



The liminal Shift

# **The liminal Shift**

by Dhawal Jain

Thesis submitted to the faculty of Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

Master of Architecture  
in  
Architecture

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Liminal, threshold, Malawi, Africa, Library



## ABSTRACT

Malawi is currently identified as one of the poorest countries in the world, based upon economic factors and the large dependence of the country on foreign aid. Poverty is endemic, but how does one measure factors such as happiness and contentment that exists in many communities? How does one account for cultural richness and diversity?

Known as the warm heart of Africa, Malawi lives up to its reputation through the warmth and hospitality shown by its people. In spite of an absence of a strong formal architectural history, one cannot help but be impressed by the crude vernacular architecture that is found throughout the country. Together these two conditions, the warm heart and vernacular architecture lead to the question concerning the role of architecture in augmenting Malawi's image globally. How can these pre-liminal conditions come together as a force that would start scripting the path of progress for Malawi as a nation?

This thesis evaluates the current pre-liminal situation in Malawi through the study of its activities, events and culture. It proposes an intervention in the form of a new library which at its core is developed around the principles of liminality. From the gathering spaces to the local construction techniques and the use of shaded spaces in and around the building, this thesis is an attempt to trigger a liminal shift in Malawi.

"It is the future and the promise of transformation that I find so heartening about Liminality."  
- Laurie Burrows Grad, activist

## ACKNOWLEDGEMENT

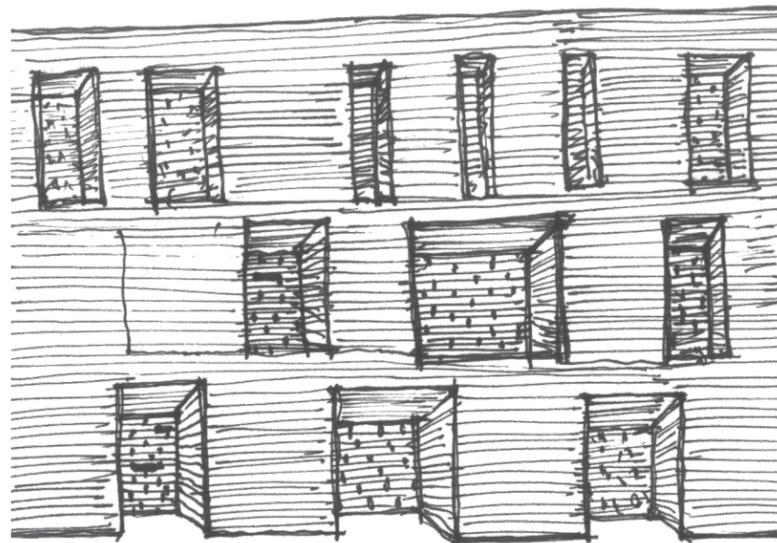
This thesis has been a constantly evolving journey for me and I would like to thank many people who have been a part of this. First and foremost, my family for all the support and more importantly the belief they had in me, while being miles apart from them. Thank you so much Mom, Dad, Chirag and Heena.

My thesis committee - Jim Jones, Akshay Sharma and Henri De Hahn for all the encouragement, criticism and motivation during the reviews and discussions. I appreciate all the efforts that went from their end and this thesis would not have been so meaningful without their meticulous feedbacks.

All my friends in Blacksburg who have been like a family and sometimes much more than that. Special thanks to Sheemantini Paik for all the healthy and heated discussions about my work. Niloofar heydarian, Shubham Chuhadia and Runjie Liu for being the awesome Cowgill support system. My roommates Tori Scheml, Natalie Toma and Jojo Kidane for keeping an awesome atmosphere at home and being patient with me. Thanks Amanda Milella, Erik Fendik, James Wood and Lindsey Blum for all the discussions. You all rock and I am sure there's a huge smile on your face after you read this.

Lastly, thank you so much Malawi team with whom I got the opportunity to travel to Malawi, Africa in September 2017. Thanks to professor Jack Davis, Bob Dunay, Donna Dunay and Kevin Jones for being great mentors. Special thanks to professor Nathan King, who has been a very strong mentor since my first semester at Virginia Tech and who had encouraged me to be a part of the Malawi studio.

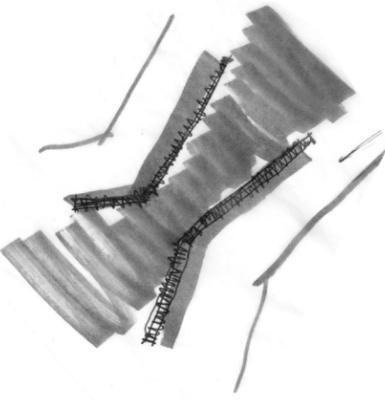
Without all of you, this thesis would have not been possible and I am blessed that I was able to meet you'll during these amazing years at Virginia Tech.



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## 1. LIMEN DEFINITION

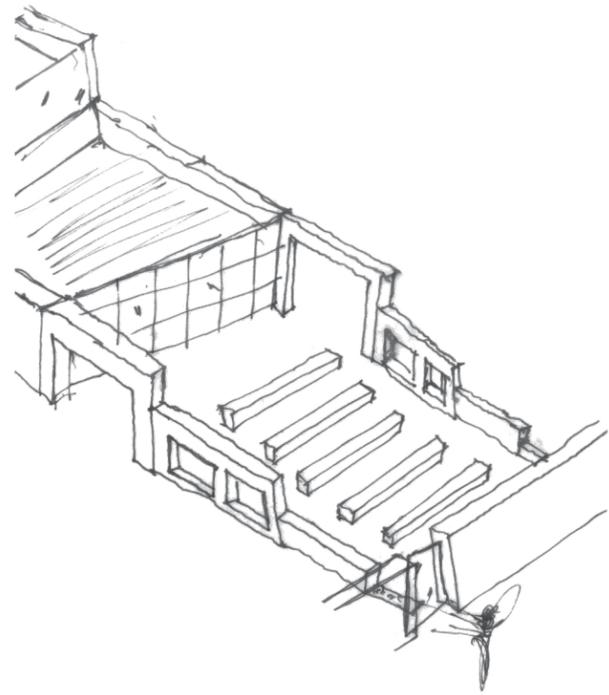
**Limen** is a latin term, which means **threshold**.

In physiology, psychology, or psychophysics; a limen or a liminal point is a threshold of a physiological or psychological response. It is the boundary of perception. On one side of a limen (or threshold) a stimulus is perceivable, on the other side it is not.

Both liminal and liminality are derived from the word "limen".

The concept of liminality was first developed in the early 20th century by folklorist Arnold van Gennep and later taken up by Victor Turner.

Liminality is the quality of ambiguity or disorientation that occurs in the middle stage of rituals, when participants no longer hold their pre-ritual status but have not yet begun the transition to the status they will hold when the ritual is complete. During a ritual's liminal stage, participants "stand at the threshold" between their previous way of structuring their identity, time, or community, and a new way, which the ritual establishes.



## 2. LIMINALITY, ARNOLD VAN GENNEP AND VICTOR TURNER

The Oxford English Dictionary notes that “Liminal” first appeared in publication in the field of psychology in 1884, but the idea was introduced to the field of anthropology in 1909 by Arnold Van Gennep in his seminal work, *Les rites de passage*. Van Gennep described rites of passage such as coming-of-age rituals and marriage as having the following three-part structure:

1. Separation
2. Liminal period
3. Reassimilation

The initiate (that is, the person undergoing the ritual) is first stripped of the social status that he or she possessed before the ritual, inducted into the liminal period of transition, and finally given his or her new status and re-assimilated into society.

It was not until the second half of the 20th century, though, that the terms “liminal” and “liminality” gained popularity through the writings of Victor Turner. Turner borrowed and expanded upon Van Gennep’s concept of liminality, ensuring widespread usage of the concept not only in anthropology but other fields as well. Various authors in a number of fields have written about liminality, but not only would it be impossible to cover everything here, it would also probably only confuse the issue.

The following are three categories which this thesis is divided into, based on the study of principles of Liminality :

- Pre-Liminal
- Liminal
- Post-Liminal

### 3. PRE-LIMINAL / SEPARATION

PRE-LIMINAL  
below the threshold of sensation or consciousness



## Malawi

Known as the warm heart of Africa, it is contradictorily also referred to as one of the poorest countries in the world. After my visit there in September 2017, I was touched by the deep sense of pride which the people possess in terms of their culture, food and values.

This led me to the question how a country such as Malawi be defined globally based on economic statistics and data?

Could there be other forces which could be critical in the way a country is perceived globally?

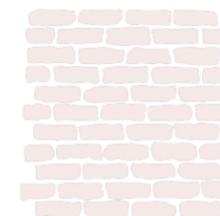


## Food, Culture and Values

People in Malawi take extreme pride in their food, culture and values. There is a very strong culture of eating Maize in the region as it is a local produce. A lot of different varieties of food are made out of maize. Along with this, people take pride in inviting people over to their place.

Cultural elements such as dancing, arts and craft are also very well rooted within the communities there. There is a regular involvement of people in these events.

Could all these qualities be a strong influence in the way a country thinks about it's future?



## Indigenous Construction

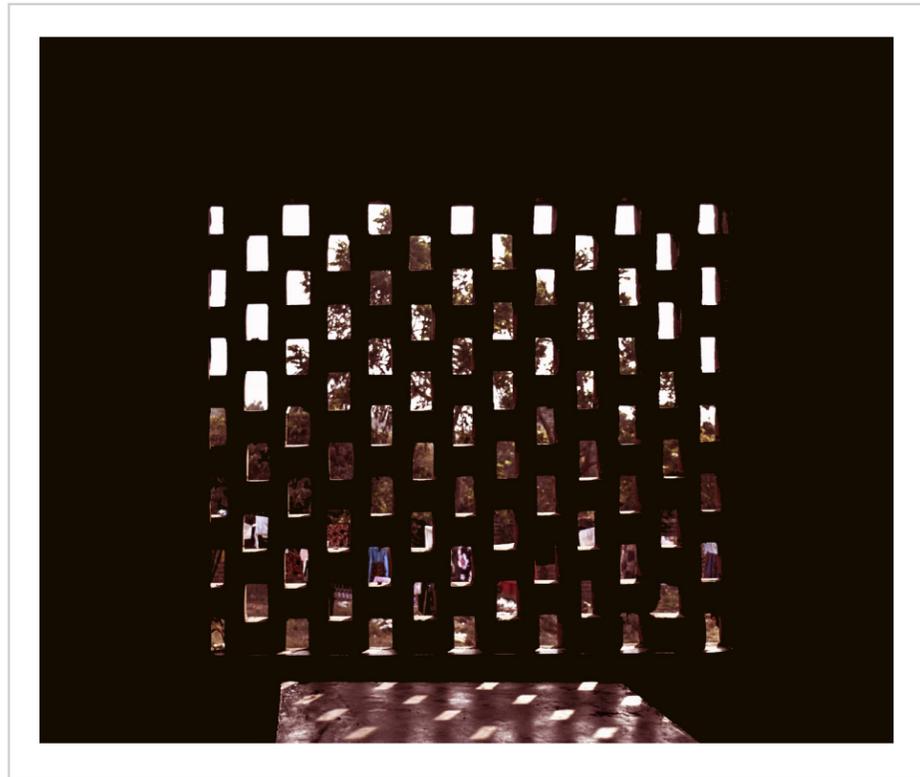
Construction in Malawi is utilitarian and pragmatic where the use of indigenous materials contributes to the larger good.

Materials such as Stabilized bricks, rammed earth, bamboo, thatched roofs and mud plaster are not only ideal for the climatic conditions in Malawi, but also create an indigenous architecture which engages the community in what they build.

The use of these materials in a very contemporary way seems to be an opportunity to express a liminal shift.

#### 4. LIMINAL

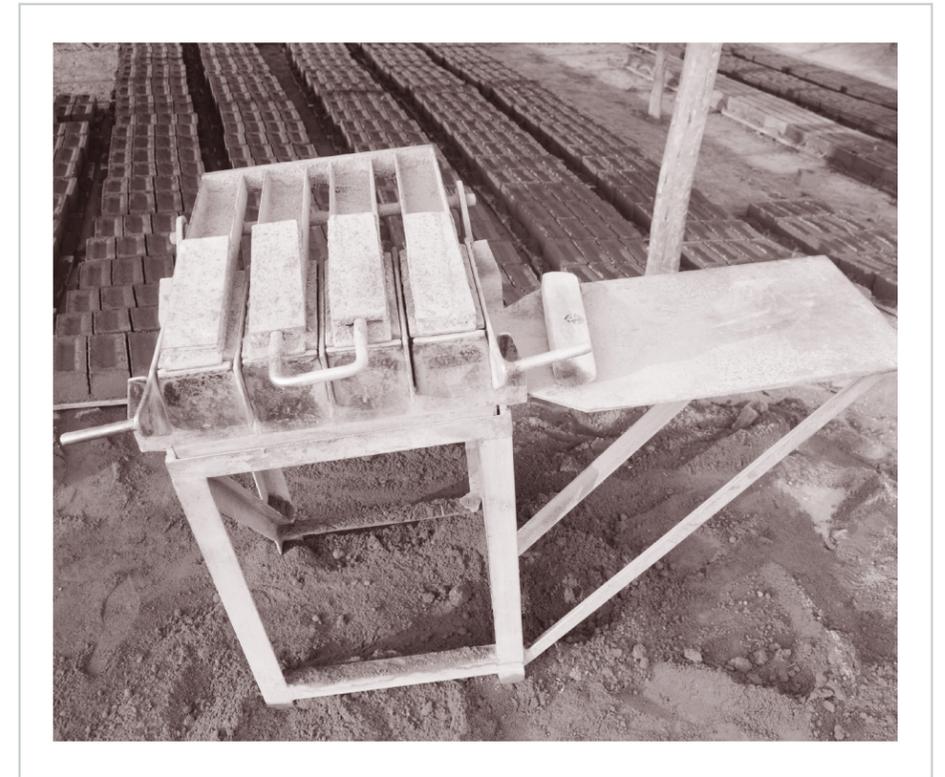
LIMINAL  
relating to a transitional or initial stage of a process



The **Masonry screen** at MASS Design Group's Maternity waiting village (MWV) in Malawi is an example of how traditional materials could be used in a contemporary way.



The presence of **strong arts and craft culture** in Malawi is present everywhere. There is a need for a catalyst which celebrates and communicates these for generations.



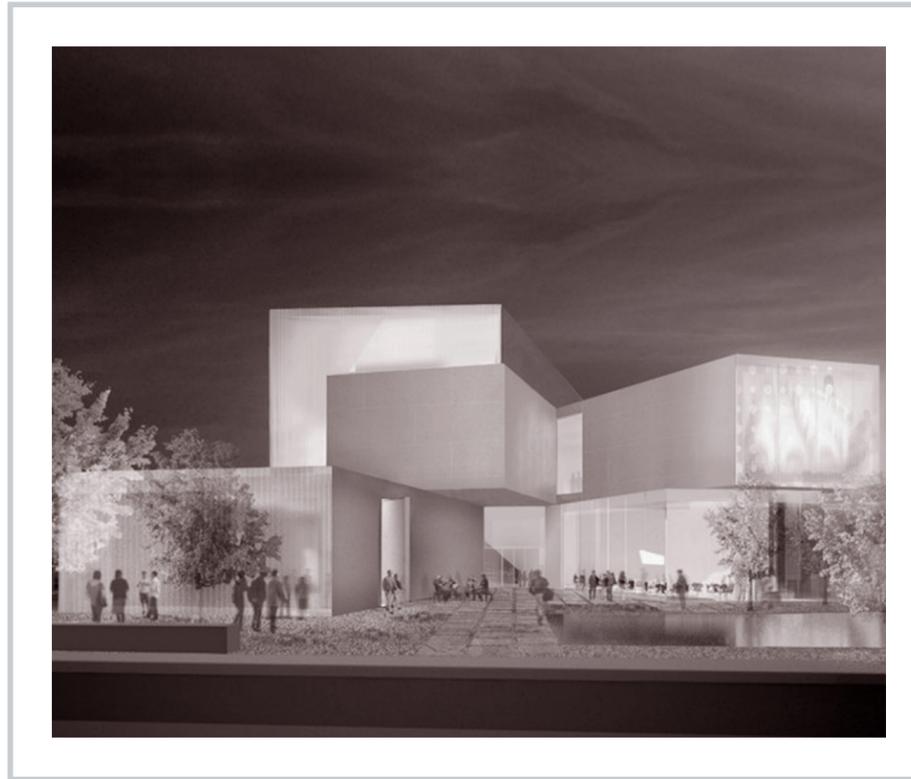
The **local craftsmanship** as seen in the construction techniques throughout Malawi. The masonry is usually made on site or sourced locally, using the abundantly available red soil.

