A Review of Potential Revitalizing Heritage Town Through Cycling: A Case Study of Taiping Town, Malaysia

Yong Adilah SHAMSUL HARUMAIN^a, Nur Farhana AZMI ^b, Suhaini YUSOFF^c

Abstract: Heritage town has its own unique character and generally well-known as one of the earliest towns developed. Over time, the issues of motorization and urban sprawl have deteriorated heritage town sustainability and has compensated with the social and economic demands, restricted building use and in its constraint land use pattern. This paper looks at the possibilities of cycling not only as an alternative transport mode but as a potential tool to revive heritage town. The objective of this research is to explore cycling experience among cycling club members, to understand the constraint and potential of cycling among Malaysians and to survey the relationship between cycling and heritage building appreciation. This review investigation has found that cycling increase appreciation towards heritage building however the majority of respondents are still in doubt on cycling as an alternative travel mode other than motorised vehicle due to its limited adeptness. (max: 150 words)

Keywords: Women Transport, Asia, Mobility, Walkability (max: 6 keywords)

1. INTRODUCTION

A responsive and meaningful public space should meet the needs of users, including diverse activities that promote social interactions and economic growth, accessibility and levels of comfort of being at that space (Zhao, 2009b). Therefore, in revitalising town, it is vital for town planners to consider the broad context of the site, including the unique quality of the town and the demand of people living surrounding the boundaries of the town. A successfully revitalised town promotes a sense of community among people living at that place or nearby it. Depending on the situations and problems of the selected areas, revitalization should have varied specific goals. This paper looks at the possibilities of cycling which commonly recommend as alternative to public transportation conversely as a potential tool to revive heritage town. The objective of this research is to investigate cycling experience among cycling club members, to understand the limitation and potential of cycling among Malaysians and to examine the relationship between cycling and heritage building appreciation.

Revitalising heritage town is a challenging task as it involves preservation and conservation of historical building and at the same time sustaining the town socially and economically. Historical buildings are often restricted in terms of redevelopment, building ownership issues and change of building status (Cantell, 2005). On top of that, issues such as zoning, height level and also building structure added up to the existing enigma (Cantell, 2005). At the same time, heritage town is also forced to develop and compete with the modern town which easily adapt better over highly used of vehicles on the road. Instead, heritage town are rather difficult to comprehend with the current status quo. Other related restrictions

^{a,b,c} Faculty of Built Environment, University of Malaya, Kuala Lumpur, Malaysia

^a E-mail: adilah_shamsul@um.edu.my

^b E-mail: farhanazmi@um.edu.my

^c E-mail: suhainiyusoff@gmail.com

involving heritage town are legal issues, limited spaces, building structures and finance (Cantell, 2005). Hence, we are now facing greater complexities in reviving heritage town and it seems that we are left without a better alternative. Is it to redevelop the whole town? Or to conserve a few? Or just to mixed up everything? This is the challenges that we are facing in revitalising heritage town particularly in developing countries.

The key point of reviving town is not merely relying only on physical modifications but ensuring people enjoying the town (Teshima et al., 2006). Attracting people to appreciate heritage town is another key point of view in reviving heritage town. In addition, appreciating historical building does not fascinate everyone and what more with a poorly building condition. The lack of appreciation also grows when less time spend at observing and utilizing the building itself (Adiwibowoa, Widodo & Santosaa, 2015). Poor observation is also caused by time and space for observations and appreciation. Commonly, observation and appreciation come in several forms such as doing activity at the building or passing by and observing (Adiwibowoa, 2015). Other ways to appreciate heritage building include the voice of mass media, direct or indirect information and awareness about the historical building. The social value of a revitalised space could improve significantly with the increasing number of people travel to that place for relaxing or recreational purpose. The transformation of a physical environment provides greater potential for the place and hence changes the human behaviour in that area. At the same time, people influences and change the environment to create a more effective environment (Zhao, 2009a).

