



PREFIGURATIVE ARCHITECTURE BOOKLET

CHARBIT STELLA

MSA YEAR 5

2016 _ 2017

MANCHESTER METROPOLITAN UNIVERSITY

**5 PROJECT
PREFIGURATIVE ARCHITECTURE**

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BOOKLET SUMMARY

PREFIGURATIVE ARCHITECTURE PROJECT



PROJECT 1/ IKIKO PROJECT, ESA STUDENT

HUMANITARIAN PROJECT. CONSTRUCTION OF A SCHOOL RECYCLING/MANUFACTURING CENTER IN THE PHILIPPINES.



PROJECT 2/ OTO PROJECTS, ASSEMBLE STUDIO

HOME FOR CREATIVE NEW MUSIC THAT EXISTS OUTSIDE OF THE MAINSTREAM WITH AN EVENING PROGRAMME OF ADVENTUROUS LIVE MUSIC SEVEN NIGHTS A WEEK.



PROJECT 3/ MUSIC MAN PROJECT, RURAL STUDIO

PRIVATE HOUSE FOR PRIVATE CLIENT IN ALABAMA



PROJECT 4/ PAPER TUBE PROJECT DISASTER, SHIGERU BAN ARCHITECT

RETROSPECTIVE OF DISASTER ARCHITECTURAL PROJECT, JAPAN, RWANDA, INDIA

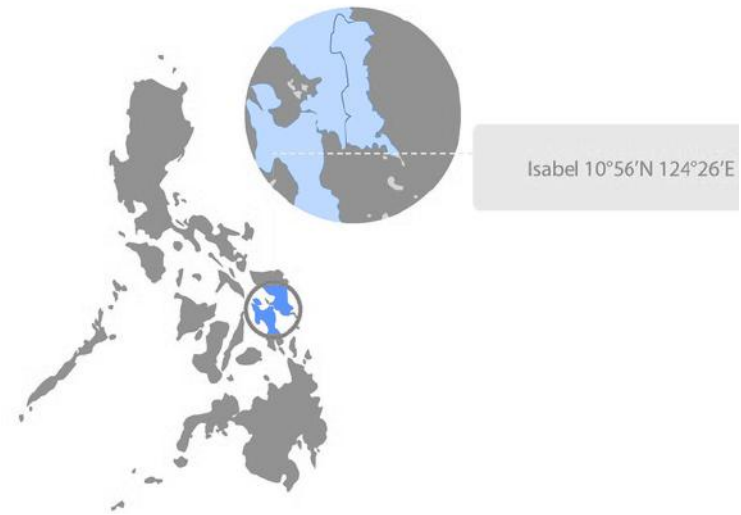


PROJECT 5/ NEAST WE GROW, KENGO KUMA ARCHITECT

COMMUNITY FOOD HUB RECENTLY CONSTRUCTED IN THE ISLAND OF HOKKAIDO

IKIKO PROJECT

HUMANITARIAN PROJECT. CONSTRUCTION OF A SCHOOL
RECYCLING/MANUFACTURING CENTER IN THE PHILIPPINES.



IKIKO is a French NGO created in May 2016 by Christophe Cormy Donat, an architect who graduated from ESA.

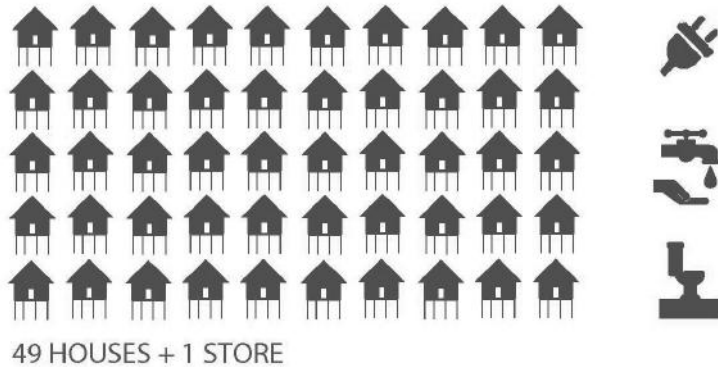
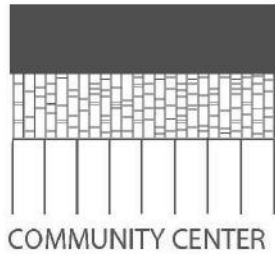
The mission of Ikiko is to PROTECT THE ENVIRONMENT, encouraging EDUCATION and TRAINING for the Bajau community in Isabel, Philippines.

