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Urban River and Its Heritage Value: A river of life at Precinct 7, Kuala Lumpur

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Abstract

Some of urban rivers have their respective heritage value and need to be preserved. However, enforcement of river pollution had not given much effect to improvement due to human attitude and behaviour. The purpose of this research is to present an analysis to revitalize the urban river at Precinct 7, River of Life Project, Kuala Lumpur. Through analysis of the precedent studies, the rationale will then be compared to suit the most suitable and relevant proposal. The study revealed that the historic buildings along the river and the river itself should be maintained and integrated to preserve its heritage value.

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Keywords: Urban river; heritage value; sustainable development; River of Life

1. Introduction

In the olden days, rivers are significant in the earliest human settlements. The settlement grew and created communities. As communities grew and became villages, the villages then developed into towns and lastly became a city. According to Widodo (2012), it is proven by history that civilization rooted from areas along the river bank. The river was a catalyst. It gave life to many people. However, as time goes by, these important historical cycles being forgotten especially for rivers located in urban areas. With the rapid development of the economy and the acceleration of urbanization, the river pollution occurred continuously, which result in damaging the river ecosystem. Vast quantities of domestic and industrial wastewater flowed into the river, causing several pollution of the water system. The problems of urban river pollution and ecological damage are becoming more and more critical. The Ministry of Natural Resources and Environment, particularly Department of Irrigation and Drainage was concerned with rivers in Kuala Lumpur and has done many programs over the years to improve the river water quality. In achieving sustainable development, a lot of effort towards water reintegration is taking place not only in Malaysia but all over the world. According to Carmona (2000), it has become the consideration of many cities to use the urban design tool to achieve a sustainable development of cities that has a water body. This will create a better public realm at the waterfront area. However,

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enforcement of river pollution had not given much effect to improvement due to human attitude and behavior. A river is no more a frontage for development, but rather as a backyard where views of the river should be hidden as much as possible. A river is no more a catalyst, and their histories are slowly being forgotten.

1.1. Aim and objectives of research

The purpose of this research is to present an analysis to revitalize the urban river at Precinct 7, River of Life Project, Kuala Lumpur. Through analysis of the precedent studies, the rationale will then be compared to suit the most suitable and relevant proposal. To conduct this research, the following research objectives are set:

- To identify the heritage value along the river of Precinct 7, Kuala Lumpur, and study its potentials to ensure the sustaining of its heritage value.
- To analyse how the urban river can be designed towards future development while maintaining the preservation of its heritage value.

1.2. Significant of the study

The outcome of the study will encourage the public to be more sensitive towards the heritage value of the urban rivers and address the importance of the river towards the community and the city itself. Besides, this study will also help the architects, planners and decision-makers in finding ways to design a suitable urban river for the public and planning a better river environment. It is also to improve the existing urban river for future development without omitting the heritage aspect.

2. Literature Review

A river is a natural watercourse, usually freshwater, begins at a source or more often another source, and flowing towards another river, a lake or a sea. Urban River is a natural waterway or river that flows through a densely populated area, a location characterized by high human density and vast human-built features that contrast to the area surrounding it (Lynch, 1960). In a simpler meaning, the urban river is a river that runs through a city, town or conurbations. A river, an inheritance, has the heritage value in the urban context in terms of religious, economic, social, cultural and physical concepts which should be preserved and conserved, so that it can be appreciated by the public (Widodo, 2012). Value is the intrinsic reason for heritage conservation and protection. As described by De La Torre & Mason (2002), no society makes an effort to conserve what it does not value; thus, conservation and protection are the consequence of the heritage value. Heritage is a property that is inherited. UNESCO (2007) interpreted that heritage is "our bequest or tradition from the previous generation, what we live with today and what we engaged on to the future". Heritage was defined as a contemporary use of the past that has the potential of side-stepping some controversial issues while correcting and developing the focus upon others (Fig. 1.).

