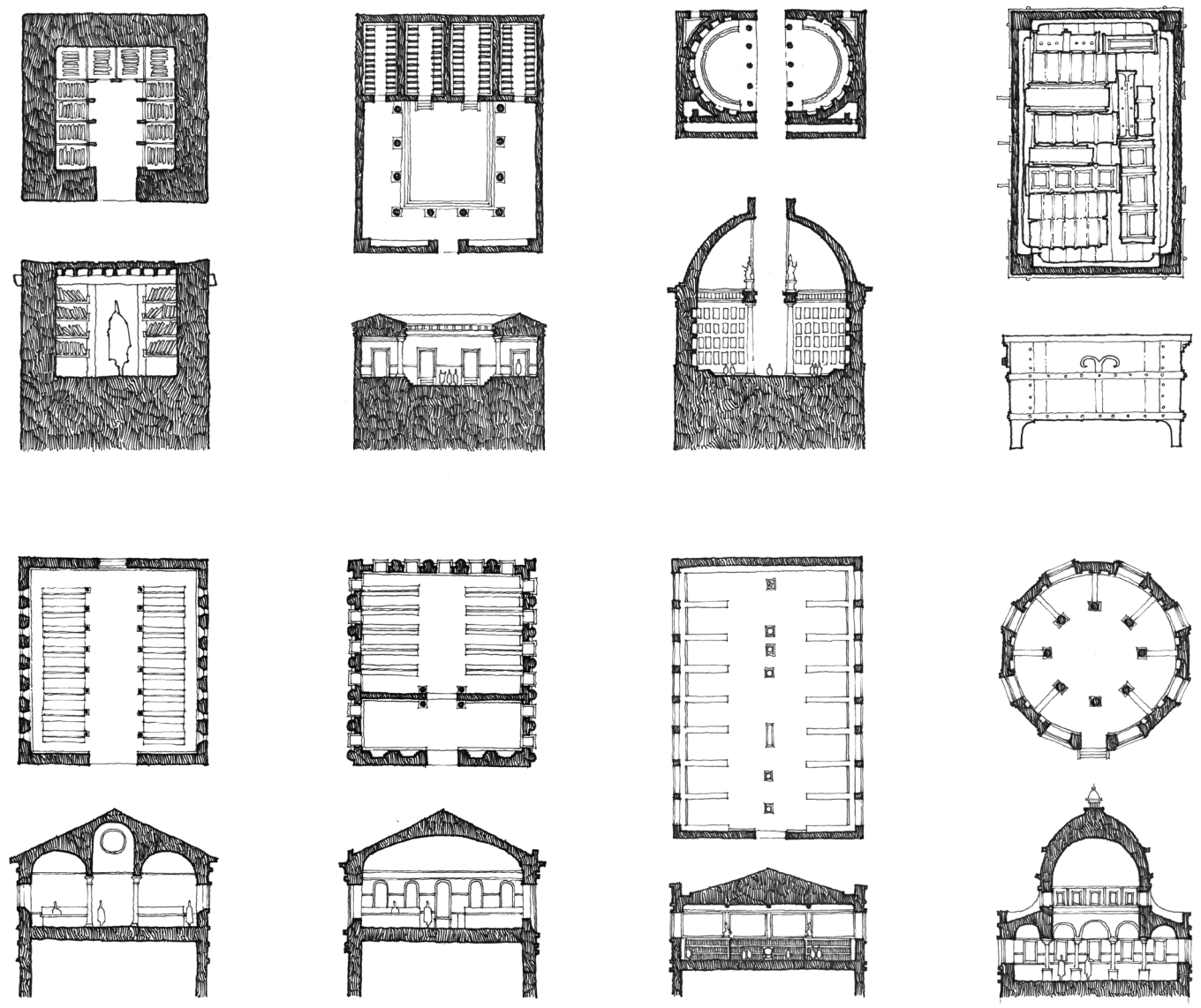

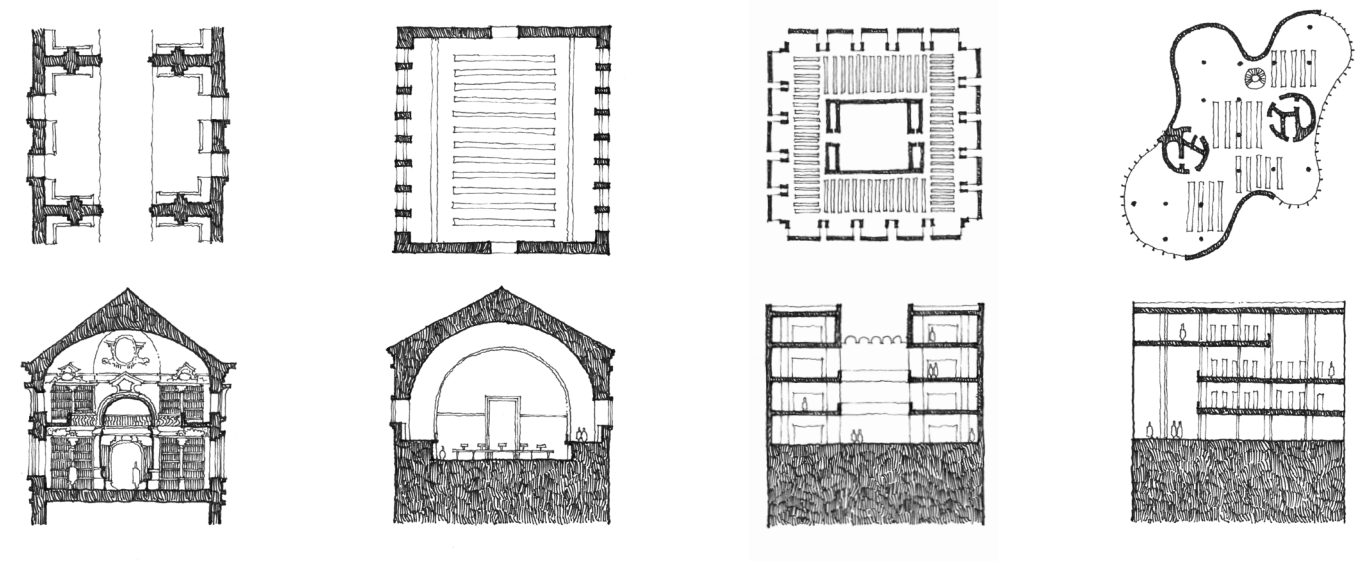

AUTHOR:

Paolo Kirsten

STUDY LEADERS:

Johan N. Prinsloo
Johan Swart
Dr. Derick De Bruyn

COURSE COORDINATOR:

Dr. Arthur Barker

RESEARCH FIELD:

Heritage and Cultural Landscapes

Submitted in fulfilment of part of the requirements for the degree Master of Architecture (Professional) in the Faculty of Engineering, Built Environment and Information Technology.

- University of Pretoria 2019

PROGRAMME:

Community library

CLIENT:

City of Tshwane

SITE NAME:

The Venning Rose Park

SITE LOCATION:

Erf 1528 - Arcadia
Bounded by Pretorius, Francis Baard (previously Schoeman), Eastwood and Farenden Streets
Arcadia, Pretoria, Gauteng

COORDINATES:

25°44'47.06"S
28°13'16.24"E

THE NAME OF THE ROSE

Addressing institutional placelessness through the design of a new Arcadian public library

ABSTRACT:

A placelessness defines the architectural expression of our public institutions; the sterile, the predictable and the generic characterise the experience of spaces that are meant to celebrate the identity and the ideals of a society. A pervasive and global condition helps contribute to the contemporary urban condition of sensory impoverishment and existential homelessness. As a means of addressing this condition of institutional placelessness, this dissertation proposes the design of a new community library in Venning Park, Arcadia. Through a celebration of the typical and essential character of the library type along with the critical application of June Jordaan's place-making triad, this new library offers an alternative to contemporary architectural trends that generate placeless institutions and erode the relevance and autonomy of the public library.

KEY WORDS:

Institutional architecture,
Public Library, Placelessness,
Place, Order, the Typical

“ WHOEVER MARRIES
THE SPIRIT OF THIS AGE
WILL FIND HIMSELF A
WIDOWER IN THE NEXT. ”

- The Reverend William Ralph Inge

DEDICATED TO
MY PARENTS

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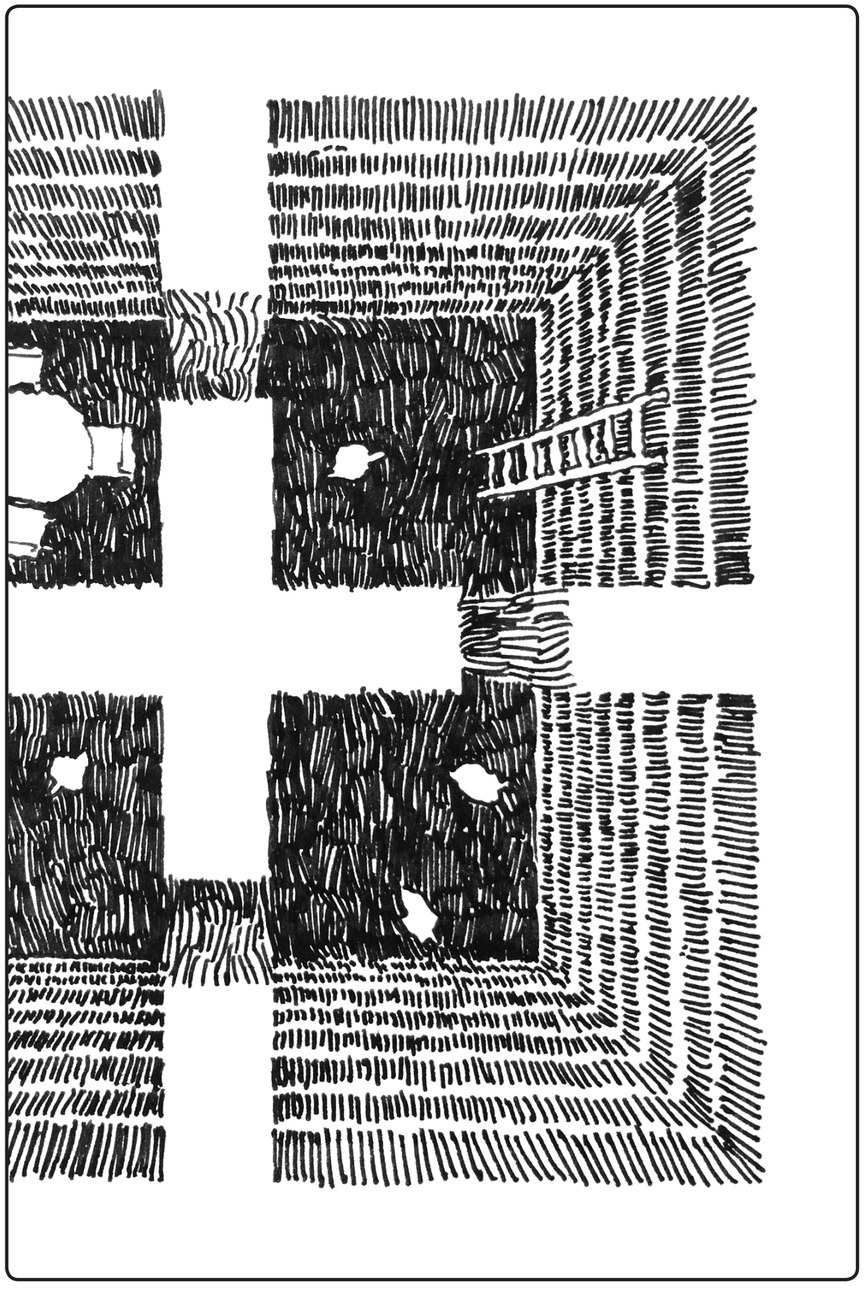
CHAPTER

01

AN EXISTENTIAL HOMELESSNESS

Introducing the issue of institutional placelessness and the necessity for an alternative.



1.1

A GLOBAL CONDITION

A placelessness defines the architectural expression of our public institutions; the sterile, the predictable and the generic characterise the experience of spaces that are meant to celebrate the identity and the ideals of a society. A pervasive and global condition helps contribute to the contemporary urban condition of sensory impoverishment and existential homelessness. The placelessness of our institutions is one of expansive, flat ceilings made up of endlessly repeating, modular panels that house coldly glowing fluorescent tubes. It is an architecture of flatness, bounded by unvaried, unarticulated and anonymous materials. Uncompromisingly utilitarian, standardised fittings and furnishings are so pervasive and ubiquitous that they have come to characterise the identity of not only our institutions but our entire built environment. These 'non-places' aggregate into the placeless geographies that define our everyday environments, conditioning our experiences and memories of the world around us.

1.2

RESEARCH QUESTION

How can the architecture of new civic institutions be designed so as to provide a meaningful alternative to contemporary architectural trends that have propagated and cemented a condition of institutional placelessness?

1.3

DISSERTATION STATEMENT

In order to establish itself as a place, the contemporary public library needs to embrace its existing, essential role and character rather than attempt to redefine itself according to shifting trends.

1.4

RESEARCH METHODOLOGY

1.4.1 - UNDERSTANDING PLACELESSNESS

By critically analysing three local examples of institutional placelessness, a deeper understanding of the condition and its architectural manifestations will be gained in order to propose a meaningful architectural alternative.

1.4.2 - INFORMING THE CREATION OF PLACE

In order to effectively inform the creation of place, contemporary theory surrounding the notion of place will be interrogated. Along with this investigation into select literature on the subject, a synthesis of the ideas of several seminal phenomenologists in the form of June Jordaan's place-making triad will be critically applied and tested as a framework with which to inform and guide the creation of architectural place.

1.4.3 - EMBRACING THE CHARACTER OF THE LIBRARY

The public library has been chosen as the ideal programme for investigation to address the issue of institutional placelessness. In order to understand its role in creating place, the essential character of the library type will be unpacked through a study of literature regarding its historical development, its contemporary civic role and any architectural traditions related to its design.

1.4.4 - EXPERIENCING AND UNDERSTANDING SITE

A combination of a study into the history of the site along with a landing visit to record initial experiences and observations of the site and surrounds will be undertaken as a means of rooting the library to its context and contributing to the surrounding character of place.

1.4.5 - CASE STUDIES AND CONTRARY ARGUMENTS

To ensure a rigorous argument and sound architectural manifestation, a series of case studies that both reinforce and contest the architectural approach taken by this study will be critically analysed and situated throughout the document where appropriate.

CHAPTER

02

THE SPIRIT OF THE AGE

Understanding the contemporary issue of institutional placelessness through theoretical discourse and literature.

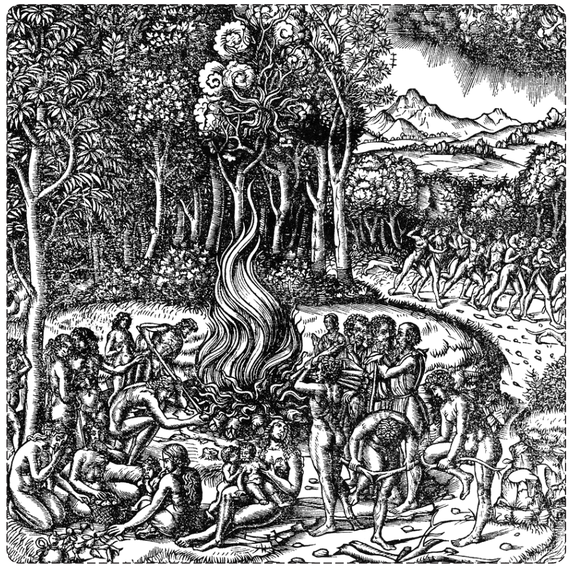


Figure 2.1 - Place

Figure 2.2 - Placelessness

2.1

PLACE

The term place is used to describe an anthropological version of space (Auge 1995:78), where space refers to the abstract and neutral realm of location, co-ordinates and dimensions. Place is a specific point within this void that is charged with significance and meaning (Jordaan 2015:1). Although this qualitative and somewhat elusive phenomenon is impossible to simplify, abstract or reduce into quantifiable parts (Norberg-Schulz 1976:414), multiple writers on the subject concur that the essence of place is a sense of enclosure created by the existence of an inside and an outside, separated by boundary (Harries 1997, Jordaan 2015, Relph 1976, Zumthor 2006).

2.2

PLACELESSNESS

In contrast to place, placelessness is a condition where spaces exist void of meaning and cultural value, capable of only facilitating mediocre lived experiences and denying the possibility of true dwelling or appropriation. Ubiquitous in its universality, the proliferation of placelessness depends on the eradication of existing places *replacing* them with a homogenous, predictable landscape (Relph 1976) which may provide all of the requirements for the physical body to flourish, but condemns the spirit to wither (Harries 1997).

2.3

CRITIQUE OF INSTITUTIONS

Norberg-Schulz (1976:415) argues that specific actions require specific atmospheres or places within which to occur in order to facilitate a satisfactory experience of the action. With this understanding of the importance of experience in relation to place, and because any institutional space will illicit an experience from those within it, the issue is not whether an experience will occur but rather the quality of the experience (Jordaan 2015:187). Therefore, the issue of institutional placelessness would best be investigated through the lens of an institution best suited to facilitate a sense of appropriation and ownership from the public rather than one of control and restriction. From this understanding, the public library was chosen as the ideal institution for investigation due to the fact that users are not confined to public waiting areas as in courthouses, police stations, post offices and hospitals, but are rather required to engage with the institution's collections, giving them free access to the majority of the institution's spaces. Furthermore, the public library necessitates the exploration and casual browsing of these spaces in order for one to meaningfully access its content. By comparison, the controlled collections of the library's sister institutions, the museum and the art gallery (Pickard 2002:4), rely on the curated and choreographed experiences offered by guided tours and maps in order to be meaningfully accessed. As a means of developing a deeper understanding of the nature of institutional placelessness and determining the spatial manifestations of such a condition, three public libraries that were initially perceived as exhibiting qualities of placelessness were critically analysed in terms of the qualities of their material form, public use and spatial experience. Chosen for their diversity of scales, contexts and users, the three libraries are the National library of South Africa branch in Pretoria, the Sandton Public Library and the Brooklyn Community Library.

2.2.1 - INSTITUTIONAL PLACELESSNESS

The species of placelessness that defines public institutions is, according to Relph (1976:118), characteristic of architecture designed with the aspiration of reflecting an international style. Driven by a fear of nationalism and a distrust of the state following the devastation of the Second World War, the rationality, economy and anonymity of the International Style promised for Europe the possibility for self-actualisation separate from the influences of the past. In South Africa, International Style Modernism came to represent the state during the Apartheid regime as the preferred (but not the only) style for governmental and administrative buildings thanks to its perceived independence and lack of overt references to the architectural traditions of Continental Europe and the British Isles. This relationship also made it an appropriate architectural expression for the many public institutions built during the Apartheid regime due to their role as an indirect interface between the public and the state. As a legacy of its historically privileged position, the tenets of the international style still hold prodigious influence over the architectural discipline today. As a result, an architectural tradition of generating placeless institutional spaces has been well established in South Africa, an ongoing condition that needs to be rectified if architecture is to hold any kind of cultural relevance moving forward (Verschaffel 2009). The particular form of placelessness generated by this tradition is one of standardisation and homogeneity driven by utilitarian and economic concerns (Relph 1976:118), a condition that denies the possibility for people to meaningfully relate to and associate with their surroundings (Buchanan 2012:7). Public institutional architecture in South Africa, both contemporary and historical, can often be characterised by endless corridors, homogenous rooms, anonymous materials and the pervasive cool glow of fluorescent lights. This condition of the generic dominates the architectural expression of institutional building types regardless of their functional and contextual specificities, a condition that not only alienates those whom the institution serves but also limits the institutions ability to effectively perform its functional role (Norberg-Schulz 1976:415).

2.3.1

NATIONAL LIBRARY OF SOUTH AFRICA

ARCHITECT :

Jeremie Malan Architects and Interiors

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Corner of Struben Street and Thabo Sehume Street (formerly Andries), Pretoria Inner City, South Africa	2008	Example of the kind of placelessness created by contemporary architectural trends

CRITICAL ANALYSIS

Figure 2.3 - National Library locality plan

Figure 2.4 - Library foyer or airport terminal?

Built as a cultural icon for the city of Pretoria and imagined as the most technologically advanced library on the African continent, the monumental structure covers half a city block and provides enough space to accommodate up to 4000 visitors per day. The architecture of the new National Library exhibits several qualities that, according to Relph (1976:118-119), define it as placeless. Yet despite proliferating a condition of institutional placelessness, the building apparently still upholds the current values of the architectural discipline due to the fact that it was celebrated as a fine example of contemporary South African architecture with a PIA Award of Excellence in 2009.

Although it responds appropriately to the urban context and has a recognisable character from the exterior, once within, the memorability of the library quickly fades away. Due to a lack of spatial variation and recognisability, the library's interiors are impossible to navigate without signage. Interior volumes are excessively large and cavernous (presumably in the attempt to evoke awe from the user), with scattered clusters of furniture floating within these great voids. The materials used to finish these volumes are draped on, like a veneer, and used to communicate the library's 'theme' of technological advancement and sophistication. Concrete, polished stone tiles, glass, steel, stained timber and arbitrarily patterned carpets make up a 'fruit salad' of high-end interior materials which have all been finished to appear smooth or flat. African themed patterns and literary motifs have also been superficially applied to interior walls in an unsuccessful attempt to give the project a cultural relevance and functional legibility. The themed nature of the National Library along with its exaggerated size and generic architectural quality characterises it as an example of contemporary institutional placelessness. This, along with its quotidian detailing, standard fittings and predictable spaces, has denied the possibility for meaningful appropriation from the public and created an edifice that could just as easily be mistaken for a large conference centre or airport terminal.

Figure 2.5 - Themed decorative panels

Figure 2.6 - Inhumane scale of interior volumes

Figure 2.7 - Urban presence of the library

Figure 2.8 - The manifestation of placelessness

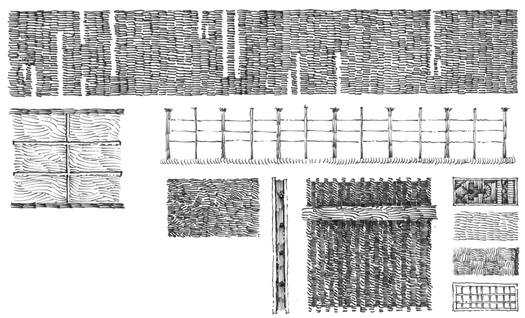


Figure 2.9 - Fruit salad of generic materials and fittings

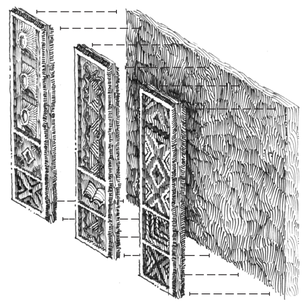


Figure 2.10 - Superficially applied ornamentation

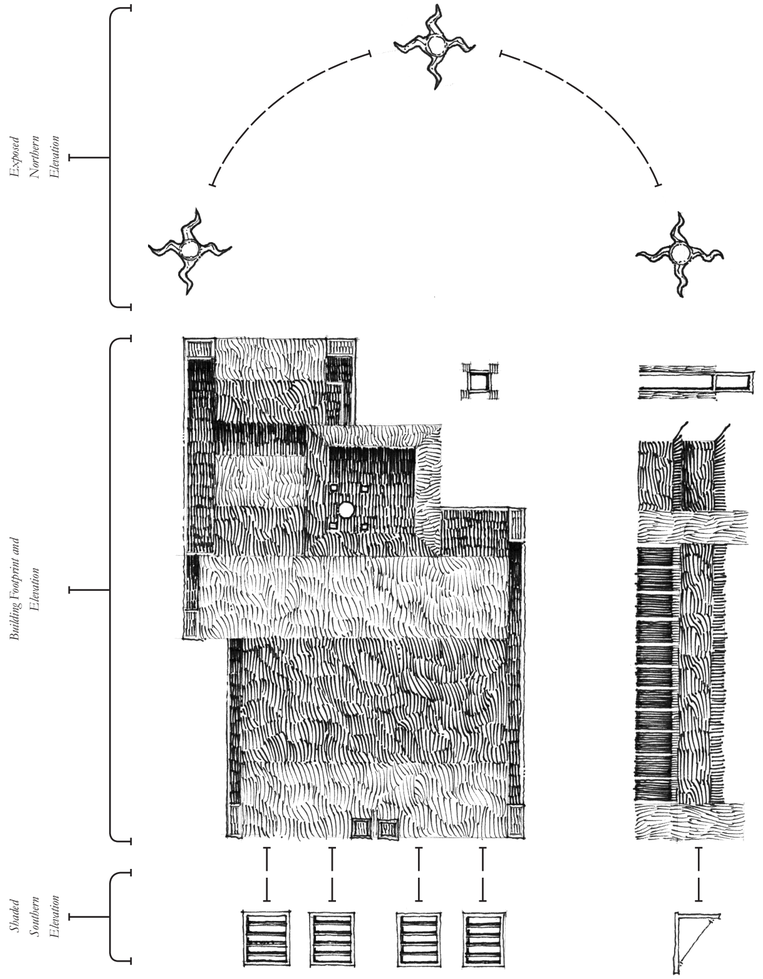


Figure 2.11 - Decorative solar 'protection'

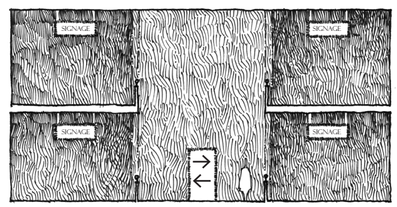


Figure 2.12 - Impossibility to navigate without signage

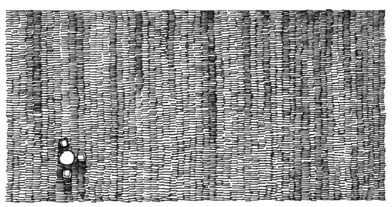


Figure 2.13 - Furnishings float in 'ocean' of open space

2.3.2

THE SANDTON PUBLIC LIBRARY

ARCHITECT :

GAPP Architects and Urban Designers

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Nelson Mandela Square at Sandton City, Johannesburg, South Africa	1995	A scheme that exhibits qualities of both place and placelessness

CRITICAL ANALYSIS

Defining one of the edges of the Nelson Mandela Square in Sandton City, The Sandton Public Library is a medium to large library that exemplifies the fact that not all the characteristics of place and placelessness are mutually exclusive and that a single institutional building can exhibit qualities of both simultaneously. Critical analysis reveals that the Sandton Public Library is primarily a place that exhibits qualities of placelessness despite it being initially perceived only as placeless. The characteristics that define it as a place are its recognisable and contextually responsive civic presence, the fact that its institutional interiors are separated from the commercial exterior by a clear boundary and that once within, the encompassing presence of books lends the place a functional legibility and communicates its civic role. By contrast, the placelessness of the building is defined by the fact that its civic presence is undermined by having the façade that fronts the square plastered with screens and billboards for advertising meaning that the architecture loses its recognisability and the institutions importance is eroded. Within the interior, although there are a variety of different library functions, there is a lack of spatial variation within and despite the library's unique character, one's experience of the interior quickly becomes repetitive, predictable and homogeneous.

Figure 2.14 - Sandton Library locality plan

Figure 2.16 - Central ramp and foyer

Figure 2.17 - Unused central lounge

Figure 2.15 - One of the library's many lounges

Figure 2.18 - Low, expansive ceiling plane

Figure 2.19 - Custom yet repetitive fittings

Figure 2.20 - Connection to the outside

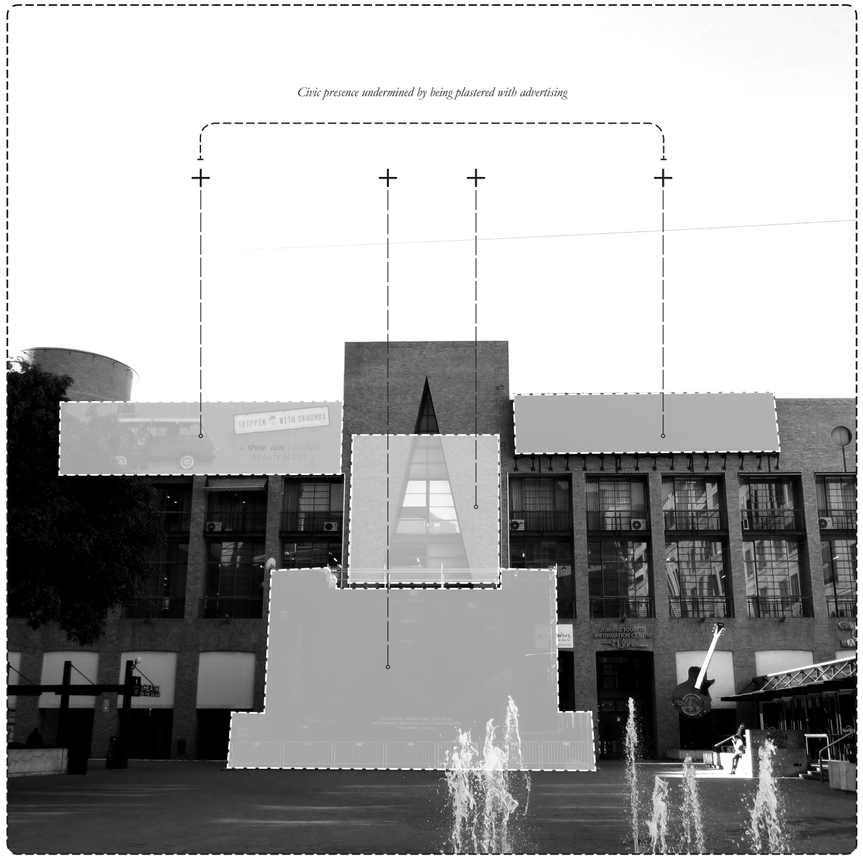


Figure 2.21 - Civic presence of the library

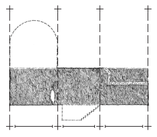


Figure 2.22 - Lack of internal spatial variation

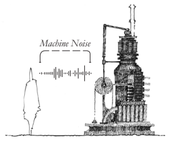


Figure 2.23 - Constant machine noise within

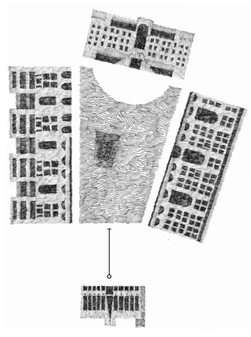


Figure 2.24 - Library's role in the square ensemble

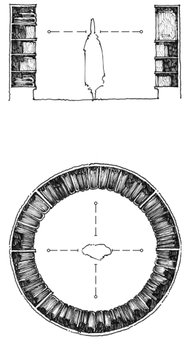


Figure 2.25 -functional legibility from codices

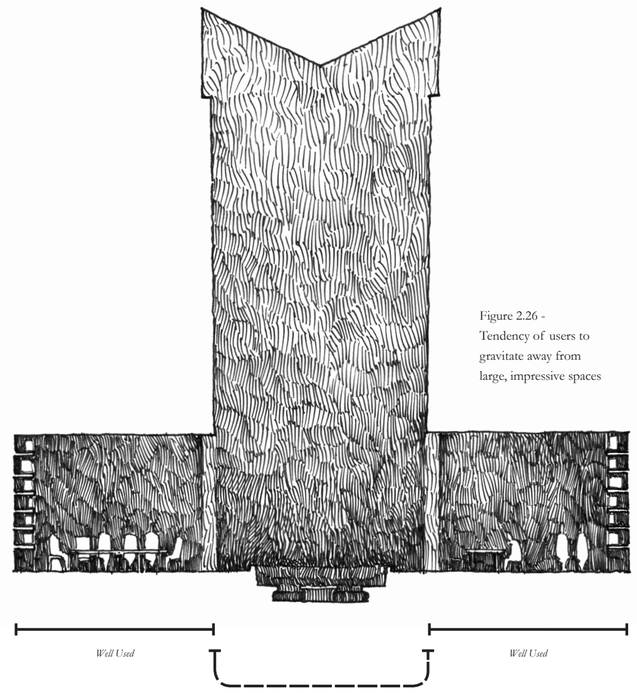


Figure 2.26 - Tendency of users to gravitate away from large, impressive spaces

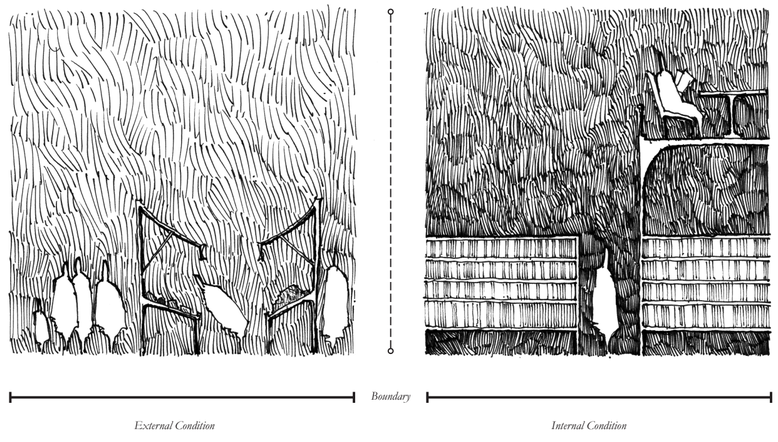


Figure 2.27 - Clear distinction between the inner realm of the library and the outer realm of the square

2.3.3

THE BROOKLYN COMMUNITY LIBRARY

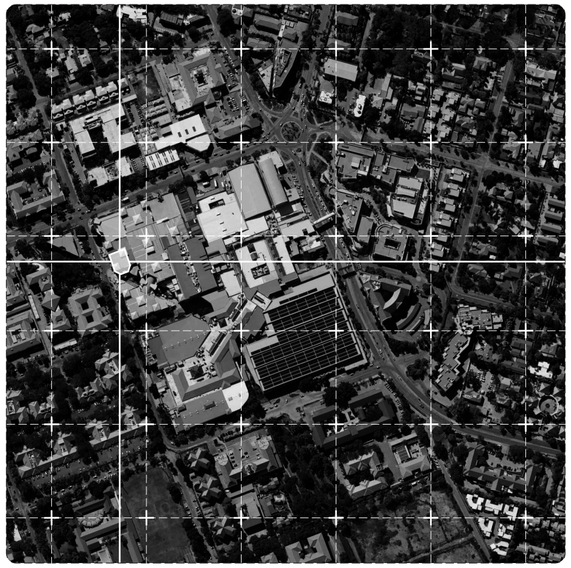
LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Design Square at Brooklyn Mall, Pretoria, South Africa	2013	Exemplary of the most common type of institutional placelessness

ARCHITECT :

Unknown - developed by Atterbury Properties

CRITICAL ANALYSIS

Figure 2.28 - Brooklyn Library locality plan



The Brooklyn community library is part of a sparse network of public libraries that serve Pretoria's communities on a neighbourhood level. It occupies a shop next to Brooklyn Mall's Design Square rather than its own building. Both a community library and of a similar size to the public library designed for this dissertation, the Brooklyn Community Library acts as an important example for critical analysis, not only for its similarities to this scheme but also because it is typical of the most common variety of institutional placelessness found in South Africa. Behind a nondescript shop-front just off the edge of the busy Design Square, the library acts as any other anonymous and ill frequented shop within the mall. Undermining the autonomy and civic importance of the library as an institution, it is subservient to the greater commercial space of the mall, lacking any kind of relationship to the nearby semi-public square as well as any kind of distinguishing architectural character that communicates its function. Instead, the library relies on signage designed and printed by its staff to announce itself and communicate its rules to the public. The interior of the library shares the exteriors lack of character and defining features. Uncompromisingly generic and economically conscious, the library occupies a single room enclosed by smooth mint green walls, standard acoustic ceiling tiles, fluorescent lights and a carpeted floor, shelving and other furnishings are unremarkable and inconsequential to the architecture of the library. If removed, the space could just as easily have been an office floor or dance studio. In addition to the bleakness of the space, all seating is clustered next to the librarian's desk where surveillance is possible and quietness is enforced, thus ensuring that little meaningful human interaction can occur within the library and any possibility for memorability or appropriation has been erased.

