

A LIBRARY FOR SOWEBO

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A special thank you to

VT CAUS for teaching me how to teach myself and providing amazing programs and opportunities for your students.

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The WAAC for providing me with an unforgettable year in a truly unique academic atmosphere. Here I learned me to find inspiration in the most mundane, question every detail, was reconnected with my passion for drawing, and fell in love with architecture again.

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Friends with whom I shared restless nights working towards deadlines, but still found the energy to put down the pencil and find some real world inspiration.

Family that were my constant support and gave me the chance to take opportunities to adventure throughout Blacksburg, Europe, Chicago, and DC.

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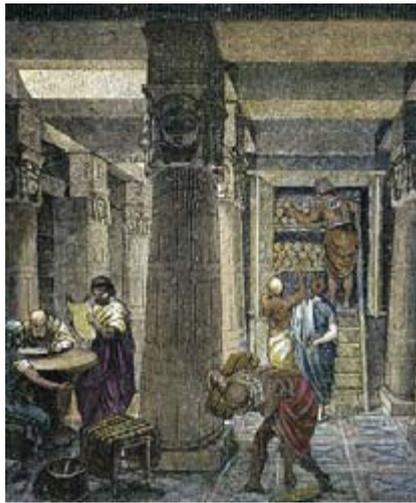
60 ADDITIONAL DRAWINGS

This thesis will be an investigation of the role of the public library in a modern urban environment. With digitization of materials must come a shift in spatial arrangements and atmospheres in which patrons experience and share information.

I will investigate how light, materiality, and architectural elements combine to provide spaces that fuel imaginations and inspire creation from patrons.

LIBRARY (R)EVOLUTION

For millennia, the library has played a significant role in nearly every society. The idea that “knowledge” is power can be traced back to ancient civilizations. This building typology has been forced to constantly evolve in order to survive intellectual, social, and technological revolutions. A few significant examples below show this long progression.



In ancient Egypt, when the new city of Alexandria was built, the Great Library of Alexandria was intended to be the main attraction for great scholars to move to the city. The library served as one of the first known “think tanks” and led Alexandria to become the cultural and intellectual capital of the civilization.



In the early 15th century and for centuries prior, religious elite held all the power in society. Their extensive monastic libraries were just one display of their incomprehensible wealth. Monks were responsible for the tedious and time-consuming task of duplicating religious manuscripts and other critical resources.



Around 1450, Gutenberg's invention of the printing press sparked intellectual revolutions throughout Europe that restructured societies. The press made publishing quicker and more affordable, allowing more people access to the Bible. More importantly, it allowed philosophers and scientists to publish theories that contradicted centuries old beliefs. This spread of new ideas gave power to a broader group of people.



Personal and private libraries were a symbol of privilege in 19th century societies. The wealthy often had expansive personal collections in their homes or were fortunate enough to have a membership to subscription libraries. However, due to a large disparity of income, the general public was still deprived of access to this type of education.



Philanthropist Andrew Carnegie was at the forefront of the library revolution of the early 20th century. Over 2,500 public libraries were built, over five decades, due to his vision for public libraries. These libraries were an embodiment of the democratic ideals in which Carnegie felt so passionate about. He felt that anyone, regardless of age, gender or race, who was “industrious and ambitious” deserved access to an education in order to better themselves. An inscription on the Boston Public Library captures his dream. His libraries were also revolutionary because they were the first to incorporate “open stacks”, allowing visitors to freely browse the collections.

PRESENT AND FUTURE LIBRARIES

Libraries today are facing a revolution that is perhaps greater than any we have seen before. Rapid technological advances have pushed much of our information into an intangible realm, prompting people to question the relevance of libraries all together. Although information has taken on new forms, there is still a need for a space for the tools with which we can access these immaterial references.

Therefore, the question doesn't lie in the relevance of libraries as an institution, but in the relevance of a library's architecture to rapidly changing media types and the needs of patrons.

The architects of the Seattle Public Library have managed to create an atmosphere that seamlessly incorporates both traditional and new media types. They have also created a great reading room, referred to as "the living room" of the city, that provides a platform for community interaction and intellectual exchanges.



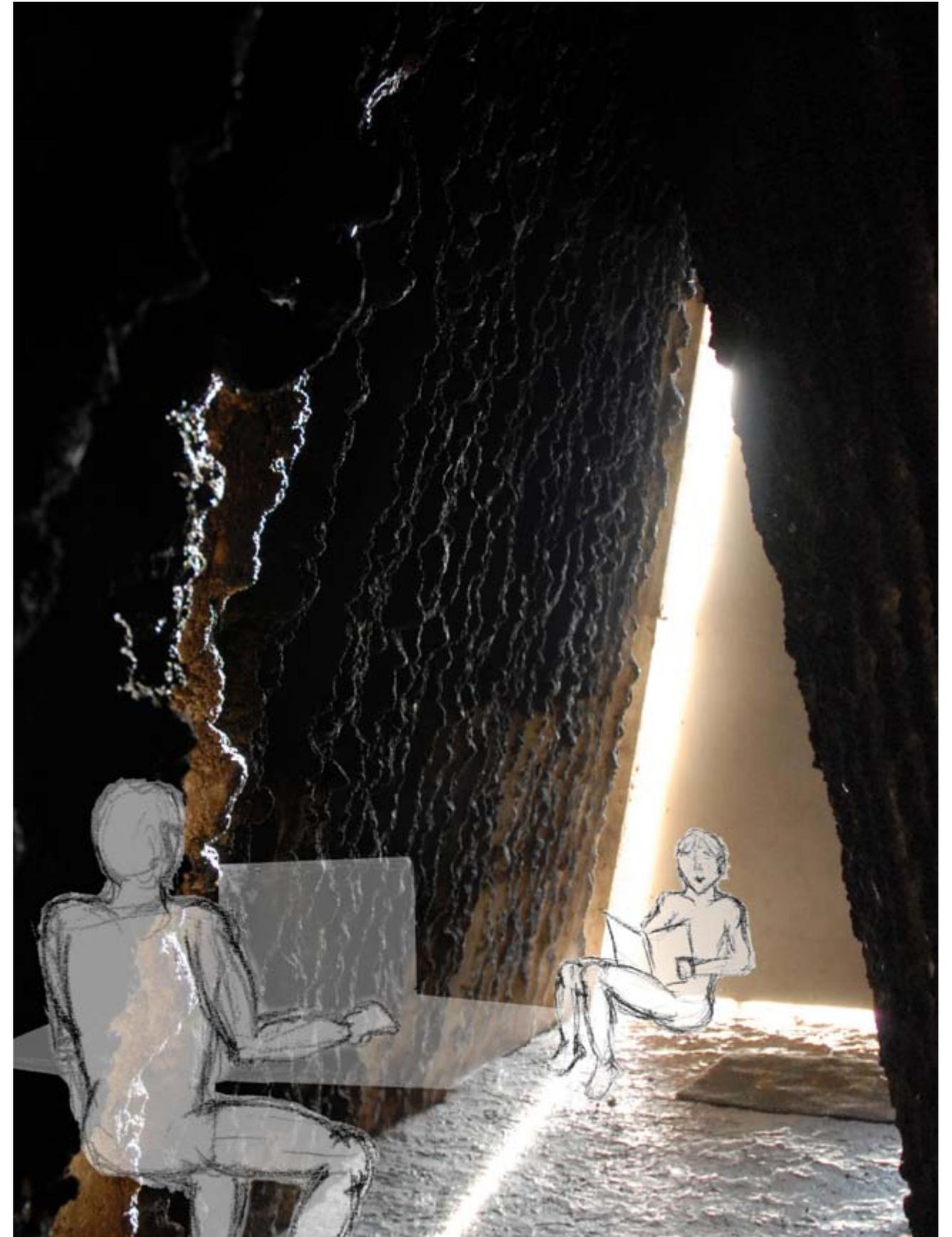
SEATTLE PUBLIC LIBRARY 'MIXING CHAMBER'



SEATTLE PUBLIC LIBRARY 'LIVING ROOM'

ATMOSPHERE

In an effort to understand what makes a comfortable library atmosphere, I studied the interactions of patrons and their habits while using various media types. I concluded that stories, research, and digital medias all require different atmospheres to allow for the most comfortable experience for users. A range of lighting, materials, and positions are utilized in my architecture for creating these various experiences.



HISTORY OF THE SITE

Baltimore has been a significant city throughout its history. During the late 19th and early 20th century, its population exploded and it was a premier port city of the country. This was largely due to the construction of the B&O Railroad, the first of its kind in the US, which is located a few blocks from the site. The railroad and the factories nearby, which exported goods across the country, employed a majority of the city.

Neighborhoods of both wealthy business owners and factory workers popped up rapidly around the railroads and warehouses. The architecture of the row homes, warehouses, and railroad stations had a beautiful simplicity. Much of their ornament and detail were derived out of function.

Baltimore Street, which runs along my site, was a constantly active shopping and business corridor of the city. The public squares and marketplaces were also alive with children, artists, merchants, and people socializing. The people of SoWeBo (Southwest Baltimore) had an uncanny sense of pride for the neighborhood. The area was inspirational to literary titans, including H.L. Mencken, Edgar Allan Poe, and F. Scott Fitzgerald, who lived there.