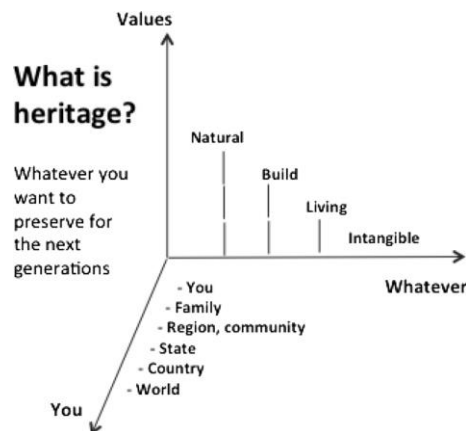


Fig. 1. What is Heritage? Source: LeBlanc (1993)

2.1. Precedent studies

Researchers have various findings for the potentials of urban rivers in the city of heritage value, a river in urban design, diversity usage of the river, and activities along the river. Abdul Majid (2014), in her Final Design Thesis, has made a comparative study of two rivers that have valuable heritage stories to understand the potentials that they have. Taking into account on how the selected rivers were preserved while at the same time enhancing their heritage value of a river, the precedent studies conclude that different rivers in the various countries have different ways of preserving its heritage value. The primary element to preserve while enhancing their heritage value at the same time is by diversity usage of the river and activities along the river. Different rivers have different usages depending on the location and the land use of the surrounding area.

Table 1. Comparative study of Malacca River and Cheonggyecheon River

Usage of the River	Malacca River, Malaysia	Cheonggyecheon River, Korea
Help in Heritage Promotion	/	/
Daily Chores		
Drinking	X	X
Cleaning	X	/
Bathing	X	/
Cooking	X	X
Water Transportation	/	X
Recreational Activity	/	/
River Ecology Maintenance	X	/
Controlling Flood	/	/
Sewerage Disposal	/	X

The two urban rivers have their respective heritage value that should be preserved and both rivers help in the heritage promotion. In terms of using the river as their daily chores, only Cheonggyecheon River used it for cleaning and bathing while Malacca River cannot be used for daily tasks due to pollution. Malacca River has the potential to be used for water transportation because it has a suitable width for boat riding. Meanwhile, Cheonggyecheon River has many bridges with low overhead clearance and not suitable for water transportation. Both rivers do provide recreational activities along the rivers, but only Cheonggyecheon River maintains its river ecology.

Both rivers also function as controllers so that the urban areas do not flood. Malacca River was also noted as being the sewerage disposal at certain locations. Through effective civic and cleanliness campaigns by the local authority and support by the residents along the river, the quality of the river is getting better and healthier. Comparatively, Cheonggyecheon River has a better and healthy environment. First of all the development along the river is adapting a riverfront concept whereby all the buildings have their frontage facing the river. Therefore, it is more pleasant, and the backyard activities will be hidden at the back.

3. Methodology

The author adopted an existing data collection method of Widodo (2012) who examined the links between the urban river and learning from history at Sumida River, Japan. The method was chosen because of the similar nature of research where both researchers studied the urban river and its history in the context of the urban setting. Data from the literature reviews and precedent studies from the Internet sources, books, articles and journals was analysed. The data consist of studies related to the needs of the research which comprise the analysis of the urban river potential to sustain its heritage value. Data collected was analyzed to find ways on how to design a suitable urban river for the public, plan a better river environment and also to improve the existing urban river environment.

Overall site plan of ROL Project was obtained from River of Life website to identify the location of the Precinct 7. Case studies by the method of observation at the site were done to explore the urban river and its heritage value, and their potential for future

development. Photograph images were taken, and significant features were written down to identify the usage of the urban river and activities that happen along and nearby the River. Evaluations were done to determine the positive and negative values of the river. A comparative study was made, results and recommendations were tabulated, and later analysed, for future development at Precinct 7, ROL.

