to retrieve and display. These are also stacked on the shelves according to the different classification schemes used in the library. For adults, the maximum number of shelves that can be placed on each level is six (Figure 17). For children, the maximum number of shelves that can be placed on each level is four. Shelf aisles should not exceed three meters long.

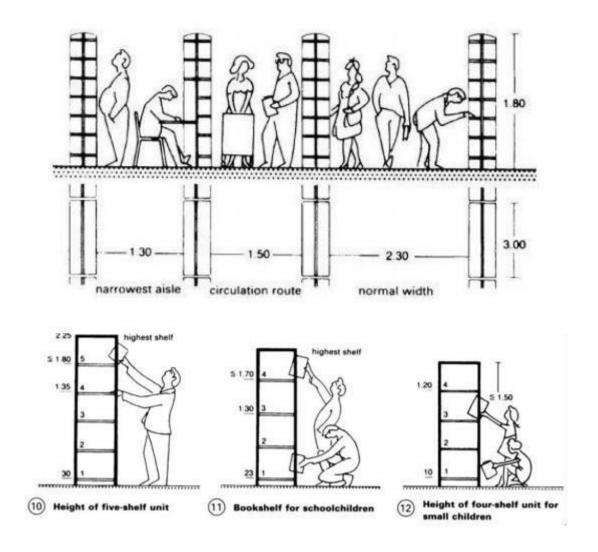


Figure 17. Shelf Height

# **Free Standing Shelves**

# Seating and Circulation

The seating arrangement includes a small group study table, a large group study table, a single reader study table, and lounge seating (Figure 18). These are ideal for reading periodicals. (Panthi, 2016)

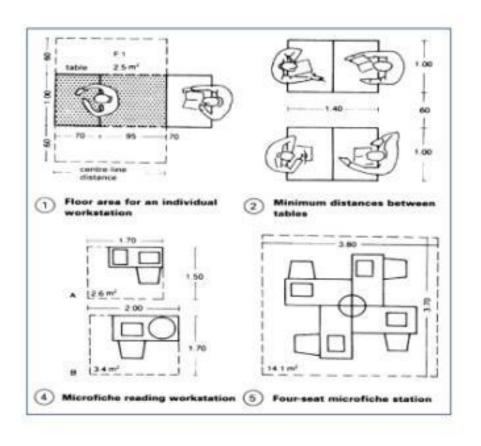


Figure 18. Seating and Circulation

## **Shelving Density**

The optimal density of shelving for a given area and dedicated zone should be chosen according to the 2020 Library Space requirements (Figure 19).

**Low-Height Shelving:** A three-shelf bookcase with low-height shelving is ideal for areas with high traffic and children's space. This type of case features improved sightlines.

*Mid-Height Shelving:* A mid-height bookcase features four and five shelves, and it offers sightlines while still being able to accommodate a lot of books.

*High-Height Shelving:* The tallest type of shelving is ideal for areas with limited seating capacity and sightlines between the shelves.

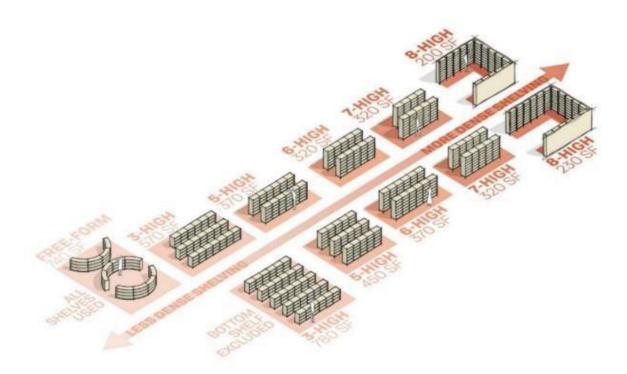


Figure 19. Shelving Density

# 2.15 Periodicals/ Journals Display Rack

A free-standing shelf is ideal for displaying and storing books at the same time. These modern systems are usually constructed on wheels and feature lightweight materials for ease of shifting. They typically have three to six shelves and are usually rectangular.

#### Pigeonhole Display Rack

This type of shelving is commonly used when there are multiple products in a batch that need to be separated from one another. The partition between the sections helps in separating them into smaller units. This type of shelving measures 6'x 3'x 16'.

#### Display Rack Periodicals

The display rack for periodicals offers a convenient way to organize and store past issues as well as recent ones. It can be used in different areas such as libraries, waiting rooms, showrooms, and reception areas.

#### Labyrinth Book Tower

Usually, books are placed on the shelves. However, since "normal" isn't always the ideal choice, we designed a special eye-catcher that's tower-shaped (Figure 20).

- 1. Total width W 580 mm (22.8"), D 580 mm, (22.8"),
- 2. H 1100 mm (43.3") 3 High Unit H 1750 mm (69") 5 High.
- 3. Book Openings W 370 mm (14.6"), D 170 mm (6.7"), H 305 mm (12")



Figure 20. Labyrinth Book Tower.

## Ratio Square Shelving

Large books can be stored on a four-sided shelving unit or displayed. This can be done by utilizing a combination of sloping and flat shelves. The top surface can also be utilized for work or play. The flexible casters provide a vital element to any mobile furniture design (Figure 21).

- 1. A shelf width of 750mm (29.5"), and a shelf depth of 250mm (9.8")
- 2. Shelf widths of 900mm (35.4") and Shelf depths of 300mm (11.8")
- 3. Height: 1250mm, 1330mm, 1550mm



Figure 21. Ratio Square Shelving

#### Mikado Display

The presentation and mobile seating system known as MIKADO offers a sculptured arrangement, accommodating variable seating, and a generous presentation space. 1. Width 1000/1500/2000 mm, Depth 500 mm, Height 400/600 mm.

#### 2.15.1 Newspaper and Magazine Stand

Most libraries buy several international and local newspapers every day, so they can easily display these papers on a suitable newspaper stand. Usually, these articles are displayed on the reader's table. But libraries should have proper newspaper stands in order to allow the users to access these publications. There are various types of newspaper stands available, and the design can be chosen according to the needs of the library.

#### 2.15.2 Reading Tables

Although they can use various types of reading tables, libraries should choose the right kind for their facility. The most popular kinds are square, round, and oval. This ensures that the tables can be used by multiple people at the same time. Library patrons may choose to use a special area designated for personal reading.

## 2.15.3 Lounge and Chair

Having enough chairs is also important to ensure that the users can comfortably read. In addition to these, lounge chairs can be utilized in the library to provide a more comfortable reading environment.

#### 2.15.4 Theme-Based Furniture

In the children's section, the furniture used can be turned into a fun and engaging environment by adding a variety of colours and designs. This style of furniture can contrast the adult ones with their creative looks (Figure 22).



Figure 22. Outdoor Treehouse concept children library

## 2.15.5 Collection Storage

Even though information has become more digital in the past few years, the need for collection storage is still a vital part of libraries. High-density mobile shelving is commonly used in these areas (Figure 23).

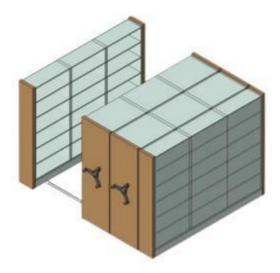


Figure 23. High-Density Mobile Shelving

#### 2.16 Colour

A library's colour scheme can complement and enhance its learning environment. By considering the varying tones and colors in the space, we can create learning environments that are more collaborative, social, and reflective. (Aaron Cohen Associates, 2019)

#### 2.16.1 Classification of Color

A library's color scheme can complement and enhance its learning environment. By taking into account the varying tones and colors in the space, we can create learning environments that are more collaborative, social, and reflective (Figure 24). (Aaron Cohen Associates, 2019)

- 1. *Warm color (exciting):* The warm color is usually represented by colors such as red, yellow, and orange, which increase the body's temperature. *Use:* Office, Cafeteria, Spaces with movements, area where people work late at night.
- 2. **Cool Color (calming):** A cool color is one that evokes feelings of sadness, water, and ice. It decreases the body's temperature and is associated with blue and green. **Use:** The use of color in various areas of the facility, such as meeting rooms and work areas, can be coordinated with the overall design.
- 3. *Neutral Color:* Neutral colors are those that have no strong contrast. Examples of these are white, silver, gray, brown, black, and tan. *Use:* Large areas can be used,

such as outdoor recreation areas. Open meeting rooms and natural light can also be created in areas with collaborative features.

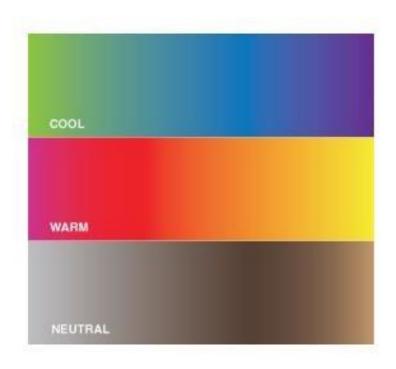


Figure 24. Classification of Color

# 2.16.2 Color Perception

S.N.	Perception of	Warm Color	Cool Color	
1	Time	Sense of time being stretched	Sense of time being condense	
2	Sound	Intensify the sound	Lessen the impact	
3	Calmness	Keeps the user alarmed Sense of calmness		
4	Weight	Appear heavy	Appear light	
5	Volume	Appear space smaller	Appear space larger	

Table 1. Color Percept

#### 2.16.3 Color Combination

A circle chart is a visual representation of the primary, secondary, and third-colored tones and shades. It helps you choose the appropriate color scheme by revealing how each relates to the other hues .