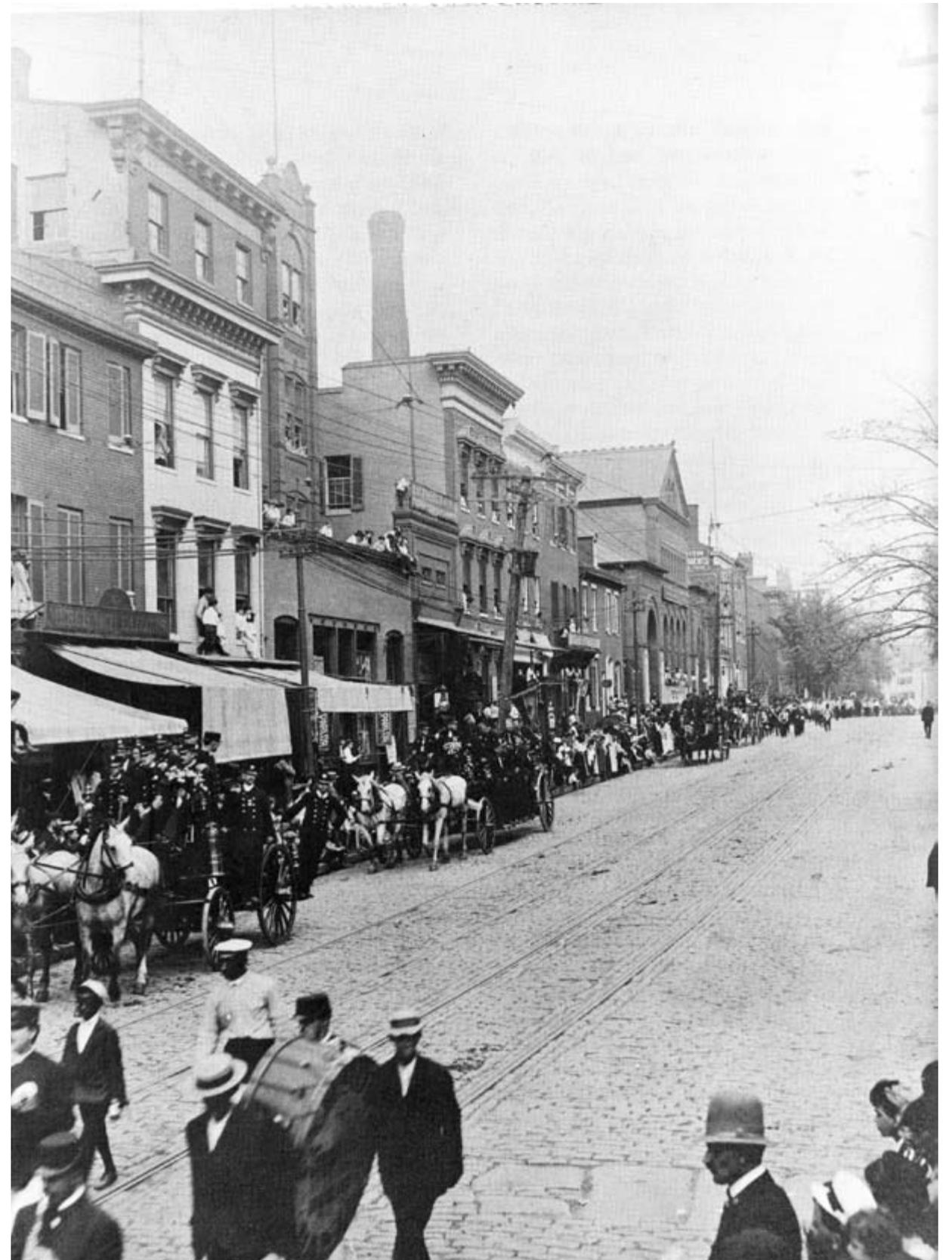
BETHLEHEM STEEL SHIPYARD, 1940



PRESIDENT TRUMAN AT THE B&O, 1948



HOLLINS MARKET, 1929



BALTIMORE STREET PARADE, 1921

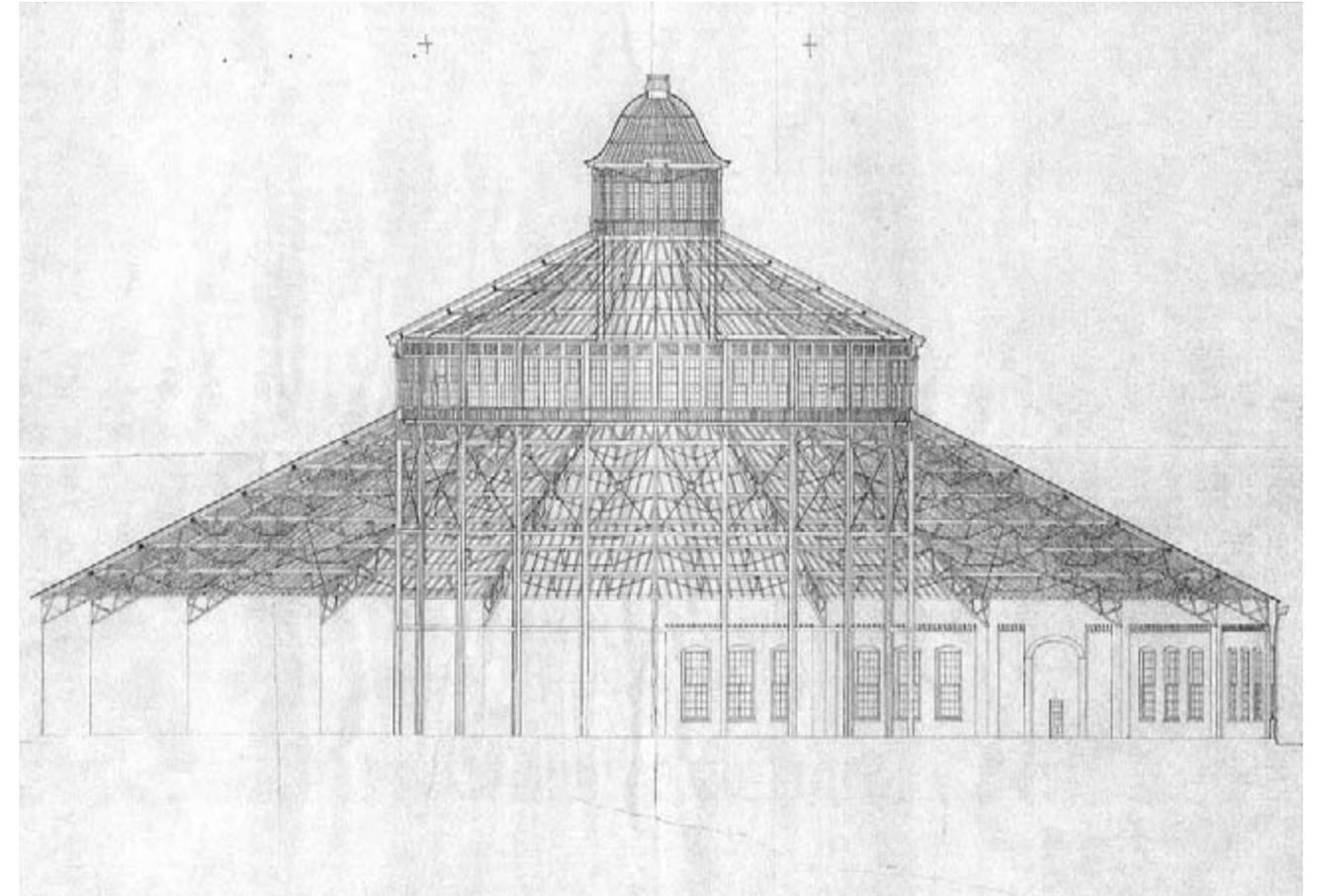
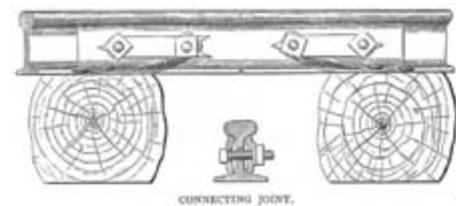
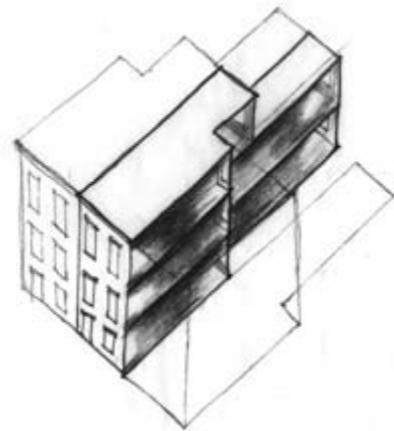
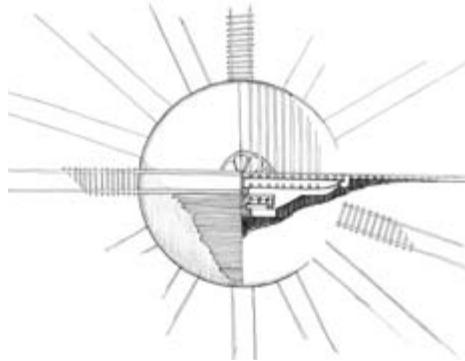
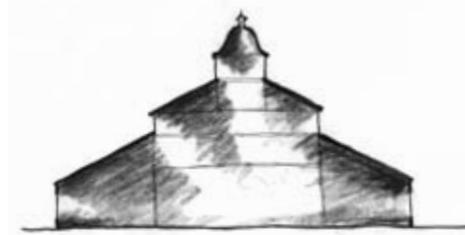


CONTEXTUAL INSPIRATION

Libraries today do not fit a mold and must be in some way contextually relevant to be successful. By studying local architecture, certain elements from various building typologies began to inspire pieces of my design.

The repetitive proportions of the rowhouses create a comfortable rhythm along the streetscape. The role of the rowhouse party walls peaked my curiosity of the manner in which a wall provides structure to a building and supports circulation. I was also interested in the relationship a wall creates with adjacent spaces.

The complex, yet delicate structure of the B&O roundhouse provides a vast and beautifully lit space for the storage and repair of the engines.



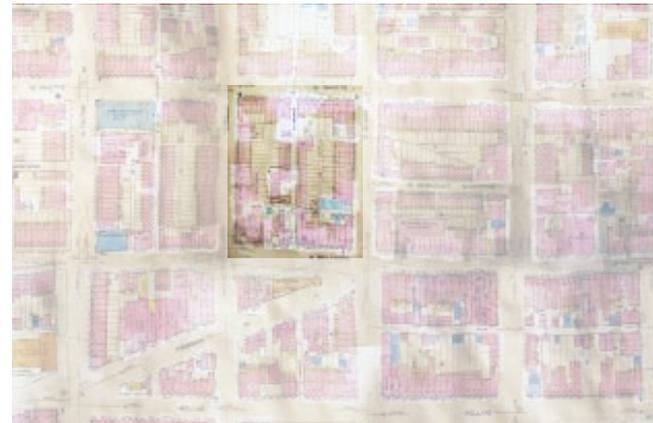
THE URBAN LIFECYCLE

Many issues, including social, environmental, and economic factors, fuel cyclical patterns of urban growth, decline, and revitalization. My site and the surrounding SoWeBo neighborhood are a prime example of this constant shift.

In the early 20th century, the neighborhood experienced rapid growth as a result of the industrial boom discussed earlier. Soon other cities caught up to Baltimore's industrial production and dependence on railroads diminished with the invention of the car. As a result people began moving out of the city in search of better employment opportunities, abandoning an astonishing amount of properties and structures. Today over 16,000 rowhouses remain vacant in the city.



In Sachse's Bird's Eye View map from 1868, my site straddles the edge of the city, with farm land to the northwest and industrial warehouses to the southeast.



This 1901 Sanborn map of building structures demonstrates the swift transformation of the site into a densely populated neighborhood.



Today, much of the neighborhood has regressed. Where homes have been demolished, nature has started to take back many vacant lots. In some ways these pockets of abandoned properties have become blank slates, holding opportunities for a rebirth of the neighborhood. The properties remaining on the highlighted site above are vacant and slated for demolition.

SOWEBO TODAY

The site was a strong source of inspiration for my design. It is located at the northeast corner of Baltimore and Mount St. in Southwest Baltimore. The currently empty lot, surrounded by vacant and run down rowhouses and storefronts, does not leave a genial first impression.

However, after speaking with community members, spending time in the neighborhood, and researching the rich history of SoWeBo, I began to see through the veil of poverty and decay that blankets the area. I could still sense a pride in those working to rebuild the neighborhood that was reminiscent of the Poe and Mencken eras.





VIEW FROM BALTIMORE ST



MOUNT AND BALTIMORE INTERSECTION



VIEW FROM MOUNT ST



The Curious Case of the...
 six years buildings... by thousands... population... has at least quadrupled in that time.

...of children the street is pre-empted...
 ...the water board had to build the high-service...
 ...the water board had to build the high-service...
 ...the water board had to build the high-service...

...Franklin Square...
 ...Franklin Square...
 ...Franklin Square...

...the two-story houses...
 ...the two-story houses...
 ...the two-story houses...

...I have lived in one house...
 ...I have lived in one house...
 ...I have lived in one house...

...Franklin Square...
 ...Franklin Square...
 ...Franklin Square...

...the persistence accounts for the superior charm of the town...
 ...the persistence accounts for the superior charm of the town...

...W. LOMBARD...
 ...W. LOMBARD...
 ...W. LOMBARD...



FRANKLIN SQUARE - The new square...
 to be laid out in the western part of the city...
 ...to be laid out in the western part of the city...

ALL THE PIECES MATTER.
 WE'RE BUILDING IT FROM SCRATCH.

...I believe that...
 ...I believe that...
 ...I believe that...

...W. LOMBARD...
 ...W. LOMBARD...
 ...W. LOMBARD...

...FRANKLIN SQUARE...
 ...FRANKLIN SQUARE...
 ...FRANKLIN SQUARE...

*They who dream by day
 are cognizant of many things
 which escape those
 who dream only by night.*
 - Edgar Allan Poe

...LET'S HAVE A DEAL...
 ...LET'S HAVE A DEAL...
 ...LET'S HAVE A DEAL...

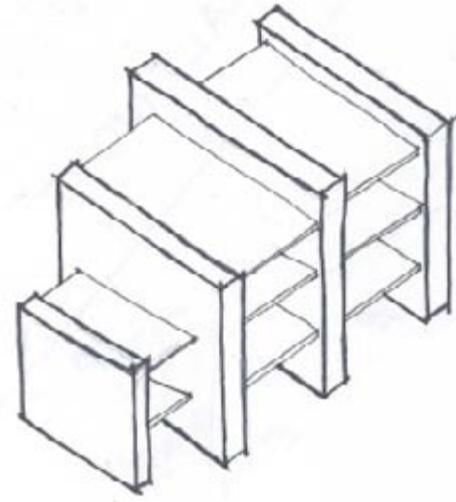
...W. LOMBARD...
 ...W. LOMBARD...
 ...W. LOMBARD...

DESIGN CONCEPT

The library design was derived from a careful attention to the building's context and a focus on organizing spaces based on various media types.

Massive concrete walls were extruded from the ghosts of the foundations that were once the party walls of the rowhouses on the site. By utilizing the traces of the demolished architecture, the library will fit in to the proportions of the neighborhood.

These new party walls will divide the space into three spaces for fiction, non-fiction, and digital media types. Each distinct space provides appropriate atmosphere based on the corresponding media. The presence of the wall and variety of spaces insures visitors won't become disoriented among rows of books.



