

Myanmar

Yangon

Ho Chi Minh City University of Architecture

Chulalongkorn University

Royal University of Fine Arts

Institute of Technology of Cambodia

National University of Singapore

National University of Laos

Yangon Technological University

Meiji University

PREFACE

by Tomoaki Tanaka / Katsushi Goto

Undoubtedly, the increasing impact of globalisation has created enormous changes in economic, social, political, cultural scenario and to the environment we live in, whilst the Asia Pacific Region has been facing unprecedented speed of urbanisation. Especially, globalization along with transformation to a post-industrial knowledge society and newly industrialised countries, an increase has been observed in the demand for higher education worldwide. According to Dr Dirk Van Damme, Senior Counsellor, OECD, “In an increasingly international environment – marked by a globalized and liberalised marketplace, globalizing professions, mobility of skilled labour, and international arena of scientific research and personnel, ... the national character of policy frameworks creates more and more tensions. Institutions already acknowledge this and are developing partnerships, consortia and networks to strengthen their position in the global arena.”

Meiji University's proposal, “Creation of Innovative Educational System for Sustainable Society and Urban Growth,” was selected for “Re-Inventing Japan Project” by Ministry of Education, Culture, Sports, Science and Technology, JAPAN. This is a five-year funded project aims at fostering human resources and strengthening the internationalization of universities; within selected category in particular, supporting collaboration with universities in Asia including CLMV countries. The “ASEAN dual-city joint workshop” was launched in 2017 as a flagship programme for the field of Architecture and Urbanism in collaboration with 7 other universities in Southeast Asia. Year 2 of ASEAN dual-city joint workshop was jointly organized by Yangon Technological University and Meiji University and was held in both, Yangon and Bangkok in 2018. During the eight-day workshop, students investigated a relevance of unique

characteristics of the cities, deepened thoughts on alternative approaches to resolve issues and developed proposals for the project site considering forthcoming developments and preservations. The structure and process of the workshop not only provides educational experience to students but also stimulates discussions through faculty development meetings, for faculty members and professionals to deliberate upon the current situation of architectural education and practice within the Asian context. Prof Masami Kobayashi, director of the workshop, argues that within the international trend of increasing mobility amongst architectural practitioners, universities and institutions in Asia must envision free movement of researchers, technologies and knowledge at events such as the special session on Architectural Education in ARCASIA ACA18.

Keeping Asian Urbanism as a key concept, it is not only possible to provide a platform for not just architecture and urban design, but also to create an interdisciplinary learning and research environment. “If university have a vital social function, it is to form intellectuals. If intellectuals have a function, it is to generate ‘ideas’. ‘Ideas’ are form of political and cultural imagination that can guide societies as they seek to manage change.” As Paul Hirst writes in *Education and the production of new idea*, 1995, Asian Urbanism is an ‘idea’, which must not simply idealise regional heritage and tradition, but must consist of skill and discipline, creativity and honour. Only with such underlining governance, will it liberate academicians and practitioners to deliberate changes that occur in the region. ASEAN dual-city joint workshop aims to continually promote and provide such opportunities until 2020.

UNIVERSITY

Ho Chi Minh City University of Architecture
Vietnam

Chulalongkorn University
Thailand

Royal University of Fine Arts
Cambodia

Institute of Technology of Cambodia
Cambodia

National University of Singapore
Singapore


National University of Laos
Laos

Yangon Technological University
Myanmar

Meiji University
Japan

PROFILE

in alphabetical order




Assistant Professor (non-tenure)
Katsushi Goto
Architecture, Urbanism

He is an architect/urbanist and researching on domesticity in ideal family home and public space allied to interior urbanism. He holds MArch from H&U, AA School. He is an architect at apartment co., ltd. Tokyo, director of design/research firm Squareworks, Mumbai and visiting associate professor CEPT University, Ahmedabad.




Lecturer
Hash Chanly
Engineering, Architecture and Urban Planning

He is a lecturer of Architecture and Urban Planning. He is responsible for Architectural Engineering Program at The Institute of Technology of Cambodia. His research focuses Landscape Design and Urban Planning. He received Master of Engineering from Toyohashi University of Technology, Japan.




Professor
Hnin Wint Yi
Architecture

She is an architect. She is also teaching and doing research on Architecture , Urban Planning and Urban Design at YTU. She received Master of Architecture Degree from Yangon Technological University and Doctor of Philosophy (Architecture) from Mandalay Technological University.



Lecturer
Anousa KHAMMOUNGKHOUN
Urbanism

He is a lecturer/practical teaching on urban planning and design in faculty of Architecture, National University of Laos, He is interested on urbanization control and urban development strategy, He received master of urban and regional planning from Khonkaen University, Thailand.




Associate Lecturer
KIM SOPHANNA
Architecture and Computer Lab Design

He is an architect and researching on low-income housing, public space, and informal resettlements. After 6 years working in VISPAN Construction firm, he moved, then teaching in Faculty of Architecture and Urbanism, also working in a computer lab to help students to intensive software skill using CAD, Revit, and 3D Lumion programs as a tool.




Professor
Masami Kobayashi
Architecture, Urban Design

He is a teaching scholar and an active architect/urban designer, who pursues strategy for preserving existing natural/built environment and promoting new development. He received a Ph.D. from University of Tokyo, a Master of Design Studies at GSD, Harvard University. He is appointed as vice-president of the university in 2016.



Adjunct professor
Antoine Lassus
Architecture, Urbanism, Landscape

He is a designer in architecture, urban architecture and landscape, researching into Bangkok's ancient districts and its communities. He worked for French and international projects with Bernard Lassus & Associés. He is the managing partner of Neovista international co. Ltd. Bangkok. He graduated as Architecte D.P.L.G. from Paris la Villette.



Assistant Professor
Phan Lam Nhat Nam
Architecture, Urbanism

He is an architect/urbanist and researching on traditional architecture, family housing, public space and resettlement issues. He holds MArch from KU LeuVen, Belgium. He is an architect in Ho chi minh city,Vietnam . His firm focus on housing and community project.



Associate Professor
Hiroyuki Sasaki
Urban Design, Urban Planning

He is a practicing urban designer promoting city restructuring and public space improvements. He is principal of Freedman Tung + Sasaki Urban Design, Tokyo office. He received a Ph.D. in Design Engineering from Kobe Design University, a Master of City Planning from UC Berkeley.



Visiting Lecturer
Jun Takahashi
Architecture, Urban Design

He is an architect/urban designer exploring the design beyond rational and strategic thinking. After ten years work at Maki and Associates, he founded DESIGN FIRM in Tokyo. He received the Master of Science in Advanced Architectural Design at Columbia University and MArch in Urban Design at Harvard University.



Assistant Professor
Junko Tamura
Architecture, Urbanism

She is teaching in the Urban Studies Research Group at the National University of Singapore, with her research focusing on spatial analysis and designs for upgrading / community participatory processes in African and Asian low-income areas. She received a Ph.D from the University of Tokyo.



Professor
Tomoaki Tanaka
Architectural planning and design

He is teaching and researching on architectural design, architectural planning and site design. He is a practicing architect as principal of FORMS. He received a Doctor of Architecture from Waseda University and a Master of Architecture from Yale University. He also serves as a president's staff for the university since 2016.

Brief History of Yangon and Overview of Selected Area for Workshop

by Hnint Wint Yi



Fig1: Growth of Yangon Before 1988

Yangon was formerly known as Dagon in the early 11th century (c.1028-1043). In 1755, King Alaungphaya conquered lower Myanmar and renamed it "Yangon", which means "ends of strife." It is situated about 21 miles from the Andaman sea thus became an important seaport [1]. Myanmar was colonized by the British in 1824 after the first Anglo-Burmese War. Yangon and all of lower Burma were seized in the second Anglo-Burmese War of 1852, and Yangon was transformed into the commercial and political hub of British Burma. The British constructed the new city on a typical British colonial grid system designed by army engineer Lt. Alexander Fraser, bounded to the east by the Pazundaung Creek and to the south and west by the Yangon River. Yangon became the capital of all British had captured upper Burma in the third Mglo-Burmese War [2]. As the capital of British Burma, the British set up many administrative and public buildings which are needed for the development of the city such as Rangoon General Hospital and Rangoon University. Yangon at that time was known as "the garden city of the East" due to its spacious parks and lakes in addition to the mix of modern buildings and traditional wooden architecture [2]. During World War II, Yangon was occupied by Japan from 1942 to 1945 and retaken by the Allies in May 1945. Many buildings were destroyed and damaged by bombings at that time. On 4th January 1948, Myanmar regained its Independence from the British Empire, and Yangon became the capital of Union of Myanmar. In 1989, the name "Rangoon" was changed into "Yangon" [2]. Yangon has expanded outwards in this period with the development of satellite towns. In November 2005, the military government moved much of the government to Naypyidaw,

