

# A Building Condition in Influencing the Walkable Environment in Traditional Street of Melaka Historical City

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## Abstract

Street as a social arena plays an essential role in representing the character of a city, thus it is important to create a street with a friendly walkable environment. Therefore, this study is aimed to determine the heritage building conditions that contribute towards the walkable environment in traditional streets in Melaka Historical City, Malaysia. The places comprised of Jalan Tukang Besi, Jalan Tukang Emas, and Jalan Tokong. Questionnaire survey, in-depth interview with the street users, observation, and document review on historical significant were conducted to achieve the objective of this study. The findings demonstrated that a good building condition is essential in order to encourage a street with walkable environment. The findings inform designers and planners of the importance to preserve our heritage buildings in street design and development.

**Keywords:** Traditional Street; Character; Walkable; Building Condition; Building Heritage

## 1. Introduction

Street plays an essential role as a public arena and it represents the image and character of a town or city. Most of the scholars in urban design agree that a good street symbolizes a good city where building is one of the essential elements that forms the street [1, 2, 3, 5]. Thus maintaining a good condition of a building is vital to enhance and preserve our local character that represents our identity [1]. As a result, we are able to create a walkable environment with a unique character [5, 15]. This intensification is included in the context of our street in traditional town and also in a new development.

However, today's rapid urbanization development causes many of our heritage building in streets to lose its unique character that contributes to the sense of place. Even though there are actions taken to preserve our street character but the decay of local identity is still happening [6, 7].

Zuraiddi, found that there have been historical buildings that were not well conserved [8]. A few of the buildings had been demolished due to too many defects. As a result, this scenario defiled the beauty and uniqueness of townscape appearances.

This scenario is encountered in many of Malaysia urban heritages. This includes Melaka that is recognized as World Heritage City by the Organization of Education, Science, and Culture of the United Nations (UNESCO). A lot of heritage buildings and historical places environment look old and it affects the image of the place especially from the point of view of tourists [9]. This disturbs the walkable environment of the place [10, 11].

Another urban analysis study by UKM in Kajang Town and Pekan Nilai Lama Development showed that there are neglected heritage buildings. In the worst case scenario, some of the buildings had been demolished. The beauty and uniqueness of the townscape

spatial is eroding, thus disappearing the value of national heritage for future generations [12, 13]. However, a different scenario was encountered in Pekan Lama Kepayang, the oldest town in Lembah Kinta, Perak. Most of the building are abandoned thus becoming an idle town. The same fate with Pekan Lama Papan which is only inhabited by the elderly and many of the buildings are decaying over time [3]. As a result, less people are going to that place.



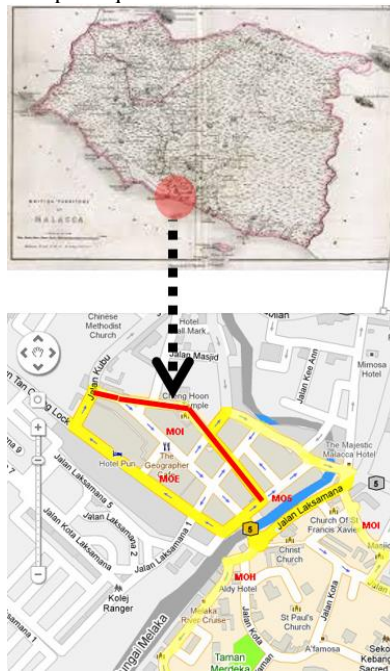
**Fig. 1:** (i) An example of demolished building in Kajang Town (ii) Pekan Kepayang

Source: (i) Mohd Haniff et.al., 2016 (ii) [indahrasajmalim.blogspot.my](http://indahrasajmalim.blogspot.my)

The explanation shows that a building conditions plays an important role to determine a street with friendly walkable environment. Thus, the objective of this paper is to determine the heritage building conditions that contribute towards the walkable environment in traditional streets in Melaka Historical City, Malaysia.

## 2. Methodology

The study used case study as the research strategy where it involved three streets as social place that portray local character in Melaka Historical City Center [15], which were Jalan Tukang Emas, Jalan Tukang Besi, and Jalan Tokong that created one long street. Dedicated for UNESCO urban heritage, the place received the highest concentration of local inherent sociocultural identity. This study involved direct observation, in-depth interview with the street users, and document review on historical significant that represented descriptive qualitative data.



**Figure 1:** Location of study area  
Source: Google Map

The street users as the respondents were randomly selected at the time of the survey, which included shop owners, vendors, shopkeepers, workers, shoppers, visitors, and residents. In-depth interview was conducted with 21 respondents using the format of semi-structured interview. The questions were set as a guide for us in order to make sure that all variables were covered during the interview. Document review was employed to determine the historical significance of the place. It supported the data from the interview. During the interview session, the data were recorded using a tape recorder and a note book. This study also used the observation technique where data were analyzed qualitatively. A digital camera and field notes approach were also used to document the physical characteristic of building condition. All the techniques were analyzed qualitatively through thematic coding using NVivo software. All the data were triangulated concurrently and compared to previous research before determining the findings.