Figure 2.29 - Unremarkable and predictable interior experience

Figure 2.30 - Civic presence of the library

Figure 2.31 - Typical interior condition

Figure 2.32 - Rules communicated by signage

Figure 2.33 - The manifestation of placelessness

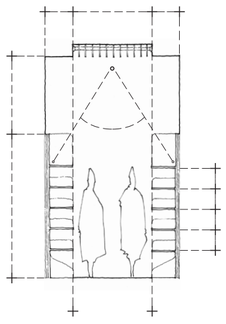


Figure 2.34 - Uncompromisingly utilitarian

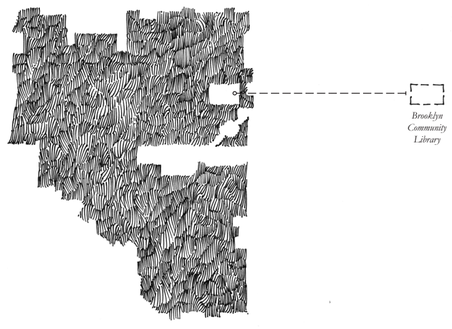


Figure 2.35 - Library as an institution is subservient to the mall

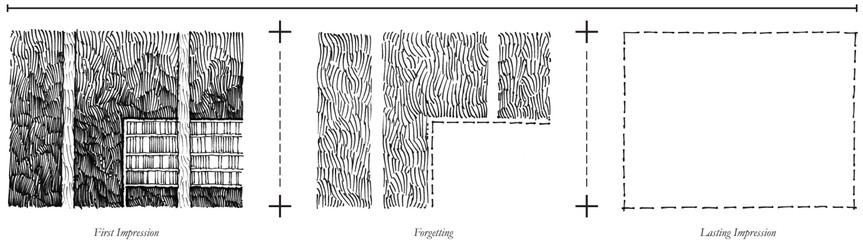


Figure 2.36 - Lack of memorability of the library

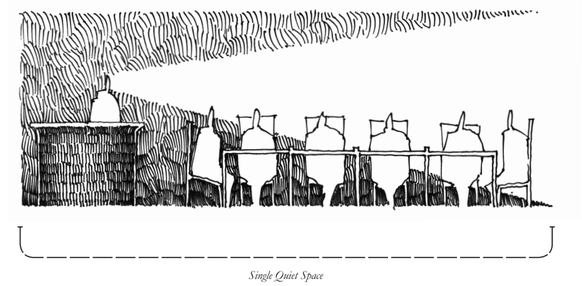


Figure 2.37 - Impossibility for social interaction

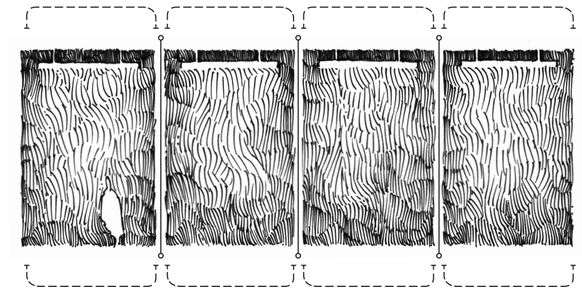


Figure 2.38 - Endlessly repeating elements

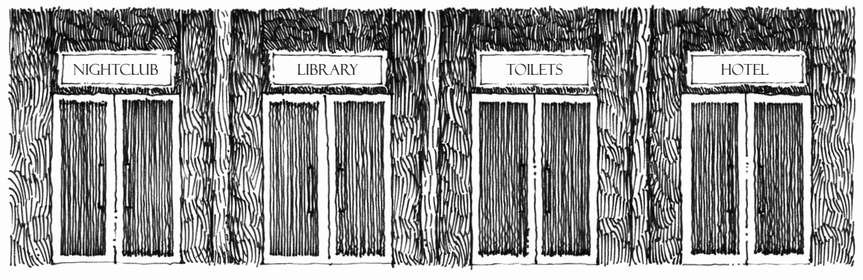


Figure 2.39 - Generic architectural expression means that function is communicated through signage rather than architecture

2.4

CREATING PLACE

Contemporary philosophical discourse surrounding the topic of place stresses its necessity and importance (Relph 1976). The significance of place is also understood by many in relation to the architectural discipline, who describe the creation of place as the fundamental task of architecture (Jordaan 2015), and it is from this call that this study will investigate the creation of architectural place as a means of addressing the issue of institutional placelessness.

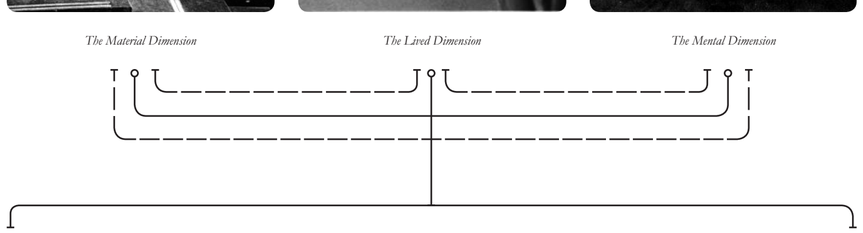
2.4.1 - PHENOMENOLOGY AS METHOD

According to Leach (2005:80), phenomenology is the study of phenomena through the lens of human experience, as well as the interpretation of phenomena as a means of understanding their ontological significance. Of the various types of phenomenology, hermeneutic phenomenology of the Heideggeran school of thought is the one most intimately linked to the architectural discipline and has been argued to be an effective methodology for the creation of architectural place (Jordaan 2015), and will therefore be used for this study. As a methodology, it relies on the designer's existing topistic knowledge and memory of existing places in conjunction with a hermeneutic understanding of places that can be used to inform the creation of new architectural place.

The Material Dimension

The Lived Dimension

The Mental Dimension



2.4.2 - THE TRIAD

In Constructing Place, Jordaan (2015) provides a comprehensive understanding of the nature of place, gleaned from a synthesis of the ideas of seminal phenomenologists Husserl, Heidegger and Merleau-Ponty in order to effectively develop a framework for the architectural creation of place. This framework takes the form of a triad structure where the notion of place is broken up into three interrelated dimensions, each containing multiple themes to be considered. The three dimensions that structure the framework are in no hierarchical order: the material dimension of place, the lived dimension of place and the mental dimension of place. The material dimension refers to the physical things, materials and joints that define a sense of place as well as the intentions behind their expression. The lived dimension refers to the reciprocity between the material and the lived realms where rituals and bodily actions define the sense of place. The mental dimension refers to how the perception of spaces through the senses, our imagination and our memories also informs our experience of place (Jordaan 2015). Using the framework, one needs to consider all three dimensions of place individually, as well as their relationships and overlaps with each other. The advantage of approaching place making through the lenses of this triad necessitates an acknowledgement of the totality of place in all of its intricacies as compared to a simplified or reduced version thereof, making it an appropriate framework through which to structure a thorough exploration of a solution for the issue of institutional placelessness. In response to the intentions of Jordaan (2015:199) that the triad be tested as a system by architecture students and practitioners, this framework will be critically employed as a means of structuring and informing the place making processes of this study.

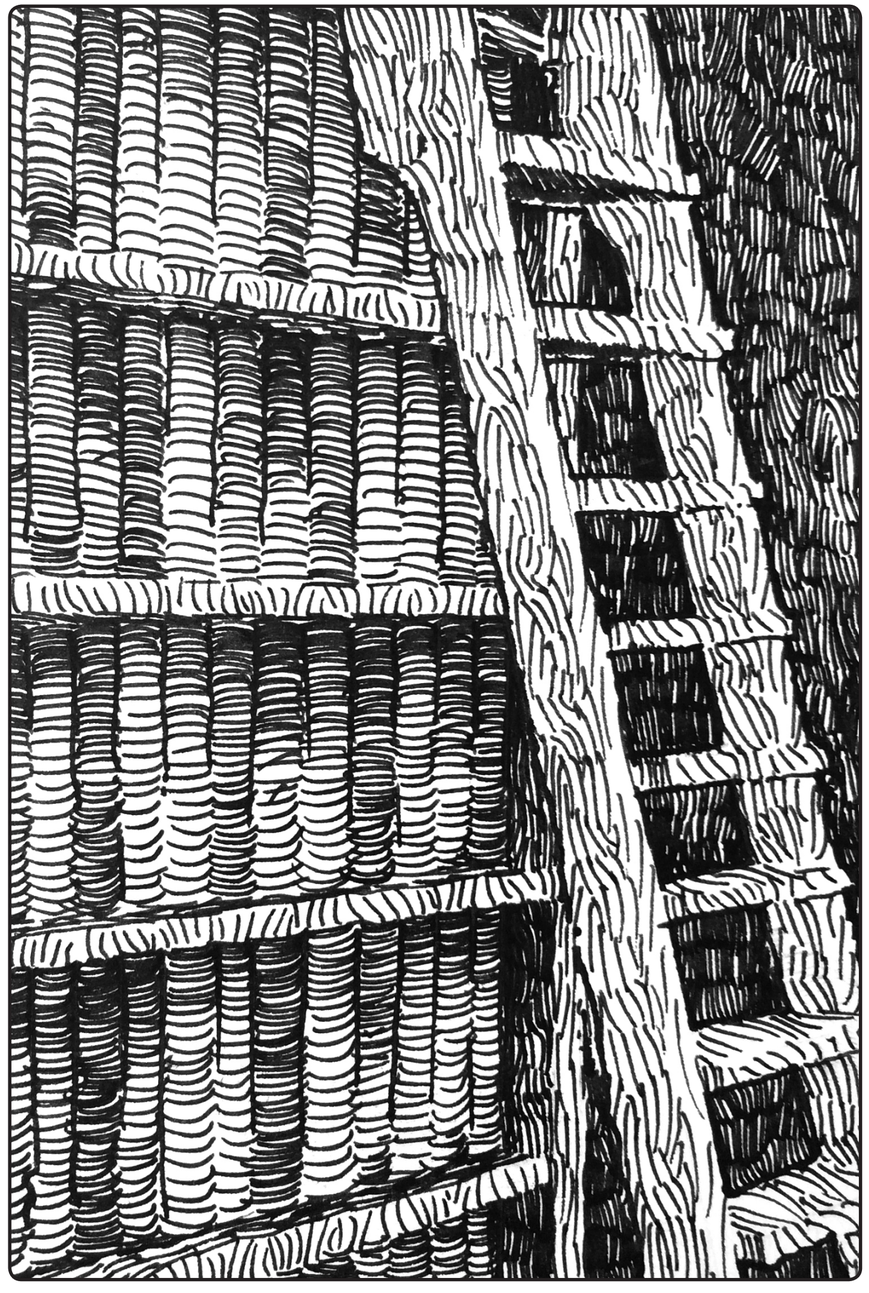
Figure 2.40 - The three dimensions of the triad

CHAPTER

03

THE LIBRARY

Understanding the essential character of the library through an investigation into its history and contemporary role.



3.1

THE TYPICAL

As a means of creating places of significance and meaning, Peter Zumthor (2013) argues for the design of places that attempt to be typical as opposed to special as this will ensure that they effectively fulfil their functional role. Verschaffel (2009:144) elaborates on the importance of this notion in relation to the critique of institutional architecture, arguing that if critique takes the form of rethinking the existing nature of an institution, it negates the possibility for any real criticism and undermines the autonomy and relevance of the institution in question. Therefore, in order to effectively address the issue of institutional placelessness, the essential character of the institution in question needs to be embraced and celebrated as a key component of its character of place.

Figure 3.1 - An oneiric library

3.2

THE CHARACTER OF THE LIBRARY

The public library as an institution is one popularly believed to be in its death throes, a perceived crisis that finds it origins in a branch of literature dating from the 1970s that somewhat presumptuously predicted the disappearance of all libraries by the end of the twentieth century as a result of the printed word being made irrelevant by the computer (Campbell and Pryce 2013:291). This popular belief persists even today, despite the global public library building boom of the early years of the twenty first century and the fact that the number of codices printed annually currently exceeds that of any given point in human history (Campbell and Pryce 2013:19). In a near hysterical response to this perceived crisis of the library's relevance, the public library was reimagined as the learning resource centre, the multimedia lab or the information hub. However Mickiewicz (2016) argues that the attempt to legitimise their existence through a blending of functions, technologies and scales, these new spaces have effectively eroded the essential character and autonomy of the public library as an institution. In order to create place in the form of a public library and despite technological developments that influence the role it plays, the library should in its essence, remain a library (Verschaffel 2009:144).

Various conditions define the library as a unique public institution. The first defining characteristic is its nature as a semi-public space, existing as an enclosed space accessible via a threshold, where according to Verschaffel (2009:142), due to its inherent rules and structures, the library is only accessible on the condition that those who enter 'play the game'. Once within, the function of the library as a repository becomes clear (Huff 2003:36). Campbell (2013:19) reminds us that the definition of a library is a building designed to house books, the spatial expression of the library celebrates and is defined by the format of the books it contains. The necessity for the storage and accessibility of these books also makes the library's furnishings and fittings essential spatial components that characterise and define it as a unique institution (Campbell and Pryce 2013:23). Along with the presence of books and furnishings, the presence of the librarian also characterises the library (Brawne and Pehnt 1970), responsible for structuring the collections, providing assistance and enforcing rules, the presence of such a guardian is as integral to the nature of the institution as the collections it contains. The final defining characteristic of the library relates to its appropriation by the public, as the public institution that evokes the strongest feelings of ownership and identity, the library provides an enclosed, indoor public space where those that enter come not as clients or consumers, but rather as participants or citizens (Verschaffel 2009, Kay 1974).

3.3

STOCKHOLM PUBLIC LIBRARY

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Observatorielunden, Stockholm, Sweden	1928	Designing with an understanding of the typical library

ARCHITECT :

Erik Gunnar Asplund

CRITICAL ANALYSIS

A clear understanding and implementation of the historic ideals of the library type defines its institutional role and establishes the Stockholm Public Library as a distinct and memorable place. Asplund was appointed to design the library after presenting a thorough report commissioned by the city that would be used to inform the brief for a new library. The design was heavily informed by the architectural traditions surrounding library design in Europe and North America, of which he had a thorough understanding, thanks to the analysis he had completed for his report.

According to a belief that public buildings should be monumental landmarks in order to celebrate their community purpose and be given prominent sites so as to allow them to act as focal points for the city, Asplund recommended that the library be sited at the corner of the hill atop which stood the old Stockholm Observatory (Wrede 1980). In response to its site, the library was designed as a massive compact bulk so as to not be overpowered by the hill with the final version manifesting as an austere stripped classical monument made up of a square base with a cylindrical drum projecting from its centre. The library is set back from the urban edge, wrapped by an active commercial front that insulates the main building from the activities of the street, allowing the programme to retain its autonomy, separation and significance whilst exaggerating the approach up towards the main building. The projecting drum suggests the importance of a centralised and enclosed space within, whilst the openings in the façade are treated differently in order to communicate their relative importance. Where entrance thresholds are stretched and tapered to exaggerate visual perspective and edged with mouldings in order to articulate them, windows and other openings are simply punctured into the red render of the façade and left unadorned. Along with a celebration of thresholds, the mass and thickness of the building's walls have also been exaggerated in order to enhance a sense of enclosure within and give the building a monumental presence according to its civic importance (Jones 2006). After ascending the external stairs and passing through the main entrance doors one is greeted by a dark foyer where on needs to ascend an additional staircase in order to enter the tall, bright, central reading room. Conceptualised as a representation of the human mind and all that it contains, once within the material palette changes and the user is confronted with white render, dark wood and surrounded by books on all sides which are lit by high level windows which permit diffused light but deny views to the outside world. The Stockholm Public library effectively encloses its own unique internal world which despite being mathematically and geometrically sophisticated, is also experientially powerful thanks to Asplund's intention to create an ideal library based on the design elements typical to the architecture of libraries, along with his belief that form and beauty are ends in themselves. A belief which was expressed through his use of the human body as a measure for the geometry and spaces of the building. Instead of seeking mathematical perfection, the geometry of the library was manipulated in order to achieve perceptual effects such as in room sizes that were determined by the number of steps a person would take to cross it and façade proportions that were determined by what looked pleasing to the eye (Wrede 1980).

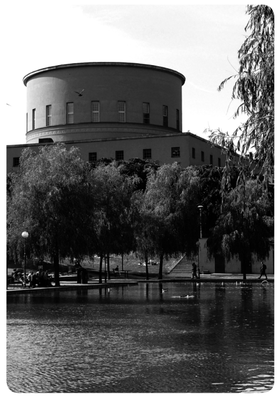


Figure 3.2 - Urban presence of the library

Figure 3.3 - The central reading room

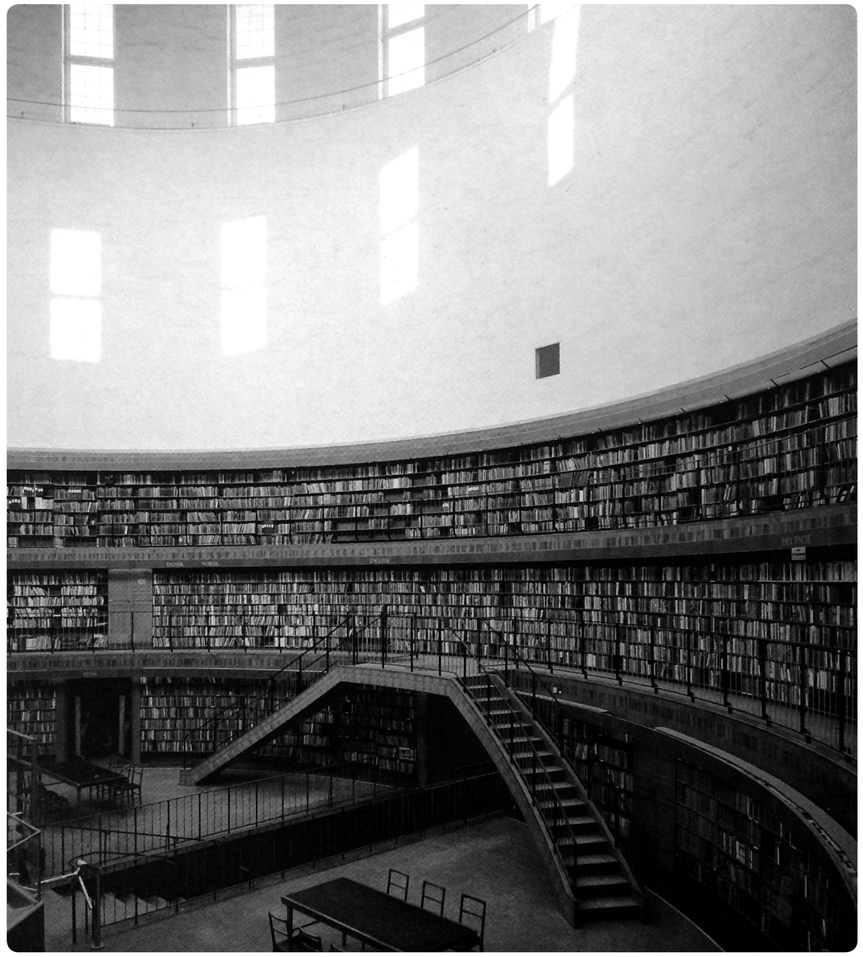


Figure 3.4 - Approach to the centre of the library

Figure 3.5 - The children's library

Figure 3.6 - Main vestibule

3.4

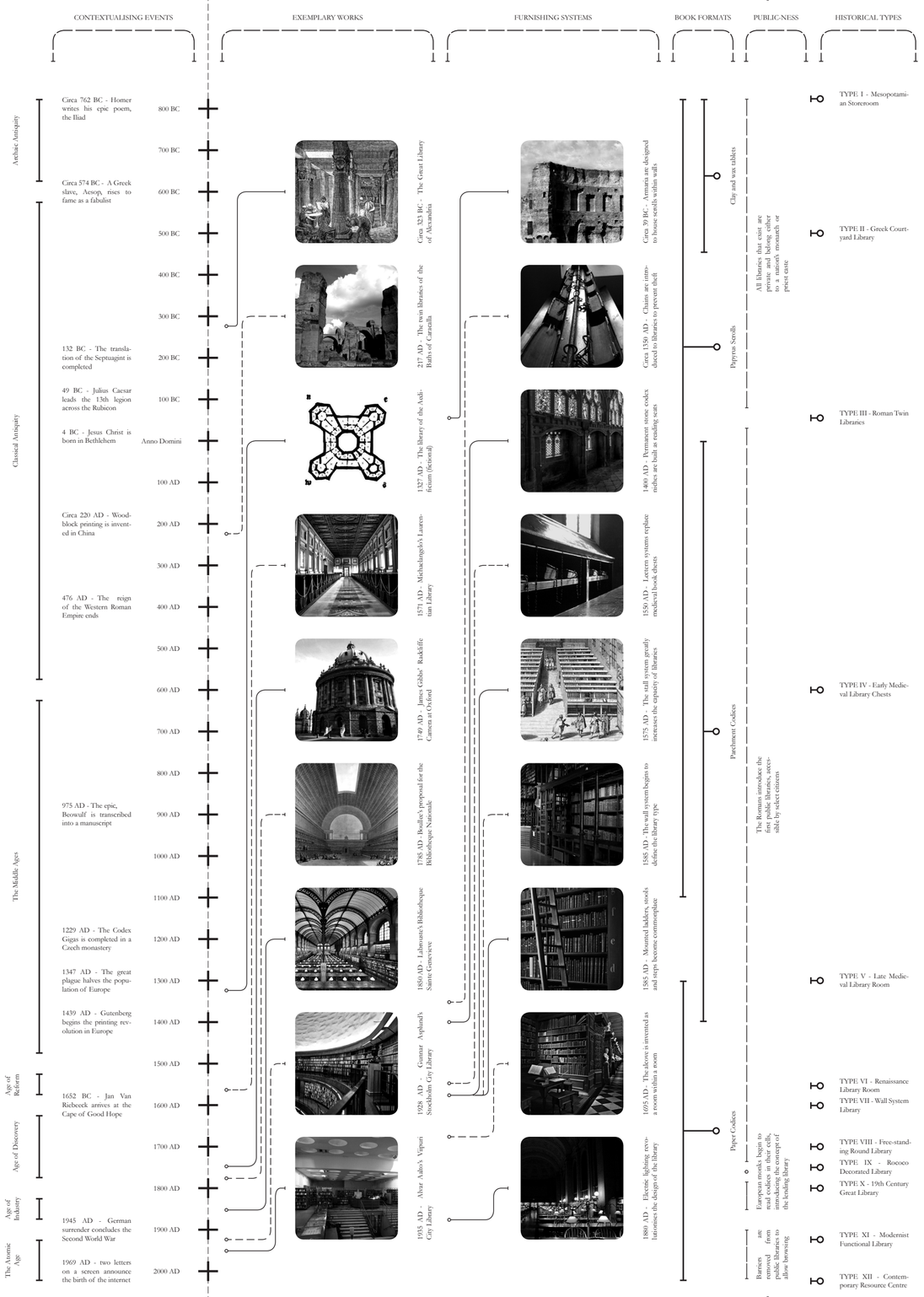
THE HISTORY OF THE LIBRARY

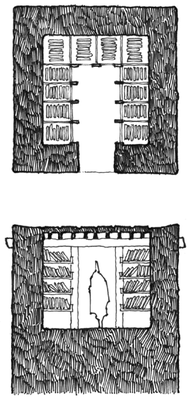
The public library as we understand it today has a relatively short history compared to other public institutions. As a unique civic institution we can trace its origins to 18th century Europe where it flourished thanks to its nature as a built symbol of the ideals of the Enlightenment (Prizeman 2011). By comparison, the ancestor of this unique institution, the non-institutional library has a history stretching back to the genesis of civilisation. Originating from the ancient Mesopotamian store rooms used to house records of agricultural transactions inscribed on clay tablets, libraries existed across multiple civilisations throughout the ages although never as their own autonomous building type until the invention of the printing press (Campbell and Pryce 2013).

Due to the comparatively small collections housed in historical libraries, the library existed as a subsidiary function attached to palaces, religious complexes or museums occupying a single room as compared to an entire building (Brawne and Pehnt 1970). Its occupation of a single room established the ideal notion of the entire library contained within a single great hall as a means of facilitating lateral thinking and symbolising the totality of the knowledge it contains (Campbell and Pryce 2013:205). In addition to existing as a single room, the library was usually located on the first floor in the interest of reducing the risk of precious books suffering damage incurred by damp or flooding: a pragmatic decision that established the experiential norm of the library threshold existing as an ascension of stairs that connect the lower outer realm to a raised inner realm (Pickard 2002:3, Campbell and Pryce 2013:100). The dangers of damp and flooding were not the only threats that informed the design of libraries. Historically, the protection of books from harm was the key informant that defined the architectural expression of the library: threats of fire, theft, vermin and dust defined not only the rules and policies of libraries, but also informed material choice and detailing in their design as well as establishing the norm of the central placement of the librarian's desk for surveillance purposes (Campbell and Pryce 2013:29, Capillé 2018:418).

In addition to pragmatic concerns, symbolic aspirations have also informed the design of libraries throughout their history. Exaggerated height has always been an important spatial characteristic of libraries, used to achieve a sense of monumentality and isolate individuals as a means of improving concentration (Brawne and Pehnt 1970). The height of the book lined walls also established steps, ladders and galleries as unique furnishings that came to define the library (Campbell and Pryce 2013:25). Along with a monumentalised height, certain forms also characterised libraries, where the cube or rectangular prism was deemed appropriate for storage halls, the dome came to typify reading rooms. Of these two, the dome had particular symbolic significance for the library due to the fact that it vaguely resembles the form of the human cranium, meaning that it was used as a spatial reference to the human mind and all that is contained within (Pickard 2002:3). Finally, when collections grew large enough to warrant the design of separate buildings, early free-standing libraries took the form of pavilions in gardens, physically separated from surrounding buildings so that their elevations could be experienced in the round - this free-standing form was used to celebrate the autonomy and unique identity of the library (Pickard 2002:4).

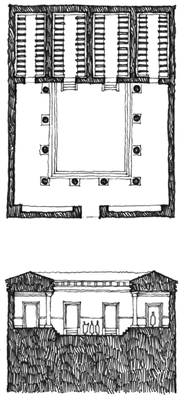
Figure 3.7 - Timeline of the library's development





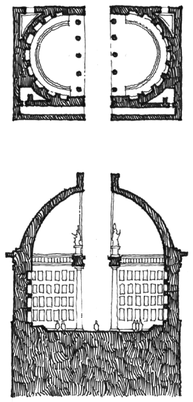
TYPE I - Mesopotamian Storeroom
Origin - Circa 3400 - 3000 BC

Built to house records of agricultural transactions, The Mesopotamian library existed as a small windowless store where clay and wax tablets were stacked facing the user on wooden shelves that lined the walls.



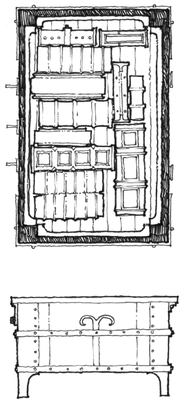
TYPE II - Greek Courtyard Library
Origin - Circa 500 BC

The Greek library consisted of a series of windowless storerooms and niche-lined corridors that were arranged around courtyards, where scrolls would be taken out from storage in order to be read and discussed in the sunlight.



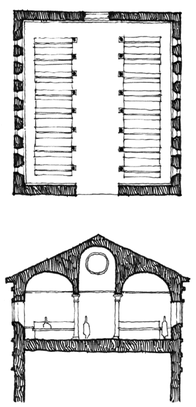
TYPE III - Roman Twin Libraries
Origin - Circa 39 BC

Usually found in pairs, one for Latin and one for Greek, Roman libraries were architecturally celebrated as grand spaces where storage was integrated into the structure in the form of timber lined armaria and raised stone platforms used for security and seating for listening to lectures.



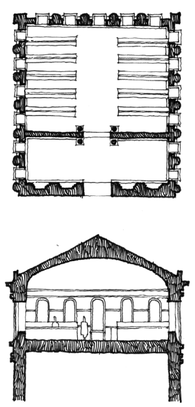
TYPE IV - Early Medieval Library Chests
Origin - Circa 600 AD

Due to the small size of collections, the library was for a long time a piece of furniture instead of a room, raised on legs to protect its contents from damp, the timber book chest provided a secure storage solution for a time when codices were incredibly valuable and highly coveted.



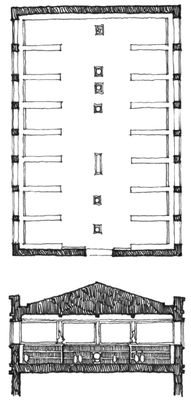
TYPE V - Late Medieval Library Room
Origin - Circa 1290 AD

Comprised of a central vaulted aisle lined with perpendicular lecterns and narrower outer aisles, in the late medieval library, codices were kept stationary and the reader would be lead to a codex to read it in place rather that have it brought to them to be read in a seat of their choice.



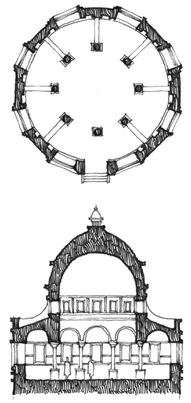
TYPE VI - Renaissance Library Room
Origin - Circa 1564 AD

Housed on the first floor to protect from damp, the Renaissance library was superficially similar to the late medieval type but only had a single vaulted aisle and was usually entered through a vestibule that extended its threshold and began to spatially separate it from the outside world.



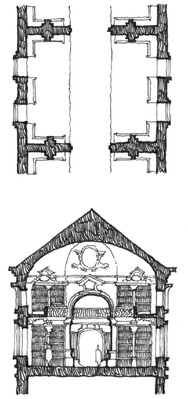
TYPE VII - Wall System Library
Origin - 1584 AD

Usually filled with both codices and museum artefacts, the wall system library was designed to make its shelving appear integrated into the walls of the room and visually separate the roof plane from the wall plane whilst using alcoves to subdivide large spaces into rooms within rooms.



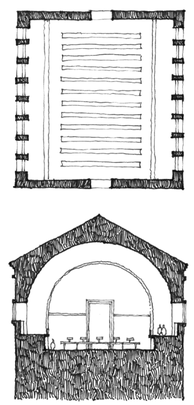
TYPE VIII - Free-standing Round Library
Origin - 1710 AD

When collections grew large enough to warrant the design of the library as its own building instead of a room, this separation was architecturally celebrated in the form of free-standing cylindrical buildings, domed for height and placed in courtyards in order for them to be viewed in the round.



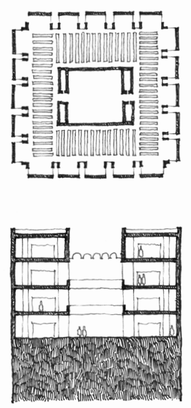
TYPE IX - Rococo Decorated Library
Origin - Circa 1728 AD

As the last libraries able to house their entire collections within a single space, Rococo libraries made use of intricate and symbolic decoration to convey contrived, complex narratives, where the architecture was intended to be read as one would read a codex.



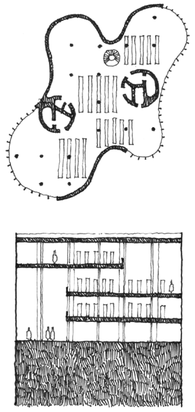
TYPE X - 19th Century Great Library
Origin - 1785 AD

Characterised by huge windows, high volumes and an austere neoclassicism, libraries of the industrial age were great halls where codices lined the walls and reading desks filled the interior, timber furnishings were replaced by iron and gas lighting allowed for evening use.



TYPE XI - Modernist Functional Library
Origin - 1960 AD

Driven by utilitarian concerns, the Modernist library was a free, adaptable space where furnishing was inconsequential to structure, roughly square in plan, codices were stored in the central deep spaces whilst reading spaces were arranged around the edges to utilise natural light.



TYPE XII - Contemporary Resource Centre
Origin - Circa 1990 AD

Often wrapped in a facade that makes use of text as a decorative motif, the contemporary resource centre is closely related to its Modernist predecessor and also makes use of the system of central storage spaces surrounded by reading spaces but houses them behind a novel exterior form.

3.5

THE CONTEMPORARY LIBRARY

Rather than damage the relevance of the institution, the popularisation of the computer and the growth of the internet has not only increased the necessity of the existence of the physical public library, but has also served to update its contemporary civic role (Prizeman 2011). The internet has effectively absolved the library of its responsibility to collect, store and make accessible the entirety of human knowledge and in doing so has shifted the focus of the library towards facilitating the meaningful experience of accessing content (Capillé 2018:409). Where the internet exists as an infinite, amorphous, digital realm of uncontextualised information accessed by individuals through a screen, the physical library exists as a datum, offering structure, context and the possibility for (non-digital) social interaction (Bennett 2013:175).

The contemporary public library is a place of order in the chaos of a disembodied digital age. Compared to words that simply appear on a screen, the information within a library is classified, ordered according to a hierarchy and contextualised within the discourse of its intellectual neighbours on the surrounding shelves (Bennett 2013:175, Huff 2003:36). The library as a physical space structures how content is experienced, creating an environment of discovery, musing and inspiration (Bennett 2013:175, Aurand 2011:13). The accessible nature of the institution also defines it as a place of gathering, discussion and chance encounters, a place which creates opportunities for individual itineraries to overlap and for formal or informal congregation to occur (Brawne and Pehnt 1970).

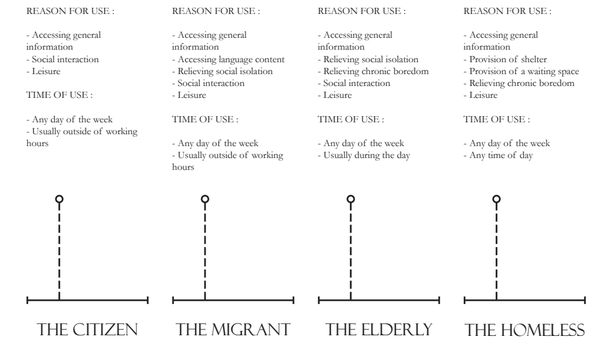
3.5.1 - THE CODEX

Physical codices necessitate a physical space within which to be stored and therefore demand that the library exist as an embodied and real space, meaning that the material nature of the codex is essential to maintaining the library's role as a fixed point of order and gathering in the face of the infinite and the unstructured (Bennett 2013:175). This nature of the public library as an enclosed physical space has ensured its relevance in the face of changing technologies but if it is to retain that relevance it cannot allow itself to be absorbed into the amorphous digital realm it provides respite from. Thus, the presence of physical codices offers a functional legibility and identity to the institution that defines its essential character and differentiates the library from the internet cafe or the airport lounge.

3.6

THE USER

Due to the fact that the public library is free to be used by anyone on the condition that they abide by its rules, this highly democratic institution serves a diverse range of individuals, each using the library at a different time for a different reason.



SEQUENTIAL RITUALS THAT DEFINE THE LIBRARY TYPE

01 LOCATING
How do you find what you're looking for?

02 RETRIEVING
How do you reach it?

03 ACCESSING
How and where do you read it?

04 RETURNING
How does it get back to the shelf?

Figure 3.8 - Rituals that define the library type

3.7

USING THE LIBRARY

Public libraries usually serve multiple roles in their civic context, because of this they can be understood as having essential and ancillary functions. Essential functions refer to spaces and services that are necessary for the library to operate effectively whilst ancillary functions, if removed, their absence would not affect the library's day to day operation. In order to celebrate the autonomy and relevance of the institution, the number of ancillary functions included in this scheme was limited so as not to dilute the library's civic role and value. Regarding the library itself, four sequential rituals characterise the way that a public library is used. These rituals are namely (in order); locating the content, retrieving the content, accessing the content and returning the content. Depending on the type of library, these rituals will take place differently. For example, the act of returning content in a specialist library may take the form of the librarian carrying a single book back to its shelf or cabinet, whilst a large national or university library will require a far more involved logistical effort which may even necessitate complex book-moving machinery or off-site storage facilities. Informed by the differences in the way libraries are used and the importance of human experience in the context of this investigation, the community library was deemed to be the most appropriate library for this investigation into addressing institutional placelessness. The small size of the community library along with the generally unspecialised nature of its collections means that the library user will usually locate content by browsing its collections instead of via a remotely accessed catalogue. The necessity of browsing makes the majority of community library's spaces accessible for the user to explore and discover, increasing the potential for meaningful and rich spatial experiences to occur. The programme of the community library designed for this dissertation includes both essential and ancillary functions.