## 5. POST-LIMINAL / RE-ASSIMILATION

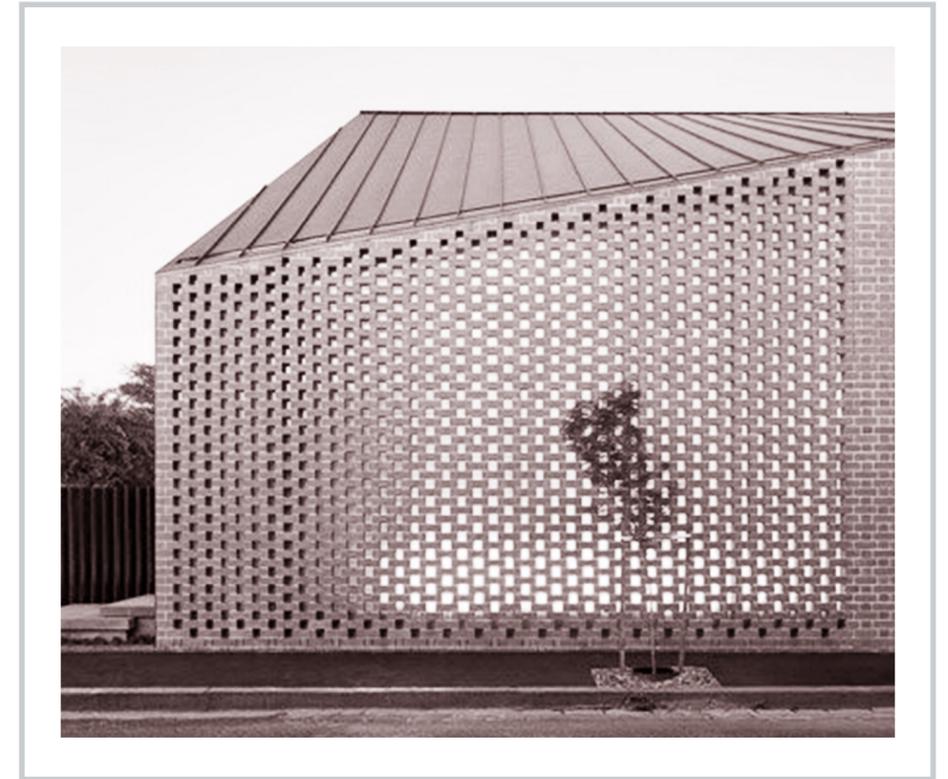
POST-LIMINAL  
marks the end of liminal phase



The MWV project by MASS Design celebrates the idea of **courtyard and gathering spaces**. It uses a traditional unit typology and creates a tightly knit community



The ICA at Virginia Commonwealth university, Richmond creates a beautiful facade and has a strong **inviting gesture** towards the users.



The transparency of the facades of the Ngamwongman House in Bangkok creates a cultural light through its **porosity** and engages people into a healthy interaction with the building.

Many important characteristics evolved from the study of the conditions presented above.  
These conditions become the underlying principles for the thesis explorations.

Gathering & Embracing



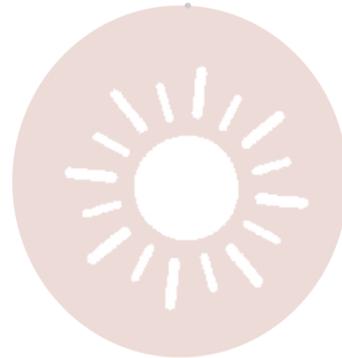
Global

Trees and shaded spaces



National

Abundant Natural light



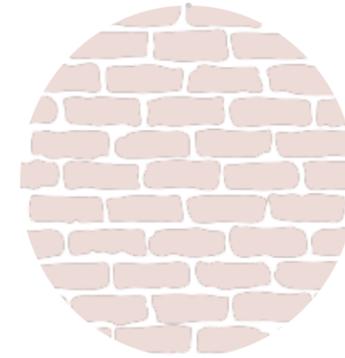
Region

Local art and culture



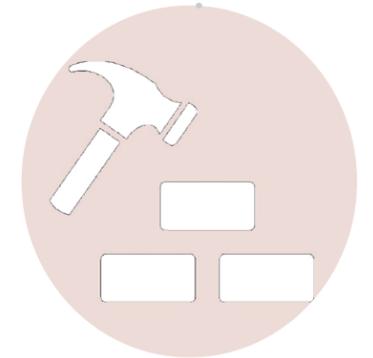
Community

Bricks and local materials



Neighborhoods

Local Craftmanship



People

## 6. LIMINALITY SO FAR

### Bangladesh

Bangladesh is amongst 200 poorest countries in the world.

Modern day, independent Bangladesh boasts of a contemporary capital city with forward thinking ideas and industries, yet the country is still strewn with ancient architectural wonders from its rich past.

Louis Kahn's National assembly in Dhaka was designed at a time when Bangladesh was experiencing political instability. Many international architects were struggling to make an impact in this region. This building turned out to be a game changer for Architecture in Bangladesh and established its presence on a global map.



With Louis Kahn's Assembly building in Bangladesh, many young architects and artists in the nation took pride in the **rich historical past** while working towards a new future. The 'Bait ur Rouf Mosque' by architect Marina Tabassum on the extreme right, is one such example of how contemporary architecture in Bangladesh has been leading the way in creating a **strong national identity globally**.

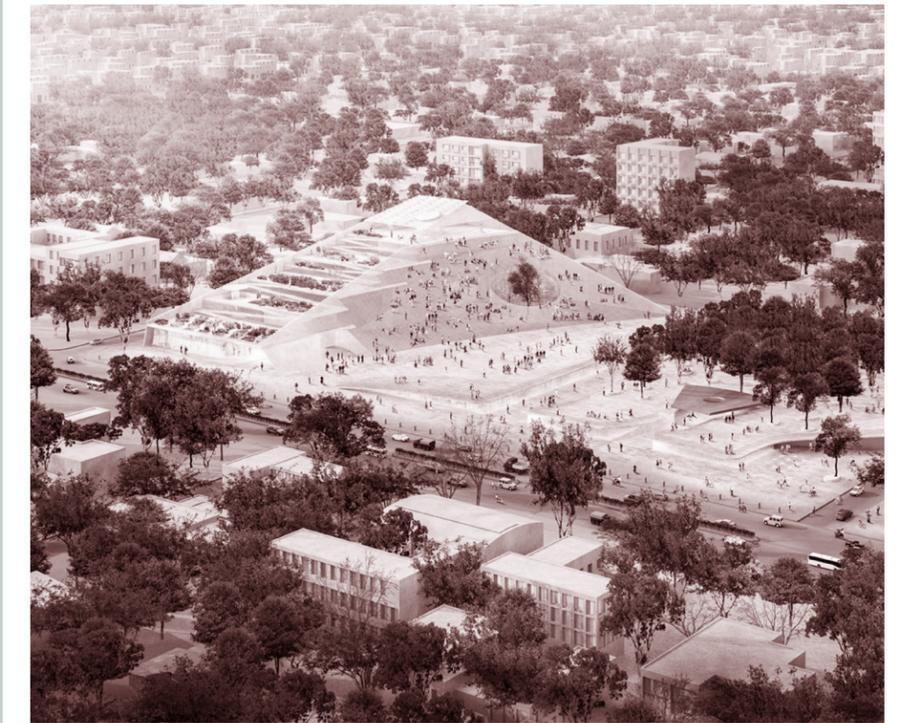


## Burkina Faso

Once a part of French West Africa, Burkina Faso is also amongst the poorest countries in the world.

Frances Kere, who studied in Germany and returned to Gando, a small town in the largely agrarian West African nation of Burkina Faso has been highly successful in putting his country on a global map.

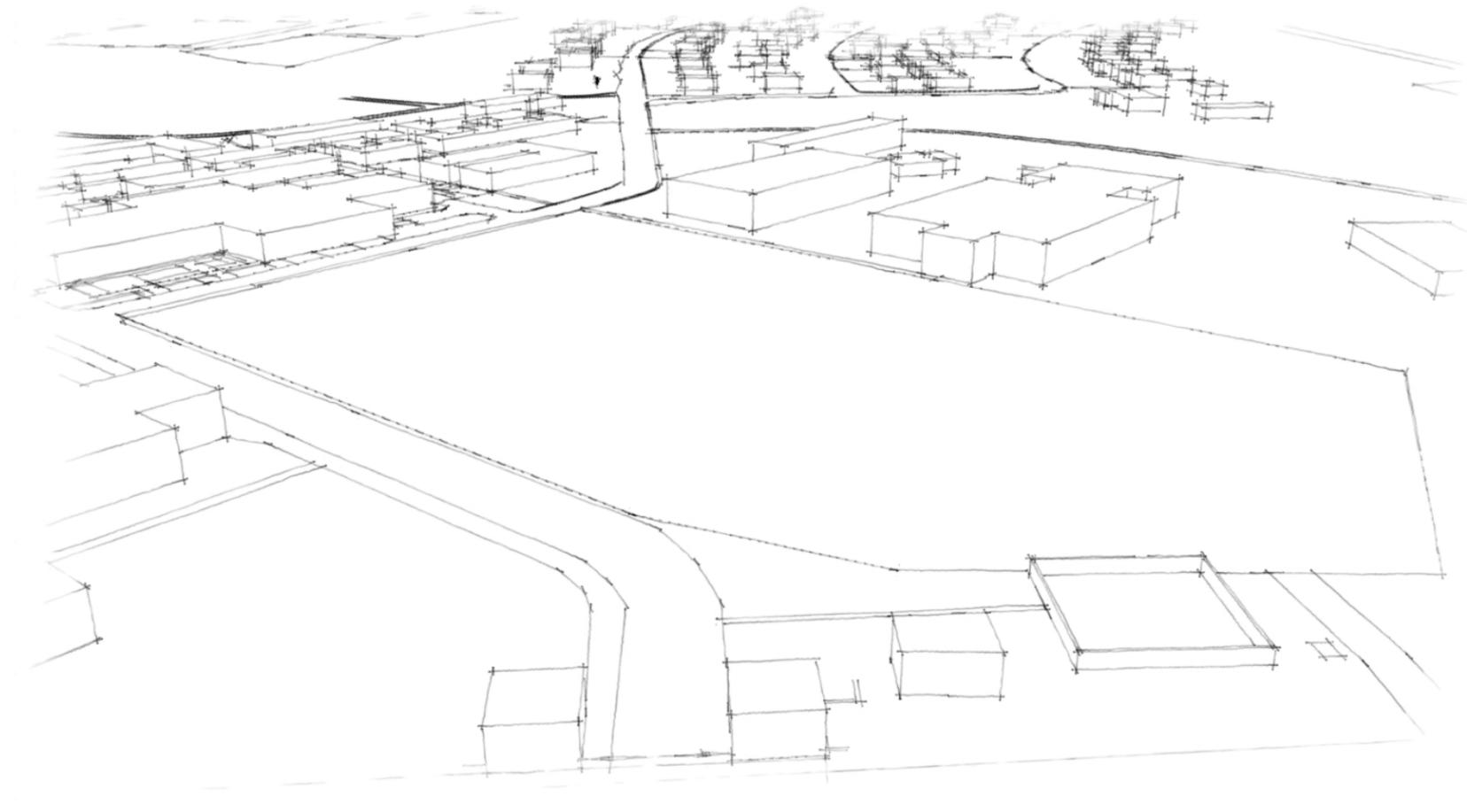
The impact of Frances Kere's efforts in Burkina Faso goes beyond making improvements to infrastructure and providing jobs: Because local people are heavily involved in the building process, they feel a strong sense of ownership and pride. "Normally with public facilities here, nobody's caring for them," he says. "But people are dedicated to these projects, they feel connected to them. And if something happens, they're able to fix them."



Frances Kere, has redefined the way Burkinabes build and possess a building. By using **vernacular construction methods and materials** and by involving community in nation building, Kere let Burkina Faso break free from the shackles of being known as one of the poorest countries in the world. This has created a **strong positive Image** for Burkina Faso, globally.



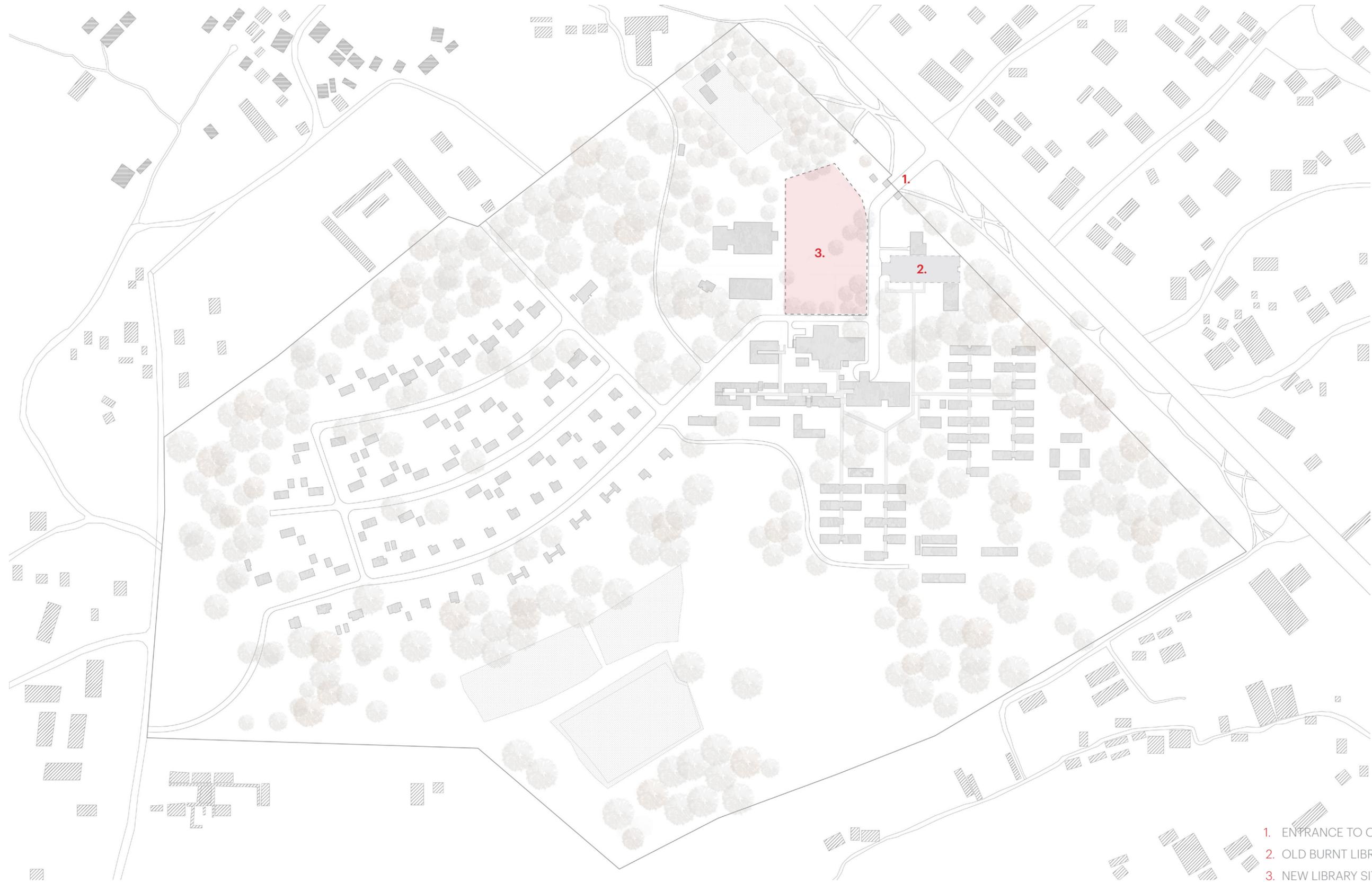
## 7. LIMINALITY IN CONTEXT



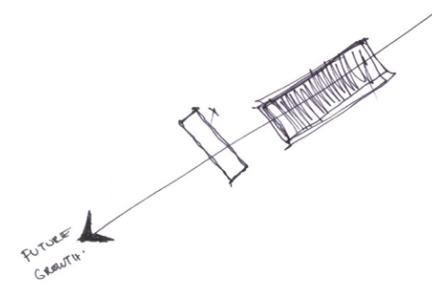
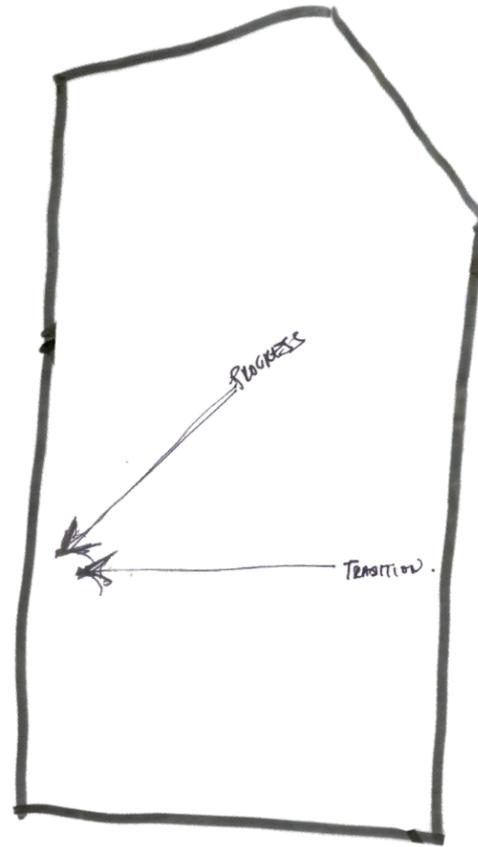
Sketch for the site of the new library



