the impact of

BOOKSTORES
on

COMMUNITIES AND

MS ADVANCED ARCHITECTURE DESIGN
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Architecture impacts the world immensely in both positive and negative ways. In which architecture sometimes becomes a problem; other times become a solution to the issues that the world faces.

This book tackles destruction of ecologies, oppression of indigenous people, influences of colonialism, consequences of consumerism, marginalization of women; some of the important issues that the world faces. It is a collection of analyses and criticisms that dissect the ways architecture has become a problem to these issues. At the same time, it is also a collection of ideals, investigations, and interrogations of how architecture can be a catalyst in providing a solution for these problems. It reflects how architecture is forever tied to the issue that the world faces in various scales. The project within this book demonstrates how architecture impacts some contemporary issues and how other issues impact architecture.
ReWild UN proposes a new Climate Council as a 7th organ to the existing organs of the United Nations aims to elevate the issue of the climate crisis. It aims to provide a permanent venue for countries to come together and resolve the climate crisis.

The design recognizes the UN Headquarters as a product of modern industrialization located within the urban jungle of New York City. The new Climate Council will reintroduce the indigenous forest of precolonial Mannahatta into the UN Headquarters in an attempt to rewild the site, providing space for a diverse ecosystem as part of the architecture of the new Climate Council.

Through the proposal of a Climate Council, ReWild UN interrogates urban expansion of cities and cutting down forests for industrial use. Is there a way for a more diverse and equitable ecosystem to coexist in the city?
ReWild UN reimagines the precolonial forest of Mannahatta to repopulate the UN Headquarters as a speculative design to challenge the concrete jungle of New York City and to critique the modernist lawn landscape design that is currently in front of the UNHQ. The new climate council emerges from the north lawn of the site as an extension of the landscape as well as an interpretation to the curve of the General Assembly building.
The council chamber is screened in timber lattice. It is flanked by a translators’ booth and a public bridge that encourages the public to participate in the discussion of climate change issues with world leaders.
The design extends nature into the interior of the Climate Council by using timber as a sustainable building material. A forest of timber columns organizes a new assembly hall, lobby space, meeting rooms, offices, etc. The main council chamber, screened in timber lattice emerges from the center of the new Climate Council to recognize its importance. Together with the timber columns, the design also uses recycled brick from deconstructed buildings as a flooring material and photovoltaic glass to power parts of the building energy.
the impact of FOODWASTE on CONSTRUCTION

THE LUFFAH SQUATTAH

with Justin Wan, Tim Chen, Neil Potnis

The Luffah Squattah experiments with the possibility of using luffah as a framework. Using a unique mix-design of clay-soil and spent coffee grounds, this project aims to produce a circular life cycle for food wastes. As a result of the experiment, a stool is created to test the strength of these organic ingredients for a possible load-bearing construction material.
Luffa sponges are composed of a complex network of fiber bundles connected to form a 3-dimensional, highly-porous network.

The core region exhibits lower yield stress and energy absorption compared to the hoop region due to its greater porosity.

When compressed longitudinally, a luffa sponge is able to absorb comparable energy per unit mass as aluminum foam.

The team started by experimenting with different ratios of earth mixtures with shredded luffa, coffee grounds, and water to identify the right mixture to be used as building material. We also experimented with using the luffa as form work to hold the earth mixture together.
To test the feasibility of the experiment, the team created a stool out of luffa mixture and form work. We also created a cushion made from luffa as a way to highlight the use of luffa in the experiment.
J.M. Richards once strongly criticized Expo ’70 and its exhibits and technological showcases as mere gimmicks to satisfy commercialism and to generate income. But Expo ’70 was supposed to be Japan’s redemption to the world with its economic miracle following its defeat in World War II. The architecture movement, Metabolism, which was the star of Expo ’70, was supposed to revolutionize Japan with its flexibility manifesto and regeneration of buildings through constant renewal.