Figure 3.9 - Accommodation schedule

GENERAL COLLECTION	Book storage, 28 workstations, 13 reading seats and 10 laptop stations	615 m²
PERIODICAL COLLECTION	magazine and newspaper storage, 8 reading seats and 6 laptop stations	98 m²
REFERENCE COLLECTION	Book storage, 15 workstations and 9 reading seats	80 m²
CHILDREN'S COLLECTION	Book storage, 22 reading seats with additional beanbags	217 m²
CHILDREN'S LIBRARIAN'S OFFICE	Workstation and storage for 1 person with meeting desk	20 m²
CENTRAL FOYER	Circulation desk for 2 librarians, bag check in and exhibition space	139 m²
GROUP MEETING BOARDROOMS	5 x ten seater boardrooms and chair store	117 m² (22.5 m² each)
PRIVATE STUDY CELLS	6 x private workstations	48 m² (6 m² each)
STORE ROOMS	Children's games and chair store, deep storage and cleaner's store	60 m²
PUBLIC TOILETS	Female: 2 wc and 1 basin Male: 1 wc, 2 urinals and 1 basin	25 m²
STAFF LOUNGE AND KITCHEN	Lounge and kitchenette with basin	12.5 m²
REPAIR AND SORTING OFFICE	Workstation and storage for 3 people	12.5 m²
ADMINISTRATION OFFICE	Workstation and storage for 3 people	12.5 m²
HEAD LIBRARIAN'S OFFICE	Workstation and storage for 1 person	12.5 m²
AUDITORIUM	80 seater hall with covered outdoor spill-out space and bar	217 m²
EXHIBITION GALLERY	Sales counter and main gallery	98 m²
CAFE	Restaurant seating, kitchen, front desk, waiter's station, and back of house	117 m²
BUS STOPS	2 x Covered areas and 20 seats each	100 m² (50 m² each)
PICNIC AREA	Seating for 44 park users	136 m²
PARKING FACILITIES	Streetside parking for 32 cars	430 m²

Essential functions

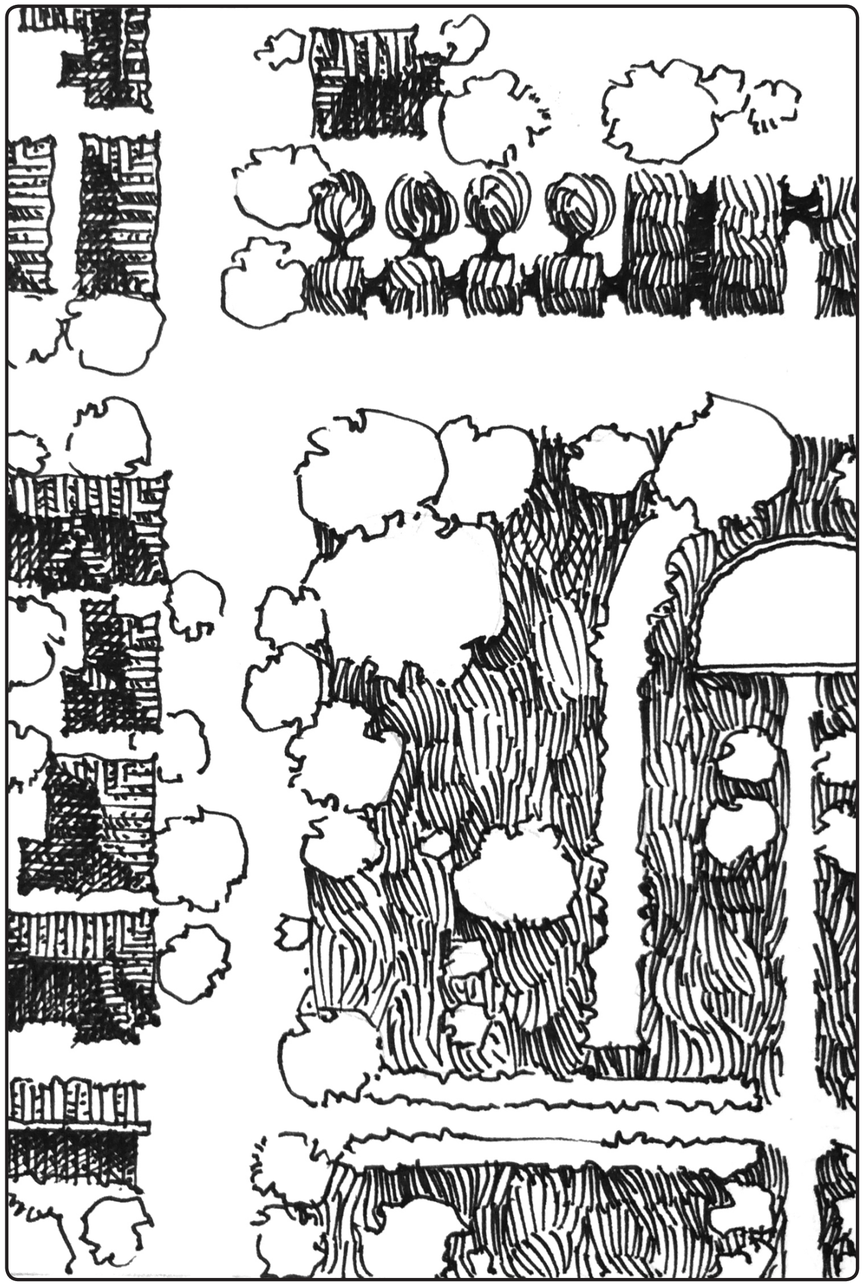
Ancillary functions

CHAPTER

04

A GARDEN IN THE CITY

Understanding the site and surrounding Arcadia in the interest of contributing to its character of place.



4.1

ARCADIA

Arcadia is a historic suburb just east of the Pretoria inner city that originally housed the administrators and clerks who formed the governmental workforce of the capital city. Named after the original farm upon which it was established, the word 'Arcadia' alone conjures images in the mind of an idyllic pastoral landscape and a utopic relationship between this perfect realm and those who inhabit it. The reality of Arcadia as a visually picturesque place exists not too far from this nomenclative ideal, containing a high concentration of historic houses and embassies as well as the presence of no less than three large public parks and a diversity of street tree species (Tshwane 2017:100, Tshwane 2005:63), it is these physical conditions along with the communities that occupy it that create for the suburb its well defined identity and unique quality of place. Along with having this distinct character of place, Arcadia is to be injected with various new programmes including institutions as part of a larger framework for the future development of the area. This overlap of a strong sense of place and the necessity for institutional functions within the suburb, means that Arcadia provides the ideal conditions for an investigation into a place-based approach for the creation of civic institutional architecture.

4.2

A FUTURE ARCADIA

The call for the injection of civic institutions into the Arcadian built fabric is advocated by the City of Tshwane in their RSDF document. In response to this identified need, this investigation situates itself within the imagined future context outlined by the RSDF. The framework proposes a mixed-use region referred to as the Embassy Precinct that would enclose the eastern half of Arcadia and a small sliver of Hatfield whilst containing a low density mix of residential, commercial, retail and institutional functions whilst retaining the areas many embassies (Tshwane 2017:104). The precinct is understood in the framework as a lesser node that acts as a transitory space between the greater nodes of the Hatfield Core and the Inner City, the consequences of such an approach limits development to smaller scale interventions within the precinct (as compared to a rapidly growing and rapidly homogenising neighbouring Hatfield)(Tshwane 2017:99), a condition that aids in the conservation of the Embassy Precinct's existing fine grained and suburban character of place.

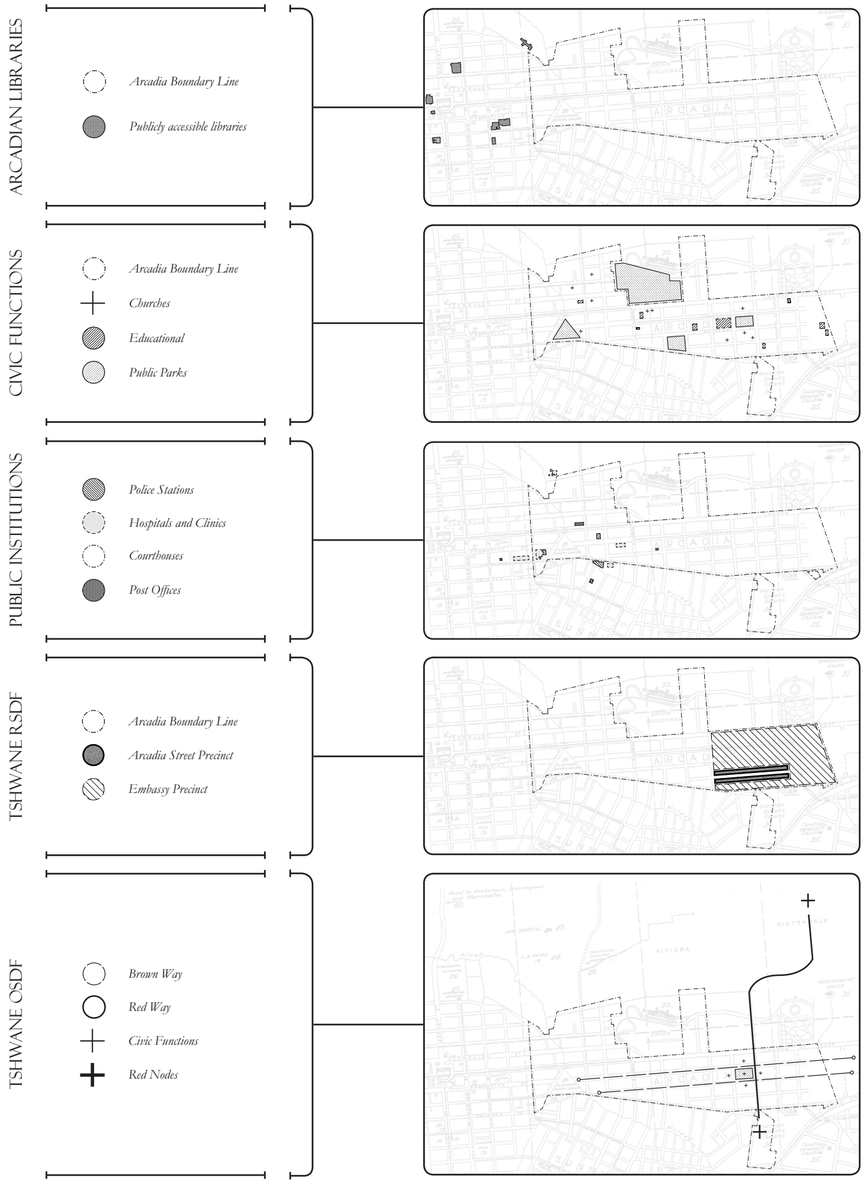


Figure 4.1 - Urban mapping of Arcadia

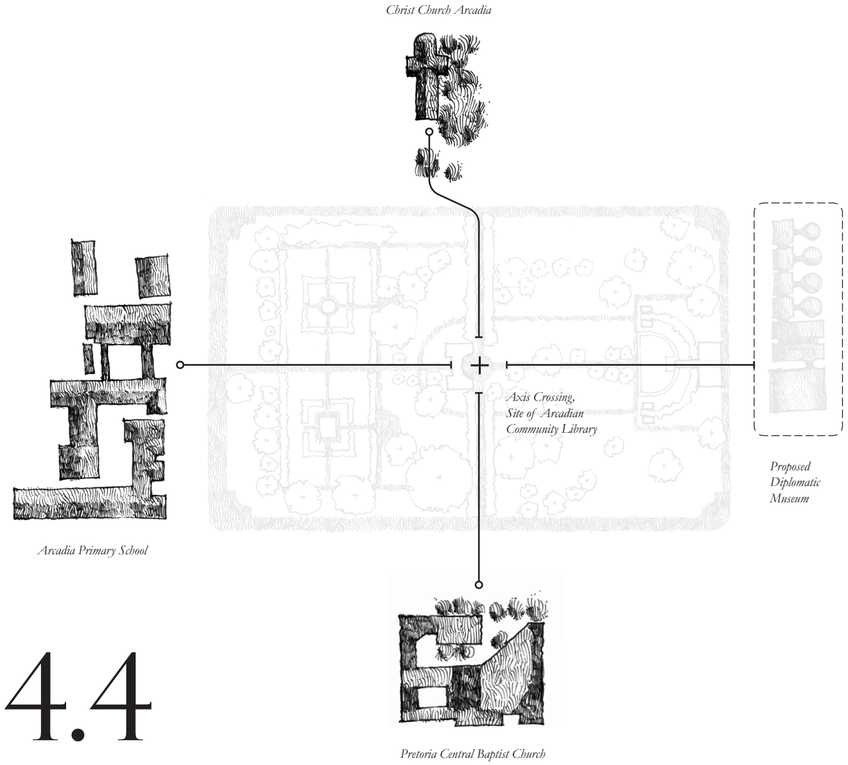
4.3

A NEIGHBOURHOOD APPROACH

From the insight gained from the mapping and qualitative understanding of the suburb, the urban vision which forms the context for this investigation acts as an elaboration for the existing RSDF proposal for the area. The elaborated urban vision situates itself within the RSDF whilst addressing a scale of investigation neglected by the existing RSDF. Where the existing framework addresses issues at a large scale (that of the precinct) and at a small scale (the treatment of individual streets) there are no proposals for dealing with an intermediary scale that would effectively mediate the scale of the urban zone with the scale of the human user. In response to this, the elaborated urban vision advocates a neighbourhood approach, proposing that Arcadia be broken up into a series of distinct neighbourhoods or districts, each legibly defined and having their own character of place, similar to the neighbourhood condition that characterises other large cities such as New York or Barcelona. This defining of the proposed neighbourhoods acts as a formalisation and celebration of the existing experientially distinct regions that make up Arcadia. The subdivision of a single homogenous region into various smaller ones is an approach informed by Harries (1997) who argues that humanity demands defined regions, boundary and spatial heterogeneity at a human scale in order to meaningfully associate with places and claim ownership over them.

An issue identified in the process of mapping Arcadia's public institutions was that of the sparse distribution of certain types of public institutions such as hospitals, courthouses and police stations as well as the total lack of any public libraries across the entirety of the suburb. This issue provided an opportunity to strengthen the individual character of place of the proposed neighbourhoods through the architectural expression of the institutions injected into institutionally impoverished neighbourhoods. Leon Krier (1983) argues that it is not just the urban grain, nor just a place's monuments and civic structures that create a sense of place but rather, place is defined by the interaction between these two conditions. As such, these proposed neighbourhoods provided the ideal context for the injection of institutional interventions concerned with the creation of place and contextual sensitivity.

Figure 4.2 - Proposed urban vision overlaid onto Tshwane RSDF and OSDF and the reintroduced historic tram lines



4.4

A CIVIC HEART

In response to the call for institutional development in the area by the RSDF, existing Arcadian public institutions were mapped in order to gauge their distribution in order to determine the appropriate siting for an intervention. Along with this mapping, a qualitative analysis of the greater Arcadia was undertaken as a means of developing an understanding of the physical and the atmospheric qualities of the context on an urban scale.

Through the interrogation of these studies, the formally designed Venning Park was identified as the ideal site for intervention. A trio of civic buildings around the perimeter of the park terminate its crossing axes, establishing a subtle relationship with one another and the open public space that binds them together. Along with the central placement of the park in relation to surrounding embassies, schools and homes, the conscious placement of the institutions in the ensemble in relation to one another defines a distinct and identifiable urban region around and within the park which holds the potential to develop into a future civic heart for Arcadia East.

Figure 4.3 - Axes relating the park to its context

Figure 4.4 - A sunken garden in the park

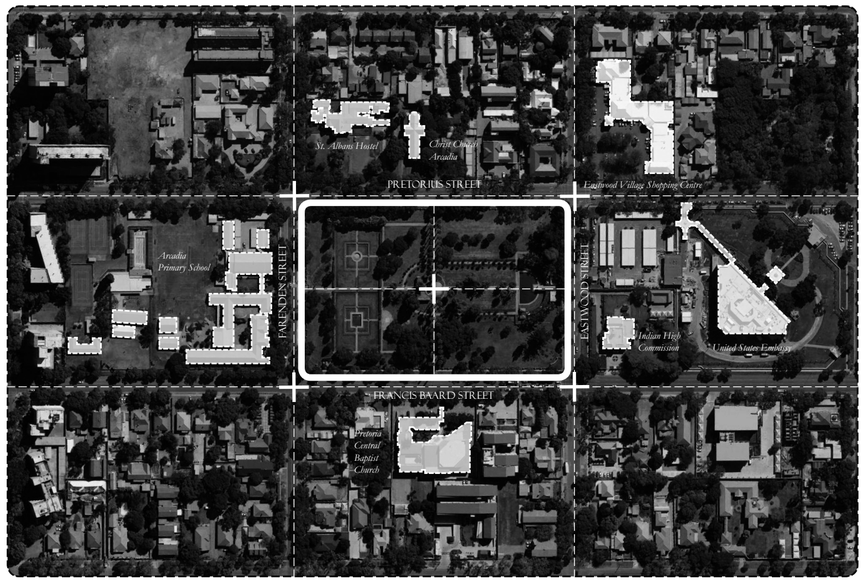


Figure 4.5 - Locality map of site

4.5

VENNING PARK, A BRIEF HISTORY

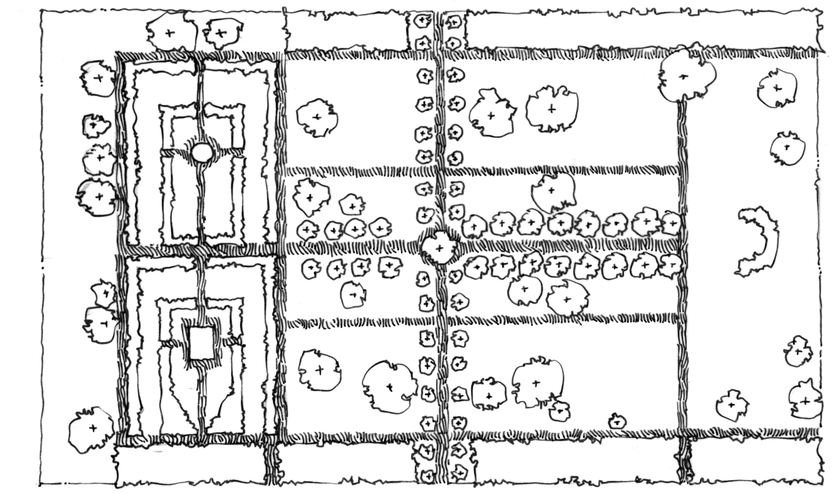
Originally named Eastwood Square when it was established in 1890, Venning Park is one of Pretoria's oldest parks and is exemplary of the city's historical character of place. Used as a park since 1912, the construction of the formalised layout of the park began in 1932 when slate paths, stairs and retaining walls were built according to the Arts and Crafts tradition and as a reference to the gardens of the nearby Union Buildings (Easton 1985). Along with the few extant trees that were planted when the park was established, this stonework is the most historically significant contributor to the atmosphere of the park. The park remained relatively unchanged from when its original layout was completed in ca. 1939 until 1981 when new rose gardens were designed to fit within the historic formal layout (Easton 1985). Although the addition of the new rose gardens was sensitive, the park underwent a heavy and somewhat ham-fisted remodelling in 1983 which resulted in the park as it can be seen today. The original layout was changed in the interest of improving the flow of foot traffic within the park and new public toilets, shops and a café were built in an eclectic post-modern style. All of these buildings now stand empty and the public frequently take shortcuts across the lawns rather than use the paths on site.

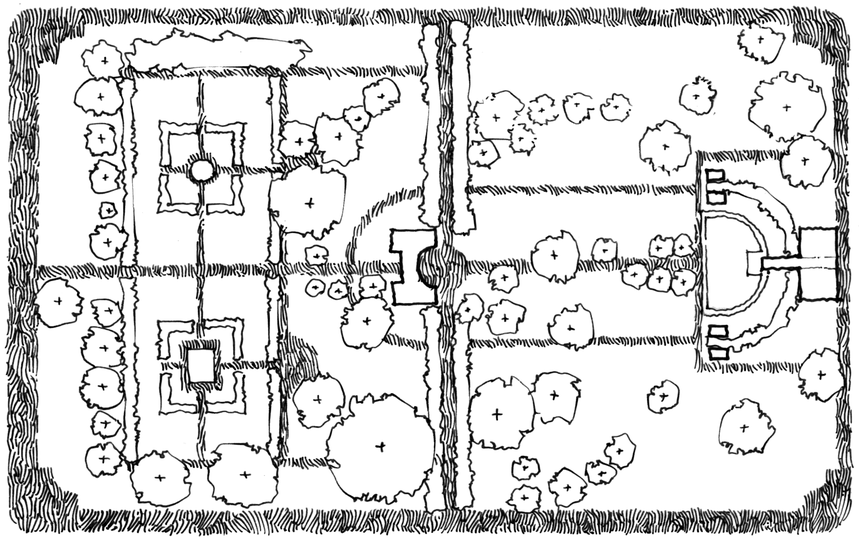
4.5.1 - A STATEMENT OF SIGNIFICANCE

In order to retain the historic character of Venning Park and its significance as a place, several aspects of the park's design need to be respected by any new interventions on the site. The presence of an ordered, formal layout, palm lanes and pruned trees lend the park its recognisability within the city and signify its membership in a larger network of large historic gardens in the city of Pretoria. The historic stonework and relationship between the park's axes and the surrounding civic buildings root the park into the surrounding context of Arcadia whilst its vegetation in the form of mature trees, pond lilies and rose bushes references the parks own history. Although the rose garden was added in living memory, the presence of roses in the park references a 19th century Pretoria known as 'the city of roses' for the rose bushes and water channels that lined its streets (Easton 1985). These rose bushes also link the park to other rosariums throughout the city, such as Burger's Park, Meyer's Park and Franzina Park. The final aspect of the parks character of place is the presence of a café. Although only added in 1983, the café has rooted itself so strongly in the public associations with, and memories of, the park that the presence of such a function has been deemed worthy of conservation.

Figure 4.6 - 1948 layout of Venning Park

Figure 4.7 - Contemporary layout of Venning Park





4.6

THE OSDF

Parallel to the RSDF within which this investigation situates itself, the Tshwane OSDF will also be responded to as a vision for the future context of the city, specifically regarding the siting of the study in a public open space in the form of Venning Park. The OSDF characterises the various types of open spaces that comprise the fabric of the city into a taxonomy of different types of nodes and ways (fig.4.1). The most relevant of these categories when referring to Venning Park are the red and brown categories. Venning Park itself is considered as a Red Node flanked on its northern and southern boundaries by two prominent Brown Ways that link the Hatfield core area to the inner city. Crossing these Brown Ways, Eastwood Street takes the form of a Red Way which links the Loftus Red Node in the south to the Pierneef Ridge node in the north with Venning Park existing as the halfway point (Tshwane 2005).

4.6.1 - RED NODE - VENNING PARK

Red Nodes are defined by the OSDF as irreplaceable place-making elements within the city's urban fabric and that their significance depends on their role of lending the city its unique character and sense of place. With this description of Venning Park as place, the character of the site needs to be considered worthy of conservation as opposed to subversion or reinvention due to the role it plays and its irreplaceable nature. In addition the OSDF states that developments surrounding Red Nodes should be of a landmark quality and therefore retail and commercial developments are inappropriate. As such Venning Park provides the ideal location for the development of institutional functions with the aim of celebrating the node as a defined civic heart for the precinct.

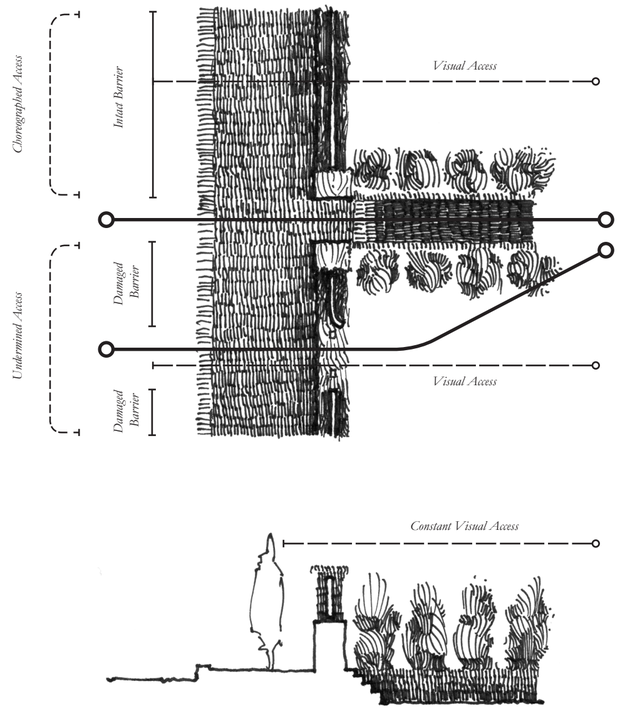
4.6.2 - RED WAY - EASTWOOD STREET

Red Ways are described in the framework as processional or ceremonial paths that connect spaces of significance within the city. The Eastwood Street Red Way running past Venning Park will be imagined as a formalised, landscaped boulevard catering for pedestrian traffic as per the recommendations of the OSDF. Such a condition makes it critical that the eastern entrance to the park be carefully considered due to the heavy flow of users walking past it.

4.6.3 - BROWN WAY - PRETORIUS STREET AND FRANCIS BAARD STREET

As per the RSDF recommendations regarding the transitory nature of the Embassy Precinct, the two Brown Ways that flank the site acts as linkages or urban corridors that connect two other precincts by crossing Arcadia. The OSDF recommends that Brown Ways be public transport and pedestrian oriented paths making the treatment of the northern and southern entrances to the site an additional consideration for this study.

Figure 4.8 - Venning Park's character as a place



4.7

A STATE OF DERELICTION

Upon visiting the site for the first time, as a means of beginning to understand its condition, some direct observations were recorded relating to the existing use and state of the park. Regarding its current use, the park is primarily used as a short-cut for people wishing to cross the block, as its accessible paths neatly subdivide the city block into four easily walkable quadrants. There are also fewer individuals who linger within the park itself than those who merely cross it or linger along its periphery, even the learners from the neighbouring school avoid waiting within the park itself and remain across the road on the pavement in front of the school buildings. In addition to the abovementioned condition (or possibly the cause of it) the park currently exists in a severe state of disrepair, bordering on dereliction (fig. 4.12 - 4.15). All of the buildings within the park are permanently locked with many having had their windows broken and one even totally gutted by fire with only the external skin left standing as a ruin. Several Arts and Crafts movement stone retaining walls and steps have also been damaged along with portions of the perimeter fence having been torn out or cut away, presumably to be sold as scrap. Although the lawn is mowed and the park is relatively clean within, the entire perimeter of the park is heavily littered with the signs of human occupation left there by the small community of homeless men who have made the empty ponds and sealed off buildings their home.

Figure 4.9 - Accessing the park

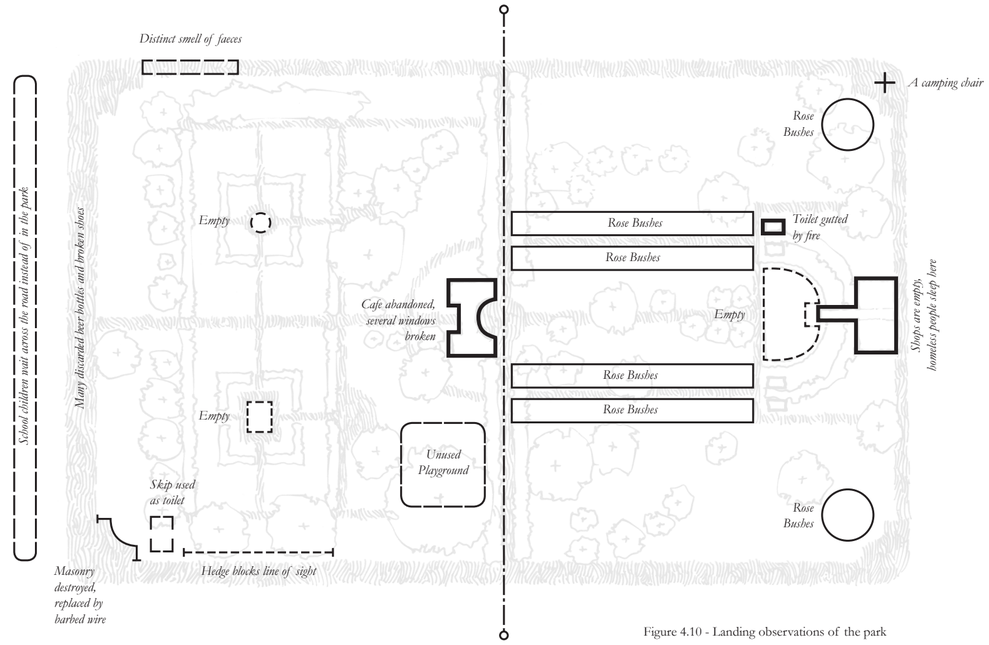


Figure 4.10 - Landing observations of the park

Figure 4.11 - Short-cut routes across the park

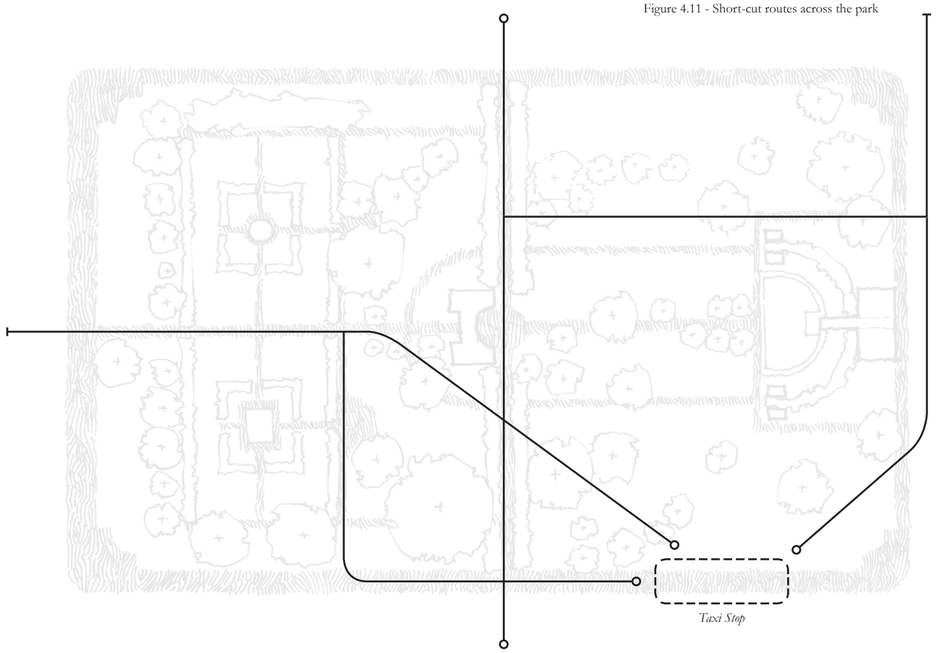


Figure 4.12 - Signs of human occupation

Figure 4.13 - The fire-gutted ruin on site

Figure 4.14 - Destroyed boundary walls

4.7.1 - A NOTE ON THE APPROPRIATE

Regarding the overlap of the site's existing state of dereliction, limited public use and 'Colonial' or 'Western' layout, it might seem logical to assume that this overlap is what has caused the current state of dereliction. Due to the fact that the park was well used until as recently as 2014, this dissertation would argue that there exists no correlation between the levels of public use and appropriation of a spatial intervention, and its architectural style. In support of this argument, one need only compare the physical state and levels of appropriation between two other public landscapes in the city of Pretoria, namely the gardens of the Union Buildings in Arcadia and Freedom Park on Salvokop. The latter example exists in a similar state of repair and use (although not as severe) as that of Venning Park, with a high concentration of litter, many lighting fixtures and handrails being pulled from their brackets, inoperational water features and empty landscapes defining ones experience of Freedom Park, a condition that persists regardless of the sites architectural aspiration to denounce all Western influences and define a new, more appropriate(able) African style. In contrast to the condition of Freedom Park however, the Union Building gardens exist as a well-used and well-maintained public space that serves the Arcadian community regardless of its unashamed Neo-classical expression. From the comparison of Venning Park, the Union Building Gardens and Freedom Park it is clear that an 'appropriate' style will not create an appropriated place, as such the existing architectural style of Venning Park will not be considered as a condition that has influenced its ongoing dereliction or levels of use, ownership and appropriation by the local Arcadian community.

Figure 4.15 - Venning Park's state of dereliction

Figure 4.16 - The north-south axis

Figure 4.17 - Single park as two rooms

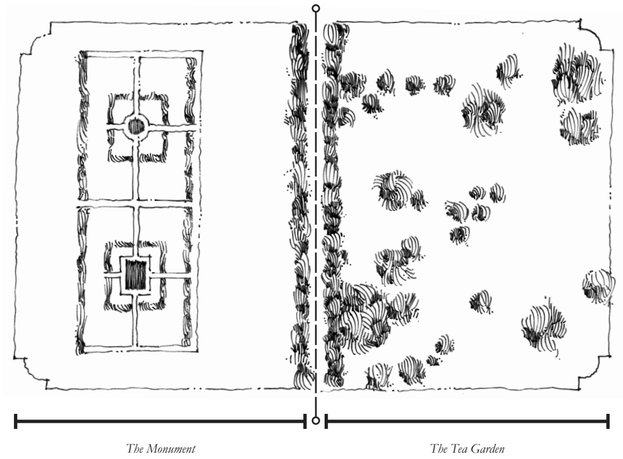
Figure 4.18 - Character of the western room

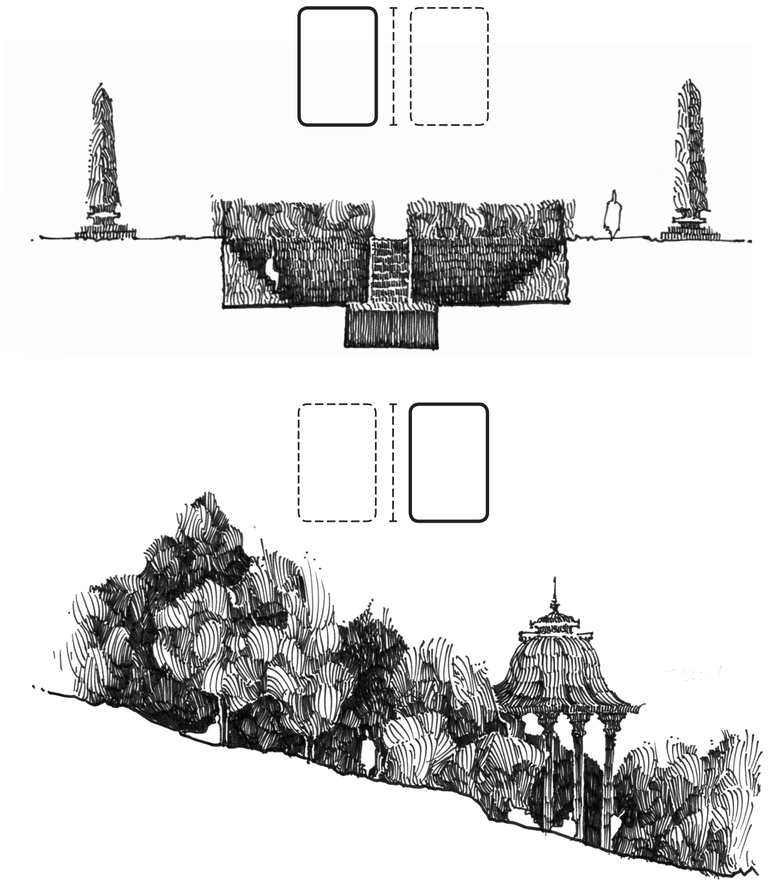
Figure 4.19 - Character of the eastern room

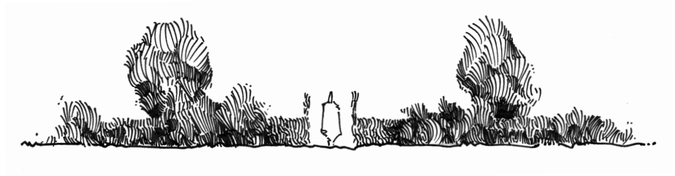
4.8

EXPERIENCING THE PARK

Aside from its historical significance, the experiential qualities and atmosphere of the park also defines it as a distinct place within the city. A low wall surrounds the edge of the park, which offers constant visual access into the park, with the wall only breaking to allow one to enter the park at specific points where the axes reach the edges of the site. Upon entering the park at either of the two axes, one is made aware of the fact that they each facilitate a distinct spatial experience of the park, with the north-south axis lined with tall palms framing the eye's perspective encouraging a rapid, forward focused movement across the park (fig. 4.20). The east-west axis by comparison is loosely defined and lined with flower beds and shrubs along either side, encouraging the eye to wander from side to side, taking in the visual spectacle of the park as opposed to directing the gaze and steps towards the terminus of an axis (fig. 4.21). On an urban scale the axes are terminated by surrounding civic buildings. When one reaches the edge of the park, the termination is less obvious, instead one is only vaguely made aware of the prominent building across the street, tying the park gently into its surrounding context. The distinct character of the axes that define the park's spatial quality also divide the park into smaller 'rooms'. This division is most prominent regarding the presence of the north-south axis where the tall, regularly spaced trees form a high wall that splits the park down the middle into two distinct rooms. These rooms each have an identifiable character: the eastern room with its diverse planting palette, open lawns, high concentration of rose bushes and post-modern pavilions gives one the impression of a pleasure garden, a picturesque landscape where the enjoyment of a tea party would not seem out of place (fig. 4.19). In contrast to its eastern neighbour, the western room contains a far more limited planting palette, with rose bushes replaced by stone retaining walls. The defining features of this room are the symmetrical sunken gardens, their monumental quality giving the room a sense of austerity suggesting a place of contemplation as opposed to celebration (fig. 4.18). In comparison to its counterpart, the east-west axis achieves a far more subtle sense of separation, indicating the effectiveness of the various spatial tools used to define space within the landscape. These tools can be broken up into two broad categories, namely the three dimensional free standing elements such as trees, hedges, buildings, low walls and sunken spaces as well as the two dimensional surface treatments which address the ground plane, like paths, planting beds, ponds and expanses of lawn (fig. 4.22).