S.N.	Color Scheme	Combination	Example
1	Complementary	Use colors that are on opposite sides of the color wheel	
-		Provides high contrast	
2	Monochromatic	Use three shades, tones and tints of one base color.	
		Provides subtle color	
3	Analogous	Use three colors that are side by side on the color wheel.	000
		Provides comfort ambience	
4	Triadic	Use three colors that are evenly spaced out on the color wheel.	
		Provides contrast and balance	
5	Tetradic	Use Four colors that are evenly spaced on the color wheel.	
		Provides boldness to interior	

Table 2. Colour Schemes

## 2.16.4 60-30-10 Rule

- (i) 60% = The main color is the one that will anchor the space. It can be determined by the room's major features, such as furniture, flooring, and walls.
- (ii) 30% = The appropriate proportion of the second color to be used should be around half of the main one.

(iii) 10% = The appropriate proportion of the second color in the overall color scheme should be around half of the primary one.

DESIGN MATERIALS	DESIGN FACTORS	
<ul> <li>Zoning and layout</li> <li>(Zonal arrangement, The learning space,</li> <li>The inspiration space, The meeting</li> <li>space, The performative space)</li> </ul>	Image and Identity	
• Space attributes  (The arrival, The meeting zone, The staff zone, Collection and seating zone, Addition of spaces, Children zone)	• Flexible Building  (Flexible space dividers, Flexible furniture and finishes)	
Access and orientation	• Internal Functions of a  Library Building  (Catalogue Area, Circulation counter,  Reference Area, Stack Areas, Study Area,  Main Study Lounge, Periodical Study Area,  Individual Study Carrel, Collaborative  Study Area)	
Multifarious Space	• Library Furniture  (Bookshelves, Free Standing shelves, Periodicals/ Journals Display Rack, Newspaper and Magazine Stand, Reading Tables, Lounge and Chair, Theme Based Furniture, Collection Storage)	
• Comfort  ( Climate, Acoustics)	<ul> <li>Color</li> <li>(Classification of Color, Color Perception,</li> <li>Color Combination)</li> </ul>	

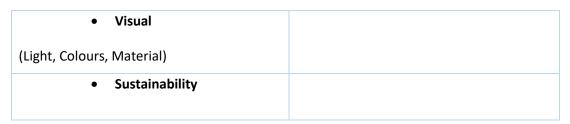


Table 3. Design materials and factors

# 2.17 Case Study

A case study involves delving into a project, and documenting it with written descriptions, sketches, diagrams, and photographs. Its primary goal is to explore and grasp the architectural concepts employed in the project's design, understand its functionality. The objective is to glean insights from both its successes and failures, all the while infusing our own creativity. Case studies offer a deeper comprehension of realized solutions for projects akin to the one being undertaken, aiding in conceptualizing designs more effectively. They shed light on what succeeds and what doesn't, underscoring the importance of analyzing multiple case studies to enhance our understanding and design capabilities.

The following public libraries have been studied:

- Open Air Library / KARO Architekten
- Joan Maragall Library / BCQ Arquitectura

#### 2.17.1 Case Stady: Open Air Library / KARO Architekten

General information

Architected: KARO Architekten

*Area*: 488 m<sup>2</sup>

Year: 2009

Location: MAGDEBURG, GERMANY



Figure 25. Library courtyard

## **Project Information**

Magdeburg's southeast region is located in Eastern Germany, which is characterized by numerous abandoned industrial sites and fallow land. Due to the high unemployment rate and the lack of jobs, the city center of Salbke is almost completely empty. This region's urban environment served as the starting point for the project. In 2005, an open-air library was established in East Germany. It was started through a public intervention. A 1:1 model of the facility was built on the site of the former library. After the residents took over the project, the library was able to grow and now has over 20,000 books.



Figure 26. Library 3d view

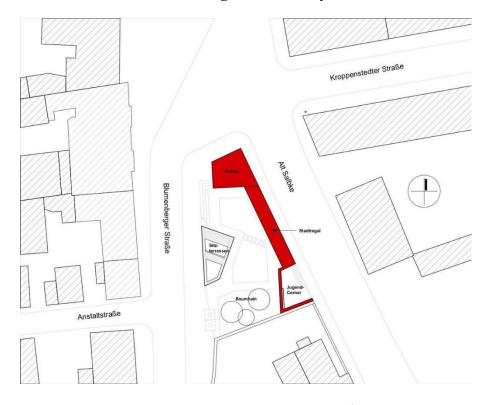


Figure 27. Master plan

• Previous state

The southeastern region of Magdeburg is among the urban areas in Eastern Germany experiencing decline, marked by the abandonment of industrial facilities and unused land. This post-industrial landscape is characterized by high unemployment rates and vacancy levels reaching as high as 80%, including in the Salbke district. The once vibrant city centre now sits largely empty, with boarded-up storefronts and unused spaces defining its appearance. In this context, the existing reality became both a challenge and an opportunity for an innovative urban experiment. Through the "City on Trial" initiative, the former district library site has been repurposed into an OpenAir Library, utilizing the urban landscape as a platform for revitalization and community engagement.

#### • *Aim and description of the intervention*

From its inception, the project was conceived as a form of SOCIAL SCULPTURE, with meticulous attention paid to both design and functionality through an inclusive and transparent participatory process. The primary objective was to foster the creation of new social networks while strengthening existing ones. Through collaboration with residents, the neglected areas surrounding the former village library were repurposed as a "bookmark". Drawing upon remembrance, history, and narratives, the abandoned space was revitalized through community engagement. An empty storefront served as the hub for a temporary library and a workshop for building, where books were gathered, and strategies for reclaiming the site were formulated.

#### • Stage as the integration of generations

As another communal function, a stage is included. This is used by the elementary school for theatre plays, as well as for public readings, gigs of local youth bands and other cultural and communal events.

#### • Facade as sustainability of signs and as an outcome of participation

In addition to its social implications, a key architectural feature of the project is the repurposing of the modernist facade of the old HORTEN warehouse in the City of Hamm, originally constructed in 1966 but demolished in 2007. These warehouses, built by entrepreneur Horten across various German cities, faced significant criticism from modernist purists. However, there is now a reevaluation of such facades, which

are fundamentally inspired by Edward Durell Stone's design for the US pavilion at the 1958 Brussels World's Fair. Thus, the Magdeburg project contributes to the "sustainability of signs" from the postwar era, alongside its energy-related aspects.

During the participatory process, numerous citizens advocated for constructing the facade using recycled materials. It was fortuitous that, around the same time, a well-maintained 1960s structural modernist warehouse facade became available at a very affordable price. With minimal alterations, including a fresh coat of paint on the aluminium modules, the facade was reused in its entirety, preserving its original construction. Today, the proposal is met with enthusiastic acclaim from all residents of Salbke, and the Open-Air Library, with its retro-futuristic design, is viewed as a new village landmark and a symbol of optimism for the future.



Figure 28. Facade conceptualising

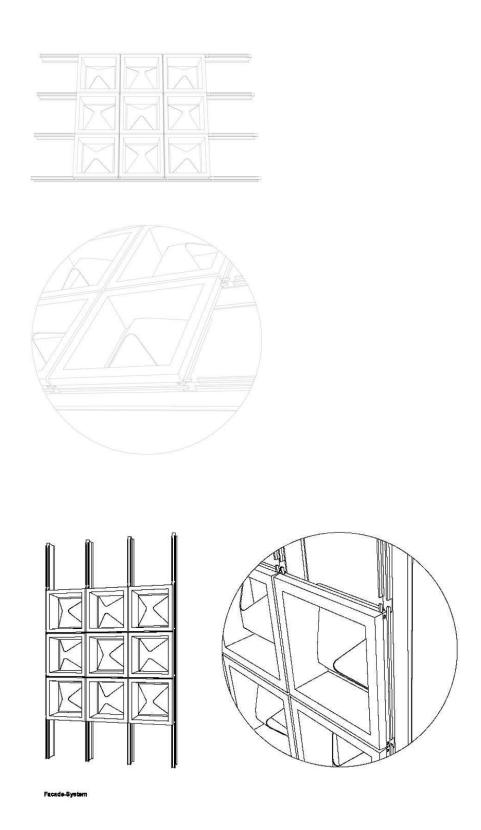


Figure 29. Facade details

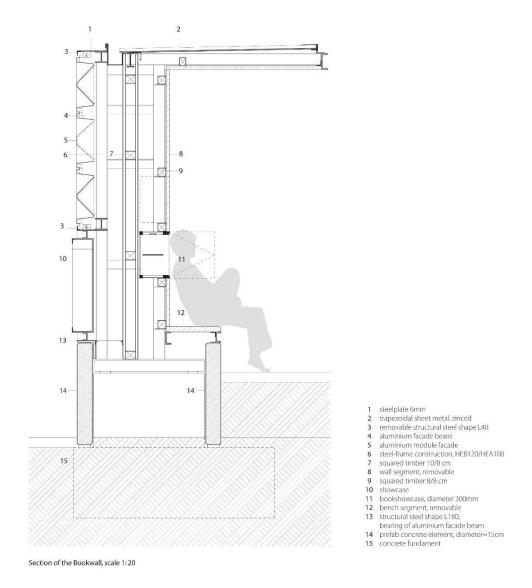


Figure 30. Section of Bookwall

It is interesting to see the section of the façade of the library which is made with recycled material and formed in a way to serve as a bookshelf.