DIGITAL MEDIA
CENTER

RESEARCH
ATRIUM

STORYTELLING
ROOM

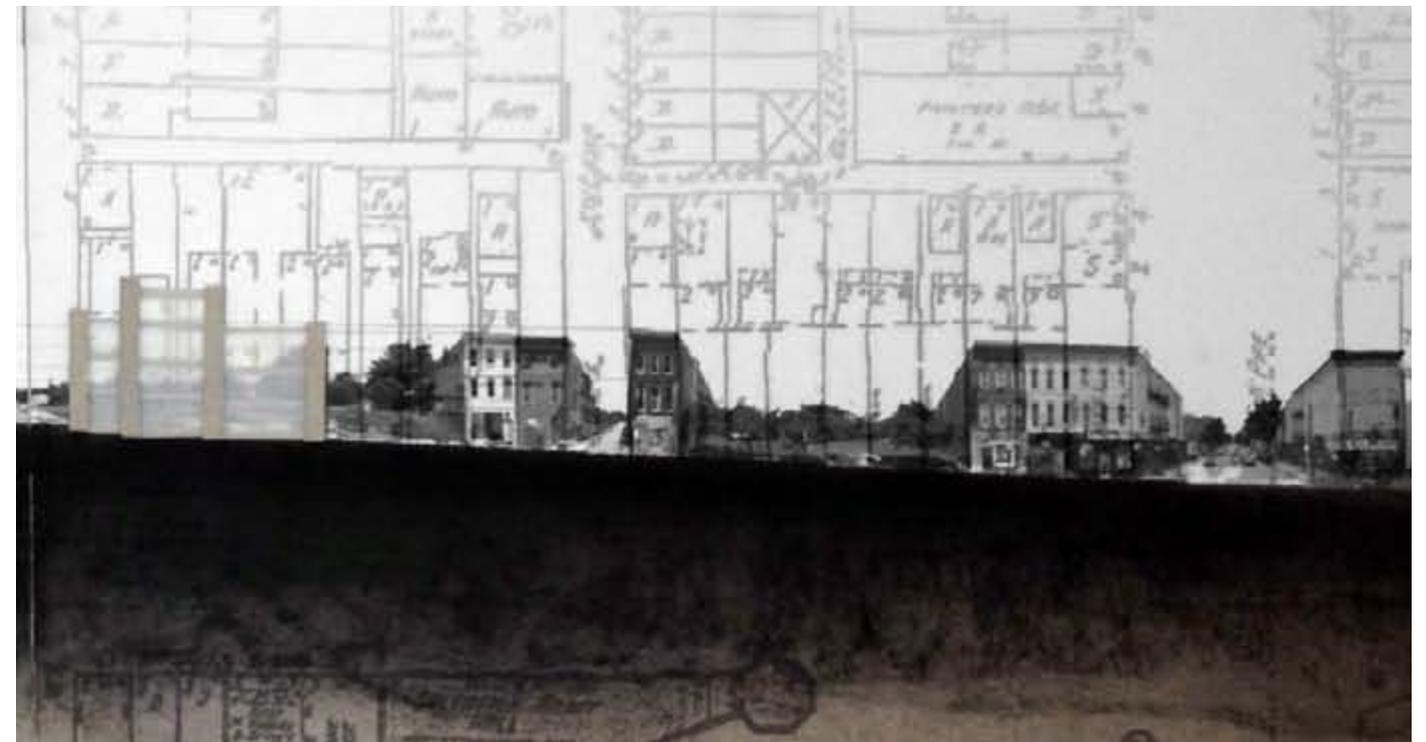
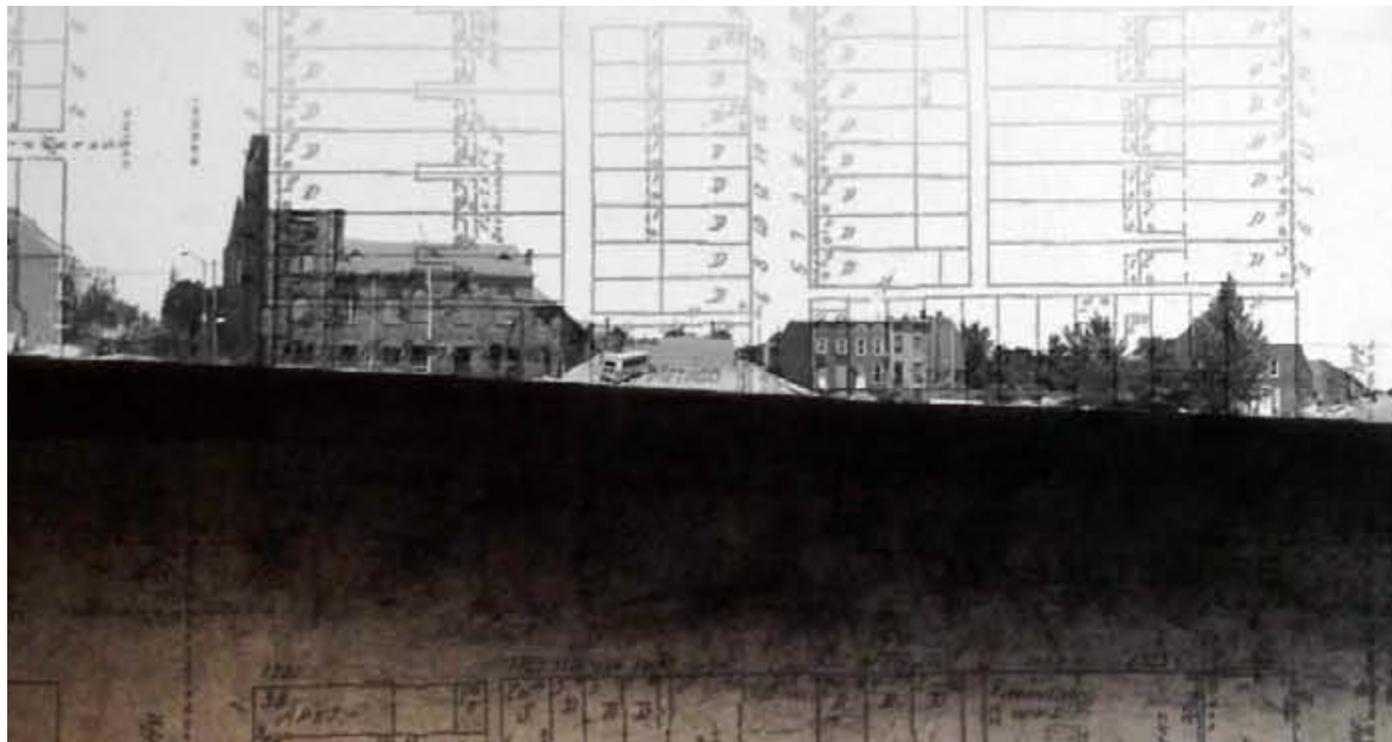
SITE DESIGN

The library, situated on the Southwest corner of the lot, will be the keystone of the park. A plaza sloping towards the library provides a space of transition from the city for visitors. It also provides a gathering space for community events and acts as a gateway for the park to the north.

As visitors approach from either direction on Baltimore Street, the monumentality of the walls are a clear indication of the public space. When passing directly in front of the library, a large glass facade provides views into the building. At moments, views all the way through the building to the park keep the building in context. This transparency will showcase the activity generated within the library.

Roof top gardens for reading and gathering are a continuation of the park throughout the building. They provide vantage points of the performance stages as well as into the neighborhood.

The section below, through Baltimore Street, demonstrates the way in which aligning major walls to historic foundations will begin to restore a rhythm to the streetscape.



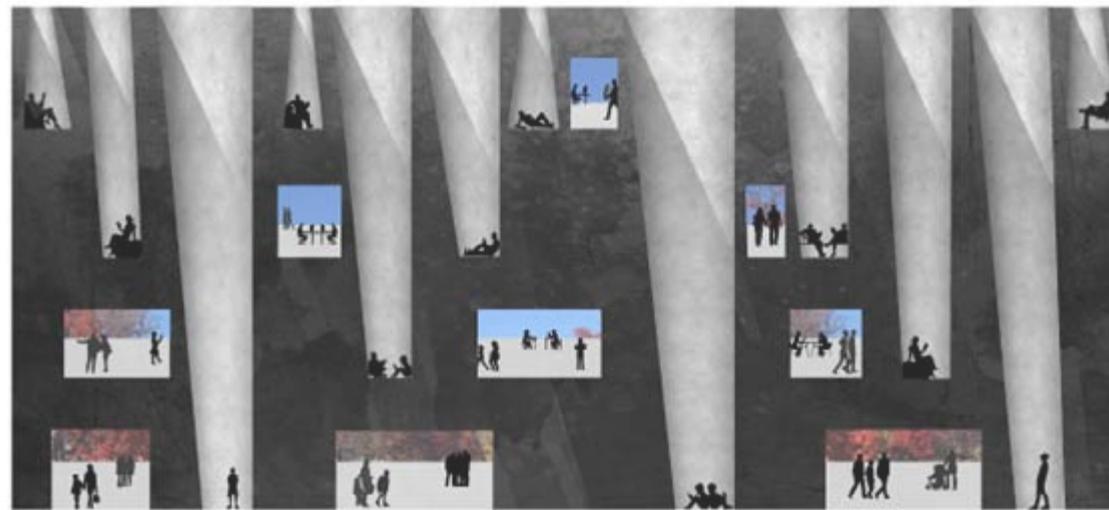
THE WALLS

Through research and reflection on personal experiences, I have found that often libraries have become stale and uninspiring places. The predictability of these spaces, led me to look at typical building elements, such as a wall, and rethink the way each element is perceived and experienced in a space.

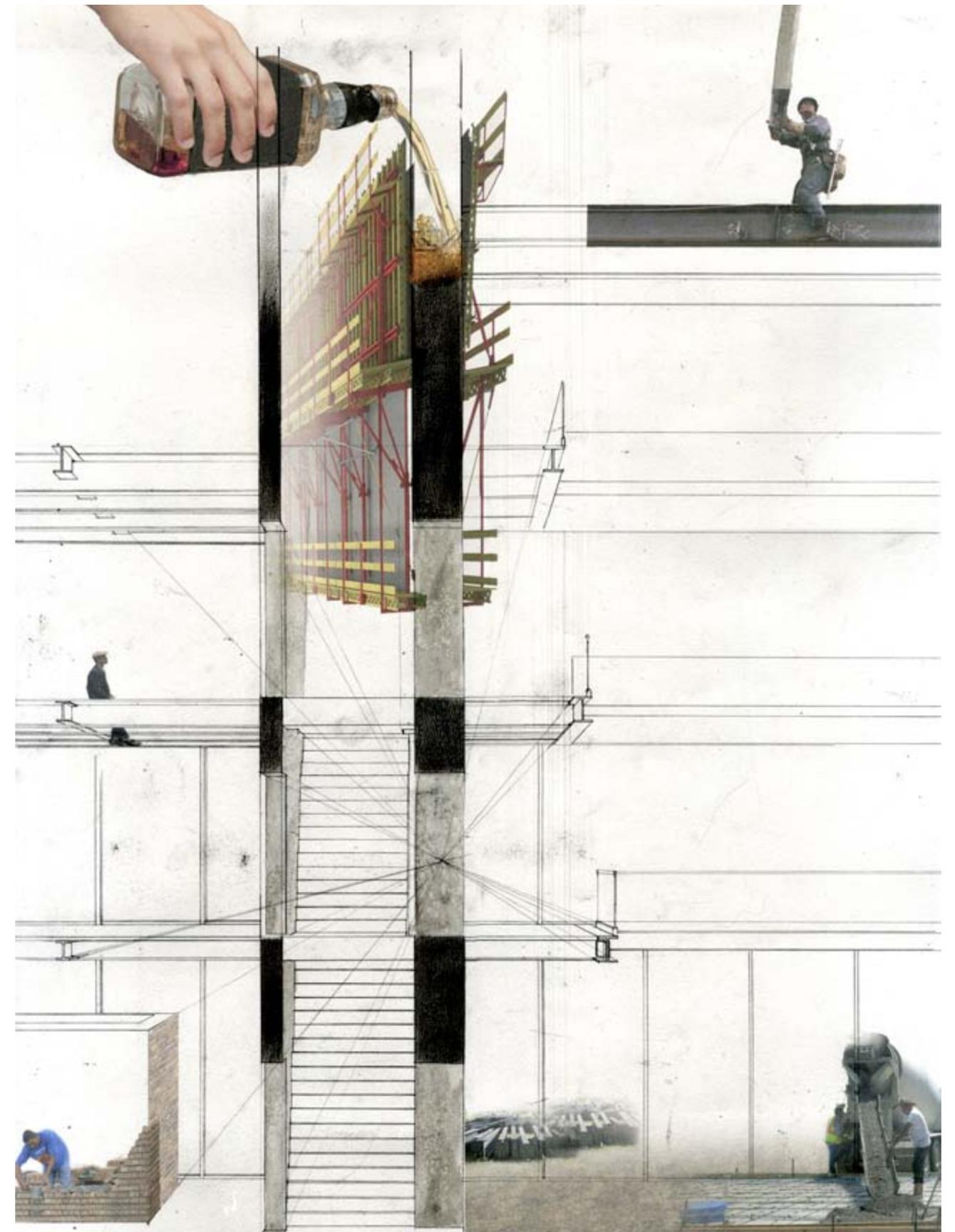
The three massive, inhabitable concrete walls of the library will be a physical memory of the rich history of the site. Inevitably the concrete will be scratched and worn by visitors. Over time a new history will be written on the walls. The walls are the memory keepers that hold the building together, both physically and metaphorically.