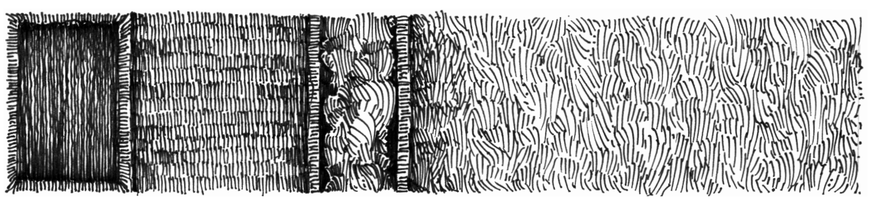


Figure 4.20 - Experience of the north-south axis

Figure 4.21 - Experience of the east-west axis

Figure 4.22 - Space defining elements of the park

Figure 4.23 - The east-west axis

CHAPTER

05

THE DEVIL'S ADVOCATE

An investigation into the relevance of contrary or contemporary arguments surrounding ways of making place and form.

5.1

BTU COTTBUS IKMZ

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Brandenburg University of Technology, Brandenburg, Germany	2004	Understanding the nature of the contemporary 'resource centre'

ARCHITECT :

Herzog and de Meuron

CRITICAL ANALYSIS

In the interest of distancing the new facility from the traditional library type in order to appear forward thinking and technologically sophisticated, the new library at BTU Cottbus was given the somewhat inelegant title of the Information, Communications and Media Centre. Due to having an uncomfortably long title, the facility is usually referred to as the IKMZ (an abbreviation of the official name), or despite the intentions of the university, as the library. Along with a new name, the IKMZ was designed with a novel architectural form to deny the possibility of association with the traditional library and announce itself as a landmark building for the campus. Its amoeba-like plan was allegedly informed by mapping and overlaying natural flows of human movement (Herzog and de Meuron 2005), a claim that falls short on closer inspection of the plan which reveals that the form was generated by layering a series of perfect circles (fig.5.2). Even if the circles did generate a volume capable of facilitating the optimal flow of movement within, this is interrupted by long parallel rows of orthogonal shelving which effectively cut through the organically designed space and funnel or block the flow of movement within.

The shapeless form of the building is wrapped in a continuous glass outer skin, which is uninterrupted and unarticulated regardless of whether the inner skin behind it is solid or transparent. This lack of articulation makes the building appear larger than what it actually is from the exterior, a condition that is emphasised by the homogeneity of the pattern that covers the entire continuous façade. Due to its lack of references to any typological informant, and in accordance with the trend of contemporary libraries, the exterior skin of the building is decorated with a text based motif of layered and jumbled letters from various alphabets. Rather than use the form, material or essential elements of the architecture to express the buildings functional role, it instead relies on this superficial and meaningless pattern applied to its outer skin. Used to control solar gain into interior spaces, when experienced from inside, the arrangement of letters in the pattern blocks important views of the campus, such as those of important buildings, and instead frames arbitrary views of things around the base of the IKMZ such as pavement kerbs and dustbins.

Because of the uninterrupted flowing skin within, the organic form and the intention that all interiors spaces be connected and seamlessly flow into each other, the interiors lack spatial hierarchy and recognisability making them impossible to easily navigate. In an unsuccessful attempt to rectify this issue, the interiors are painted with garish, artificial colours, presumably chosen in accordance with the information-age theme of the building. Instead of using these colours in specific functional areas to demarcate space and establish specific rooms marked by specific colours, the bands of colour stretch across floors, walls and even different levels binding spaces together rather than distinguishing them. The metal ceilings and shelves within are used to reflect these bright colours in order to create a psychedelic effect (Herzog and de Meuron 2005) rather than assist with the problem of wayfinding, and despite this aesthetic gimmick, the fittings are generic and unremarkable, as is the way the building is planned and constructed. Despite intending to appear forward thinking and define the new information age library, the IKMZ is essentially a conventional modern library, built and laid out in the same way as its pre-internet predecessors where columns arranged on a grid support floors which house books clustered in the centre of the plan with reading areas arranged around the periphery.

Figure 5.1 - The shape of the new 'library'

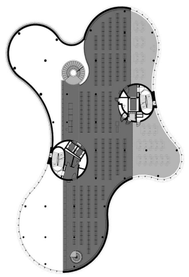


Figure 5.2 - Amorphous typical floor plan

Figure 5.3 - Facade as continuous, unbroken skin

Figure 5.4 - Using colours to define space

5.2

DISNEY WORLD SWAN AND DOLPHIN RESORT

LOCATION OF PROJECT

Epcot Resort Area, Orlando, United States of America

DATE OF COMPLETION

1990

REASON FOR INCLUSION

In order to prevent any associations with postmodern classicism

ARCHITECT :

Michael Graves

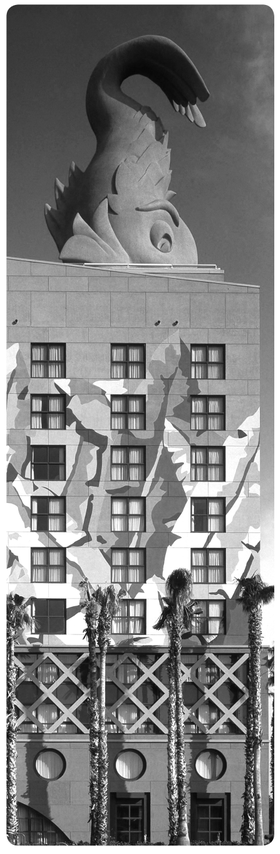


Figure 5.5 - Applied, themed decoration

Figure 5.6 - The central triangular wing

CRITICAL ANALYSIS

Analysed to understand the contemporary association between formal geometry and the failings of postmodern neoclassicism, the Swan and Dolphin resorts have no doubt contributed towards the current apprehensiveness amongst architects surrounding the value and contemporary role of 'historical' or formal geometry. A condition that has taken root not because of any inherent failings of the geometry itself, but rather because of its association with a particular movement and the movement's subsequent failure to convince.

Based on a narrative contrived by Graves himself in the hope of creating characters worthy of their own film produced by Disney, the resorts were designed to symbolise the story of a pod of dolphins, a pair of swans and a mountain erupting from the depths of the ocean, with the central triangular wing representing the mountain (Perez 2010). The architecture is an essentially Modernist edifice with an applied decorative theme, the decoration is superficial and rather than imbue the work with any kind of cultural or aesthetic value, it is deliberately inauthentic in an attempt to evoke a sense of irony. Void of any functional roles like protection from weathering, the decorative elements lend the architecture a tangibly cheap and artificial quality thanks to the fact that they are hollow ornaments built from wood and fibreglass or painted murals of pastel colours. To complete the superficial theme, the presence of water which is central to the narrative of the resort is not integrated in the architecture in any meaningful way (such as celebrating the handling of rainwater from above or the marshy soil below), rather water has been incorporated in the form of fountains that occupy central spaces in front of the buildings or within them and are inconsequential to the architectural manifestation of the scheme. Critical analysis of the central triangular wing in the context of such a project reveals that although its form is not inherently spatially problematic it is rather the form's inclusion in a design replete with the above-mentioned artificial and ironically applied decoration which acts to undermine the form's essentially stable and monumental character. The extrusion of a triangular plane as a mountain in the context of such a scheme evokes an association with a cardboard cut-out of a mountain, a thin and unconvincing representation. The entire wing is made into an insubstantial applied ornament thanks to the architectural approach of the resort within which it is contextualised indicating that it is not the form itself which is problematic, but rather the nature of the overall scheme within which it is found that defines the user's experience and the form's architectural potential.

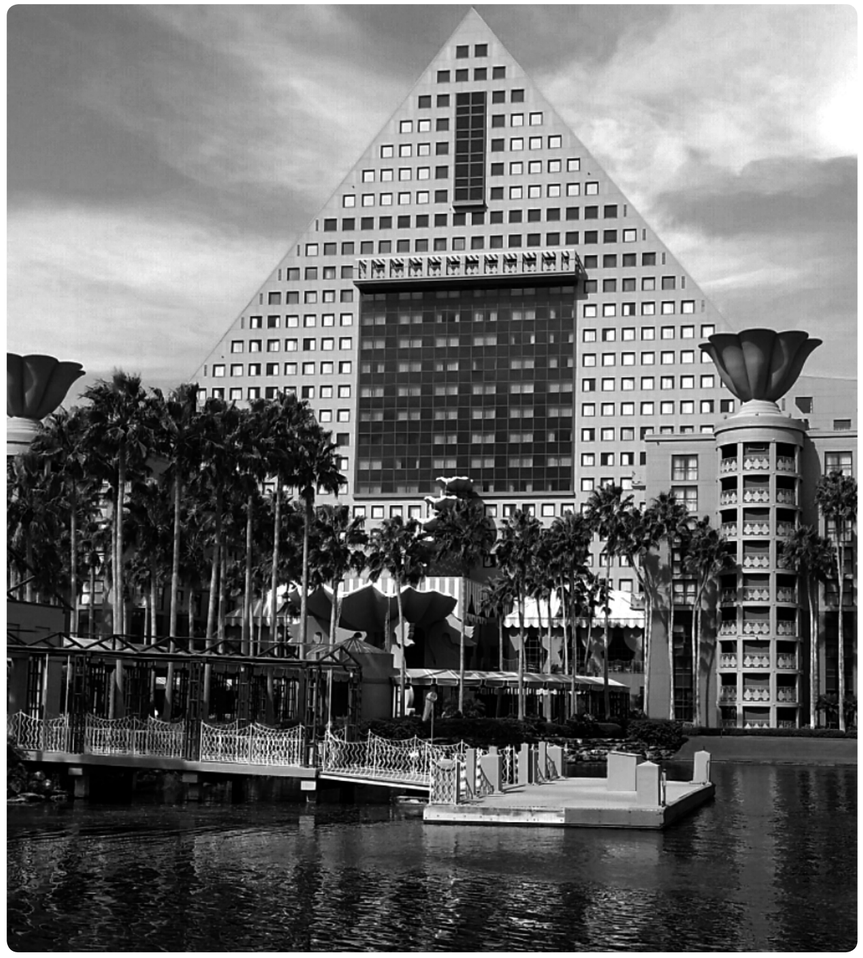


Figure 5.7 - Inhumane scale of the hotel blocks

Figure 5.8 - Superficial use of water

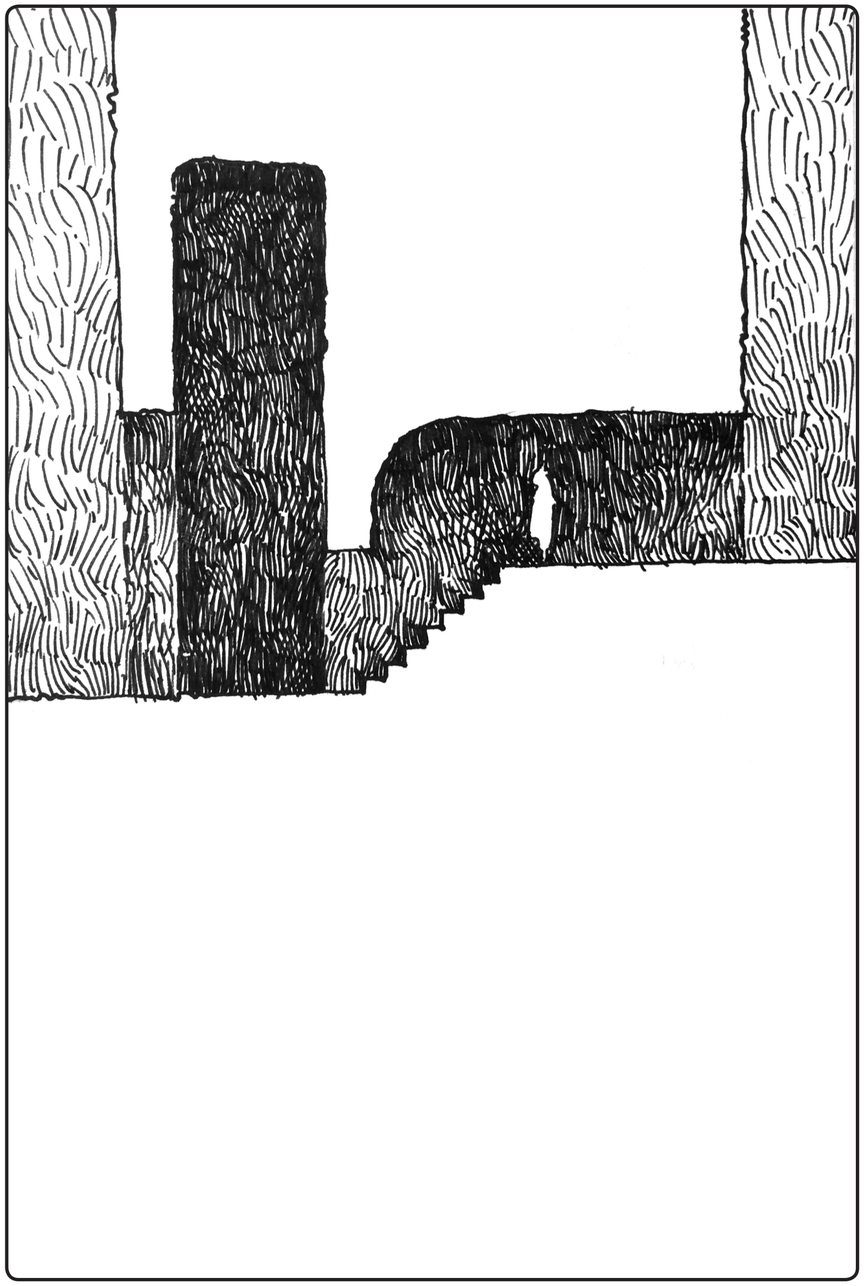
Figure 5.9 - Ironically cheap decoration

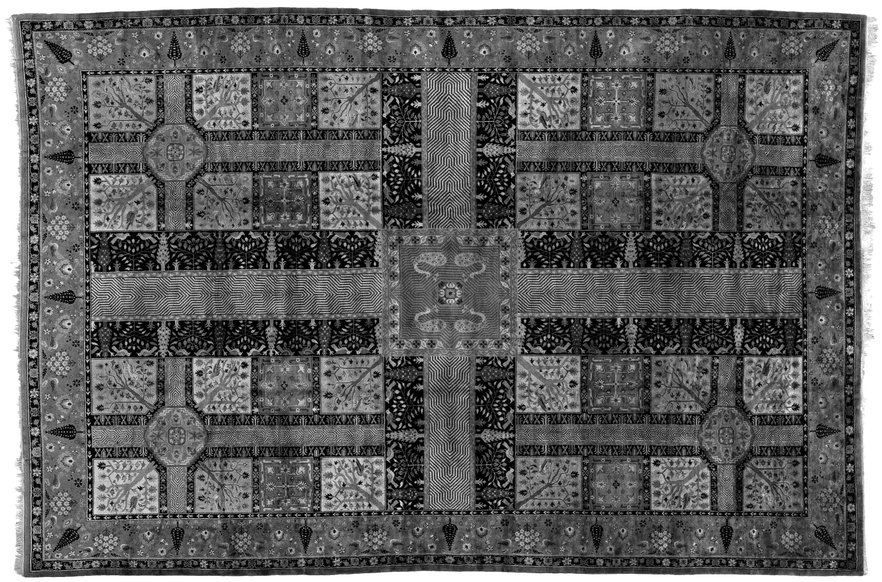
CHAPTER

06

ORDER FROM CHAOS

Applying the principles advocated by the triad to giving form to the library and documenting the design process.



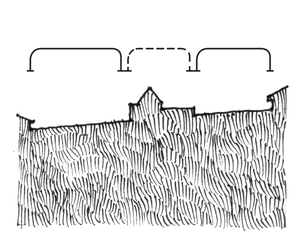


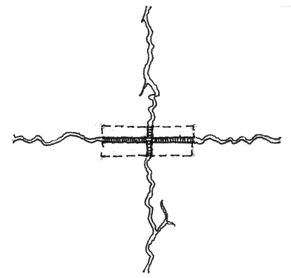
6.1

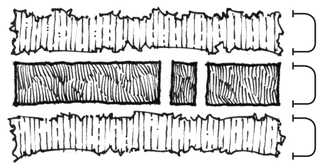
CONTEXTUAL RESPONSE

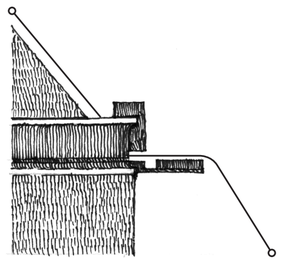
The first considerations of designing a library as place, related to its site. The central placement of the building within the park was an urban response informed by the condition of the surrounding blocks where all of the civic buildings that neighboured the park terminated an end of one of the axes extending out of the park. The library was placed at the crossing point of the axes in response to this existing relationship between the civic buildings and the park and it allowed the library to be separated from its surrounding context by a buffer of open space so as to enhance a sense of enclosure and threshold when one enters the building. A pavilion within a landscape was also deemed an appropriate architectural manifestation for an investigation concerned with the design for human experience. The crossing point of the axes within a landscape is also significant historically due to the fact that the four paths emanating from it were originally conceived as representations of the four rivers of life in the landscape tradition of ancient Persian gardens (a tradition that established the norm of crossing two axes to divide a garden into four quadrants) - this central point was considered an appropriate site for a pavilion or a pond (Jellicoe and Jellicoe 1995). In response to this tradition, the library was designed as a celebration of water through the articulation of its storm water system, the treatment of the four 'rivers' and how they are experienced within the building and the inclusion of a series of perimeter ponds around the building and within the landscape. These perimeter ponds were placed around the edges of the building as a further layer of separation from its surroundings which ensured that upon approaching the edge building, one is always kept at 'arm's length'. The ponds also contain lilies in response to the historic lily ponds in the sunken gardens at the western end of the site. Along with the formal layout and lily ponds, the rose bushes and the slate walls on the site also contribute significantly to the park's character of place, in response to these the library was designed with a long rectangular plan to fit between the two rows of rose bushes along the east-west axis of the site and makes use of various forms of dark slate as the building material for the exterior carapace of the building.

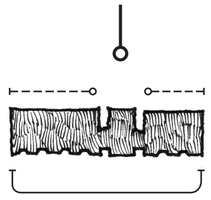
Figure 6.1 - Carpet depicting an ideal garden according to the Persian landscaping tradition











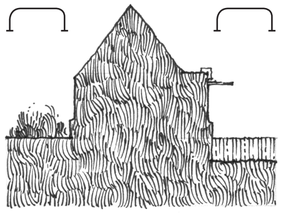


Figure 6.2 - Landscape acts as buffer between the library and its context

Figure 6.3 - New buildings do not interrupt existing rose bushes

Figure 6.4 - Building maximises south facing area for lighting purposes

Figure 6.5 - Recognition of axes representing four rivers of life

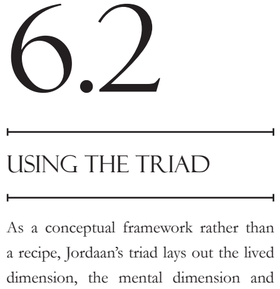
Figure 6.6 - Building acts as a celebration of water

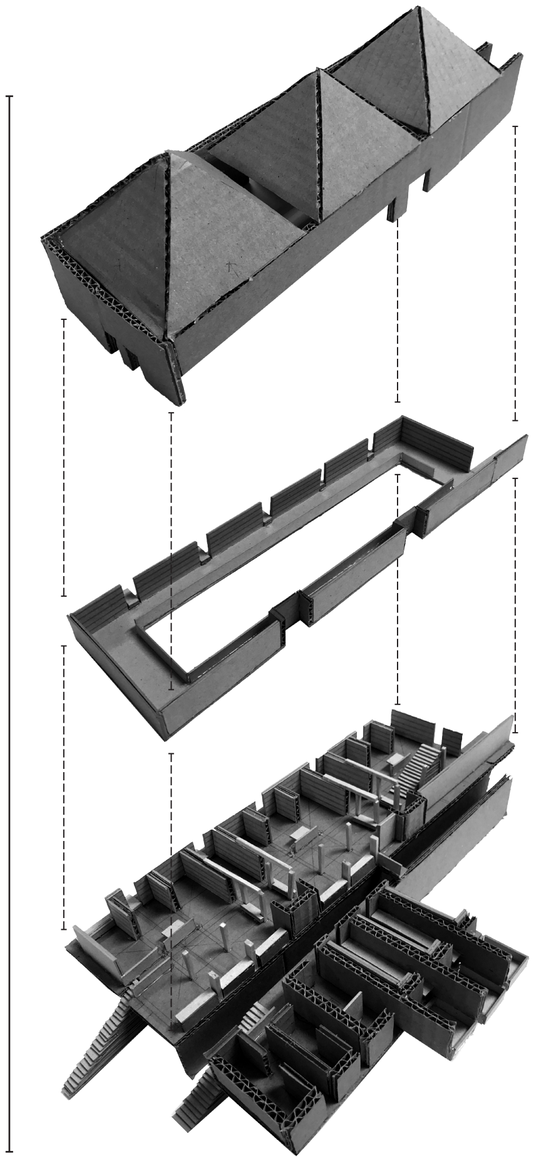
Figure 6.7 - Water is celebrated in summer, roses are celebrated in winter

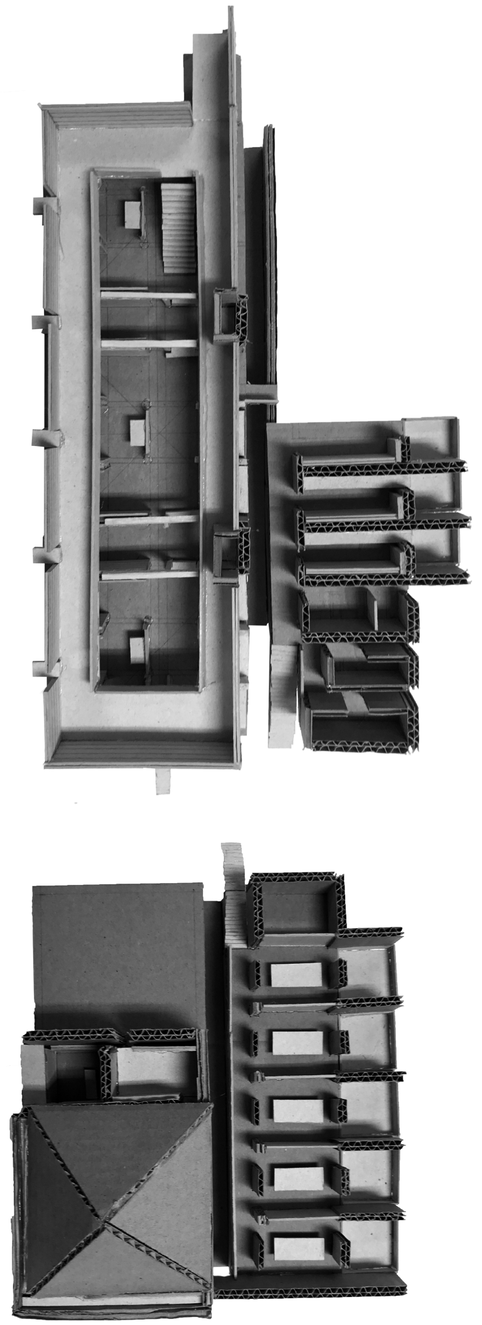
6.2

USING THE TRIAD

As a conceptual framework rather than a recipe, Jordaan's triad lays out the lived dimension, the mental dimension and the material dimension as factors to be considered in the creation of place, but offers little regarding the application of these considerations. In order to inform how the triad should be applied to a design, theoretical and programmatic concerns need to act as lenses through which to guide its application. This investigation into the design of a public library made use of the role and nature of the contemporary public library to inform the treatment of the lived dimension. Zumthor's notion of the typical informed the treatment of the mental dimension and finally the notion of constructing order from chaos acted as the lens through which the material dimension was designed. Due to the fact that this is an architectural investigation, the material dimension has been considered the most important dimension for investigation. As the only dimension that the architect is actually able to control or manipulate, it is only through the material dimension that the lived and mental dimensions be addressed architecturally.







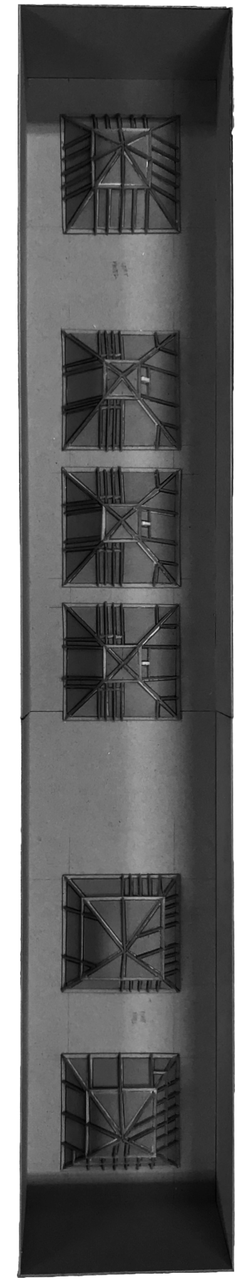


Figure 6.8 - Models exploring the internal manifestation of the library

6.3

THE LIVED DIMENSION

A LIVING ROOM FOR THE CITY

As previously mentioned, the lived dimension of place has been approached in this investigation through the lens of the civic role and character of the contemporary library. This contemporary character has been used as an informant for the scheme to ensure that this new library holds a contemporary relevance despite its celebration of the typical and the heavy influence of historic library typologies.

Although functionally similar in its operation to historical libraries, its facilitation of appropriation by the public sets the contemporary library apart from its predecessors. Described as a living room for the city instead of a temple for knowledge (Pickard 2002:139), the contemporary public library exists as an indoor public space that is programmatically robust enough to serve a diverse range of users whilst providing a space that encourages social interaction and gathering. Thanks to its accessibility coupled with its regulated nature, the kind of gatherings that occur within a public library are usually small and informal, coming about as the result of chance encounters or organised meetings between individuals or small groups. This public yet intimate character of the contemporary library means that it provides a place of interaction for the socially isolated. The lack of obligation to purchase anything allows it to provide a degree of shelter for the destitute and the vulnerable. The controlled nature of the space provides a productive working environment for a growing population of university students, telecommuters, freelancers and entrepreneurs.

The design of the library facilitates this manifestation of the lived dimension in several ways. Based on a casual observation of public buildings, people tend to spontaneously stop to interact with one another in doorways and circulation spaces (due to their enclosed, intimate quality) rather than in the larger volumes allocated for congregation. The gathering spaces of the library have thus been designed as thresholds between larger, more prominent volumes. Along with using structural members to reduce the scale of these 'thresholds', roof lights and reading lamps ensure that these are some of the best lit spaces within an otherwise darker library, encouraging congregation towards them. The library also contains a diversity of seating or working spaces depending on the needs of the user, ranging from communal lounges and boardrooms for groups to private study cells and inward facing individual seating near the windows to allow for private reading and facilitate people watching. Although people watching is facilitated as an important aspect of a successful public space, designing for surveillance by library staff has been relegated to the foyer of the building. The foyer is dropped below the ground level of the main library in order to block the line of sight of the librarian into the main space whilst still allowing access, allowing the users to develop a sense of appropriation and ownership of the library without the disconcerting feeling of being watched.

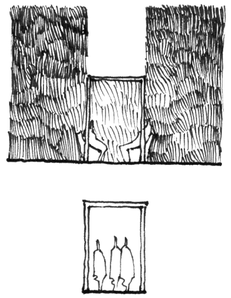


Figure 6.9 - 'Threshold' as gathering space

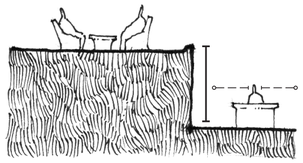


Figure 6.10 - Undermining the visual control of the librarian to encourage appropriation

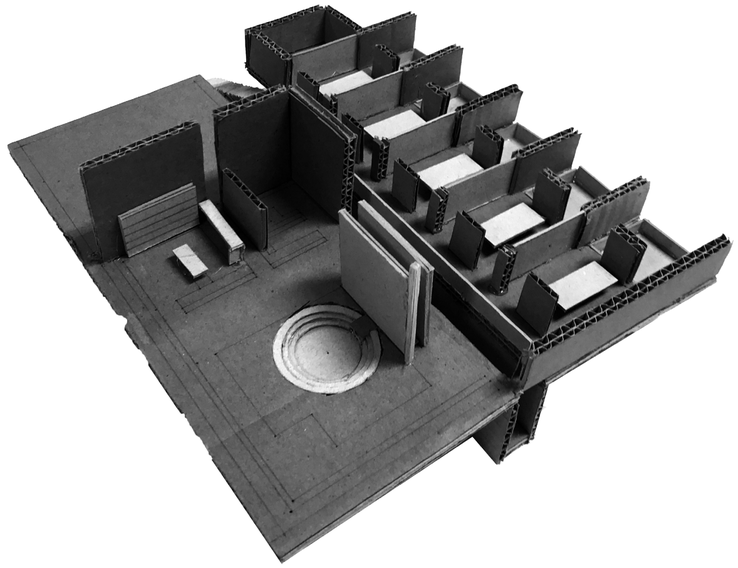
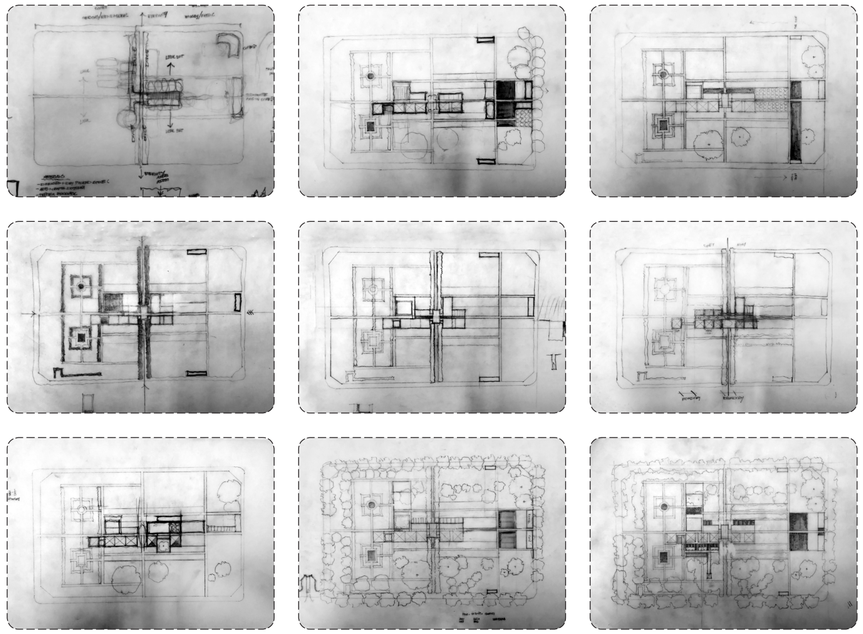


Figure 6.11 - Interior model of children's library

Figure 6.12 - Masterplan iterations



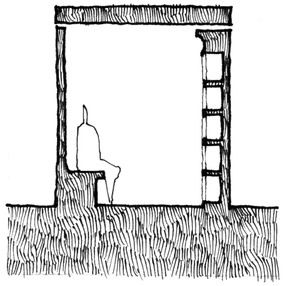
6.4

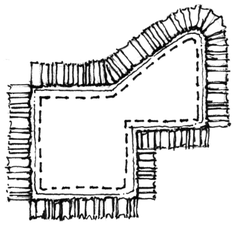
THE MENTAL DIMENSION

THE TYPICAL

Zumthor's notion of the typical has been used to inform the treatment of the mental dimension for the purpose of this investigation. Typical here refers to the essential character of the library that distinguishes it as a defined building type, a character that has developed over the course of the library's long history. This treatment of the mental dimension has been designed to form and recall memories, acknowledge the senses and prompt the imagination in order to facilitate an immersive, multisensory experience of place that evokes an unmistakeable mental association with one's oneiric library. Because of the idiosyncratic nature of memory and imagination coupled with the diversity of users who would make use of the library, the notion of the typical library needs to be evoked through universal or objective spatial experiences instead of subjective or personal ones. The human body, something shared by all members of the public, needs to be considered as the basis for a common experience of place rather than the specificities of culture or social class.

The user's first experience of the typical occurs upon entering the library: The threshold that connects the exterior realm of the park to the interior realm of the library has been stretched and exaggerated so as to enhance a sense of enclosure and separation when moving from one condition to another. In addition to this exaggeration, the main library itself is raised above the level of its vestibule meaning that as per the norm with historical libraries, one needs to step upwards from a 'profane', lower plane to enter the raised 'sacred' plane of the library. Once within, an aspiration towards the historical notion of the ideal library is made clear; the main library is a single great hall lined with books on all sides where shelving is irremovable from structure and the books themselves are celebrated as decorative elements in themselves. The rituals and equipment unique to the library type have also been celebrated as defining aspects of its character. Furniture, interior fittings and library specific equipment such as shelf mounted ladders have been understood as essential to evoking a memory of the oneiric library. In response to this, these elements have been designed to be integral to the spatial fabric of the building through being merged into the building's structure, used to demarcate spaces or used to articulate surfaces. The final way that the treatment of the mental dimension manifests is in relation to the senses of those who use the library. Interiors have been designed to facilitate feelings of comfort and warmth through the materials that enclose the space whilst fireplaces encourage congregation and heat the stone building (as is typical in historical libraries) and the scent of paper establishes an atmosphere that is simultaneously studious and nostalgic.





