

PUDITH CHATTEERAPHAT

PORTFOLIO

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CASA CLOUD

Bangkok residential project 2020

By Boondesign co., Ltd.

Casa cloud the large private residence on estimate 1 rai at the center of Bangkok. The house was design for a family of 6 people who have an active life style at the same time are craving for the serenity on the greenery.

The consequence of all the programs causes the massive outer appearance of the building which not necessary a welcome feeling for the dweller. The Cloud concept is to reducing the mass by insert the unsymmetry levitated plane onto second floor of the house, which provide the sense of lightness.

I was involving on the mid process of the projects where the structure work are completed. My responsible includes create shop drawing, create custom aluminium door and window drawing for manufacture, create working drawing for built-in and furniture, and quality controlled on site.



figure 1



figure 2

- figure 1: The front elevation of the house.
- figure 2: View of the house from the car entrance.
- figure 3: 1st floor plan.
- figure 4: Foyer leading to living- dining room on the 2nd floor.
- figure 5: Main living- dining room on the 2nd floor.



figure 4

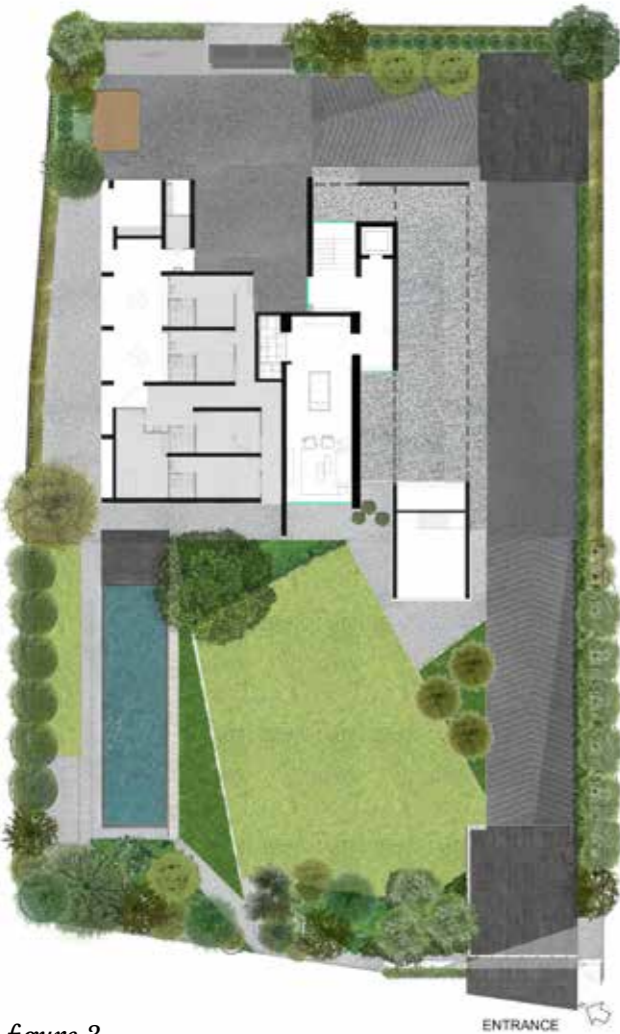


figure 3



figure 5



figure 6

The owner trusted our design and commission us to design the interior, lighting and landscape to complete the house.

The interior concept is quite simple which is luxury yet humble. The choice of materials are few but not redundant since most of its are nature material which have its on uniqueness in each piece: marble, linen, teak, Hessian fabric, leather.

In this project, I was involved in the furniture design and quality controlled on site and factory. I also take part in lighting planning and lamp design.



figure 7



figure 8

figure 6: Master bedroom on the 3rd floor

figure 7: Custom leather lounge chair and custom Aluminium coffee table.

figure 8: 3rd floor marble cladding corridor.

CASA OMNI

Bangkok residential project, Ongoing

By Boondesign co., Ltd.

Casa Omni is a renovation project of a family with three members: a mother in-law, husband and wife . This house is meant to be a heritage for the next generation. Even though the modern life style and aesthetic take lead in this project, some specific function and family ritual couldn't be neglected.

The project is more complex since owner asked us to keep most of the existing structure to save some cost, although, it has been renovated and extended numerous of times through out many

decades that they have lived here. The previous extension of the house wasn't on the same level of piles and create many floor levels up and down the house, moreover, it wasn't design to withstand any add on load which could be every challenging for us.

We are ambitious in create a nice long open spaces without a disruption of structure. So, we are work closely with the structure engineer to open the existing floor and added a necessity structure to help creating a wide span structure.

In this project, I was responsible for initial site observing, concept design drawing and presentation, developed the initial design, 3d modeling, interior design development, coordinating with structure and mep engineer, and permission drawing.



figure 1



figure 2



figure 3

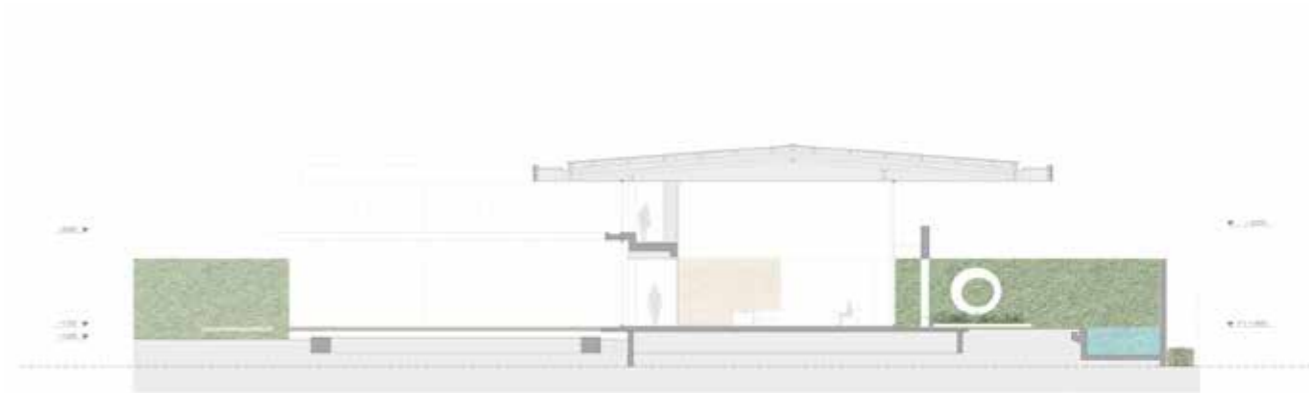


figure 4

figure 1: Front entrance of the house
figure 2: Arrival court allocates to 3 zones of the house: Main house, maid house and service area
figure 3: Atmospheric rendering of Living - dining room
figure 4: Section drawing, cutting through the living- dining room.

AURA

Furniture & interior projects

By Boondesign co.,Ltd.

Boondesign is frequently work with large residential project. Many times the space is more generous than a typical house in which require some extra attention and some custom finished to completed the space.

Majority of the build-in and furniture in each project is custom made to ensure that we are delivered exactly what we have promised on the initial design stage.