This project encourage students to conceive, design and manufacture experimental projects collectively.

LOCATION : «the coral triangle» between the Philippines, Indonesia and Malaysia

THE BAJAU VILLAGE consists of about 50 houses which are built over the water on stilts; there are about 350 people; Their stilt village allows them to stay connected with the marine world. The Isabel Bajau live exclusively from fishing

PROBLEM : Plastic ocean pollution and destructive fishing
As a result, the children from the village cross Isabel to beg. Little by little, as victims of the progress of society, the Bajau begin to lose their cultural identity.



MISSION :

Teach to recycle plastic bags and bottles littering the beach, streets and parks of Isabel and to show them how this can BENEFIT their community economically.

After their first use, plastics become a VALUABLE RAW MATERIAL for the manufacture of other products, while offering a solution to waste management. This initiative will empower the villagers of Isabel and preserve their lifestyle.

ARCHITECTURAL PROJECT :

Build a school and a recycling/manufacturing center, utilizing SUSTAINABLE, LOCAL MATERIALS, in an effort to inspire a sense of ENVIRONMENTAL RESPONSIBILITY in the community. They also aim to initiate various training seminars and microprojects that will facilitate positive, sustainable economic benefits for parents and children PARTICIPATING IN THE PROGRAM.

PROCESS DIAGRAM : RECYCLING PLASTIC BAGS



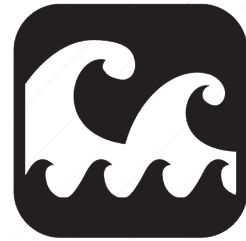
1. plastic bag collection
2. sorting and cleaning
3. cutting
4. transformation into plastic yarn
5. manufacturing
6. selling



THE CONCEPT :

The building and its fabrication will be done in a COLLECTIVE MANNER and demonstrate ENVIRONMENTAL AWARENESS as well. The facility will incorporate as much RECYCLED MATERIAL as possible : the walls will be braided with PLASTIC BAGS, BOTTLES will be repurposed to allow light to enter.

A COCONUT WOOD STRUCTURE ON WHICH EVERY VILLAGER can hang woven or knitted panels.



WHY THIS PROJECT IS INTERESTING IN LINK WITH PREFIGURATIVE ARCHITECTURE ?

This HUMANITARIAN PROJECT is part of a long-term volunteer effort. They want to discover people, men and women and a new culture. In a global society, where the actions of one affect the lives of others, understanding and mutual support are important values for everyone to live, and live in peace. Through this project they also want to show the face of an enterprising youth, dynamic and responsible, who can make the right choices.

This initiative is an opportunity to experience life-giving and openness to others, friendship and sharing.

This project is in link with PREFIGURATIVE ARCHITECTURE because it's a collective project, they work directly with the population and this project is a correlation between ARCHITECTURE, ENVIRONMENTAL and ECOLOGICAL needs and POPULATION.

Moreover, we can link this project with the example of Johannesburg city, in the text « People as infrastructure ».

«Such a conjunction of heterogeneous activities and provisional possibilities for how people live and make things, how they use the urban environment and collaborate with one another»; the IKIKO PROJECT want to directly involve the local poor population, use their own knowledges and skills, and furthermore, permit to learn them how to preserve their environment, and how they can build for a better lifestyle. The project is not only focus on the construction, but also on learning and provide new knowledges to the population, and work with them.



Sources : <https://www.ulule.com/helloikiko/>
People as infrastructure, Abdoumalik Simone

OTO PROJECTS

ASSEMBLE STUDIO



PROJECT :

This project is a WORKSHOP AND PERFORMANCE SPACE for the experimental music venue Café OTO in Dalston, Hackney.

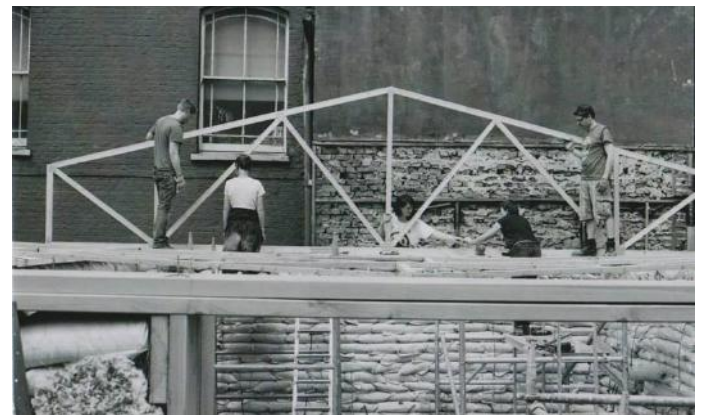
The building occupies a formerly disused site and is MADE OF DEMOLITION RUBBLE found there. It is a SIMPLE SINGLE VOLUME, an informal and LOW-COST SPACE for experiential and educational performance.

