

SHOPHOUSE SERIES REVITALIZATION PROJECT

Redefining Tropical Workplace and Work Culture.

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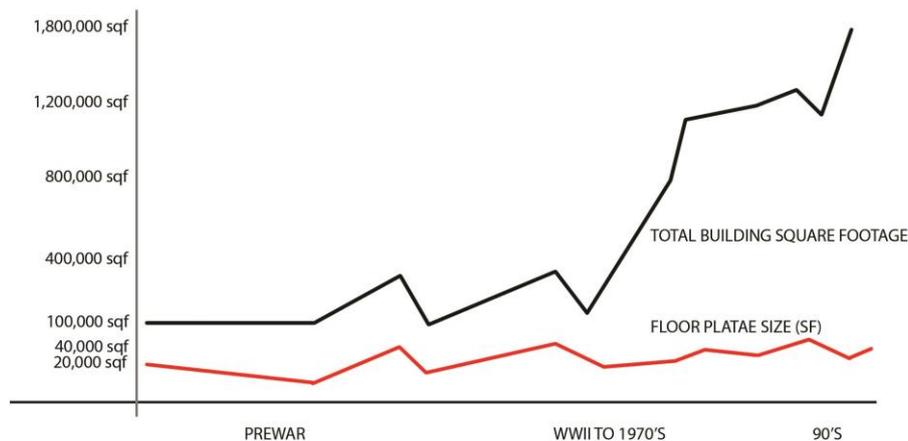
The issue of sustainability and human's culture in the age of consumerism

The concept of sustainable architecture these days may always be related to green technologies or strategies such as passive design or active design. Such technologies could response the need of renewable energy, but the number of carbon dioxide released to the atmosphere, which is the main cause of greenhouse effect, might not be much different without the existence of these devices. What we need to consider might not how to reproduce new energy, but how to reduce the number of carbon that is released, in other words, changing human's consumptive minds. Can architecture change human's culture ?

Architecture can't be separated from technology, but architecture is always a product of a culture and always has an impact to the human culture itself. This cultural aspect might be one of the most important thing that we forget when we think how to reach sustainability. What these green buildings do to human culture probably is the real matter. Some reports said that green products are actually make people less aware of sustainability. It creates higher demands of using the natural resources and end up consuming more of it.

Today's workplace and daily activities

Since the invention of elevator, and the industry revolution, civilization has relied too much on tall buildings. The image of workplace in the 21st century can't be separated from tower blocks. High density and using space effectively are extremely important, but building tall doesn't always mean creating higher density.



The change of floor plate efficiency ratio from pre-war buildings to the modern buildings.

(Source : Shawn Gehle's Lecture at TEDxVeniceBeach)

The fact is the occupation ratio or the number of people that are served by tall buildings are not much different to the pre-war buildings that had much smaller total floor spaces. Tall buildings require a lot of not occupy-able spaces such as mechanical and electrical rooms. A lot of spaces are also not used effectively and remained empty. Rather than providing space as much as possible or as big as possible, providing effective and efficient spaces is more important.

Mobility also might have an effect with the occupation of workplaces these days. The development of mobile technologies such as laptops, smartphones, tablets, make people could work everywhere. Fixed, static workplace became less and less efficient as people spend more of their office hours outside their office. Flexibility of workplaces might be the next thing that we might need to deal with. There is no point of providing green building that some of its spaces could not be occupied effectively.

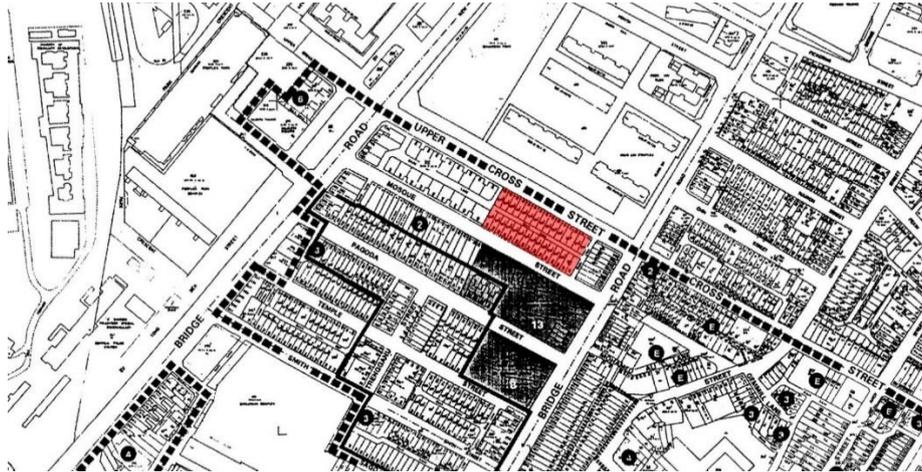
Tropical workplace today

Globalization sure has an impact on how we work today and eventually how our workplace is designed, arranged, conditioned, etc. Most of people in the eastern tropical country are working with not much different culture to the way people work in the northern hemisphere. Working behind the desk, in an enclosed room with air conditioner maintaining the comforting temperature is a typical daily activities of a person that living in a tropical area, even though the climate might suggest different culture.

Tropical climate sure suggest different way to live our daily activities. Having the sun shines through the whole year and without cold season are actually allow us to do some or most of our daily activities outside buildings, or at least in semi-outdoor spaces. This was exemplified by our ancestors, with most of traditional tropical buildings or houses were only to house private activities such as sleeping, and most of daily activities were taken outside. Today's fact is, about 70% or more of modern people's daily activities are still taken inside the buildings. Technology always has an impact on human culture, showed best these days by how smartphones and internet changing our culture. If architecture is a part of technology, maybe it could propose a new way of working in the tropical climate.