4. Case Study and Analysis

The case study for this research is located at the Precinct 7, Kuala Lumpur. The site's history was investigated to value its heritage, and ROL Project will be explained.

4.1. Precinct 7, River of Life Project

Fast development in Kuala Lumpur had taken place over the years especially during the post independent era. These developments grew rapidly and were uncontrolled to the extent of forgoing or scarifying the natural heritage, specifically speaking the river that was once the lifeline of the city in the olden days. Kuala Lumpur has reached a point where dramatic intervention is required to reconnect the community and river. The Ministry of Natural Resources and Environment, particularly the Department of Irrigation and Drainage was concerned with rivers in Kuala Lumpur and had done many programs over the years to improve the river water quality.

Early 2012, the ministry had produced and imposed a draft of the ROL Project for the cleaning, beautification and development of the Kuala Lumpur's river. The ROL Project, which proposed to orientate the city back to its roots along the Klang and Gombak Rivers by rehabilitating the water quality and revamping the river banks with the variety of developments. The proposed master plan maximised the social and economic potential of the river by connecting, activating, regenerating and enlivening the people in Kuala Lumpur through the waterfront. Figure 2 shows the location of Precinct7, which is the historical, literal and figurative heart of downtown Kuala Lumpur. Surrounded by impressive historical buildings, the area has all the ingredients of an iconic city, where local and global contingents come to shop, stay and enjoy. The close tie to the birth and history of Kuala Lumpur, Precinct 7 earns the name of Heritage Quarter.

The Heritage Quarter demands careful attention to protecting its heritage value not only in the context of existing historic buildings on the site but also the river that runs through the site.

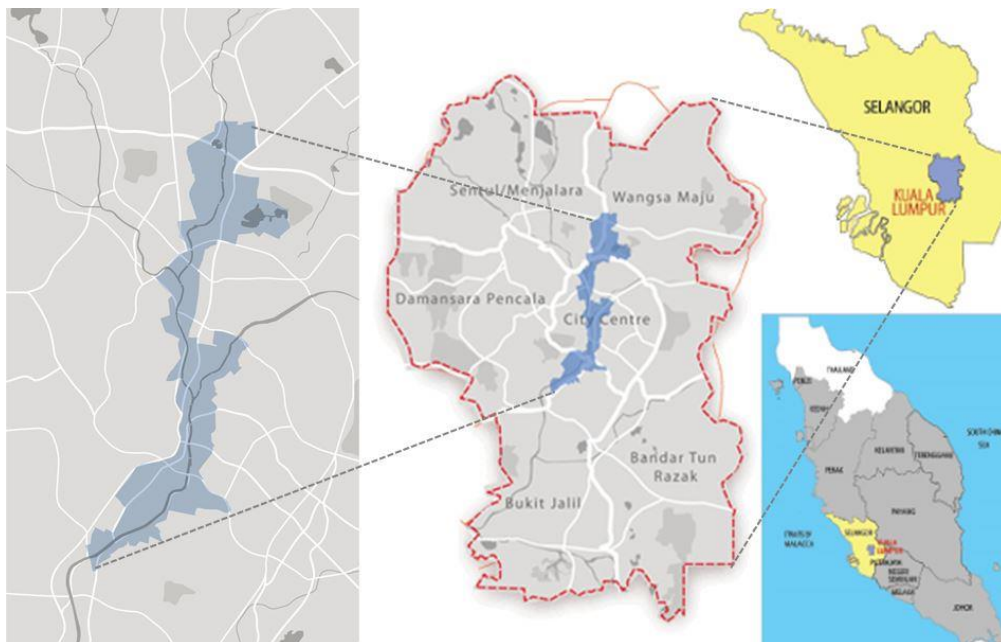


Fig. 2. Site Location of ROL Project Source: <http://app.kwprkb.gov.my/greaterklkv/entrypoint-project-river/> (2014)