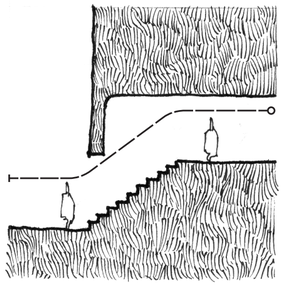
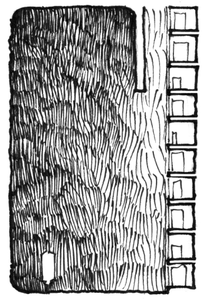


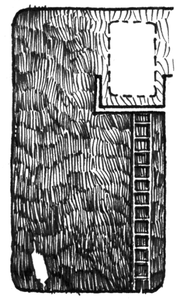
Figure 6.13 - Storage and furnishings are integral to structure

Figure 6.14 - Codices define internal space

Figure 6.15 - Stepping upwards upon entering

6.4.1 - THE USE OF LIGHT





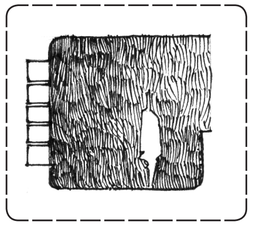


Figure 6.16 - Light washes wall of codices

Figure 6.17 - Light encourages exploration

Figure 6.18 - Darkness enhances interiority

The use of light in the library is informed by both practical and spatial considerations and is intentionally used sparingly, concentrated in only specific areas, with the majority of interior spaces characterised by darkness. The practical function of this darkness serves to protect the library's collections from damage caused by UV rays, primarily emitted by sunlight but also to a lesser extent by artificial lights. The phenomenological function of darkness provides respite from the uniformly and coldly lit environments that are typical of our places of work and leisure. It enhances a sense of interiority and enclosure within the library whilst the deep shadow it creates erodes the grip of reality, distorting ordinary objects into curious 'half-things' that have their mundanity stripped away to become both strange and familiar, establishing an environment that is fertile to our imaginations, musings and inquisitive thought (Plummer 2016). This backdrop of deep shadow means that light can be used effectively to highlight spaces or objects of importance. Volumes of light have been 'scooped' out of the mass of enclosing darkness in appropriate areas, such as the reading lounges and bay windows of the main library facilitating congregation towards them or in the high places of the children's library where beckoning glows are used selectively to draw children upwards and encourage their exploration of the collections and secret spaces to discover. Light has also been used to establish different atmospheres for the different library functions, the dark, cold and inhumanely scaled volume of the foyer presses down on the user and reminds one that the library is a space subject to rules and authority. The reference collection makes use of soft, diffused curtains of light to wash over the book lined walls and treat the books as objects of value worthy of display. Finally the periodical library utilises a large double height window to flood the space with diffuse light creating a gentle transition between the outer realm of the park and the interior of the library's most causal space.

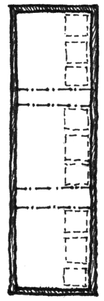


Figure 6.19 - Single hall made up of sub-spaces

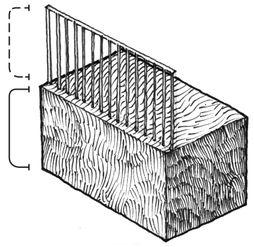


Figure 6.20 - Contrast of light elements enhances sense of mass

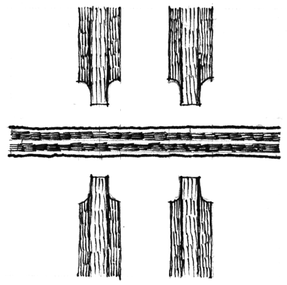


Figure 6.21 - Horizontal articulation breaks vertical articulation

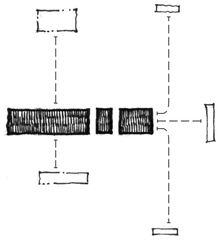


Figure 6.22 - Ancillary functions pulled away from main building

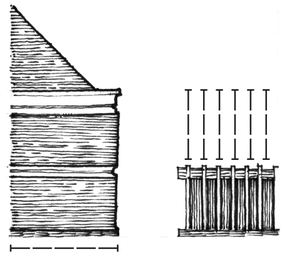


Figure 6.23 - Different architectural expression for different functions

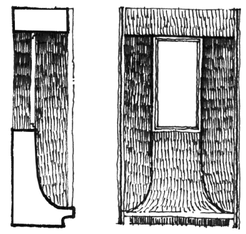


Figure 6.24 - Mass of wall scooped out to reveal thickness at windows

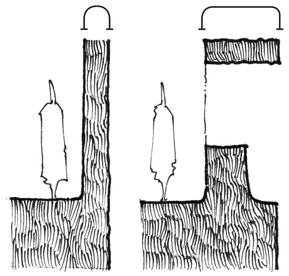


Figure 6.25 - Southern wall made thicker because of presence of openings

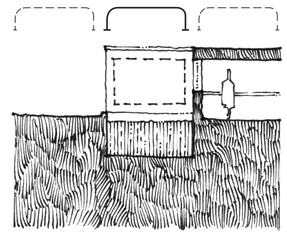


Figure 6.26 - Perimeter ponds act as interstitial 'rooms'

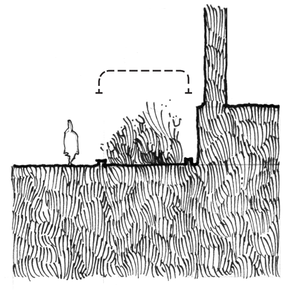


Figure 6.27 - Rose bushes form buffer between inside and outside

6.5

THE MATERIAL DIMENSION

ORDER FROM CHAOS

The contemporary role of the public library has been argued to be one of creating order from chaos. This role is informed by its unique ability to provide both containment and structure to the information it contains, the interactions of the individuals who use it and the physical space it encloses. The library structures the information contained within its collections through the way its codices are classified, hierarchised and grouped within physical space. This condition of structure stands in stark contrast to the endless, uncontextualised stream of information made available by the internet. In addition to ordering information, the library also conditions its users to interact with each other in a particular way and facilitates their experience of accessing the knowledge contained within its collections. Over the course of the building type's existence, a canon of appropriate library behaviour and spatial experiences has been established which still manifests today, resulting in a simultaneously regulated and experientially rich institutional environment, distinct from the unpredictability of the outer realm of the street. Finally the library also orders the physical space it occupies through a sense of enclosure. Because of its nature as an interior public space, it creates an inside distinct from a larger, undefined outside and separates the two through the use of boundary. This creation of order from chaos is the essence of the contemporary library and has therefore been used as the primary driver for the architecture and the informant for the treatment of the material dimension of this scheme.

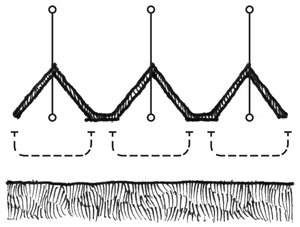
A primary architectural expression of order is the subdivision of larger elements or spaces into interrelated, smaller and more understandable ones. This subdivision or articulation allows topics and collections to be grouped and arranged legibly whilst remaining clearly separated from each other. As long as the articulated elements are understandable in relation to the bodies of the users, it ensures that the library retains a human scale regardless of the size of its overall volumes. A clear distinction between inside and outside is also key to establishing a sense of order, the boundary that separates a chaotic and placeless outer realm from an ordered and distinct inner realm is celebrated in various ways throughout the building. The walls that enclose the space are thick and solid, and the walls that contain openings that would allow its thickness to be read have been made even thicker. The materials that finish the exterior of the building are distinct from those that finish the interior in order to emphasise the difference of the two conditions. In addition to this, wherever the interior meets the exterior, such as in the thresholds or where something from inside escapes into the outside such as the smoke from the internal fireplaces, all of these points of connection have been carefully considered and designed so as to enhance the gravity of this change of condition. When articulating a space, the wall can clearly define and separate two conditions whilst the floor and roof can only suggest where one space begins and another ends, the space will still flow between the floor and roof plane without the clarity offered by the wall. The suggestive spaces created by floor and roof have been utilised within the boundaries established by the walls to allow the interior of the library to be read as both a great hall lined with books and a series of subject specific reading rooms where information is ordered and classified not only on the shelves but also within space. The pyramidal roofs as the most architecturally distinctive element of the scheme have been used to mediate this historical ideal of a singular space and the contemporary need for order through subdivision. There is no typical roof shape associated with the library type, only high-level spatial principles, therefore the pyramid was chosen as a roof form for the library because it best facilitates these spatial principles and ideals. The pyramid as a form has been described by Thiis–Evensen (1987) as the missing link between the dome and the spire: like the dome it encloses a centralised space but unlike the outward and omnidirectional focus of the dome, it announces a singular point or location like the spire. These features make it the ideal form to ensure that articulated spaces of the library remain distinct. The pyramid is also an inherently static form, meaning that from the exterior, it offers the building a sense of mass and permanence whilst the fact that it is repeated and geometrically pure enhances the atmosphere of order and consistency that characterises the library.

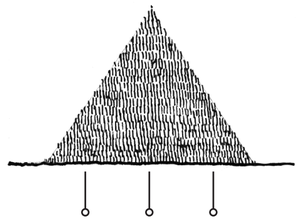
Design Development

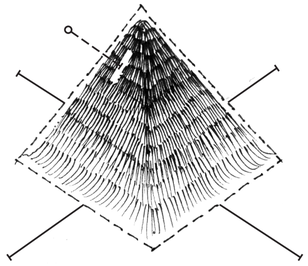
6.5.1 - MODULES AND MEASURES

The final architectural manifestation of the library as a place of order is the use of a strict module to define the sizes of the elements and volumes that make up the scheme. The module used was a grid of 305 mm x 305 mm, a square derived from the size of the largest standard codex size, the folio. The use of a physical codex to order the entire scheme ensured that its importance was celebrated and it was architecturally recognised as integral to the character and identity of the library. This module also ensured that shelving was designed to accommodate any codex, regardless of its size. Thanks to its roots in the imperial system, the size of a folio and its derivatives allowed sizes similar to many commonly used architectural dimensions to be generated whilst correlating directly with standard sizes of building materials such as those of timber and steel members (fig. 6.31).

The relatively fine grain of the module accommodates the flexibility required to meaningfully curate the lived experience of the scheme without compromising its ordered character. Along with this, in order to ensure that the library is meaningfully and comfortably experienced, an anthropological measurement, the Hebrew cubit (457mm or 1.5 modules) has been incorporated into the ordering system. Defined as the length from a man's elbow to the tip of his fingers, the cubit is an ancient architectural measurement that will ensure that seating is ergonomically correct and that shelves are not too high to reach. Its incorporation means that the volumes and elements that make up the architecture of the library will correlate with the bodies of those who use it. The folio module and the cubit have ordered all the dimensions of the scheme in order to lend a cohesiveness that unifies the library across all scales, from the height of rooms to the articulation of details.







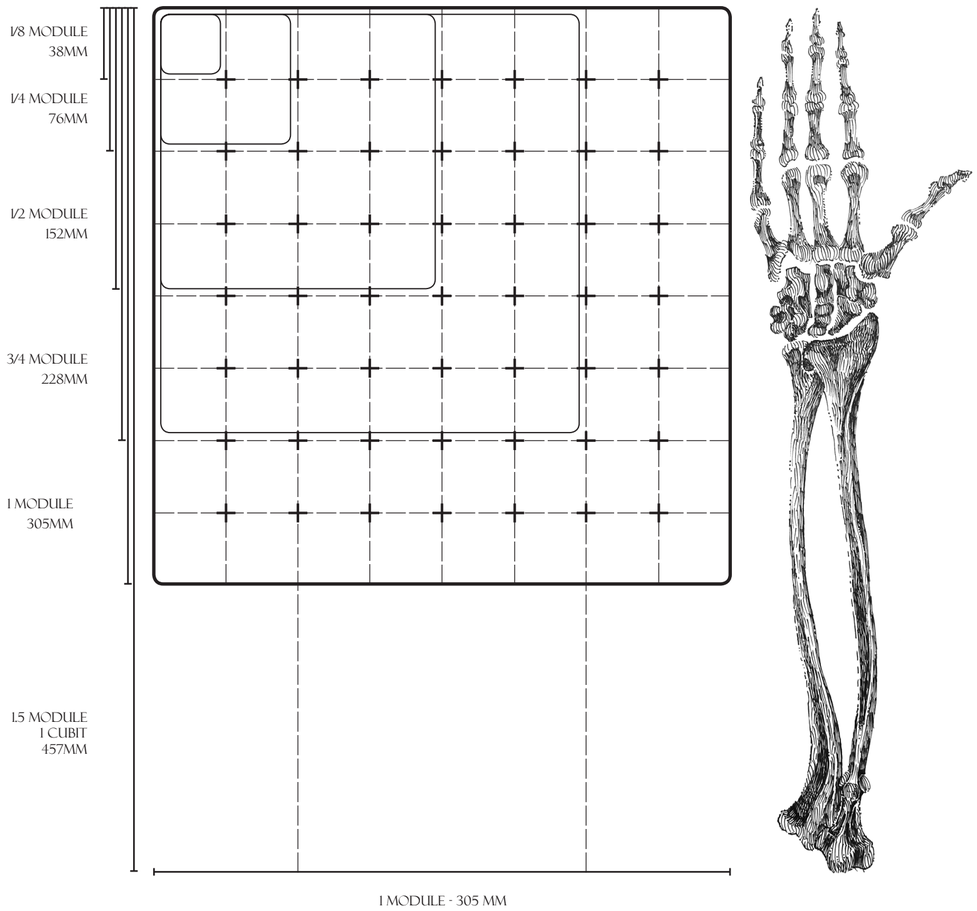


Figure 6.31 - The module and its subdivisions

Figure 6.28 - Pyramids separate single hall into a series of smaller spaces

Figure 6.29 - The pyramid as an inherently static form

Figure 6.30 - Climatic role of the pyramid used to enhance the venturi effect

6.6

THERME VALS

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Vals, Graubünden, Switzerland	1996	Mediating strict order and the design for human expereince

ARCHITECT :

Peter Zumthor with Marc Loeliger, Thomas Durisch and Rainer Weitschies

CRITICAL ANALYSIS

The Therme Vals illustrates the fact that a strictly ordered scheme still has the potential to facilitate rich lived experiences. Considered to be Zumthor's seminal work, the Therme Vals is a well-known and celebrated building despite being heavily critiqued and labelled as elitist during the design process due to its unconventional approach and celebration of the ritual of bathing (Philippou 2010). And although an experientially powerful building, the Therme Vals is also a highly ordered work of architecture with the sizing and articulation of volumes informed by repeating modules and material dimensions. Regarding its overall form, the building is uncompromisingly rectilinear and built up of fifteen concrete 'table-like' units which are rotated and interlocked to form a radial pattern around a central pool. Between the edges of these units, small gaps have been left to allow light to filter into the circulation spaces below, and because light has been used extensively within the project to facilitate movement, the nature of ones experience within is a direct result of the geometric pattern that defines the building's layout. On plan, the users experience is ordered by the pattern of interlocking 'tables'; in section the heights are all determined by a module of 150mm, the height of a stair. The stone strips used to clad the walls are of three different sizes but add up to 150mm when three are used together in specific combinations, meaning that although the cladding appears random, even this was determined by a strict module which was used to ensure that levels line up perfectly for floor, stair and opening heights (Cadwell 2008:16). Beneath the fifteen 'tables' that order the scheme, rectangular hollowed out masses support the roofs and are arranged uniquely. Although a seemingly organic layout, many of these rooms are either symmetrically planned or make use of repeating and regularly spaced cubicles or fittings. In addition to the experiential qualities of the building regulated by an overarching order, Zumthor also makes use of his notion of the typical to inform the user's experience. Exploring two levels of typicality, the first being the essence of bathing, where a primordial atmosphere and ritual of bathing is evoked through the cave-like character of the space where steam, shadows and stone work together to conjure the memory of a natural spring. The next level is the exploration of the archetypical, where historical architectural traditions surrounding the design of bathhouses have been incorporated such as a centralised layout comprising various separate rooms arranged around a central internal pool lit with diffused sunlight from many small roof openings. Primarily an interior architectural experience, light has been used to encourage movement and communicate the nature of spaces without the need for signage, mostly artificially lit to control the consistency and colour of the light, only select spaces make use of natural daylight. In addition to light, the shadows of spaces have also been embraced to enhance a sense of mass, enclosure, security and curiosity. To further emphasise the mass of the building, openings are deep set to express the thickness of walls and any non-structural elements such as hand railings and window frames are made from thin steel in order to contrast and emphasise the solidity and thickness of the stone structure. And in a final celebration of the enclosure and separation of the interior of the building from the worries of the outside, the building was originally designed to contain no clocks and have no entrance that connects it to the outside landscape, the only entrance and exit is an extended threshold in the form of a softly lit tunnel connecting it to the adjacent hotel (Zumthor 2014).

Figure 6.32 - References to the typical bathhouse

Figure 6.33 - Interlocking 'table-like' units

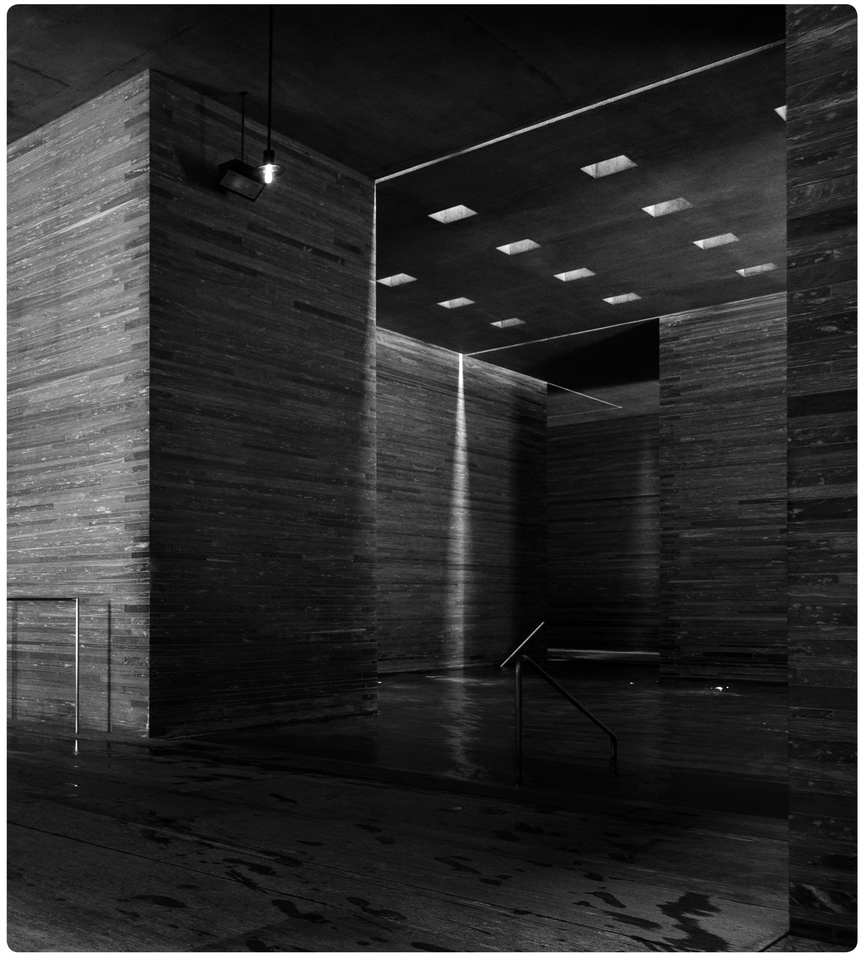


Figure 6.34 - Removed modules form courtyard

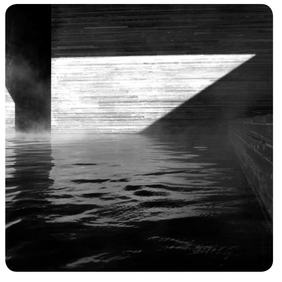


Figure 6.35 - The primordial notion of bathing

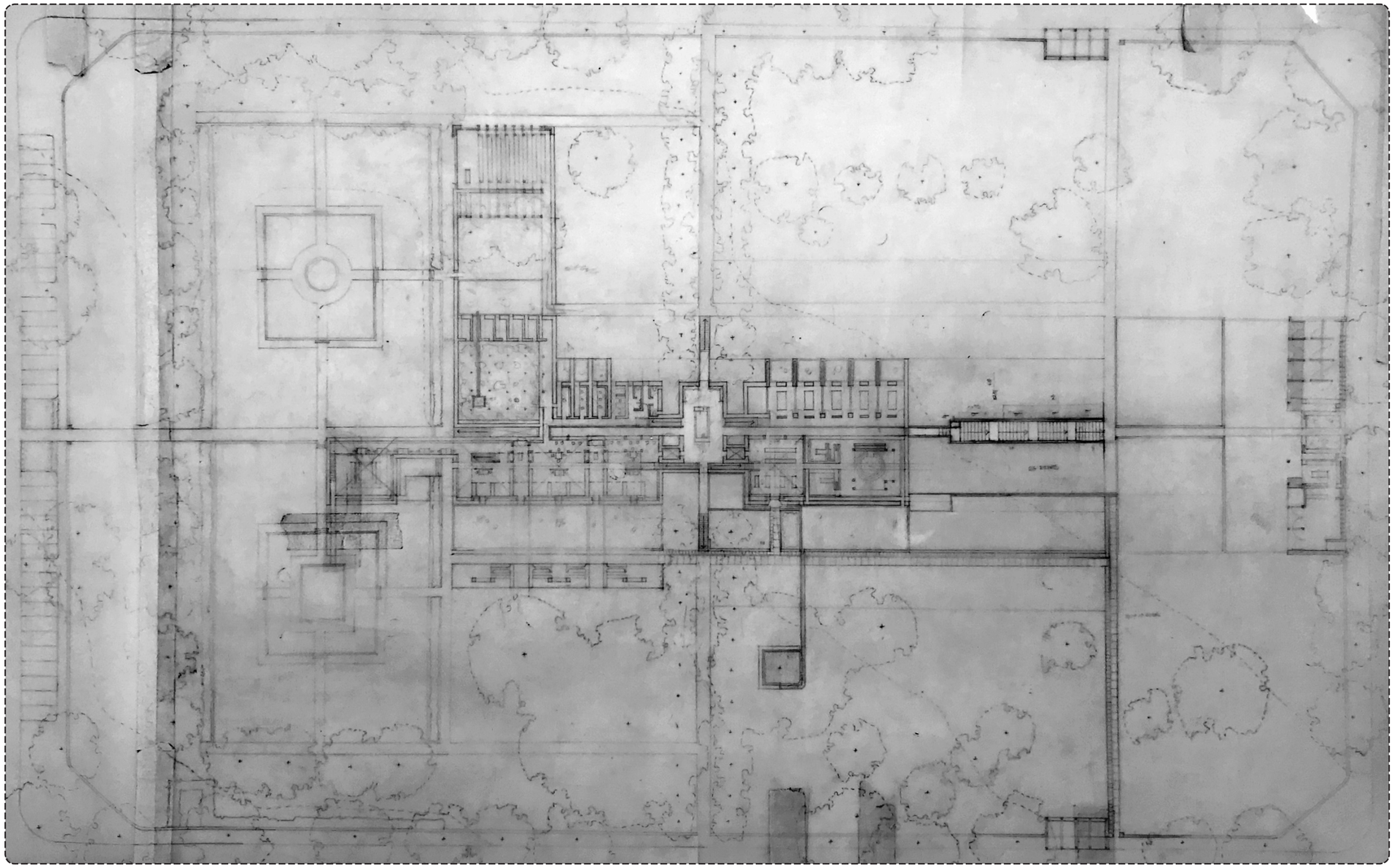
Figure 6.36 - Strictly ordered stonework

6.7

DESIGN PROCESS

Beginning at a high-level diagrammatic scale, the design process for this project moved across scales and mediums in an accretive manner as the scheme developed. The first phase of the process was to develop an appropriate urban presence for the library, for this, diagrammatic thumbnail plans were rapidly generated and iterated in order to test as many possible alternatives for the site and surrounding blocks. When the pavilion typology was deemed the most appropriate response for the site, the first iteration of the scheme was developed using a combination of plans and sections to resolve the interior condition and a massing model to mediate this condition with the site. When the first iteration had been developed to sketch plan level, it was iterated again two more times using the same tools. The third and final iteration was chosen to be developed into the final scheme, for this resolution, plans and sections were still used in conjunction with larger models in order to help visualise the proposed interior volumes and light quality. Note that throughout the process, no elevations were produced until the volumes of the third iteration had been finalised, an approach taken to ensure that any decisions regarding the external articulation of the building did not influence its interior, rather the exterior was generated as a result of its interior condition. This method of designing the library from the inside out ensured that the library's essential character as an enclosed, indoor public space was respected and celebrated whilst ensuring that the experience of this interior remained a primary concern throughout the process.

Figure 6.37 - Masterplan development drawing



6.7.1

FIRST ITERATION

The use of roof volumes to subdivide larger open spaces whilst allowing the space to still read as a single hall was developed early on in the process, the original roof volumes took the form of domes and pyramidal frustums before being finalised as pure pyramids. In the first iteration of the scheme, these pyramids were clustered around the crossing of the axes in the centre of the park and their distinctive form was not used to celebrate a specific function of ritual, meaning that the iteration lacked a legible spatial hierarchy and logic. To contribute to this lack of hierarchy, ancillary functions such as the auditorium were housed in voluminous spaces, attached to the edge of the central spaces which competed with the pyramids in terms of their height. Within the space, the plinth that the pyramids rested on was designed to be very low in order to emphasise the height and volume of the pyramids which would be manipulated through the manipulation of exposed trusses, unfortunately, the fact that the pyramids occupied a greater volume than the plinth meant that the interior space was not read as a single hall that was subtly subdivided by its roof, instead it created a condition where each pyramid defined a clearly demarcated and distinct room beneath and prevented spaces from flowing into one another where appropriate.

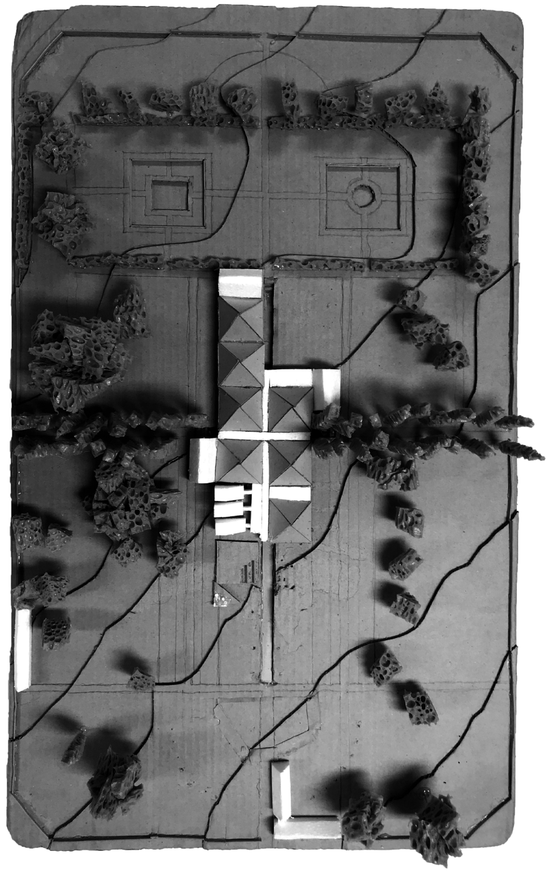
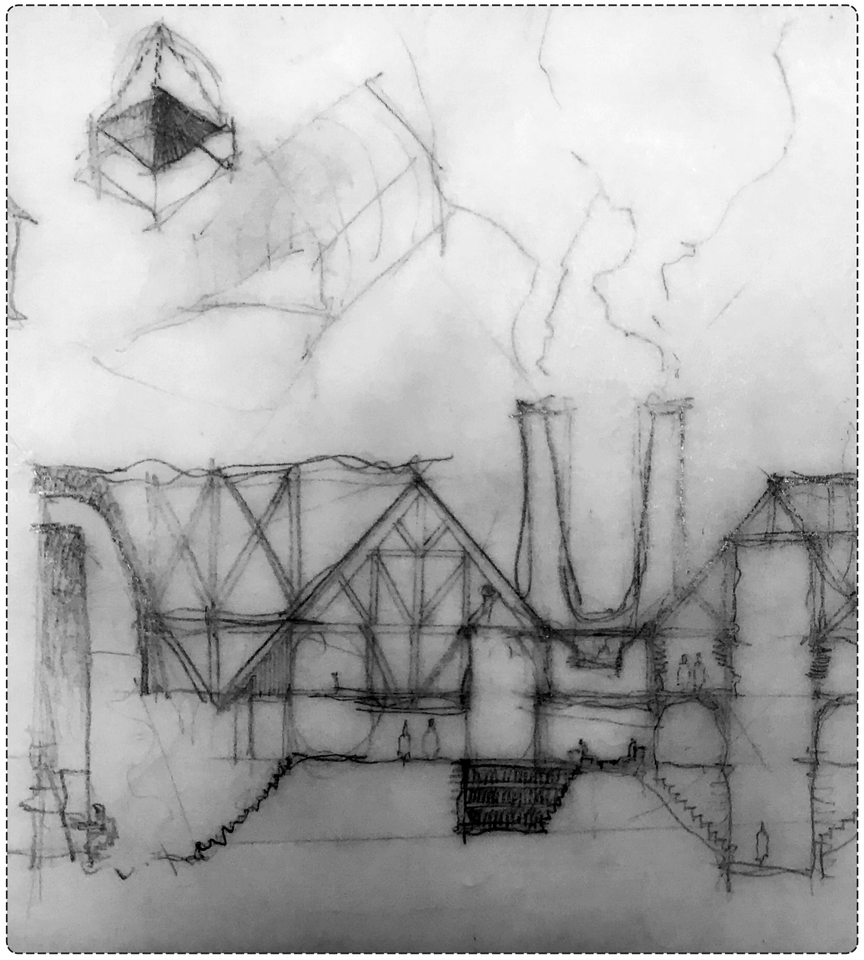


Figure 6.38 - First iteration massing model

Figure 6.39 - Early conceptual section



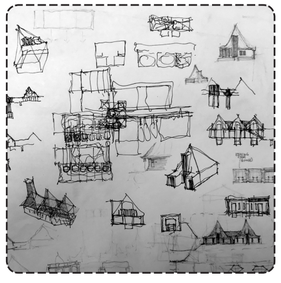


Figure 6.40 - Conceptual spatial exploration

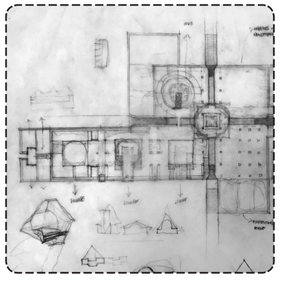


Figure 6.41 - Early sketch plan

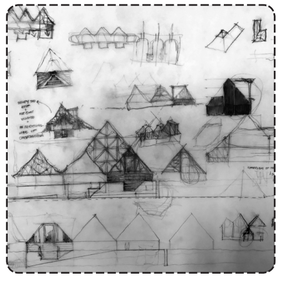


Figure 6.42 - Exploration of the pyramid

6.7.2

SECOND ITERATION

The next iteration of the used the pyramids to house the library spaces of the scheme and aligned them in a single long row to allow them to utilise southern light within. All the pyramids were identical and all floated above the plinth on a clerestory that wrapped their base despite the fact that they housed functionally specific library spaces such as the reference collection and the children's library. The plinth that they rested on was also raised to accommodate a mezzanine in the main library hall whilst services and secondary functions were housed in flat roofed portions of the plinth that extended from beneath the pyramids. This version was still centrally clustered and protruded little into the surrounding landscape but did include a walled garden to begin mediating the interior condition of the library with the exterior condition of the park and began to allow interior walls to extend into the landscape as fins to define interstitial rooms or foyers between the library and park.

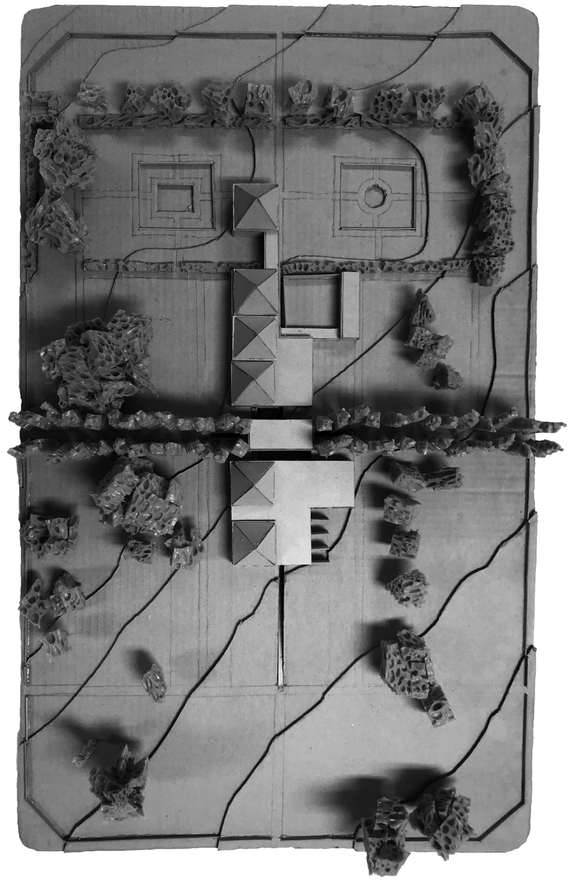
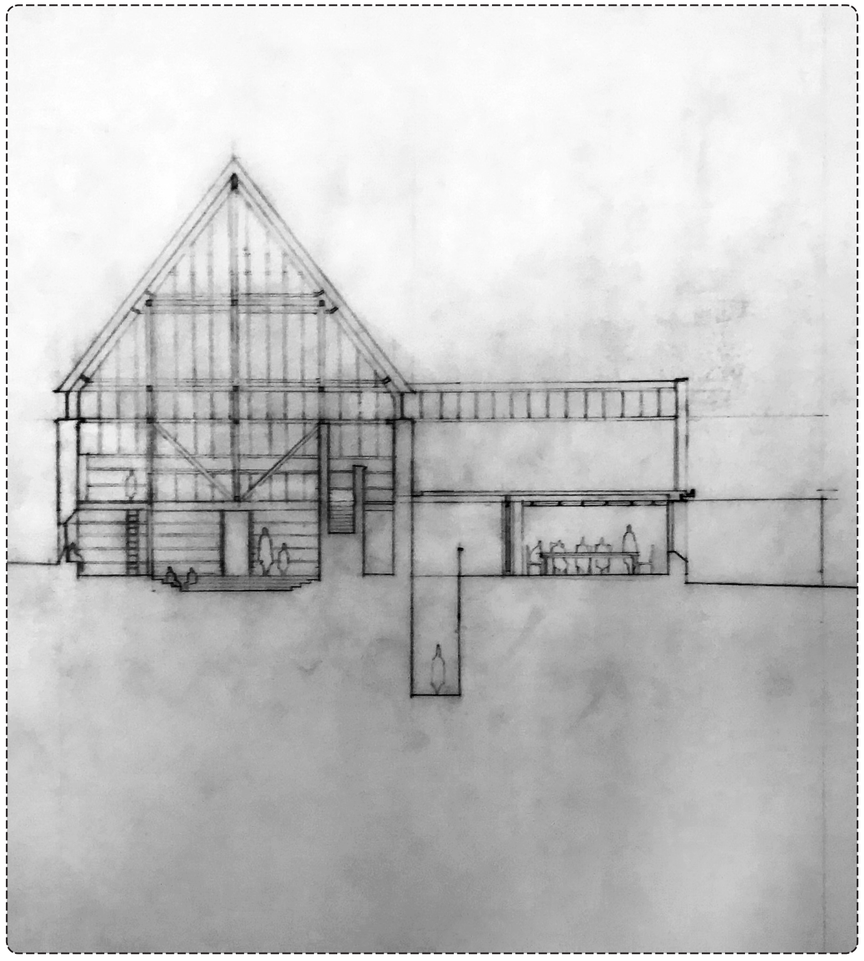


Figure 6.43 - Second iteration massing model

Figure 6.44 - Section through the children's library



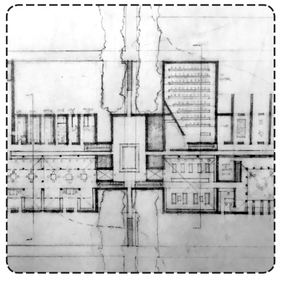


Figure 6.45 - Plan of central auditorium and foyer

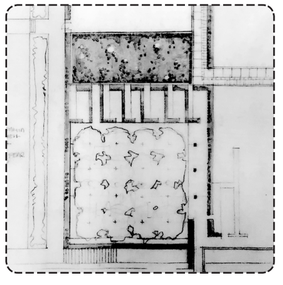


Figure 6.46 - Landscape design for the courtyard

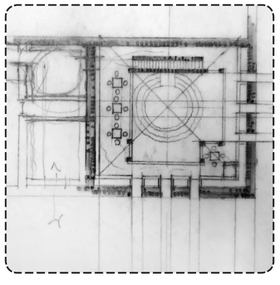


Figure 4.47 - Sketch plan of the children's library

6.7.3

FINAL ITERATION

The third and final version of the scheme appears superficially similar to the second iteration but has incorporated some significant if subtle changes. Due to the fact that the pyramids now housed specific functions, they were each shrunk slightly and offset in a particular direction atop their plinth depending on the space needed within. This shrinking was done to ensure that the form of the pyramid was not undermined but still allowed them to be flexible enough to accommodate the specificities such as light, ventilation and services to serve the functions below. Along with the manipulation of the pyramids and their bases, the portions of the plinth that housed the service spaces were reduced from a double volume to a single volume so as to further celebrate the main function of the library. All ancillary functions not integral to the operation of the library such as the café and auditorium were also reworked, these secondary functions were pulled away from the central library space towards the perimeter of the park and given a distinct architectural language different to that of the main building. This final version also began to spread out and interact with park in a more meaningful way through the inclusion of a series of perimeter ponds, another walled garden space and the integration of a picnic area that extends from the main library building.