I was responding for the furniture design development, create a furniture manufacture drawing and quality control on site in which included dining chair, folding stool, marble stool, night table, foyer table, lamp, aluminium closet, etc.

figure 1: *Detail of leather dining chair seat with oak leg*

figure 2: *Oak frame night table with hessian drawer and White carrara marble lamp on top.*

figure 3: *Foyer steel folded foyer table.*

figure 4: *Leather dining chair.*

figure 5: *Leather folding stool with brass crossed leg.*

figure 6: *Manufactured drawing for leather folding stool.*



figure 1

MIN TU WON

Multi purpose study hall

Design for community, INDA

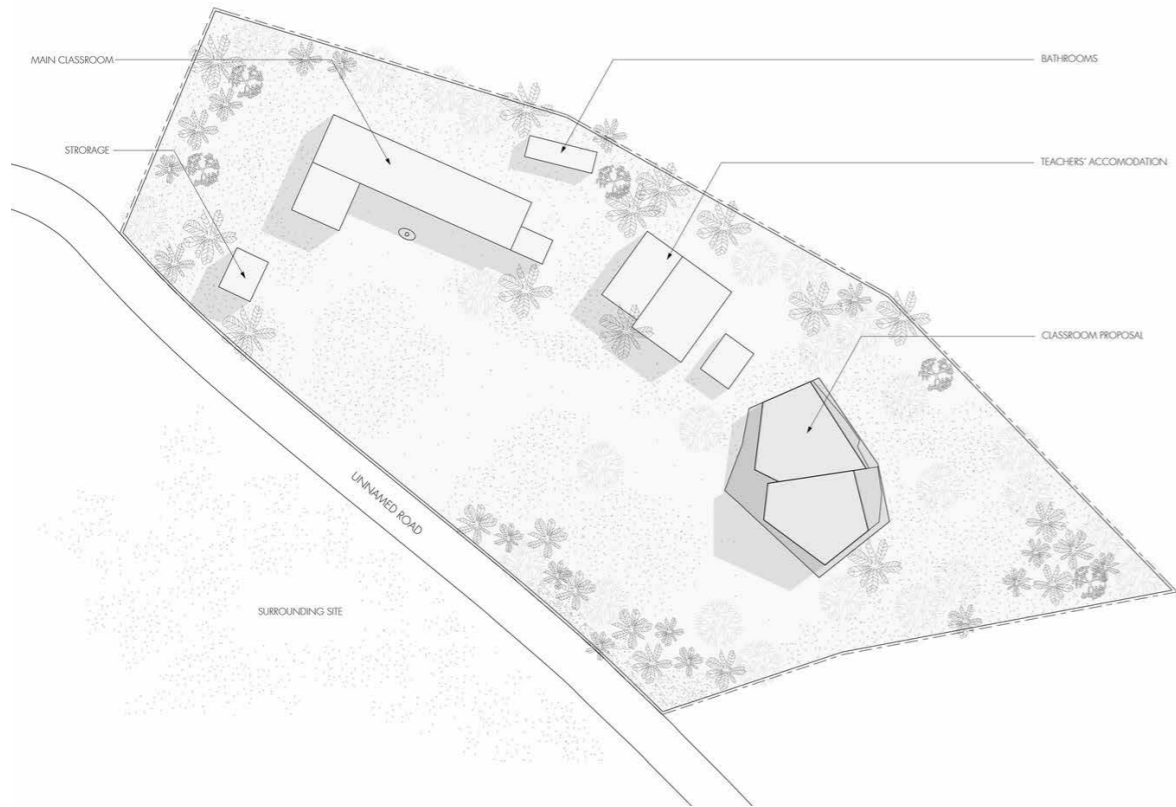
The Mae Ku Learning Center is a new educational building located near the Thai-Burma border. The building is designed as a mountainous, monolithic object nestled in amidst the adjacent fields. The center is a multi-functional educational space for the Min Tu Won School, a community-led organization that provides education for a local community of Burmese refugees and migrants. They sought additional room for 70 students to improve the learning conditions of the school as well as to continue to cultivate and promote local education.

The new center responds to these needs with a massing of adaptable, multi-functional spaces. Two large interior volumes form an open floor area for teaching, studying and interactive learning. As the school grows and develops, these spaces will be able to accommodate the Min Tu Won School's evolving conditions.

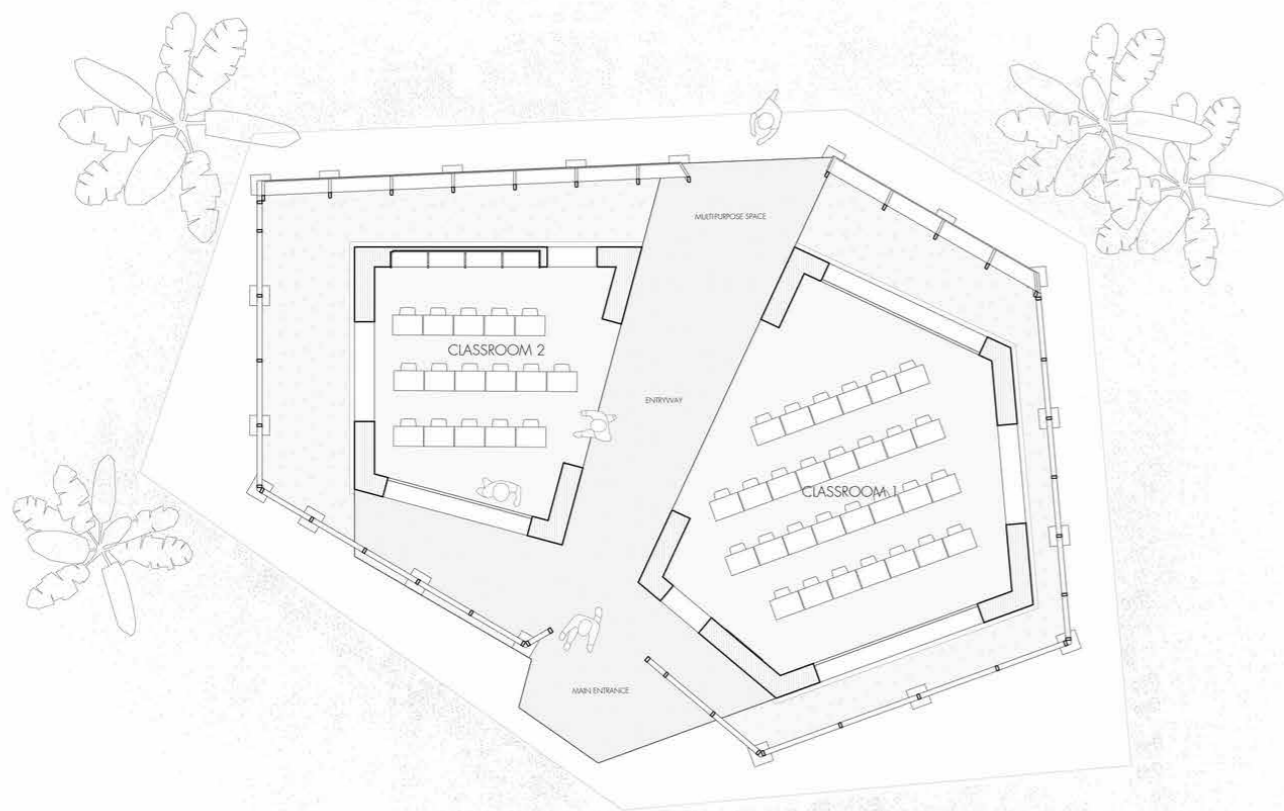
The large classroom volumes feature blackboards, built-in wall benches and storage space. An open floor plan allows for flexibility in the arrangement of the learning areas. The interior is illuminated with soft, natural light using skylights. A delicate, veiled bamboo skin wraps the interior spaces, creating a world of passages and spaces for students to discover. Sunlight is filtered through, adding depth and volume to the building. The bamboo skin acts as an environmental mediator, screening the interior rammed earth walls from direct sunlight and rain while welcoming fresh air and breeze to pass through.

This project aims to provide inspiration space for student, without neglecting the sustainability of the environment also for the building itself since we provide a knowlegde to the local labors, so they can maintain or possibly build the own rammed earth building in the future.