4.2. Data analysis

A study through direct observation was made. The area of observation chosen was based on a few focal points whereby views of both the waterfront and the urban river can be obtained without obstructions. The author engaged in walking and photographing to assimilate the role of a visitor to experience the urban river (Robson, 2002), as well as evaluating its heritage value. Based on the summary of the previous literature and precedent studies, the elements to preserve the river and enhancing its heritage value are: Diversity usage of the river; and Activities along the river

4.2.1. Diversity usage of the river

Analysis of the literature review and precedent studies, a different river, has different usage depending on their locations and the surrounding land use. Table 2 shows few possible recommendations for future developments at Precinct 7, ROL Project.

Table 2. Recommendation for future developments at Precinct 7, ROL Project

Usage of the River	Current Precinct 7, ROL Project	Suitable Development for Precinct 7, ROL Project
Help in Heritage Promotion	X	/
Daily Chores		
Drinking	X	X
Cleaning	X	/
Bathing	X	/
Cooking	X	X
Water Transportation	X	X
Recreational Activity	/	/
River Ecology Maintenance	X	/
Controlling Flood	/	/
Sewerage Disposal	/	X



Fig. 3. Heritage building nearby the Precinct 7, ROL Project

Since the ROL Project in Precinct 7 is located near many heritage buildings and sites, such as Dataran Merdeka, Bangunan Sultan Abdul Samad, Masjid Jamek, Panggung Bandaraya, St. Mary's Church, Royal Selangor Club and many others (Figure 3), it is strongly recommended to use these buildings and sites in the future development. These historic buildings and the river that run through them have their respective values. If these values are considered in the master planning, it surely will give more impact in promoting this site.

As one of the aims of the ROL Project is to clean and purify the river, therefore, it is possible to do daily chores mainly washing and bathing in the future. However, for human consumption such as drinking and cooking, it is not recommended. The river in Precinct 7 through proper care and management will serve as touristic purposes and flood mitigation.



Fig. 4. Bridge conditions at Precinct 7, ROL Project Sources: Google Street View (2014)

Gombak and Klang River along this precinct 7 is not suitable for water transportation mode because of the dimension and size of the river that is too small. Even if the river is being widened in the future, the depth of the river is not suitable for water transport. The bridges crossing the river are too low for boats to pass through (Fig. 4.). Adapting the Cheonggyecheon River strategy, the focus is more towards promoting people to experience the site by walking along the river, rather than boat ride that is a bit swift. And by doing so, they are not only appreciating the nearby heritage buildings but able to value the river through their human senses (vision, smell, hearing and touch).



Fig. 5. Bicycle convoy along the Precinct 7, ROL Project Sources: <http://ahpekbiker.blogspot.com/2013/04>

A proper pedestrian and bicycle track need to be installed along the Precinct 7 River since these activities have a demand to some people (Fig. 5.). Recreational activities can be run along the stretch of the river since in this existing urban area, healthy activity is very limited. There will be jogging tracks for people to jog along the river that will continue to the nearby lake garden. This activity can be extended to bigger events such as the marathon events that are usually held all the way to Dataran Merdeka.