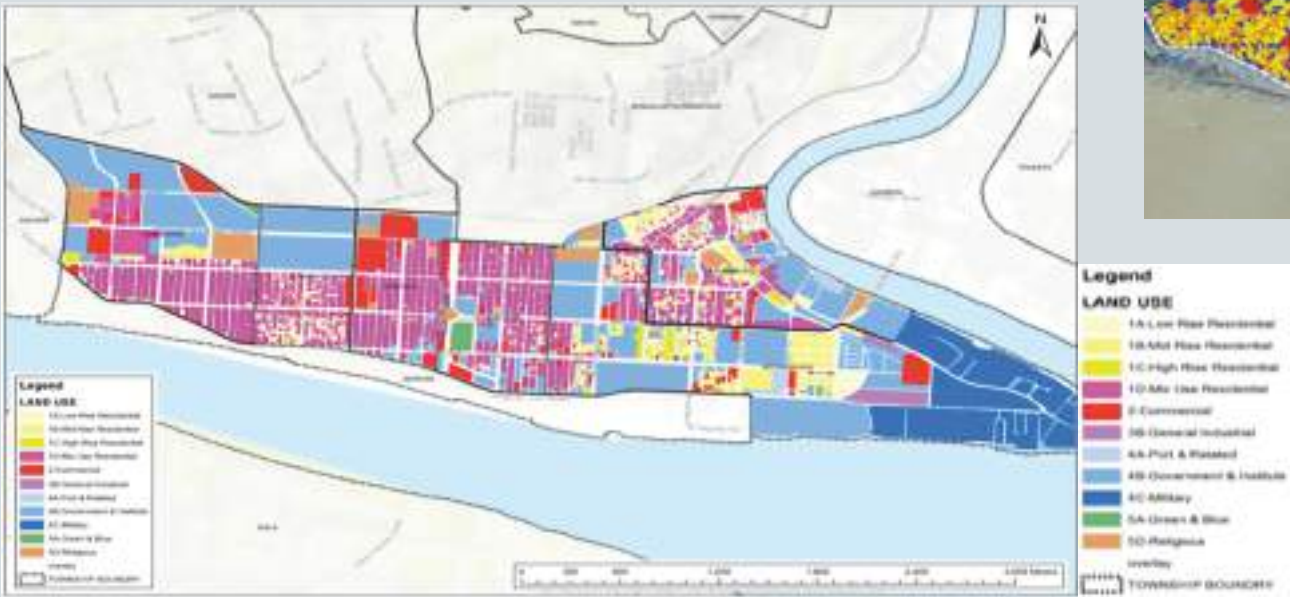


Fig2: Current Land-use CBD Area

Source: Urban Planning Division

Fig4: 3D Image of CBD Area



Fig3: CBD Area

Yangon has an urbanized area which expands with an area of approximately 505 km². The urbanized area was originally developed around Shwe Dagon Pagoda and area along the Yangon River still performs as the city center of Yangon, the CBD with high density of houses and shops.

The CBD consists of seven townships: Ryauktada, Latha, Pabedan, Lamadaw, Botahtaung, Pazaungdaung and Seikkan Township which is the selected area for the workshop. The CBD area has a long history and there are many heritage buildings which have the potential to become tourist attractions.

After 1989, the city has grown rapidly and new suburban satellite townships have been developed to accommodate the increasing population and to resettle inhabitants from the congested inner area. Although the city boundary has been extended, the CBD, which is bordered by Yangon River, remains at the southernmost part of the city. All important public buildings, commercial and trading centers, markets and shopping centers, and even warehouses remain in the CBD, so that most of the traffic flows are concentrating into the CBD. More than 4 million people from the suburb of Yangon city commute daily to the central downtown business area or the CBD for various reasons.

In the CBD area, there has not only been an increasing number of inhabitants but the daily floating populations have been increasing day by day. The utilization is congested, therefore other problems appeared such as lack of open space for recreation and traffic congestion due to high daily floating population and mixed land-use. Our proposal will make it a

well-function place to live and pleasant environment for land users and will improve the life of urban dwellers. Rivers and water are valuable natural resources for human life, the environment and national development. Moreover, since the beginning of civilization, rivers have played a major and important role in shaping and influencing the development of the nation and the culture of its people. Waterfront, the place connecting land with water, is an innate and timeless attraction for people. There are several dominant types of water features that are most attractive to human settlement for urban development. Therefore the waterfronts are often strategic areas, because its usage has direct or indirect impacts on the image of the place and on social equity [3]. In conclusion, Yangon CBD including the selected site should benefit from waterfront development not only in ecological and economical terms but also socially. Waterfronts need to be redeveloped step by step, therefore, the entire city can benefit from their potentials. They are challenges for more than one generation and need a variety of characters both in architecture, public space and art. Therefore, this current critical situation requires many valuable researches in order to determine the suitable solutions for the urban waterfront to provide tourism and recreational opportunities, and to increase the range of future benefits to the environment and the local community within the area.

References
[1] Anonymous, 2000, Myanmar, 7th ed, lonely Planet.
[2] Anonymous, Yangon, October, 2017 (<http://wikipedia.org/wiki/Yangon>)
[3] Zhang, L, 2002, An Evaluation an Urban riverfront park, Spokane, Washington Experience and Lessons for designer.
[4] Aye Aye Myint, Introduction to Urban and Regional Development Planning Law, 2018, Yangon.
[5] Tin Tin Kyi, Yangon Zoning Plan,2018.

WATERFRONT

by Jun Takahashi

Urban Grid

Yangon was a British colonial city at 19th century and the east-west grid street pattern was laid out in the downtown area at that period. This urban grid still remains and it has structured the city. In addition, many of colonial style buildings were built on the urban grid, and this remaining colonial heritage is one of the most unique characteristics of Yangon downtown.

Yangon is surrounded by the rivers at its east, west and south side, and this urban grid works as the wind paths of river breeze to cool down the city. So, historically and functionally, the urban grid is the critical factor for the Yangon downtown urban design and planning.

Heritage Buildings

As mentioned before, there remain many colonial stone buildings in Yangon downtown, which have various styles of such as Gothic, Renaissance and so on, and they were modified to adapt to the Asian monsoon climate by having deep eaves and verandahs to protect from the heavy rains and the strong sun lights. Since many of Asian cities have lost their heritages at the process of the modernization, Yangon colonial building are very valuable for the historic researches and for the tourism resources. Furthermore, they save Yangon from being a generic city which can be observed at other rapidly growing Asian countries as Rem Koolhaas points out.

Waterfront

During the British colonial period, Yangon functioned as an important port, and many of representative heritage buildings were built along the waterfront. In that era, the waterfront areas were the wide open loading yards for shipping, so those of the heritage buildings were mostly built at 200-300m apart from the river coasts. Along with the city development,

those open yards have been occupied by large scale warehouses, factories, port facilities with gigantic gantry cranes and so on. Most of waterfront areas are currently non-accessible and the harbor road, which functions as bypass road, segregates the downtown from the waterfront. The scenery of the waterfront has been lost from Yangon downtown. However, recently, the port functions have been transferred to the opposite side of the river bank to be more efficient for the contemporary transportation systems. This transfer is a great opportunity for the waterfront development to bring it back to the city and to impose new urbanities looking forward the future of Yangon.

Flood

Like other Asian developing cities, Yangon is also suffering from the flood, and its damage is expanding more and more. The reason for the flood is not only the recent global warming but also vulnerable swage system which has not been well maintained and improved since the colonial era. Most of streets in the downtown area have been paved with non-permeable asphalt, and surging monsoon storm floods the lowest sea level waterfront area. It is an urgent issue for the city to solve the flood problem.

Coexistence of formality and informality

The polarization of the gap between rich and poor has been a serious issue at developed countries in recent years. In Yangon, this issue can be observed more drastically, like other developing Asian cities, at the urban activities on the streets. Many of primitive manner markets are operated at the foot of contemporary skyscraper buildings, and there seems no law to control such operation. However, this informal activity presents the urban stir and bustle and creates Asian urban scenery of coexistence of formality and informality.

REFLECTION on Students' Work

GROUP E / The Relive Edge

The primary concept of this group is an extension of the existing urban grid until the river edge. By extending the urban grid, they preserve the wind path from the river and they embrace the waterfront area as a part of the urban fabric to break its occlusive condition. The artificial ground is designed on top of the port road, and the various spaces under the artificial ground is designated for the conventional market places to achieve the coexistence of formality and informality. This extension contains multi-layer slab buildings and those horizontal and light structures guarantee the sense of modernity by making the contrast with the vertical masonry heritage buildings. The slabs also provide various small covered spaces which work as shades from the strong sun lights and heavy rains. The building heights and configurations are carefully designed to preserve the view corridors from the critical viewpoints at the downtown areas and they bring the waterfront scenery back to the city. In summary, this group takes advantage of the existing urban structure and designs three dimensionally layered slabs above the ground to create new values at the waterfront.

GROUP F / YANGON Unity Gate

In current Yangon downtown, there is no plaza where people can get together and which symbolically represents the democracy. Group F started to design the target area as a big public open space. In other words, this group found the missing urban structure through the studies of existing conditions and

provides it by making the most of the opportunity of the site in a very drastic way of not having architectural structures above the ground. This open space reminds the once loading yards and ameliorates the waterfront scenery and the frontality of the heritage buildings along the river cost. Many fountains are designed in the new plaza, allocated at the recesses of the undulated surface, to provide small sales in a vast expanse, and they also function as water mists which cool down the temperature at the non-covered area. The water supply for the fountains will stop on the occasion of the large-scale rally to provide a wide open space which will support the democratic activities in modernized Yangon city. At the underground level, a huge water tank, which controls flooding, a historic museum, which bridges the past and the present, and the port road, which will not disturb the smooth access from the downtown area to the waterfront, are designed in their scheme.

Conclusions and Recommendations

The site and the goal for these two groups are same, but the design approaches are quite opposite. One is the extension of the existing urban structure and the other is the addition of new urban structure. In both of the ideas, they are admirable architectural solutions through intensive and serious study of issues and opportunities of the existing contexts, and demonstrate possibilities of the new urban developments at the waterfront.

WATERFRONT 01 / GROUP E

The Relive Edge

Venh Lay Ou (Institute of Technology of Cambodia)
 Ogasa Hiroki (Meiji University)
 Tei Kayou (Meiji University)
 Bui Minh Chau (Ho Chi Minh University)
 Kyaw Sin Thant (Yangon University of Technology)

Yangon is an old city in Myanmar and used to be under British Empire. The British moved the capital to Yangon and constructed a new city with a grid plan. As a legacy of the colonial period, there are many heritage buildings in the central business district (CBD).

The site is in front of the CBD, where most of the heritage buildings remain, across Strand road towards the river. Public garden and water bus station used to be located on the site, and we thought that the site must have been abandoned for a long time.

Nowadays, Yangon does not have enough public space such as park, plaza, mall, parking and night market. These public spaces are essential for the citizens because it provides them with a place to relax away from hard work in weekend and holiday.

Because of the lack of public space, our group decided to activate the edge of the site and reform the traditional market while improving water bus station.

Before designing a proposal, we have conducted site analysis especially to understand and respect the existing building and elements. From the analysis, we have identified following building types and facilities in and around the site: three bus stations, warehouse next to the port, heritage buildings such as hotels, embassy, banks commercial buildings and so on.