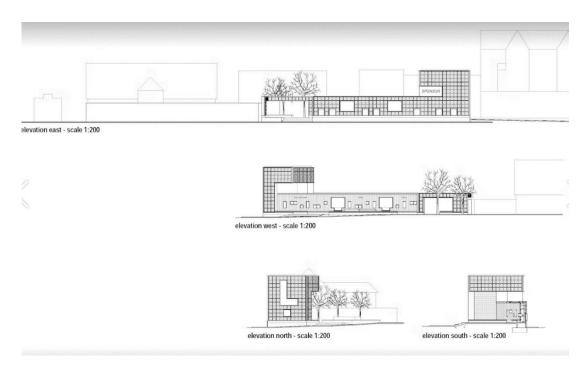


Figure 31. Section of the library building

In addition to its book lending facilities the Open Air Library also introduces a burst of green public space to a post-industrial district. The grassy plaza features a reading cafe and a stage that hosts elementary school theatre plays, public readings, concerts, and other cultural events.

#### Items I extracted

The Open Air Library by KARO Architekten is a prime example of how architecture can blend innovation, sustainability, and community involvement to create meaningful public spaces. In this case study I liked the idea of outdoor places for reading. Also, the idea of the design is that The library serves as a cultural hub, hosting events, readings, and workshops that enrich the community's cultural life. Also I extracted the use of simple, clean lines and the interplay of materials.

#### 2.17.2 Case Stady: Joan Maragall Library / BCQ Arquitectura

Architects: BCQ Arquitectura

**Year:** 2014

Manufacturers: Jansen, Assa Abloy,

Site area: 5.464 m<sup>2</sup>

Building area: 2.983 m<sup>2</sup>

Landscape area: 763 m<sup>2</sup>



Figure 32. Joan Maragall library photo

## Concept of design

The primary choice was to construct the new structure beneath the pre-existing garden area rather than encroach upon it. The concept we conveyed in our submission to the idea competition was encapsulated in the phrase "Garden of Light". This succinctly captures the dual objectives of the project: preserving and enhancing the current garden while also creating cheerful and brightly illuminated spaces.

## Mapping

The primary entrance of the building will be accessible from Sant Gervasi de Cassoles Street. The natural slope between the garden and Sant Gervasi Street provides seamless access to the new facilities. Additionally, the rooftop garden will align with the elevation of the existing garden, ensuring that the construction of the new facility restores the Vil·la Florida civic centre garden to its full extent, with Vil·la Florida serving as the central focal point of the complex.

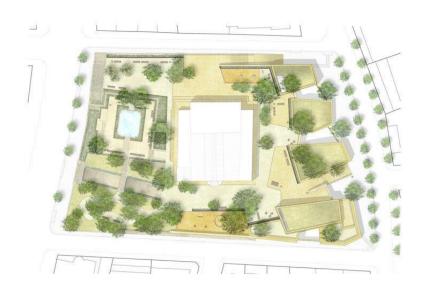


Figure 33. Masterplan of library



Figure 34. 3D terace view

## • Light

The architecture of the building is defined by two types of courtyards: "light and silence patios" and "books and knowledge patios". The former, enclosed by glass, serves to illuminate and ventilate the interior spaces while also shielding the library from street noise. Meanwhile, the latter, constructed from concrete volumes filled with books, form an integral part of the library's structural support.



Figure 35. Courtyard view of the library

#### Acoustics

Internally, the design aims to create a tactile landscape characterized by bold volumes and unexpected glimpses of transparency. The reading areas are intimate, reminiscent of a cosy living room. Structural walls are clad in honeycomb clay blocks, a simple yet noble material that offers both acoustic insulation and thermal comfort, as well as a tactile connection to the earth—an apt choice for a partially subterranean building. Being situated underground contributes significantly to the thermal

regulation of the building, ensuring a consistently stable temperature with minimal energy consumption for heating or cooling purposes. Additionally, the use of thick insulation minimizes heat losses. The HVAC system relies on active inductors equipped with micro-diffusers for effective air circulation and climate control.

#### • Plans

This library is organized on 2 floors, and each of them has its own program with different functions. All the functions are organized in open spaces, and connected with a big hall. There are places for gathering, meeting, reading, and studying while enjoying the greenery from outside.



Figure 36. Underground plan



Figure 37. Ground floor plan

#### • Items I extracted

Joan Maragall Library's design integrates various elements that make it a functional, inviting, and aesthetically pleasing space. There are some interesting elements that I extracted for my purpose, the large windows and skylights which are used extensively to maximize natural light, creating a bright and welcoming atmosphere while reducing the need for artificial lighting. Large windows provide views of the surrounding gardens, creating a peaceful and inspiring environment. Another issue is the interior layout features an open plan, facilitating easy navigation and flexible use of space. This design promotes a sense of openness and community. The flexible spaces with include multipurpose areas that can be adapted for different uses, such as events, workshops, and community meetings. This flexibility ensures the library can serve various community needs. The green roof Is also extracted for my proposal. A green roof is used to improve insulation, manage rainwater, and provide additional green space, contributing to the building's sustainability and aesthetic appeal.

## **CHAPTER 3**

## **METHODOLOGY**

# 3.1 Methodology and Research Method

A qualitative research study was conducted to gain a deeper understanding of the factors that influence a person's decision-making process It allowed to identify the underlying motivations and provide useful insight into a topic. This type of research also helped in developing ideas for future quantitative studies. Through qualitative research, we can also identify trends and provide valuable insight into a problem. Through case studies, we can collect data that can be used to develop effective strategies. For this study, various information sources were collected and analyzed. After reviewing the literature, the program formulation was carried out, and the feasibility of the project was checked.

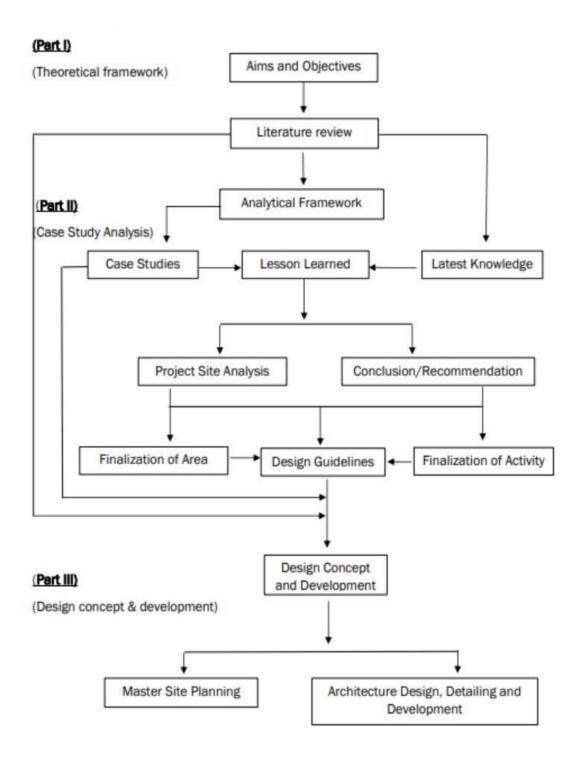


Table 4. Project working progress.

# 3.2 Working Process

The research proposal is focused on the development of a strategy to improve the efficiency and effectiveness of the operations of the Elbasan Arena, which is located in the City of Elbasan. The first step in this project is to analyze the current situation in this area, and to collect data from the various informational structures in the city. The research methodology will be carried out by reviewing theoretical literature that closely resembles the project's concept. In addition, the case study will help me develop a structure for analyzing and organizing data in the region. The selected area is considered to be significant due to its development and importance, which have contributed to the formation of the city. Due to the presence of various educational facilities in this region, such as the university and elementary school, it is expected that this area will play a significant role in shaping the city's future. To understand the potential of this area, a detailed analysis of its various characteristics has been conducted.

During the analysis phase, which is usually conducted in the following months, the researcher will carry out site visits and interviews with the residents of the chosen area.

The objective of this research is to gather information about its various characteristics.

#### These analyses are based on:

- 1. Data gathered from interviews and discussions with neighbours.
- 2. Data gathered from site observations and analysis.
- 3. Examples taken from similar projects done in other countries.
- 4. Gathering of information in sites such as ASIG, PPV, PDV, Bashkia Elbasan
- 5. Observations on site.

#### 3.3 Observations on site

#### 3.3.1 Context of Elbasan

The city of Elbasan is located in central Albania and is in the county of Elbasan. It is one of the largest cities in the country and is situated on the Shkumbin River. During the 2nd century BC, a trading post known as Mansio Scampa was located near the junction of two Roman roads, which connected the Hellespont and the Adriatic Coast. It was a city that grew from a fort to a full-fledged Roman fortress during the 3rd or 4th century. According to Albanian Studies, it was a part of the Christianization

of the Via. During the 5th century, it had multiple basilicas, cathedrals, and bishops. As a town that's located in a valley, it was vulnerable to attacks. Emperor Justinian rebuilt its fortifications. Before the Second World War started, the city had a mixture of medieval and eastern architecture. It had a well-defined Christian settlement, and it was surrounded by castle walls. There were also several mosques and Islamic structures. At the time, the city's population was around 15,000. It was noted for its public buildings, gardens, timber-built shops, and educational facilities. After the war, the area was severely damaged, and a massive industrial development project was carried out during the communist era. This led to the city's population growing to around 75,000.