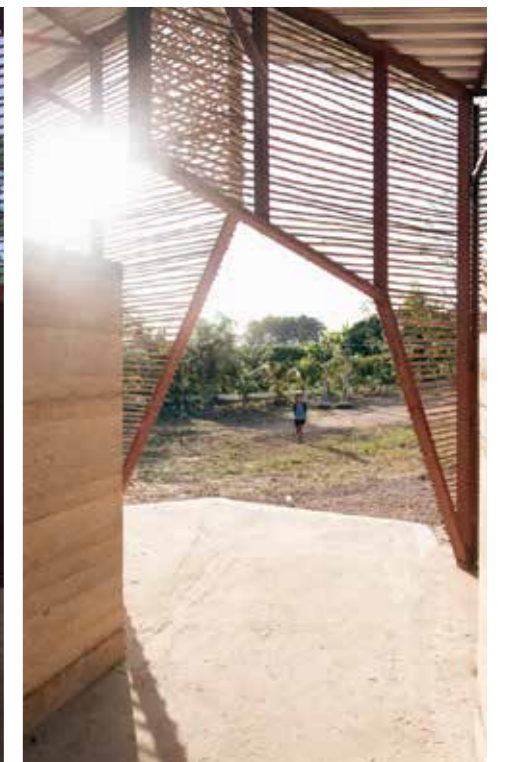


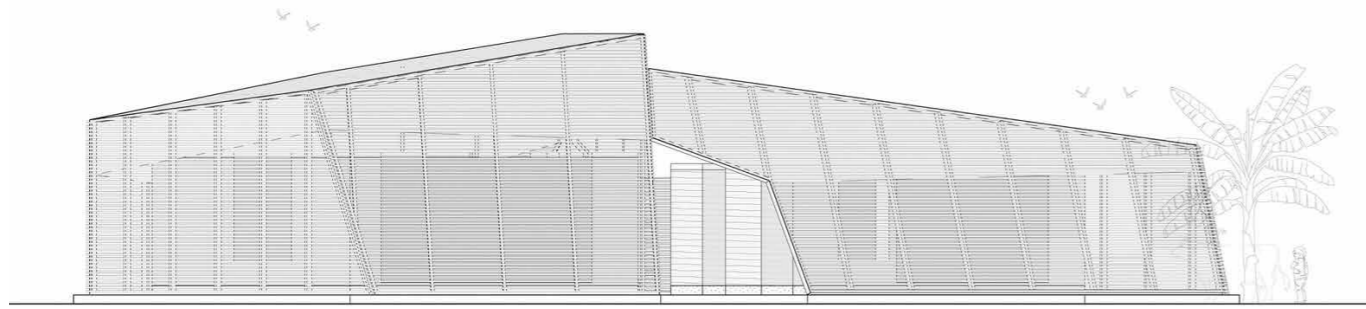


Site plan

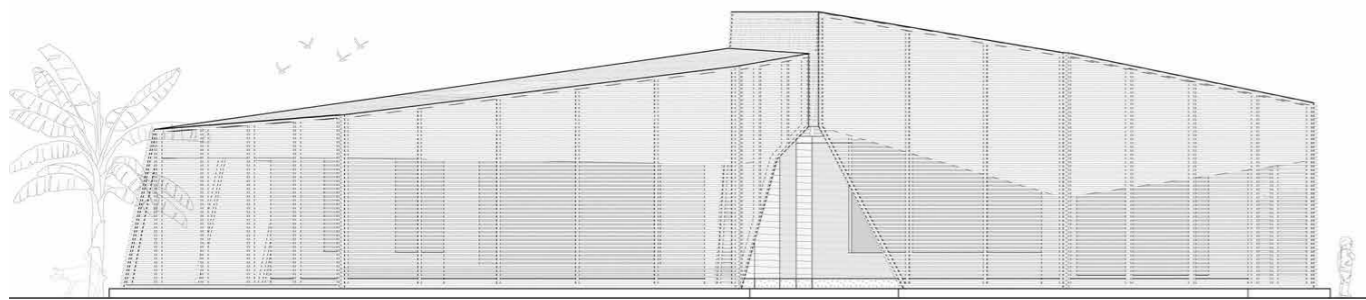


Plan

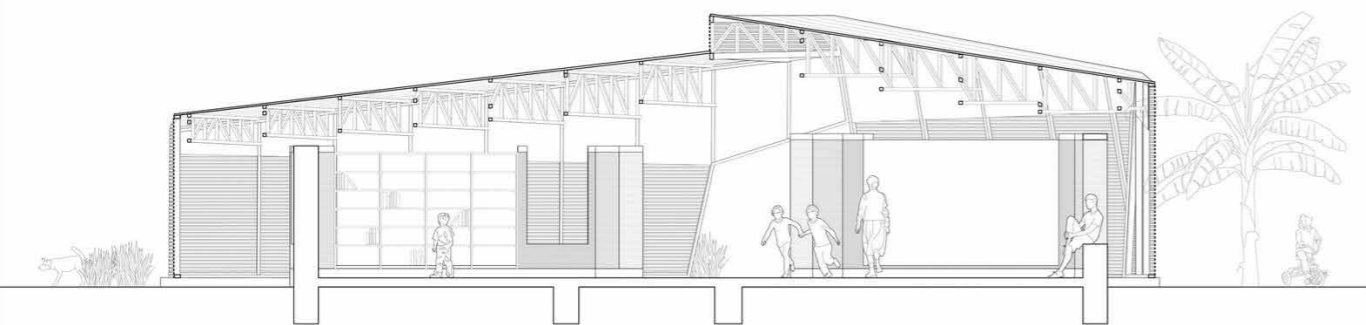




Back elevation



Front elevation



Section



AFFORDABLE HOUSING

UNPD Competition

By Site-specific architecture and research

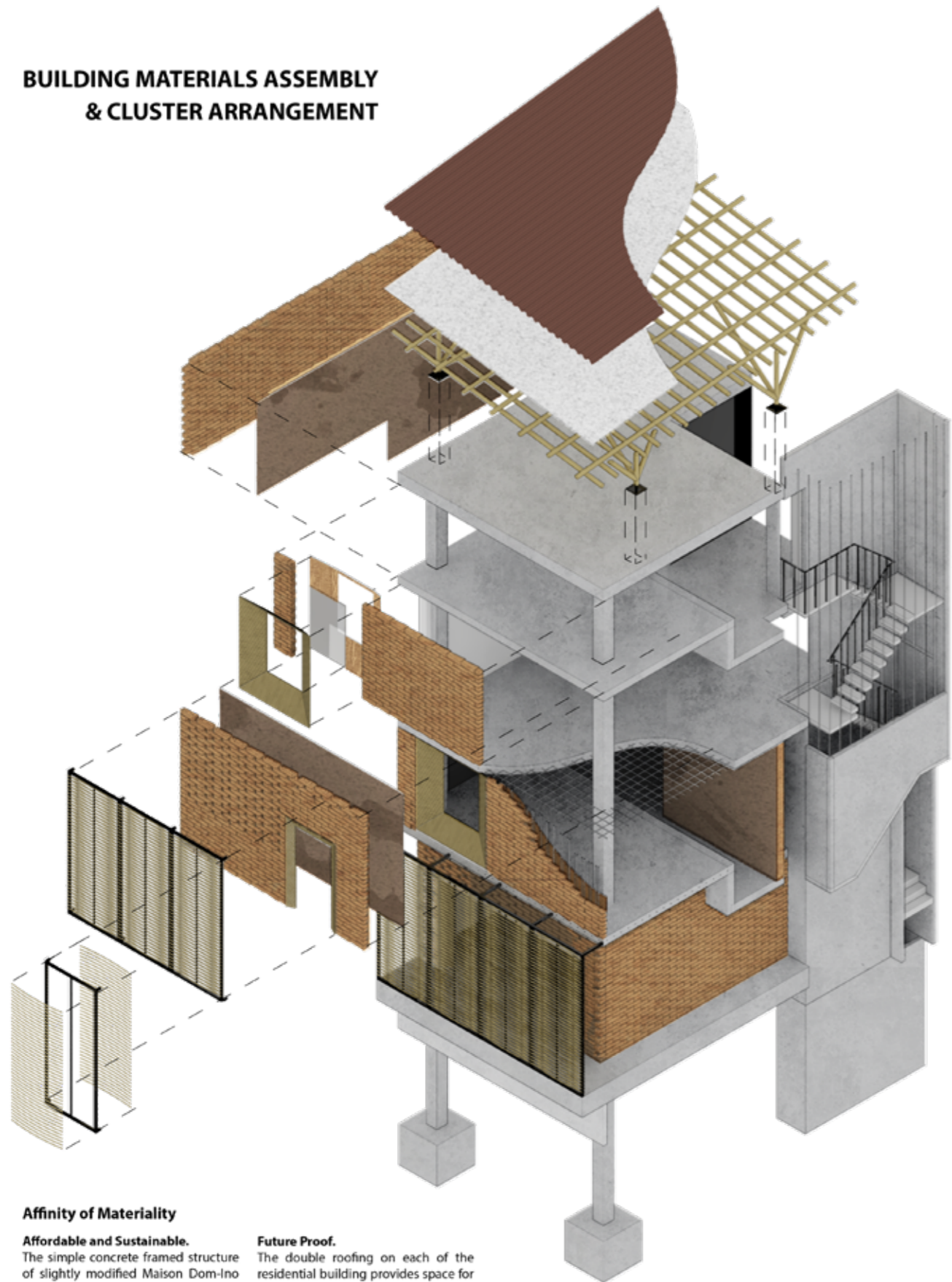
The aim of this competition is to design modern, affordable homes for the workers in and nearby PPSEZ. The design should have a sensitivity to the local culture and tropical surroundings and where possible provide a sustainable solution that enhances the local architectural tradition, in which locally sourced renewable resources are used to provide natural temperature and humidity regulation. As the costs related to sustainable technology solutions decrease, opportunities arise to integrate new technology innovations into the design. Sales cost per standard unit house should be capped at US\$16,000, to maintain affordability and allow for future ownership by factory workers. The standard unit house, should be safe, include at minimum; a bedroom, a living room, a kitchen, and an independent