Additional clarification and a critical problem we found was that there is a traditional market along the street to the water bus station and separating truck from the existing road by creating a new road dedicated to freight trucks. Besides, we intend to provide Burmese to have modern lifestyles similar to neighbouring countries and comfortable living.

Finally, our proposal consists of plaza and public space for the citizen and tourists by respecting the existing building and the grid pattern of the city. Within site we have created a new waterfront for the citizen, such as public garden, night market, water bus station, pedestrian bridge and office. The proposal included re-appropriation of the grid pattern of Yangon city, which was separated by a big wide road from west to east and a small road from south to north. As the grid allow wind to flow into the city as it was aligned dominant wind direction, the proposed plan was organized by extending the grid pattern to the site.

Site Potential

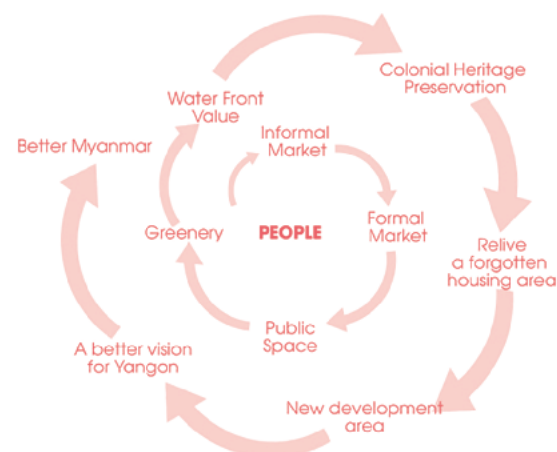


Site's Features



GREENERY WAREHOUSE LOCAL MARKET
 TRANSPORTATION SPORT RESTAURANT

Site Opportunity



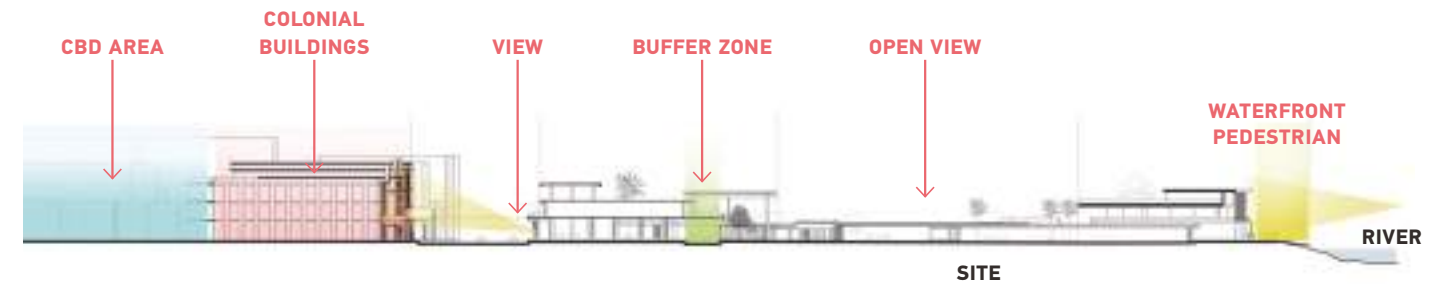
New Master Plan + Zoning Map



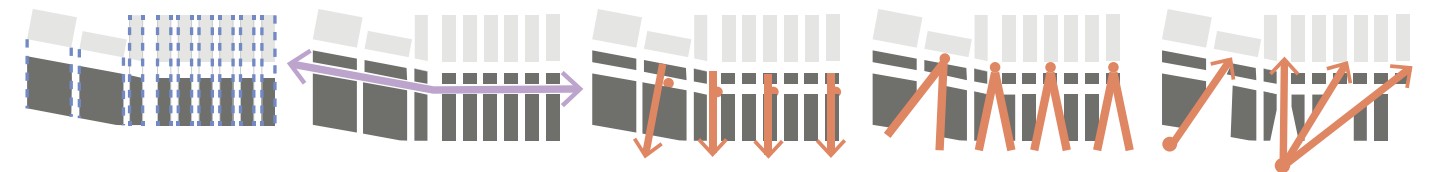
Office Museum Food market
 Bus&taxi stop Restaurant Informal market
 Ferry terminal Hotel Temporary market



Section



Design Concept



Follow the city's characteristic plan, divide the site into the same block, and let the wind energy from the river flow into the city.

Bring the site closer to the colonial buildings and create a service road in the middle of the site.

Focus on important historical buildings, creating a good perspective for historical architecture.

View from the colonial buildings, create a good perspective for the river.

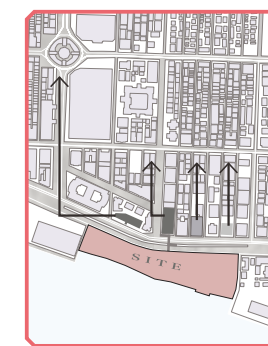
View from the water bus, create a good perspective for the colonial buildings.



The rain flows from a high point to a low place, and finally the dirty water flow into the river.



The wind from the yangon river flows through the streets into the city.



The colonial buildings around the area are one of the characteristics of the region.



Focus on the street of yangon, the street line divides yangon into one and other squares.



One of the characteristics of the city, the street divides the city into regular blocks.

WATERFRONT 02 / GROUP F

YANGON Unity Gate

Hmu Khant Myo (Yangon Technological University)
 Kittimont Kookasemkij (Chulalongkorn University)
 Takehiro Onodera (Meiji University)
 Hanae Sakamoto (Meiji University)
 Takahiro Wakayama (Meiji University)

Nearly 50 years of Military government in Myanmar had led to a situation where there is no democratic nature of plaza and public space in Yangon. Access and use of plazas and public spaces were controlled by the military government, as it would act the space for civil demonstration. In capitalistic society, the plaza signify the civil liberty, therefore we propose the plaza for the city of Yangon. Simultaneously, the proposal includes the buildings from colonial period to add historical layer and value to the plaza.

Apart from the issues of public space, Yangon faces severe flood during monsoon season. City sewage system is insufficient and the city often floods when heavy rain hits the city, the level of water goes up to seventy centimeter above ground level.

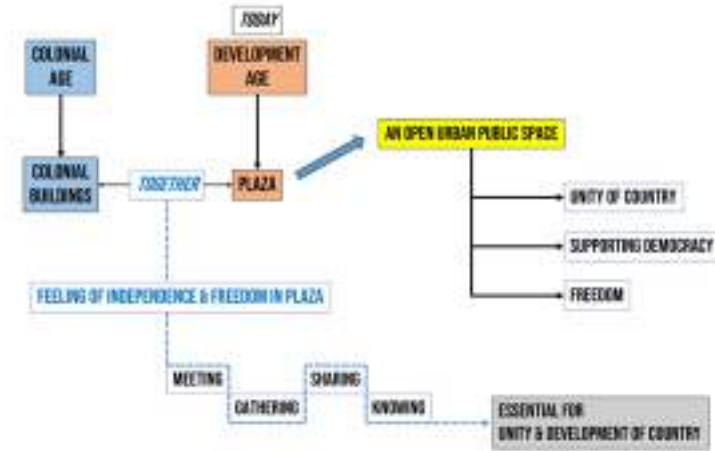
Another problem is the traffic congestion. The site is at the intersection of two major traffic flows: one kind of traffic is car and the other is water bus. Because of these two traffic systems are literally overlapping, this intersection is not functioning well.

To solve these problems, we identify that the site needs two functions in underground, one is water tank, the other is parking. Such functions work in tandem with each other, the water tank is used as parking when the tank is empty.

The ground level programs are organized and switched around according to day and time. The design of the plaza needs to respond to the programs and various situations, therefore the layout of the plaza is neutral. For example, on an ordinary day, the plaza is used by people seeing old colonial buildings, but it has a potential to provide space for democratic activity such as political protests and demonstrations. The water fountain is an essential element of the plaza as temperature of the city is so high and the water fountain keeps the plaza cool. As the plaza is located in the south of the downtown and there is dominant wind flow from south to north, it also contributes to cool the downtown.

This plaza embodies the meaning of Myanmar's freedom which has changed into a democratic society. It may create a discrepancy if the government tries to dispel the memories from the colonial era, as the proposed plaza is surrounded by these colonial relics. However we strongly believe that this kind of fusion of the present and past is necessary for the future of Yangon.

Development Diagram



Flood Problem FLOOD



REASONS

- 1 Underdeveloped rainwater removal facilities
- 2 Insufficient falling ability of existing waterways
- 3 Drainage problem
- 4 Inadequate tide gates

WATER TANK HEIGHT

$$(1200\text{m} \times 0.7\text{m}) \div 50000\text{m}^2 = 7.56\text{m}$$

Max Flood Height

Our Site Area



Future Port Movement

At present, yangon port is the port of yangon which supports export and import, accounting for 90% of domestic import and export share. However, the government will transfer the function of the port and the land that will become a black space in the future will be developed.