CONCEPT: CONSTRUCTION METHODS

Like the traditional London-stock brick of the nineteenth century, the CONSTRUCTION METHOD is based on UTILISING RESOURCES that are readily AVAILABLE LOCALLY at little or NO MATERIAL COST.

The EARTH, RUBBLE and GRAVEL on the otherwise empty site was gathered, sieved, bagged and compressed; Then, TRANSFORMED FROM WASTE into giant BUILDING BLOCKS.

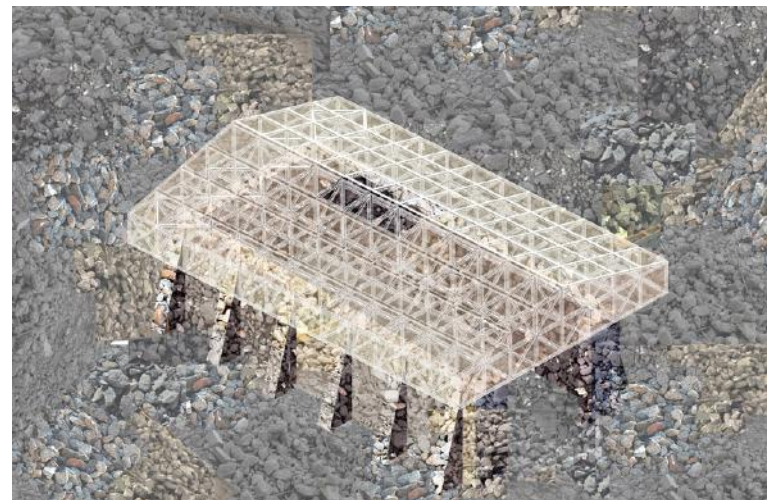
Deep RUBBLE WALLS were finished with a decorative 'rubble-dash' render and topped with a lightweight timber trussed roof.



ARCHITECTURAL PROJECT :

OTOProjects was BUILT BY 60 VOLUNTEERS, including many musicians and OTO members, over the summer of 2013. It was supported by Café OTO and delivered in association with the Barbican.

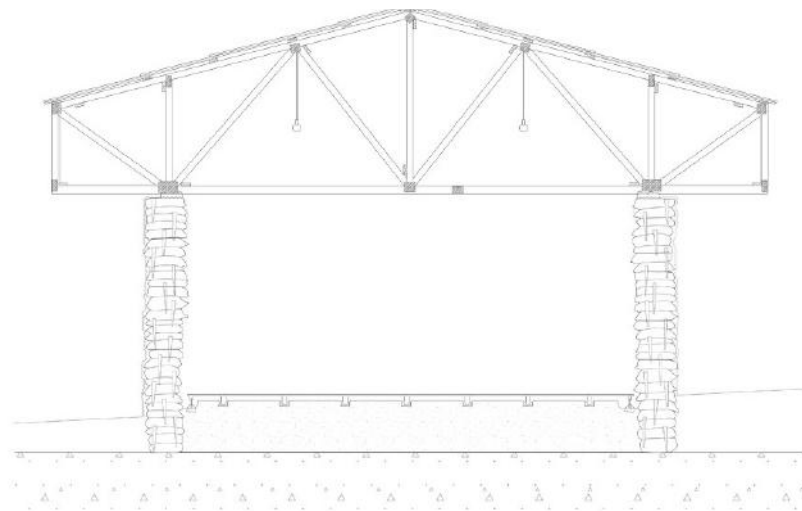
The STRUCTURE OF THE PROJECT, was build with recycle wood for the roof and the ground.





The project was created as a SPACE FOR ARTISTS to develop new work and for OTO Projects to present workshops, talks, film screenings and installations relating to the core programme at Cafe OTO.

The most interesting in this project is that it is the fact that it was ENTIRELY BUILT BY A TEAM OF STUDENT, it consists of a VOLUNTEER PROJECT, COLLECTIVE WORK, with reusing materials for a LOW COST ARCHITECTURE.