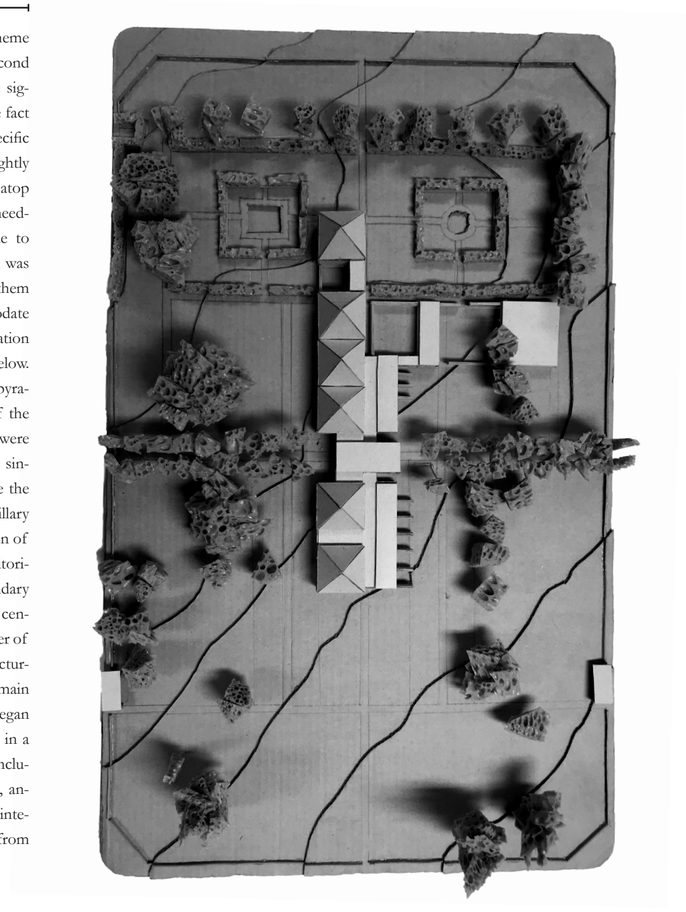
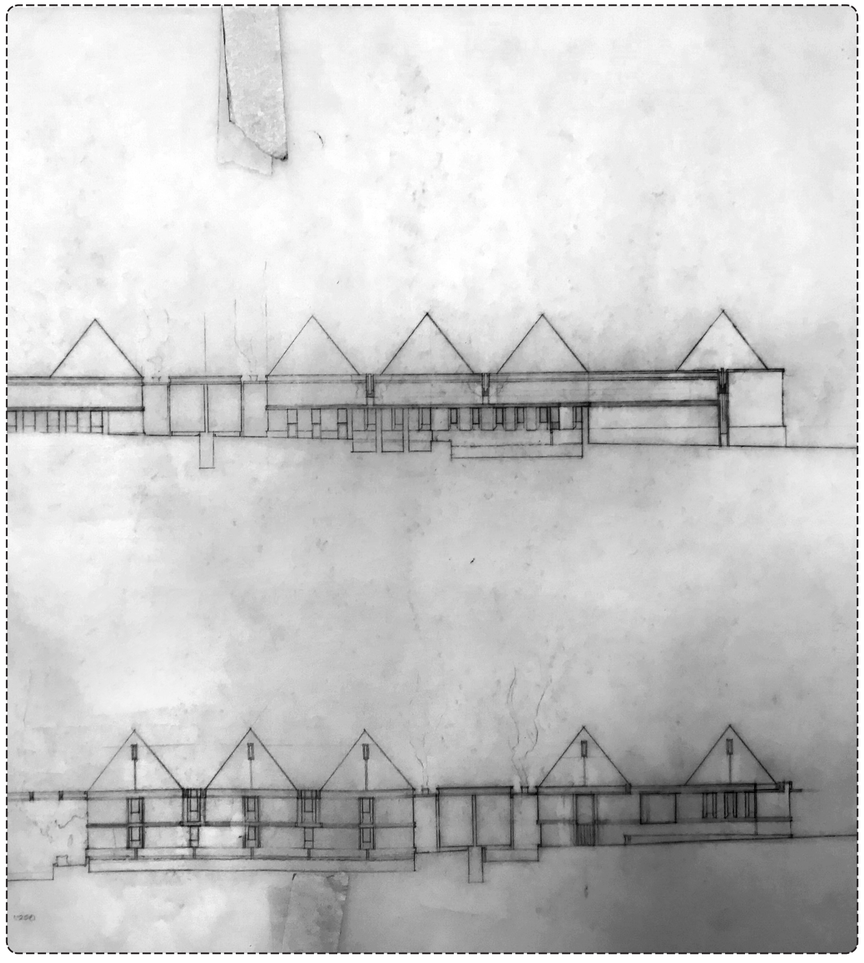
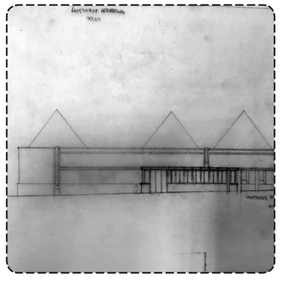
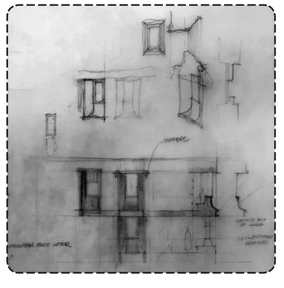


Figure 4.48 - Third iteration massing model

Figure 4.49 - Elevations indicating surface articulation







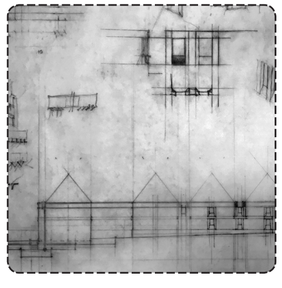


Figure 6.50 - Comparing architectural expressions

Figure 6.51 - Iterating the treatment of openings

Figure 6.52 - Early elevation explorations

6.8

ST. CYPRIAN'S SCHOOL IT CENTRE

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Oranjezicht, Cape Town, South Africa	Part of ongoing masterplan	Well executed contemporary South African formalism

ARCHITECT :

Noero Architects

CRITICAL ANALYSIS

The new IT centre of the St. Cyprian's School has been interrogated to understand the potential of the contemporary expression of formal geometry in South African architecture. Due to the age of the school, its spatial layout developed in a piecemeal fashion where buildings were added accretively to the urban fabric. As a result, the additions designed by Noero Architects often needed to respond to awkward or interstitial spaces between buildings. In order to respond to both the historical fabric of the school and the awkward sites allocated for new buildings, Noero argues for the value of platonic geometry as a means of mediating these conditions. Inspired by the writing of Aldo Rossi, he argues that when architecture is more geometrically precise it both becomes more useful and has a greater capacity to be adapted to new uses over time (Noero n.d.).

The new IT centre is a cylinder that stands in the middle of the Tortoise Courtyard. Its form was generated as a direct result of its function and its context, the circular plan was used to minimise its impact on the flow of space outside in the courtyard, whilst inside it allows the teacher to see all of the student's monitors from a central desk (Noero n.d.). The cylindrical form was chosen as it best accommodates the IT centre's programme and due to the fact that the form was not undermined through any manipulation of the geometry - the cylinder is celebrated as a thing of value. A further manifestation of this celebration is the fact that the external staircase is a delicate and lightweight steel construction so as to emphasise the importance and the mass of the cylinder as the primary component of the IT centre. Both the cylinder and the staircase are finished with reflective materials so as to dematerialise their presence in the courtyard, achieved more successfully in the cylinder through the use of mirrored blue mosaic tiles, the staircase was built of polished steel which actually draws more attention through the kaleidoscopic nature of the reflection it picks up rather than appearing light and insubstantial as it would have had the steel been finished with a non-reflective surface which would have allowed one to appreciate its delicate construction. In addition to a well-chosen material and form, the IT centre is also well articulated with the plinth and parapet of the mass sculpted and finished differently from the rest of the form, the circular windows that ring the cylinder are also not just punctures in the façade, rather they have been framed in a different material and have sculpted reveals so as to announce the windows' importance from the exterior and allow in as much natural light as possible. Once inside, the intention of the round windows, combined with the circular rooms was to create a unique learning environment, different from the surrounding classrooms because of the unique nature of the kind of learning that takes place within. Furniture and fittings were also designed to fit the circular volume and make the most efficient use of the small interior spaces. Despite the constraints of site and size, Noero's appreciation of the value of pure geometry and its functional potential has resulted in a well-considered architectural intervention that is both aesthetically contemporary and timeless.

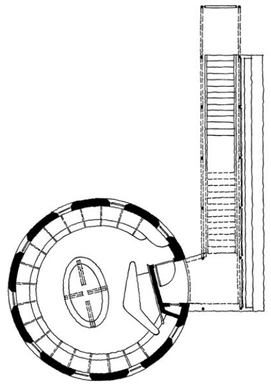


Figure 6.53 - First floor plan of IT centre

Figure 6.54 - Material choice of the IT centre

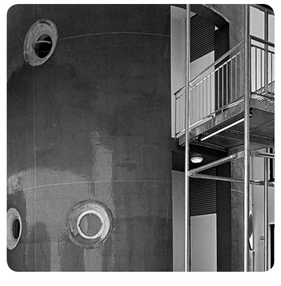


Figure 6.55 - Contrast between cylinder and stairs

Figure 6.56 - Functional role of the cylinder

Figure 6.57 - Massing model of intervention

6.9

TRENTON BATH HOUSE

LOCATION OF PROJECT	DATE OF COMPLETION	REASON FOR INCLUSION
Community Centre, Ewing, United States of America	1955	Functional potential of the pyramid as a roof form

ARCHITECT :

Louis Kahn and Anne Tyng

CRITICAL ANALYSIS

Analysed to illustrate the functional versatility and spatial potential of the pyramid as a roof form, the Trenton Bath House is considered to be the earliest example of Louis Kahn's exploration into notions of served and servant spaces (Scully 1962). The bath house is made up of four timber pyramidal roofs that enclose an open central courtyard, the corners of each pyramid rest atop hollow columns built from concrete blocks. The bath house serves the swimming pool of a community centre, providing cloak rooms, changing rooms and ablution facilities.

Figure 6.58 - Interior experience of the pyramid

Each of the four pyramidal roofs is used as an element to define and announce a specific space beneath, but in order not to undermine the purity of the form, none of the pyramids are manipulated or differentiated from each other in any way in order to respond to any functional or climatic concerns. Rather, in response to these issues, the base was manipulated instead of the roofs, walls are pushed in or out beneath the roofs to let in natural light and facilitate stack ventilation whilst the hollow columns contain the services, such as storage and toilets, that relate to the needs of their adjacent pyramids. Meaning that despite the constraints of multiple informants, the overall form of the scheme is allowed to remain orthogonal and symmetrical without compromising its usefulness. In addition to their role of defining the four main spaces of the bath house, they also ensured that the building developed an appropriate finish over time. None of the roofs were originally fitted with gutters, meaning that all of the water that they collected was allowed to run down the faces of the concrete base in order to develop a patina on the concrete. Because of the fact that they fulfilled multiple roles which made them an integral spatial tool for the architecture of the Trenton bath house, the pyramidal roofs were celebrated as independent elements within the scheme and the detailing of their structure and connections was designed to ensure that the four roofs appear to float above the concrete base, only lightly touching it at each of their corners.

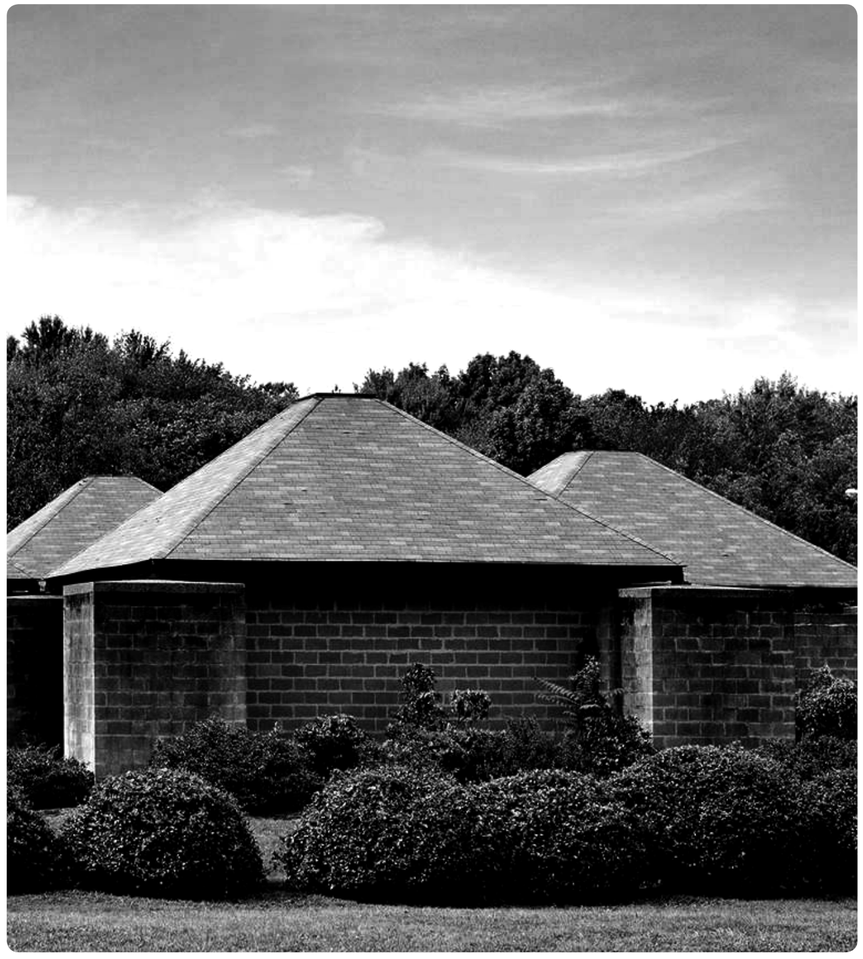


Figure 6.59 - Repeating pyramidal forms

Figure 6.60 - Manipulated base beneath pyramid

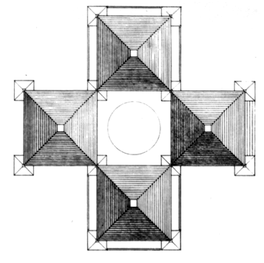


Figure 6.61 - Roof plan of Trenton bathhouse

Figure 6.62 - Connection between roof and base

CHAPTER

07

A MATERIAL WORLD

Unpacking the technical investigation of the scheme as a continuation of the design process at a more intimate scale.

7.1

TECHNICAL APPROACH

The importance of human experience within the scheme and the fact that the experience of architecture is an experience of physical matter, the materials that give form to the spaces of the library and define its haptic qualities are the primary subject of this technical exploration. The relationship and joining of materials as well as the materials themselves have been investigated and designed so as to contribute to the overall design intentions and character of place of the scheme.

7.2

STRUCTURE

The role of the structure of the library is that of defining the crust or boundary of the building that separates its interior from the outside world. Considering this role, the structure of the walls have been afforded special significance due to the fact that whilst roofs and floors can only suggest enclosure, the wall can meaningfully enclose or separate two conditions. This celebration of the wall manifests as it being the only plane where the structural material is exposed as a finish. By contrast, the floors and roofs lack the singular character of the walls and are instead built as a series of thinner composite layers where the structural material is not exposed but is rather finished with a different material. The cladding of the hidden structure of the floor and roof planes allows a specific spatial experience to be maintained without compromising the constructability and feasibility of the scheme whilst also providing the opportunity to selectively expose the structural material as a means of articulating the otherwise unbroken surfaces of the finishing materials.

7.3

STORAGE CAPACITY

Due to the importance of storage space in a library that handles physical codices, the treatment of storage in this scheme has been carefully considered for both its experiential and practical value. The kind of storage needed by a community library differs from that of national or specialist libraries. A community library holds no obligation to act as a repository for cultural capital or historic documents, instead, general reference material and codices that are considered good reading are housed within its collections (Neufert et al. 2012:330). In addition, the content accessed by the library user is usually found after browsing the library's physical collections rather than by browsing a catalogue. Because of this civic role, the majority of the storage space of a community library needs to be accessible to the public whilst any archival or dead storage space should be limited to housing codices in need of processing or repair. In order to ensure that the library can house enough content to meaningfully fulfil its functional role well into the future, a square plan (the norm of many contemporary resource centres and information hubs) has been avoided and the geometry has instead been stretched into a rectangular hall. The use of a long rectangular plan is not only typical of the historical library type but also necessitates that a greater surface area of wall be built to enclose an interior area of the same size that a square could enclose with less wall space. This extension of the wall provides more space for shelving around the perimeter of the interior when compared to a square plan of the same area. This combination of large storage capacity in relation to its size along with a well-managed weeding process (the common practice of selling outdated or unpopular library books) will ensure that this library will be able to offer enough content to provide a meaningful service to the surrounding community.

7.4

INTERNAL ENVIRONMENT

The internal environment of the library has been designed to enhance a sense of enclosure and separation from its surrounding external condition whilst ensuring that the spaces of the library are still comfortable and useable. This has been achieved through a manipulation of haptic conditions such as thermal quality, acoustics and artificial light in order to establish an interior environment that is experientially distinct from the outer realm of Venning Park and the placeless environments that have come to typify our experience of public institutions and condition our collective memory of them.

7.4.1 - TEMPERATURE

The interior of the library has been designed to maintain a consistent and cool temperature in the interest of the comfort of its users and the preservation of its collections. The cool interior contrasts the typically warm South African climate whilst enhancing the sense of being within a stone building. Thick walls, small openings and high thermal mass limit heat gain whilst a passive ventilation system facilitates adequate air flow and changes. Utilising a consistent soil temperature and the shape of the roofs, the passive ventilation system pulls cold air from the subterranean corridor that runs the entire length of the library, into each of the pyramidal volumes. Once the air heats up, it rises into the pyramidal volume of the roof where the Venturi effect will force it quickly upwards towards the apex where it can be flushed out. This geothermal system of a sunken, cold spine that runs the entire length of the building was used instead of an evaporative cooling system (that would make use of the lily ponds) to minimise the humidity levels within the library in the interest of protecting its collections. In order to ensure that the building does not become too cold in winter, fireplaces have been scattered throughout the library near gathering spaces which along with carpets (rolled out in winter to help insulate the stone floors) would provide places of comfort and respite during the colder season. Along with these, the library's courtyard is planted with deciduous trees meaning that it will provide a place to use the library's facilities whilst sitting in the sun on an otherwise cold day.

7.4.2 - ACOUSTICS

Accommodating the variety of rituals and user types associated with the library without excessive regulation or compromising the public's sense of ownership over the institution necessitates that the library's spaces be acoustically comfortable in order to create a public space robust enough to effectively fulfil its civic role. The buildings distance from the busy roads surrounding the park along with its thick walls and double sets of windows help acoustically insulate the interior of the building from the outside world. Once within, the library's book lined walls prevents noise from growing beyond comfortable ambient levels by providing a comprehensive layer of sound absorbing material that wraps the perimeter of the building. This layer absorbs and scatters excess noise generated from within the library whilst the articulation of the timber panelling helps break up any large reflective planes to ensure that the library's interior maintains an acoustically gentle atmosphere without absolute silence constantly enforced by staff.

7.4.3 - ELECTRIC LIGHTING

In accordance with the strategy previously laid out for the use of light within the scheme, the use of artificial lighting is not only typical of the library type but also allows for a consistency and control over the atmosphere of the building's interior. Rather than make use of the cold and uniform light provided by the ubiquitous fluorescent tube, warm coloured LEDs (3000 Kelvin) will light the library's lamps and lighting strips. Providing 500-1000 lux directly onto the reading surface to increase letter contrast, adjustable reading lamps that create a brightly lit reading area in an otherwise darker space establish more comfortable reading environments than bright, uniformly lit spaces. The dimmer ambient light reduces eye strain and letter blurring whilst reducing the risk of overhead shadows falling onto pages. Chosen for their energy efficiency, low maintenance and aesthetic flexibility, the LEDs in the lamps also emit very little heat and almost no UV radiation meaning that they present a negligible threat to the library's collections when compared to natural light or other forms of artificial lighting.

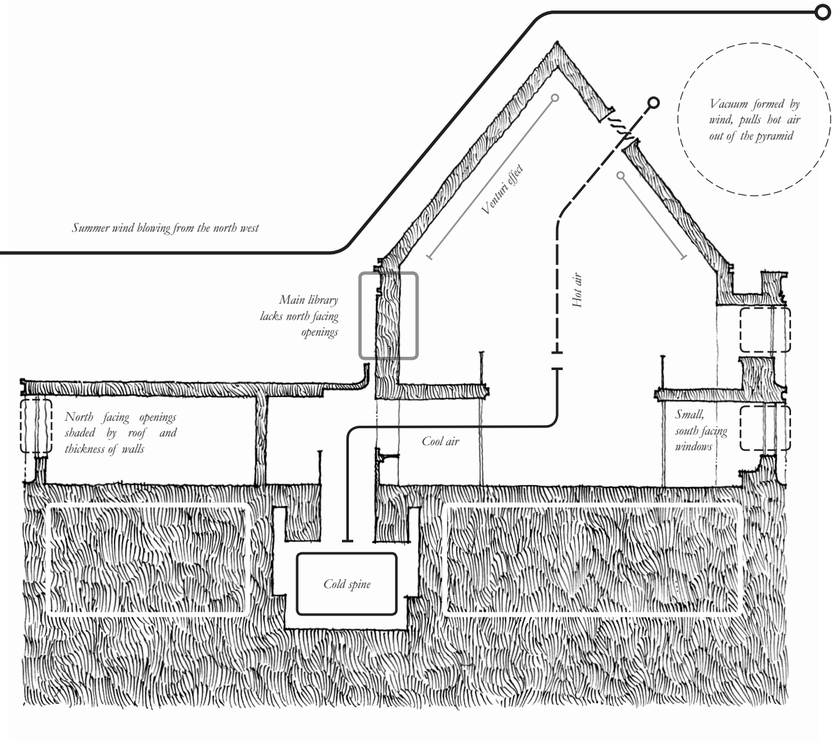


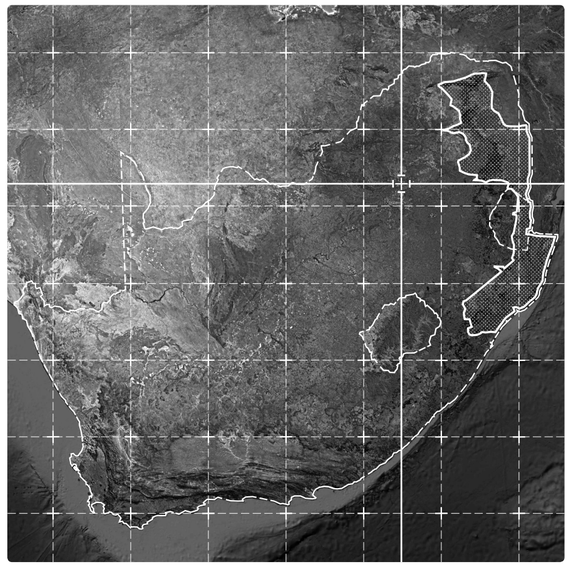
Figure 7.1 - Thermal condition of the library

7.5

MATERIALS

The three primary materials that give form to the library are slate, timber and steel. Each plays a specific role in defining the atmosphere of the library and have been used strategically according to the character and properties of each material. Acting as an articulating material, steel has been used to separate and define the edges of other materials and is primarily used in details and trims where it clarifies and emphasises the separation of elements. It is also used structurally where distances become too large to span economically using other materials. When compared to stone or timber, steel has been used relatively sparingly throughout the scheme due to its high embodied energy. Despite this, the material is contextually relevant due to the fact that it is manufactured in the Pretoria region and has a tendency to oxidise upon weathering. When used in the spouts, gutters and ponds of the scheme, the oxidised steel and the stains it leaves on other materials strengthens the connection between the library and its site through a celebration of the relationship between the building and water.

The use of timber within the scheme takes two forms: an external skin of wax impregnated SA pine for the ancillary buildings surrounding the main library building and an internal skin of Brown Kiaat wainscoting for the main library building. Timber interiors are typical of the library type and have been ubiquitous throughout the institution's history. In addition to this, the haptic qualities of the material establish an atmosphere of warmth and domestic comfort which encourages appropriation and a sense of ownership by the public who use the library. Brown Kiaat was chosen for its aesthetic qualities and availability. A commonly used wood that is prized for its workability, durability and affordability when compared to other hardwoods (Geldenhuys 2013). Along with Kiaat, wood harvested from the two large cypress trees cleared from the site to make way for the building will also be used inside the library for important fittings and furniture pieces.



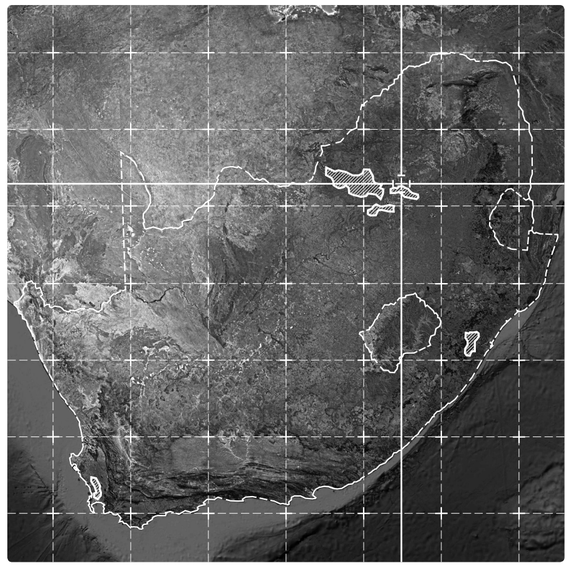
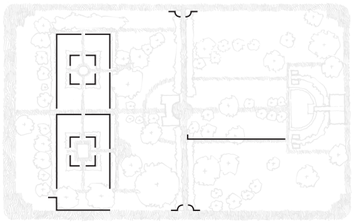


Figure 7.2 - Location of local Kiaat forests

Figure 7.3 - Location of local slate deposits

The final material used to give form to the library is slate, as the boundary between inside and outside, the permanent and heavy nature of the stone is used to establish an atmosphere of mass, enclosure and separation. Chosen as a contextual response, slate is used to root the library to its surrounding place. Geologically, it forms the bedrock of the city of Pretoria and has been used throughout Arcadia to build boundary and retaining walls that can be seen in both the gardens of the Union Buildings and the gardens of suburban houses. In the park, the Arts and Crafts era retaining walls (extant) and flagstone paths (now cement brick) were originally made from local slate and are essential to Venning Park's historic value and character of place. Quarried locally from the large slate deposits surrounding the city, slate is a highly durable building material with a very low embodied energy. The natural property of slate to split along its grain when struck also means that minimal capital and specialist equipment is needed to harvest the mineral, providing the opportunity for entrepreneurs and surrounding community members to easily found small scale quarrying operations (Kayamandi Development Services 2006). Despite its potential to spur economic growth, high quality slate is still expensive and because large quantities are required to build the library, an innovative approach to using the material needed to be developed.



Location of slate retaining walls on site

HERITAGE RESPONSE

Arts and Crafts era slate retaining walls

Figure 7.4 - The use of slate as a contextual and heritage response

GEOLOGICAL RESPONSE

Slate bedrock of the city

DENSITY:
2800 - 3040 kg/m^3

MINERAL COMPOSITION:
clay minerals, silt, quartz, muscovite, feldspar, hematite

COMPRESSIVE STRENGTH:	WATER ABSORPTION:	THERMAL MOVEMENT:	MOISTURE MOVEMENT:
42.5 - 216 MPA	Less than 0.4%	0.93% mm/m per 90°C (requires joints every 3m)	Negligible

MATERIAL PROPERTIES

STONE TYPE
- Sedimentary
- Metamorphic
- Igneous

Stronger in both tension and compression when compared to other dimension stones of the same thickness

Highly durable building material with good resistance to acid and alkali damage, should last in excess of 150 years

Chemically inert mineral making it ideal for reconstitution

Usable as a roof, floor or wall material in both internal and external applications

Rated durable enough for heavy duty commercial applications

THE PROPERTIES OF NATURAL SLATE

7.6

A MINERAL EXPLORATION

As celebration of boundary and mass, the design of the library necessitated enough material to build the thick walls along with large singular blocks of material to articulate the elevations and openings. Although slate is available in large blocks, they would prove to be prohibitively expensive due to the cost of the material, its difficulty to transport and the lack of local stone masons skilled enough to work the material. In order to ensure that the design of the library is rooted to place whilst remaining economically viable, further investigation into the material revealed that great volumes of waste slate in the form of small shards and dust is generated by the quarrying and cutting process. Because of the low cost of this readily available and easily transportable waste, the potential for slate reconstitution was explored through literature on the subject (Anon 1920, Everett and Barritt 1994, Handisyde 1963, Oti et al. 2010a, Oti et al. 2010b) and developing my own samples of proposed new materials (for results of explorations see pp. 103-106). Conceptualised as a building built entirely from "stone" albeit in different forms, the materials that give form to the final scheme is a combination of two kinds of this reconstituted slate and the stone in its natural form.

1

TONNE

useable, cut stone

8

TONNES

waste tips, shards and dust

Product of the quarrying and manufacturing process

Limited commercial use outside of roof felting

Easy to transport without risk of breakage

Available at a low cost

Ready for reconstitution without processing

Figure 7.5 - Waste ratio of South African slate

7.6.1

OLD SLATE

100%
Natural Slate

COMPOSITION

Rustenburg
and surrounds

Less than
100km away

SOURCE

Ground floor plane
and building plinth

WHERE USED

Old slate is the term used to describe slate used in its natural form which is simply split or cut without any reconstitution. Formed over millions of years by the compression of clay and silt layers in the valley between Pretoria's quartzite ridges, this is the slate in the same form as it is found on site and in its surrounding context. Old slate is used around the lower portion of the library where it connects to the earth such as on floors and the plinth of the building, it is used at this lower level to allow users to meaningfully experience and appreciate this ancient material. The natural stone plinth also mediates the transition between earth and the building whilst referencing the low stone walls found on site. The plinth is built in the same way as these Arts and Crafts era walls, where thick slabs of sawn slate are laid on an equally thick mortar bed which is flush with the edge of the stone. This flush surface allows any excess water to run off the wall so as to not damage the vulnerable cut edge of the slate. Although vulnerable to water causing delamination at its edge, natural slate is practically impervious to water perpendicular to its grain, meaning that the slate plinth also acts as a waterproof base to isolate the dry interior of the library from the damp earth thanks to the layered slate forming a natural damp proof course.

Figure 7.6 - Surface texture of old slate

7.6.2

NEW SLATE

40%
Natural Slate

60%
Clay

COMPOSITION

Clayville, Midrand

Less than
25km away

SOURCE

Wall planes
and roofs

WHERE USED

Because Pretoria slate is primarily made up of mineralised clay that has been compressed into stone, clay and slate have been conceptualised as essentially the same material but in different forms. From this understanding, reconstituted slate which uses clay as a binder is argued to be the closest kind of reconstitution to natural slate because an additional material has not been introduced into the composite and the entire material is made from clay, some ancient and mineralised and some new and un-mineralised. New slate is a clay based slate reconstitution where slate powder is mixed with clay as a grit and then fired into bricks, a black clay mix is used to ensure that the colour of the new slate matches the old slate with the only visual difference being their texture. In order to fit into the module of the library, the new slate bricks are made to a custom size where they resemble slabs rather than bricks in reference to the natural stone used on site and in the building's plinth. New slate is used to build the majority of the library's exterior skin because of its close relationship to natural slate and relative affordability, it also references Pretoria's established regional tradition of building with brick.

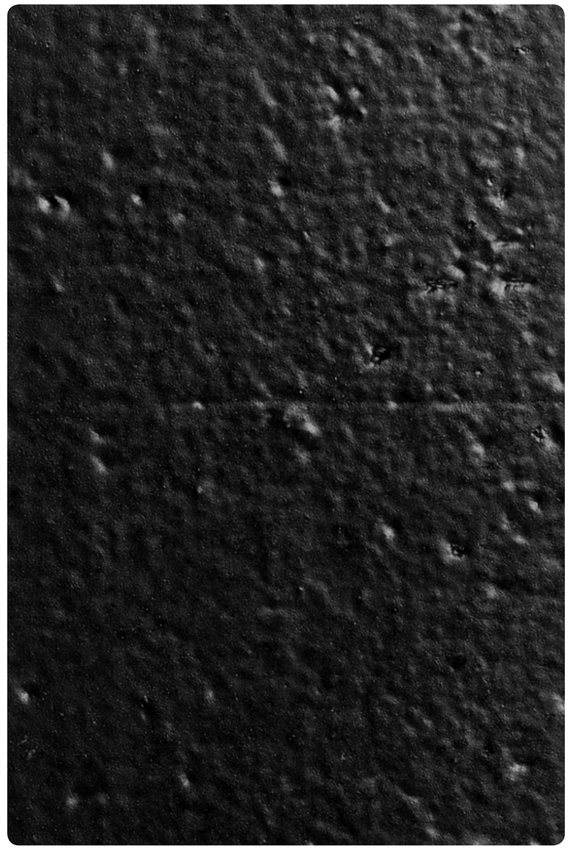


Figure 7.7 - Surface texture of new slate

7.6.3

CAST SLATE

80%
Natural Slate

20%
Portland Cement

COMPOSITION

Daspoort, Pretoria

Less than
6km away

SOURCE

Articulation
around threshlds
and openings

WHERE USED

In order to be able to use large blocks of material to communicate the mass and solidity of the building's walls, a reconstituted slate material needed to be developed that had the same singular character as a block of natural stone. This reconstitution needed to be able to be easily poured into moulds to make precast elements to ensure quality due to the scarcity and expense of skilled stonemasons who would be able to cut such precise elements. Cast slate uses dyed Portland cement to bind a mixture of slate shards and powder into large blocks or elements. These elements are used wherever a sense of mass or solidity needs to be expressed such as where the interior of the building meets the exterior such as arounds thresholds, windows or chimneys. Alternatively the flexibility of form making offered by the casting process makes cast slate elements useful where intersecting geometries or levels need to be mediated. Once cast, the aggregate of the cast slate is exposed and then polished to reveal the natural colour of the slate which matches the colour of the cut edges of the old slate and the satin black of the new slate whilst differing in texture from both. In order to determine the final mix that would result in an appropriate colour and texture, multiple test blocks were made to compare cast slate recipes against the appearance of cut natural slate (fig. 7.9).