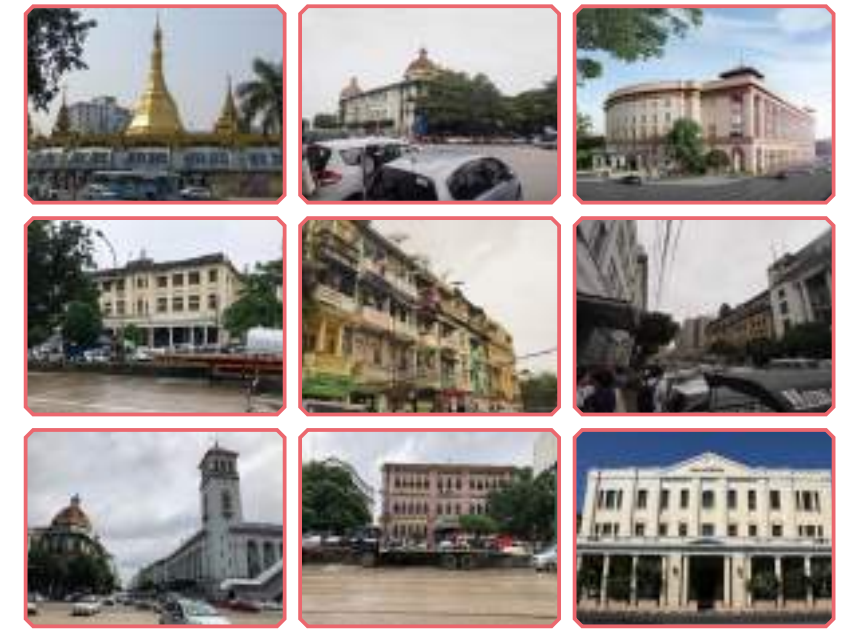
Histolical Map



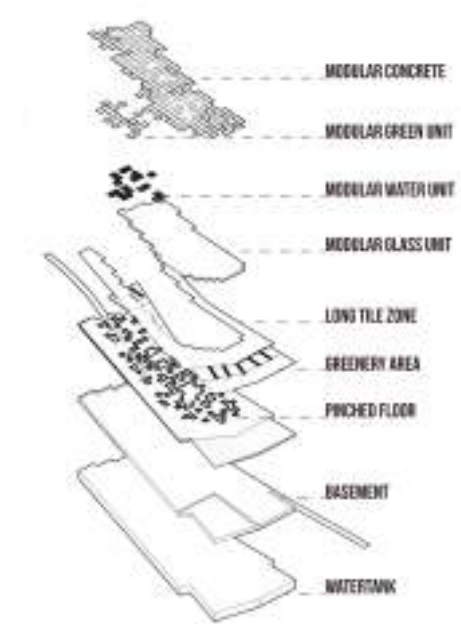
Colonial Style Buildings

Pagoda

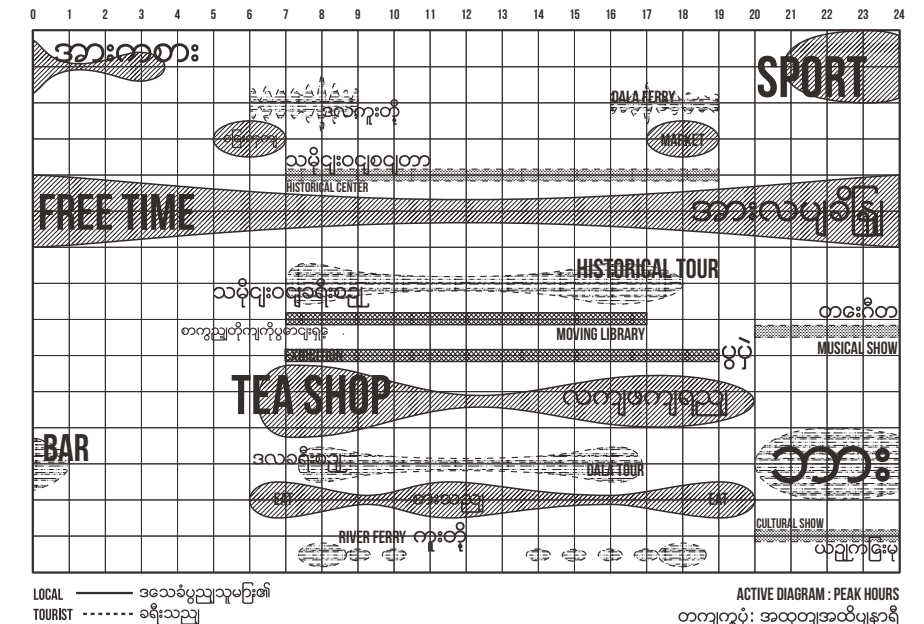
Historical Tour By Yangon Historical Trust



Composition Diagram



Activity and Time Diagram



Long section



Short section



POST INDUSTRIAL

by Junko Tamura

Post-Industrial society in the cultural dynamics of the technetronic age is commonly recognized as also the information age, which in all can be understood as the *third wave* advocated by Alvin Tofler (1980). A third wave is indeed followed by the first and the second where briefly speaking, the *first wave* is the agricultural revolution that took place thousands of years and is a life that is organized around the village. In this society, economy was decentralized and production happened at its own necessities. The *second wave* is the industrial revolution, which took three hundred years to mature. The consequence of this made human life to split into two: the *production* and the consumption, which created a new organizational urban formation to achieve maximization in scale of networks. The centralization meant concentrated capital, energy, and people as opposed to the decentralized economy of the first wave. The *third wave* is essentially driven by two factors. One is by the rise of dynamic new industries that are based on scientific breakthroughs. This includes the emergence of quantum physics, information theory, space sciences etc. The other is enhanced through manipulative abilities via computers, which enabled data processing, artificial intelligence, fuzzy logic etc. Both factors lead to the establishment of the theory of *complex system*. With this new concept, we can understand the city also as complex system for which the city is formed in a self-organized manner (Paul Krugman, 1996) where the small difference in individual's preferences provides a feedback system between the environment—organizational urban formation—and makes the *whole* to be *more than the sum of the parts* (Herbert Simon, 1969). Observing this feedback system on a macro-level, there appears an emergence of new

society, which can also be understood as the societal *events*. The Post Industrial group in this workshop aims to think of how the third wave that ties in with the theory of the complex systems affect architecture and urban space in the context of Asian urbanism.

Looking at students' proposals, we can see that both schemes structure their narratives based on tourism industry as one of the potential economical drivers in the future scenario of Yangon city. However, the architectural / urban interventions they have proposed are not necessary focusing on the needs of the tourists and serving in accordance to their preferences, but rather, the space is designed and programmed targeting for the local people. This makes more sense because the project site is currently surrounded by residential areas inhabited by the locals and if we do not consider this into account, the waterfront development will lack in the sustainability of social systems and will lead to another gentrification of the area just like any other touristic cities around the world. Therefore the two proposals attempt to optimize services for the local people who use the space on daily bases and will create new identity elements of the city overlaid onto the historical context. This is believed to strengthen the authenticity of the place by which as a result will attract the tourist even more. Despite the scale of the project that impacts on a macro-level, these schemes are designed more from a bottom up approach at the same time, and therefore will empower the locals in the process of place making happening on the micro-level. By engaging them in such a way, the true users of the space has control in negotiating the space between the other users—in this case are the tourists, once they start to also occupy the space.

Another very important aspect of Asian urbanism is not to forget that many of the cities were constructed during the second wave period mentioned earlier on and massive concretization of urban areas were implemented by colonial countries, which disturbed the natural ways of designing resilience that historical context once had. This is not to deny or criticize the past in which urbanization was necessary to achieve maximization in scale of networks, yet it is also non-negligible the fact many Asian cities are facing a moment of reconfiguration in urban areas to combat some of the issues they are currently facing due to this massive concretization. In the case of Yangon, the city was built on top of a landscape with rivers and water catchment areas that absorbed the heavy rainfall during monsoon seasons, and the consequence of urbanization had lead to causing constant flooding that are affecting people's everyday. Focusing on this point, group A had established a green network by utilizing the existing green spaces and linking them with integrated network system that includes swales and streetscape to facilitate public activities such as cultural festivals and events that Yangon people enjoy. This will provide two significant points beyond a physical network. One is to use this green network as permeable spaces for the rain to drain and to absorb water, which hope to reduce the flooding, and to provide new public spaces that are critically lacking in the city today. These spaces will maintain as green open areas during the ordinary moments, perhaps slightly exclusive in the sense that creates a heterotopic atmosphere,

but when festivals occur, either periodically or spontaneously, will change its mode and turn the entire city into an event. Deleuze (1969) explains that "unlimited becoming becomes the event itself" where *event* is the ontological realisation of the eternal truth of the *one*, "the infinite power of life"; (Alain Badiou, 2005) and it is also a synthesis of the past and the future. This means events are as such that transforms a state into emergence of a new society, but are *beings* that cannot be expected, thus must await for it to just happen. In this, architecture plays an important role as to how it becomes a setting for the emergence of *societal events* that might occur one day in the future. Tapping onto this idea, group B attempts to facilitate the existing urban stock—the industrial buildings, through adaptive reuse, with few new supplementary buildings added where necessary. However in all, the intervention aims to be as minimal as possible. The spatial attributes of void and mass, which acts as attractors—or identity elements of the city—aims to mobilize people to traverse around the area. With the effect of such centripetal and centrifugal forces driven by the attractors, the site is expected to become more dynamic and diversified once the tourists will also be engaged in activating the area in the future through negotiation of space. Instead of contestation of space, they will negotiate the space and through this feedback system, identity elements will slowly evolve into the emergence of new culture—the societal event.

POST INDUSTRIAL 01 / GROUP A

Cultural Nest of Yangon

Hsu Lai Yee (Yangon Technological University)

Chantrea Pol (Royal University of Fine Arts)

Yu Heng Lim (National University of Singapore)

Takuyo Fuse (Meiji University)

Nagi Aoki (Meiji University)

The site, in the CBD area of Yangon, is very isolated despite of proximity to the downtown. It is located between the Strand Road and Yangon River. As opposed to the downtown side, the riverfront is occupied by post-industrial fabric. The notion of post-industrial development must be understood as a dispersed but inter-connected system that reveals characteristics of Yangon's future developments. The proposal consists of public spaces interconnected by green paths which enable to link the current and future developments, while the site acts as the main node of the green network. Within the context of post-industrial development, the green path is not the only visualization of connecting one node to another; but also it confirms the implementation of the resilient flood management system. In this network, the site acts as a starting point of the trail that connects the flea market, unused greenery, public space and CBD area, while the city becomes walkable and it improves traffic conditions.

Further, we emphasized such green urban intervention by creating the main node of the ecosystem in the site in order to retain Yangon's characteristics. The ecosystem keeps the balance between man-made scenery and nature. This ecosystem works as Cultural Nest of Yangon which nests and hatches the urban potentials of Yangon.