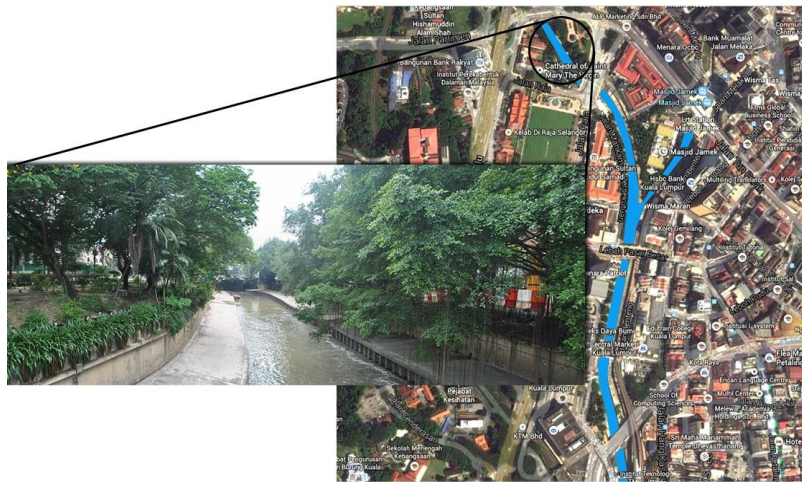


Fig. 6. St. Mary's Church Ecological River

There is only one section of the river at Precinct 7 that maintains its ecological system (Fig. 6.). This site does not only give the opportunity for the river to filter naturally the water but also to implement sustainable water management system to improve on-site storm water quality. We should utilize our tropical climate as this climate environment supports a great diversity of flora and enable the rapid establishment of biodiversity. By restoring natural river features, functions and in-stream habitat, the river shall reconnect back nature with the people. A place like this shall create a vibrant, bio-diverse environment and focus on specific habitat for amphibians, fish, insect or birds. Native species and naturalized planting should dominate this area and throughout the stretch of the river.

Klang and Gombak Rivers' primary function in this present day work is flooded controlling. Malaysia's climate is known for its rain. It makes the flood control a vital in its drainage system management. These flood monitoring rivers still need to be functional to its purpose. However, a proper system needs to be implanted so that the river does not flock or block by rubbish. With the beautification strategy towards enhancing the river, this approach hopes to change the mentality of people not to throw trash into the river and to make the river as a huge sewerage disposal area.

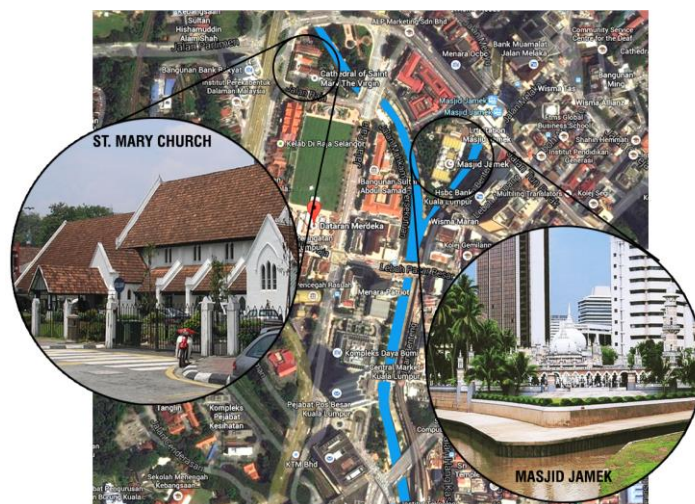


Fig. 7. St Mary's Church and Masjid Jamek

4.2.2. Activities along the River

Summarize from the precedent studies, the activities along the river is closely related to its usage diversity. From the analysis, it was found that there is a need to activate people to go to the river. It will make them appreciate and value its heritage. The master plan of each river is to connect and link it with the heritage building thus creating a vibrant continuation of activities along the river. To execute the ROL Project at Precinct 7, this master plan technique was proposed and implanted. The potential of dynamic space and static areas was mapped along the Precinct 7 River (Fig. 8.).