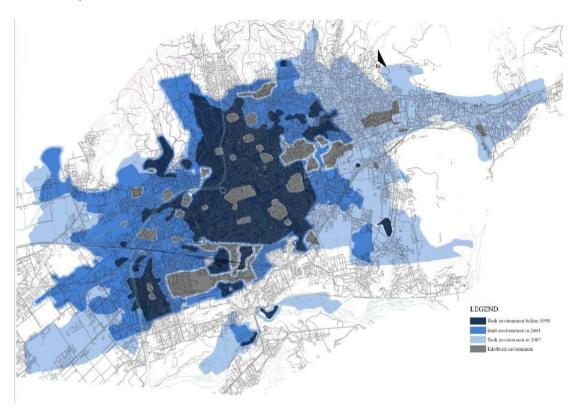


Figure 38. Urban development of Elbasan in years

Elbasan, as a historically significant, institutional, and historic site, has experienced a housing bubble and rapid urban development in past years. Its area is now much larger than it was before 1990. Just after the 1990 policies as well as the expansion of its urban texture, Elbasan faced a fast rise in population. Before the socialist period,

Elbasan had a population of about 15,000 people, afterwards 75,000 during communism, however with the urban renewal growth, the city expanded to nearly 266,245 people, facing a strong increase as a result of the of several households both from rural areas around. Elbasan's infrastructure has changed fairly rapidly, leading in such a heavy pattern compared to its prior urban style. The fast expansion and lack of adequate laws to handle the region's growth led to the creation of demotic housing everywhere causing confusion in the purity of the city character.

#### 3.3.2 Topography of Elbasan

Elbasan is an important city in the centre of Albania, which is located in an important geographical location and has an interesting topography. In the north, it borders the District of Dibra, where you find the high mountains of the Albanian Alps. In the south, there are vast agricultural fields that stretch all the way to Kurbin. To the east and west, it is surrounded by medium-sized hills and mountains. Elbasan's topography is rocky and steep in some areas, while the rest of the city is relatively flat and easy to navigate. In the central part of the city is the river Shkumbin, which passes through the city dividing it into two sides. The central part of the city is situated on a steep hill with an approximate height of 150-200 meters above sea level. In this part of the city is the historical centre with ancient buildings and cobbled streets. The surrounding area of the city is steeper and has various mountain and hill formations surrounding the city. Some areas of the city of Elbasan are steep and extend into the surrounding mountainous regions, offering wonderful views of the city and its surroundings. In these areas, nature is rich with green trees and beautiful fauna. Due to this topography, the city of Elbasan has a beautiful and excellent natural appearance, offering a harmonious mix of history, architecture and natural landscape.

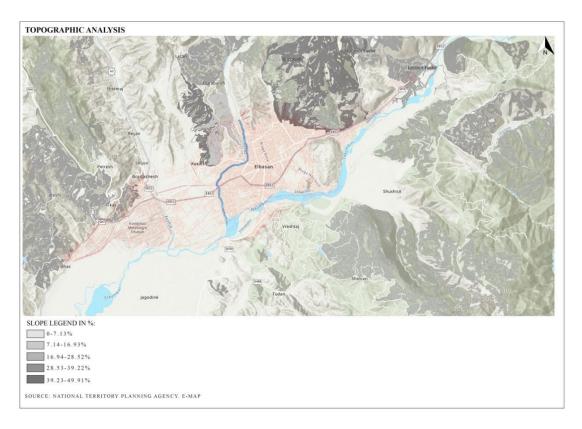


Figure 39. Topographic analysis map

#### 3.3.3 Climate

According to the Köppen climate classification, Elbasan has a hot-summer Mediterranean climate (Csa) with an average annual temperature of 13.1 °C (55.6 °F) (Climate Data, n.d.) The summers are hot and dry, and the temperature is mild in the winter. The average annual temperature for Elbasan is 19° degrees and there is about 512 mm of rain in a year. It is dry for 190 days a year with an average humidity of 68% and a UV index of 4. The clearer part of the year in Elbasan begins around June 6 and lasts for 3.5 months, ending around September 20. The clearest month of the year in Elbasan is July, during which on average the sky is clear, mostly clear, or partly cloudy 91% of the time. The cloudier part of the year begins around September 20 and lasts for 8.5 months, ending around June 6. The cloudiest month of the year in Elbasan is December, during which on average the sky is overcast or mostly cloudy 54% of the time (Climate and Average Weather Year Round in Elbasan, Figure 1 Map of Elbasan City (actual situation)

# Monthly rainfall statistics in Elbasan

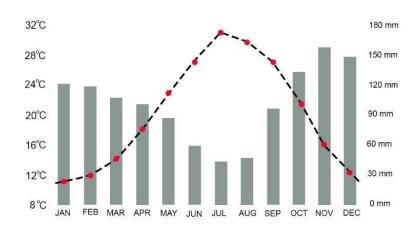


Figure 40. Monthly rainfall statistics in Elbasan



Figure 41. PDV map

Bashkia: Elbasan

Njesia 1/15

Sistemi UB Urban

Kategori 1 A.Banim 20%

Kategori 2 S.Sherbime 80%

Lartesia ne kate 25

Lartesia ne metra 25

PDV PO

Itensitet K1-2.5 K2-1.5

KSHT K1-50% K2-40%

KSHR 20%

# 3.4 Study AREA

Before beginning the design process, it is essential to understand the site where the building will be constructed. Site study is crucial as it forms the foundation of the building. This study identifies site constraints and opportunities that will inform the design. Emphasis must be placed on the available resources and key aspects of the site. Therefore, an in-depth analysis of the site and its surroundings was conducted through multiple site visits and map collection. Before starting the design process, it is necessary to understand the site, where the building is to be built.

The area where I am positioned for the proposal of my project is the area near Elbasan Arena, specifically the plot where I am positioned is on the edge of the 11 November road near the intersection that connects the city with the ring road. To access this area from the centre of Elbasan, it is about 7 minutes away for pedestrians and 1 minute for cars. The concrete surface reaches 8000m2 and normally within this surface, we have created an object which is smaller than the existing plot for several different reasons in relation to the master plan. This area has life only in cases of matches due to Elbasan Arena, and in other cases throughout the year it turns into an area without life. The purpose of our project is to revitalize this area at any time of the year. The main theme of our project is the open library and therefore this came from the educational facilities which are located very close to this plot that we are building. Specifically, the educational facilities are the Naim Frasheri school, the University of Elbasan, the Pedagogical College, the University of Ms. Keshillit Mire, and the Xafer

Kongoli Gymnasium. All these educational facilities start from elementary school and up to the highest level of education, which is university. This is the strongest reason for creating this object with this topic. In every consultation that was carried out during the year with the relevant pedagogues, we concluded that this library is mainly for students but also for residents of the area. This has come as a result of the fact that we create it specifically only for students, the problem is that the library is only functional for a part of the year until the schools reach the end of the teaching process, and then the other months it remains inaccessible to other people. The surrounding area is quiet, and this is a strong point of our project. In the case of sports matches or events at Elbasan Arena, the underground floor serves as acoustic insulation for every person who accesses the library below. The typology of housing around the area is mainly private ones and buildings that reach a height of up to 5 floors, but a small exception is made for new buildings that reach up to 11 floors. The special feature of this area is the hierarchy of buildings which absolutely do not spoil the view offered by the topography of Elbasan. In this way, our project takes this feature of the city as an example and the maximum height that our building reaches is 1 floor with an underground floor. In the following pages, our project will be seen as presented more concretely, where the master plan will be clearly seen, which comes because of the expansion of our facility, keeping the same footprint. What prevails is, in addition to the greenery, the rest areas that are used by the people who access the library.

The surface of the construction footprint reaches 2350m2 and based on the calculations, it is thought that both floors have a reception capacity for people accessing up to 314 people. Below we have the presentation of the entire project in a graphic and technical way, how this project has evolved.