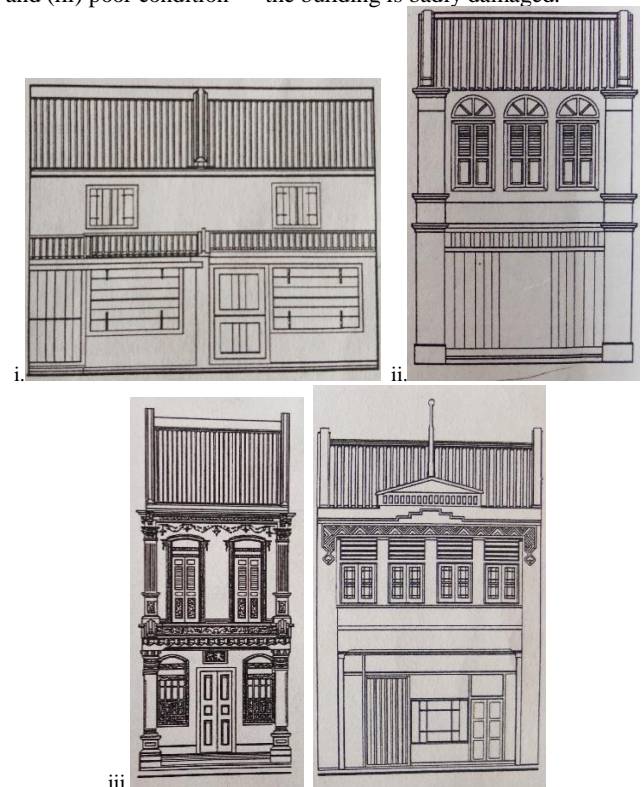
## 3. Result and Argument

Building condition that contributed to the walkable character in traditional streets in the Melaka Historical City Centre were observed. Table 1 shows that this variable have mentioned in in-depth interview, visual survey and historical document.

**Table 1:** Building attributes that contributes towards walkability of traditional street

Building Attributes	Interview (street user) (n=21)		Visual Survey	Historical Document
	Yes	No		
Building condition	21	-	✓	✓

Building condition is associated with the maintenance of the building where it could be rated by good, average, and poor condition through visual survey method [15]. This study used the National Disaster Risk Management Programme (2007) [16] assessment categories, namely (i) good condition — the building has not shown any signs of distress and it satisfies all the safety, hence no action is needed towards retrofitting, (ii) average condition — the building is seen to be deficient (or distressed) but it can be repaired and strengthened or performance criteria set by the user, and (iii) poor condition — the building is badly damaged.



**Figure 2:** Typology of shophouses according to the older; (i) Early shophouses, (ii) 1st transitional shophouses, (iii) Late shophouses and European shophouses style [17]

Document review showed that all buildings have a very strong significant history where the oldest was built in the 1800s and the latest was built in 1960. These buildings were built under Dutch and British colonies with a diversity of style such as early shophouses (1800s), first transitional shophouses, late shophouses style (1900–1940s), European shophouses style (1930–1960s) (Figure 2) [17]

However in our visual survey, majority of the buildings are in good condition (80% - 132 units) and the remaining 20% (33 units) are in average condition (Figures 3 and 4). During the visual survey, several buildings were under conservation construction in order to upgrade the condition. This shows that the preservation of our historical significant building is essential which is associated with the building's condition.

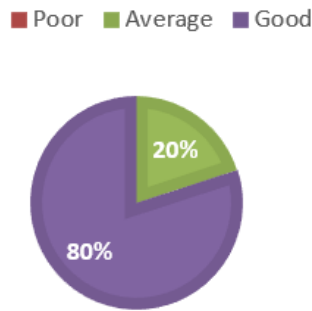


Fig. 3: A pie chart: Building condition from visual survey



Fig. 4: Buildings with (i) a good condition of building enhances the uniqueness and quality of view of the place, thus encouraging a pleasant and walkable environment and (ii) an example of average condition of building condition

The data from the in-depth interview also shows that a place with good building condition maintenance is essential. All respondents (n = 21) mentioned that the condition of the building makes them

enjoy walking along the street and nearby places (Table 1). One of the respondents admitted,

*"I enjoy and feel safe while walking here because generally the building is good in maintenance and this enhances the uniqueness and beauty of the place as our historical heritage."* (Respondent 1)

The quotation above shows that a good building condition with a quality visual will create a value of aesthetic, harmony, and attractive. Therefore, a good building condition is important because it contributes towards a psychologically safe and comfort environment. It is also able to encourage pedestrians to be more appreciative towards the visual aesthetic of the building, thus encouraging more people to walk and use the place.

Previous study also supported that a poor building condition can generate an uncomfortable and unsafe environment while passing the building even though it has a unique appearance [18, 19].

In short, the good building condition is essential in contributing traditional street character. This study found that this character should be considered in designing a new or existing street. This environment will create a walkable place that is psychologically safe and comfort to the users. In addition, it helps the appreciation towards the aesthetic visual appearance of a group of building in a street.