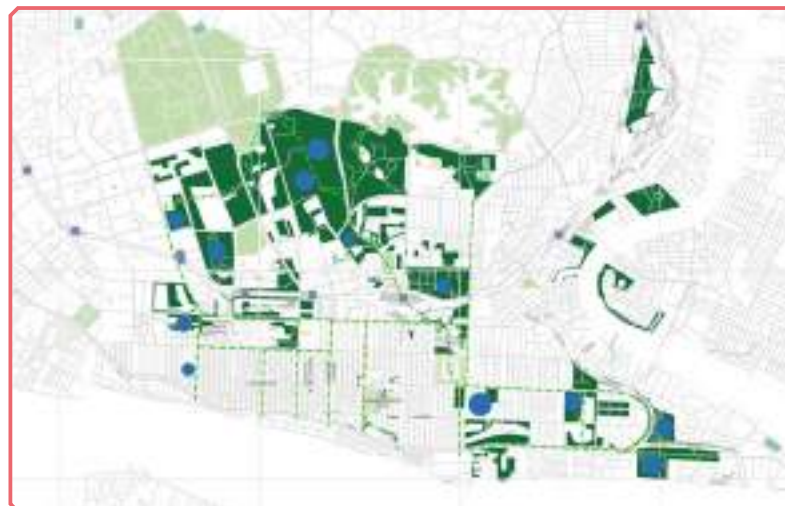
The center of the site is proposed to become the plaza and theatre to watch sceneries on both sides of the site, heritage buildings across Strand road and activities on the river. The plaza is planted with Buddha trees to create the essence of Buddhist country. Its primary function is to provide a grand area that holds a large number of people who want to enjoy green space daily or the variety of festivals in Myanmar. This plaza becomes the starting point of the green network within the master plan.

On the left side of the plaza, to highlight man-made scenery, we have turned ship warehouse area to an art space. Additionally, the other warehouses are renovated into water purification house which is open to the public. Visitors are able to see the memory of the industrial past which is now adopted and cleaned as to preserve Yangon port and lifestyle identity. It can also be considered as a symbol of post-industrial development within the whole network.

Area of Implementation in Yangon City



Green Connection



Urban plan showing the proposed green connection that links existing green spaces

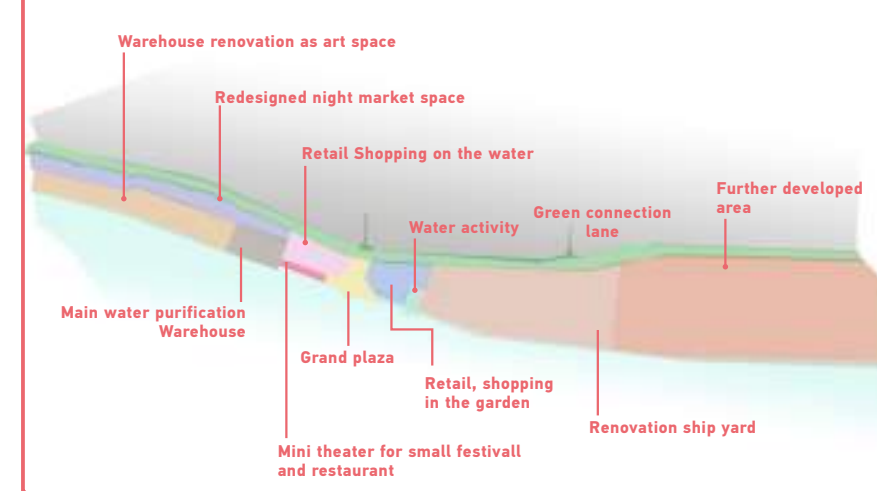
Religious and Cultural Connection

- THETAYATTAW MONASTIC COMPLEX
- SOCIAL AND CULTURAL CORE
- CHINATOWN
- THEINGYI ZAY & ENVIRONS
- INDIAN QUARTER
- OLD ADMINISTRATIVE CORE
- SECRETARIAT ENVIRONS

Urban plan showing the proposed green connection that links existing religious sites and cultural districts



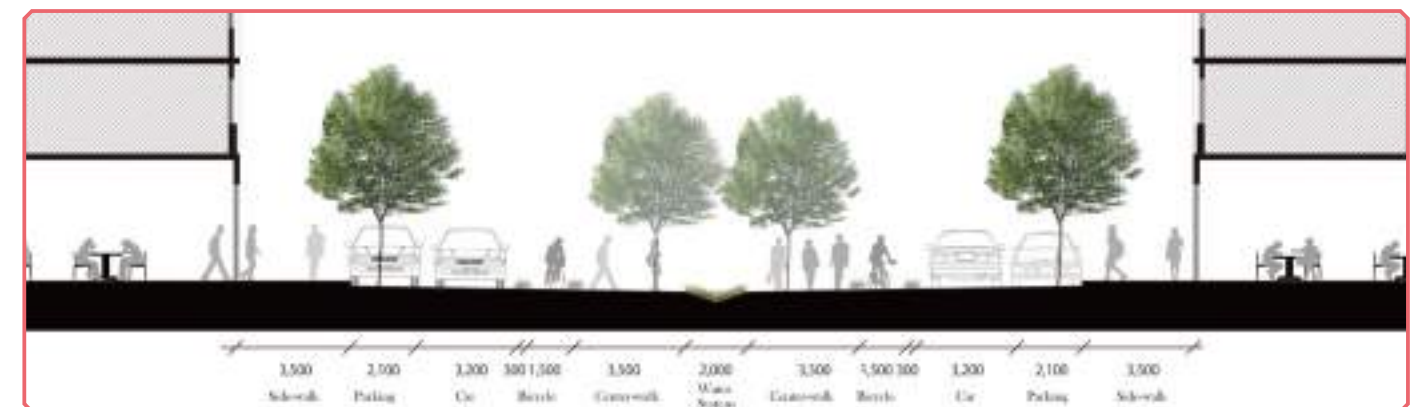
Masterplan



Urban Flooding Prevention System

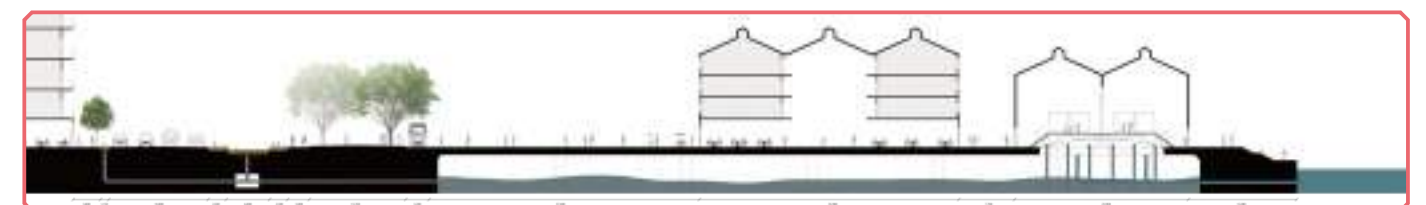


Road Section



Section showing the walkable proposals to be implemented on the roads of Yangon

Site Section



Section showing the re-industrialisation of existing warehouses into a water purification and tourist destination

POST INDUSTRIAL 02 / GROUP B

Seeding the Pearl

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Bun Hai (Royal University of Fine Arts)

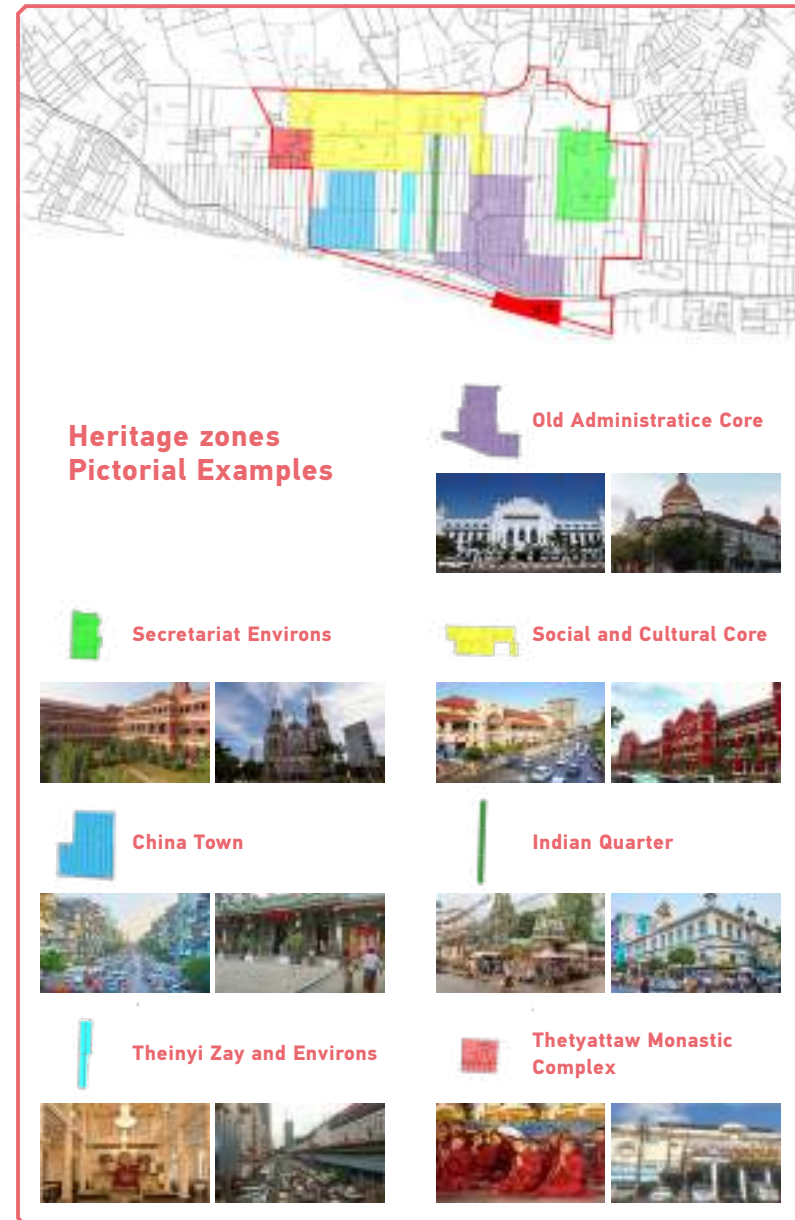
John Lee (National University of Laos)

Considering the current economic and cultural situation as well as the future developments of Yangon, the proposal is to keep the authenticity of the waterfront area while injecting new changes that would help Yangon jumped in the competition with other cities in the world. Looking at the larger context, there is a series of developments happening around the city center. This emphasizes the importance in the waterfront area as a part of the transport system to bridge these developments. While these developments are indeed beneficial for Yangon, they also possess threats and challenges. The treatment of the waterfront is critical to ensure what is uniquely Yangon will not be pushed away by modern development; it has to be financially sensible. This is because it would be difficult to demand heavy financial support for this area due to the extensive support the developments surrounding area need. Therefore, minimum intervention is needed. The site on the waterfront is full of heritage, bustling traditional markets, and co-existence of different ethnicities. Learning from Tsukiji market in Tokyo, the traditional market potentially becomes the heart of the city, attracting local and international tourists while still preserving its tradition. The masterplan aims to boost the development of Yangon while preserving its heritage with minimum intervention.