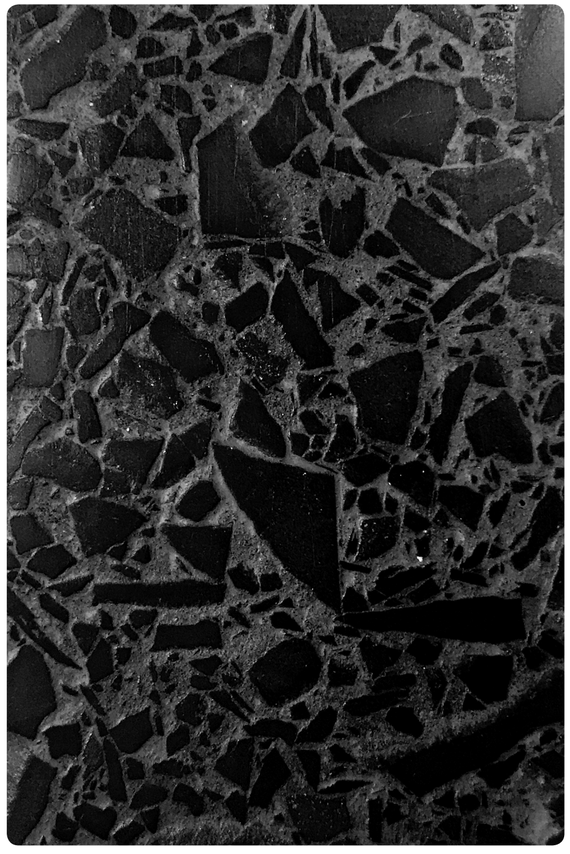
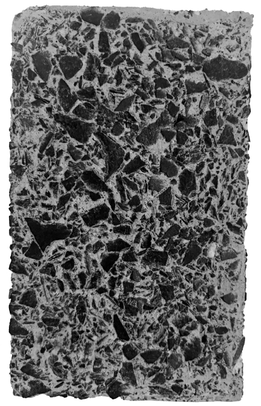


Figure 7.8 - Surface texture of cast slate

Figure 7.9 - Exploration samples made to create cast slate with the desired finish

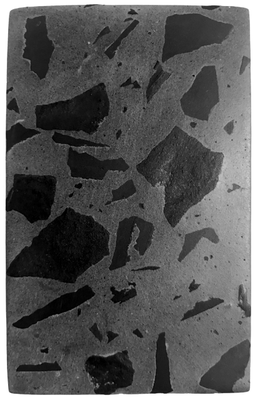


FINISH:
Exposed
aggregate

COMPOSITION:

85% Slate Shards
and Dust
15% Cement

01



FINISH:
Polished

COMPOSITION:

30% Slate Shards
70% Cement

04

FINISH:
Exposed
aggregate

COMPOSITION:

10% Slate Shards
laid on formwork
90% Cement and
Black Oxide

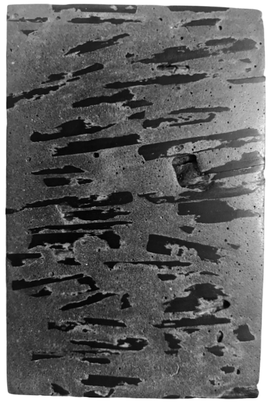
02

FINISH:
Exposed
aggregate

COMPOSITION:

70% Slate Shards
30% Cement and
Black Oxide

05

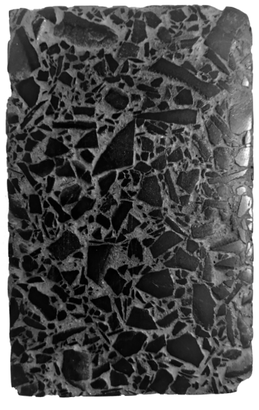


FINISH:
Polished

COMPOSITION:

40% Slate Shards
stacked upright in
formwork
60% Cement

03



FINISH:
Lightly Exposed
and Polished

COMPOSITION:

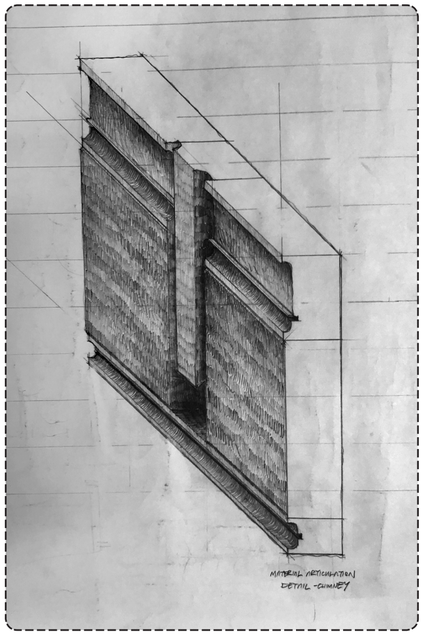
80% Slate Shards
20% Cement and
Black oxide

06

7.7

A NOTE ON MOULDINGS

Described as a play of light, shadow and water (Michael and Peter 2015), mouldings have been used throughout the scheme to articulate edges, connections and individual elements. In contrast to the contemporary tradition of understanding materials as flat, unbroken planes which are only significant and varied at their connections to other materials, this scheme explores the value of articulating not only these connections between different materials but also the surfaces of the materials themselves. The articulation of large surfaces ensures that the library maintains a human scale despite the actual size of its volumes whilst establishing specific atmospheres for different spaces such as on the elevations of the main library building, where horizontal mouldings are used to emphasise the heavy and static quality of the building by breaking the continuous vertical lines suggested by lined up windows. On closer inspection of these articulating elements, each moulding has been designed to describe its own role and contribute to the overall character of the building such as in the abovementioned horizontal moulding which is made up of two symmetrical cavettos separated by a deep sunken fillet, a form which uses the play of light and shadow to evoke a notion of separation by creating a continuous 'groove' that wraps the entire perimeter of the building and suggests where its top half and bottom half are joined. Along with an artful mediation of light and shadow and facilitating the appropriate weathering of the building, mouldings also reveal the mathematical sophistication of the modular system used to order the design of the library with each of their details and components lining up with an entire module or fraction thereof.



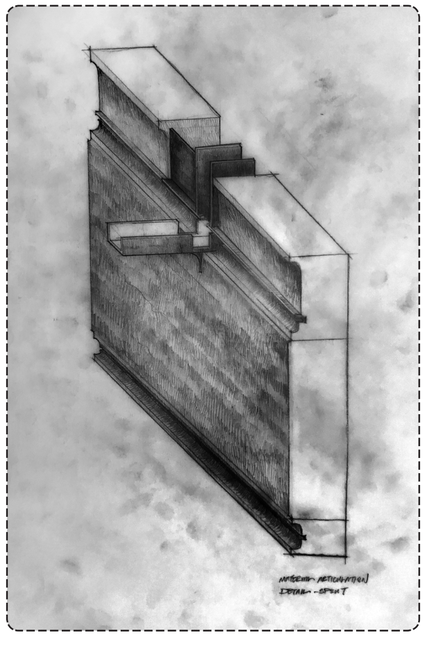


Figure 7.10 - Surface articulation and moulding explorations

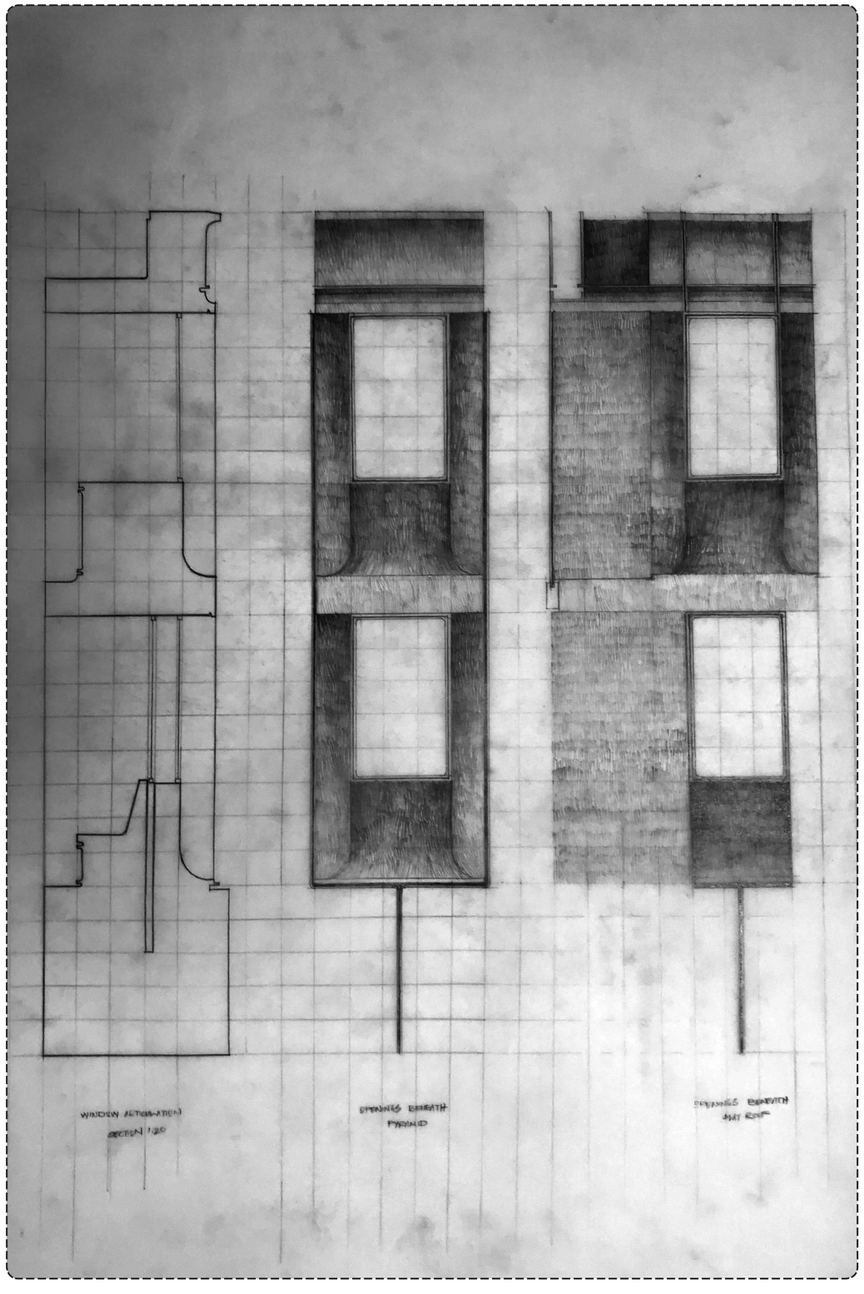


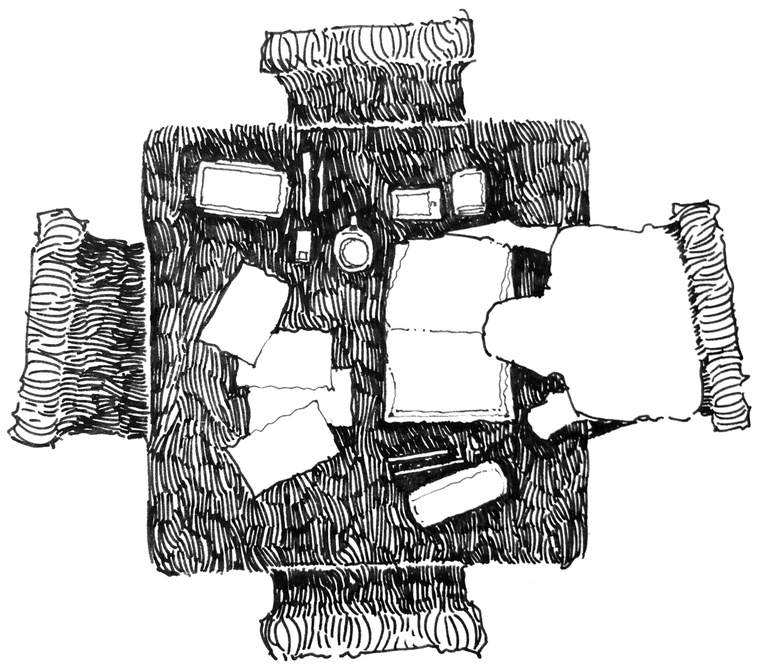
Figure 7.11 - Designing the treatment of openings

CHAPTER

08

AEDIFICIUM

Concluding remarks and final manifestation of the argument in the form of final models and drawings.



8.1

CONCLUSION

In an age where the progressive and the novel are fetishized and the fictional ideal of a man-made future utopia blinds us to the value of the historical or the existing, we attempt to reimagine our world without questioning whether something need be reimagined. The public library is a victim of a self-fulfilling prophecy that called for its reinvention in order to cope with a digital future and retain its relevance, this reinvention took the form of the library being renamed as the resource centre and the rapid proliferation of these counterfeit replacements made up of blended functions, technologies and amorphous, ill-defined spaces, have only acted to expand the placeless geographies that characterise our urban environments.

If new libraries are to be built as places of meaning and significance whilst critically engaging with the future of the type, then architects need to embrace the library's essential character as an enclosed, well defined and regulated semi-public space built to house physical codices and people whilst facilitating non-digital interactions. It is this typical library that has both value and a contemporary role, rather than existing as a placeless window into the bottomless riches of the digital world. It is an enclosed space of order, context and structure in contrast to the infinite chaos of the outside.

8.2

THE ARCHITECTURAL PRODUCT

Following these concluding remarks, the drawings and models that have been made to communicate the design of the library, act as the architectural manifestation of the argument. As the fruit of this investigation into the issue of institutional placelessness, the architecture presented here should be understood by the reader as the final chapter of this argument and as a means of critically assessing the relevance and potential of the approach to place-making proposed by this dissertation.

Figure 8.1 - Roof volume model making process

Conclusion

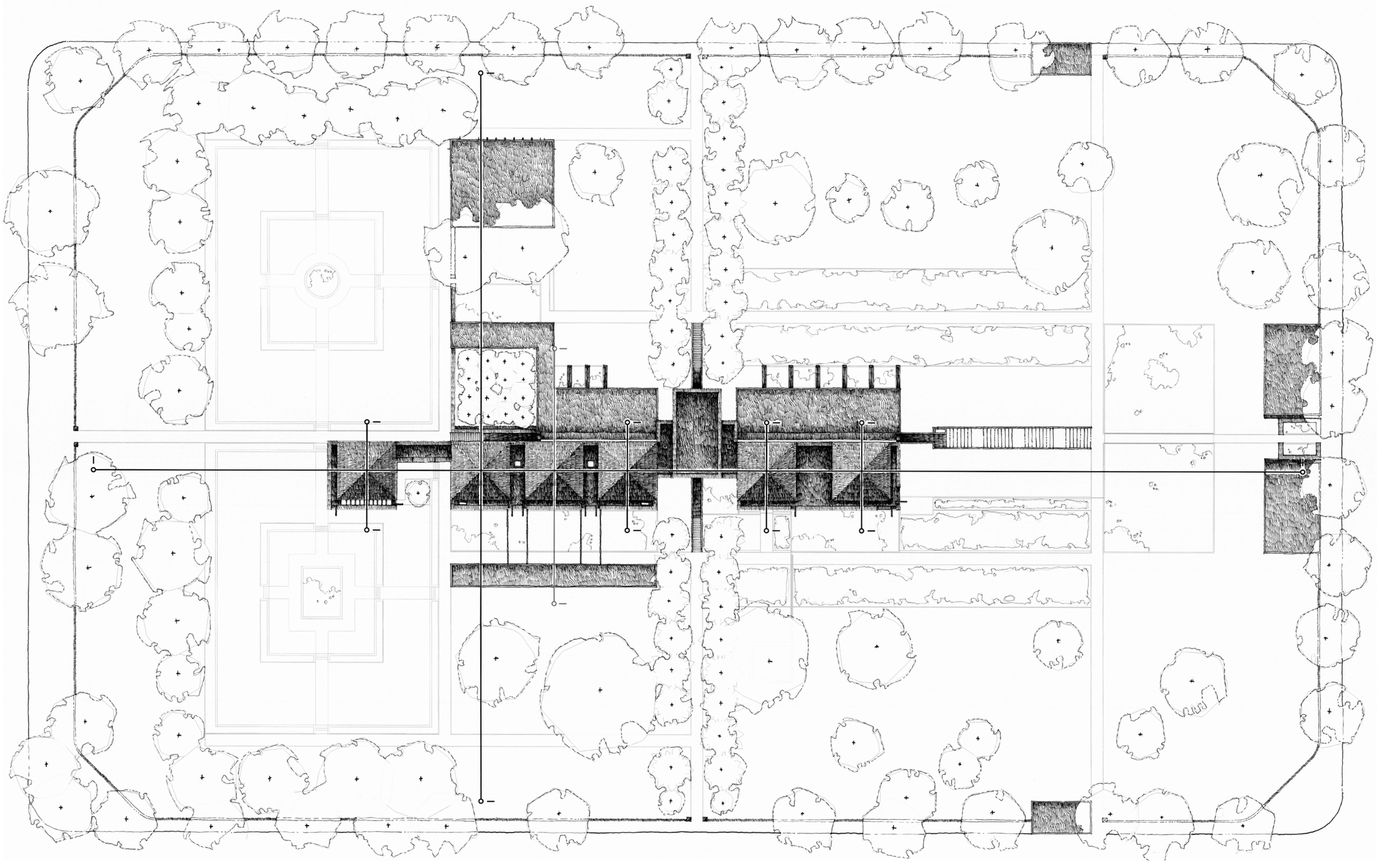


Figure 8.2 - Masterplan and roof plan of site

Conclusion

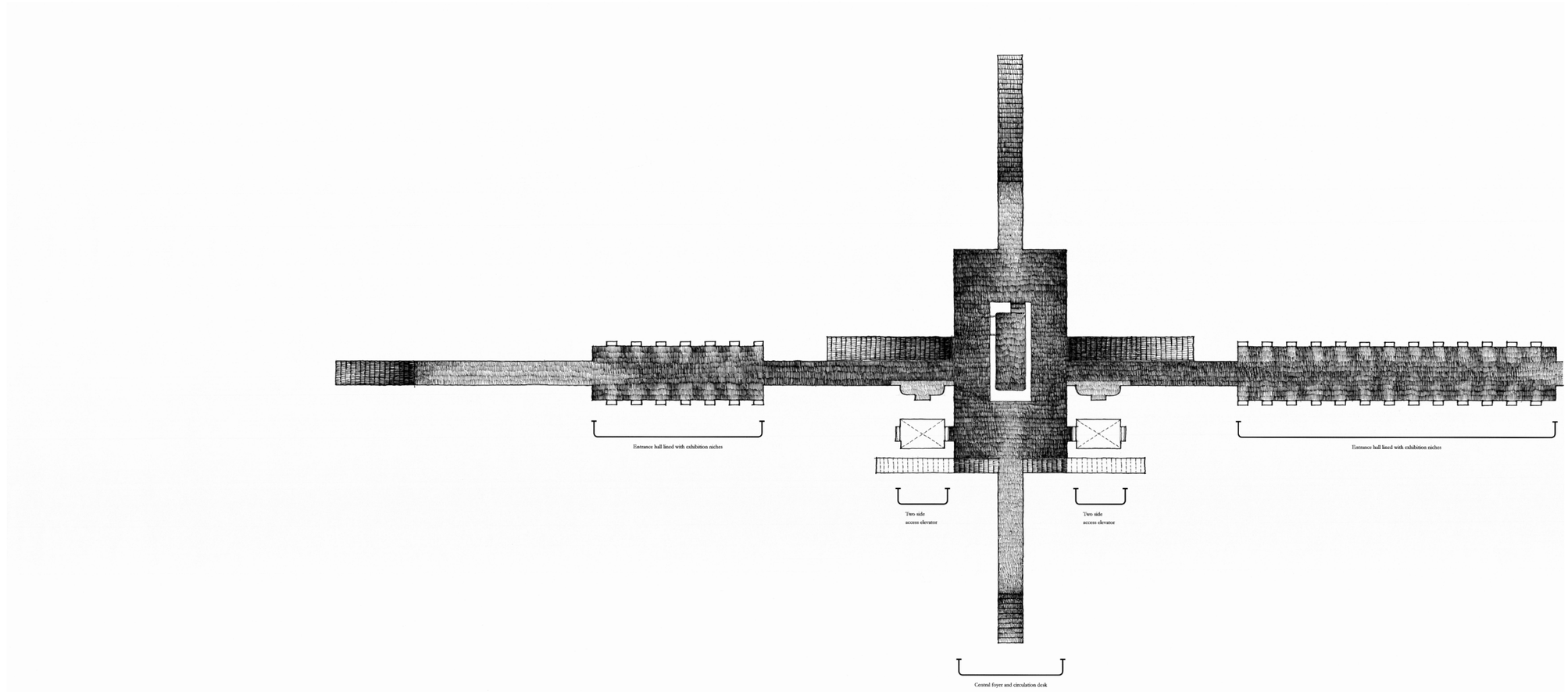


Figure 8.3 - Basement plan of main library building

Conclusion

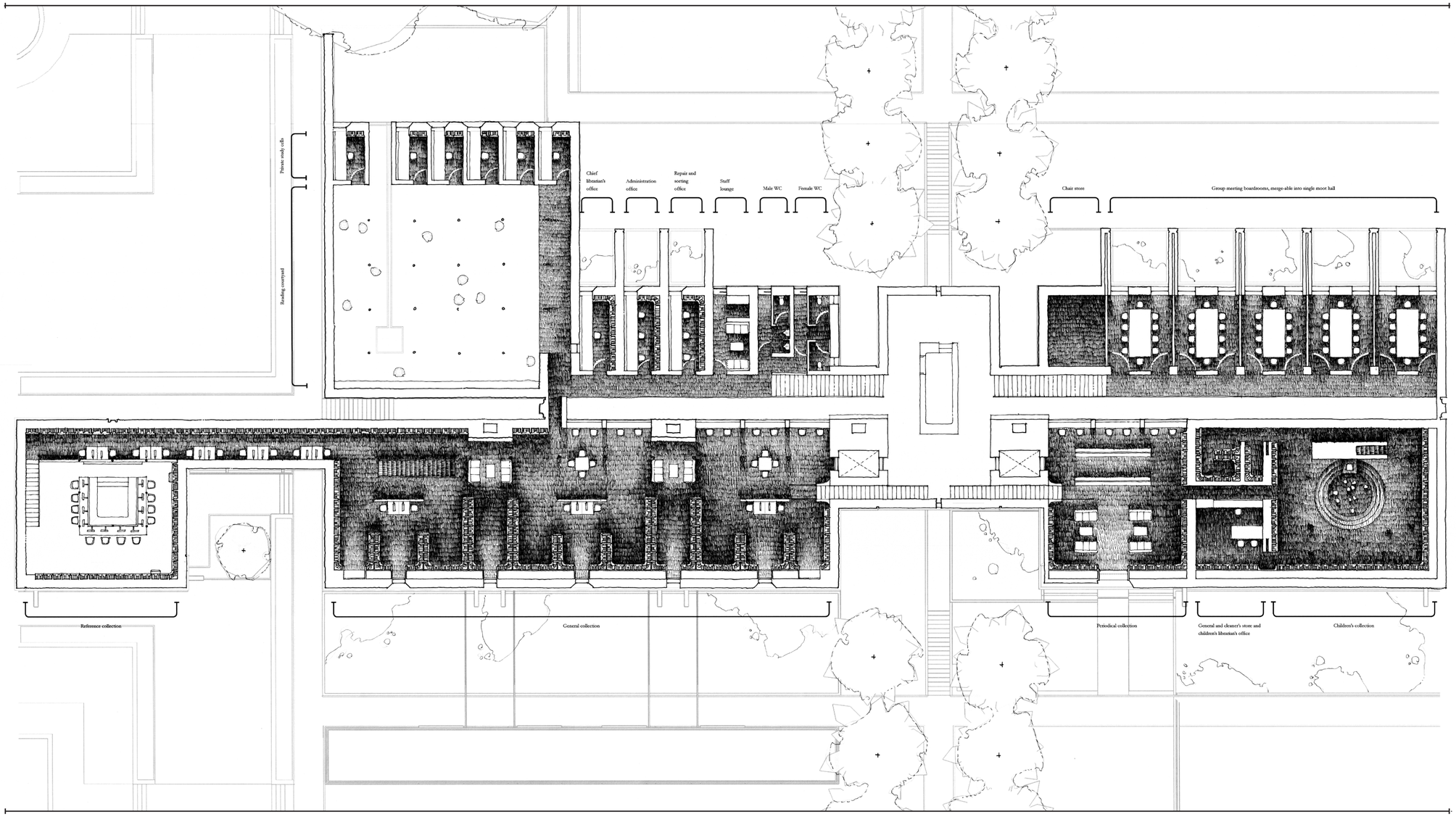
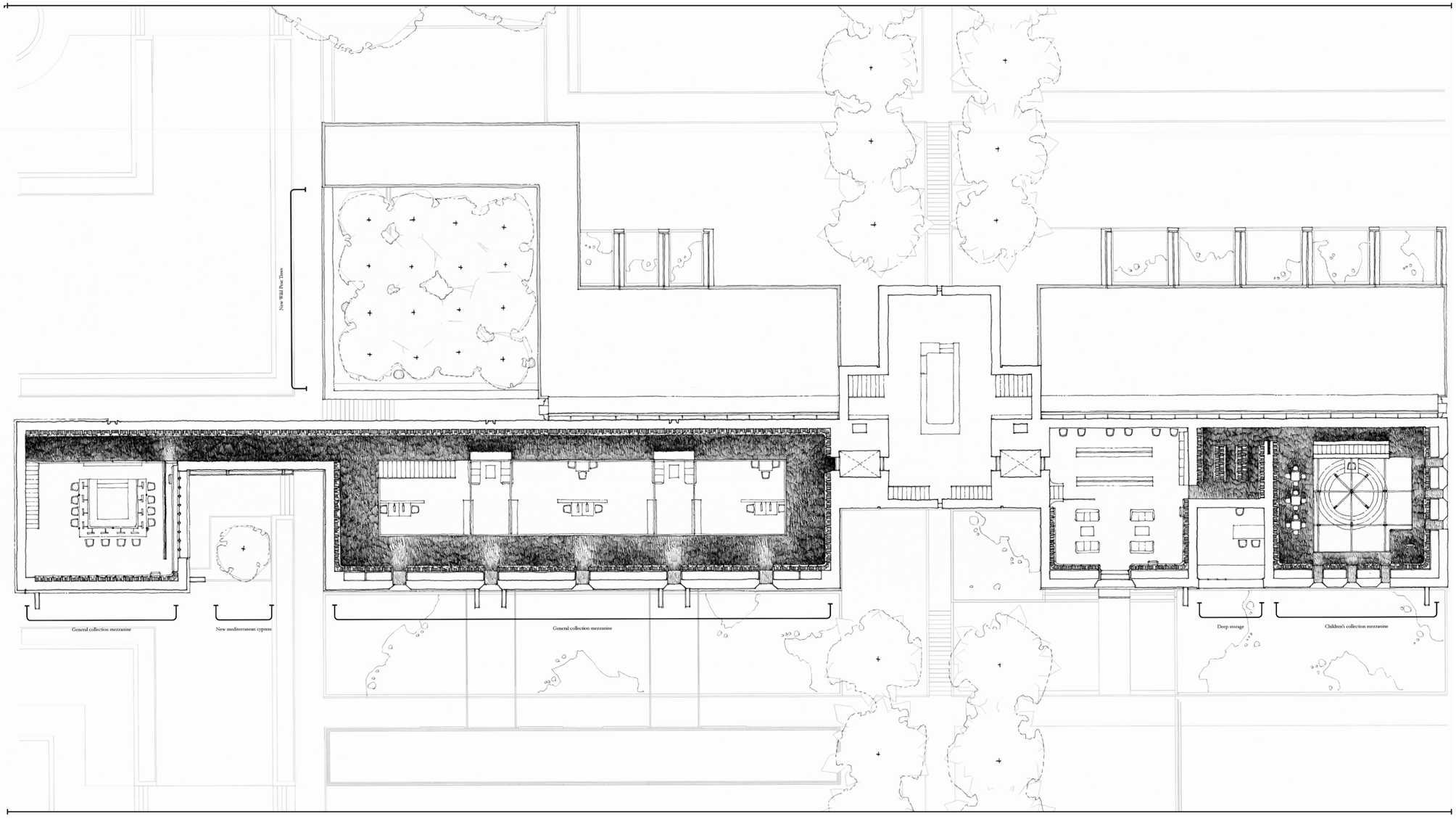


Figure 8.4 - Ground floor plan of main library building

Conclusion



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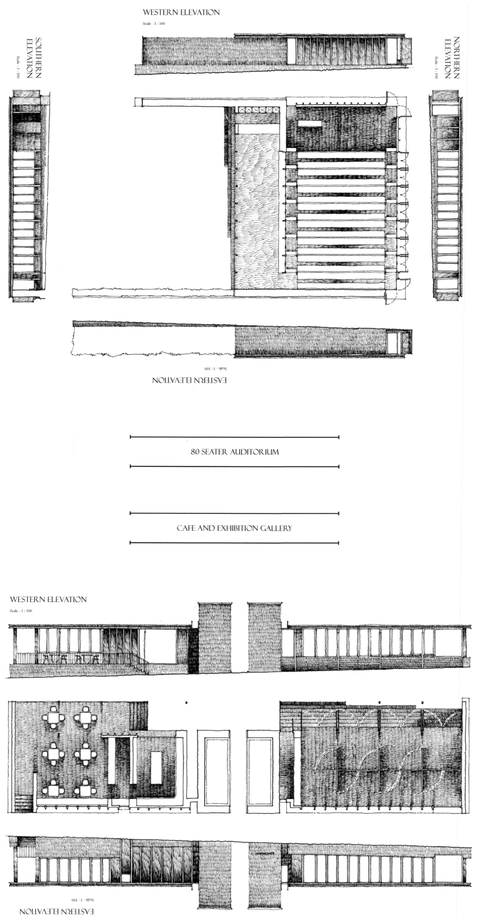

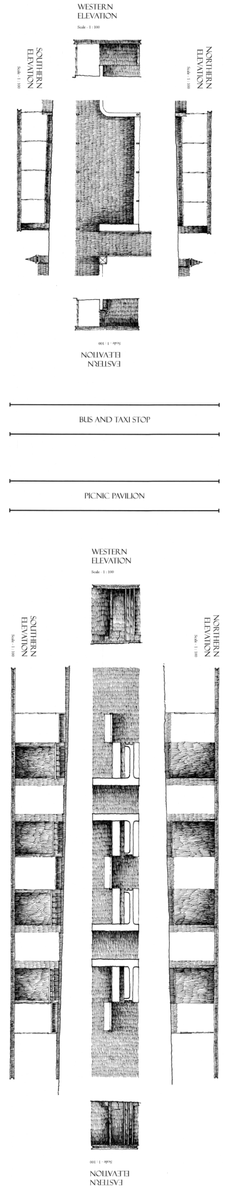

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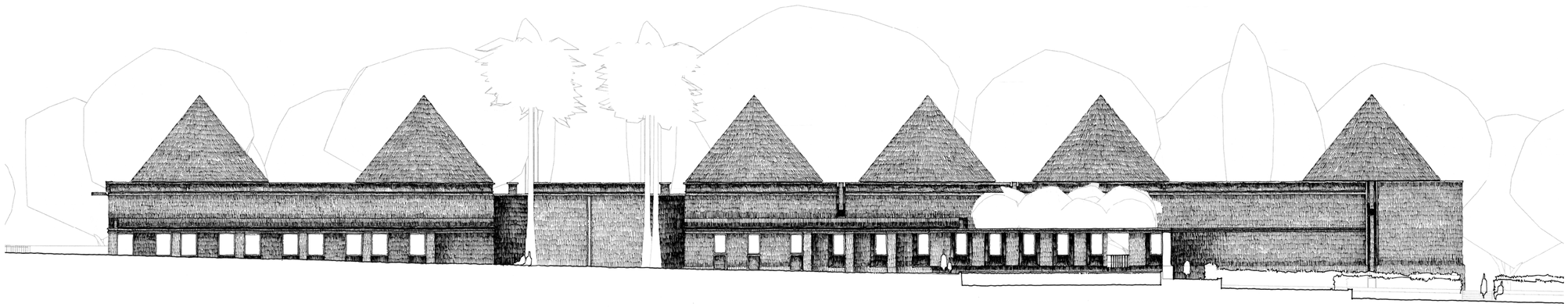

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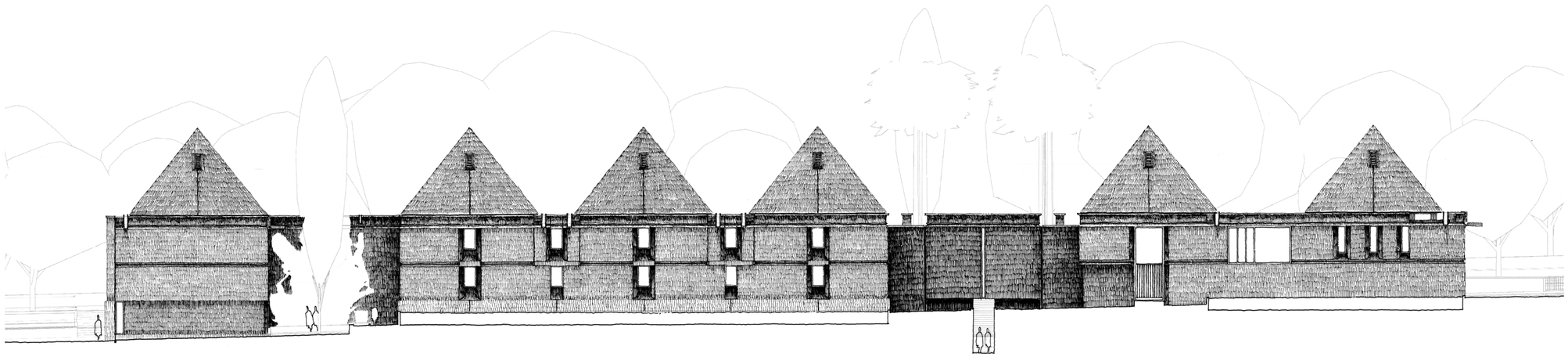