WHY THIS PROJECT IS INTERESTING IN LINK WITH
PREFIGURATIVE ARCHITECTURE ?

« Architecture is not the addition of something new, but rather the redistribution of what is already there », *2012Architecture practice*. The OTO PROJECT used resources that are already available locally, furthermore they used materials transformed from the waste of the site. In my point of view this is a good example of prefigurative architecture, even more, the construction was established by student and volunteer.

Moreover, in link with *Invisible Agency* text, we are looking in a different approach of recycling, the notion of reusing existing things and components part, or elements from demolished building to make new products, spaces, buildings. They called that

«Super- use» define as using surplus materials which others would consider as simply waste.

«nowadays people think that the only solution to perceived spatial problem might be the addition of something new when, in fact, careful considerations of existing facilities, services, or processes might prove to be less costly and less intensive in terms of material resources.» As in the text, the project, in the construction system and also in the process, is prefiguring. Finally the project, is also provide a communication spaces, sharing with the community, provide workshop and cafe.



SOURCES : <http://assemblestudio.co.uk/>
Invisible Agency, *2012Architecten practice*
Arif Hassan architect project

MUSIC MAN PROJECT

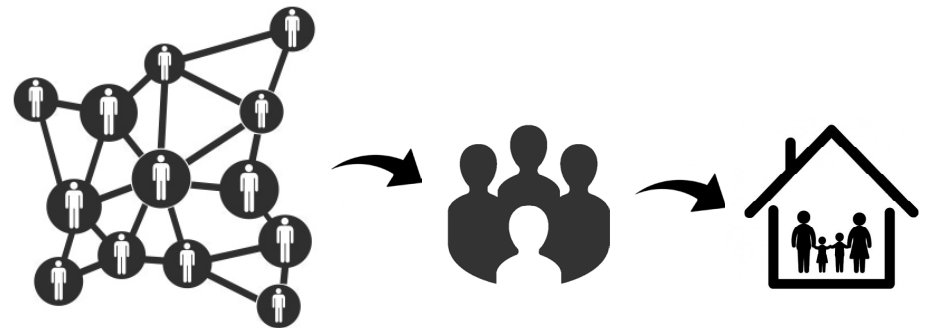
RURAL STUDIO



MUSIC MAN PROJECT of Samuel Mockbee , Rural Studio built this project in 2003 for a private client

Living in extreme poverty, Jimmie Lee was chosen to be a recipient of a home from the Rural Studio. Known within the COMMUNITY OF GREENSBORO, ALABAMA as Music Man because of his passion for soul music, he has always managed to maintain a healthy zeal for life, blasting R&B from his vast collection of used stereos.

THE STUDENTS WORKED CLOSELY WITH THEIR CLIENT, Music Man. Encouraging his eclectic style, his HOUSE is a MENAGERIE OF DONATED AND FOUND MATERIALS.



PROJECT :

Music Man's House is a tall and narrow 600 square-foot structure. This NEW HOUSE is built on a property owned by Jimmy Lee Matthews, known as Music Man; an enthusiastic AFRICAN AMERICAN MAN from whom STUDENTS learn deep lessons about life and the world. The VERTICAL PROPORTIONS of Music Man's House are determined by HIS NEEDS; he can be considered a "junk collector".

The interior is divided into TWO MAJOR AREAS: an undivided living area and a bathroom area. In the living area, the furniture has been structured into a lateral brace system that glides to give room to Music Man's possessions.