#### 4. Conclusion

It was proven that building condition encouraged the walking environment in Melaka Historical City Centre. It enhances the uniqueness of a building's appearance through a combination of diversity of architecture styles. It also creates a form of unique spatial which generates an interesting quality of view. Hence it is one of the factors that encourages people's appreciation through a good walking ambience.

This study assessed on how building condition contributes to a walkable environment and strengthens the street character of our heritage streets or during a new street development. Therefore, to conserve our heritage building is essential. Thus, this study is expected to be a useful reference for urban designers and architects in designing the existing or new street that emphasizes the local character. Therefore, future research on why development is still lacking in conserving our heritage buildings in Malaysia and what the solution of this matter should be done. Focus on the essential things of your article.

#### Acknowledgement

The author would like to express a great attitude to Universiti Kebangsaan Malaysia (UKM) and Ministry of Higher Education, Malaysia for funding this study through research grant FRGS/1/2015/SS111/UKM/02/2.

#### References

- [1] C. Moughtin, *Urban Design: Street and Square*, 3rd ed. Architectural Press, 2003.
- [2] A. Jacobs, "The Importance of Streets," in *On Asian Streets and Public Space*, heng C. Kiang, L. B. Liang, and H. Limin, Eds. Ridge Books, 2010, pp. 159–169.
- [3] E. Lillebye, "Architectural and functional relationships in street planning: an historical view," *Landsc. Urban Plan.*, vol. 2046, no. 96, 1996.
- [4] J. Gehl, *Cities for People*. Island Press, 2010.
- [5] Gehl Architects: Urban Quality Consultant, "New York City," *ity of New York*, Department of Transportation, 2009.
- [6] Shuhana Shamsuddin and A Bashri Sulaiman, "Eighth Leadership Seminar, ISI/Seacum on Heritage Conservation and Cultural Revival, Johor Bahru, Oktober 2001," in *Conservation of Urban Heritage in Malaysia: the Threats, the Prospects and the Challenges*, 2001.

- [7] Wan Ismail Wan Hashimah and S. Shamsuddin, "The Old Shophouses As Part Of Malaysia Urban Heritage: The Current Dilemma," in 8th International Conference Of The Asian Planning Schools Association, 11-14th September 2005, 2005.
- [8] Zuraidi Siti Nor Fatimah, "Model Rangka Kerja Pemuliharaan Struktur Fabrik bagi Bangunan Bersejarah," Universiti Tun Hussien Onn Malaysia, 2014.
- [9] Zakinan Nurul Fhatihah, "Bangunan Usang Terbiar Cacat Pemandangan Bersejarah," Berita Harian, 2017.
- [10] M. Vikas, "Walkable Streets: Pedestrian Behavior, Perceptions and Attitudes," *J. Urban. Int. Res. Placemaking Urban Sustain.*, vol. 1, no. 3, pp. 217–245, 2008.
- [11] "ScienceDirect Walkability Design for Urban Public Housing Park," vol. 02, 2016.
- [12] Kean Jie Tan, Ayrton Brandon, Khairul Ihsan Badri, Muhammad Nushi Izahar, Nik Muhammad Amin, Choong Li Loh, and Chong Thein Wai, "Kajian Analisa Rekabentuk Perbandaran Pekan Nilai Lama," Pekan Nilai Lama, Negeri Sembilan, 2017.
- [13] Mohd Haniff, Mohd Fadli, and Nor Afifah Hussien, "Kajian Analisis Rekabentuk Perbandaran Bandar Kajang," Kajang Selangor D.E., 2016.
- [14] Astro Awani, "Kampung Kepayang dan Papan Makin Dilupakan," Ipoh Perak Darul Ridzuan, 2016.
- [15] Jaafar Nor Haslina, Abdul Rahim Asiah, Abd Samad Nur Amirah, and Che Rahim Che Raikandar, "Sidewalk Accessibility at Melaka's Traditional Street for People with Disabilities (PwDs)," *Plan. Malaysia*, vol. 15, no. 1, pp. 389–396, 2017.
- [16] Kawakami Kaori, Welse Kai, Dingwall Paul, *World Heritage Papers 35. Understanding World Heritage in Asia and the Pacific*
- [17] *The Second Cycle of Periodic Reporting 2010-2012* Supported.
- [18] UNESCO 2012. 2012
- [19] Syed Zainol Abidin Iddid. *Pemeliharaan Warisan Rupa Bandar. Bandar Warisan Malaysia*. 1995
- [20] A. H. Askari, K. Dola, and S. Soltani, "An Evaluation of the Elements and Characteristics of Historical Building Facades in the Context of Malaysia," *Urban Des. Int.*, vol. www.palgra, no. October 2013, pp. 1–12, 2013.
- [23] [NYC DOT, *Street Design Manual*. New York City (available at [www.nyc.gov/dot](http://www.nyc.gov/dot)): Copyright © 2009 New York City Department of Transportation, 2009.