In this era of modernization, the use of a vehicle is at its peak but people are perceived removed from the surrounding environment (Graves-Brown, 1997). In 2012, statistic shows, the number of the vehicle in Malaysia rose from 535,113 to 552,189 to while in 2000 the number of the vehicle are just 309,441 (Malaysian Automotive Association, 2016). Especially, in developing countries where public transportation is relatively poor and mismanaged such as Thailand and India, more people depends on the own vehicle to travel added up to the current traffic congestions problems that many urban area faces (Gakenheimer, 1999). In addition, the extensive use of the vehicle has disconnected people from the surrounding environment due to vehicle speed and barrier between the vehicle and surrounding. The disconnection between people and the environment is a result of the pattern of movement. For instance, people move from origin to destination prefers to move using the shortest time, shortest path and are profound to focus on arriving at the destination on time. For many, cycling is perceived as a tool for exercising instead using it as a mode of transport due to the capacity of bicycle load and also the ability of a person to cycle. Other factors such as distance, load ability and status also influence the propensity of people to cycle. Notwithstanding the fact, cycling has recently become some new exercise phenomena in Malaysia. This can be seen by the emerging of many cycling clubs around Malaysia organising fun and charity rides as well as the needs to cycle as a way to improve a person's health. By identifying differences of needs among different types of cyclists, strategies in promoting cycling in each group are varied. In promoting utility cyclists, the approach must be multi-level that considered various factors such as individual, social and physical environment contexts (Heesch et al., 2014). In the world we live today, cycling is not seen as a mode of transport but as a tool for healthier life and leisure.

2. ISSUES AND POTENTIALS OF CYCLING IN TAIPING TOWN

This study is conducted in the historical town of Taiping, Malaysia with 37 cyclists from four cycling clubs involved in a weekend cycling program. There are about 50 members involved in the weekend cycling program involving any concerned cycling clubs to cycle in Taiping.

Most cycling club members are not professional cyclers but cycling as part of their leisure and healthy activities (refer table 1). This is important as to ensure respondents to understand the constraint and advantages of various cycling scenario, especially in a heritage town. It is anticipated that the best method to conduct this study is to conduct a survey with cyclers from cycling clubs.



Figure 1 shows the respondents of the survey during the weekend cycling program

A survey was conducted during a fun-ride cycling event comprised of several cycling clubs from Kuala Lumpur, Taiping and other districts of Perak. During the survey, questions about cycling experiences as well as their feeling when cycling in Taiping town particularly when passing by heritage building were asked. Through the survey, the research found that a majority of respondents cycling because of health and leisure while the rest are for sports, club activities and nobody actually cycles to work and school. This is an interesting finding as although all respondents are interested to cycle as a hobby but all of them are not ready to cycle as a daily travel mode.

Cycling distance ability	Less than 5km	5km or more
Reasons to cycle		
Leisure	4	6
Health	8	4
Sports	3	5
Club activity	5	2
Work/School	0	0

Table 1 Reasons to cycle (N=37)

3. FINDINGS

The layout of Taiping town is based on the gridiron pattern which was established since British colonization of the town in the early 1900. According to Harumain and Morimoto (2015), Taiping town was greatly influenced by the British town planning and the gridiron pattern of the town layout shaped the current town. Among problem existed due to the layout is discouragement going to the town as there are many junctions, traffic lights and intersection. Hence, the respondents were also asked about issues regarding cycling in Taiping town. Chart 1 illustrates that one of the main issues related to cycling in Taiping town is no special and designated facilities for bicycle such as parking, lanes and lighting. Other issues are related to the grid pattern such as too many traffic lights, visibility and too many junctions. Unfortunately, there is also a concern that car drivers do not respect cyclers on the road and

will contribute to the safety of cycles. Hence, the respondents were also asked on what are the criteria considered before they decide to cycle on the road. According to the respondents, the number of traffic and condition of the road are main criteria when selecting the route for cycling. In other words, facilities and infrastructure for safe cycling and convenient are one of the main factors to encourage cycling on the road. Ironically, interesting and historical buildings along the route are not their main concern while cycling. In contrast, in terms of more specific needs, recreationists prefer scenic routes, which would not be the main concern for commuters.

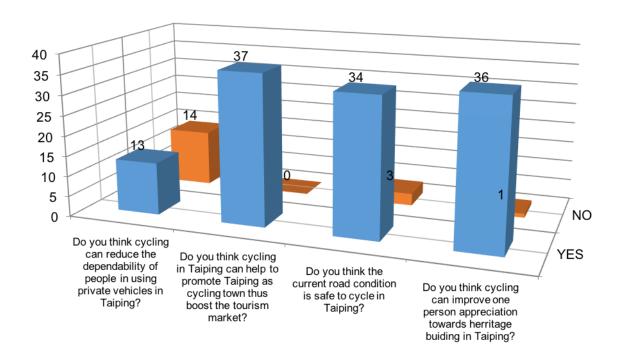


Chart 2 Responds on the possibility of cycling in Taiping town

Mehmood (1995) identified that there are three types of cyclists, which are recreationist who ride occasionally for recreational or pleasure purposes, learners who cycle more often around neighbourhood or nearby park for practice, and commuters who cycle regularly for multi-purposes such as work, household errands and recreational activities. For Heesch et al. (2014), cyclists can be classified into two groups, which are utility and non-utility cyclists. In general, cyclists' main concerns are the safety of riding the bicycle on the road, and connectivity of cycling route between starting and finishing point. Besides that, physical environment for cycling, including quality of bicycle route and cycling facilities is also a concern for all types of cyclists (Meng et al., 2014).