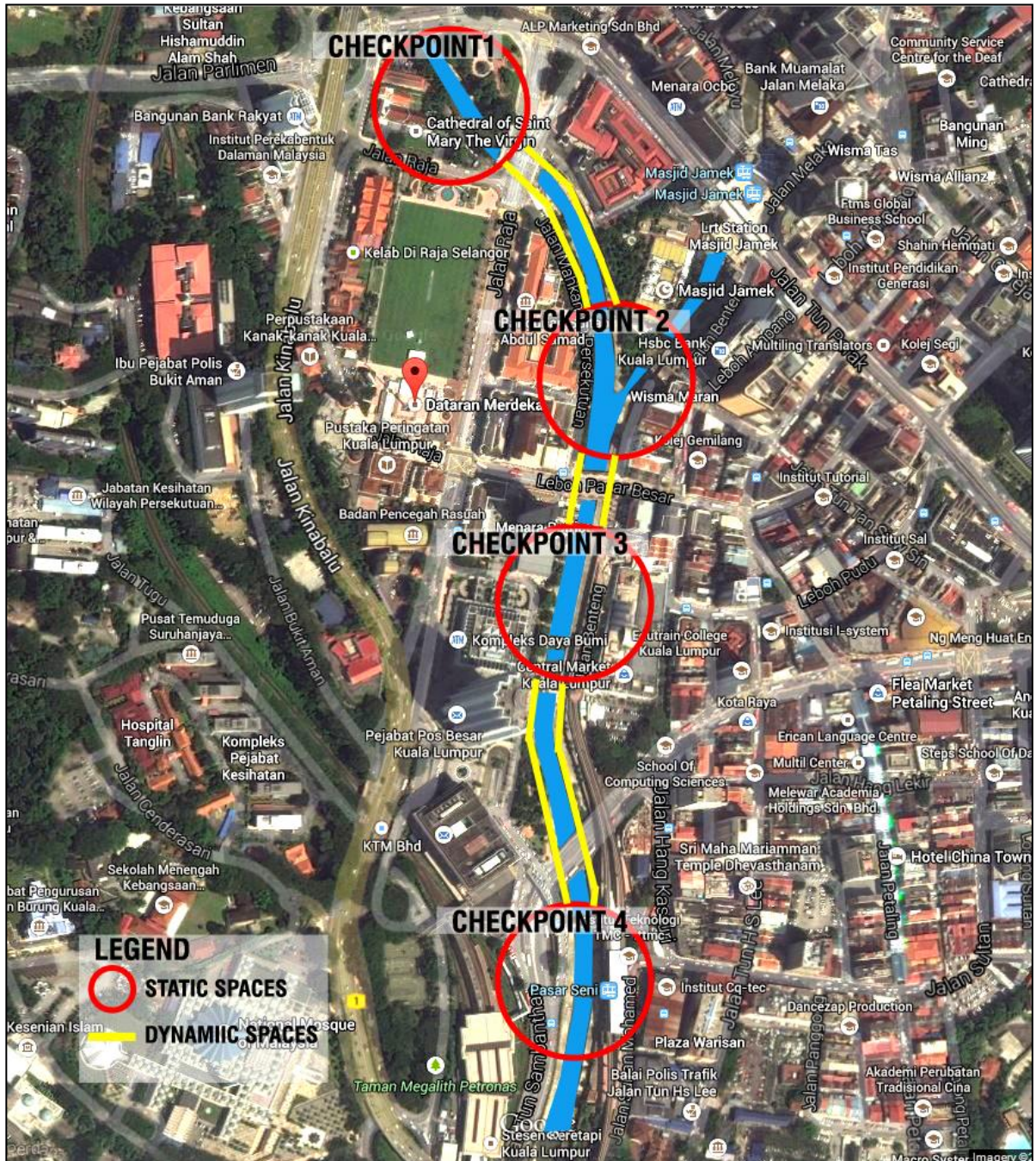


Fig. 8. Mapping of the potential dynamic and static spaces

The pedestrian pathway is designed into the environment so as to make it in such a way make people want to continue walking along the river. The walk must have static spaces, also called checkpoints or spots for people to rest in between or after a long walk. At this place, various activity infrastructures can be incorporated. Each place should be developed according to its character and potential. In this precinct, four checkpoints were identified. Each checkpoint has its potential. It can be further designed to strengthen its identity by providing facilities and infrastructures. These will increase the community participation and ultimately improve the environment quality.