toilet. Efficient space management and new construction designs may allow for variable and adaptable space usage. Thought should be given to access to fire exits, ventilation and natural light. green space.

The houses should be designed for families, young couples with optional design elements for multiple or larger groups. As a total of 3,000 units are to be designed within the housing community, please include an overall masterplan of how the units will be arranged. This community planning, should include supporting facilities that meet the basic needs of residents, such as children's daycare, shops, and public/green space.

The design site is located in site shown which is part of the third phase of the PPSEZ, net sellable area:70,000 m² (seeplan). The site is largely greenfield site with an area close to the river and trees. The whole site (shown on Available PDF) shows how whole site will be developed over time in to a mixed use area of accommodation and employment.



BUILDING MATERIALS ASSEMBLY & CLUSTER ARRANGEMENT

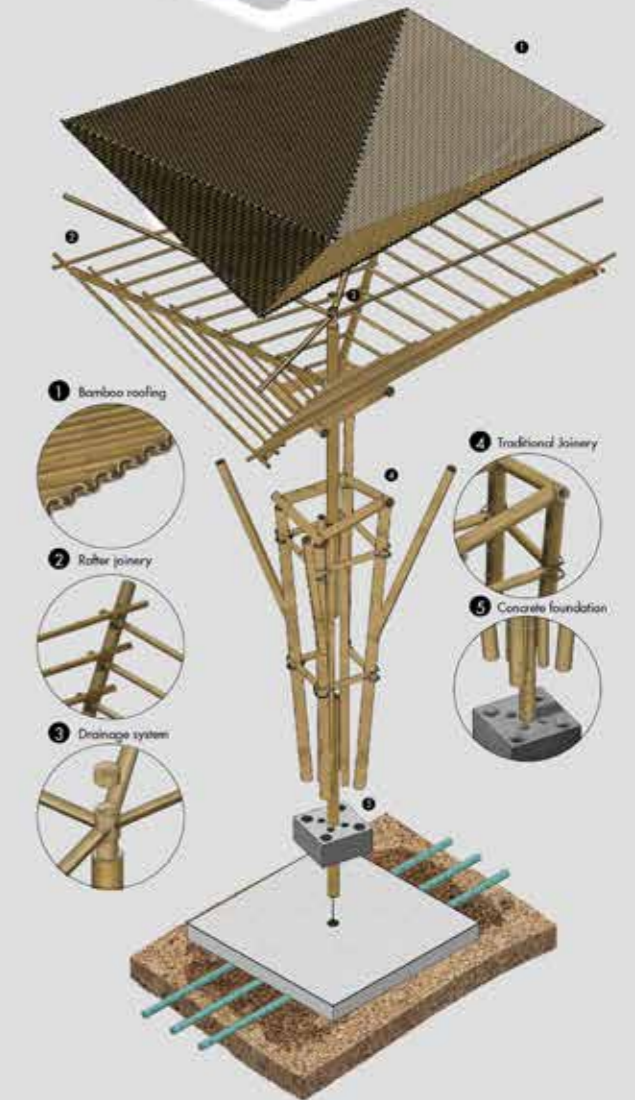
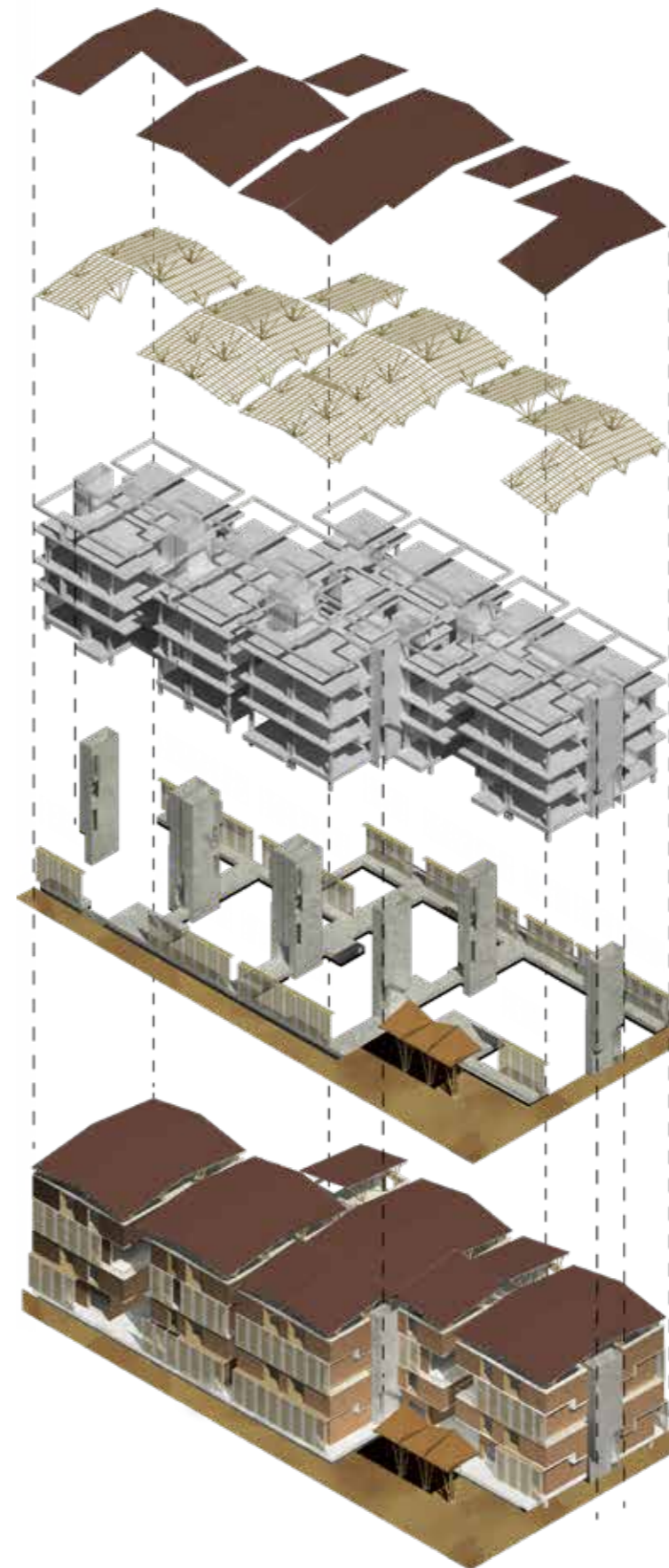
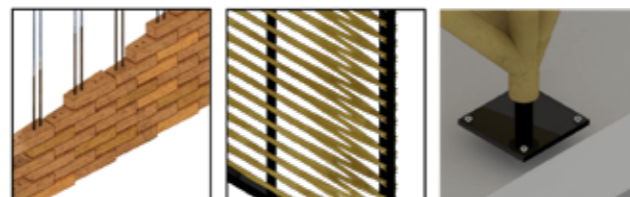