The massive walls will be constructed by two parallel walls braced together. Their structure allows for open and airy interstitial spaces that provide contrast to the heavy walls.

In keeping with traditional library designs, the walls provide a sense of monumentality to the building. Unique spaces and circulation are embedded with the walls. As patrons spend time in the library, they begin to realize the walls are full of activity, peaking a curiosity to explore a new room within the wall upon each return.

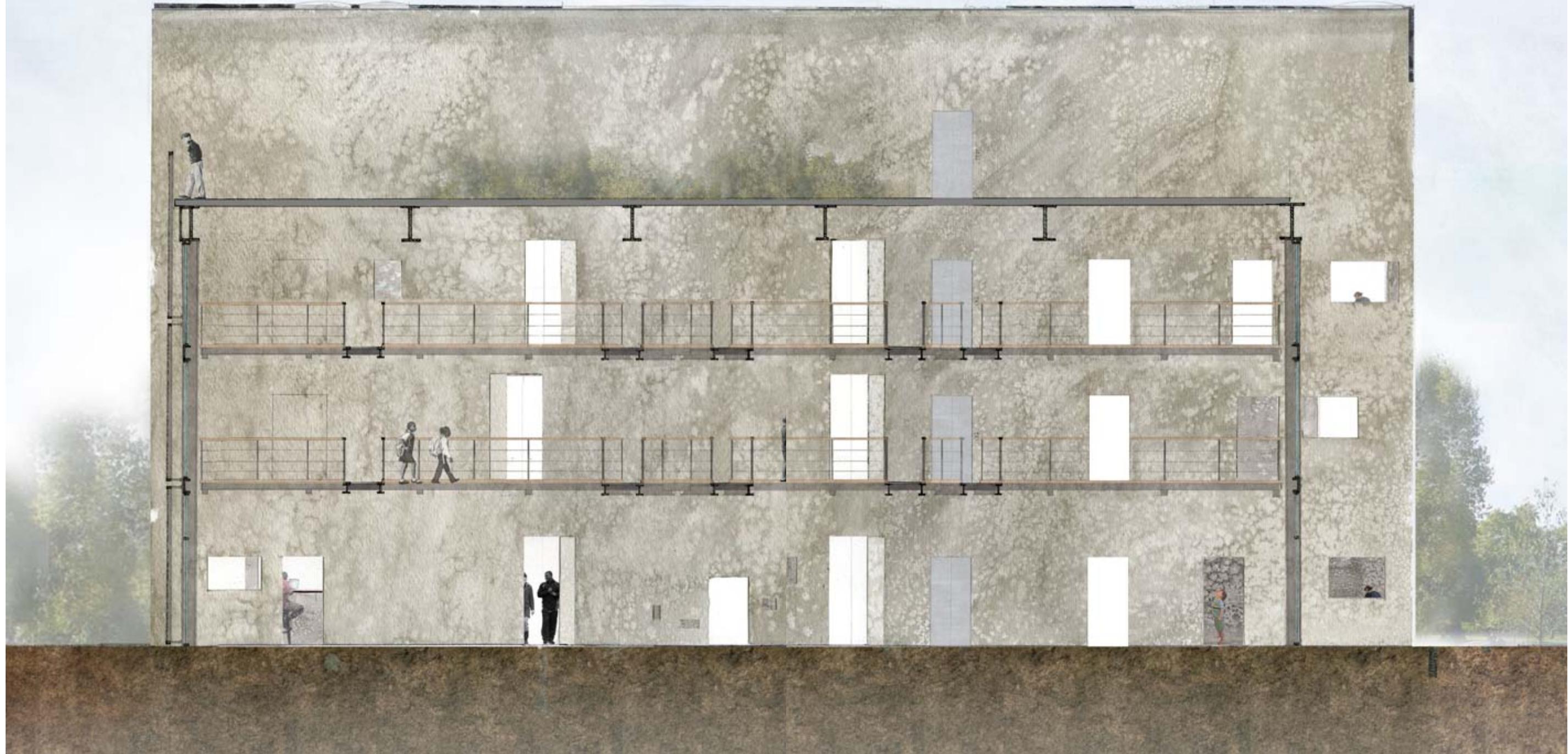


DIAGRAMMATIC SECTION



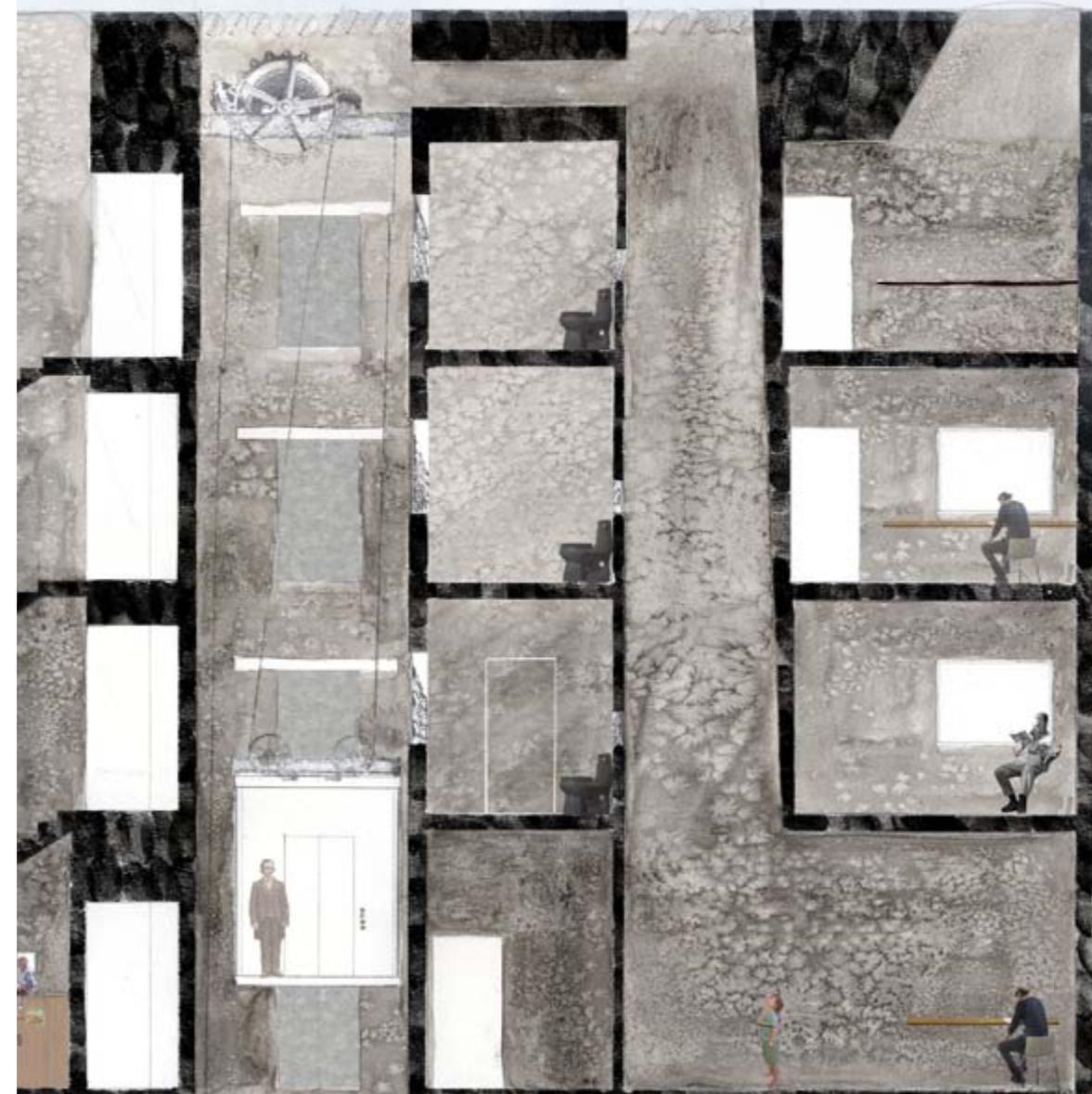
Edgar Allan Poe, among many other literary geniuses, was inspired by the streets of this neighborhood. The essence of the walls captures the sense of mystery and deception used in many of Poe's stories.

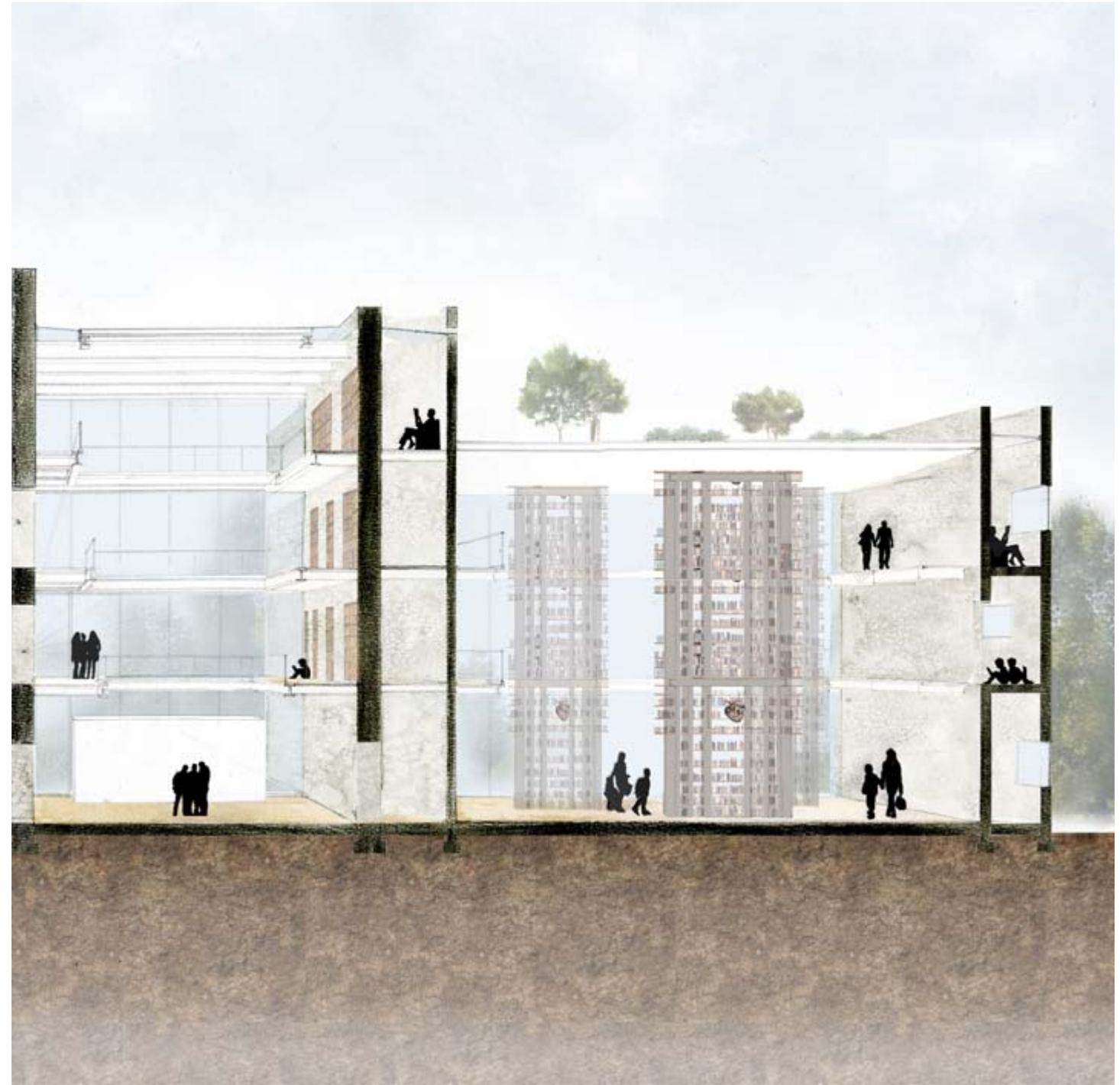
In elevation, the way in which the wall will actually be experienced, there are hardly any clues as to what happens within the wall.