On the other way, the availability of the direct and shortest distance route to destinations is important for commuters although it would be a low priority for recreationists (Mehmood, 1995). Perceived environment, including traffic and route conditions and crime concerns, and psychological factors such as self-efficacy, affection, social supports and habits for physical activity play a significant role in promoting recreational-only cyclists, but limited impacts on utility cyclists (Badland et al., 2013; Heesch et al., 2014). Recreational-only cyclists are more associated with neighbourhood features like routes connectivity and designated paths, while transport-related cyclists are more concerned about functional features

such as mix land use and accessibility to destinations (Badland et al., 2013).

Perceptions towards cycling vary across different age group. Mehmood (1995) identified that young people in Hong Kong considered cycling as a popular and good recreational activity instead of a travel mode. Simons et al. (2014) found that students or working young adults did not associate ecological awareness with their travel mode choice as self-image, identity and materialism were more important than protecting the environment, unlike the middle-aged working adults in Belgian population who were more likely to concern with ecological benefits when choosing non-motorised travel mode. In this context, if respondent's sensitivities and feel the connections with the historical building, the respondents were asked to name three (3) heritage buildings that they are attracted to while cycling in the town. All buildings were plotted and this study found that the most attracted building is the one which is huge, visible at a distance from the road and has a prominent building identity. In particular, the most attractive building is the Perak Museum which was built in 1883 and the building is now about 120 years old. It is the earliest building built by the British in Taiping town during their colonization period. Respondents are also attracted to the Taiping Prison where the location is just opposite the museum. The large scale of the prison building is one of the reasons why the building is memorable and easily admired by the respondents. Finally, respondents are also attracted to the shop houses along Jalan Taming Sari where earliest building in Taiping town is located. However, close proximity to the road reduce their appreciation towards the building and the façade maintenance has also deterred the respondent's attachment to the building. Below is the historical building that was dictated by all respondents accordingly.

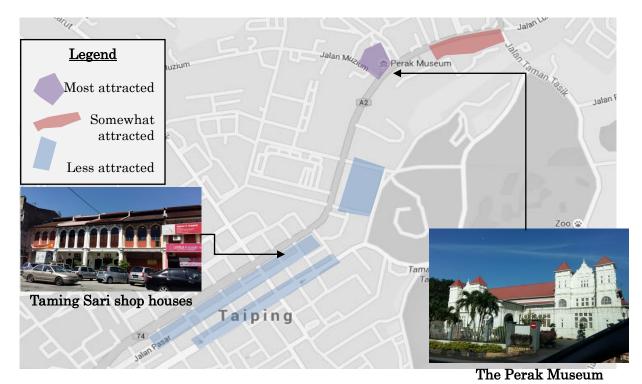


Figure 2 Historical buildings dictated attractive by respondents in Taiping town (Map source is from Google Map 2016)

Cycling in Malaysia has become new phenomena and acting as a tool of creating a healthier lifestyle. On the other hand, this could also mean to create another opportunity for heritage town, such as creating appreciation to heritage building and as a tool to revive heritage town. There are many independent cycling clubs in Taiping town which very active in conducting cycling programs weekly. One of the main influences of the program is the support from the local authority. Despite the support, there are lacking planning for safer cycling and encouraging cycling as an alternative for transportation modes to work. Instead, cycling can be a good opportunity for small cities. Small size of the town and the non-periodical traffic congestions are perfect reasons to promote cycling from home to town instead of spending on developing light train railways. Cycling can be alternative to driving, and can create an efficient way to stop compared to public transport. According to Handy et al. (2012), physical characteristics and social characteristic of smaller town of lesser than 300,000 people are opportunities for cycling town. This is because the smaller town scale means distance are reasonable for cycling and traffic densities are tolerable. The close relationship poses by many traditional historical towns is a bonus to create cycling friendly town as a greater likelihood of residents influencing their neighbours to cycle (Krizek et. al 2009).