Affinity of Materiality

Affordable and Sustainable. The simple concrete framed structure of slightly modified Maison Dom-ino provides a long lasting basic building structure at reasonable cost. The exterior and partition walls are made of a custom-mold compressed earth block, which is used through out Southeast Asia as construction material. These blocks can be made locally with simple factory that can be set-up with in the construction site using readily available local materials. Treated bamboos are uses as the interior dividers, exterior sunscreens and as the roof structure protecting the market square.

Future Proof. The double roofing on each of the residential building provides space for the future installation of the photovoltaic system when the technology becomes more affordable.

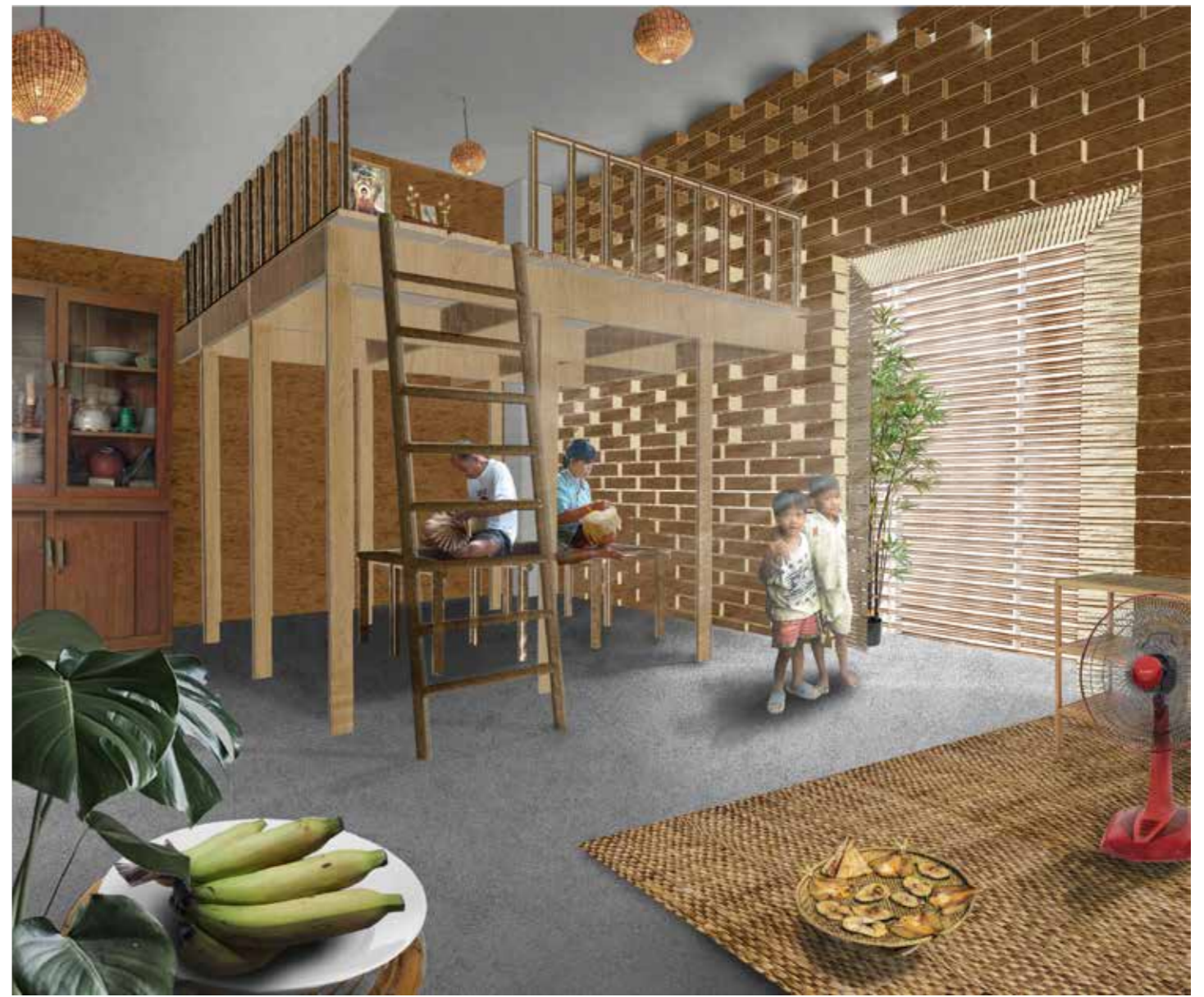
Flood Resilient. Each of the residential building is raised 1.5 meters above the road, while the market square is raised 1.2 meters above the road to provide flood protection in tropical monsoons.



- 1 Bamboo roofing
- 2 Timber joinery
- 3 Drainage system
- 4 Traditional joinery
- 5 Concrete foundation

BAMBOO MUSHROOM STRUCTURE.

Bamboo Mushroom Structure. The roof protecting the market square is made of bamboo structure with bamboo roof cladding. Internal drainage system directs rainwater into the drainage system for storage in the underground aqueduct.



HIPSTER - HOME

Specific high density housing

Instructor : Patxi Martin

This project is designed to redefined architecture by questioning the how people live through a specific cycle of time; hours, months, years, or decades.

I interested in longer period, decades.

Even though many buildings were proved that its not falling apart after decades went by, we can hardly find any building which stay true to it's origin design. However, They are some interesting idea from the Futurism movement back in 19 century which mentions the easy deconstructing building. Antonio saint Elia believes in change he foresee the rapid chage of human livestyle, so he suggest architects to design something that directly response to the present livestyle but could be demolished easily in the future to clear a space for a future building.

Easy constructing and deconstructing becomes a key concept for this building. However, people change in every second, one moment they want something, a second later, they don't want it anymore. In order to achieve a housing for such a long period time, we also need to provide a freedom of change in a shorter period of time as well, and we can attain that by give people a sufficent flexibility. We set the boudary, which was calculated to be enough for a 4 people family to stay together, and people can be creative and matching the prefabricate partition together to create a suitable space for them.