The section is intriguing because the walls will never be experienced in this way. The activity and variety within the wall can only be experienced in one room at a time. This allows patrons to enter into a room and escape into thought or into the world of their favorite novel. It is up to the visitor to discover the rooms inside the wall and put together all of its pieces.

While the wall appears to be one solid and heavy building element, it is in reality quite the opposite. In many of the reading rooms of the wall, skylights bring light down as far as the first level. The light space inside contrasts the feeling of compression one feels as they enter into the wall.





DIGITAL MEDIA CENTER

Digital media and new methods of accessing information have forced us to rethink the role of the library today and how it will continue to adapt to changing technology in the future. As architects, we have to change the way we design library spaces to provide an appropriate atmosphere for ever changing media types.

In order to avoid glare on digital screens, a facade system is designed to filter natural light into the space. The facade wraps the digital media center and the southern face of the building. It is composed of layered screens inspired by the rich ironwork of the surrounding neighborhood.

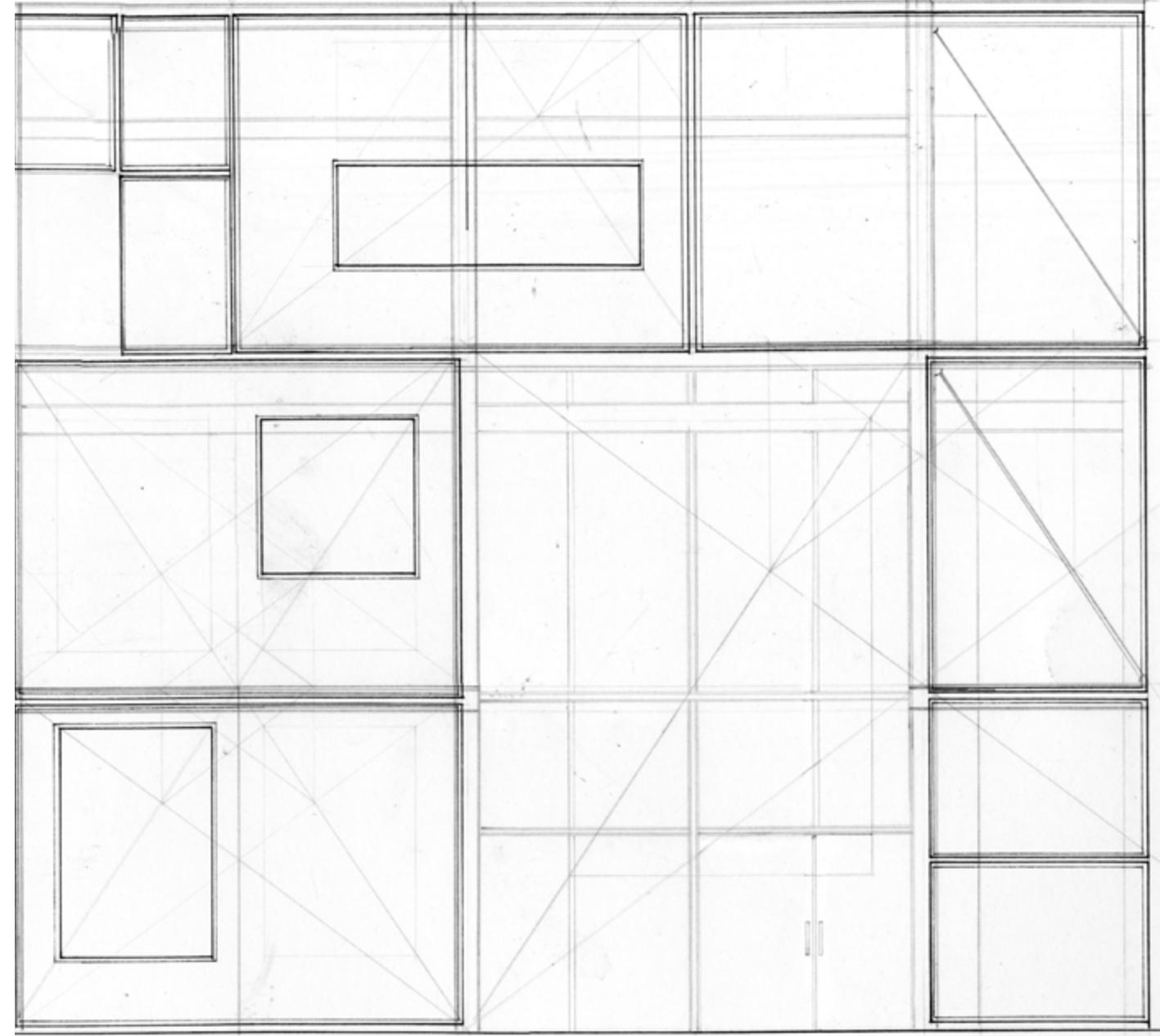
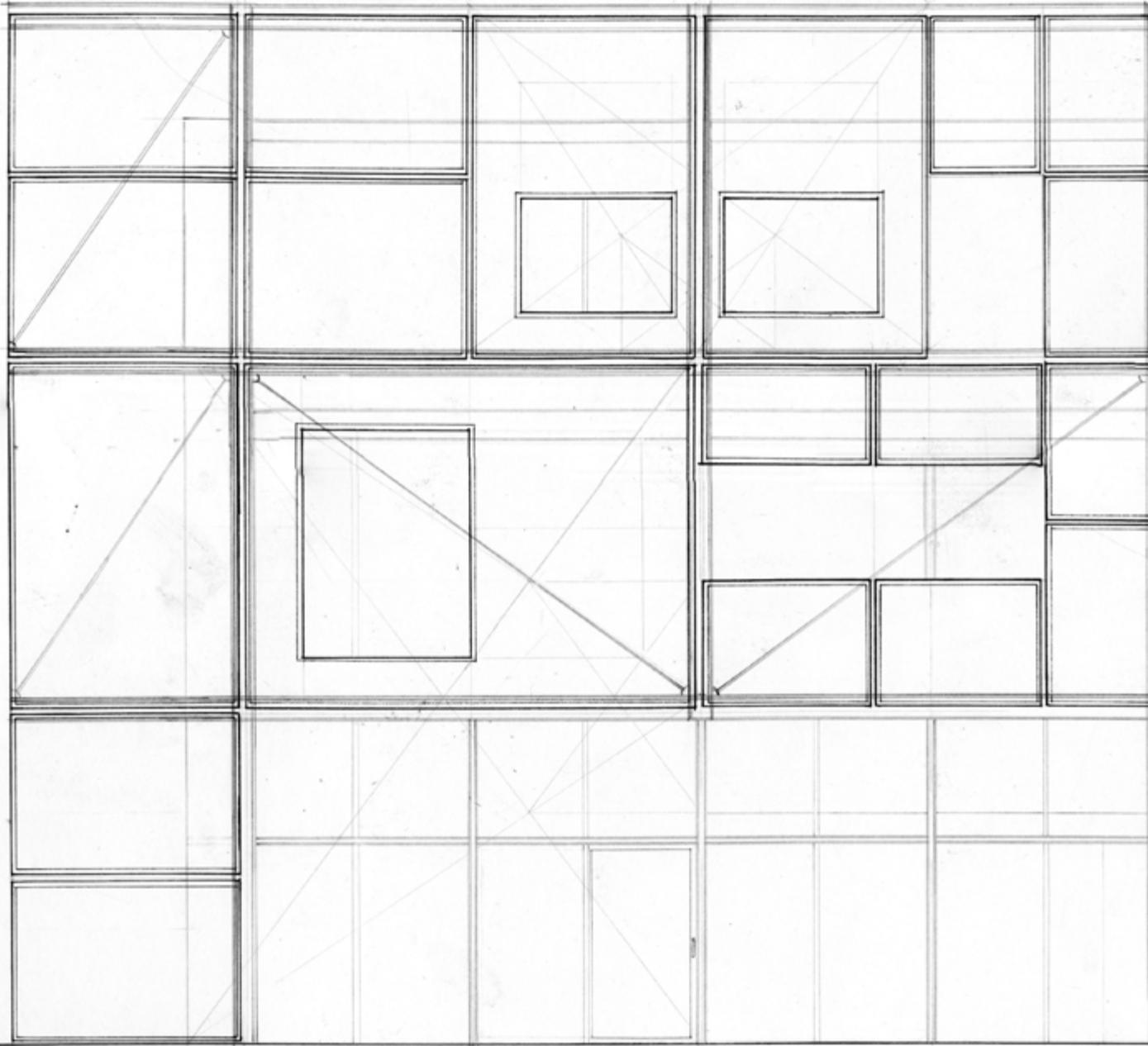
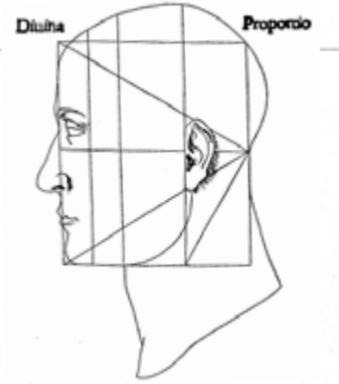
Traditional brick rowhouses line the streets of Baltimore with only minor variation. The intricate wrought iron railings, grates, and fences are elements that change from one neighborhood to the next. Historically, the beautiful detailing of the iron would incorporate symbols, such as the fleur-de-lis or a family's coat of arms, taking on the identity of the family or culture living there. The design of the facade creates an opportunity to express the rich heritage and current spirit of the surrounding neighborhood.

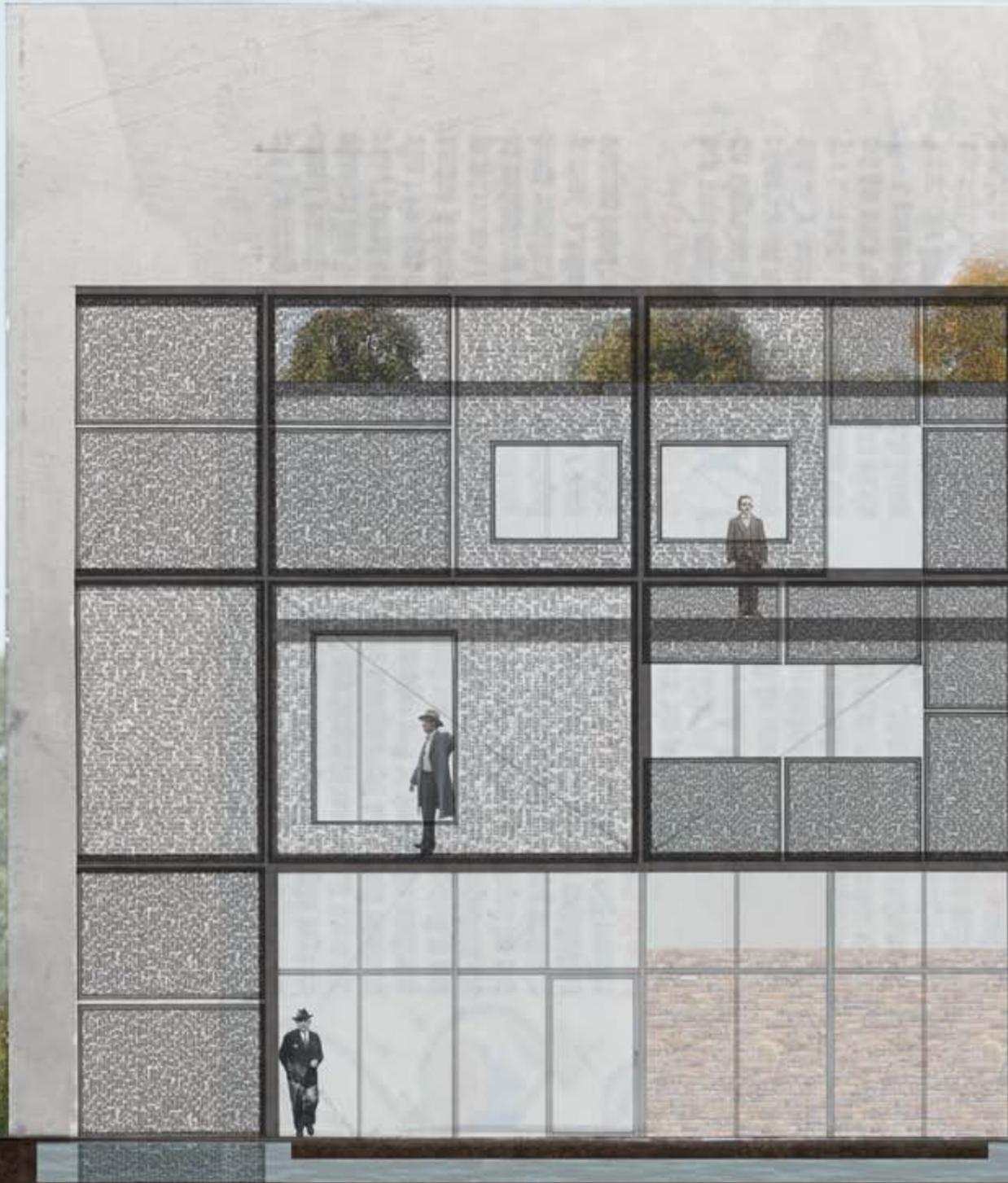


FACADE PROPORTIONS

The facade will be constructed of iron screen, of various scales, based on the proportions of Gutenberg's page layout. It is believed that his page design was inspired by the Divine Proportions and the way in which books would be used. For instance, a larger margin at the bottom of the page accommodates the reader's hand and the placement of the text towards the center compensates for our eye's tendency to move towards the middle of the book.