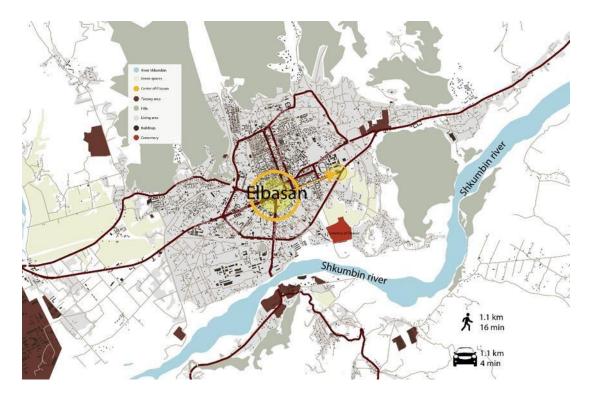


Figure 42. Total map of Elbasan

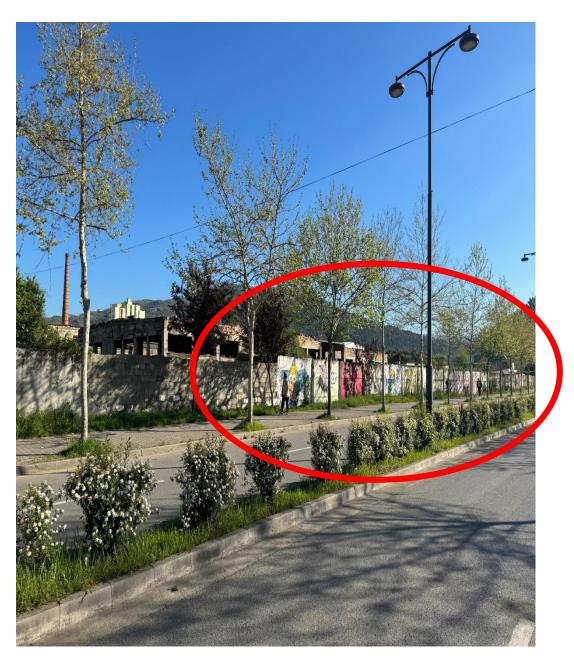


Figure 43. Site photo 1



Figure 44. Site photo 2

#### 3.4.1 Street map

The selected area is specifically located near Elbasan Arena and has direct access to "11 Nentori" road. It is surrounded by some old private buildings and in front of the site is the main road. "11 Nentori" Street in Elbasan is one of the main streets of the city, which stretches through the centre and crosses the central part of the city. The area around this street is diverse and offers a diverse mix of activities and facilities. In addition, in the area around "11 Nentori" street, there are also important city facilities such as government institutions, schools, and other important public and private buildings. In the upper part of the street, you can also come across some of the

historical buildings of the city, giving a special suspense to this area. Due to the easy access to public transport and mobile citizens, this area is also frequented by people coming and going around the city. Because of this, the atmosphere is always charged with activity and movement.

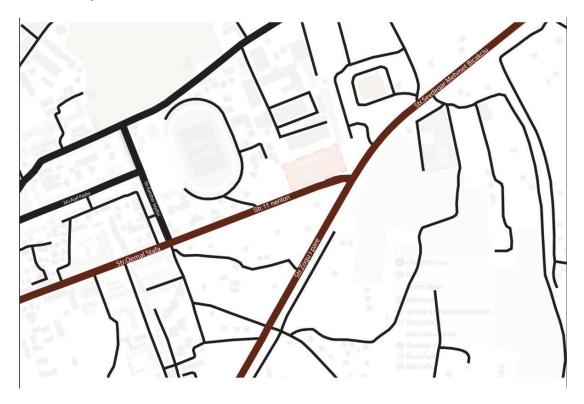


Figure 45. Street map of Elbasan

#### 3.4.2 Building height map

The area under study is currently composed of buildings up to 5 floors at most, but we also have buildings that reach up to 11 floors (the highest in this area). Most of the buildings are made of brick material, built before the 90s. .But we also have those that were built after 90' with modern materials. The way of maintaining a hierarchy of these buildings is to the benefit of the area without affecting its current appearance. Of course, there are also private residences. of the 1k-3k type.



Figure 46. Building height map

#### 3.4.3 Building use map

This neighbourhood is a central and populated area of the city and includes a mix of residential housing, shops, and various services. The "Elbasan Arena" stadium is one of the most important sports structures in Albania and is often recognized as a reference point for this area The Stadium neighbourhood is characterized by a good infrastructure, including paved roads, public services and green areas. It is well-connected to the rest of the city and offers easy access to schools, health centers, and markets. The apartments in the Stadium area in Elbasan have different functions that serve their community. Some of the main functions include:

Residential: Most of the houses in this area serve as residences for individuals and families.

Commercial: Some flats on the first or second floors are used for commercial purposes. These include various shops, markets, pharmacies, bars, restaurants and other services that serve the residents of the neighbourhood and visitors to the area.

Public and Social Services: Educational institutions (such as schools and kindergartens), health centres, administrative offices and other similar facilities that provide necessary services to the community can also be found in this area.

Green and Recreational Spaces: Some residential blocks have green spaces and areas for recreation, such as small parks, common yards, or children's play areas. These areas are important for the well-being and relaxation of the residents.

These functions make the Stadium neighbourhood a multifunctional area and suitable for a wide range of needs of its residents.

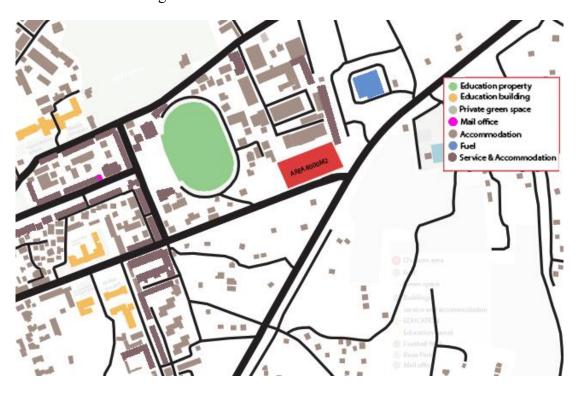


Figure 47. Building use map

#### 3.4.4 Greenery map

The positioning of the area that I have chosen is connected between Rinia park and Krasta Hill. Rinia Park in Elbasan is one of the most important and popular green spaces in the city, which offers a convenient place for recreation and relaxation for residents and visitors. Some of the main features and functions of the Youth Park include greenery spaces, activity spaces, picnic areas and other sportive and culture activities. Krasta Hill in Elbasan is one of the most popular natural attractions of the city and a favourite place for recreation and hiking. It offers a combination of natural

beauty, panoramic views and opportunities for various outdoor activities. The hill has numerous trails suitable for walking, jogging and walking. These trails offer opportunities for physical exercise in a quiet and natural environment.



Figure 48. Greenery map

#### 3.4.5 Educational Building Map

In the area of Elbasan Arena, we have many educational buildings for all grades, starting from elementary school to university. Schools that are in this zone are Naim Frasheri Elementary School, Petagogjikja High School, Gjuhet e Huaja High School, and University. These types of schools contribute to a diverse and complete education system in the Stadium neighbourhood in Elbasan, meeting the diverse educational needs of the community and supporting the all-round development of students.

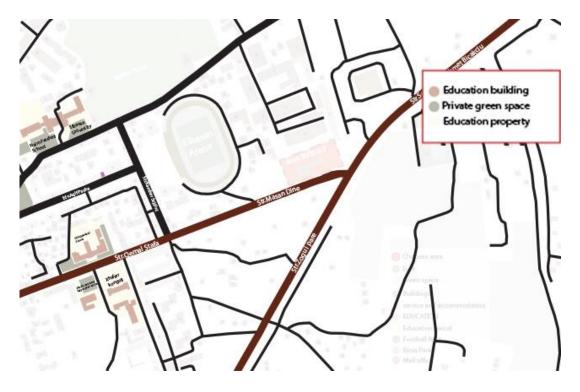


Figure 49. Educational building map

During the site observation phase, there were also interviews and small discussions with some neighbourhoods in the area to understand from their perspective the actual situation of the site, if they are satisfied with it, and their needs for a better living environment.

#### 3.5 The analysis of the questionnaire

The instrument used in this study is a questionnaire. The questionnaire consists of several different questions, and each question has multiple options for choice. The questionnaire was completed through various methods and social media networks. Additionally, it was physically distributed in the Elbasan arena community, schools, universities, and public spaces. Community events, including public meetings, were also organized where the questionnaire was distributed and filled out by participants. It will be distributed to a representative sample of Elbasan residents to gather quantitative data on their preferences, habits, and expectations regarding the new library. The questionnaire includes questions about reading habits, preferred library features, and desired services.

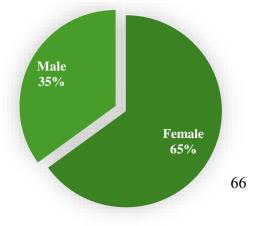
#### 3.5.1 Data presentation and analysis

In this part of the research, a study was done by the returned questionnaire and the collected data were presented in percentages, graphs and simple tables. Analysis and interpretation were performed equally.

	Specific Questions
1	What types of services or activities would you prefer to have available at the new public library?
2	How do you think a new public library can contribute to improving the cultural and educational life of our community?
3	How do you think the cooperation and partnership of the public library with local organizations and institutions can be improved to provide better services to the community?
4	What are the two main characteristics you would like the reading environment in the new public library to have in order to create a comfortable and productive environment for users?

#### Gender

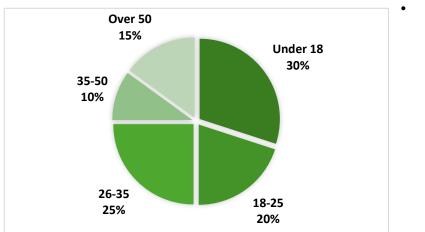
From the questionnaire results, we see that 65% of the participants are females and 35% are males. From this result, we observe that a higher percentage of respondents are female, while the rest are males. It can be concluded that females may be more predisposed to reading and visiting libraries than males. Females seem to be more inclined to participate in library activities and express their preferences regarding the opening of a public library, as indicated by their higher participation rate in the survey. This phenomenon may be the result of many factors, including their personal



interests, their need for information and knowledge, as well as the influence of traditional roles that women often play in family education and culture. These conclusions provide important guidelines for the development of library services and programs to better address and include the needs and preferences of both genders.