Expo ’70 was the biggest testing ground for Metabolism to experiment its utopian ideology. Arata Isozaki was part of the team designing the expo organizers had tasked to design demonstration robots as part of the main festival plaza. Isozaki designed two cybernetically controlled robots that respond to human feedback. The robots Deme and Deku work in tandem to create and manipulate spaces based on human activities. The robots are able to produce light, sound, smoke, scent, and even bubbles to enhance performances taking place at the festival plaza. Deme serves as the controller robot where people can give instructions on the spherical globe located at its head. Deku on the other hand executes these instructions.
manipulate spaces based on human activities. The robots are able to produce light, sound, smoke, scent, and even bubbles to enhance performances taking place at the festival plaza. Deme serves as the controller robot where people can give instructions on the spherical globe located at its head. Deku on the other hand executes these instructions and provides the corresponding effect to the performances. Deme has a head of two spheres as the main control room, a body that contains a dressing room and other gadgets and equipment that collects and emits information, and two arms of different length. The robot has the capability to elevate its body up to 24ft. The base then becomes an additional stage for performers to perform. Deme also has the ability to move around and twirl. Deku’s description is unknown. The design provided a novel cybernetic flare to the performances by executing special effects through robots rather than separate machines. Having three sections on the festival plaza: Past, Present, and Future, the demonstration robots were located in the Present section of the plaza. The location of the robots seemed like an intentional act to symbolize that cybernetic technologies were the norm in Japanese society at the time and that Japan was at the forefront of technology.

Expo ‘70 was definitely a success in putting Japan on the map. Visitors were more than double of the organizers’ projection. The futuristic image of the event continued to help boost Japan’s thriving economy. Architects were able to realize their experiments that resulted in several impressive designs like the demonstration robots. The event was able to create a futuristic city filled with architectural and technological innovations. Yet the Metabolism movement peaked at Expo ’70 and slowly faded from Japanese society as well as the world thereafter. The expo was criticized for having succumbed to commercialism and consumerism.
People were more attracted to the parades and performances in the event than admiring the architectural and technological feat of the pavilions. Expo '70 was considered a disillusion of a Metabolic utopian city with no lasting impact made to Japanese society after the expo. The demonstration robots together with their technology also faded with the Metabolism movement as its technology quickly became obsolete and outdated.

Ironically, despite Isozaki’s participation in Expo ‘70, he did not fully believe in the Metabolism movement. He criticized the movement as too optimistic and lacking skepticism. Isozaki’s skepticism towards Metabolism seemed to have forecasted Metabolism’s dwindling after Expo ‘70. Isozaki’s oracle seems to hold true to this day as the world lost one of its most iconic Metabolism architectures, the Nakagin Tower, which was demolished in April of 2022.

References:


Once a high-end residential area for international expatriates and businessmen from all over the world, contemporary Tunisians have transformed functions of the French colonial architecture along Rue de Angleterre after the French colonial period. Today, the street is known as the ‘library street’ where people from all over Tunis come to purchase second-hand books for a cheaper price at the multiple second-hand bookstores located along the rue. Yet, the city continues to deteriorate and people moving out because of poor maintenance of the colonial buildings.

The design preserves the additions, subtractions, extensions, connections, and any other forms of intervention of Rue de Angleterre that contemporary Tunisians have made. These alterations are a DNA of Tunisian seen in the medieval medina. Using these techniques, the design medinaizes Rue de Angleterre to revitalize the second-hand bookstores and create an accessible book-sharing environment to the community. Ultimately, the design aims to bring back the depleting community through ‘medina’-tizing the street.
The design started by analyzing how contemporary Tunisians adapted the French colonial buildings to suit their lives. We have identified different types of intervention that reflects the medieval medina.
A book bridge flanks two adjacent preschools to expand the preschool to create an environment for children to read books and play.

A manual louver envelops the entire book bridge to protect the books from natural elements in the area.
A study hall extension is designed above the school supply bookstore to provide students a dedicated afterschool venue to review and help each other out.