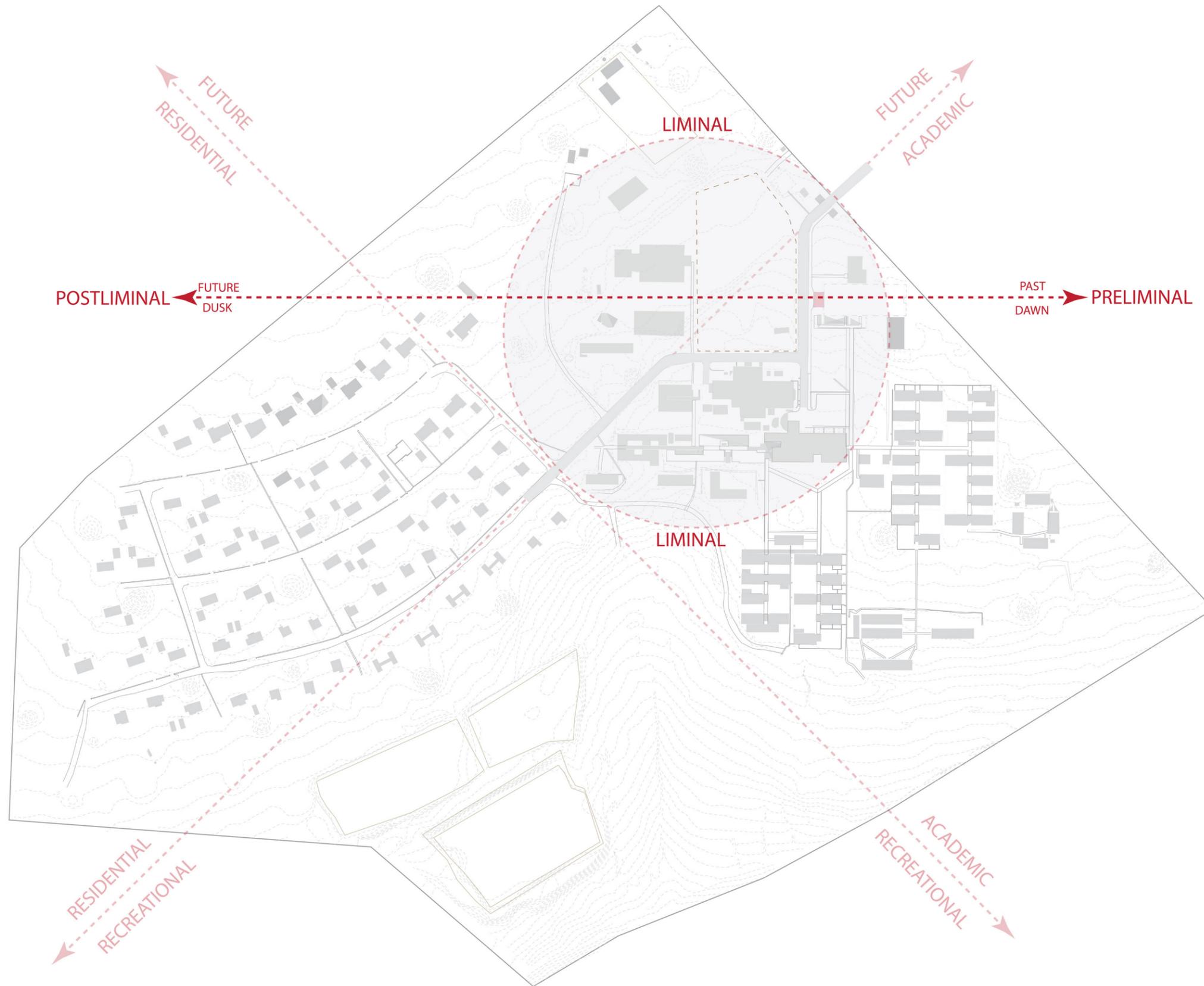
THE LIMINAL SHIFT



- 1. ENTRANCE TO CAMPUS
- 2. OLD BURNT LIBRARY
- 3. NEW LIBRARY SITE



Existing important axes on the site



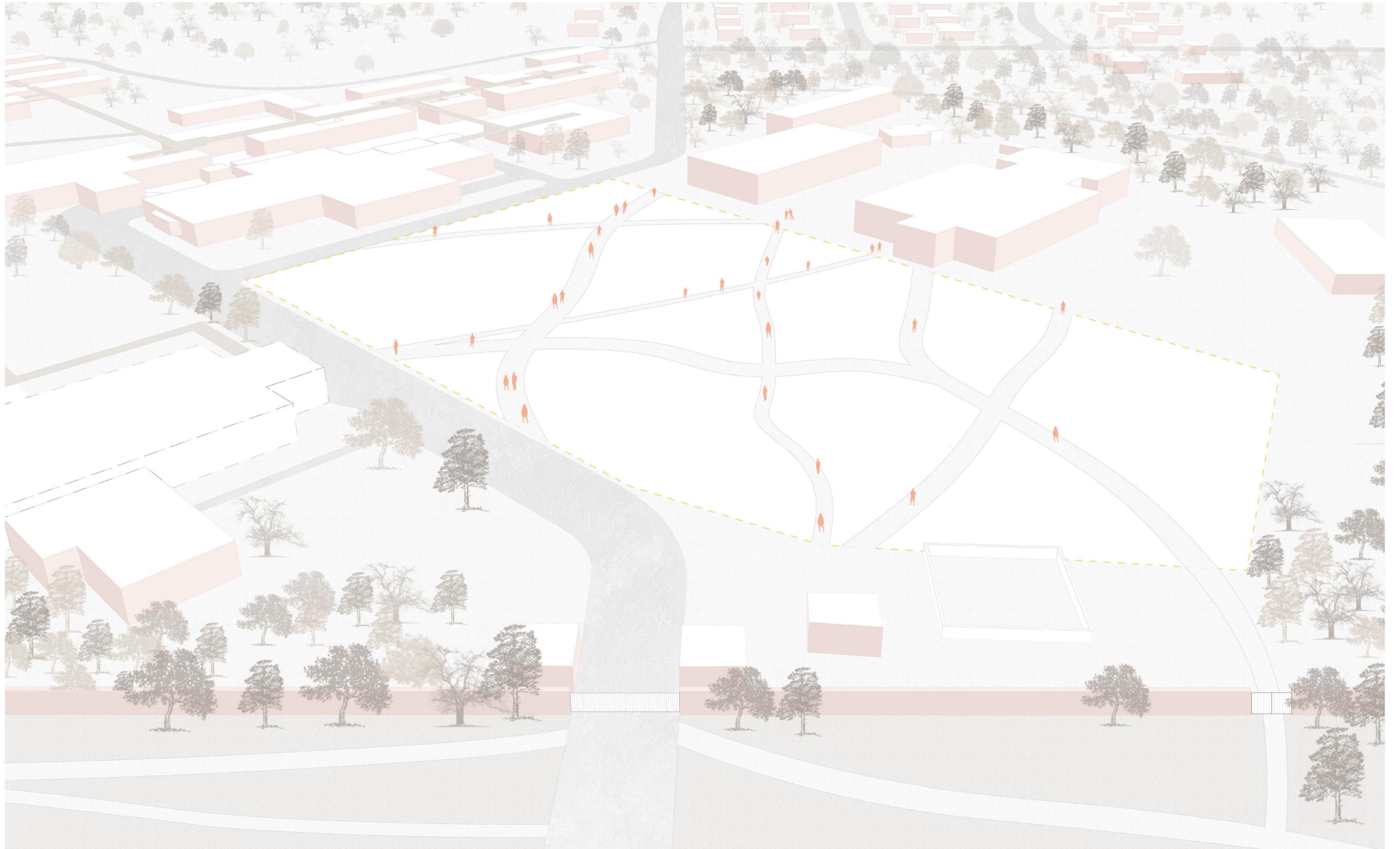
## 8. LIMINAL GROUND

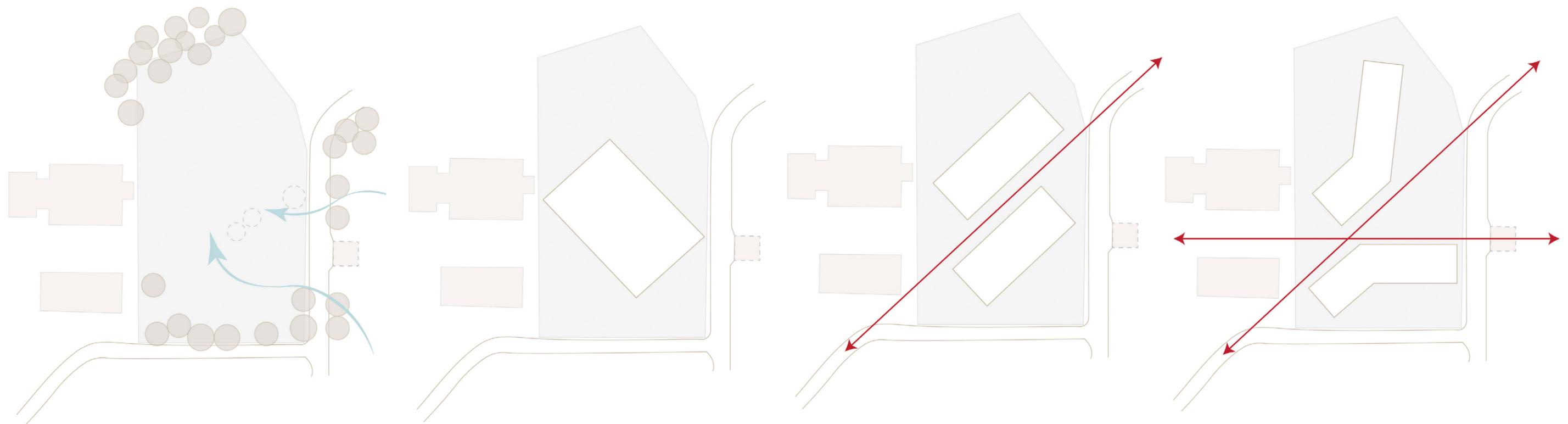


The existing pedestrian pathways through the proposed site gives a distinct character that highlights the connections across various parts on the campus.

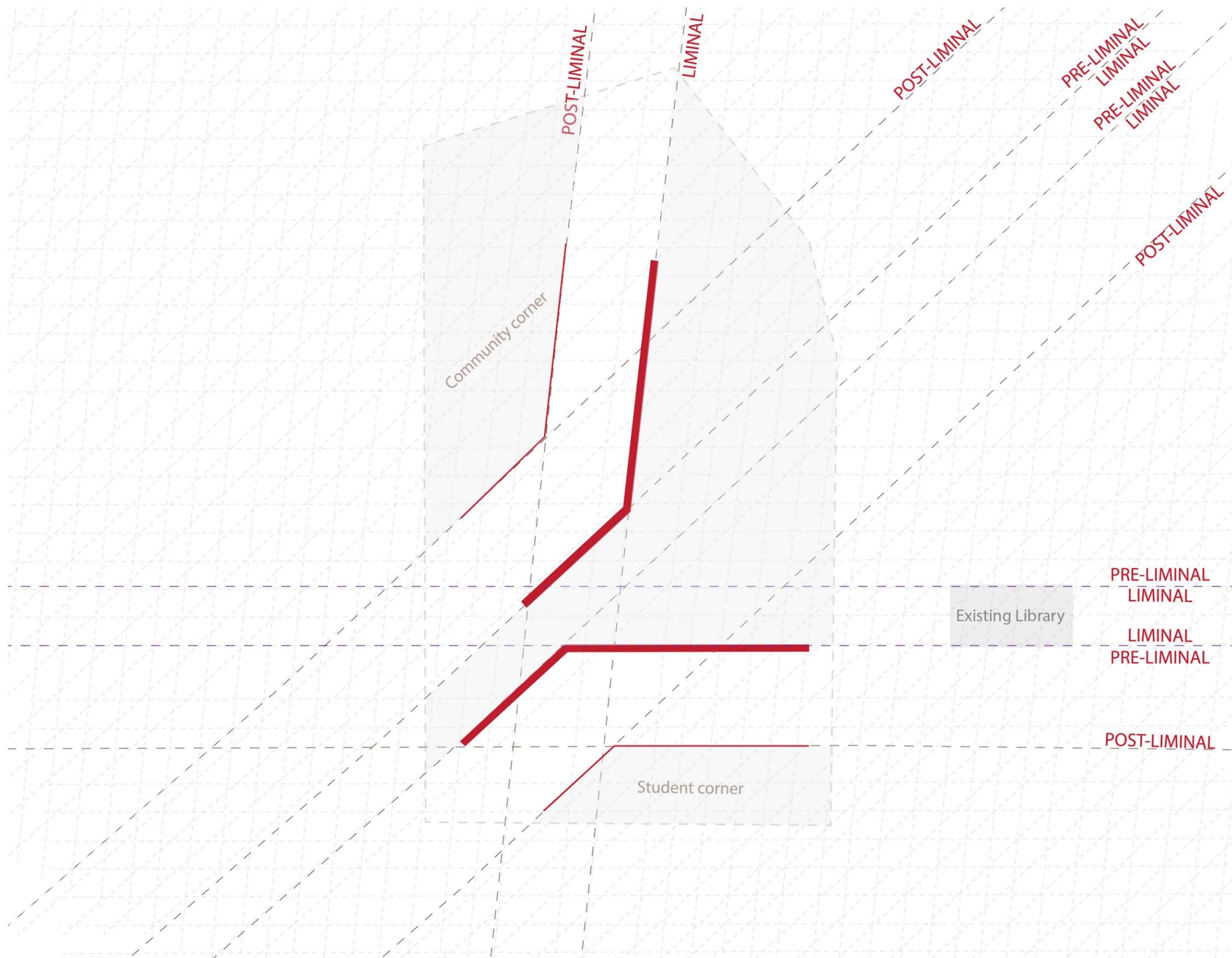


THE LIMINAL SHIFT





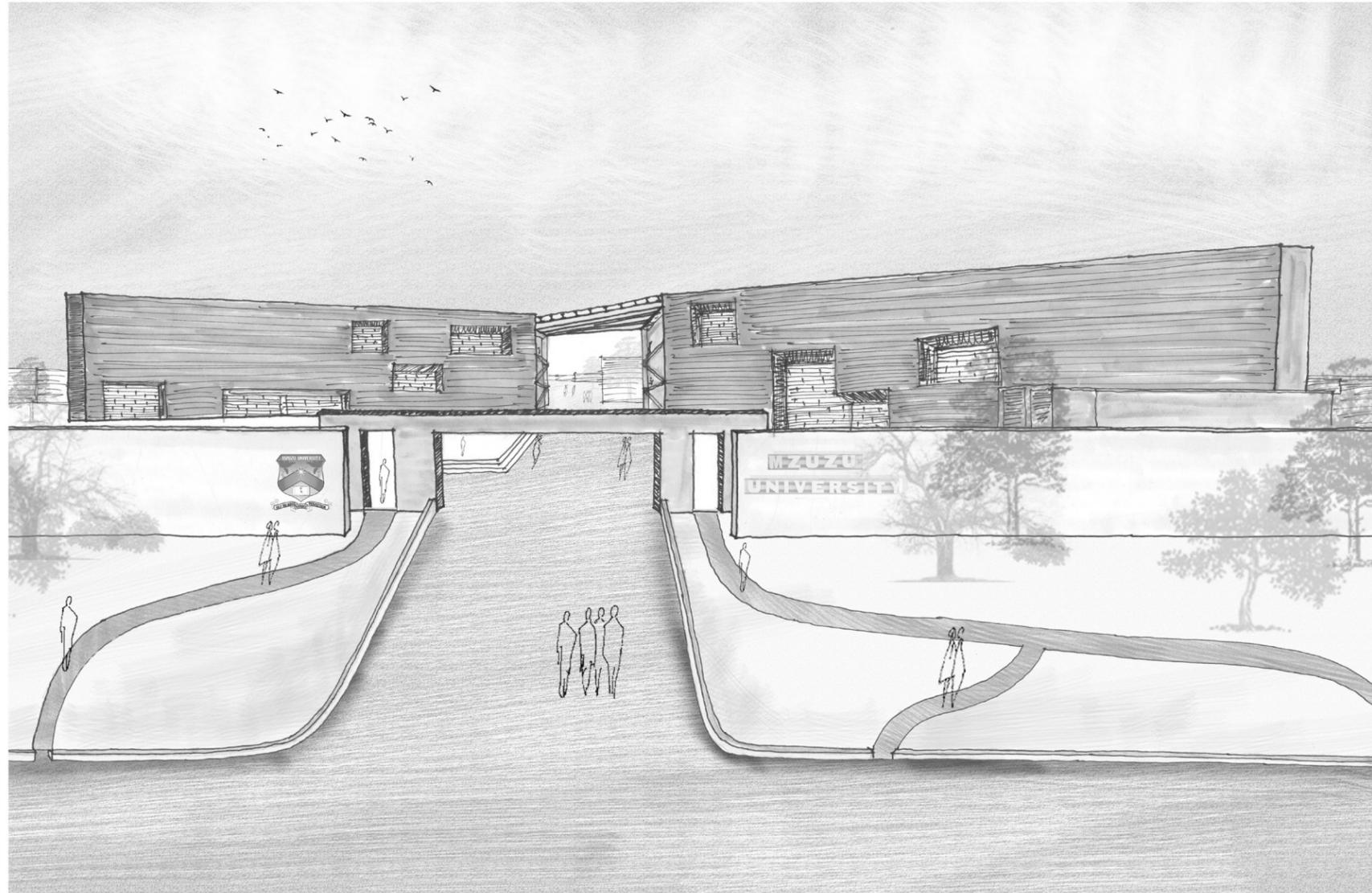
In response to existing natural and topographic conditions, the building mass is oriented towards the main campus entrance. The masses are then split in two volumes, one being for the community and the other being for the students. These volumes are then skewed in response to the two important axes; from the entrance and from the old library.