Nakameguro is famous for hipsters city where teenager can express themselves and be different. I believe that this city are the perfect fit for my concept since every one can be unique and they are striving for a new idea.

figure 1



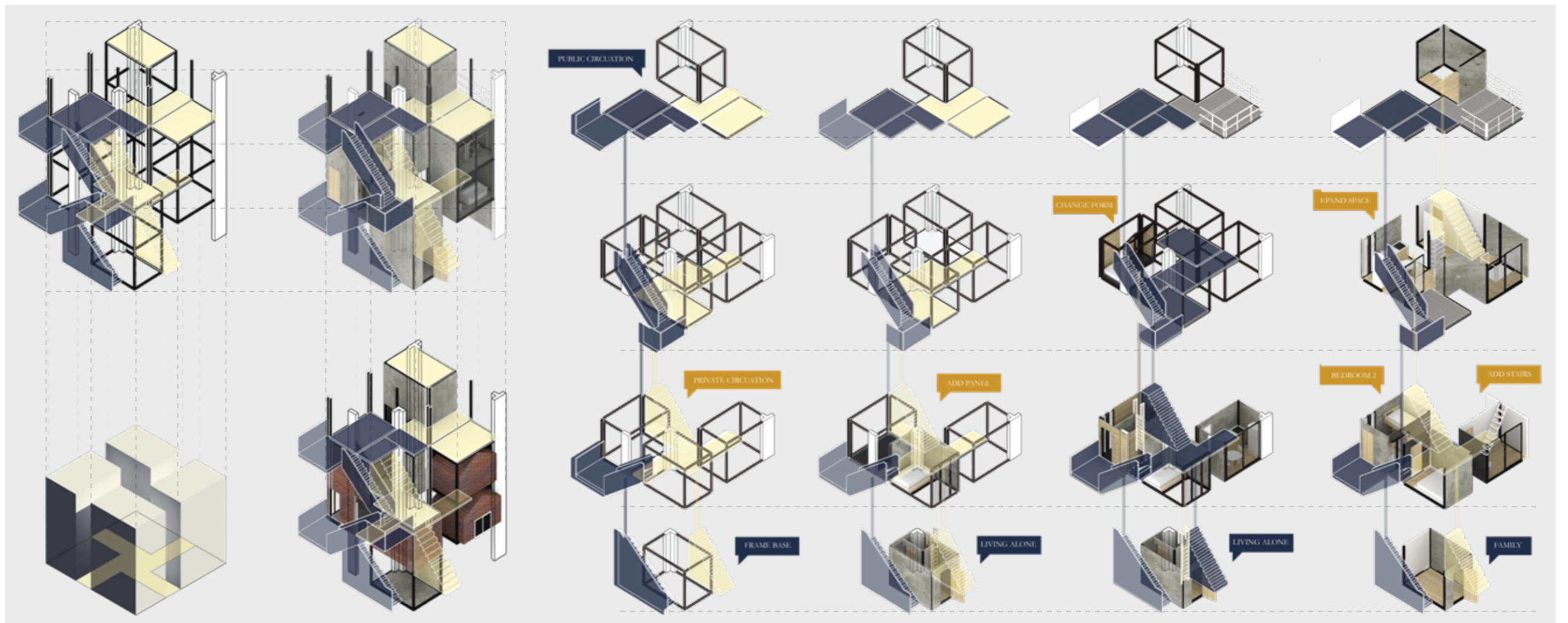


figure 2



figure 3

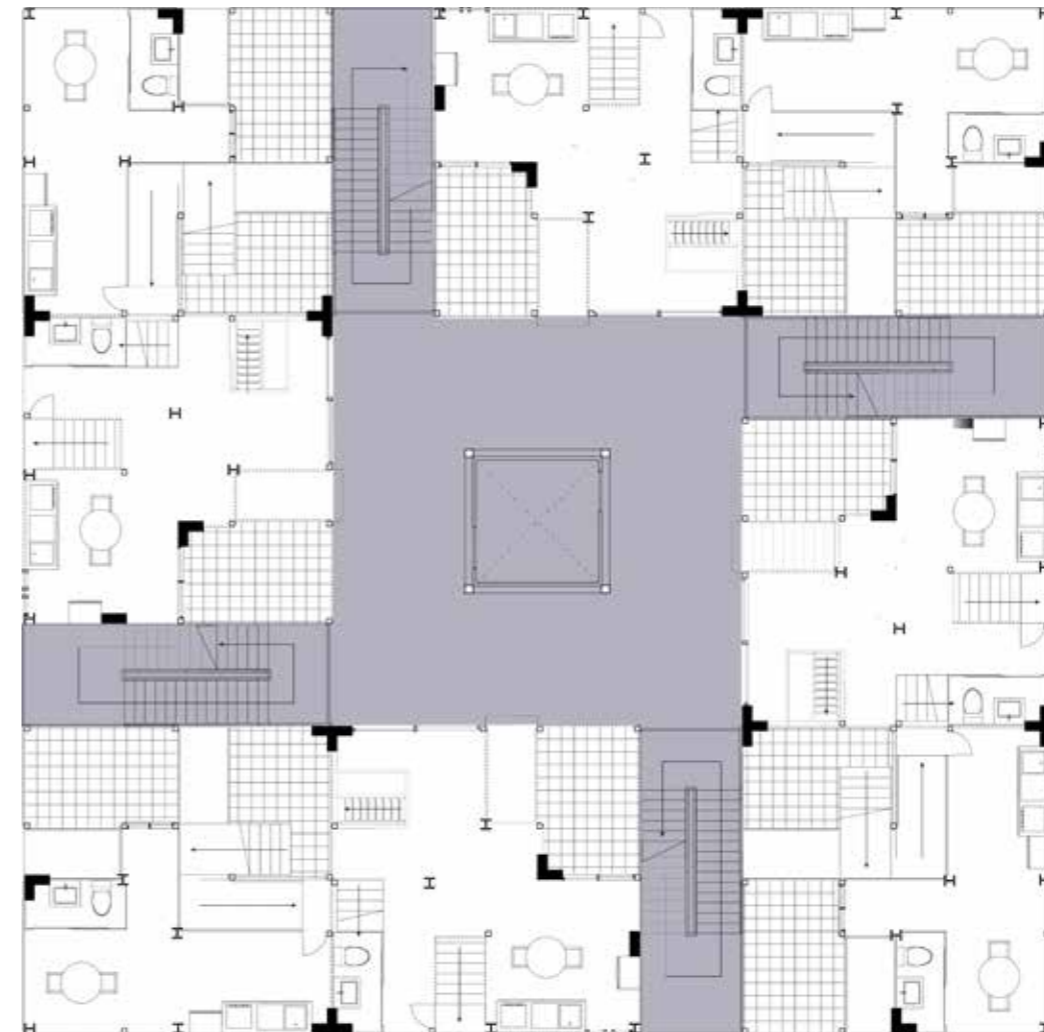


figure 4

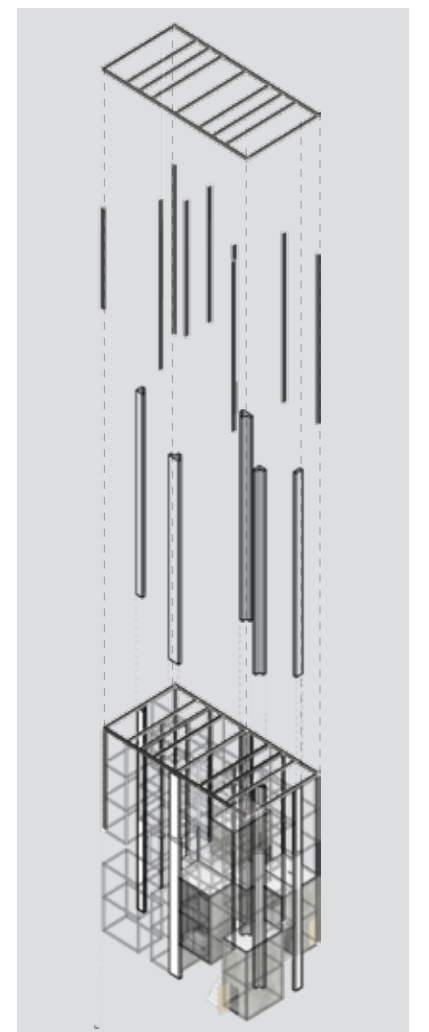


figure 5

figure 1: The Building in Nag-ameguro context.
 figure 2: Unit potential utilization diagram: a quarter usage, rental usage, and family usage.
 figure 3: Site plan
 figure 4: The building plan
 figure 5: The exploded drawing displays a material usage of the main unit structure.



figure 6



figure 6: Axonometric section through the building displays relation between single unit to another.
figure 7: Elevation visualize the potential "randomness" which could take place in the future.

figure 7

FOLDING SHADE

Studio Site-Specifically Beautilitarian

*Instructor : Chutayaves Sinthuphan
Bea Vithayathawornwong*

Sublime or mundane? Beautiful or chaotic? Many say it subjective but can have one collective definition of it. This studio is meant to tried to pursue that question of what is collective beauty and mundane.