A replicable wind tower is punctured through the existing staircase of the building to increase ventilation of the now transformed old French colonial buildings.
A community storage will be located at the empty lot of the street. Just like the bookstores that extend their storefront to the streets, the community storage extends its interior space to the entire street. Furniture is extended to the streets during the day, hosts seasonal book fairs, Iftar during Ramadan, other large scale events, or just a crowded street full of people shopping for second-hand books. The community storage becomes a venue for smaller scale events, such as Al Hakawati (Arabic storytelling), book review, seminars, etc.
The design deploys several interventions on the existing street, sidewalk, and into the buildings allowing to locally and incrementally transform and upgrade the existing deteriorating block while empowering its residences. The design intends to return the streets to the people by replacing asphalt with paved cobblestone to create a safe environment for people to shop for books.

Cabinet designs are designed to create an extension for existing book stores to formalize their extension into the streets. It also serves as an advertisement to become more visible to people passing through Rue de Angleterre.
Deanna van Buren has an architecture practice that is very different from conventional practices. As an architecture and real-estate development non-profit organization, Designing Justice + Designing Spaces (DJDS) challenges the current mass incarceration practice in the United States by trying to address the root cause of crime through architecture. The architecture firm designs community-based projects through a participative design process wherein future users of the design are involved in the planning and designing of the building while architects listen to their ideas with respect and openness. This type of design process stems from the belief that users will be the ones utilizing the spaces; hence, they should participate in the design process of the architecture. In one of van Buren’s participative design workshops for her project Women’s Mobile Refuge Trailer, she realized that her initial assumption that out-of-jail women wanting a bed to sleep in after they were released was wrong. The women want to have a change of clothes, meet with caseworkers to help them figure out their paths, or “to sit in a comfortable chair, right? They haven’t sat sometimes for years in a comfortable chair.” (van Buren, 2020).
Women’s Mobile Refuge Trailer is a project born out of a collaboration between DJDS and Five Keys Schools and Programs. It is a trailer that provides out-of-jail women a safe space for refuge and assists them in facing their challenges. The two organizations saw that women released from jail immediately face challenges such as a lack of a place to spend the night, exposure to drugs, and being at risk of various forms of exploitation. Out-of-jail-women also often require help for their traumatic experiences as well as reintegration into their communities.

In designing the Women’s Mobile Refuge Trailer, DJDS and Five Keys programs held a five-day design workshop with 60 incarcerated women at the San Francisco County Jail #2. The workshop was important to listen to the inmates’ past experiences or experiences in jail. With restricted resources of just pens and papers, the organizations worked with the inmates to understand their needs after being released from jail. The women were involved in the design process all the way from planning the layout of spaces to choosing the patterns to be used in the cushion, and “hot pink recliner,” for the trailer. The result was a quaint purple bus with couches, beds, plants, tables, and chairs in the interior to accommodate out-of-jail women and assist them in transitioning back to their communities. The project has been so successful that it is planned to be deployed to also rescue women at risk of human trafficking.

Van Buren’s participatory approach to design has proven effective in answering her clients’ needs. The Women’s Mobile Refuge Trailer and Restore Oakland, a previous project of hers, has even led her to design new typologies of architecture that directly protest against the US justice system. While other architects have attempted to question the justice
system, none seem to be as successful as van Buren in the impact in its community. Architects have tried to provide superficial design solutions offering Band-aid solutions that do not actually solve the root cause of incarceration. With van Buren’s participative design approach to architectural design leading to so many innovations, current mainstream architecture practice has been proven ineffective in trying to solve problems. When a mere renovated commercial trailer was able to provide safety to many vulnerable women and an inconspicuous hot pink recliner chosen by the inmates able to provide comfort for them, the architecture industry may have to rethink its approach in design if it wants to provide an impactful solution to contemporary social issues.

1Restore Oakland is another project that was a product of participatory design van Buren conducted with jail inmates. It is the first center for restorative justice and restorative economy that brings together a high-end restaurant, non-profit organization offices, and a restorative justice space to people out-of-jail a holistic center that can help them reintegrate back into their community through proper healthcare, housing, and livelihood.

2In 2017, Frank Ghery conducted studio classes in Yale and Southern California Institute of Architecture with the topic reinventing prison architecture. The studios were criticized for acknowledging the prison system by trying to improve its conditions instead of trying to understand the root cause of injustice that lead to mass incarceration and finding an alternative solution to the flawed system. Prominent architecture firms of recent years, such as Morphosis Architects, Richard Meier, and Mark O. Hatfield has also been commissioned to design court spaces with cursory or symbolic design solutions that do not address the problem of the justice system in the US.