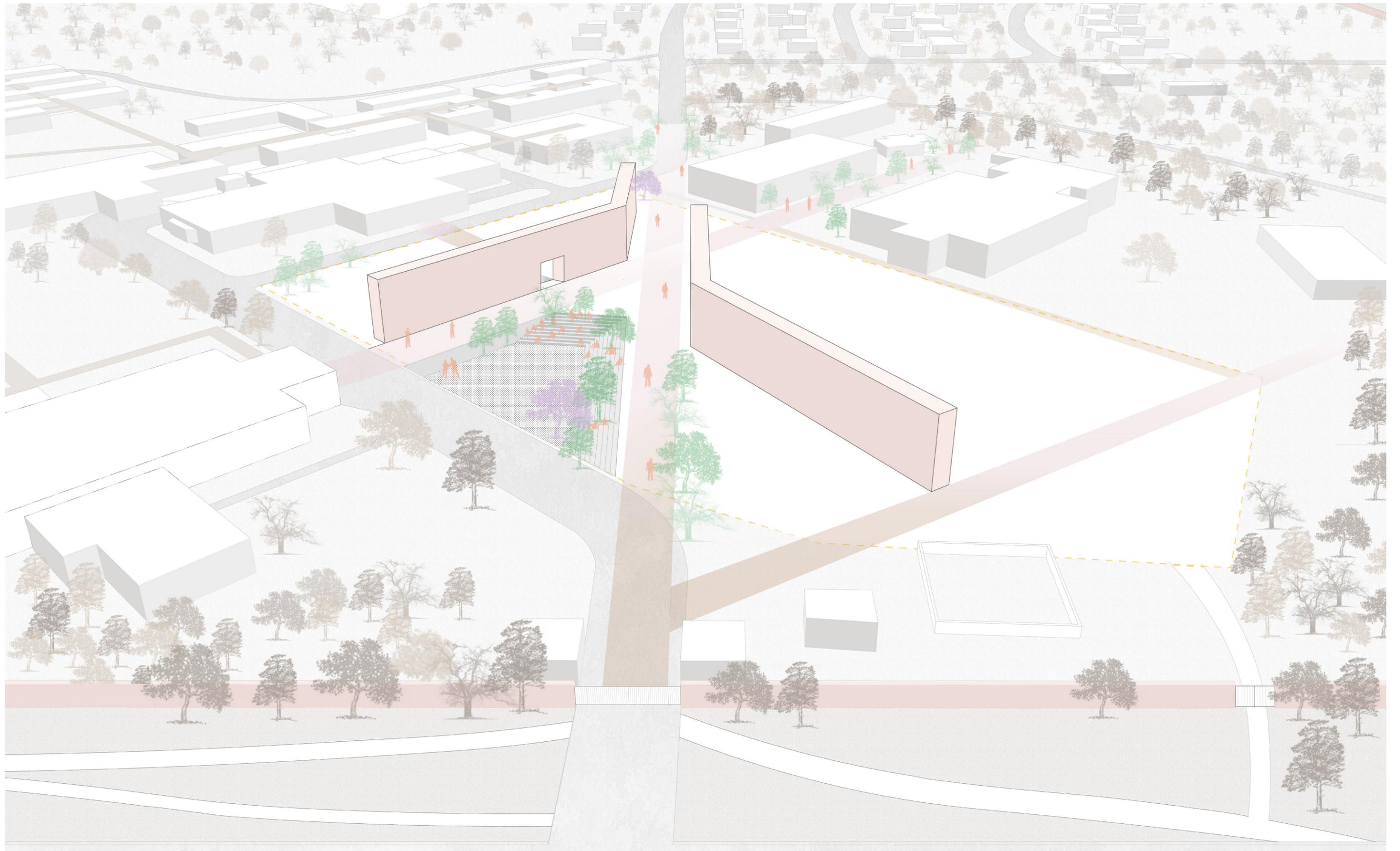
## 9. LIMINAL CONCOCTION

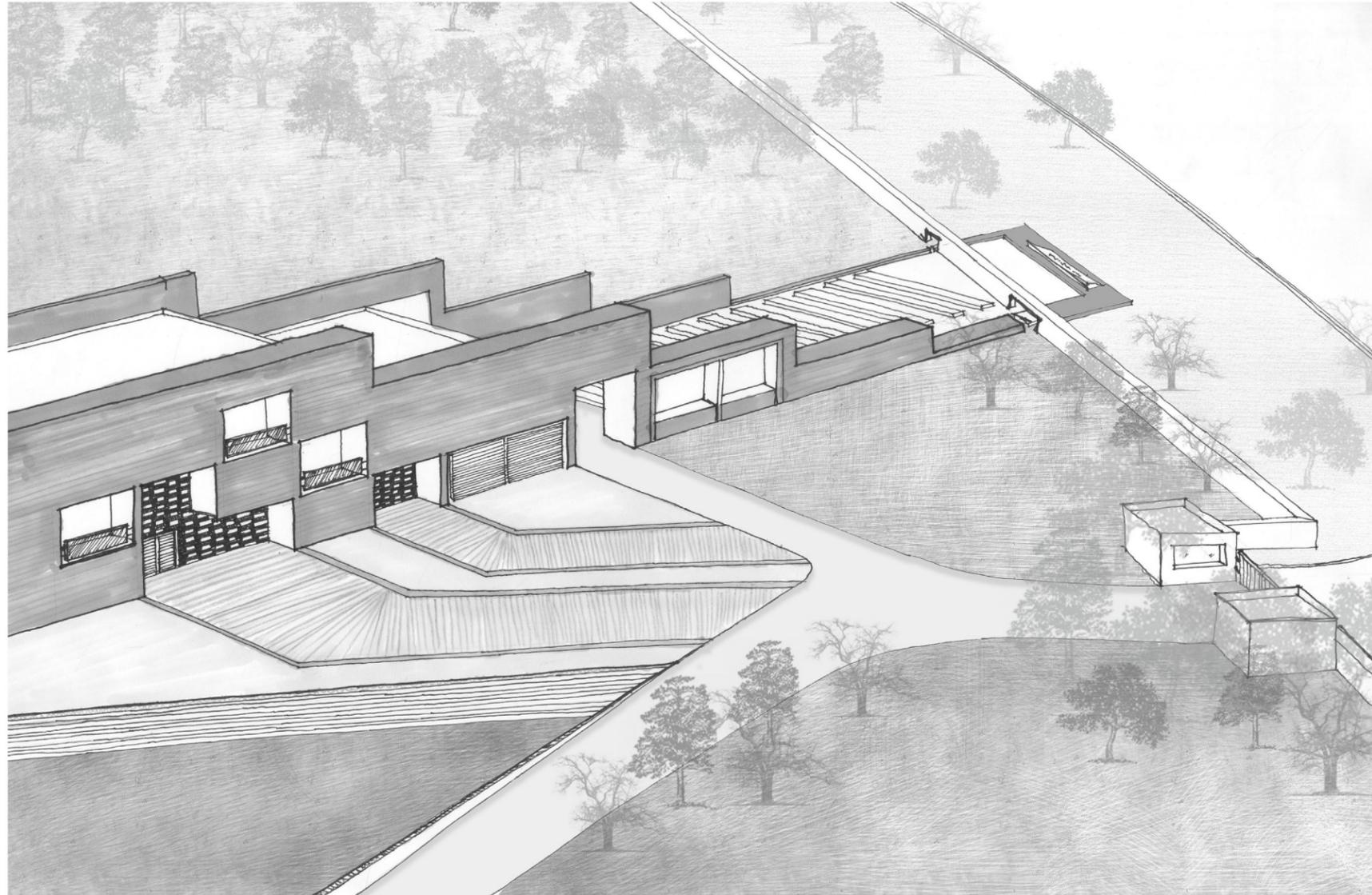


Sketched view of the proposed library from the Mzuzu university campus entrance

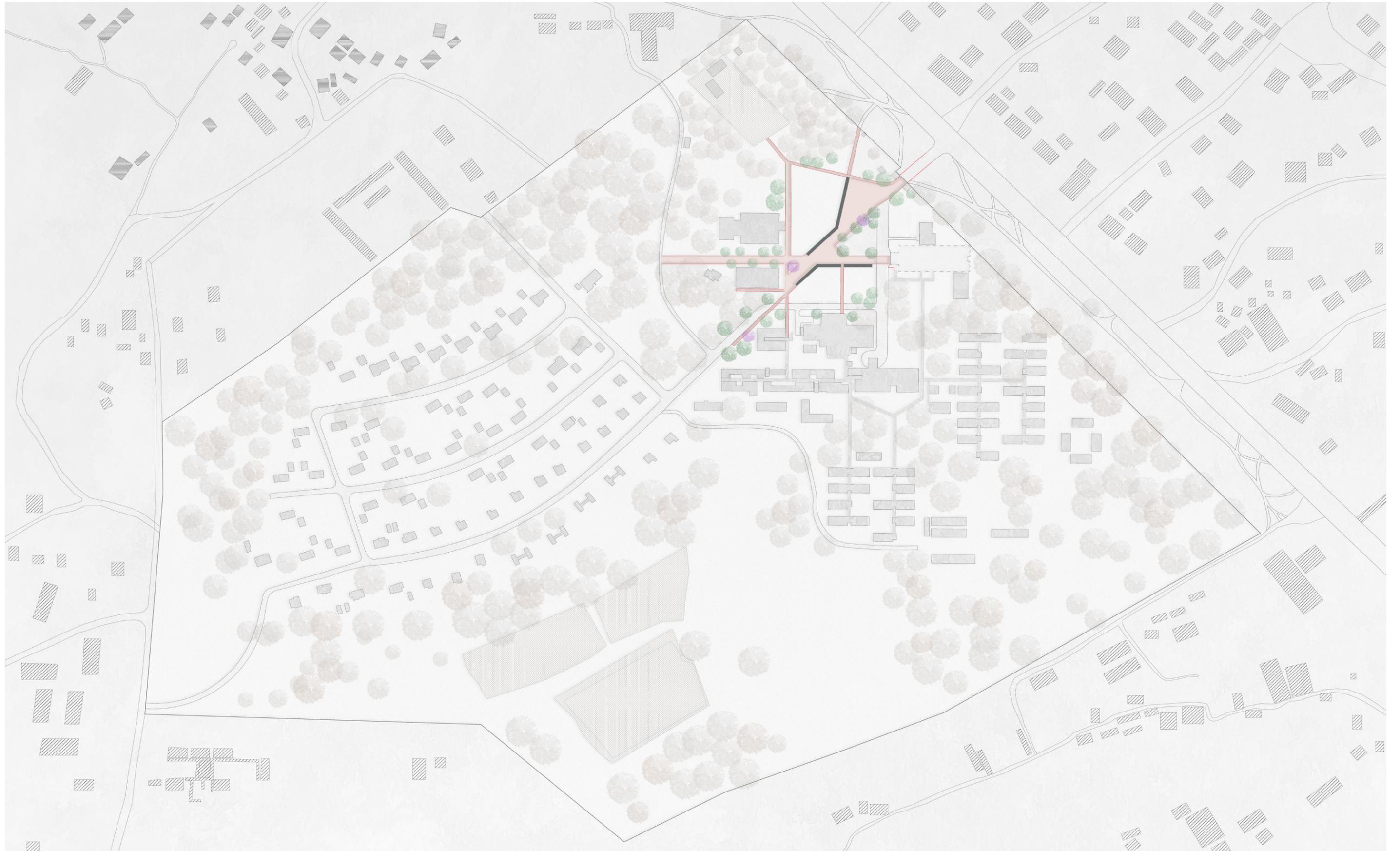


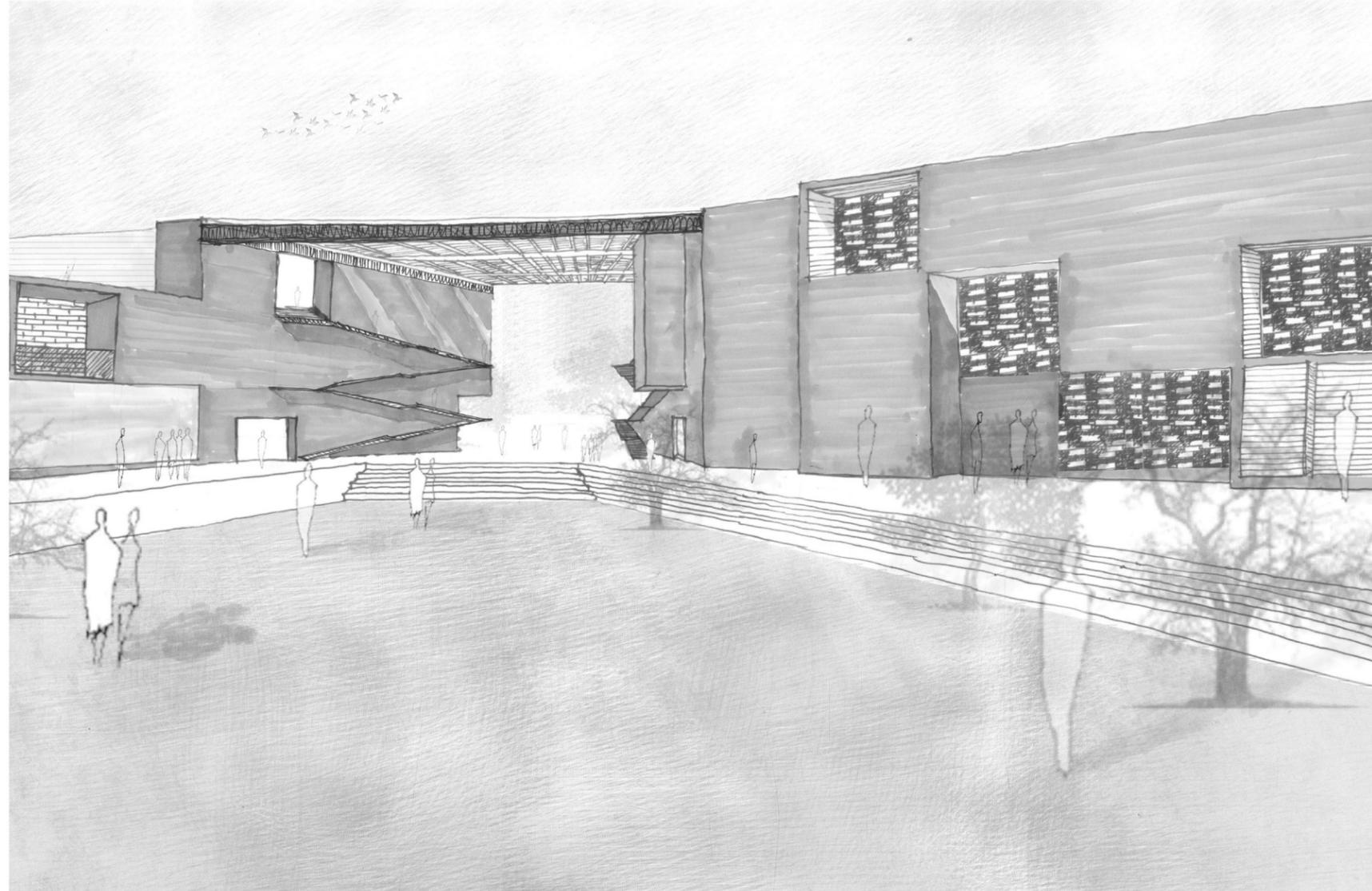
THE LIMINAL SHIFT





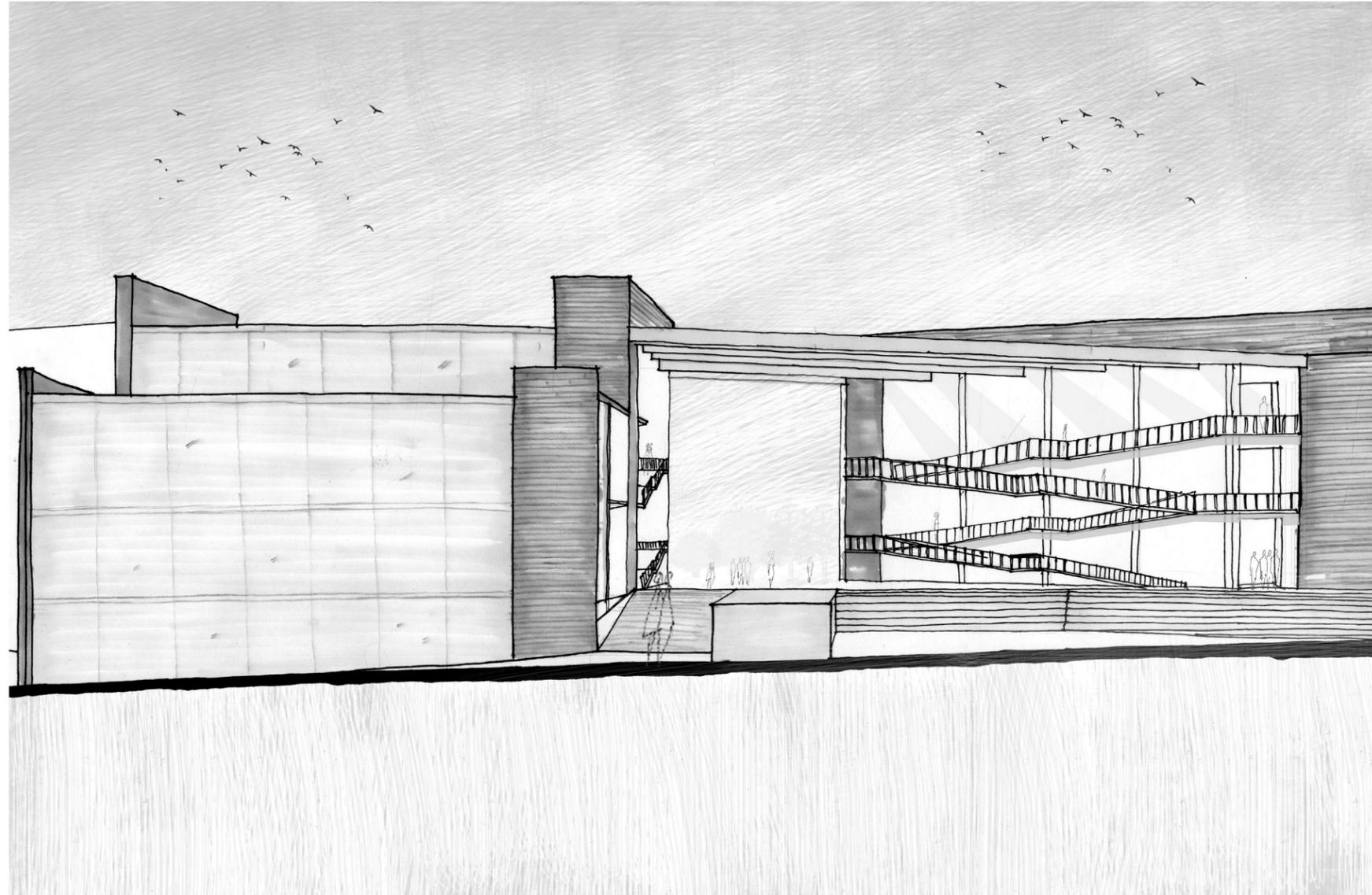
The **walls emerge from the landscape**, changing scale as it transforms into a facade for the building.



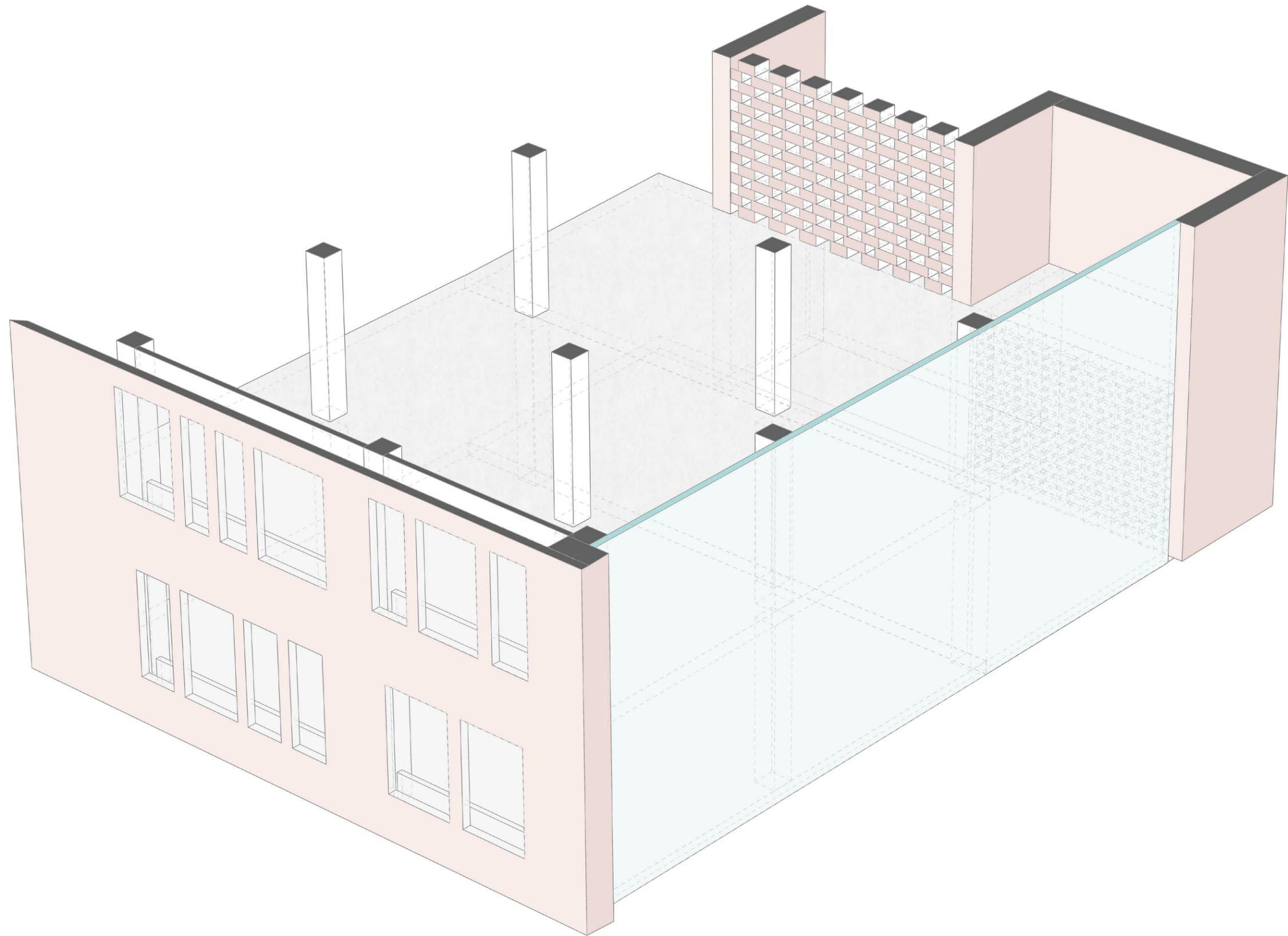


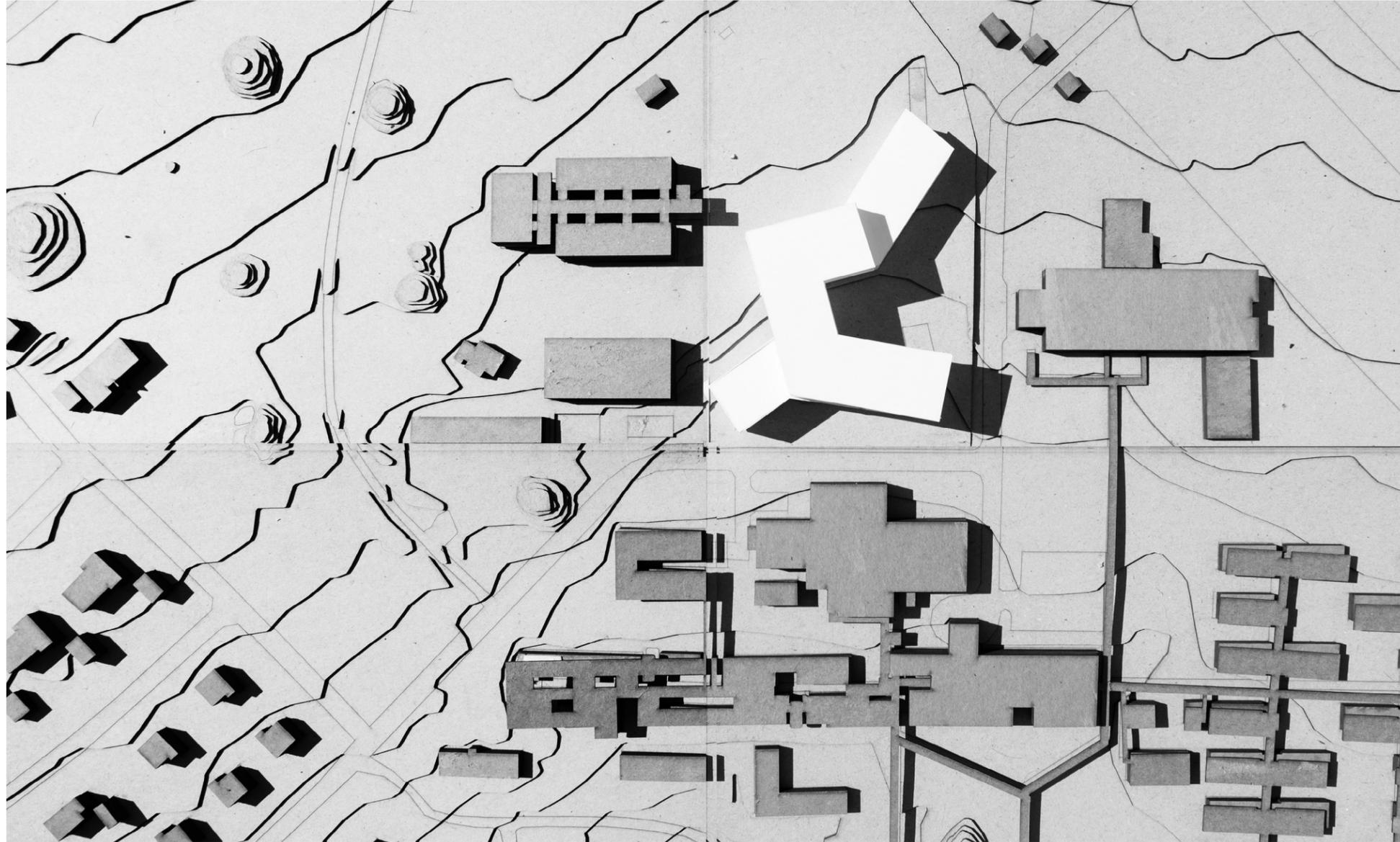