#### Age

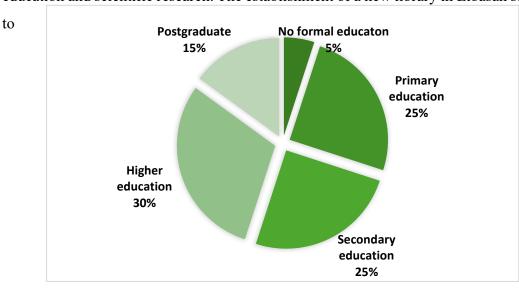
The majority of respondents are young (under 18 years old), followed by those in the 26-35 age group. This indicates a strong interest from younger individuals and young professionals in using the library. The high percentage of respondents under 18 suggests that the younger population sees the library as an important resource for their educational and recreational needs, underscoring the importance of creating spaces and services that cater to children and teenagers.



#### **Education level**

At the

educational level, a significant percentage of respondents have primary education and secondary education (25%) and higher education (30%), indicating the need for resources and services that match the educational needs of a wide spectrum of library users. In addition, 15% of respondents have excelled at the postgraduate level, which suggests a high demand for specialized materials and programs at a higher level of education and scientific research. The establishment of a new library in Elbasan stands



benefit from the community's high educational attainment, offering advanced educational resources suitable for both students and young professionals. User experience shows the need for specialized materials and programs at the highest level of education and scientific research. Thus, a new library must carefully adapt to the needs and expectations of an educated community to ensure a quality and convenient service for all.

# ☐ What types of services or activities would you prefer to have available at the new public library?

In the new public library, respondents expressed a preference for a variety of services and activities to enhance their library experience. Some of their preferences are:

- 1. Access to diverse book collections A wide selection of books covering different genres, topics and languages to suit different reading interests and preferences.
- 2. Educational programs and seminars Courses and seminars, reading and discussion clubs, community meetings and social activities, regular workshops, educational programs on topics such as literacy, language learning, technology skills and academic support to promote lifelong learning and skills development.
- 3. Community Events and Cultural Activities Organizing community events, book clubs, author readings, art exhibits, and cultural performances to foster community engagement, creativity, and cultural appreciation.
- 4. Study spaces and collaboration areas Quiet study areas, group study rooms and collaboration spaces equipped with modern furniture, whiteboards and technology to facilitate individual and group study sessions, academic collaboration and project work.
- 5. Programs for children and youth Specialized programs and activities for children and youth, including storytelling sessions, arts and crafts workshops, educational games and reading clubs to promote early literacy and a lifelong love of reading.

6. Access to Information and Reference Services - Expert assistance from librarians, reference materials, and research support services to help users find information, conduct research, and access reliable resources for academic, professional, and personal needs.

By offering these various services and activities, the new public library in Elbasan can become a vibrant center for learning, creativity, cultural exchange and community engagement, meeting the needs and interests of a wide range of library users.

# ☐ How do you think a new public library can contribute to improving the cultural and educational life of our community?

A new public library has the potential to contribute to the improvement of the cultural and educational life of our community in many ways where some of the answers of the respondents are as follows. Promoting reading and education where by offering a wide range of books and other resources, a new bookstore will encourage reading and learning in all age groups. You will help to increase the educational level where with access to academic literature, study materials and career guidance, a bookstore can help improve the education and professional training of its users. Creative spaces and library activities, such as workshops and art exhibitions, can encourage the exchange of ideas and the development of new projects for users. As a community center, a new bookstore brings people together to learn, discuss and work towards common goals. With extensive collections of books and other materials, a new bookstore can promote cultural and linguistic diversity in the community. Through cultural events, such as theater performances, music concerts, and literary presentations, a bookstore can reinforce local culture and identity.

# ☐ How do you think the cooperation and partnership of the public library with local organizations and institutions can be improved to provide better services to the community?

Some of the resident's responses to improve cooperation and partnership between the public library and local organizations and institutions are:

"I would be happy to see more joint programs and activities between the library and local schools. This would help improve educational opportunities for children and youth in the community."

"I think that cooperation and partnership can be improved by ensuring that the library has close ties with local universities and schools. This would allow us to have access to important academic and study resources that would help us in our school work."

"One step that could help improve services for students is the creation of special study spaces in the library that are suitable for our needs. A partnership with universities to provide these facilities would be very welcome."

"One way to improve our access to library resources and services could be to improve communication and information. If the library would partner with student organizations to share information and guidance about available services, it would be very helpful to us. ."

"I think that the organization of joint events and activities between the library and universities could help us make better use of resources and get to know each other more deeply. Such activities would also offer us the opportunity to create new networks and friendships."

These responses show the diversity of ideas and needs of residents to improve cooperation and partnership between the public library and local organizations/institutions serving the community.

☐ What are some of the characteristics you would like the reading environment in the new public library to have in order to create a comfortable and productive environment for users?

"I would like the library to have a quiet and noise-free environment where I can focus on my reading without being interrupted by outside noise. Isolation of reading areas from other areas of the library would be a key feature for me."

"I would like the library to have is a well-lit environment designed with natural materials. Natural light and the use of wood and stone for the environment will create a calm and relaxed atmosphere for readers."

"For me, a comfortable and productive environment would also include the use of comfortable furniture to sit on. This would enable reading to be more enjoyable and less tiring for users."

"Personally, I would also like to have an environment outside the library with quiet and comfortable spaces, where I can read in the fresh air and in contact with nature. A suitable yard, with lots of flowers and greenery will create an environment conducive to reading outside."

"One aspect I would appreciate is the presence of a cafe or similar environment where I can get a warm drink and rest a bit between readings. This would add a social and relaxing dimension to my library experience."

"One feature that would be important to enhance my library experience is the presence of a wide collection of books and materials available for borrowing. A library with a rich range of materials would provide more opportunities for exploration and personal development."

Respondents expressed a strong desire for a quiet, undisturbed reading environment, enabling them to fully concentrate on their reading and study activities. They emphasized the importance of isolating reading areas from other sections of the library to minimize disruptions caused by movement and conversation. In addition, respondents emphasized the importance of abundant natural light and the inclusion of natural elements in library design. They want beautiful environments where sunlight falls, greenery and natural materials which would induce a deep sense of relaxation, thereby enhancing the overall reading experience.

#### **CHAPTER 4**

#### **CONCEPT AND DESIGN**

The area I have chosen to build the public library has many appropriate features. Given that we are on the edge of the main road and surrounded by buildings one or two storeys, the shape of the library must be suitable and at the height of no more than two storeys. The main reason is not to block the view and have a clear view through low alt-height. Since the area around it doesn't have much green space, I have created some green spots which make the building more attractive and are very useful for visitors who want outdoor spaces for reading and relaxing. The placement of this building in an area consisting of all kinds of schools is another good reason for its construction. All roads connect you to the road where my proposed building will be positioned.

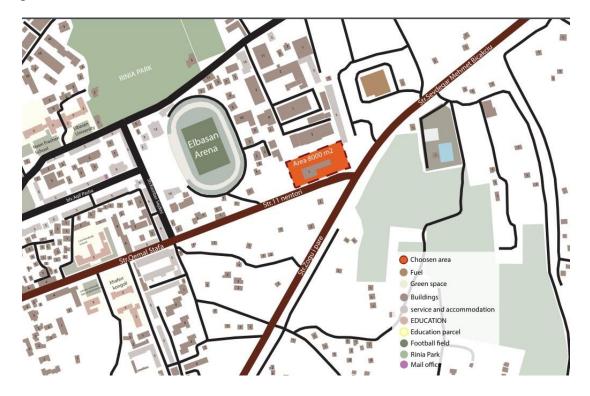


Figure 50. Map of my site location

### 4.1 Form generation

For the form at first the total area required for the ground floor is calculated referring to program formulation and then respecting the site edges a mass is drawn then to introduce the library cut is provided in the middle of the area. After analyzing the shape stepped form has been introduced to provide outdoor reading nooks maintaining a focal point to the main library block which when looked at from the main road creates an interesting façade which shows the level of activity from the underground to top floor, interactive programs like makerspace to quiet study areas.

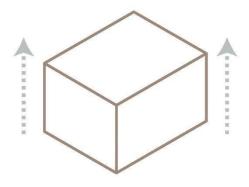


Figure 51. Solid form

#### • Solid

The first concept starts with a solid form where it's easier to create ideas on it..The fragmented urban fabric in the area leads to the idea of "composed fragments" for shaping the volumes or forms of it.

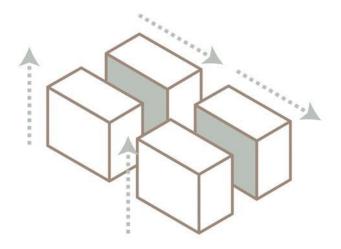


Figure 52. Split form

#### • Split

In this way, we create 4 pieces from a solid form. Later we will see that those 4 pieces or objects will get some changes in their shape.