I interested in passive ventilation system.

In Chinatown which located in the prime area of bangkok where every squre meter mean money, people tend to do whatever that seem to make to most profit out the least investment. We can find a cooker hood oddly place in front of the house concealed the old ornamented ventilation grill. AC sit on the balcony along with other personal stuff sometime blocking a window. Original cross ventilation system was block by the house extension of neighbour. So, we record interesting case and try to analyse what is the mundane. I come up with the short conclusion of the mundane mostly are the effect of neglegent behavior, onthe other hand, beauty are the consequece of care that one's have put into doing one specific thing under certain period of time.

Since I researched specifically in passive ventillation, I realized that major people in that area rely heavily on the active ventilation system such as air condition and fan. We can hardly change the passive ventilation system because it mean to knock down some neighbour wall, instead, I purpose an Origami screen shading to prevent direct sunlight interfering peopleand also help reducing the use of active ventilation.

I have got inspired by the origami ability of compressing and expanding in such an intricate manner. So, I experiment with multiple pattern with a agenda of creating a sublime movement of shading screen which lead to creating the pattern where it mix between waterbomb and diamond shape.

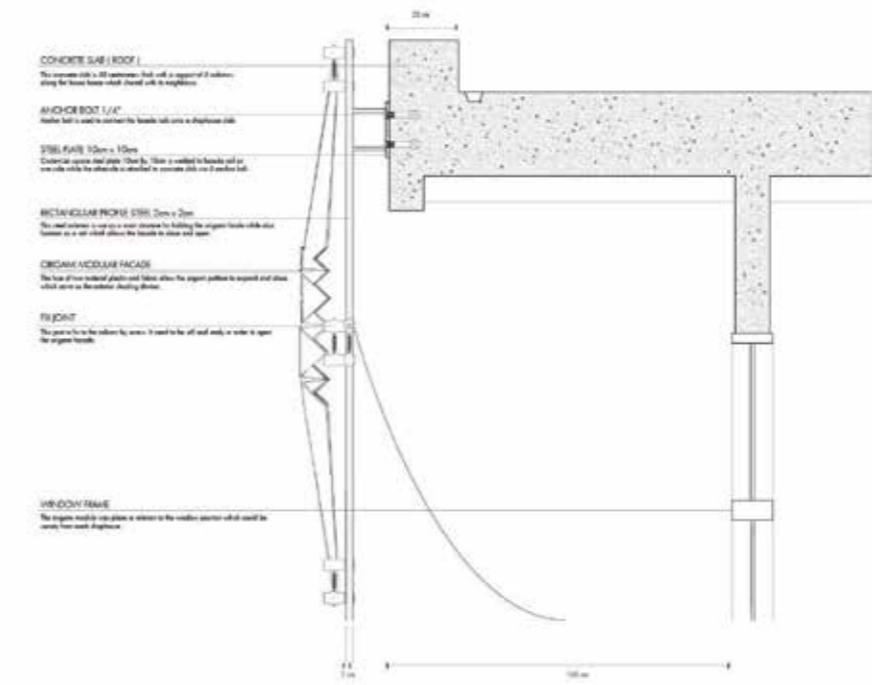


figure 1



figure 2

SECTION TOP CONNECTION
SCALE 1:10



SECTION BOTTOM CONNECTION
SCALE 1:10

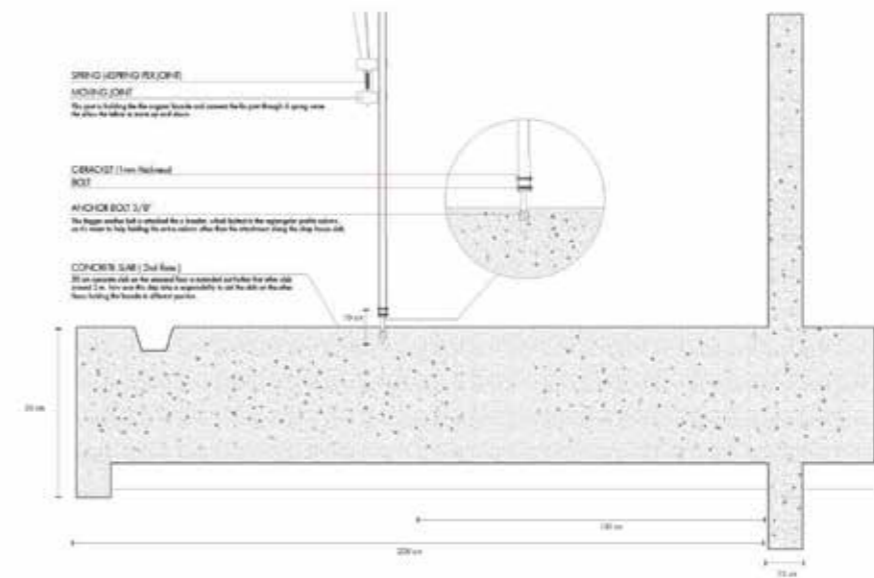


figure 3

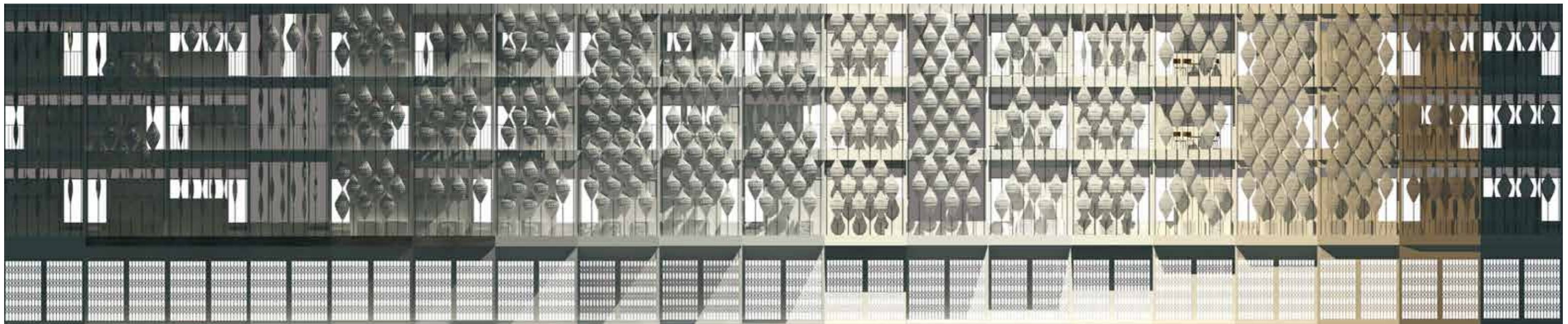


figure 4

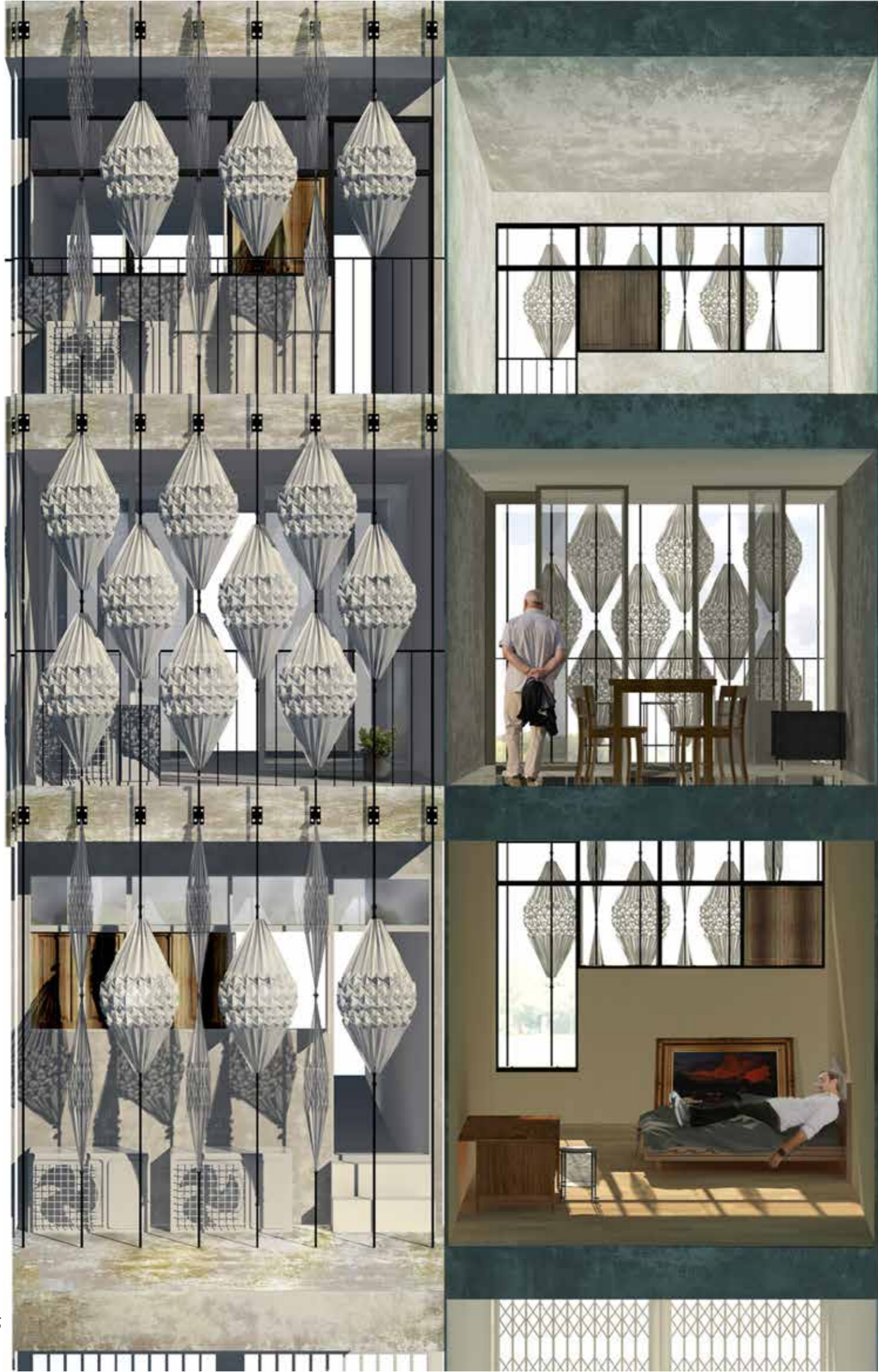


figure 5

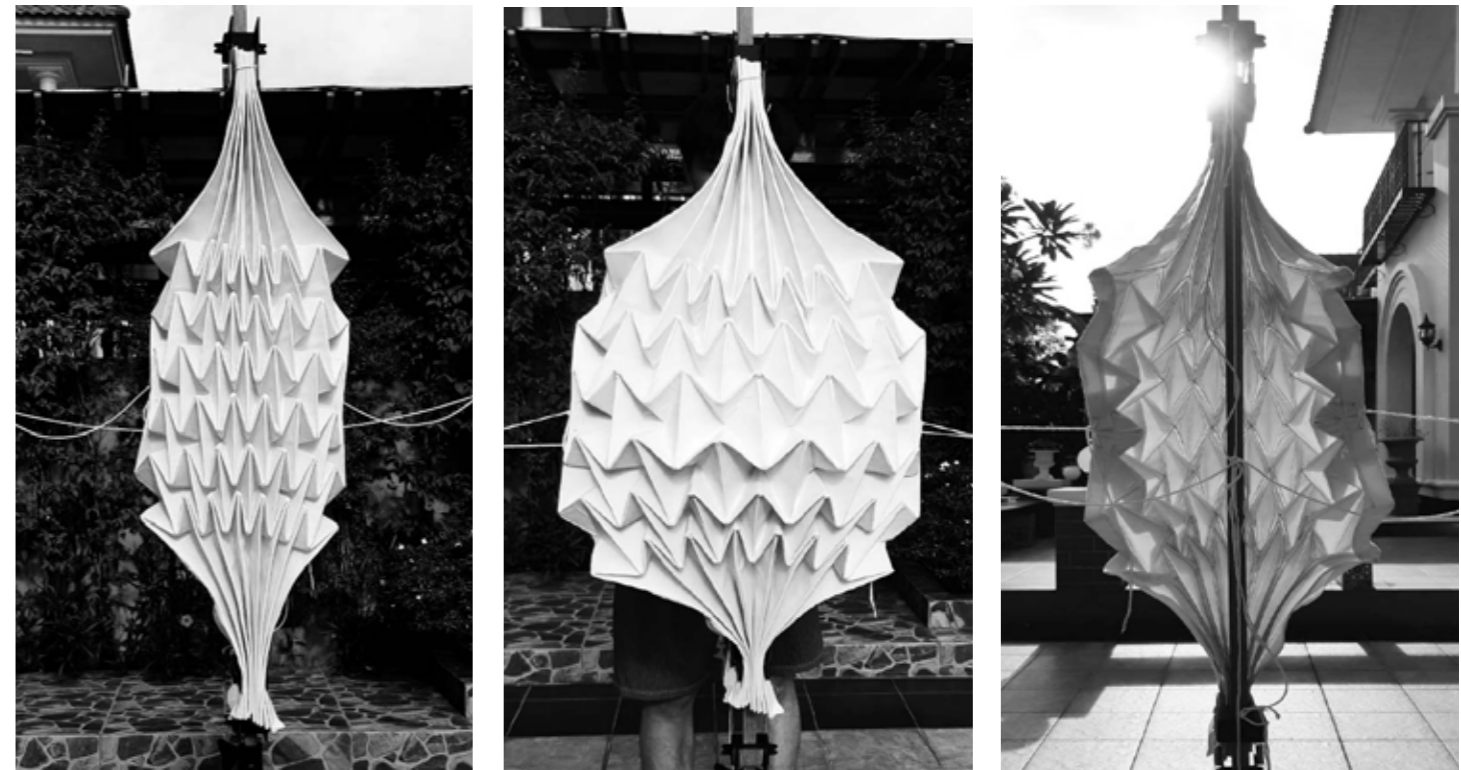


figure 6

- figure 1: Front elevation of shading device on the the shop-house of china town
- figure 2: Front elevation and section.
- figure 3: Detail section.
- figure 4: Simulating the usage of the shading device through different time of a day.
- figure 5: Exterior vs Interior view after installed in the Folding shade.
- figure 6: 1:1 Prototype of the folding made by fusing a fabric with thin triangulated plastics.