Likewise, the screens of the facade will vary to accommodate users and corresponding spaces. The desired density of the screen at moments will determine the scale of the panels. Tension cables will strengthen panels when necessary and follow the text placement guidelines used by Gutenberg.



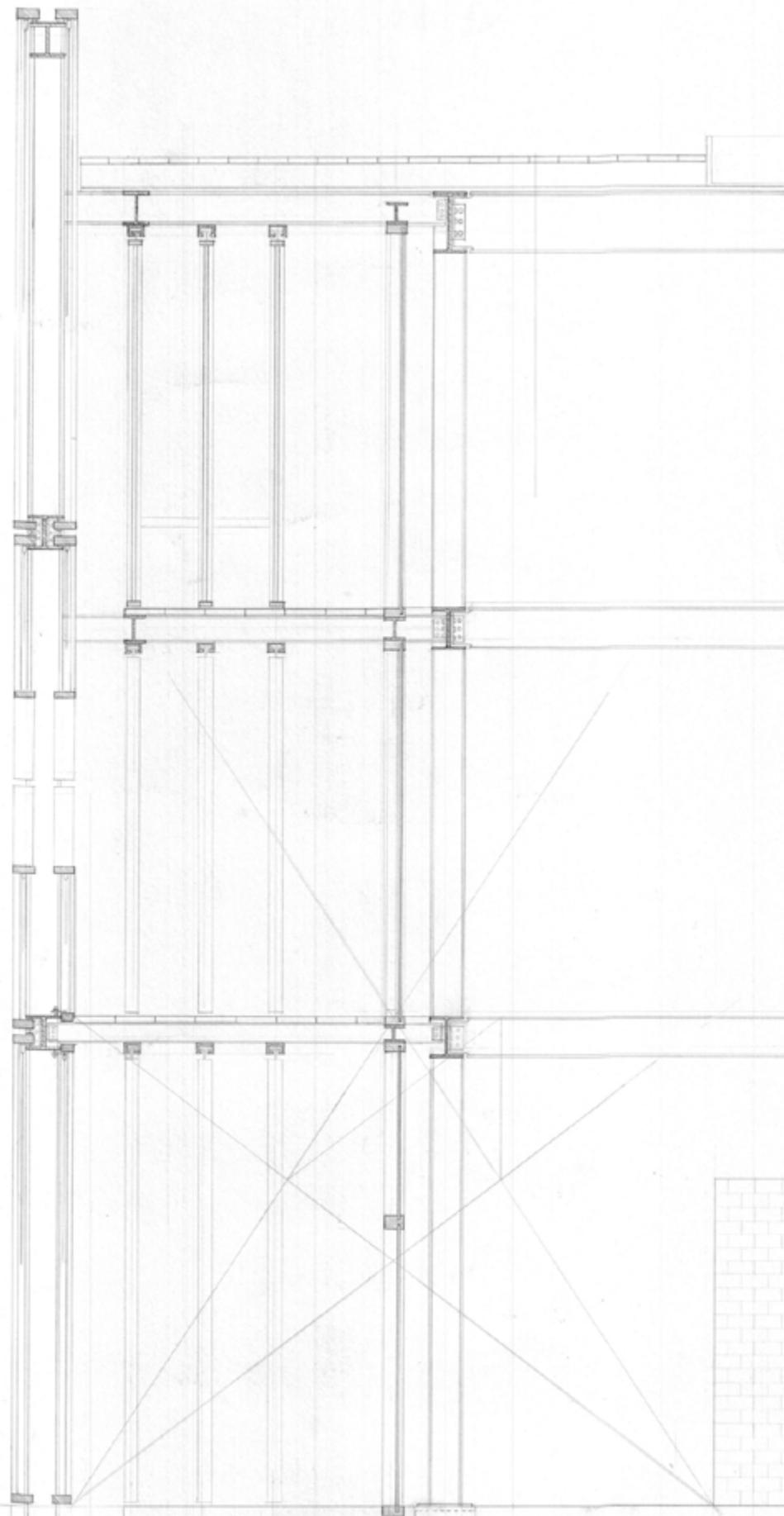


INHABITING THE FACADE

The layering of screens also creates a depth allowing visitors to inhabit the “pages” of the facade. It will have “rooms” within it, similar to the inhabitable concrete walls of the project, but without the heavy feeling created by the concrete.

Like a bar along a coffee shop window, people can sit within the screens to work, read, or simply take in the sights and sounds of the plaza, park and city, as if on their own personal balcony. This space creates an opportunity to experience sensations of the outdoors (listen to the birds of the park, watch a thunderstorm or feel a cool summer breeze) while working in a digital realm, two experiences that rarely mesh.

Shallow pools surround the moments where the facade touches the ground. The reflection will create visual illusion that the facade has grown out of the site just as the concrete walls appear. To enter the library, visitors will cross over the pools. This passage across the water will cleanse visitors' ears of the chaotic sounds of the city. On a rainy day, this sensation will be amplified as rain trickles down the facade and the sloped plaza into the pools.

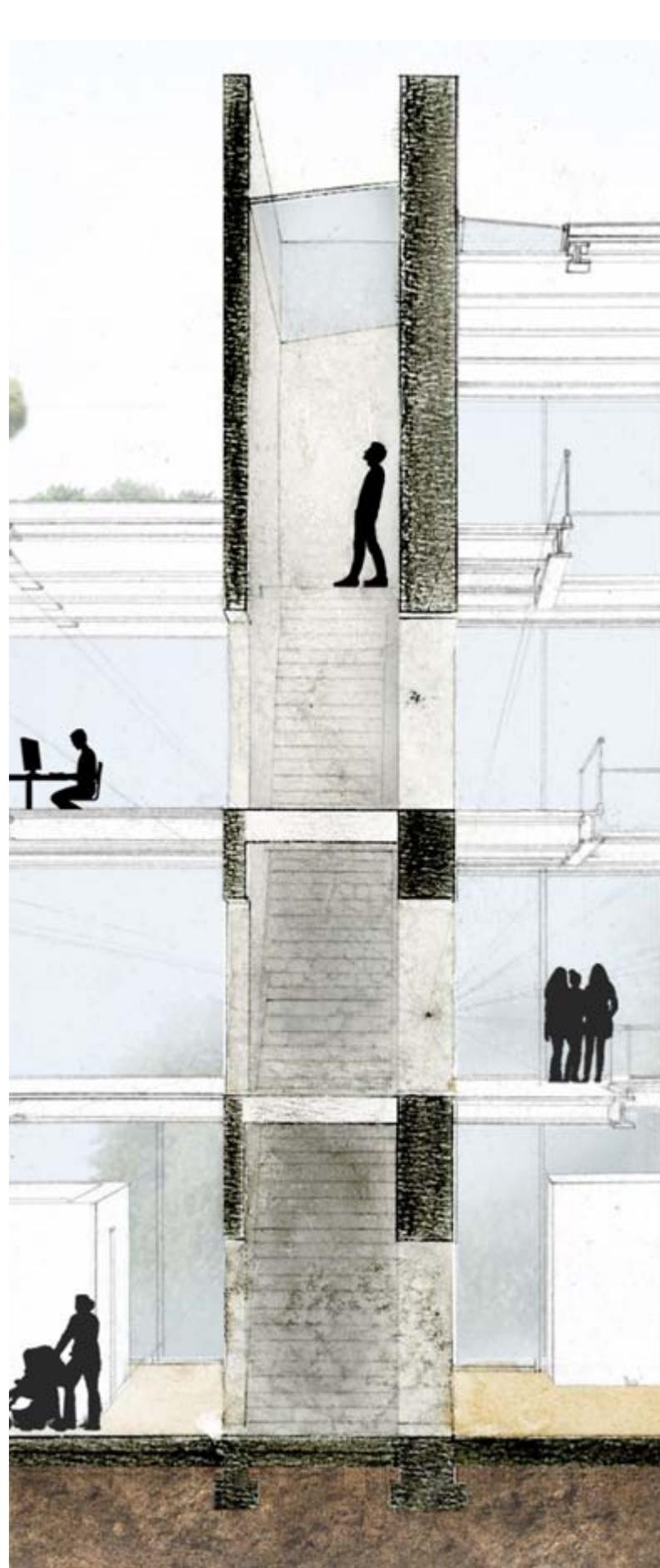


THE RESEARCH ATRIUM

The non-fiction collection, located in the center of the building, was inspired by the great reading rooms of traditional libraries. This formal atrium space is one of the few moments where visitors understand the massive scale of the walls. Books are stored along bookshelves embedded in the large concrete walls giving them an overwhelming presence in the room. This architectural gesture is a reminder of the power we are given through education.

Natural light, from skylights, washes down the walls, adds emphasis to their presence. Light sensitive material can be stored accordingly within the wall or along the wall, but on the lower levels.