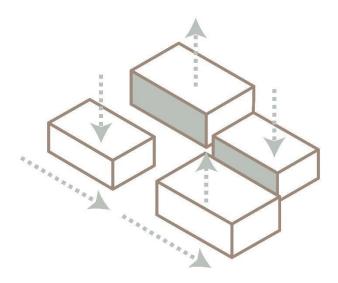


Figure 53. Extension form

#### • Extension

As we see those forms, the shape of the objects changes as a result of the extension. So we have a taller one or a shorter one. THEY NEED DIFFERENT HIGHTS to have a hierarchy with the site buildings around and to be more attractive to the public.

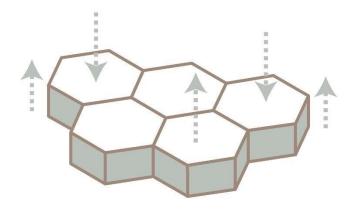


Figure 54. Pre final form

#### • Pre-final form

The hexagon form is the main form in my project. So here we have the regular hexagon form, the clear one.

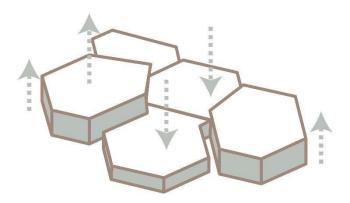


Figure 55. Final form

#### • Final form

This is the final form where you can see that the hexagon form is also here but with some changes that are caused by all the project functions.

## 4.2 Proposed Detailed Program

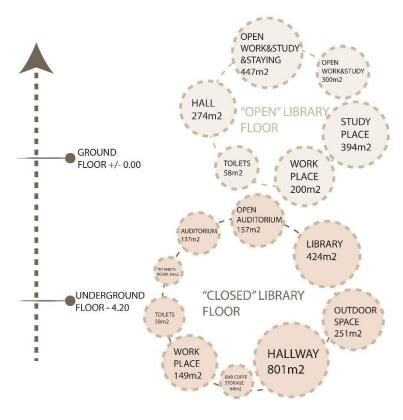


Figure 56. Proposed program diagram

## 4.3 Masterplan



Figure 57. Masterplan of Library design

The master plan that we have presented shows the way we access our plot, from the 11 November street, where we have thought of positioning a parking lot in our facility to serve those who access it. Then, if you look clearly at the landscape, it is a continuation of the building in terms of shape. We have positioned concrete slabs in the shape of hexagons, which rise step by step to a considerable height without destroying the facades of the building. In these concrete slabs, we have interspersed spaces with extensive greenery. In the entire landscape, everyone has the opportunity to rest, study and read, as we have provided spaces with outdoor furniture such as benches and tables. The positioning of the object is clearly distinguished, which is located in the middle of the plot and everything else is done around the object. The plot is limited by walls separating the neighbors to prevent access not only to us but also to them in different ways besides the main entrance that we propose. Everything we have built has been done within the selected plot which complies with the construction conditions according to PDV Elbasan



Figure 58. Floor plan of Library design Scale 1;500

Here we present the program of our building, what each floor contains. The ground floor is a public zone and will serve as a gathering space accessible by all

community members. The ground floor initially contains the reception area, where we also have places to stay and rest. The way to access this floor is directly in the front part that is facing the main street 11 November. After the reception area, we start with other areas that are not separated by walls, but we thought that the separation of these areas are done by means of furniture and greenery. On the left side is a big space dediated to childrens of 5-15 years (elementary school hildren) a place for reading and studing. Children by nature are curious where they learn not only through books but by interacting and playing. Next to this we have an area which can be used for storytelling studing and reading. In front of the entrane we have a space with tables which will be used for working in groups. At the other side of the building we have the large lobby and toilets and also some places for sitting and taking books to read. Also, the building has a nucleus that serves as the supporting structure of our building, which is the nucleus of the stairs and the elevator. The ground floor will serve more for residents and children of elementary shool who will be accompanied by their parents.

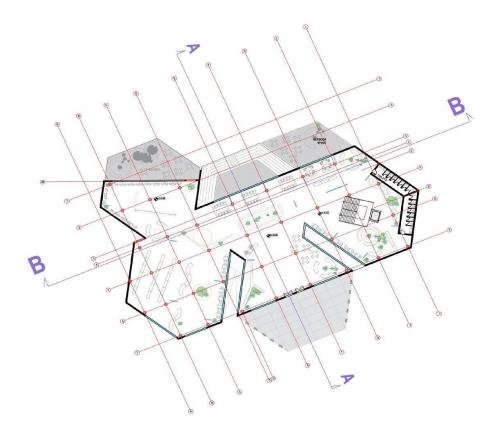


Figure 59. Ground floor plan scale 1:100

#### 4.4 Underground floor

As for the underground floor, it has more or less the same functional divisions as that of the ground floor, but with two changes, the access to it and the way the rooms are divided on this floor. Let's start with the access to this first floor in two ways, with ramps and stairs. The moment you access the basement, you first have a reception. Then we have the facilities similar to the one upstairs, but with some additions, starting with the cafe, which is indoor and outdoor. Next to the part of the cafeteria, it is necessary to create an environment serving the cafeteria. Then we have the part of the toilets, which are the same as the ground floor, and the stairs with the elevator. The special feature of this floor is that we have an indoor and outdoor auditorium, which means that when some schools or universities want to teach in a different way, they decide to access our facility, which offers this service. Personally, my favorite is the outdoor part of this auditorium, which is organized in the form of a staircase, where from this staircase we have the opportunity to access the ground floor, which will be clearly seen in the rendering of the project. Adjacent to the auditorium is a space dedicated to it, which contains articles to help students when they carry out a certain lesson. In front of the auditorium is a rather limited library which has a control point for all the people who access it when they pick up or hand in a book. We also have a space dedicated to people who want to work with different schedules and this space has an open outdoor area for relaxing or for working and staying. The special feature of these outdoor spaces is that they themselves perform a type of service that is necessary for this floor, which is the introduction of light into the building, since it is an underground floor and there is a lack of lighting.

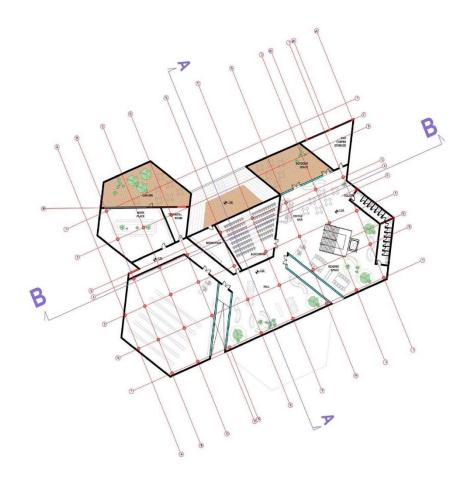


Figure 60. Underground floor plan scale 1:100

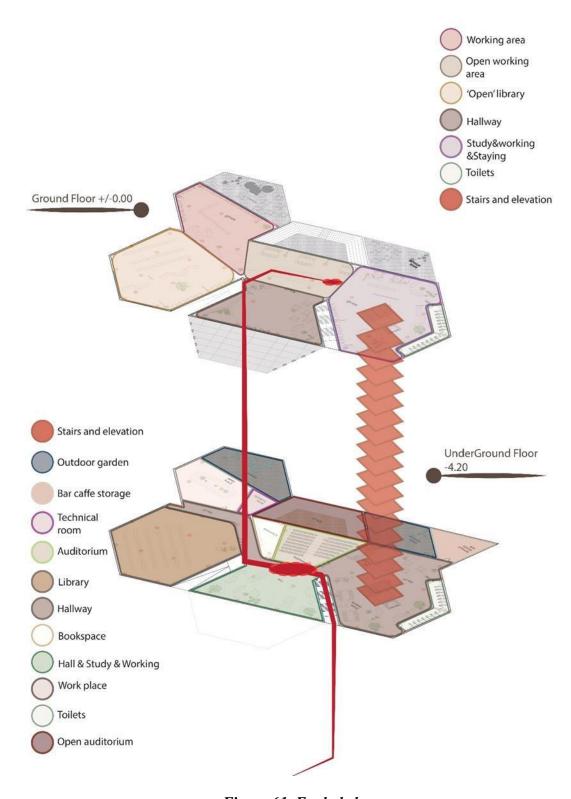


Figure 61. Exploded

# 4.5 Building facade



Figure 62. South façade

Also, as seen in the exterior of the building the windows are used for maker space transparent to the people in the streets making the users a part of the city. The southern facade is the main facade of the building, which in another menu is called the front facade. Here is shown the shelter that this building has at the entrance, the glass facades and the walls which are pure concrete.

Regarding the northern and western facades, the shelter is clearly shown and how the rear part of the building is.

The northern facade is the rear facade of the building, where it is shown how this facade consists of glass mirrors and the pure concrete material that we used.