References:


the impact of PLANNED CITIES on INDIGENOUS LAND

Anti-New Clark City is a documentation, analysis, and campaign project of the displacement of indigenous Aeta tribes due to the construction of the ‘green and disaster resilient’ New Clark City. New Clark City emerged as a government project and is being constructed on the ancestral lands of the indigenous Aeta tribes. To complete the project the Philippine government is actively marginalizing and disputing Aeta’s claim to land through lost documents. In addition, the government is displacing the community through unjust compensations that further marginalize the Aeta community. This project aims to raise awareness both publicly and within the Aeta community to resist the continuing marginalization of community members in and outside the boundaries of New Clark City.
The Aetas have lived on the land throughout the Spanish and American colonial periods undisturbed. They were forced to leave their homeland during the eruption of Mount Pinatubo in 1991 but were able to return. Now, due to the government’s political investment in New Clark City, the Aeta community is under threat of displacement.

The indigenous Aetas are descendants of an East-Eurasian meta-population that first migrated to the Philippines around 40,000 years ago and two more migration waves between 25,000 and 12,000 years ago through the Sundaland land bridges as well as the Austronesian migration wave that arrived in the Philippines from Taiwan about 7,000 years ago.

The Indigenous Aetas around the areas of Mount Pinatubo rely heavily on the natural resources of the mountain, scavenging food, medicine, and nutrition, and farming seasonal fruits, vegetables, and root crops. Their main sources of income are selling excess produce and coals in neighboring villages and working as laborers for farm owners.
New Clark City was proposed by Bases Conversion Development Authority (BCDA) past president, Arnel Casanova in 2012 to build a ‘green and disaster resilient’ city in Capas, Tarlac, north of Metro Manila. The city was built as a response to the climate crisis threatening Metro Manila and to become a new economic hub for the country. The development proposes a 9,450 hectare land that includes several sitios where Aeta communities live.

In March 2015, BCDA awarded AECOM Corporation as the winner of the Clark Green City Conceptual Master Development Plan. The conceptual plan by AECOM will be used as the master plan for New Clark City.

The P607 billion (USD 10.86 billion) New Clark City will be funded through a public-private partnership program with several local and international corporations and financial institutions. The Philippine government has pledged only P59 billion (USD 1.06 billion) for the development and the rest will be funded through a mix of investments and loans. The biggest share of the loan will come from Chine Energy Engineering Company with P105.2 billion. Other investors include the Asian Development Bank, AECOM, Japan Overseas Infrastructure and Investment Corporation for Transportation and Urban Development (JOIN), Surbana Jurong, and MTD Capital Berhad.

On April 11, 2016, late president Benigno Aquino III led the groundbreaking and inauguration of the city.
Since 2014, the Hung-ey Aetas have been in communication with BCDA that the boundary of New Clark City includes the Aeta’s claim to ancestral lands. They are also asserting their rights to the land as well as requesting free, prior, and informed consent (FPIC) with the Aeta tribe on the New Clark City development project. However, BCDA has been requesting documents from the Aeta tribe on their claim to the ancestral land.

The Aeta tribe is referring BCDA to the Certificate of Ancestral Land Title (CADT) that the tribe has submitted previously in 1999 to the National Commission of Indigenous People (NCIP). However, the NCIP claims that they have no documentation of the Aeta tribe’s application to the ancestral land despite the tribe proving to receive copies of dated and signed copies of their application. The Hung-ey Aeta tribe has since made follow-ups with NCIP regarding their application in 2014 and again in 2018 with no progress.

The construction of the Sports Complex in New Clark City started in 2018. The first phase of New Clark City construction consists of a sports complex and supporting facilities in preparation for the South East Asian Games in 2019 to serve as its venue. This was supposedly the first sports complex built by the government after Rizal Memorial Sports Complex in Malate, Manila completed construction in 1927. In the process, BCDA has evicted several families that occupy the land that was planned to build the sports complex.