Furthermore, the survey demonstrates that all respondents would like to cycle in Taiping town as an alternative to a motorized vehicle and public vehicle. Interestingly, it was found that the mentality setting of most cycles still think that cycling could not reduce their dependability of using private vehicles because of the bicycle restrictions in terms of its load ability, the number of carriers and also the suitability of tropical weather. Considering the nature of cycling as a sport, people would be more reluctant to cycle to work places due to sweating and practicality in carrying more luggage's (Simons et al., 2014). Having that considered, the majority of the respondents think that cycling is able to promote and boost the tourism market in Taiping town and able to increase people appreciation towards heritage building in Taiping. Cycling is also highly dependence on weather conditions. Weather is one of the main barriers for people to cycle in places with humid and high temperature, or high precipitation during rainy or winter season (Mehmood, 1995; Simons et al., 2014). Furthermore, cycling is more preferable only when travelling within a certain range of distance. Various studies have shown that it is more acceptable to cycle for short distance travel that covered not more than eight kilometres (Simons et al., 2014). Furthermore, gender also plays an important role in cycling due to safety from crime concern, crime perceptions could be possible barriers to utility cycling for both men and women (Heesch et al., 2014). Barriers found not only on individual levels but also in the policymaking and implementation levels. It could be a lack of organized interest's groups or organisation that advocated for better infrastructure and facilities for the cyclist. In addition, walking and cycling is taken guaranteed by some governmental officials and city planners as basic modes for everyone, and hence easily overlooked on its importance to improve relevant facilities for a safer and efficient environment. Facilities for pedestrians and cycles are basically considered as a non-avenue production and limited to seasonal use, which restricts transportation funds for it (Mehmood, 1995). Due to various limitations, cycling is hard to be able to become an independent travel mode choice.

Definitely, heritage town has its own disadvantage and affected by this situation. The differences in land use pattern between heritage town and modern town are also other issues that is very much affected by motorization. Due to the high dependency on vehicles, wider lanes are designed in modern town which accommodates the needs of vehicles such as parking and accessibility. In contrast, heritage town is not designed in such away in fact often having disadvantages for vehicles. Relatively, heritage town offers a mixed land use, walking

distance land uses pattern and offers restricted areas for road lanes expansion. Indeed, heritage town is not preferable for a vehicle town. Another main concern and disadvantages of heritage town are the ability of drivers and vehicle users to appreciate historical buildings or monuments. With the land use pattern that is sprawl and distance, vehicle speed and height provides lesser opportunity to appreciate historical building if compared to non-motorized modes such as walking or cycling. Thus, this has inculcated detachment, disconnect between the building and people coming to the town. As a result, it will affect businesses at heritage town, values and rundown identity of heritage town. Which at the end will result in heritage town deteriorate and needs revitalization? Vehicle dependency definitely is a disadvantage for heritage town although undeniably in today's world, vehicle plays a major role in daily transportation. The issue is now on how to manage and revive historic town with the existence and probably continuous problems in transportation? Meng et al. (2014) argued that 45% of total trips in Berlin that is designed with decentralisation urban structure are less than three kilometres, which could be covered by cycling. The cycling policy has to be adaptive depending on the climate and culture of a place in order to fulfil the needs of people without surge travel burden on users (Sun, 2010; Meng et al., 2014).

4. CONCLUSION

In order to encourage sustainable and active transport modes, the concept of multimodality is recommended by mixing the use of cycling with another travel mode such as walking and public transport. By doing so, cyclists are able to travel longer journey with shorter travel time while maintaining higher levels of flexibility and autonomy in sustainable travel modes. Cycling facilities such as bicycle parking areas and provision for bringing bicycles onto public transport modes could facilitate a better multimodality travel. Besides that, balancing the use of private vehicles and public transport could achieve when there is indifferent of individuals' preferences on private vehicles and public transport. Hence, there is in need of well-developed public transport system and infrastructure that fulfil the need of users.

Looking at the bigger picture of developing a cyclist- friendly environment, multiple areas have to be taken into consideration for creating a sustainable travel system. In comparing four cities, Berlin, Singapore, Canberra and Beijing, it was identified that four main aspects, including urban structure and development, transport policy targeting at promoting bicycle use, integration with public transport and cycling infrastructure development, had to improve collectively in order to revitalize cycling. Mixed land use has gained popularity in recent decades due to various advantages, including higher accessibility to facilities and community services, greater opportunities for social interaction, socially diverse community and greater efficiency in using space and energy. In order to increase more social interaction, there is a need to reduce dependency on mobilization transportation and increase pedestrians and cyclists. The sense of community fulfils the need of people to express a sense of belonging, which is essential to preserve the social order and stability of a place. The growth of many cycling clubs around Malaysia not only produce a healthier community but also opportunity towards revitalising heritage town. Although that through this survey, cyclist is still in doubt and sceptical about the idea of cycling as main mode of travel, there is a blessing in disguise. In heritage town today, revitalizing efforts are greatly desirable due to the growth of urban sprawl and motorization or else heritage town will be gone. Cycling is a great medium for sustainable transportation and can also be used as revitalization tools that a heritage town should embrace. It is a great potential to embark for future planning and something that severely needs to think deeply by future town planners.