Through the dynamic and static spaces, that comprises a 'system of places connected by routes', the continuity of activities in the urban area shall make it more pleasing and pleasurable. The dynamic areas provide the sense of 'movement and change' and the static areas imply the meaning of 'rest and completeness'. The mixed experience created by the journey thru the dynamic and static spaces can be more valuable once it is interconnected with preserved heritage buildings. Preserving heritage buildings retains the cultural memory of the cityscape. That will educate the people about its cultural landscape and buildings amid the surrounding modern development. It will also maintain the visual interest of its communities, passers-by and defines the character of the city.

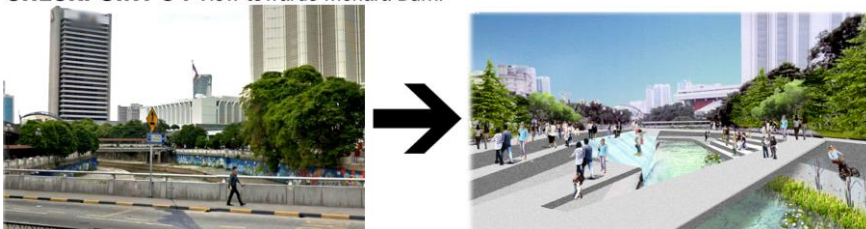
CHECKPOINT 1 : View along the river near St. Mary Church



CHECKPOINT 2 : View towards Masjid Jamek



CHECKPOINT 3 : View towards Menara Bumi



CHECKPOINT 4 : View towards Central Market

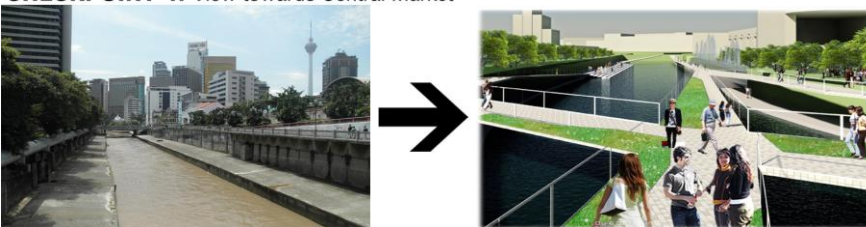


Fig. 9. Illustration of checkpoints revitalization possibility

The dense and historically sensitive nature of the Heritage Quarter shall only allow controlled redevelopment and urban infill as the primary method of revitalization. The main aims are to increase the activities within the area and increase people traffic flow with better accessibility to all places potentially regarded tourist attractions. The juxtaposition of everyday life and the history, striking adjacency shall be created between an event that is experienced in the present and event that was built in the past (Fig. 9.). It is possible for the River and heritage area to become extensively linked up through open space and streetscape using existing spaces.

5. Conclusion

Two ways are identified to design an urban river towards future development while preserving its heritage value. First is to diversify the usage of the river. It may be done through the incorporation of water transportation system, recreational activity, ecological maintenance and flood control mitigation as the various means of river usage. Secondly, activities along the river should be created. Static spaces and dynamic spaces define the activities along the river. Through the study of Precinct 7, ROL Project, elements of heritage value – the historic buildings along the river and the river itself should be maintained and integrated to preserve heritage value. It is strongly recommended that for the future, proper development could complement this heritage value in a creative way, bringing in today's generation and the future's generation to appreciate the past.

A river is not a static object. Cleaning the river at only one section will never work because the river flows from the upstream right up to the end where it meets the sea channel. Thus, in order to keep on maintaining and appreciating the river value, the cleaning of the whole stretch of the river that runs through the Kuala Lumpur from the emergence of the upstream of Precinct 1 until Precinct 9, should be further researched. Awareness and educational programmes to care and appreciate the river should be consistently and efficiently implemented. This study should be developed throughout the whole Kuala Lumpur to save and value the river.

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