Sketched view of the proposed plaza in front of the library which becomes the **center of gathering and other activities** on campus.



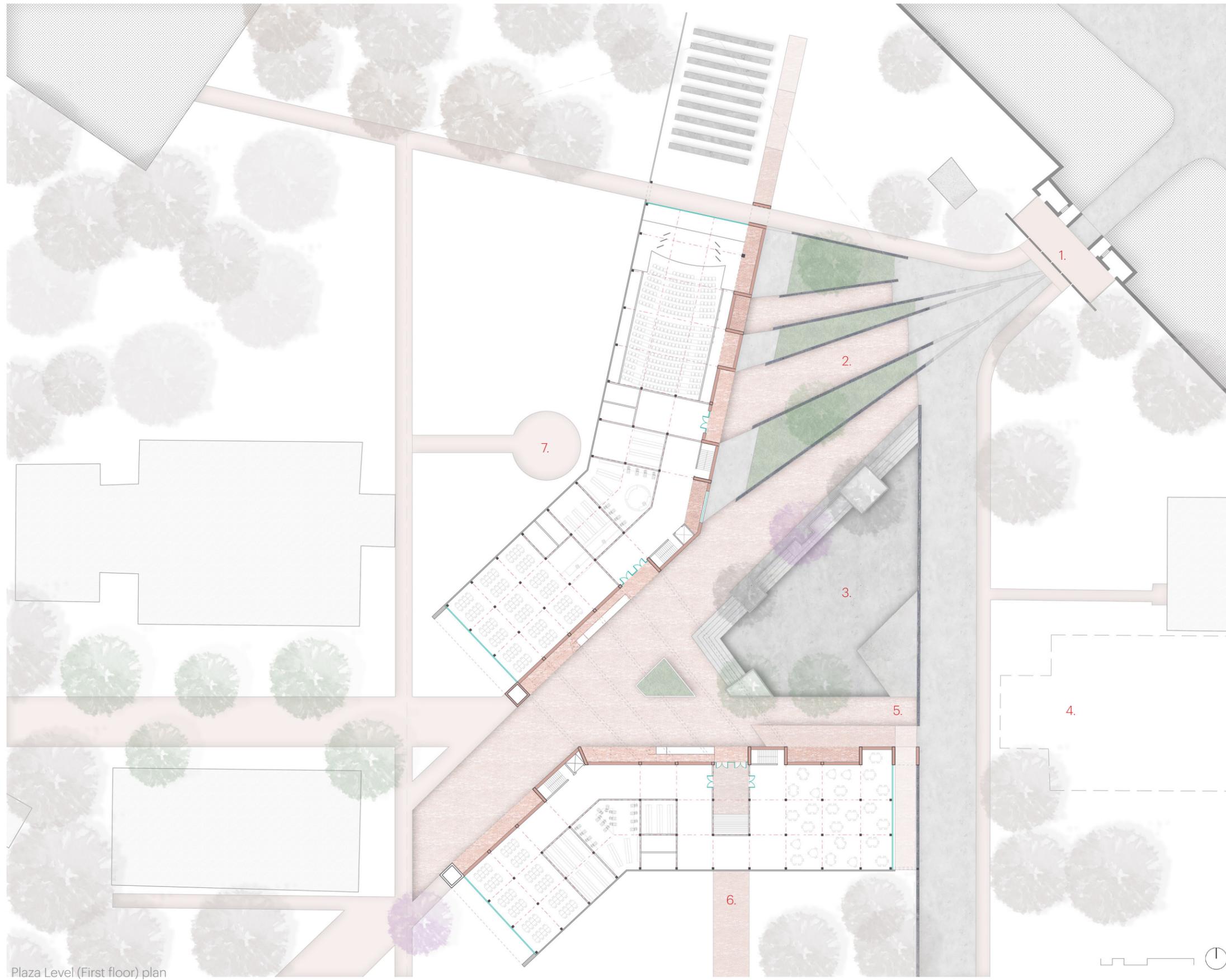


Sketched view of the new library as seen from the old library.  
The ramp in front of the old library draws the people to the main plaza of the building, **integrating the central plaza with surrounding movement.**



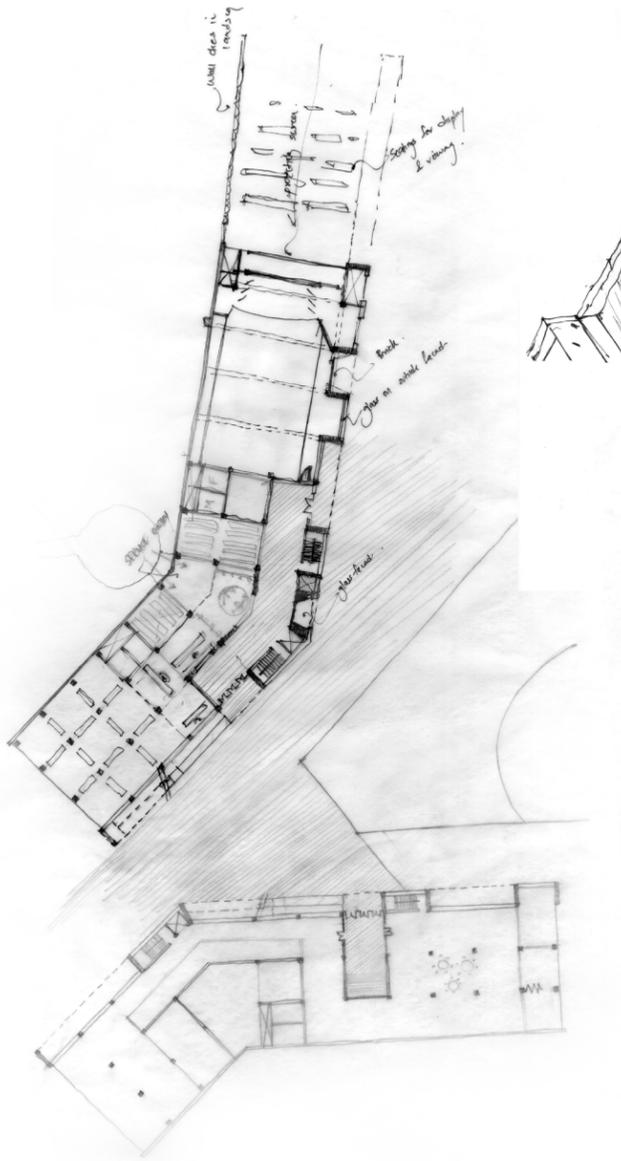


Massing model placed on the site model showing the shadows it casts.