The proposal suggests reusing the existing structures to accommodate contemporary and traditional functions. The repurposed structures still tell stories of Yangon's past while serving the current society. An example of such iteration is to repurpose containers in the current port into spaces for workshops for Yangon's performing arts and crafts. However, repurposing such structures is not necessarily done only by injecting completely different program. This also can be done by inserting another layer of activity into the existing space. The current industrial area on the left of the container port is repurposed as a market, port and eateries at the same stop. These unique experiences would be attractive to tourist and thus generating more income to Yangon to develop more.

Meeting people of Yangon's basic needs, preserving Yangon's heritage and developing Yangon into a modern city, have to happen simultaneously. This is the reason why minimum intervention is essential to free up available resources and achieve as many things as possible.

Heritage zone and Character Precincts

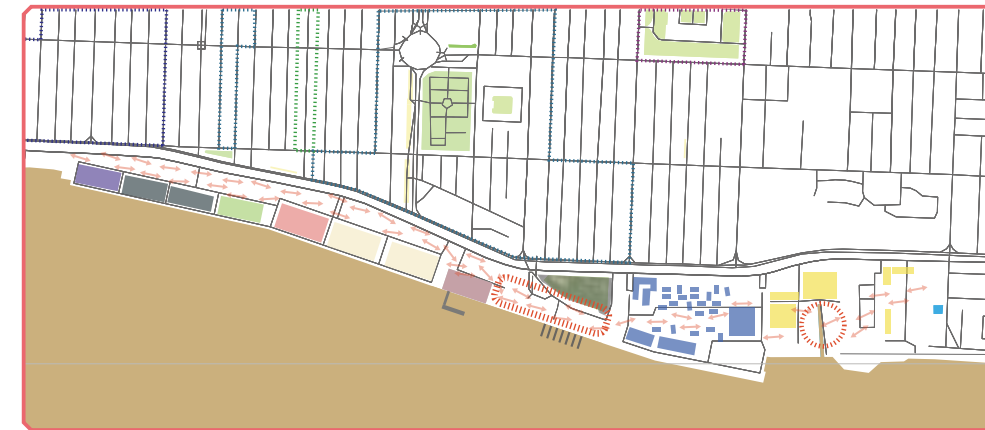


Development areas in Yangon.

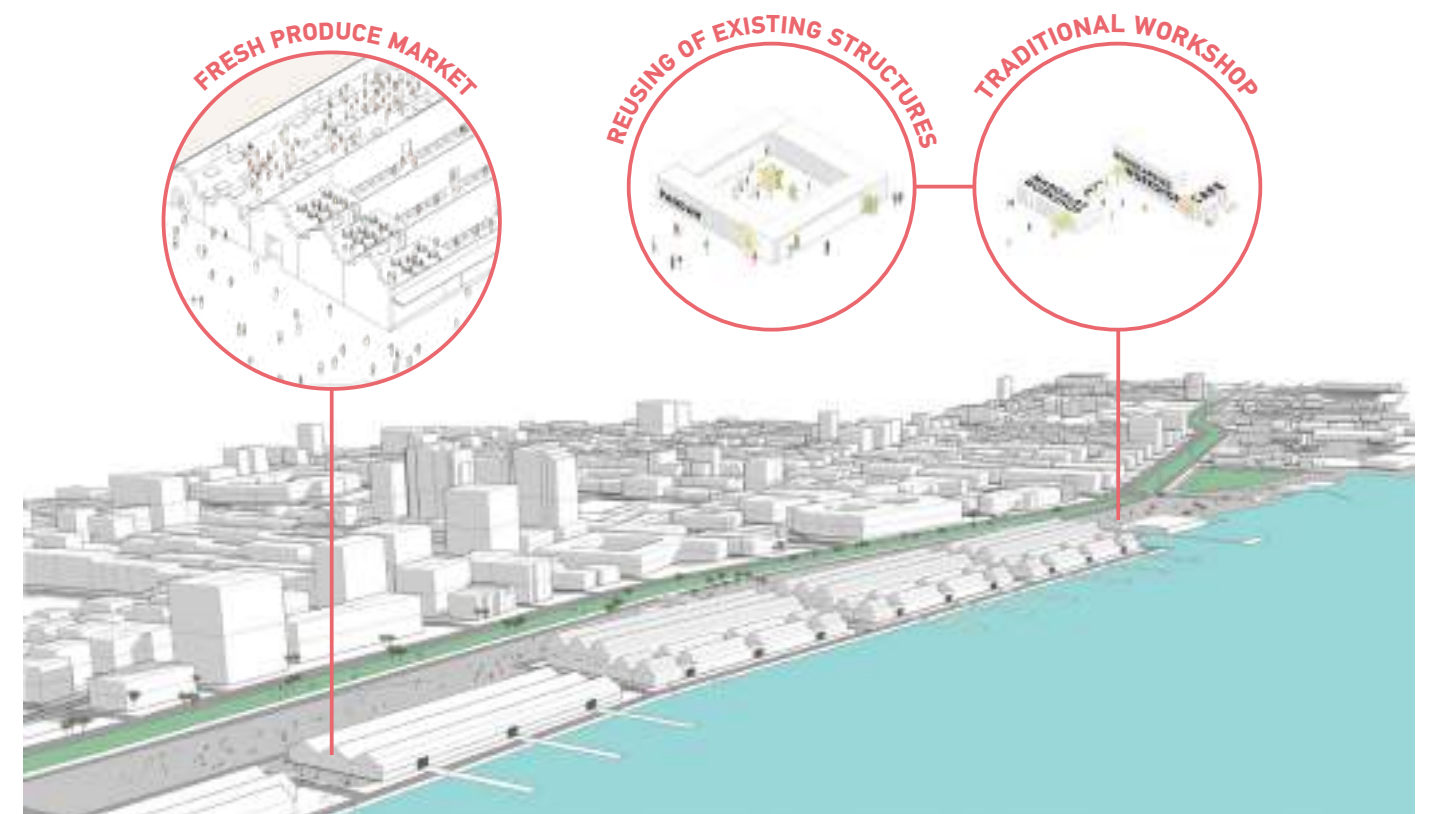


Yangon City Development Committee

Proposed Masterplan



- HERBS AND SEASONINGS
- MIXTURE OF RAW FOOD
- SPICES
- FOOD COURT
- FRESH PRODUCE
- PORT
- PLAZA
- CHINATOWN
- TRADITIONAL + CONTEMPORARY ART DISTRICT
- PERFORMING ART CENTER
- SPACIAL POTENTIAL OF MOVEMENT
- PORT FOR SMALL LOCAL BOATS
- SECRETARIAL DISTRICT
- INDIAN QUARTERS
- COLONIAL HERITAGE SITE
- WET MARKET



Bird-eye view proposed masterplan with minimum intervention.

HOUSING

by Kim Sophanna

Throughout history, cities in Southeast Asia, such as Phnom Penh, Vientiane, Ho Chi Minh, and Yangon have gone through a steady process of urbanization and economic modernization. This change is clearly following similar to the phase of development observed in the prime cities in Southeast Asia a decade ago. Since cities rarely grow in the way they have been designed (Robinson, 2012); people and time are affected by its growth. In time, Lakes are filled in, street patterns are altered, roads are widened, agricultural land and irrigation systems are destroyed, and new residential areas are built instead. Also, the main sign of the transformation into this large city is depended on private investments that change the mix-used current habitat areas into a commercial center, high-rise buildings, and luxurious accommodations. Subsequently, the city provides many opportunities for poor people from rural area pulling into the city; this rural-urban migration causes more and more inefficient and spontaneous development which is a source of many problems. As a result, the city becomes more crowded, the land prices go up, and affordable housing is diminished. One of the examples is the city of Yangon initially restoring a new face by 2010 by reforming political and economic structure, and the private sector's participation and involvement. Thus, the urban population is dramatically raised due to migration increment. For instance, 53% of all people migrated from their original place to seeking employment (Myanmar Census, 2014). This indicates that most of the adults migrate to the city of Yangon, as Yangon is the economic hub of Myanmar and base of economic growth and the main administrative center. At the same time, the huge population growth has made an urban sprawl in a short period for reasons of a shortage of public services, lack of safety, lack of drainage

management, and no public green space within the city center. In fact, Bo Ta Htaung Water Front has existed in the downtown area and located along the riverbank and along Strand road. The site is 250-meter-long (length of waterfront edge) which should be set up as a communal space, combined with housing to attract tourists, and regulate the water system as well. In return, tourism (smoke-free industry sector) is the best for the waterfront site to boost its economic growth. While tourism grows, it opens needs for other services, especially agricultural produces and farmers' artifacts sold in the market as most of the Burmese practice farming, and the economy is based on agriculture (Mr. Win Myint presented, 2018). It should promote the development by stakeholders become a diversified tourism center associated with intangible cultural heritage, vernacular architecture, and tradition of the daily life of people around there. Besides this, communal space should be covered with the rich greenery of grass and trees to reduce the impact of urban heat, especially reducing heat generated by the construction and energy used in houses. According to the Kyoto convention based on the environment itself, particularly in the field of water resources, the city must manage and develop a drainage system that collects and cleans a large basin. From this point of view, the city must encourage people to be concerned with their own environment by keeping all types of dwellings in this district, including the families of all levels both rich and poor people. If there is no clear plan, the city development will be dominated by financial opportunities in one particular area without infrastructure. Such development cannot meet the demand for urban expansion, and without city infrastructure, the development will be stagnated in the short term.