5. REFERENCES

Adiwibowoa, R. S., Widodo, P., & Santosaa, I. (2015). Correlations Between Public Appreciation of Historical Building and Intention to Visit Heritage Building Reused as Retail Store. *Procedia - Social and Behavioral Sciences* 184, 357 – 364.

Badland, H., Knuiman, M., Hooper, P., & Giles-Corti, B. (2013). Socio-ecological predictors of the uptake of cycling for recreation and transport in adults: Results from the RESIDE study. *Preventive Medicine*, 57, 396–399.

Cantell, S. F. (2005). *The adaptive reuse of historic industrial buildings: Regulation barriers, best practices and case studies* (Master's Thesis). Retrived from http://sig.urbanismosevilla.org/Sevilla.art/SevLab/r001US1_files/r001_US_1.pdf

Gakenheimer, R. (1999). Urban mobility in the developing world. *Transportation Research Part A: Policy and Practice*, 33(7-8), 671-689.

Graves-Brown, P. (1997). From highway to superhighway: The sustainability, symbolism and situated practices of car culture. *Social Analysis: The International Journal of Social and Cultural Practice*, 41, 64-75.

Handy, S., Heinen, E., & Krizek, K. J. (2012). Cycling in small cities. In J. Pucher & R. Buehler (Eds.), *City Cycling* (257-286). Cambridge, MA: Massachusetts Institute of Technology.

HARUMAIN, Yong Adilah SHAMSUL, and Akinori MORIMOTO. "A Preliminary Study on Differences of Previous and Current Town Planning On Travel Behavior of Road Users in Malaysia." In *Proceedings of the Eastern Asia Society for Transportation Studies*, vol. 10. 2015.

Heesch, K. C., Giles-Corti, B., & Turrell, G. (2014). Cycling for transport and recreation: Associations with socio-economic position, environmental perceptions, and psychological disposition. *Preventive Medicine* 63, 29–35.

Lee, L. T., Alexandrov, A. W., Howard, V. J., Kabagambe, E. K., Hess, M. A., McLain, R. M., Safford, M. M., & Howard, G., (2014). Race, regionality and pre-diabetes in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study. *Preventive Medicine*, 63, 43–47.

Lanzendorf, M., & Busch-Geertsema, A. (2014). The cycling boom in large German cities—Empirical evidence for successful cycling campaigns. *Transport Policy* 36, 26–33.

Malaysian Automotive Association (2016). *Summary of Sales and Production Data*. Retrieved from http://www.maa.org.my/info_summary.htm

Meng, M., Koh, P. P., Wong, Y. D. & Zhong, Y. H. (2014). Influences of urban characteristics on cycling:Experiences of four cities. *Sustainable Cities and Society* 13, 78–88.

Simons, D., Clarys, P., Bourdeaudhuij, I. D., Geus, B. D., Vandelanotte, C., & Deforche, B.

(2014). Why do young adults choose different transport modes? A focus group study. *TransportPolicy*, 36, 151–159.

Sun, S. H. (2010). Managing motorization in sustainable transport planning: the Singapore experience. *Journal of Transport Geography*, 18, 314–321.

Mehmood, B. (1995). *Green mode: pedestrian and cycling: A design strategy for Tin Shui Wai* (Master's thesis). Retrieved from http://hdl.handle.net/10722/26786.

Teshima, T., Koike, H., Morimoto, A., Yoshida, K., & Tanaka, E. (2006). Creating sustainable cities through "Machinoeki"— ongoing attempts to revitalize city centers in Japan. Paper presented at Walk21-VII, "The Next Steps", The 7th International Conference on Walking and Liveable Communities, October 23-25 2006, Melbourne, Australia.

Zhao, Titi (2009a). Community revitalization by reuse abandoned areas Kennedy town (Master's thesis). Retrieved from The HKU Scholars Hub.

Zhao, Titi (2009b). *The mixed uses of space* (Special Study Report). Retrieved from the HKU Scholars Hub.