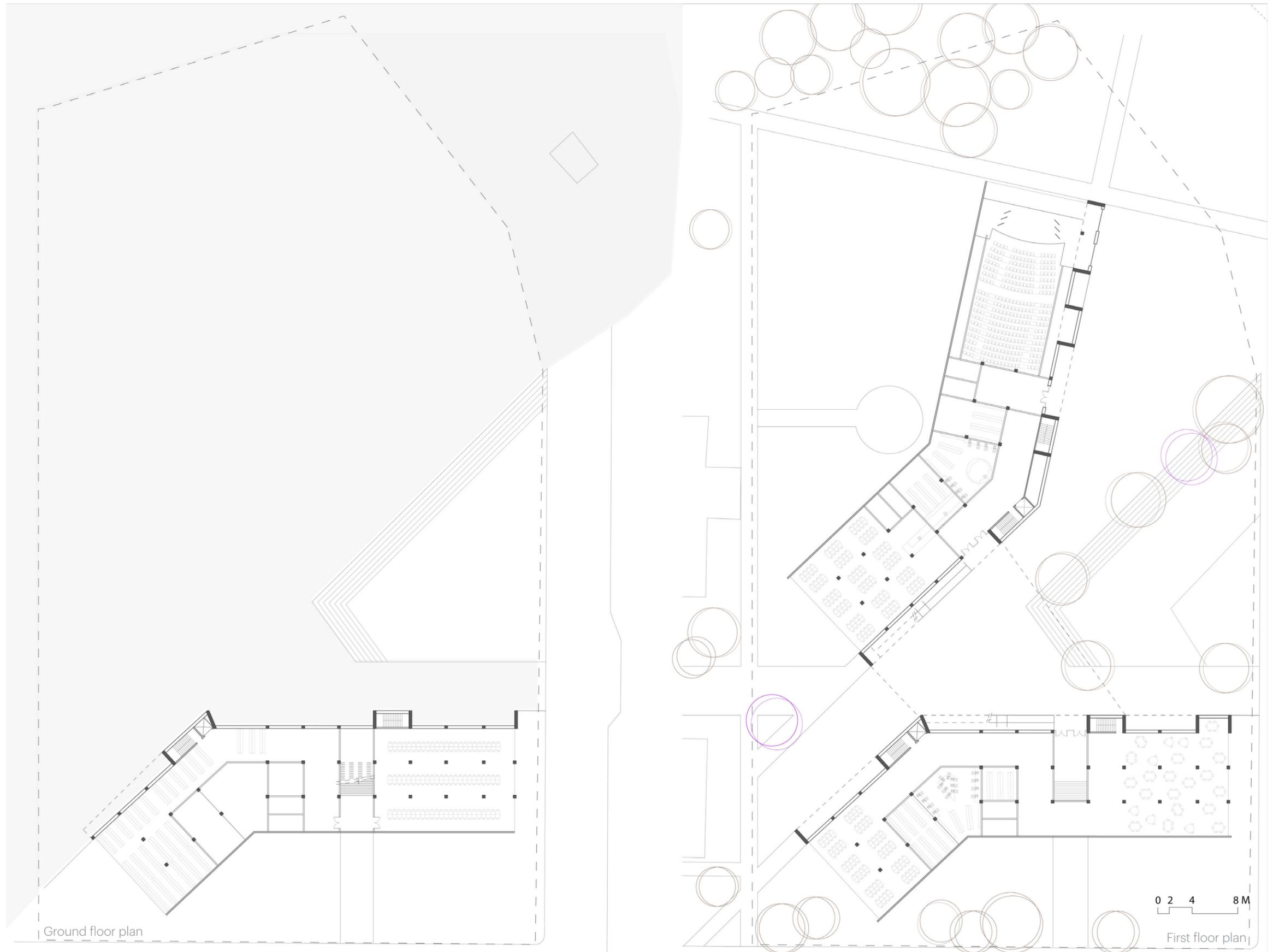


Plaza Level (First floor) plan

- 1. ENTRANCE TO NEW LIBRARY
- 2. PUBLIC PLAZA TO THE SITE
- 3. ACTIVITY COURTYARD
- 4. OLD BURNT LIBRARY
- 5. ENTRY FROM OLD LIBRARY
- 6. THROUGH WALKWAY
- 7. SERVICE ENTRY



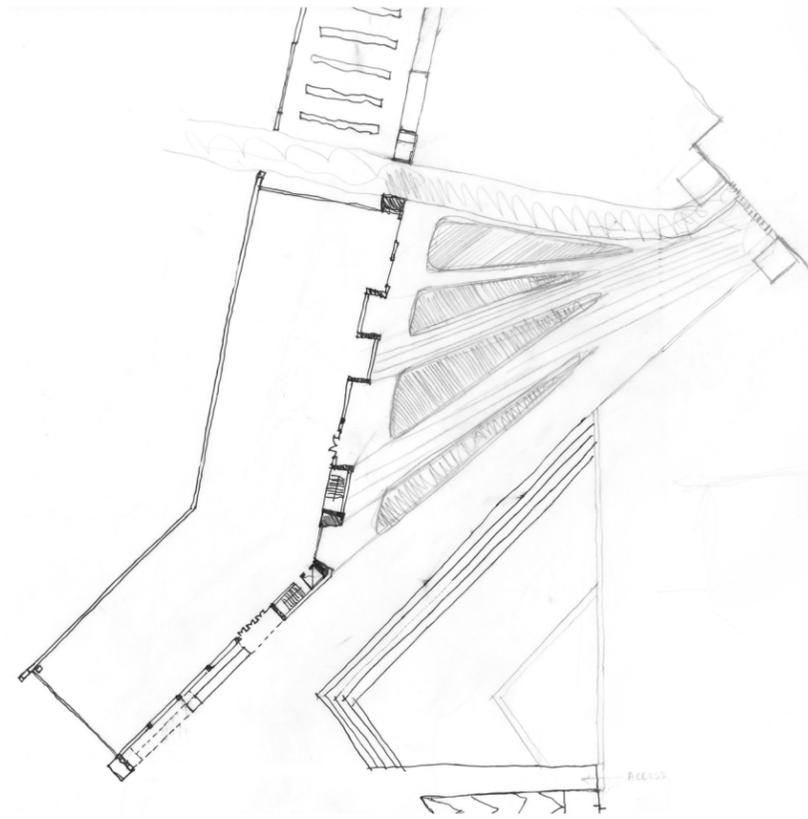
Sketch of the plaza level with the proposed **central gathering space**