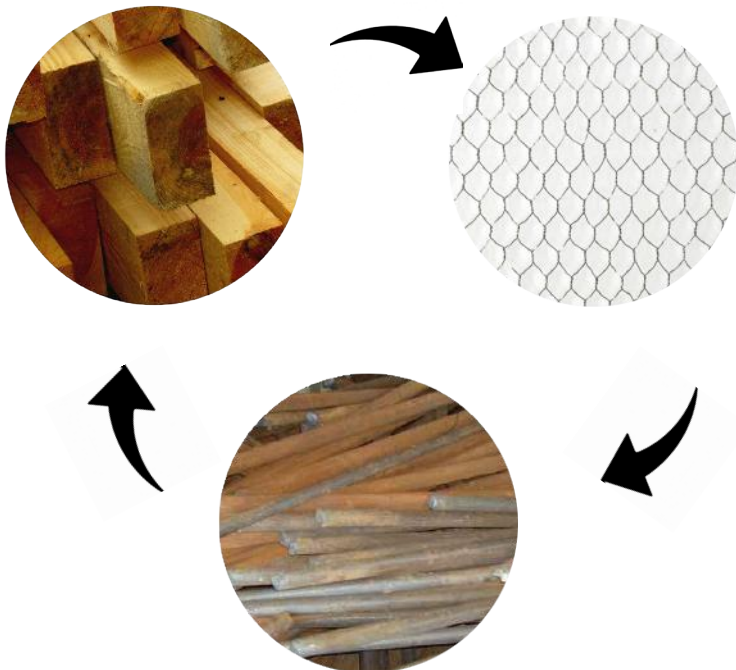
Samuel Mockbee wanted his students to abandon themselves into the “CLASSROOM OF THE COMMUNITY” to bring things (buildings, construction materials, finishes) towards a world.

Today, SUSTAINABLE, COMMUNITY-BUILDING WORK is now prevalent. Students, teachers and community leaders realize its value today. And many have found inspiration in Mockbee’s creative use of building REUSE MATERIALS, using DONATED, SALVAGED, found and RECYCLED MATERIALS TO SOLVE PROBLEMS while keeping COSTS LOW and designs courageous.



MATERIALS : LOCAL

Some of the CONSTRUCTION MATERIALS –timber, chicken wire, glass bottles- were FOUND ON SITE. Four dilapidated structures remain on the property: one belonged to Music Man’s late mother, another to his uncle, in addition to two deteriorated trailers.



WHY THIS PROJECT IS INTERESTING IN LINK WITH PREFIGURATIVE ARCHITECTURE ?

For Norberg-Schulz, a house or home is “the stage where private dwelling takes place... which may be characterized as a “refuge” where a human gathers and expresses those memories which make up his personal world” (Norberg-Schulz 13).

Through this project, Rural Studio intervention is focus on the profile of the Music-man, they created a strong link with the client, « All barriers between builders and users must be abolished so that building and users become two different parts of the same planning process» *G.De Carlo, Architecture's Public*. Moreover, student, teachers, client and community worked together, and Mockbee vision of architectural construction is interesting, creating building with reusing or waste materials. “between fortune and virtue,” Mockbee wanted to unsettle the architecture establishment.

We can compare, this kind of project and vision of architecture as the mood of the late 1960s, with the idea of « anything could happen, and money did not seem no matter.»

Morreover, this project let me think of the experimental construction of Sulzer and Hubner (1969) , the students were able to test and enact their ideas, and see how materials and details performed. « cacofony of rooms in different styles and materials.» *Architecture and participation, Peter Blundell Jones*



SOURCES : <http://www.ruralstudio.org/projects/music-manhouse>
“Social Architecture”: The Politics of Representing Practice
Paul Jones & Kenton Card

PAPER TUBE PROJECT

SHIGERU BAN ARCHITECT



Pritzker Laureate SHIGERU BAN may be as well known for his INNOVATIVE USE OF MATERIALS as for his compassionate approach to design.

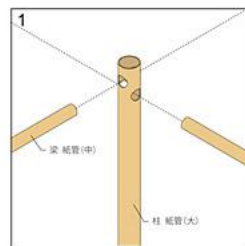
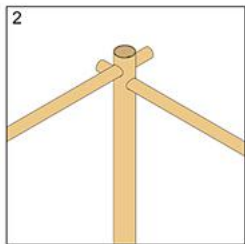
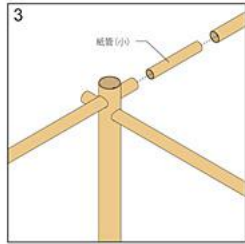
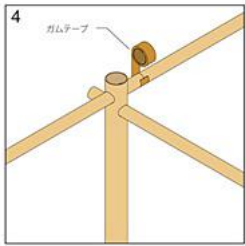
For a little over three decades, Ban, the founder of the VOLUNTARY ARCHITECTS NETWORK, has applied his extensive knowledge of RECYCLABLE MATERIALS, particularly PAPER AND CARDBOARD, to constructing HIGH-QUALITY, LOW-COST SHELTERS for victims of DISASTER ACROSS THE WORLD from RWANDA, TO HAITI, TO TURKEY, JAPAN..