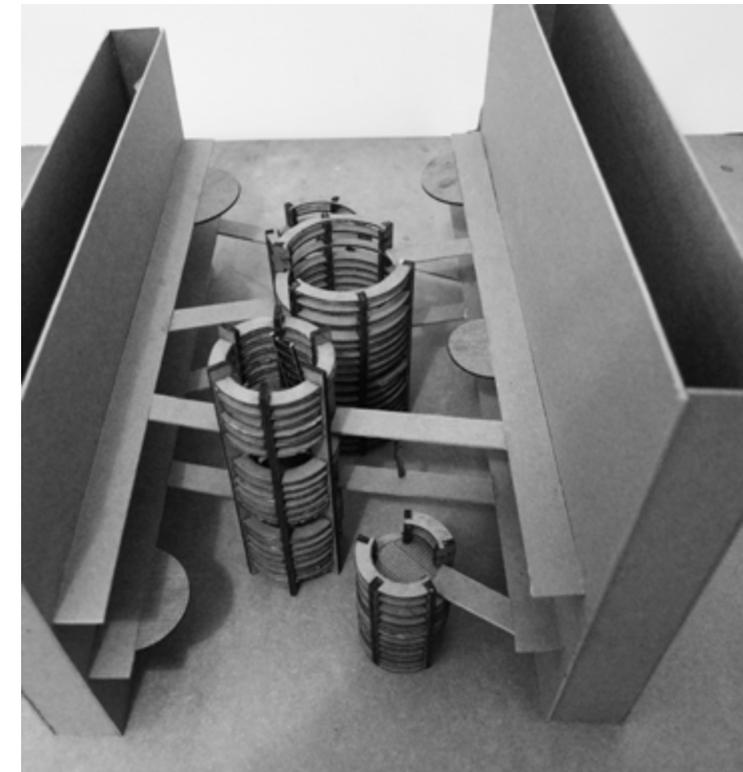
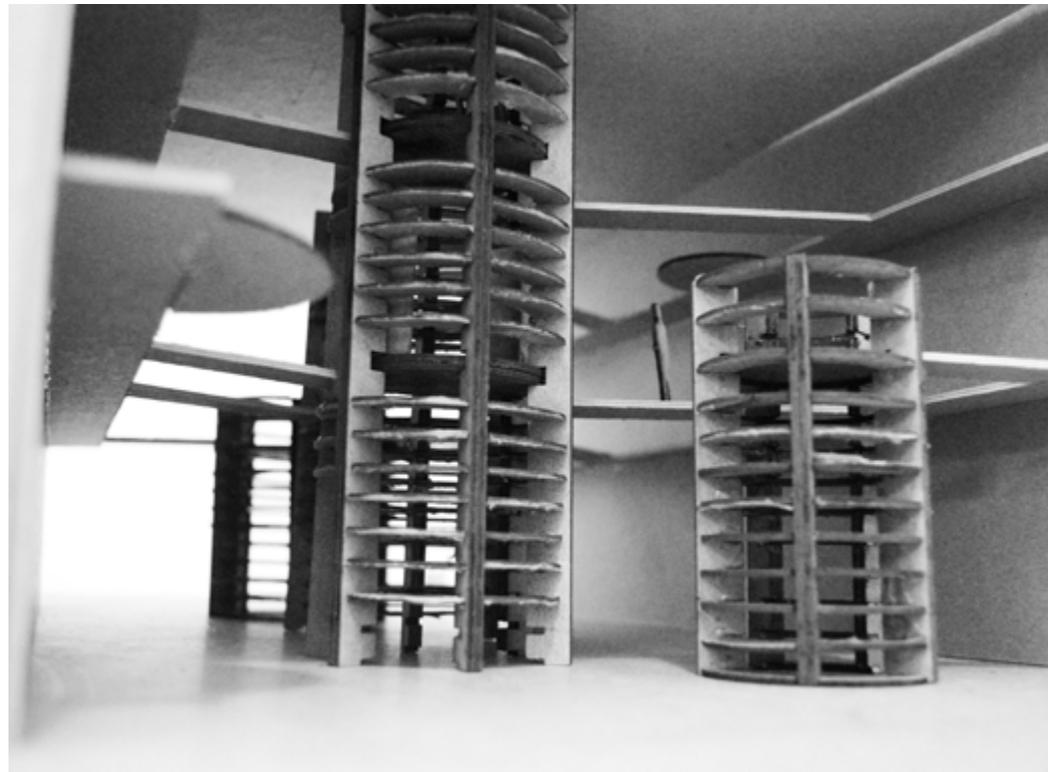
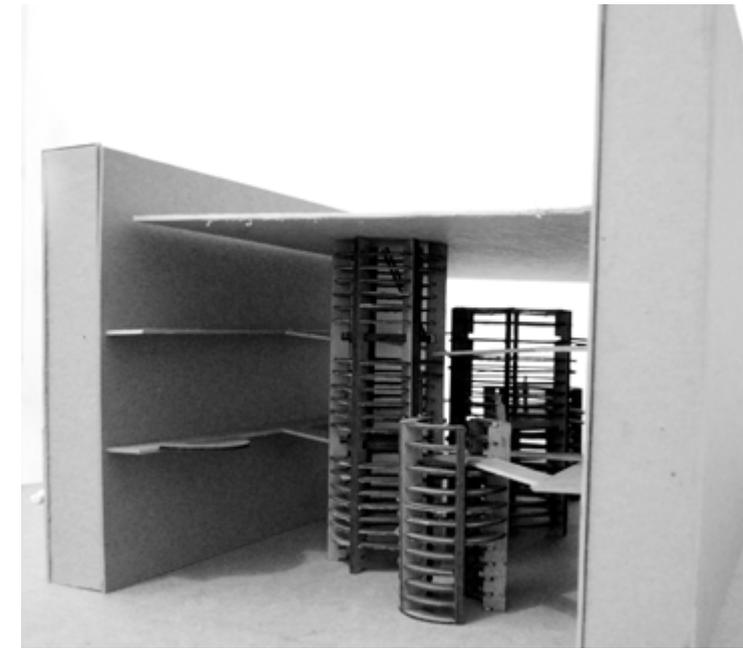
The large atrium space also allows opportunities for community based events and installations to take place within the library. Providing this flexible atrium space is important to accommodate a variety of events and to keep the library active during a larger time frame.

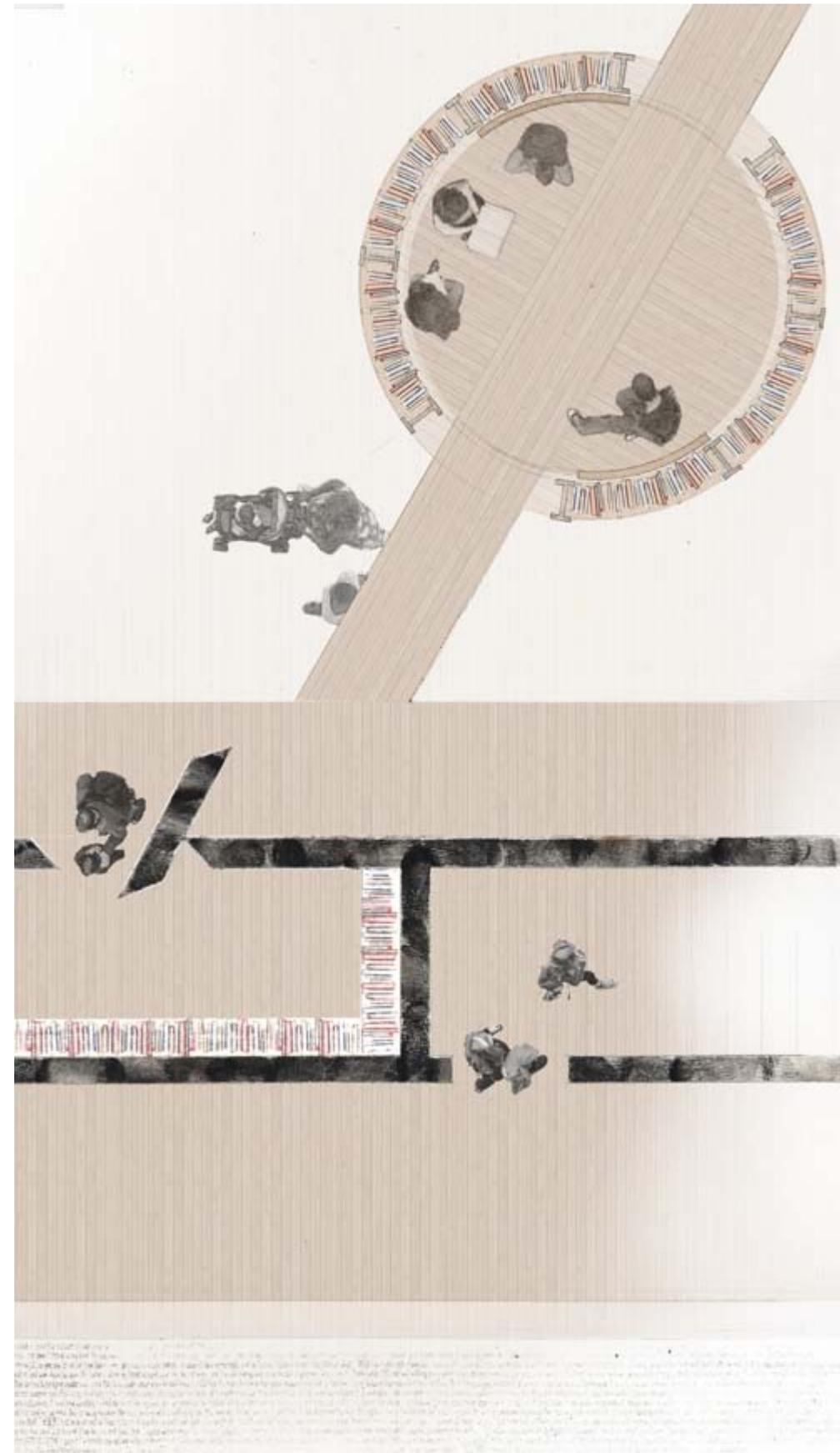


STORYTELLING ROOM

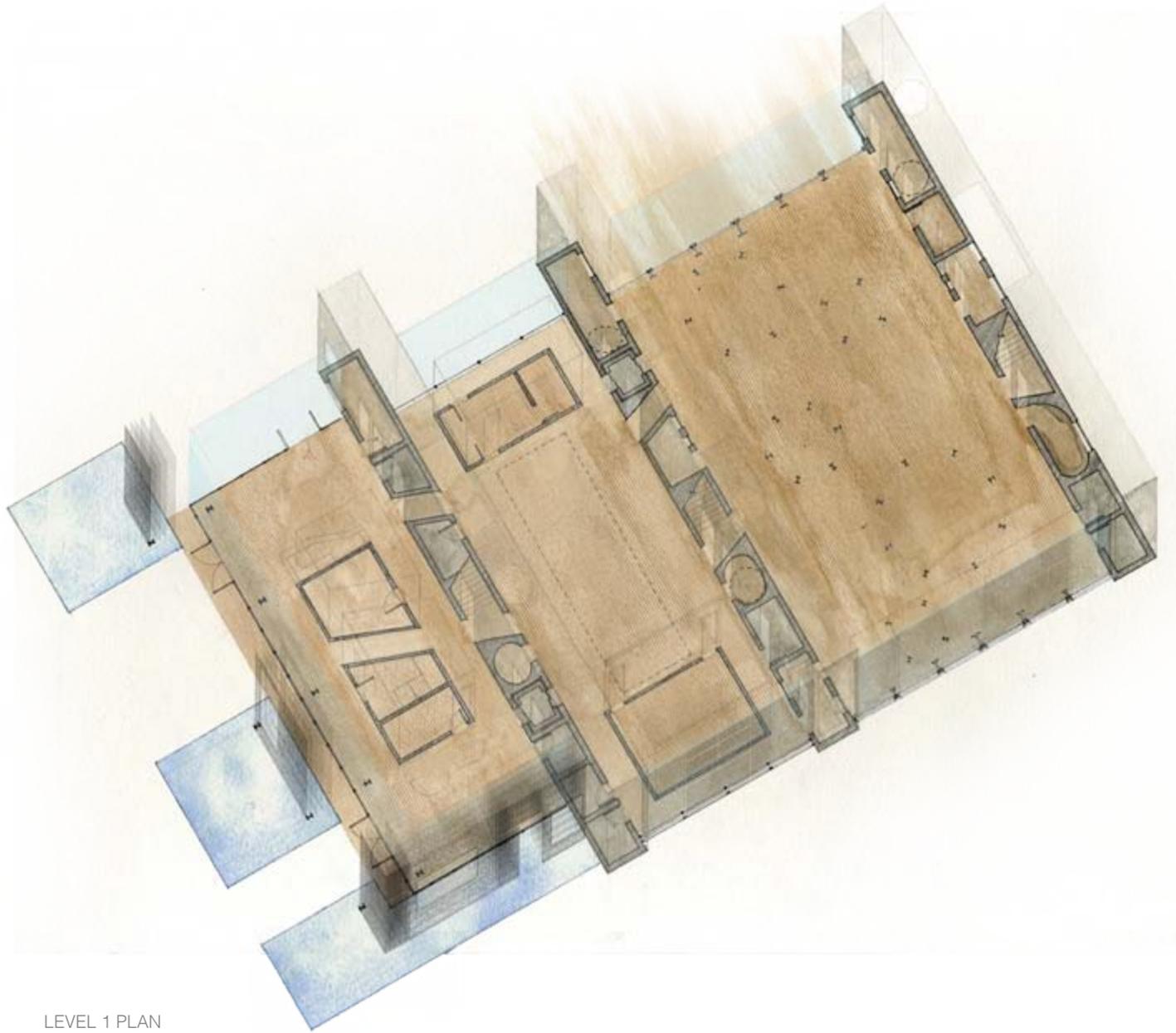
The storytelling room of the library was inspired by the roundtable of the B&O Roundhouse. Book towers that are accessed by bridges create a forest like quality to the room. This playful space provides opportunities for patrons to escape into a world of literature.

Instead of creating a room for books, it is the books that create a room for visitors. The quality of the space and the light will be in constant flux as books are moved on the shelves. From any point in the space visitors will have vantage points into these small rooms created by the book towers. The distance between each shelf will vary to control certain views.