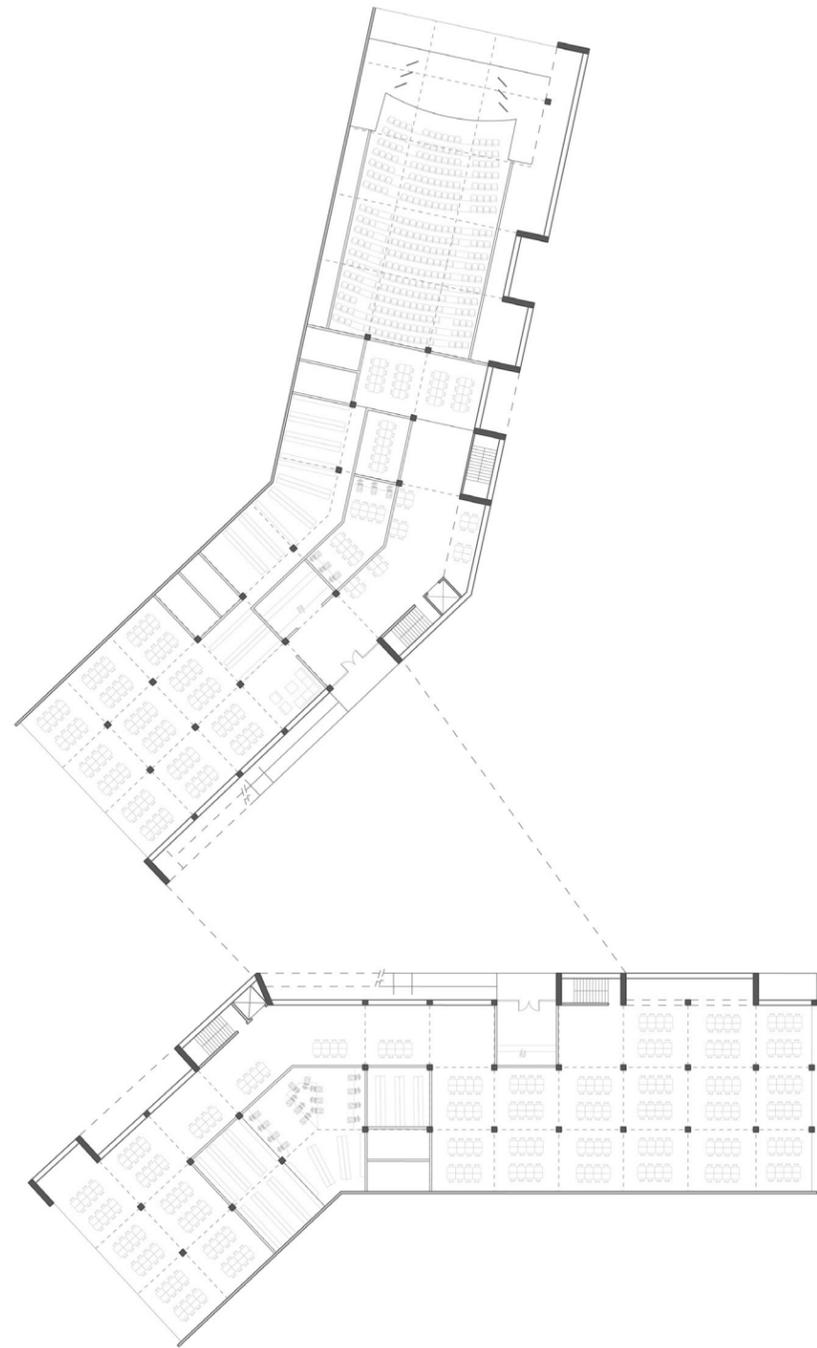
Ground floor plan

0 2 4 8M

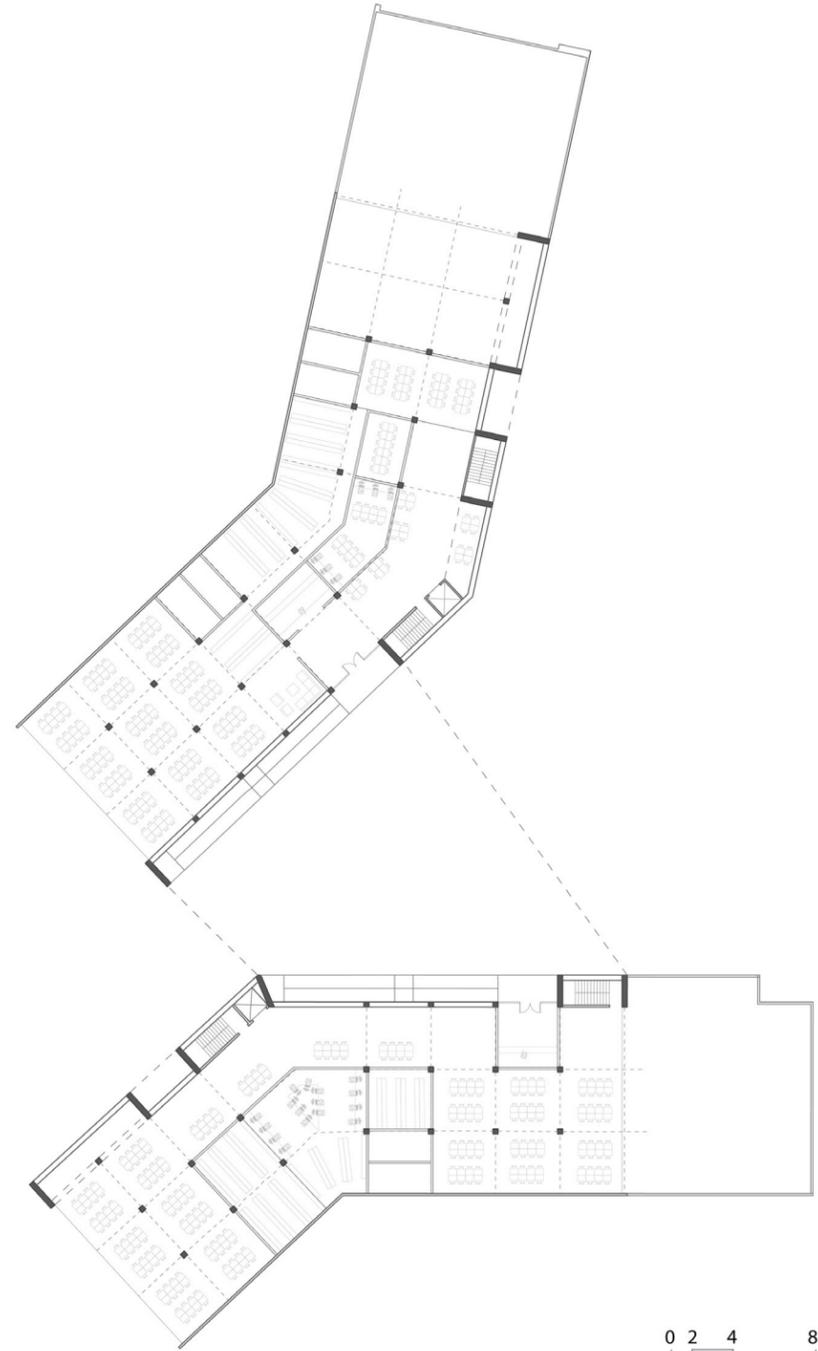
First floor plan



Sketch of the proposed landscape within the plaza

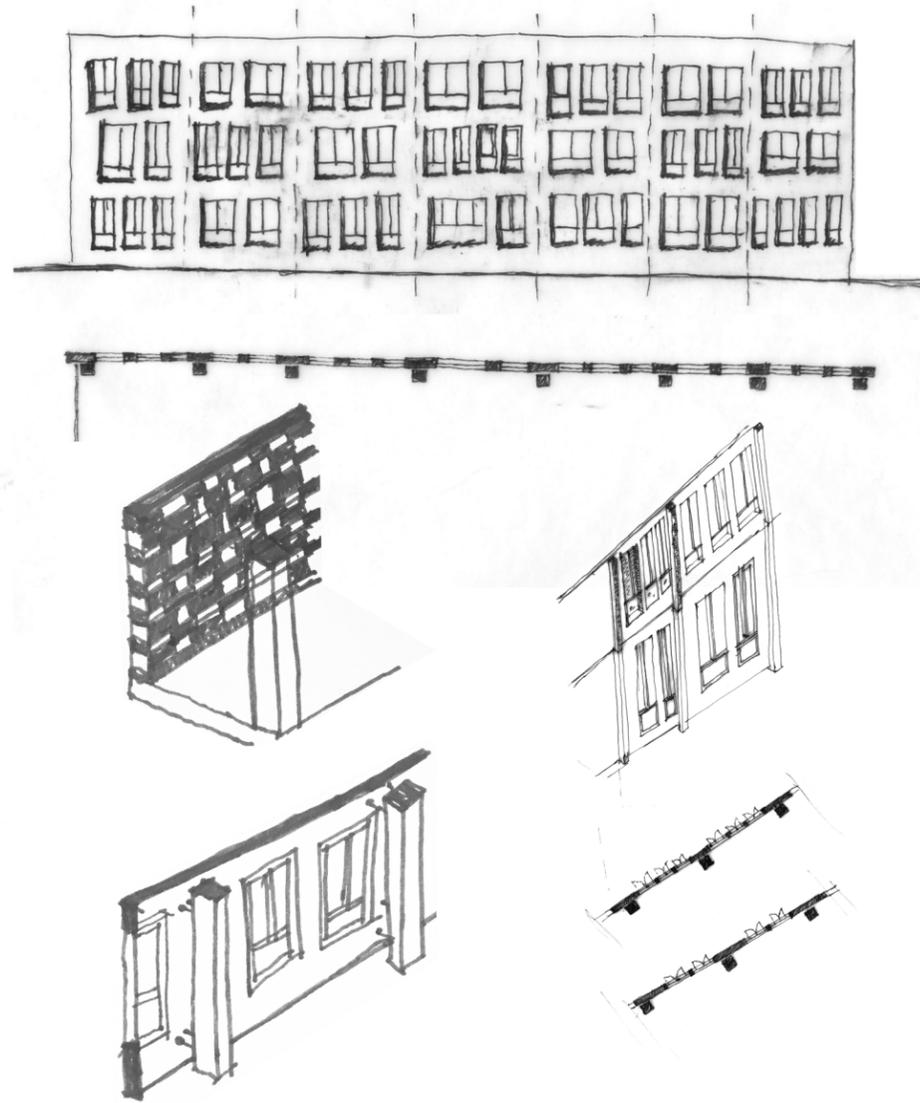


Second floor plan



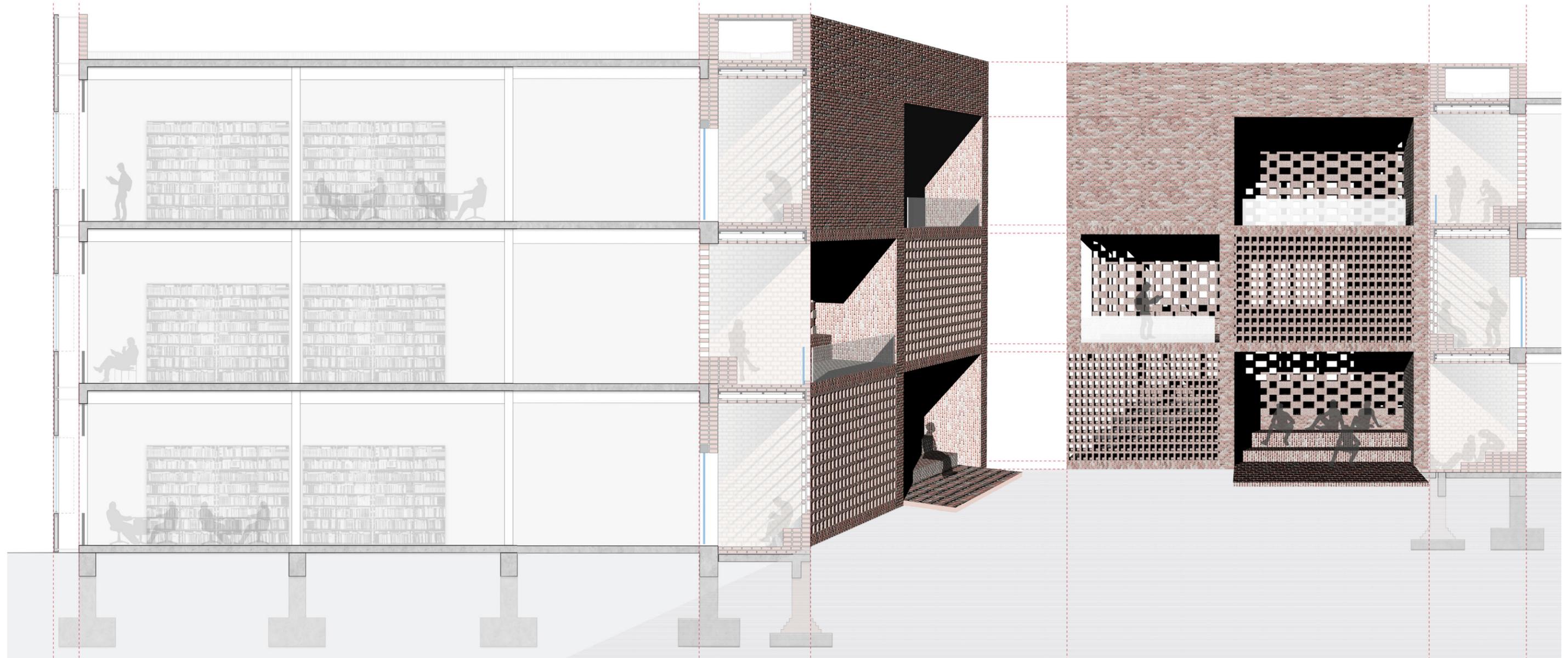
0 2 4 8M

Third floor plan



Sketches of the **pre-liminal** and **post-liminal** facades to the building

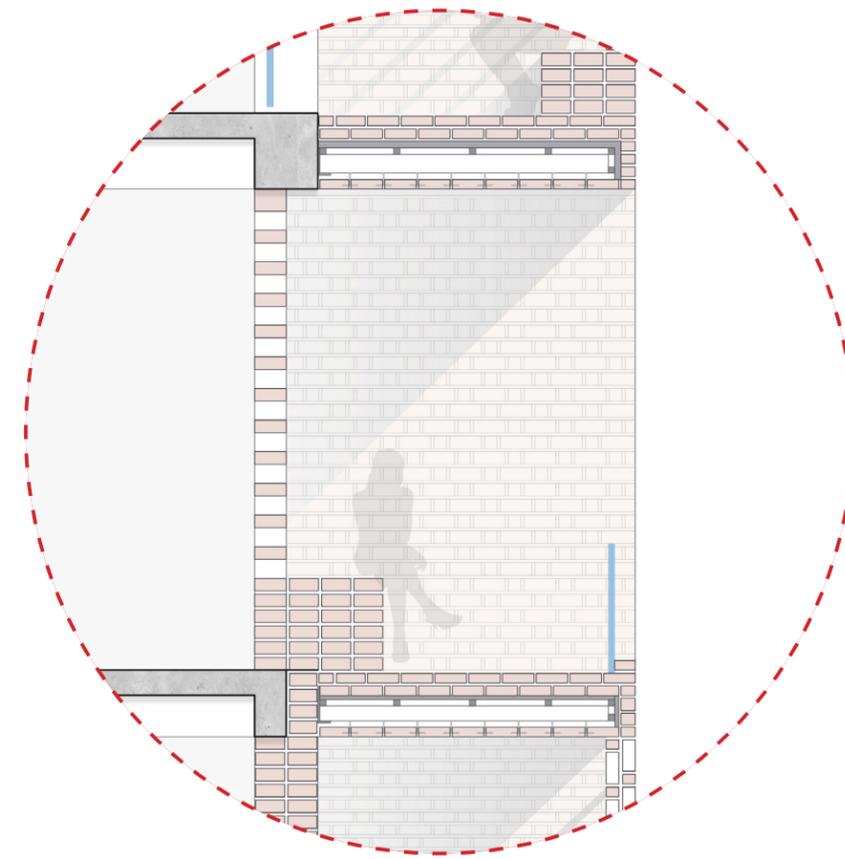
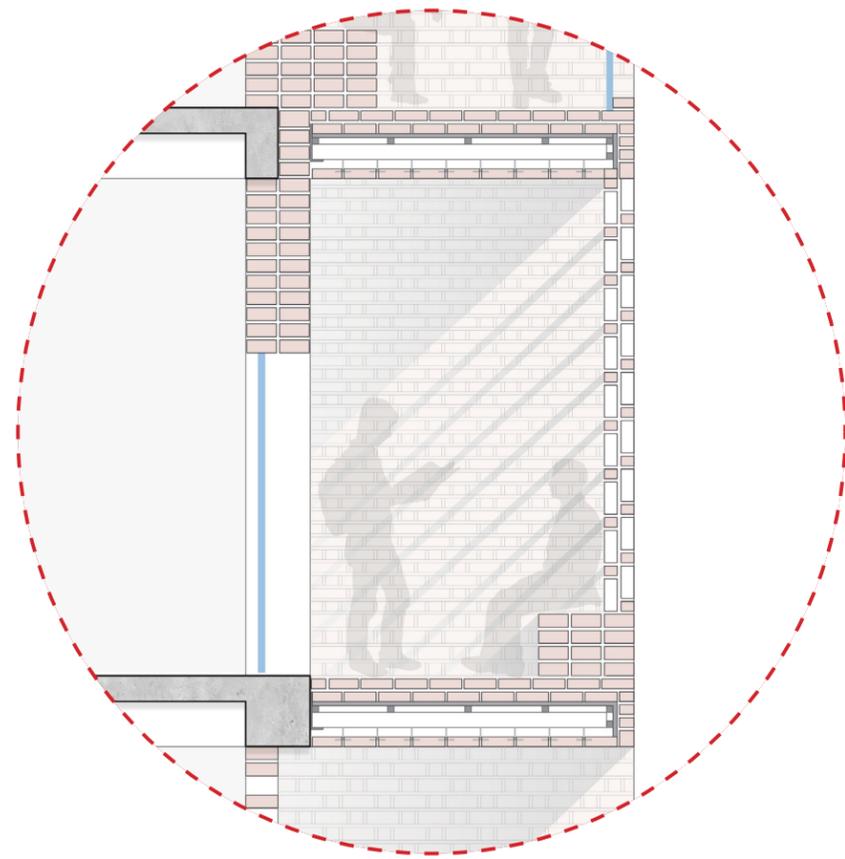
## 10. REASSIMILATION



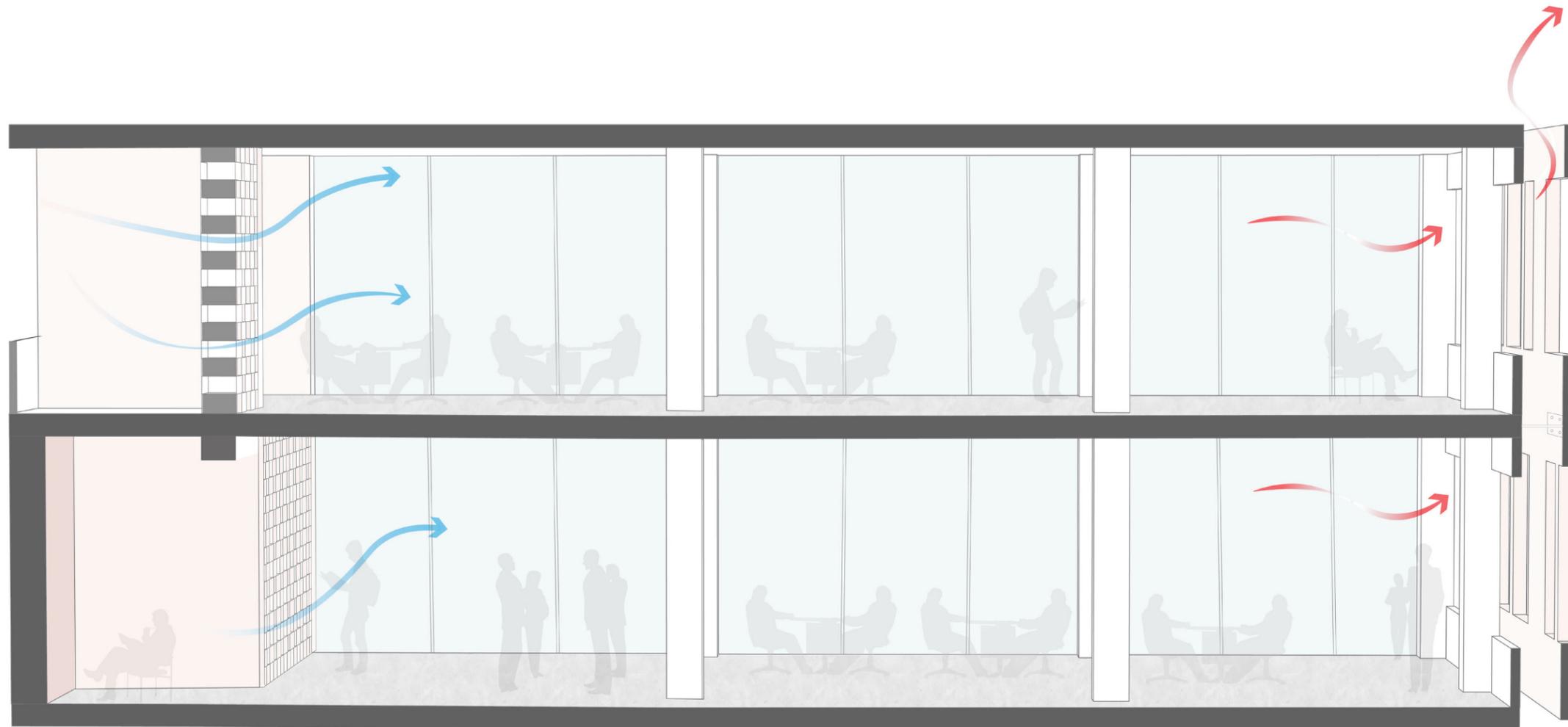
The **porous facade** promotes cross ventilation through the building. The thick volumes allow niches to be carved out along the central plaza, **creating shaded places** for the users, increasing the interaction of the building with the plaza.



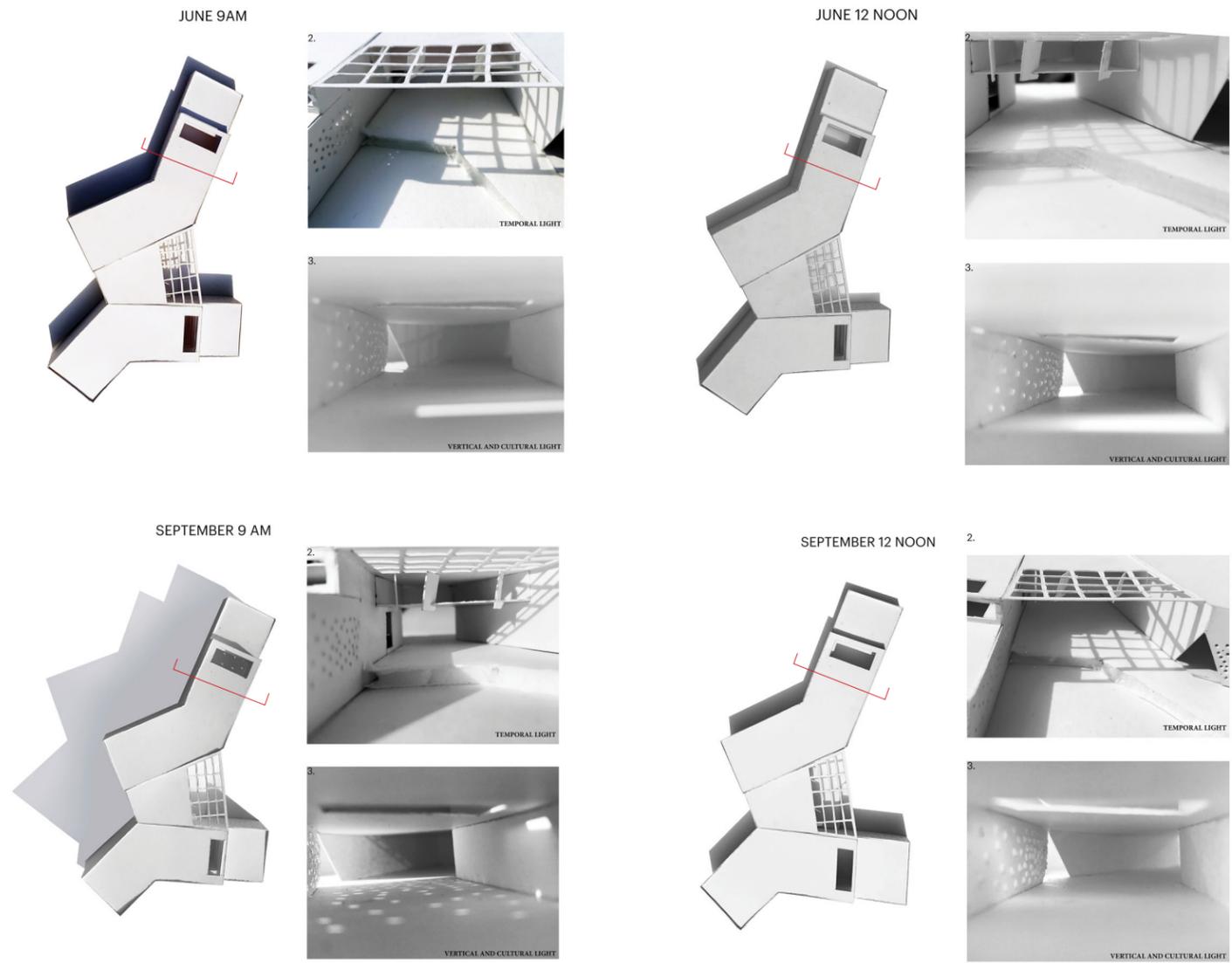
THE LIMINAL SHIFT



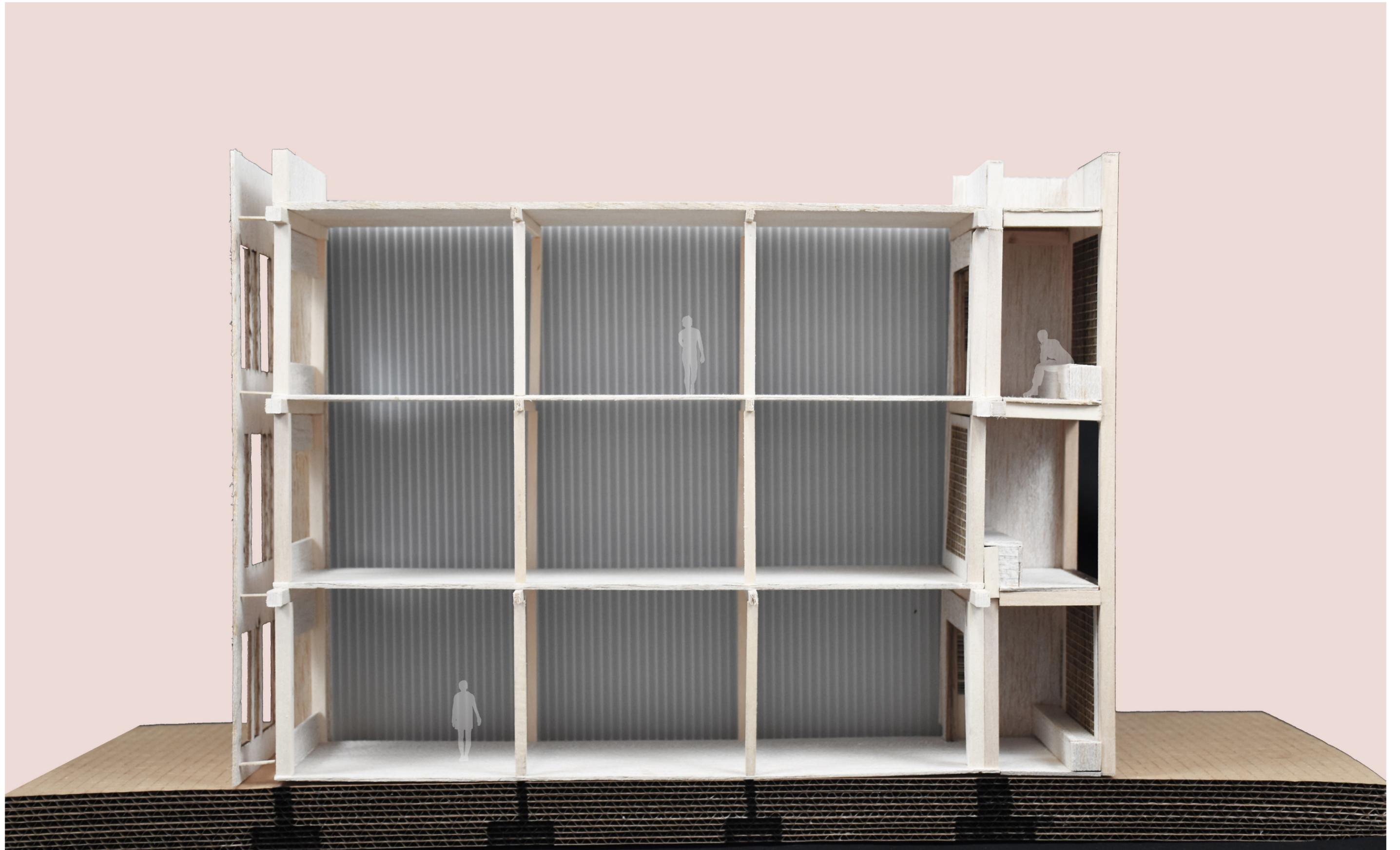
The moment where the liminal meets the pre-liminal