MATERIALS :

Budget constraints and the RECYCLABILITY OF THE TUBES were the main justification for the TUBES, and these have since become the main arguments in Ban's widespread use of the materials. The tubes were COATED WITH PARAFFIN WAX and strengthened with GLUE. After dismantling the structure the tubes were tested, and to the architect's delight their COMPRESSIVE STRENGTH actually increased.

Ban has realized dozens of structures with paper tubes, many of which can be categorized as long-span structures and his now FAMOUS DISASTER RELIEF PROJECTS.





PAPER PARTITION SYSTEM 4 - JAPAN, 2011

The MOST RECENT DISASTER relief structures in cardboard saw Ban move indoors, specifically to GYMNASIUMS AFTER THE 2011 EARTHQUAKE AND TSUNAMI EASTERN JAPAN.

THE PAPER PARTITION SYSTEM aimed to give evacuees some means of privacy in the communal conditions they were forced to endure for months afterward. PAPER TUBE FRAMES demarcated an AREA FOR AN INDIVIDUAL, couple or family, while curtains allowed that space to be closed off from its neighbors.

The same year he also started, with architect Koh Kitayama, THE VOLUNTARY ARCHITECTS' NETWORK, which unites and enables architects that likewise want to respond in TIMES OF

STRUCTURE : MODULAR SYSTEM

Made of TWO SIZES OF CARDBOARD TUBING, PLYWOOD, ROPES AND WHITE CURTAINS, the modular system allows for fast and easy assembly and disassembly. The structure can be made DIFFERENT DIMENSIONS FOR DIFFERENT SIZED FAMILIES depending on where the cloth is hung.

1,800 individual units of PPS PAPER PARTITION SYSTEM were assembled in 50 provisional shelters for evacuees affected by the DISASTER. It is a COST EFFECTIVE SOLUTION to harness materials that are easily available and RECYCLABLE.



WHY THIS PROJECT IS INTERESTING IN LINK WITH PREFIGURATIVE ARCHITECTURE ?

« In poorer countries it can be quite profitable to reuse old parts»
In these Post-disaster projects, the architect Shigeru Ban is reusing materials, and use paper tubes as a structure material and low-cost. All his construction were build by his Student team, and the most important is that, all construction are built to help people surviving in poorest or post-disaster condition. In his process , the architect propose simple construction, that can be build by the local population after.

«Apart from the ability to understand materials that have the potential to be useful, know the cost of transportation and low cost» *Superuse*.

Nowadays, «a third of the world's people house themselves with their own hands, sometimes in the absence of government and professional intervention, or sometimes inspite of it» *Anarchy in action, chapter V*» Also, Shigeru Ban projects are providing a new vision of the role of an architect, we are building architecture not for the society, or economy, but for human's lifes.

All the construction of Shigeru Ban, are in my point of view interesting and in link with prefiguration, because those project are able to be construct by the population themself and provide them better condition of life and knowleges about materials,ecology, and new type of construction.



SOURCES : <http://paper-partition-system/>
Superuse, OIO
Anarchy in action, Chapter V