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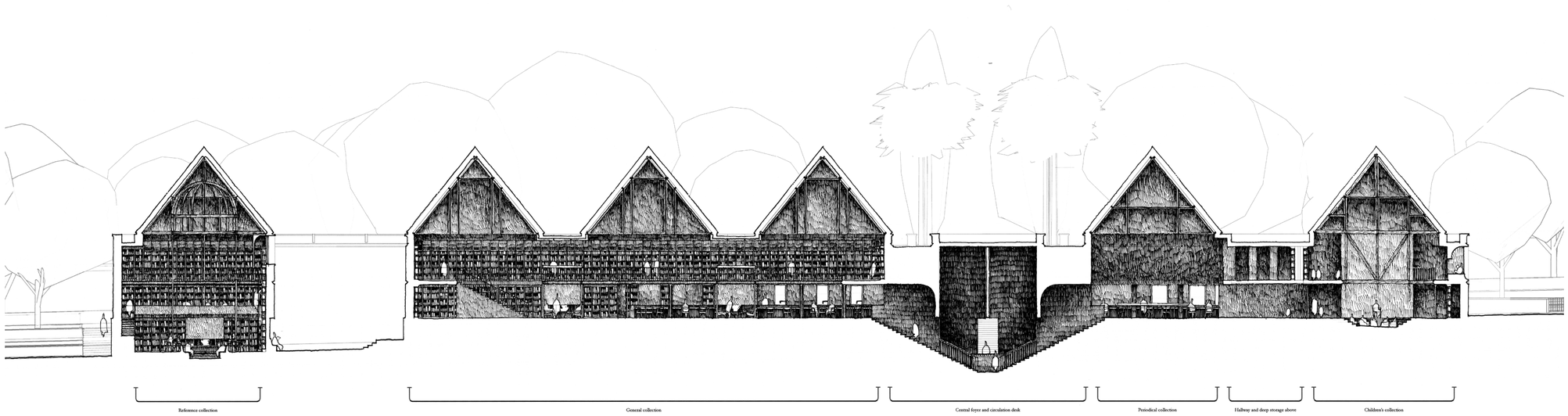

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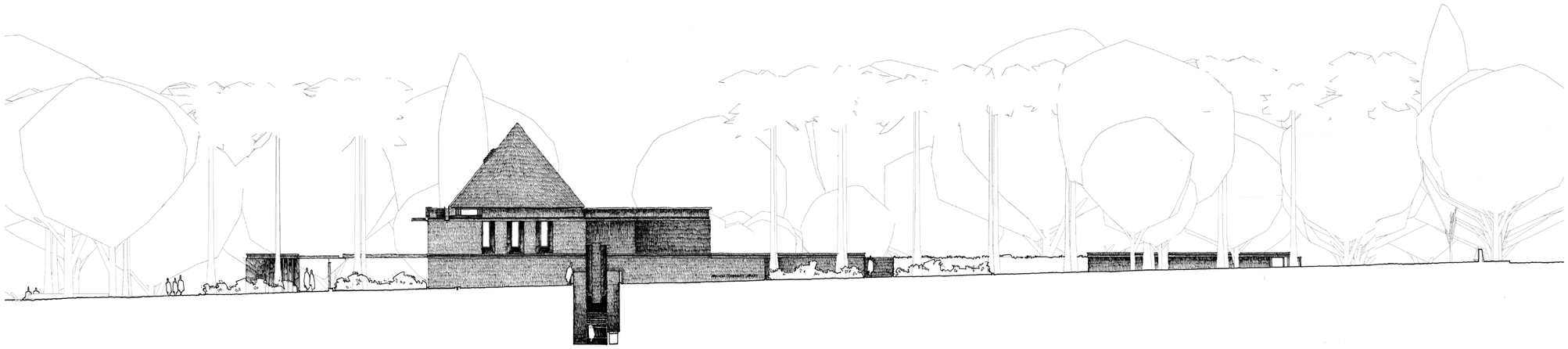
Conclusion



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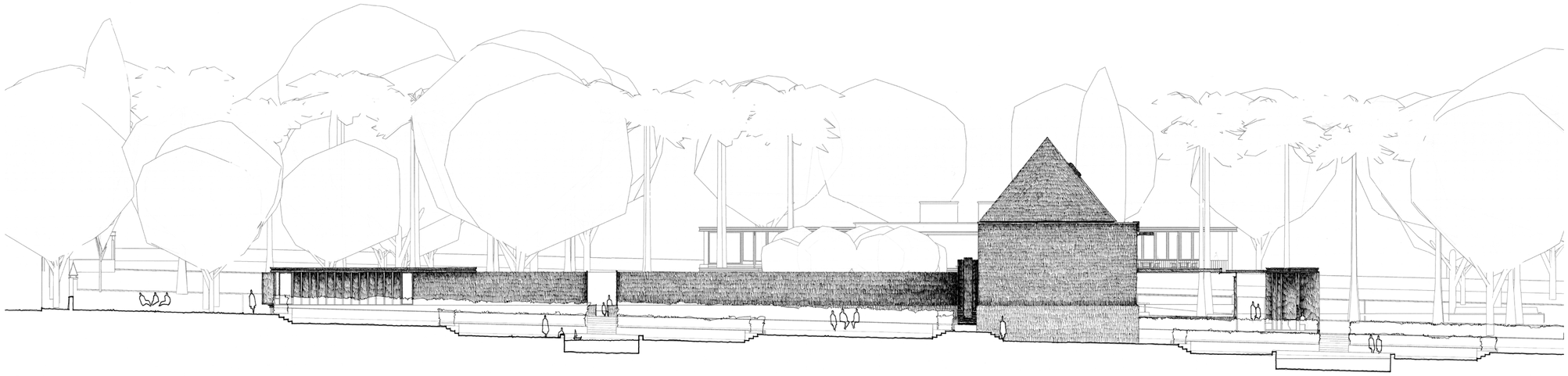

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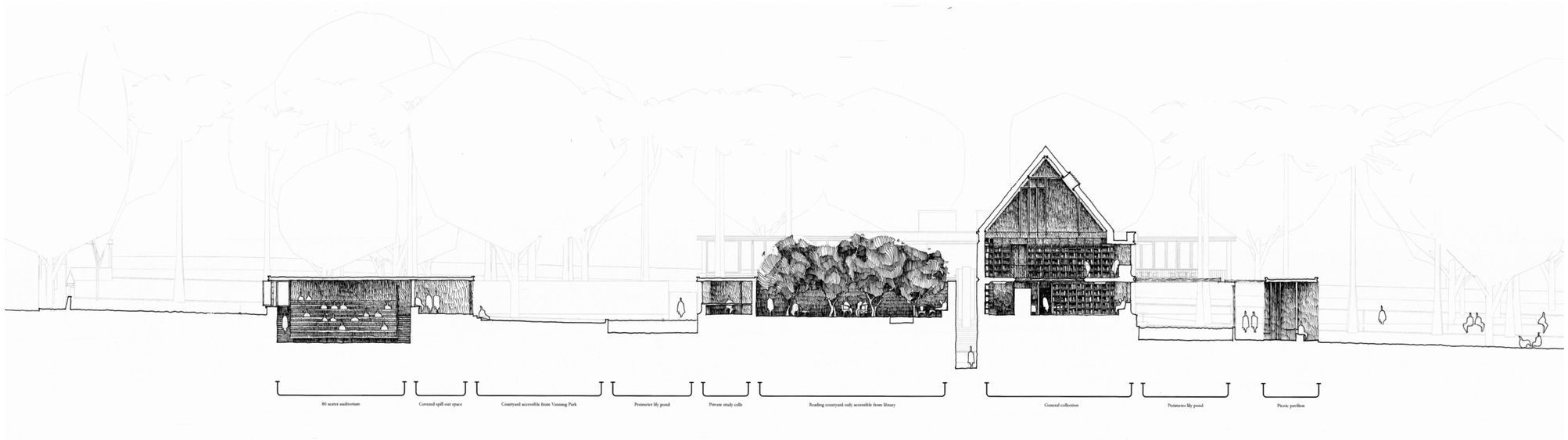

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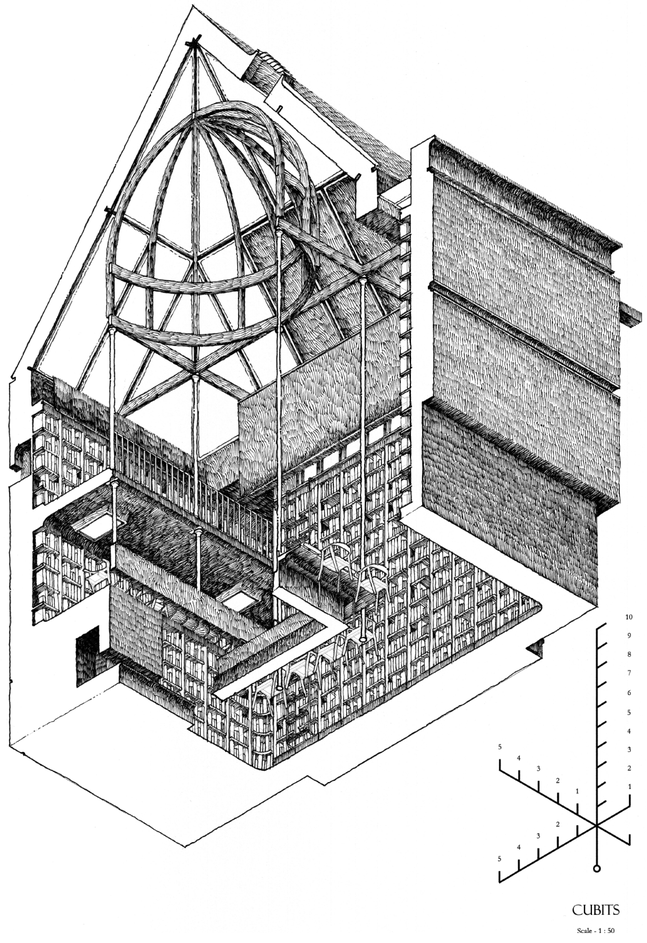

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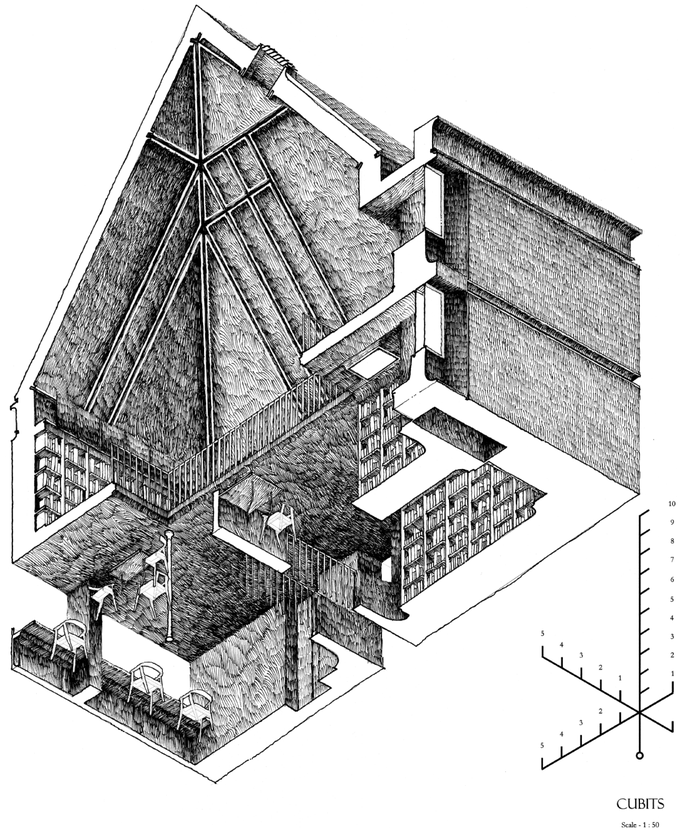

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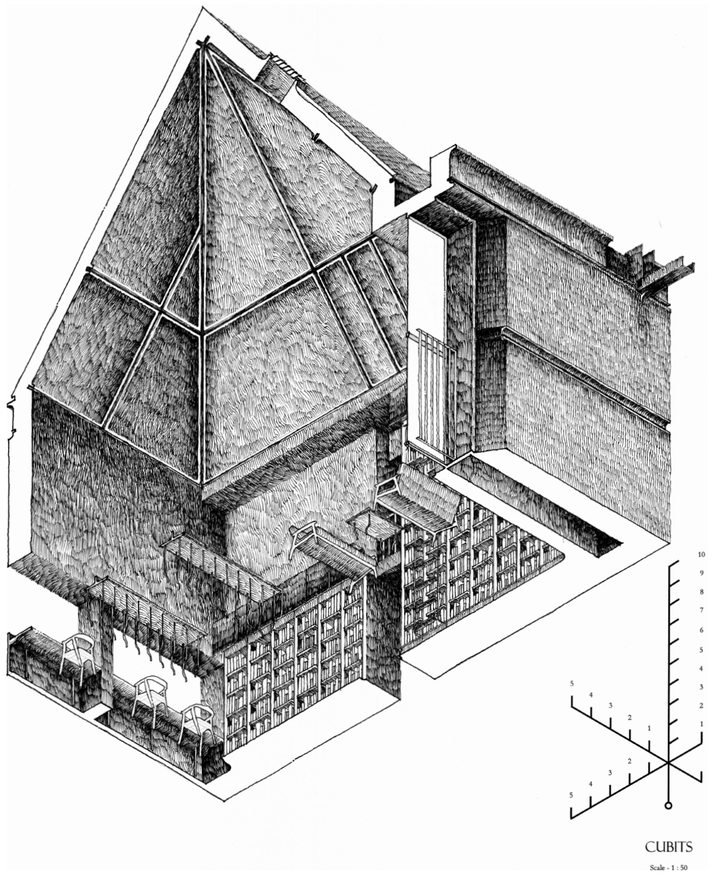

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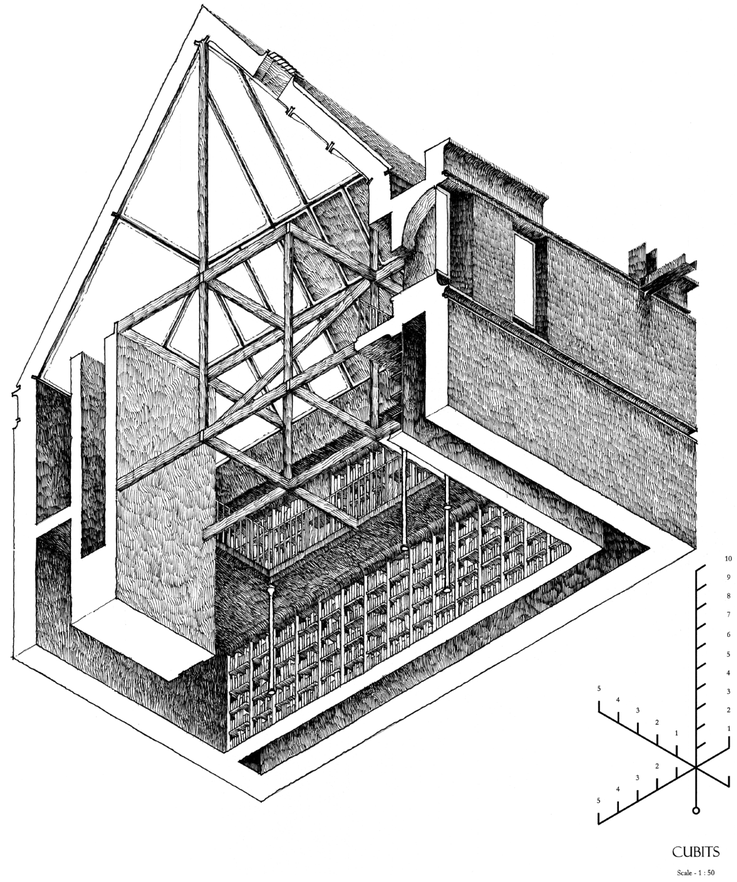

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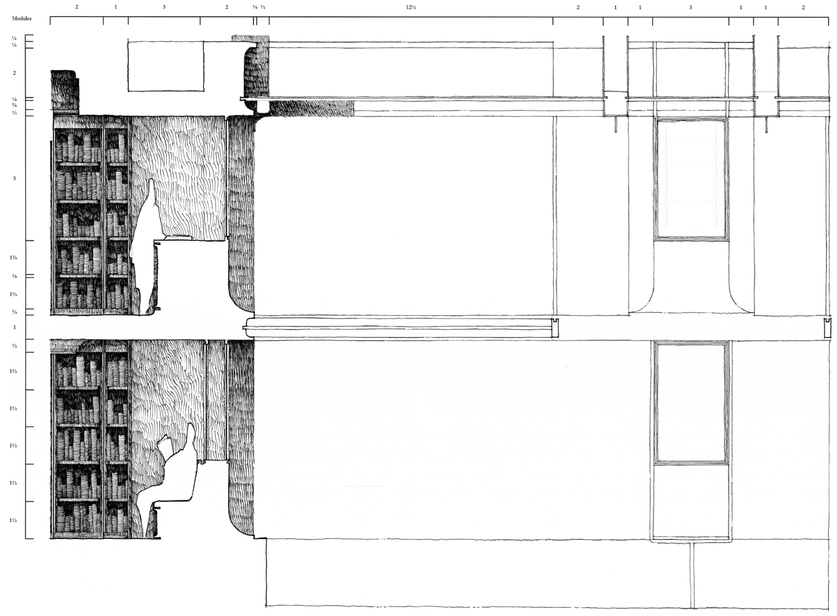
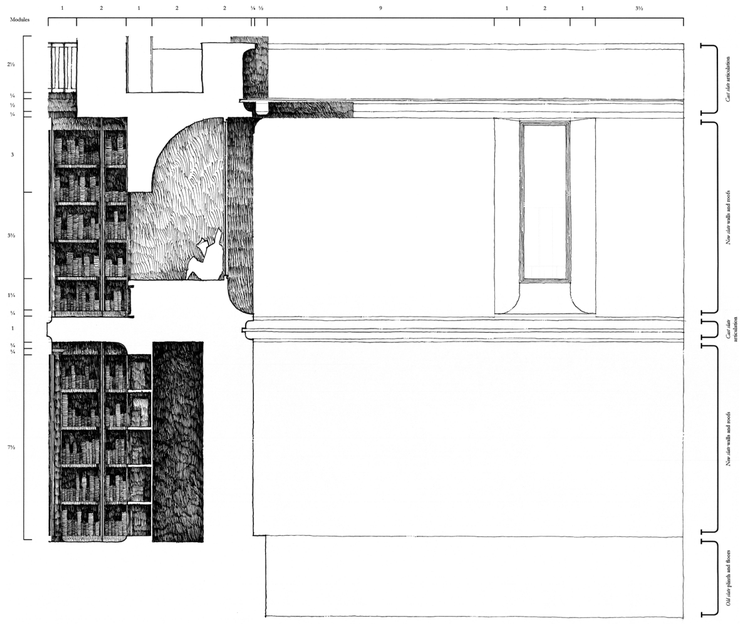


GENERAL COLLECTION BAY WINDOWS

Scale - 1 : 20



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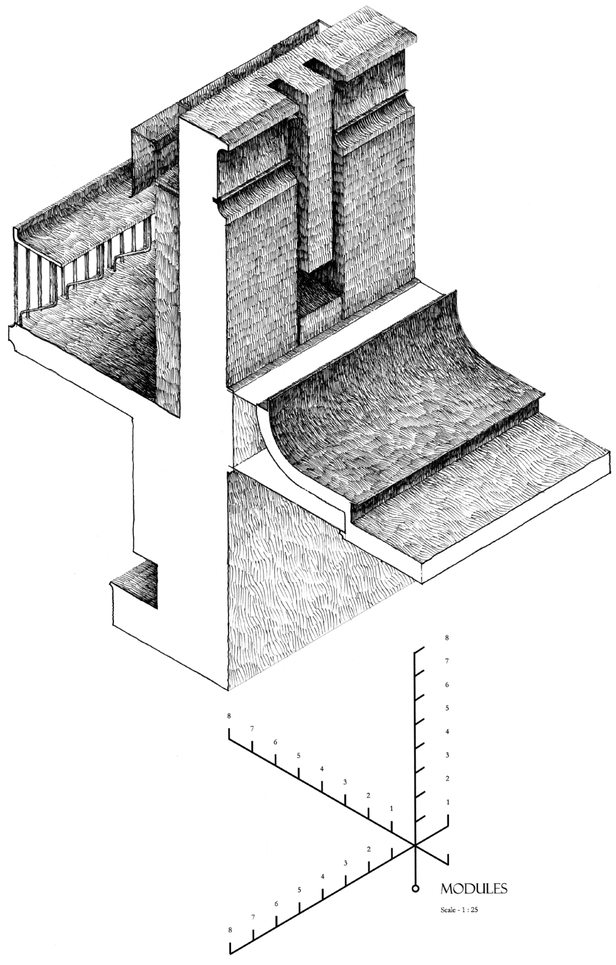

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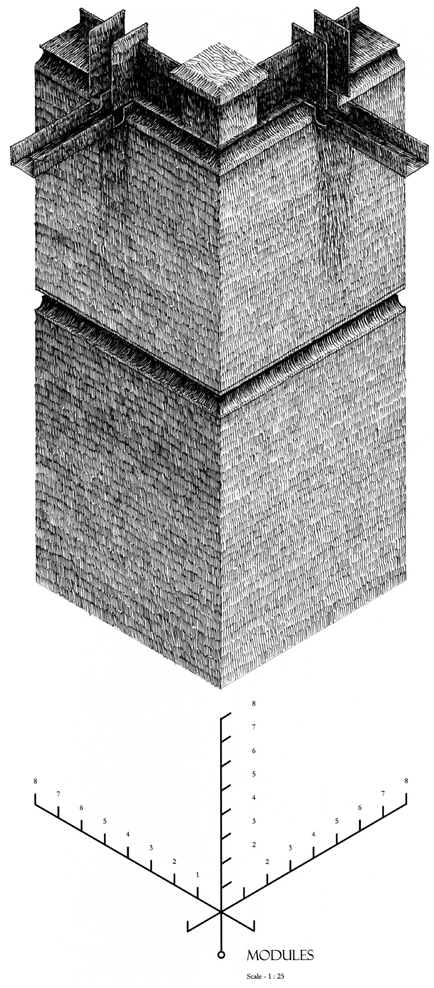

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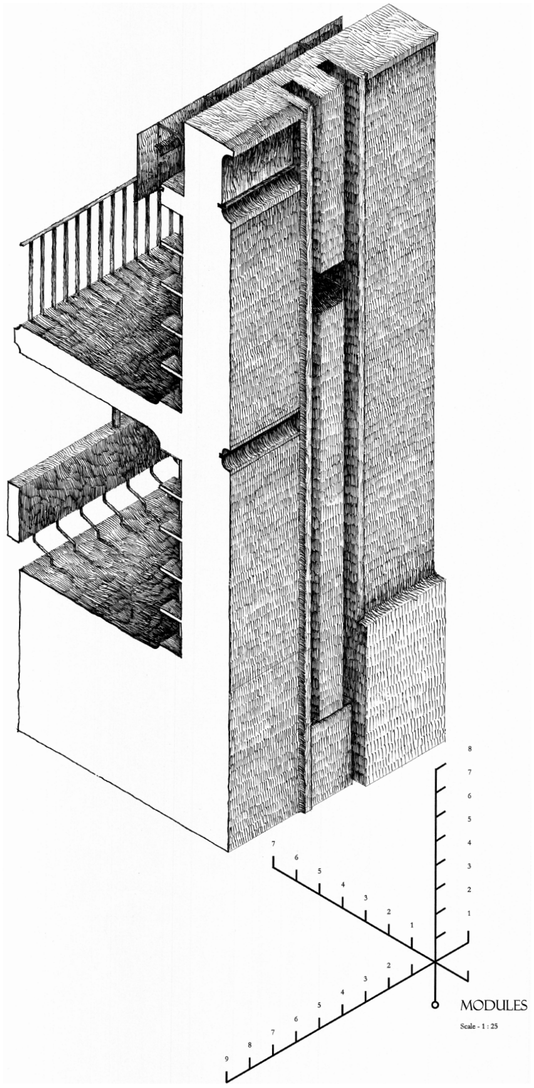

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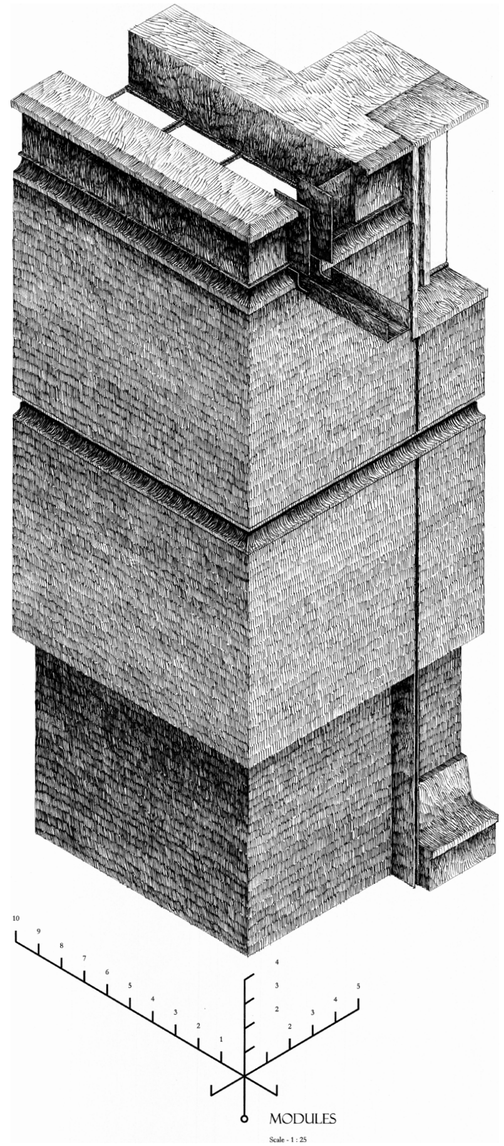

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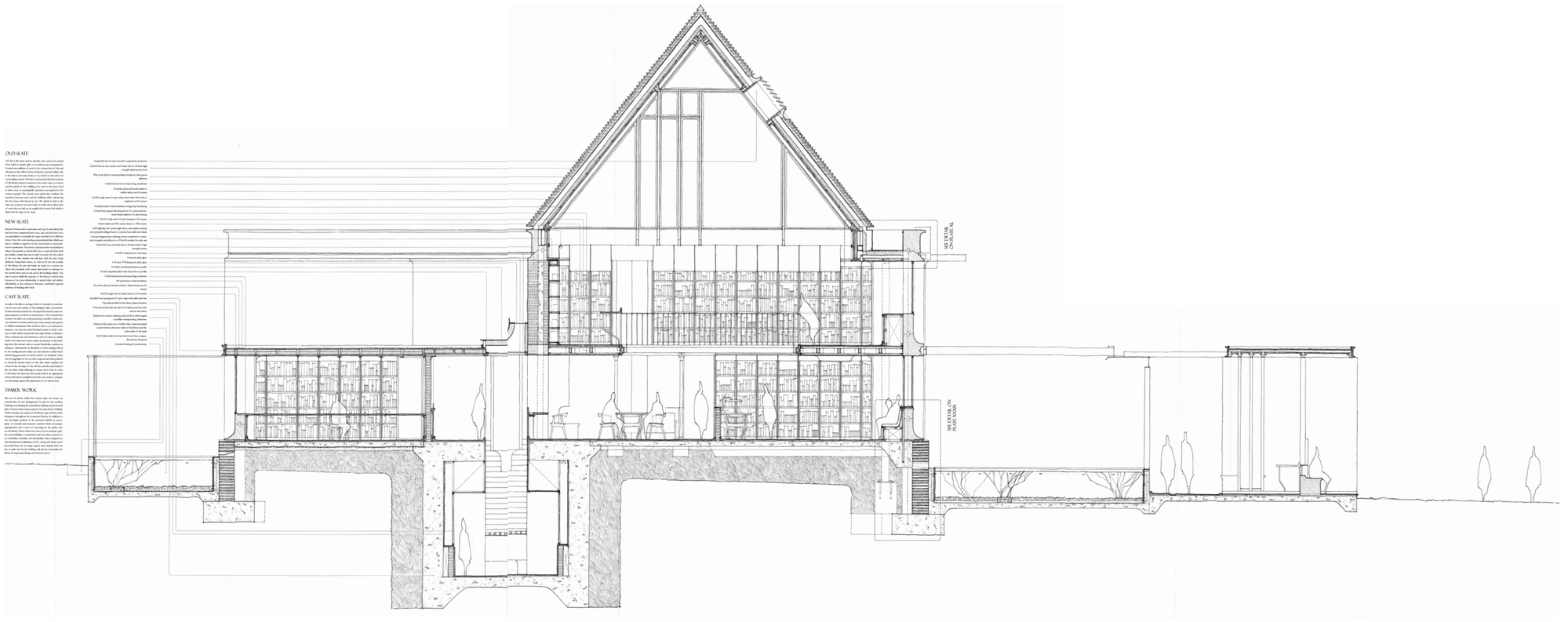

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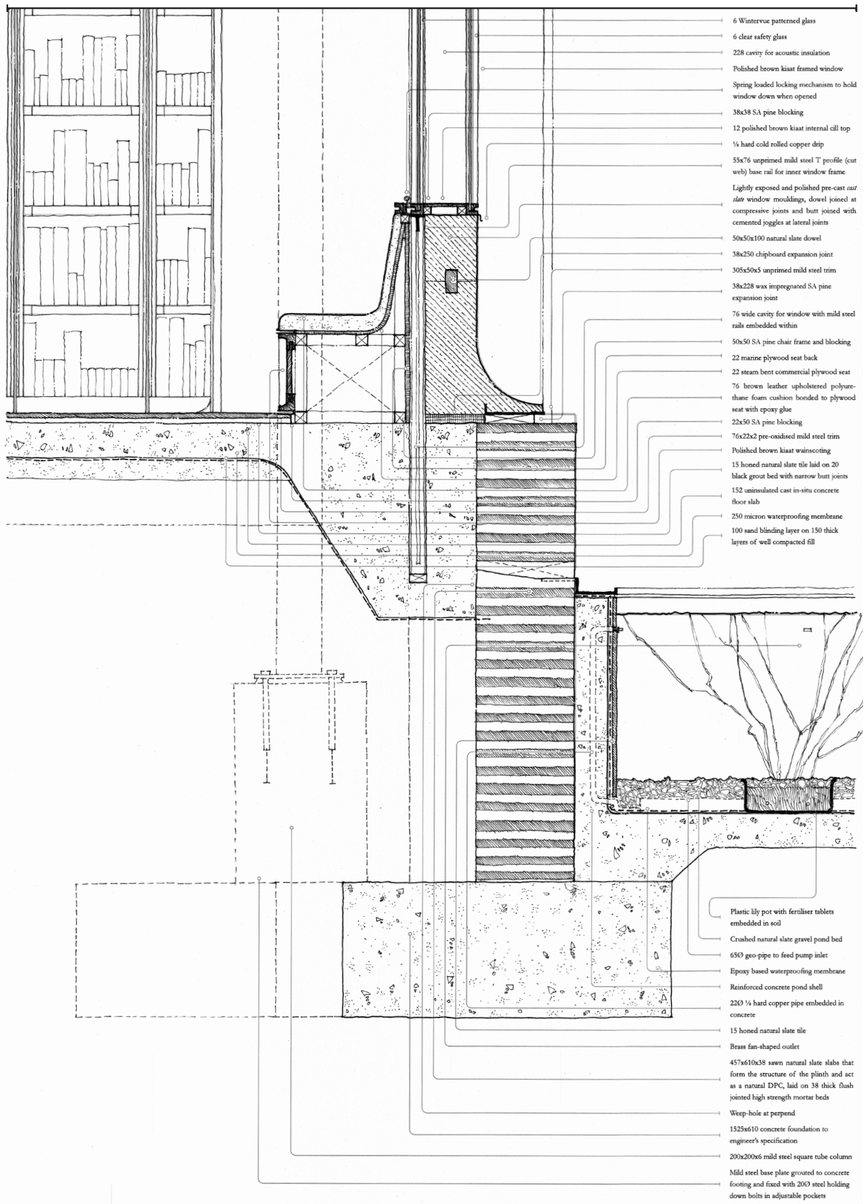

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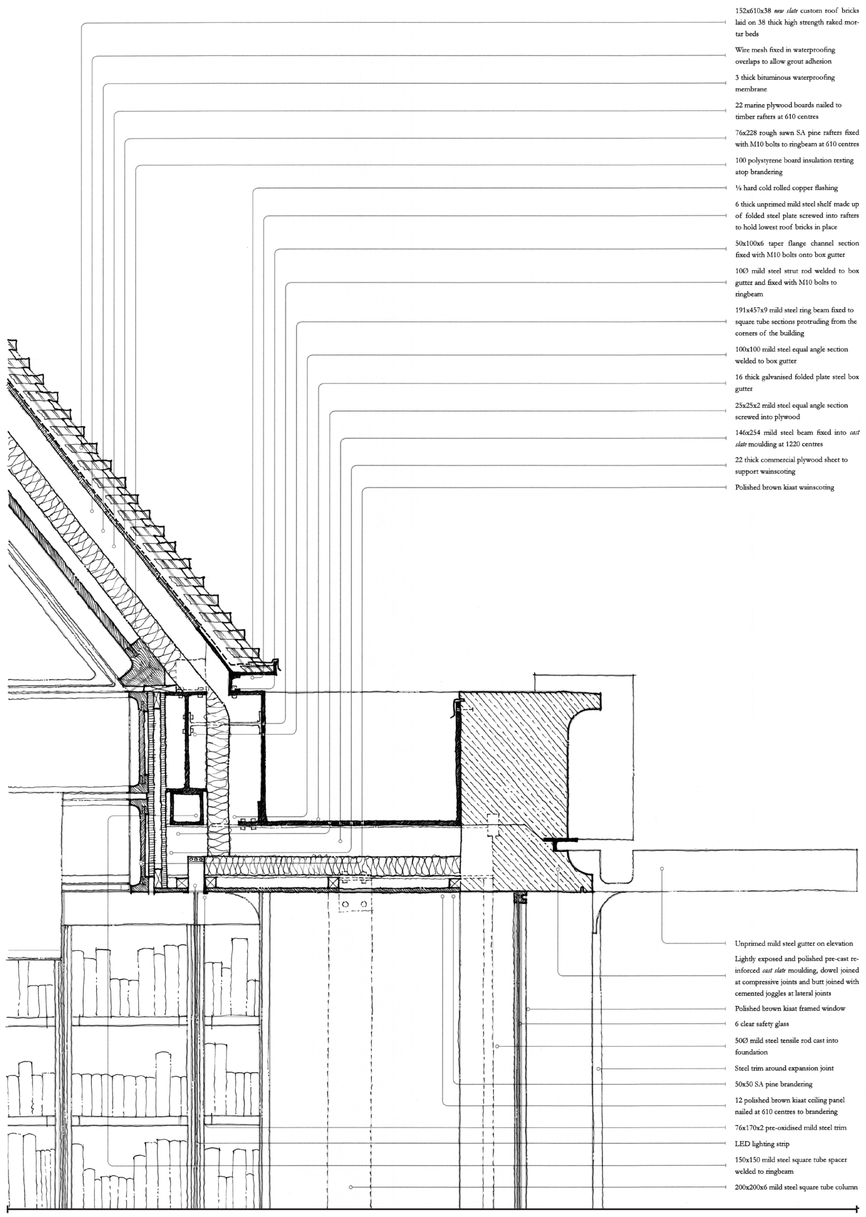

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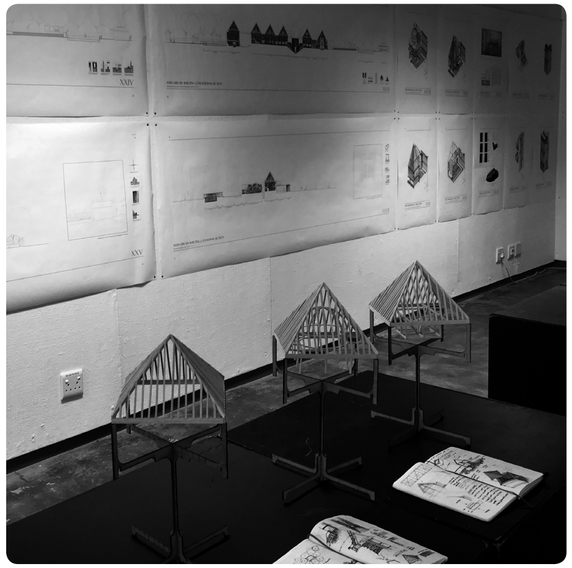

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I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

PAOLO KIRSTEN