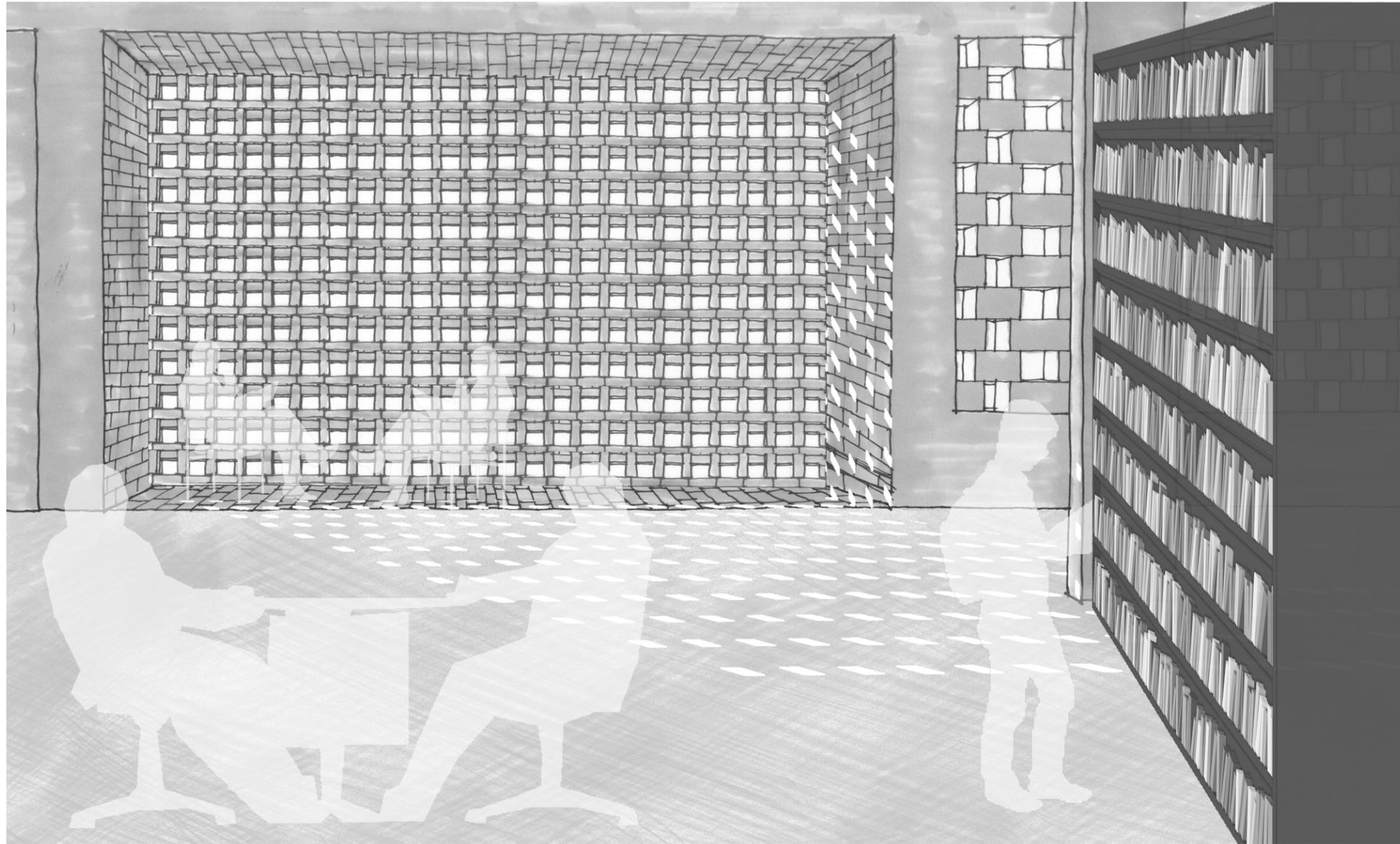


Section through the library emphasizing the passive strategies. The thick walls are strategically located in the direction of the wind. The thin walls on the opposite side promote the stack effect through the spatial cavity.



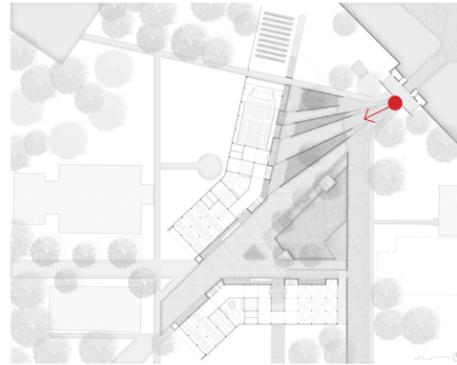
Model studies of shaded spaces inside and outside the building.





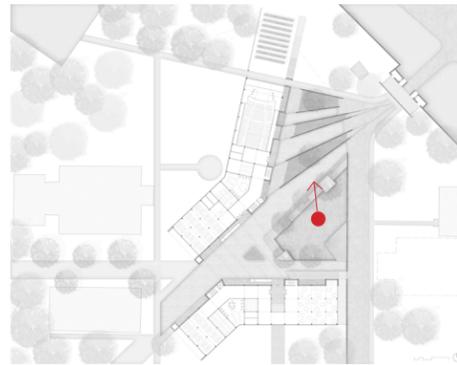
**Natural light through the brick screens** in the interior spaces of the library. This light is a culturally important element in the context of Malawi while providing abundant day-lighting.





The entrance signifies a democratic approach to the proposed library. The lines which emerge out of the building, converge at the entrance as the pedestrian plaza meets the motor vehicular pathway. This converging point at the entrance is the moment where one notices how the plaza emanates from the site and regulates the activities as well as movement around the two walls.





The plaza, with various activities and culturally significant elements, is proposed to be the heart of the Mzuni campus. The shaded spaces under the trees, the plaza oriented coffee shop as well as the spaces along the building volume facilitate a strong atmosphere of **gathering and celebration**.

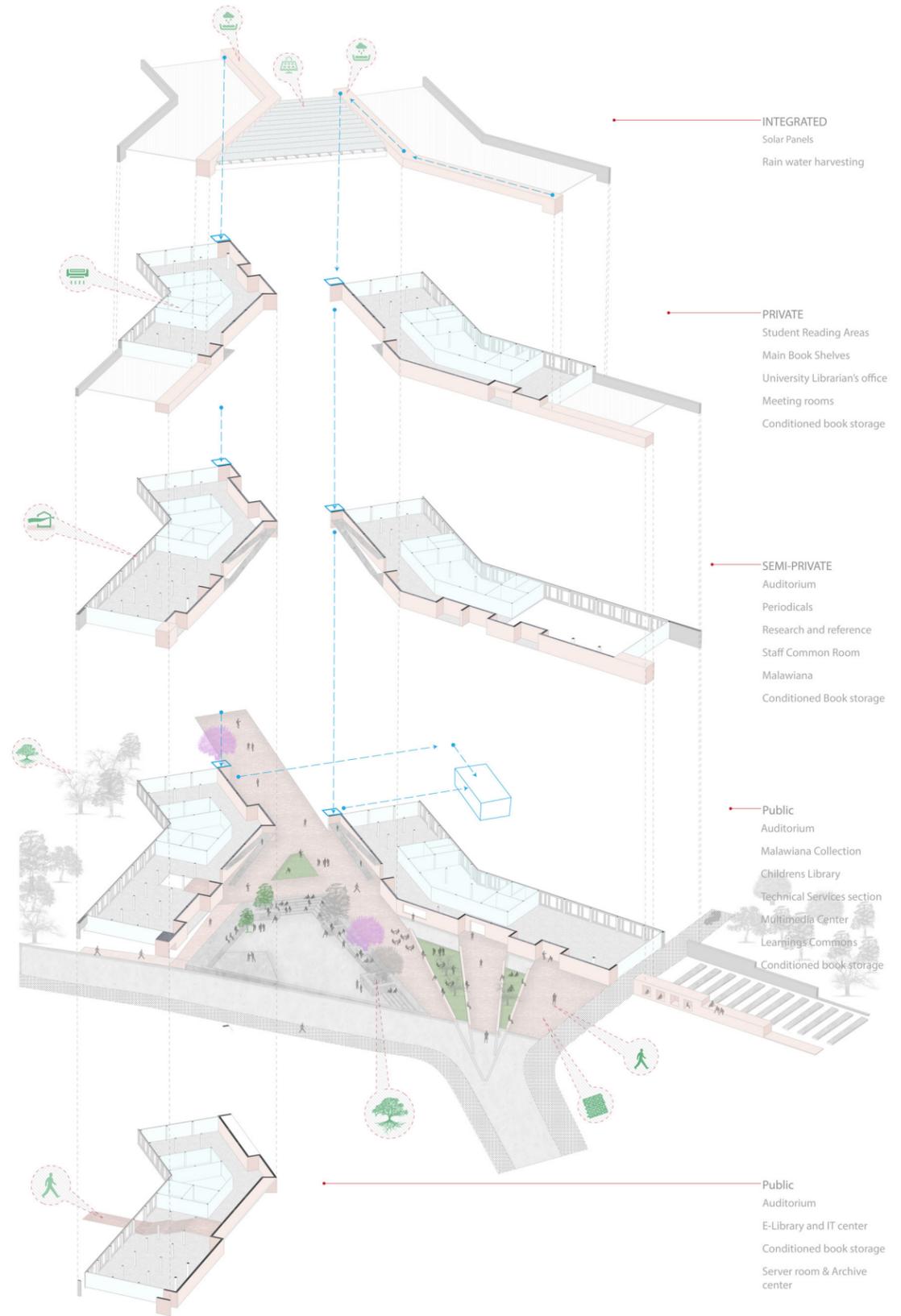




The 'post-liminal' facade of the library, is an attempt to reflect the modern aspirations of the people of Malawi. This facade facilitates **abundance of natural light** in to the library spaces.



The exploded axonometric of the library building and the important elements that constitute the library  
These elements include **rainwater harvesting, retaining existing trees, gathering spaces, walkability along the site, local materials as well as solar panels** along the central roof.



## 11. CONCLUSION

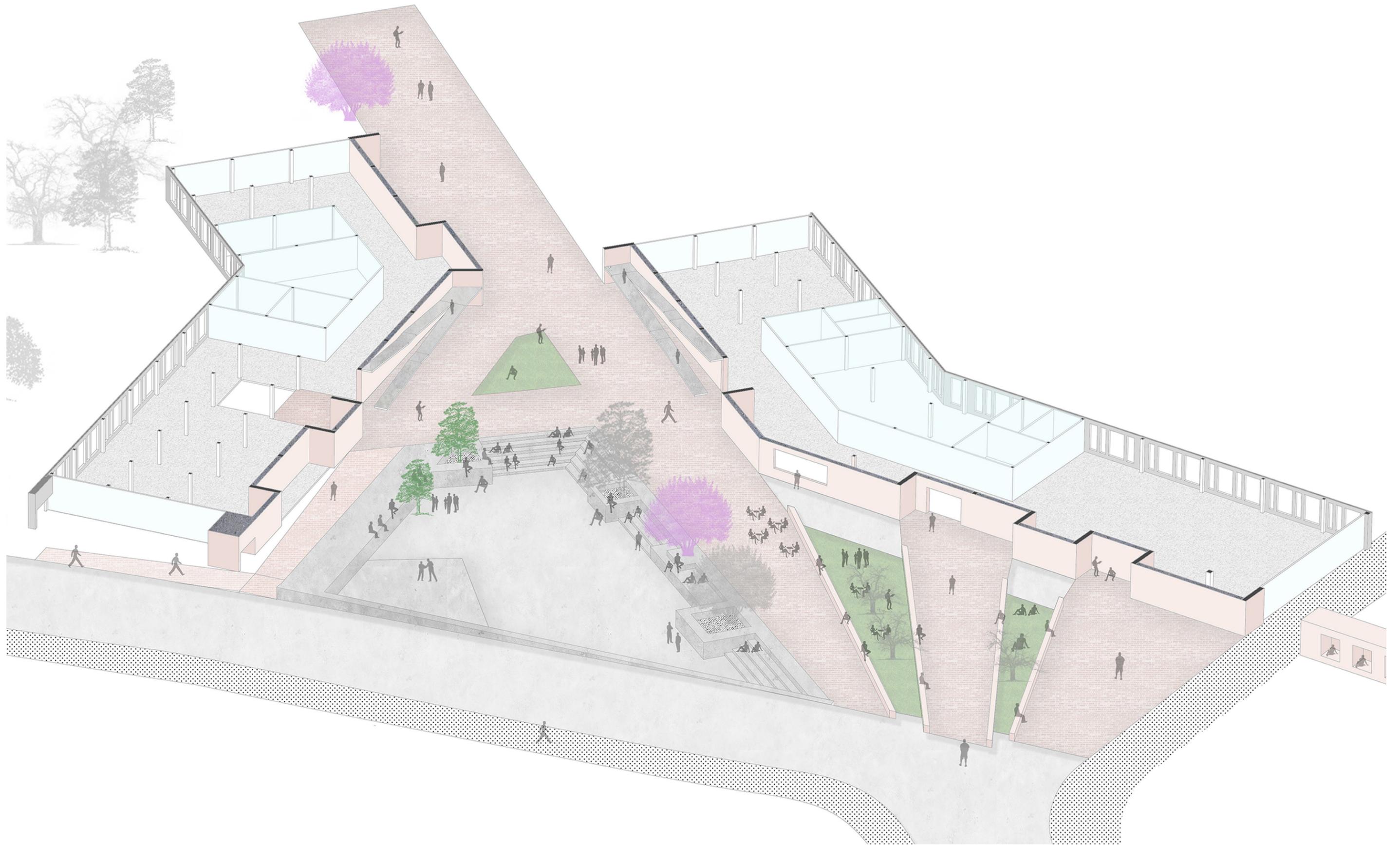
Historically, libraries are known to be institutions of knowledge, dispersed through various physical medias that it houses. Over years, it has become more digitized with the evolving technologies and the changing media for reading.

The role of a library can be significantly different, especially in contexts such as Malawi. It could not only be an institution of knowledge gained through books, but also an embodiment of the local culture. The construction techniques of the building itself could be an educational experience for the users. It could be an adaptation of the historical and vernacular methods that exist in the region. It could engage people into elements that define their culture such as gathering, embracing and celebration.

The idea of a wall is questioned and explored beyond just being a physical barrier or a separator. It is an element that is rooted deeply within a particular context or region. The wall has been explored as a liminal medium in this thesis, which deals with questions of shadow, sunlight, natural ventilation and intimate reading spaces in a library.

This thesis sets a larger framework for future projects similar to this one in Malawi. The different scales dealt with in this thesis are crucial factors that affect a project beyond its physical existence. The initial studies provide those analysis, which could be adopted for later projects in Mzuni university.

The thesis sets a path for the future growth of not only the university but also of Malawi as a nation.  
**It triggers a liminal shift in Malawi.**



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