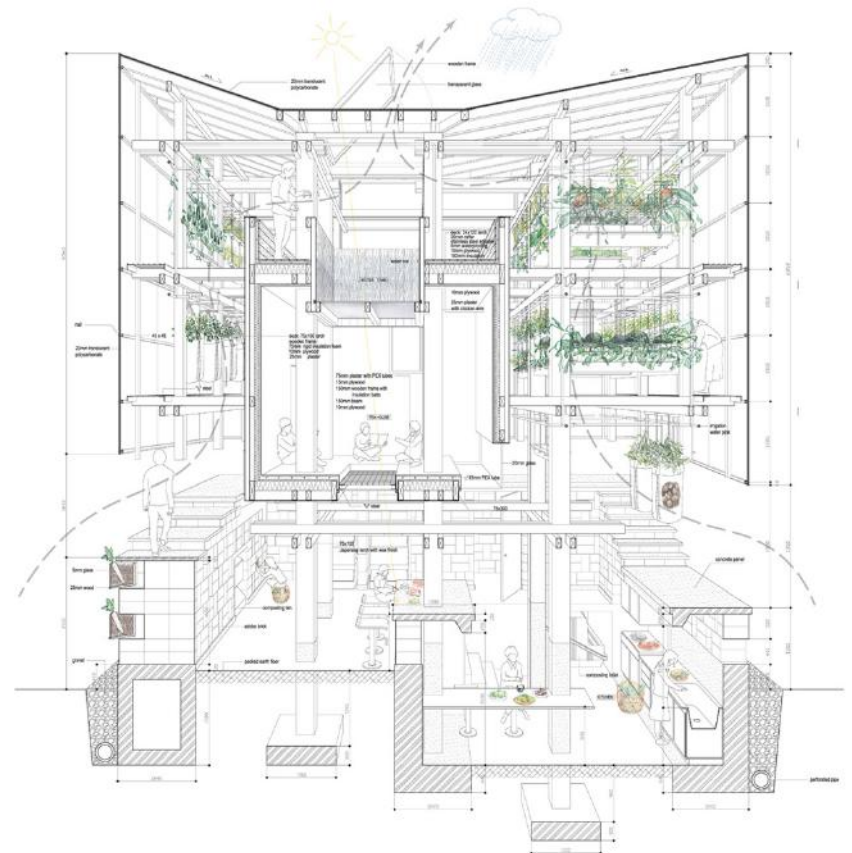
NEST WE GROW

KENGO KUMA & ASSOCIATES • COLLEGE OF ENVIRONMENTAL DESIGN UC BERKELEY



Japanese architectural firm KENGO KUMA AND A TEAM OF STUDENTS at UC Berkeley's College of Environmental Design created 'Nest We Grow', an elaborate timber COMMUNITY FOOD HUB recently constructed on THE ISLAND OF HOKKAIDO.

The structure's timber frame actually mimics the vertical spatial experience of a Japanese larch forest. The team added plenty of beams for hanging fish and produce and a central tea platform with a sunken fireplace. The building is supposed to BRING PEOPLE IN THE COMMUNITY TOGETHER TO STORE, PREPARE AND ENJOY LOCAL FOODS.



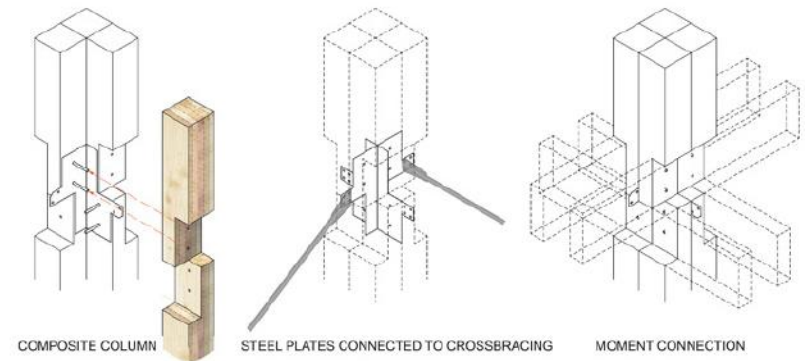


It is not only particular to Japan that the architecture related to SUSTAINABLE DESIGN AND RESEARCH owes much of its achievements to collaborations between industry and academia, without necessarily implementing the resulting technologies contributing to LOCAL COMMUNITIES. The project create a mutual benefit between the SITE AND INNOVATIVE ARCHITECTURAL PROPOSALS.

The projects are then reshaped by LOCAL KNOWLEDGE and DEVELOP into what ultimately strengthens its own COMMUNITY in return.

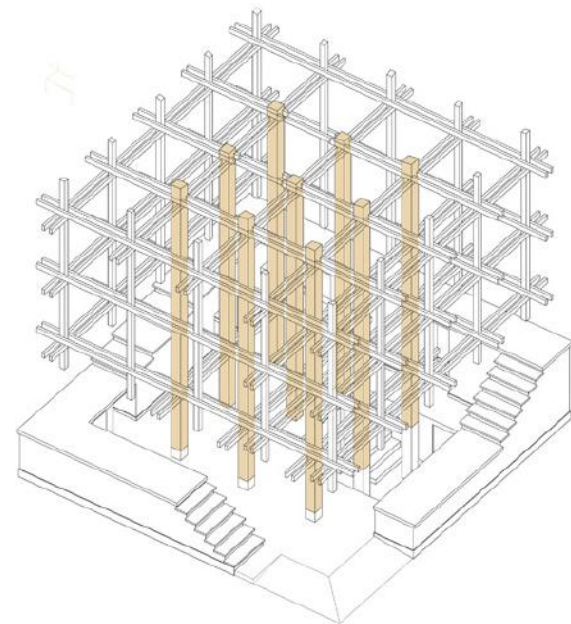
STRUCTURE :