REFLECTION on Students' Work

Bo Ta Htaung Water Front may be challenging for the teamwork because the site is different from the previous year's workshop in Ho Chi Minh city at District 8 which is far away from downtown. Yangon site is along the Yangon River and Strand Road where the heavy-duty commercial vehicles from the ports bypass regularly. Otherwise, the site is the main route of many water taxis where people are living at Dala and Seik Gyi Kha Naung to pass by every day. It is hard to change the waterfront to housing project where this place surrounded by a rich mix of British colonial buildings and Buddhist stupas. Today the place should have been proposed as an open public space as the site is located next to Yangon River and in front of the old city center. However, when one project to be approved, it is an inevitable consequence that the function of teamwork is reduced to compromise the project. It has been thought that the way housing programs are appreciated in order to fit the local surroundings and bring benefit to the community. The housing project turns itself into accommodation for attracting tourists' spot. Moreover, this approach will allow the city to build high-rise projects on the riverbank and achieve the development of modern waterway transport systems. These developments include high-end and environmentally-friendly residential homes to create a new identity of the existing old city based on the preservation of historical and natural works. This makes the city unique in the world while prioritizing economic boost to enhance the city's attractiveness to all types of tourists.

GROUP C: "Flexible Yangon". The idea was to create a new architecture to respond to the needs of Yangon's traditional social wellbeing activities and urban space, while looking at the general situation of housing. The students discussed the housing arrangement and proposed a long-term housing supply that became an opportunity to be integrated into the most diversified activities. The extension of alley axis "Wide Plan" is a good idea to connect the city landscape, turning the site into a tourist attraction. However,

there are a few critiques of the new land use and massing city composition. The proposal violates public garden, eliminates the Seik Kan Thar Park. The form of the master plan and the building is isolated from nature and inconsistent with topography. Also, the masterplan did not give the opportunity for public pedestrian walking along the riverfront as its block access.

GROUP D: "Full Moon Garden". Group D manipulated the design of negative space to connect with the existing cultural heritage. Their residential project focused on inspiring the standard living of the surrounding community. The problems, including public transportation, green space, and heritage preservation were discussed and they designed the site into a new multi-purpose, high-class residential complex which attracts tourists. One of the critiques was a lack of skywalk or underground walkway where there is a mix of activities across the road. In short, Group C and Group D have the same goal that is to prepare the site as a hub for tourism. However, there are different designs and concepts. Group D was more logical where there is more greenery for the public interest, keeping the Seik Kan Thar Park and creating a riverfront garden to welcome pedestrians whereas Group C proposed more building coverage area than open green space. The following points should have been thought:

- demonstrating urban planning regulation regarding the laws of protection of riverbank which is public land cannot be constructed,
- showing how to deal with a noisy Strand road with busy traffic,
- also considering the flood level and studying the past and future of waterfront to the sea level,
- be aware of waste disposals and the waste management drainage system that the historical water source.

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HOUSING 01 / GROUP C

Flexible YANGON

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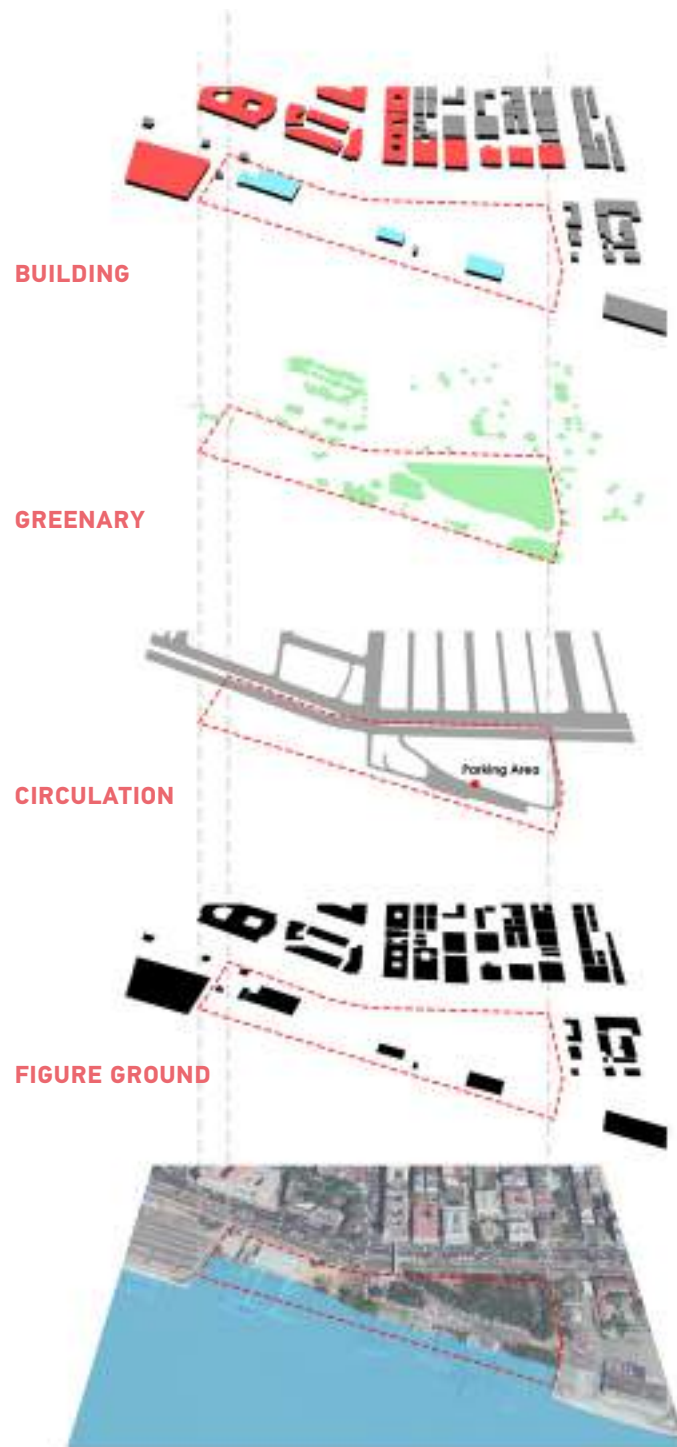
Miki Katayama (Meiji University)

Yangon, the largest economic center of Myanmar, is composed of 33 townships and has a population of about 8 million in 2017, about 5.2 million in 2014. Because of the increasing urban population, housing shortfall is inevitable. The government has announced “million homes plan” to fulfil the housing need. However, in the last fiscal five-year from 2011 to 2015, the total housing units provided by the government did not meet the target. According to the housing provision in Myanmar, upper-middle and high income households live in housing built by the private sector; middle-income households often occupy formal, but low quality housing; low-income households live in slums and squatter settlements, or in low-cost rental housing.

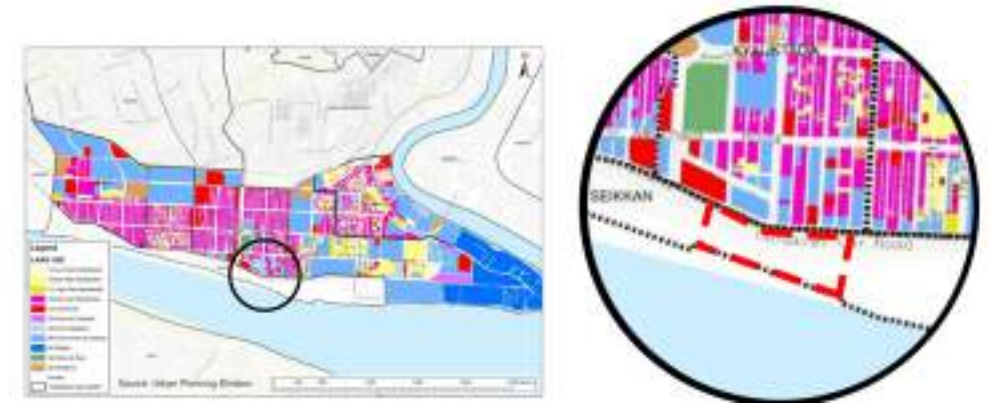
Knowing the strict conditions of housing in Myanmar, it is apparent that fulfilling the housing needs could not be done in a short time. Combining “old” and “new” housing is a good way to improve the quality of people’s life in Yangon.

We analysed the existing environment, and understood that “old” condition consists of many historical buildings and green area. For example, some embassies and official buildings are around the site along the city pattern, three ferry stations inside the site are waterway connections with Dala area. Inside the site, over 50% area is greenery. We decided to keep the city pattern in the site to connect with the old city, keep some greenery for the public spaces and keep one ferry station for Dala area. Our interpretation of “new” is that the site will be an area for major pedestrian movement because the site is a waterway which connects CBD and Dala area. Therefore, we added apartment, commercial, hotel, workspace, restaurant, gallery and public green to create a new business center to provide more basic services. However, the city pattern does not strictly follow that of the old city; for example, we added a public park near the apartment area to enrich family and community activities. We kept the main street pattern to connect the old city center to the ferry station directly and added more restaurants and shopping malls to provide leisure and shopping. In addition, to attract more foreigners or young people to work and travel in Yangon, we made modern workspaces, galleries and hotels to fit their needs. Combining “old” and “new” in our site, we made a possibility to provide everyone with a flexible area in Yangon.