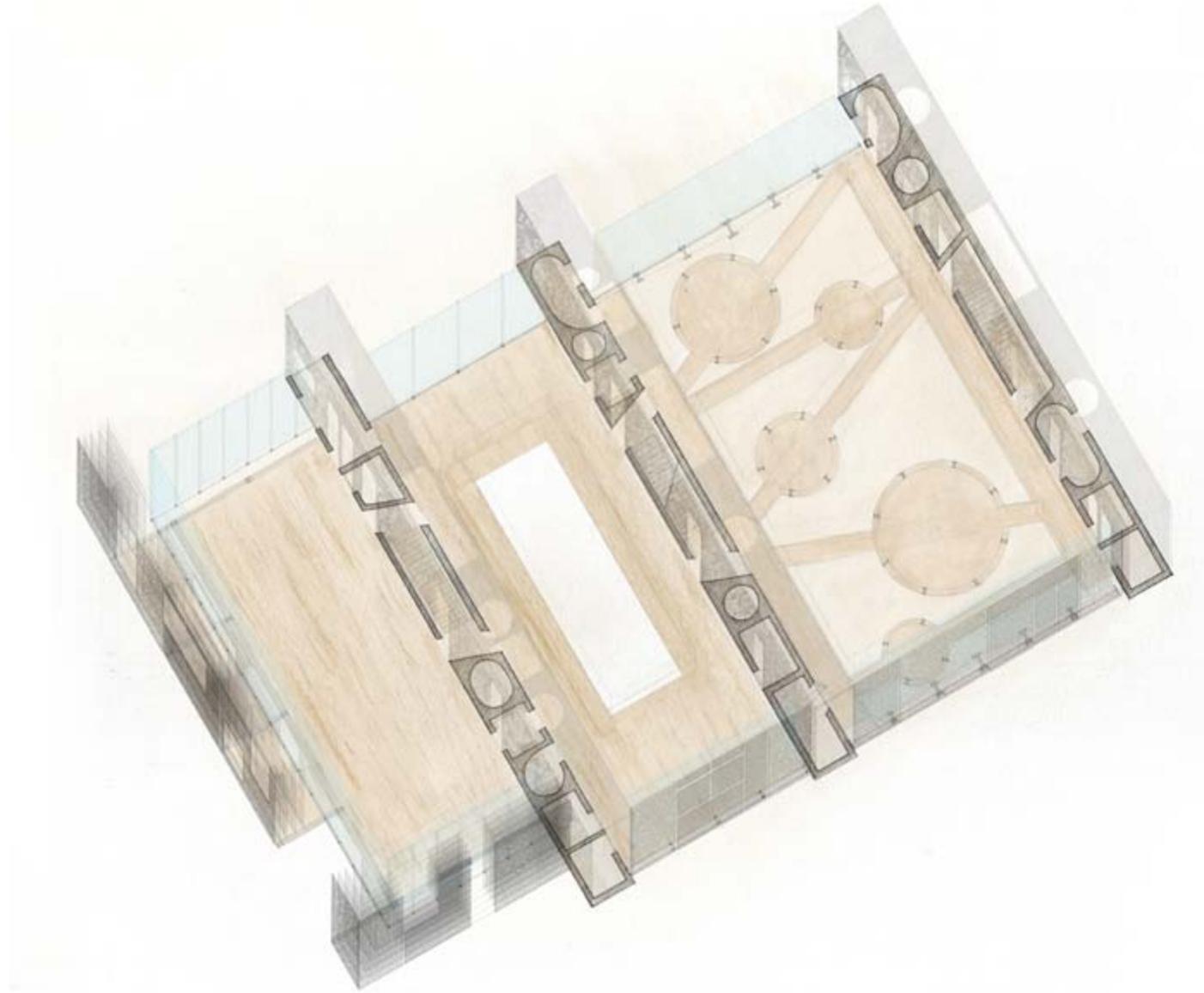




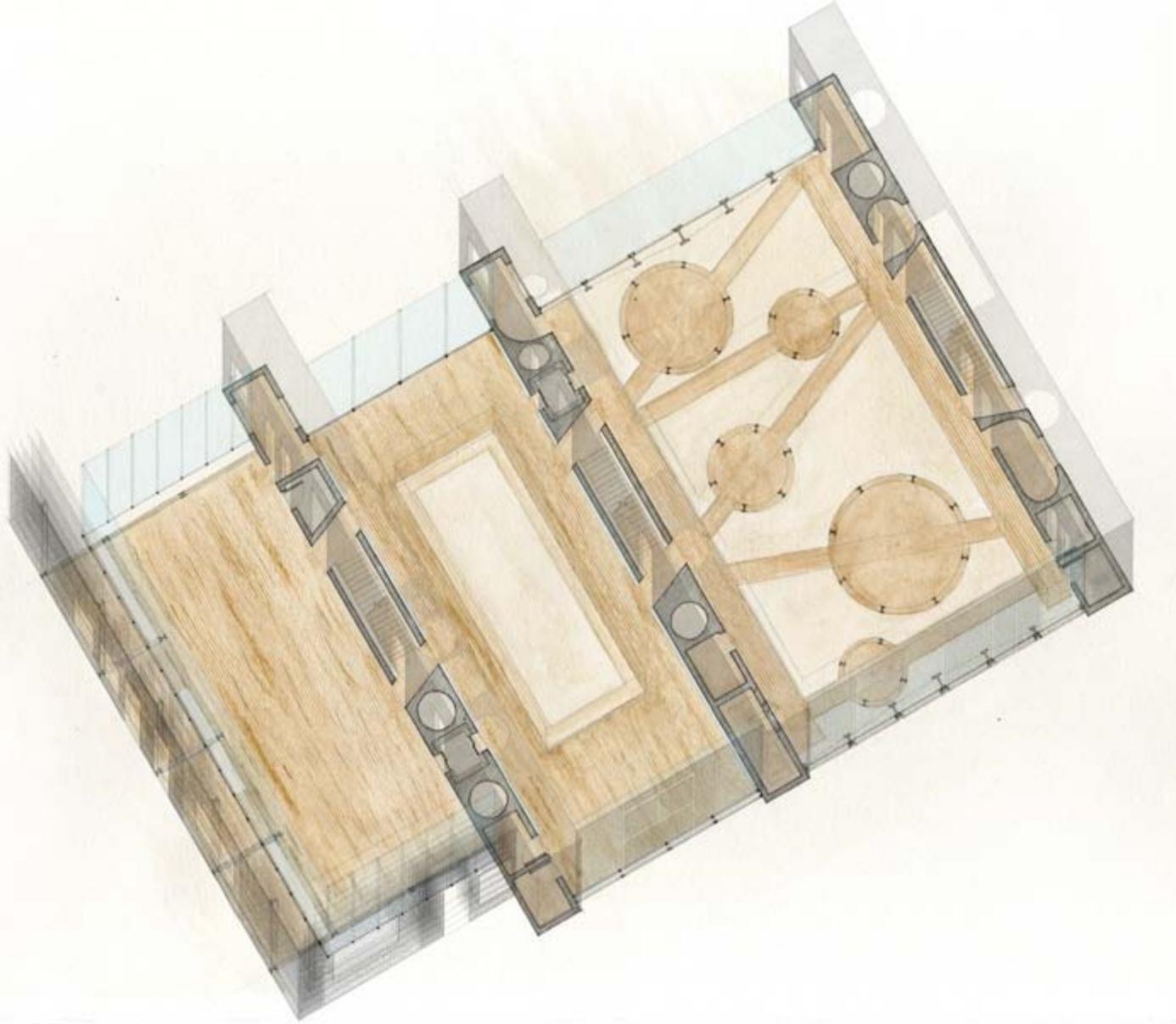
Embedded in the wall is a secret collection of Poe's works. A door with angled edges will block light entering and exiting the room. The mystery of the room is inspired by the scene of *The Tell Tale Heart*, in which the narrator, a tortured soul, is spying on an old man in his bed. He cracks open the lantern he is holding, shining a beam of light onto the startled man's unforgettable eye. The secret room will only be revealed to visitors when they are close enough to see the light inside through the narrow, angled slit around the door. The collection will be two levels and connected by a hatch in the floor. The secret Poe library will be as memorable as the old man's eye.



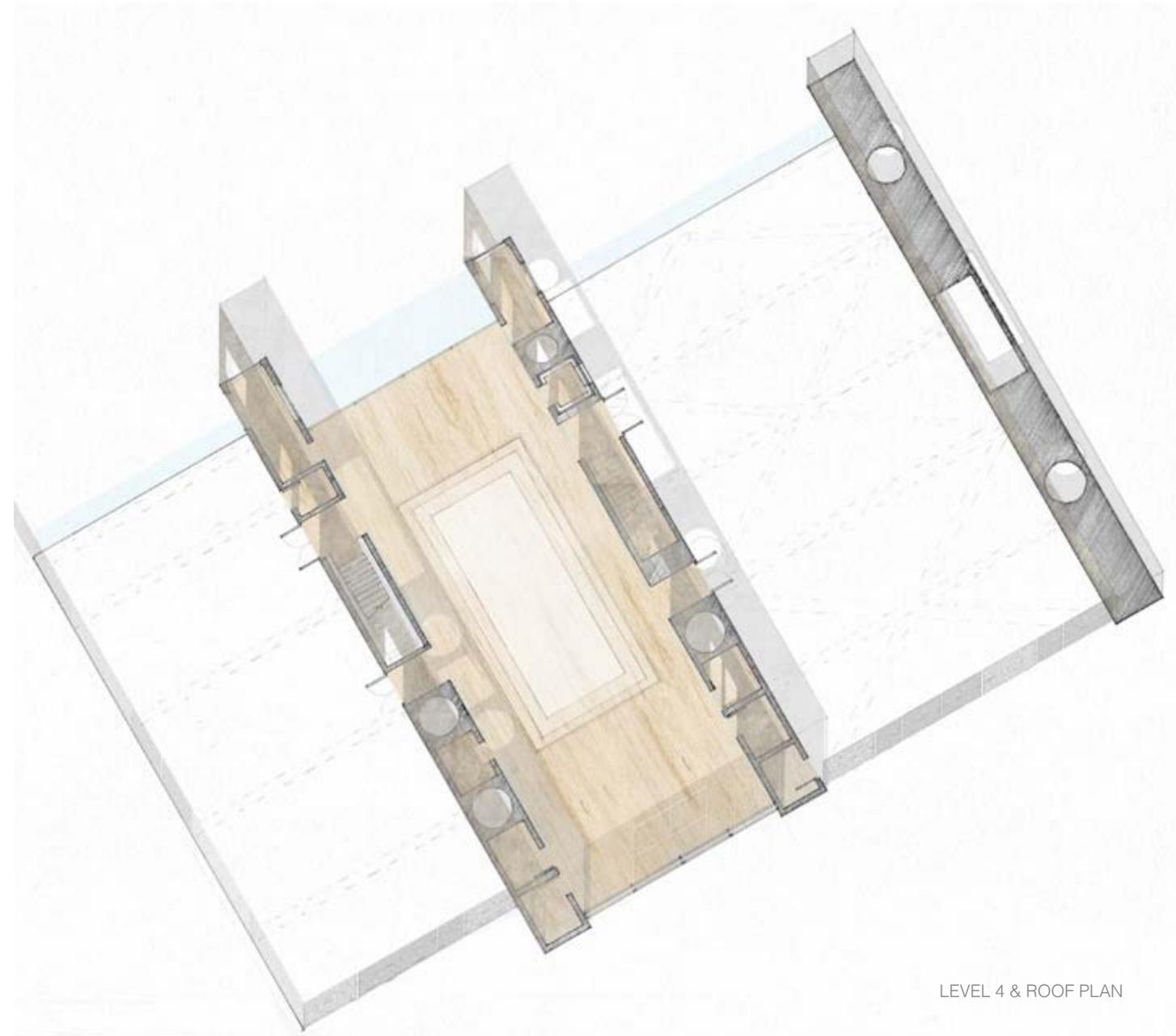
LEVEL 1 PLAN



LEVEL 2 PLAN



LEVEL 3 PLAN



LEVEL 4 & ROOF PLAN

IMAGES

- Pages 2-3 *Illustration of Library of Alexandria.* Digital image. *Encyclopedia Britannica.* Encyclopedia Britannica, 07 Feb. 2008. Web. 10 Nov. 2013. <<http://www.britannica.com/EBchecked/topic/14417/Library-of-Alexandria>>.
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- Page 5 *Photo of Seattle Public Library 'Mixing Chamber'.* Digital image. *REX.* Web. 10 Nov. 2013 <<http://www.rex-ny.com/work/seattle-library/>>.
- Pages 10-11 *Robert Kniesche's Historic Photos of Baltimore City.* Digital images. *The Dark Room.* The Baltimore Sun, 2 Nov. 2012. Web. 28 Sept. 2013. <<http://darkroom.baltimoresun.com/2012/11/robert-kniesche-a-life-devoted-to-baltimore-and-photography/#5>>.
- Page 13 *Architectural drawing of the B&O Railroad Museum Roundhouse.* Scanned image. The B&O Railroad Museum Archives, 1884. 8 Dec. 2013.
- Page 14 *Sanborn Map of Baltimore, 1901-1902.* Digital map. *Digital Sanborn Maps.* Accessed through Enoch Pratt Free Library Databases. 12 Sept. 2013. <<http://sanborn.umi.com/md/3573/dateid-000004.htm?CCSI=2043n>>.
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- Page 40 *Aubrey Bodine Photos of Iron Balconies.* Digital images. *A. Aubrey Bodine - Baltimore Pictorialist.* Web. 17 Mar. 2014 <<http://www.aubreybodine.com/gallery/category.asp?cat=208&pg=5#TOF>>.

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