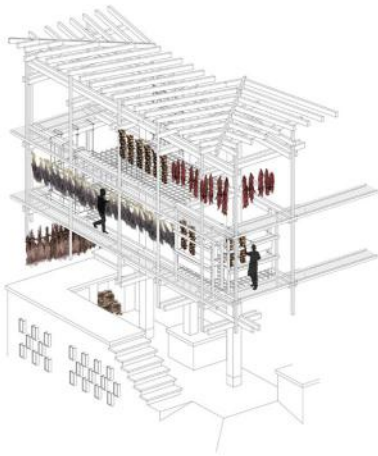
The structure's timber frame "mimics the vertical spatial experience of a Japanese larch forest." Conceived as AN OPEN, PUBLIC STRUCTURE where people can gather to prepare and enjoy local foods, the Nest employs all sorts of measures to keep it comfortable THROUGH THE SEASONS.



MATERIALS : SEASONAL SYSTEM

The FAÇADE AND ROOF, made of TRANSLUCENT PLASTIC corrugated sheets, help retain heat from the tea platform fireplace during the colder months. SLIDING PANELS throughout the façade and roof help facilitate air flow in the warmer months. And at the BASE OF THE STRUCTURE, the CONCRETE WALL shields the interior space from strong northwest winds.





Storing

INFLUENCE BY THE LOCAL SITE :

The project is build with LARGE SECTIONS OF WOOD and in Japan this translated to the composite column, which uses smaller pieces of wood to generate a larger column.

It took considerable effort to identify a way to JOIN MATERIALS, which was INFLUENCED BY BOTH LOCAL CARPENTRY PRACTICES and THE JAPANESE MATERIAL MARKET.

We were also under a considerable time constraint with the entire building process taking only SIX MONTHS TO COMPLETE.

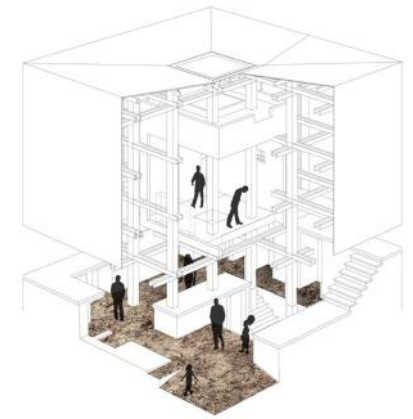


Harvesting

INVOLVED COMMUNITY :

The PROGRAM of the Nest is decided according to the life cycle of these local foods:

- growing
- harvesting
- storing
- cooking/dining
- composting, which restarts the cycle.

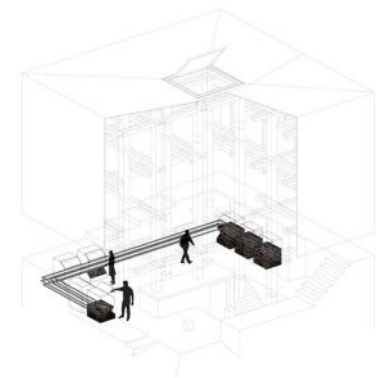


Cooking / Dining



Growing

ALL MEMBERS OF THE COMMUNITY HELP to complete each stage, allowing THE STRUCTURE TO BECOME A PLATFORM FOR GROUP LEARNING and GATHERING ACTIVITIES in the Nest throughout the year. COMMUNITY PARTICIPATION extends and completes THE LIFE CYCLE of local foods, which is a symbiotic relationship.



Composting

WHY THIS PROJECT IS INTERESTING IN LINK WITH PREFIGURATIVE ARCHITECTURE ?

« The most interesting building are those that are motion, that evolve in time » In the Kengo Kuma, and students at UC Berkeley's College of Environmental Design, this project is build for the community, bring them into this platform , and share times, knowleges and food.

Moreover, the construction process was influenced by local practices and local market and the program of the building is clearly made for community exchange through the life cycle of the local food; though the different season the activities of the community are constently evolve.

The notion of «community» is different, in Baan Baan Mankong and the Asian Coalition for Community Action, it is normally an administrative term, related with the social relationship that includes working together toward a shared aim. This perception of the community is almost the same of the NEST WE GROW project because the process of this architecture is made for sharing things and promote community exchange.



SOURCES : <http://divisare.com/projects/283550-Kengo-Kuma-Associates-Nest-We-Grow-Memu-Meadows>
Participatory Urbanism in South-East Asia, Camillo Boano and Emily Kelling