Existing Built Environment



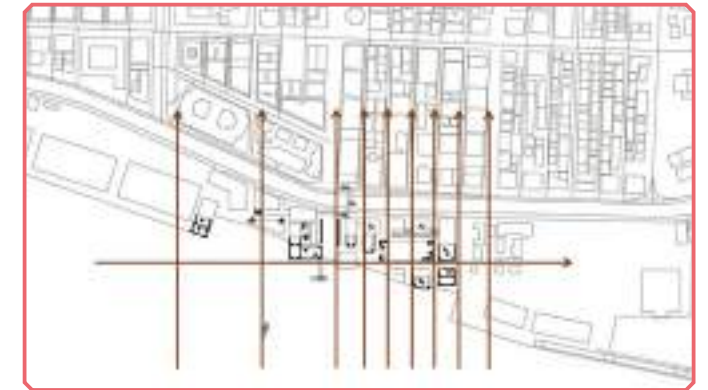
Current Land Use



Wide Plan

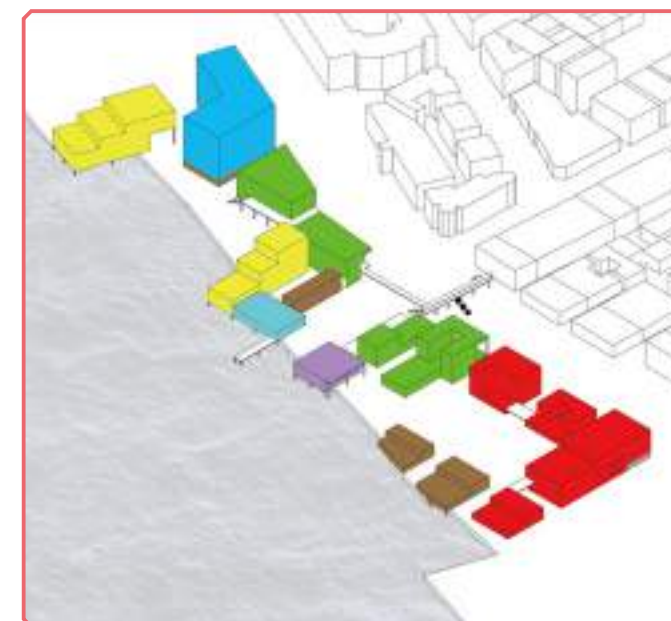


City pattern extended



Be well ventilated

Bird's Eye Sketch



Land Uses & Massing Composition

Apartment	Restaurant
Commercial	Water bus
Hotel	Gallery
Work space	Parking

Living with Heritage

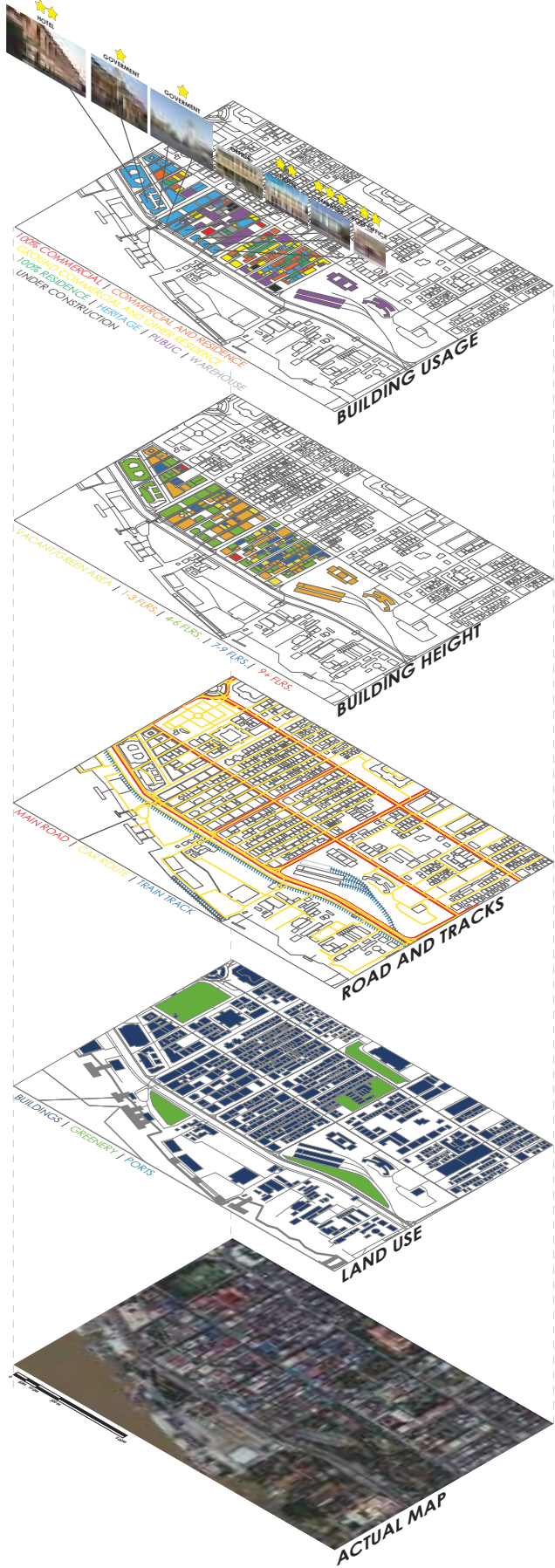
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Tatsuhiko Hashimoto (Meiji University)
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Haruka Nagamachi (Meiji University)

According to YCDC(Yangon City Development Committee), the future plan includes a proposal for railroads, buses, water transportation in CBD area where many domestic and international tourists visit. In spite of many visitors, there is a lack of accommodation and even homes for local resident. Our proposal is to supply homes and accommodations tailored to their needs. It was found that there are many historical buildings including Pagoda and a guided tour to visit them. We felt that it is a unique opportunity in such tour. So, we wanted to design a facility to disseminate Myanmar’s traditional crafts and historic character and incorporate it into the tour to contribute to the city.

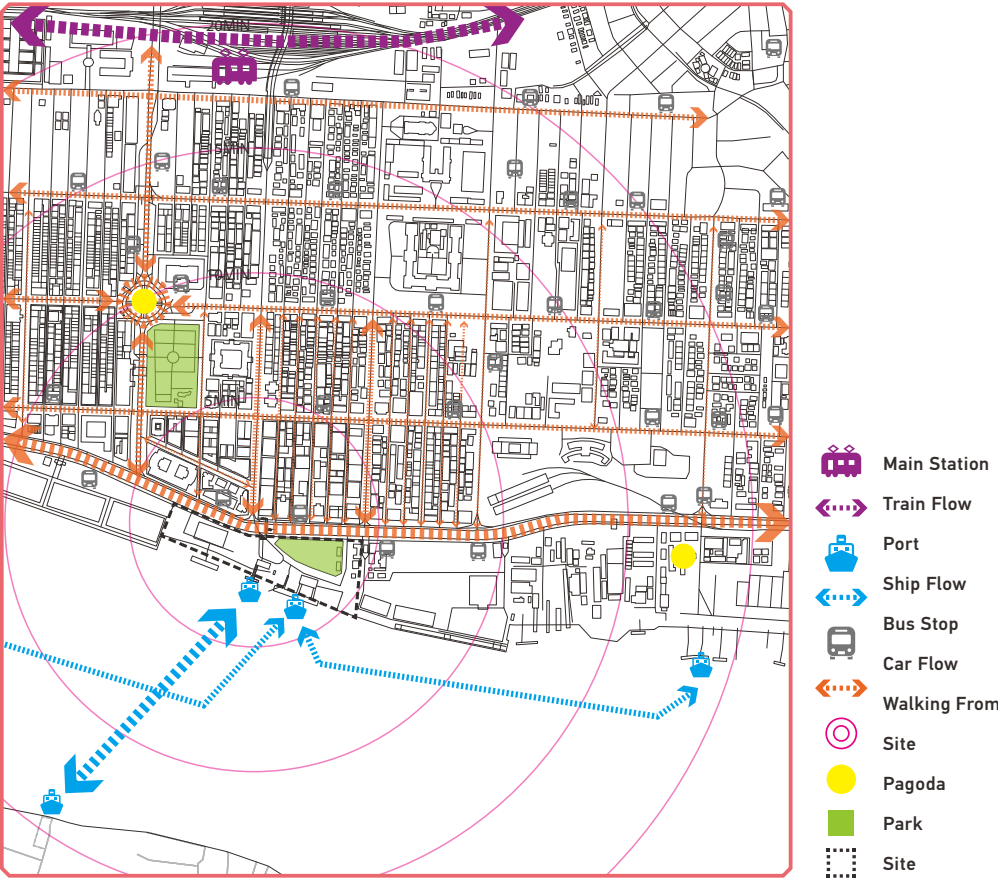
The proposal consists of high-rise and low-rise housings. High-rise housings are to respond to rapid population growth and for international visitors’ accommodation. Low-rise housings are for the elderly. It has a workshop studio where seniors can teach visitors their knowledge and skills of traditional craft and history. Artifacts made by them are sold as souvenir at hotels and outdoor markets. Besides high and low rise housing, we prepared various housing types such as shop-house, hostel and service apartment.

The proposal includes cultural institution, history museum and civic hall, also upgradation of water bus terminal and bus station to create sustainable linkage to existing heritage tours. We respect the history and culture of Yangon and aim to make a mechanism that can insert them to future generations and experience for international visitors. The proposal promotes the future development of the waterfront area by strengthen the existing resources and function while newly designed spaces shape the future of Yangon.

Site Analysis



Circulation Map



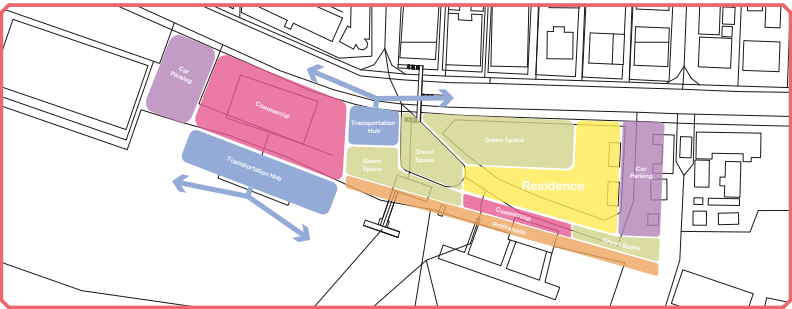
Bird's eye view



Zoning map



Program map



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ASEAN dual-city joint workshop 2 | Yangon, Myanmar

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