Figure 63. East façade

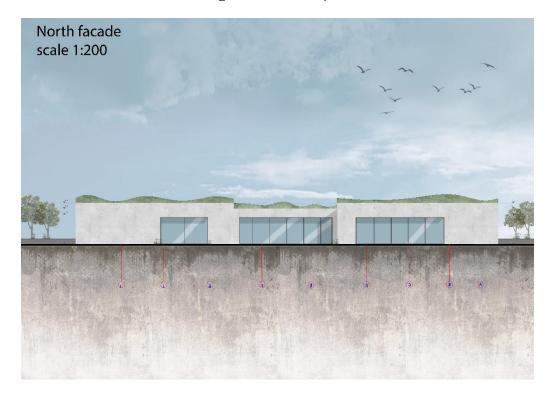


Figure 65. North Façade

# 4.6 Building sections

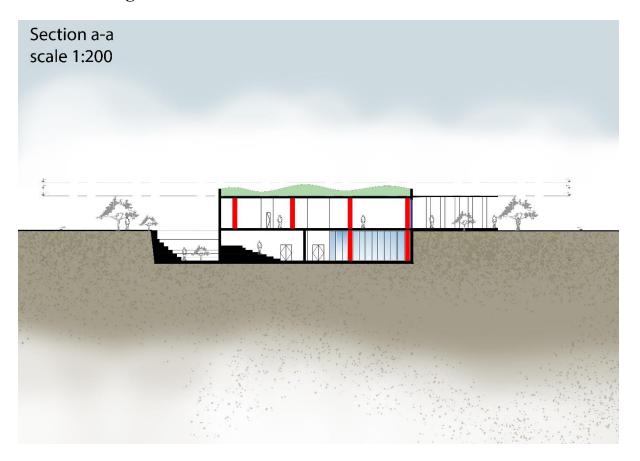


Figure 66. Section a-a'

Section A-A is the transverse section of the object where information is shown on how this object is supposed to be. Specifically, the open atriums that we have as key points of the facility are clearly distinguished. In this particular case, this section passes between the open auditorium where the staircase that we discussed above is shown.

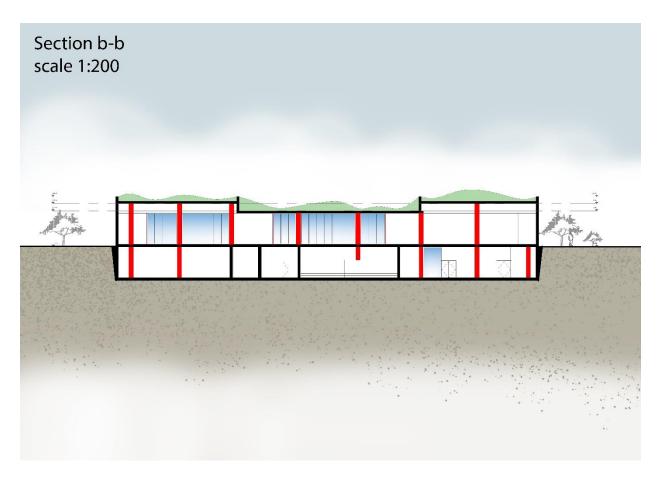


Figure 67. Section b-b'

The B-B section is the longitudinal section of the object, which presents clear information about how this object is positioned on the ground. Also shown here is the part of the sole that has a parapet of about 30 cm high due to rain, etc. In this section, the level of the building is shown. Since we have hexagon shapes, these shapes must be distinguished in the top view, a levelling of these terraces should be done and automatically this levelling affects the height of the ground floor. It is clear that in this section some parts of this floor are higher than 4 meters and some are 4 meters.

# 4.7 3D Rendering of Library



Figure 68. Entrance area



Figure 69. Reception



Figure 70. Entrance and reception area



Figure 71. Reading area



Figure 72. Studing area



Figure 73. Bookshelf design



Figure 74. Relaxing area for reading



Figure 75. Learning area

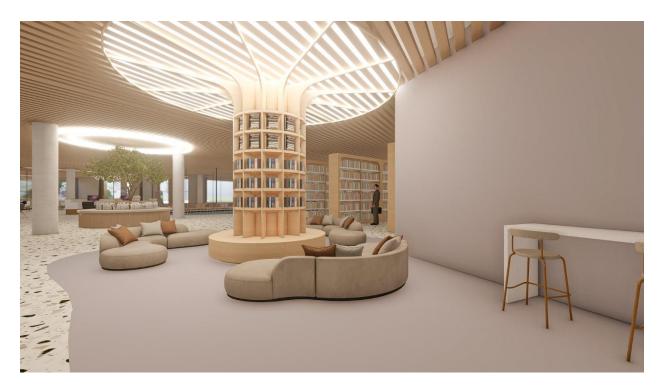


Figure 76. Relaxing area



Figure 77. Reading area



Figure 78. Looby



Figure 79. Entrance outside



Figure 80. Entrance by ramp



Figure 81. Entrance by stairs



Figure 82. Back of the building



Figure 83. Courtyards and balustrade



Figure 84. Greenery around building



Figure 85. Facade details



Figure 86. Top view



Figure 87. Shape of the building 3d



Figure 88. Auditorium outdoor

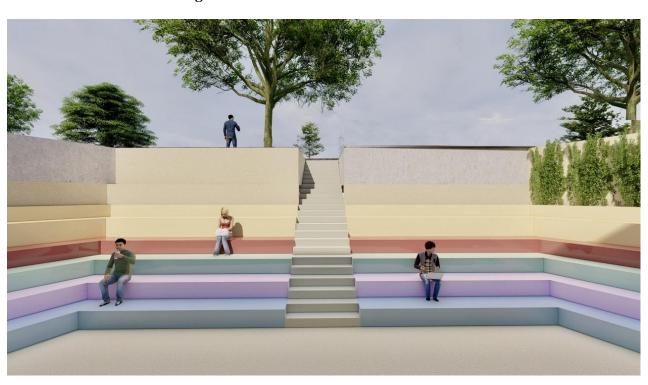


Figure 89. Coloreful stairs of atrium



Figure 90. Benches outside the building



Figure 91. Outdoor Coffe area



Figure 92. Parking area

# **CHAPTER 5**

## **CONCLUSIONS**

## 5.1 Conclusions

The research proposes a new typology for public spaces—a cultural center anchored by a public library. This reimagines the library not as a 'definitive source of knowledge' but as a facilitator. It envisions an extended space that integrates multiple functions, serving as a cultural and knowledge hub. The library is rethought as a vibrant, relaxed, and inclusive public place. While collections remain important, the shift towards digital materials allows libraries to allocate less space for physical items. Instead, they create flexible, multiuse spaces where people can gather, interact, and learn new skills. This design emphasizes a physical interior environment that provides proper lighting, connections to outdoor spaces, and views, attracting users with its new programs and facilities.

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# APPENDIX A

# THE QUESTIONNAIRE TEMPLATE

Pyetësor

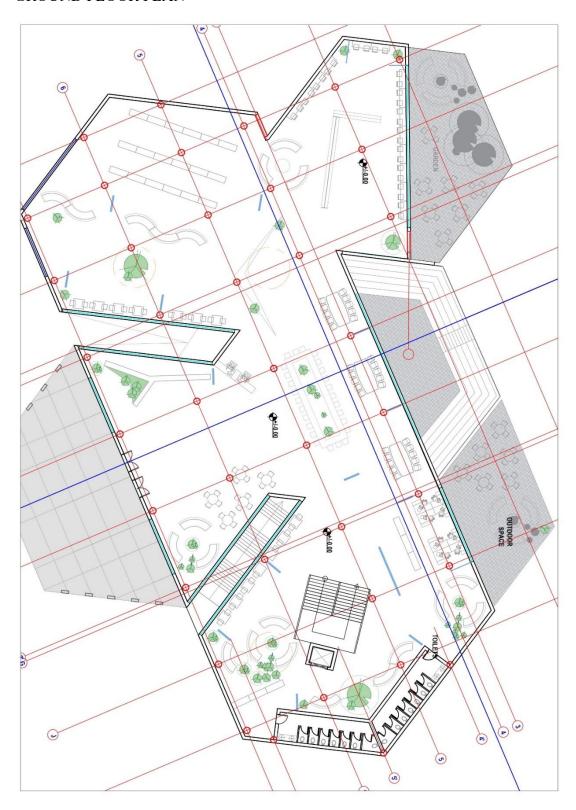
1. Gjinia:	
0	Femër
0	Mashkull
2. M	losha:
0	Më pak se 18
0	18-25
0	26-35
0	35-50
0	Më shumë se 50
3. N	iveli i Edukimit:
0	Pa arsimim formal
0	Shkollë fillore
0	Shkollë e mesme
0	Diplomë universitare
0	Pasuniversitar (Master, Doktoraturë)
4. P	yetje Specifike:
1. Çfarë lloj shërbimesh ose aktivitete do të preferonit të keni në dispozicion në bibliotekën e re publike?	
	mendoni se një bibliotekë e re publike mund të kontribuojë në përmirësimin ës kulturore dhe arsimore të komunitetit tonë?

- 3. Si mendoni se mund të përmirësohet bashkëpunimi dhe partneriteti i bibliotekës publike me organizatat dhe institucionet lokale për të ofruar shërbime më të mira për komunitetin?
- 4. Cilat janë dy karakteristikat kryesore që do të dëshironit të ketë mjedisi i leximit në bibliotekën e re publike për të krijuar një ambient të rehatshëm dhe produktiv për përdoruesit?

## APPENDIX B

THE GRAPHICS OF PROPOSAL

# GROUND FLOOR PLAN



# UNDERGORUND FLOOR PLAN