In 2019, a seven-day eviction letter circulated online. The letters are allegedly sent out by BCDA to communities of Sitio Kalangitan. The letter informs the recipient to approach BCDA and leave their homes within seven days of their receipt of the letter in order to claim their compensation for the displacement. The letter also includes that the government has the right to forcibly remove the recipient from their homes together with their properties if they do not comply. At the same time, government officials and developers try to sow discord within the Aeta community by spreading disinformation among the members of the community.

After the pandemic, programs helping the Aeta community have stopped and there is little report on the progress of the destruction and eviction by media outlets. But based on satellite images on Google Maps, BCDA has been constructing the Access Road leading McArthur Highway to New Clark City as part of its Phase II construction. In the process, several houses and communities have disappeared as a result of the construction as seen in the images.
To expose the struggles and displacements of the Aeta to a wide public, I created a website to show the history and claim of the Aeta people to the land, an insight to the investment and planning of New Clark City, and the conflicts and displacements of the Aeta as a result of the construction of New Clark City in the Aeta ancestral land.
In congruent, I also created a map and pamphlet as an initial draft to be proposed to the Aeta community as a predecessor to a proposed co-designing workshop with the community. The pamphlet map includes an initial draft of the current condition of New Clark City, informations of the development, and laws that protects the indigenous people to keep the Aetas informed of their rights and claims.
The back of the pamphlet is a poster that highlights the demand for the government. The poster is a way to empower the Aeta community to defend their ancestral lands and their rights as indigenous people. The draft currently writes my demand for the government. But it will also be replaced as part of the workshop for the Aetas to voice out their demands.
Critical regionalism in Kenneth Frampton’s Six Points for an Architecture of Resistance uses an environmental context to weave a conceptual narrative for architecture and create a unique architectural experience for its user through visual and tactile experiences. Frampton’s idea of a concept, which is the design of the building, is heavily influenced by the context, which is the surrounding environment of the building. His idea of critical regionalism influences the environment to the design as a way to introduce users to the unique experience of its environment.

Peter Zumthor’s design of Therme Vals reflects this spatial narrative with a single element of a local stone as a building material. He started the project with a challenge, “Mountain, stone, water – building in the stone, building with the stone, into the mountain, building out of the mountain, being inside the mountain – how can the implications and the sensuality of the association of these words be interpreted, architecturally?” To design with the locally quarried stone, Zumthor approached the design of the building beyond just the immediate aspects of its surroundings but “a building that relates to the topography and geology of the location, that
responds to the stone masses of Vals Valley, pressed, faulted, folded and sometimes broken into thousands of plates.” He imagined a bath to be born out of the mountain. The stones, in this case, play an important role in creating an illusion of the therme carved out of it.

In designing the pools of the therme, Zumthor traced back public baths to the Roman empire where bathing was a ritual of cleansing and relaxation. He wanted to transform a simple, mundane, and essential task of bathing into a rich experience of austerity and sensuality. Zumthor poetically transformed this sensual idea of a ritual into a collection of bath pools that turn bathing into a complex ritual. He stretched a single element of quarry stone into a rich sensory experience. By manipulating the temperature of the water in the pool, light, acoustics, and shadows, Zumthor extracted a variety of unique experiences that bathers can discover. His design of the outdoor pool, for example, transports bathers from a bright exposed environment into an intimate interior space with the use of shadow and darkness. In one of the indoor pools, he designed an acoustical space that reverberates the softest whisper throughout the entire pool which allows bathers to feel the acoustical effect on their skin. The design seemingly transforms bathing into a religious activity which Zumthor compared to Christianity. All these, from manipulation of a single building element of the local stone.

In today’s world where communal baths have become a form of leisure rather than a daily ritual, Therme Vals creates an experience that is unique to Vals, Switzerland. Kenneth Frampton’s idea of critical regionalism is greatly embodied by Zumthor’s design of the therme. With a single context of local stone of Valser Quartzite cut in slabs, Zumthor was able to conceptualize a simple bath experience into a ritual that weaves a sensual experience and erases bathers’ perception of time the minute they step into Therme Vals.
how else can architecture impact