Shop Houses Revitalization – From Conservation to Solution

The testing ground to implement the idea is a series of shop houses located in Chinatown, one of the Singapore's heritage area. The intention of using heritage building as the context, is to tackle the idea of relying too much on new buildings, especially big developments, when it comes to face current issues. New problems that arise in this era are not necessarily must be solved by proposing new buildings or big developments.

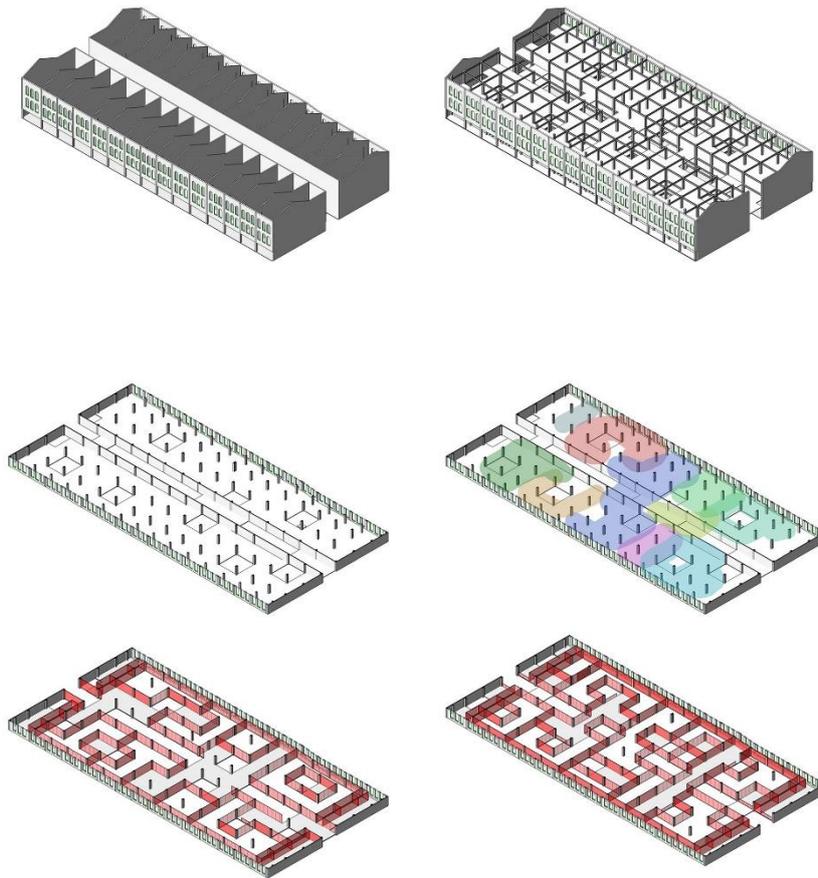


Shop houses in Singapore mainly were influenced by the western style and eastern Asia, which have four seasons climate, since many of them were built during the colonial period. The arcade, a setback that provides sheltered pedestrian walkway was actually an act of adaptation to Singapore's climate which has high humidity and high rate of rainfall. As time goes by, these shop houses are converted to many types of functions, including workplaces. Most of them were redesigned and conserved in order to adapt to the new function with some rules are applied in order to maintain the identity of these heritage buildings. Some could work and perform well, in terms of housing new function, while some are not.

The proposed project takes series of shop houses to become a new workplace that more suitable to the current lifestyle, technology, as well as climate, a concept that is usually applied to new building. This project attempts to propose the idea of using old existing structures to solve new issues, not only to preserve the identity of the nation. Sure identity embedded in the heritage buildings are extremely important. But in order to create integrated city that could solve sustainability problem, these buildings have to perform well with new buildings, it has to be adapted to the current situation. Architecture indeed has to be specific to the epoch where it stands. Everything that is no longer suitable might need to be redesigned, while there are still many ways to maintain the identity of the heritage buildings. Historical identity is worth to be preserved, and yet new identity needs to be formed.

New notion of office territory and flexibility of office spaces

The main concept of the project is to redefine the working spaces in the tropical area. It is not only a western style building equipped with green technologies, but a new concept of workplace that is more suitable to the climate and culture. This project is heavily influenced by the existence of designed outdoor spaces as the main activity spaces for our ancestors. The proposed design breaks the walls that divide the territory between shop houses, providing open space that open for high flexible configuration. The ownership of each shop houses will need to be redefined and the limitation of small space that conventional shop houses have, could be extended.



Each tenants have flexible and extendable territory that fills the open plan. This flexibility and these extendable spaces might could reduce inefficient spaces, since unused spaces owned by one tenant could be used for other purpose, even by other tenants. Some spaces are remained as shared spaces to increase the efficiency of the space. Each tenant only needs to rent or own the space they really need, and will be able to extend it or reduce it. By breaking the boundaries between shop houses, it could create more flexibility between inside and outside. This bounding elements are able to be reconfigured when it is needed, especially if there is one or more tenant that need to extend or reduce their office spaces.



This transition spaces between indoor and outdoor, between nature and artificial environment is the proposed concept of workplace for the tropical climate. Nature is brought into this space to help reconditioning the work space environment naturally, while also re-establishing the boundaries between human and nature.

Overall, the idea of redefining tropical space, breaking the conventional territory between office spaces, as well as the boundaries between artificial environment and natural environment, are intended to encourage a new way of working by re-establishing the relationship between human and human, and human and nature. This project not only propose sustainable concept, but also a new way human could work with the others and how human work in their environment. The issue of sustainability is too complex to be solved by only physical elements or technologies. One might need to go back to the roots about the relationship between human and nature, and architecture as an act of intervention to the nature, as well as architecture as a medium between them, in order to achieve sustainability.