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The Quality of Traditional Streets in Indonesia

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ABSTRACT

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In the past few decades, the cities of Indonesia have experienced rapid development, with the transformation sometimes leading to improvements but often having a devastating impact on the urban environment. A worrying trend has been the reduction of the role of urban traditional streets in Indonesia as mixed-use and vibrant public places to become purely channels of movement, especially for car-based traffic. For this reason, this research focuses on assessing the quality of traditional streets in Indonesia and is being conducted before they disappear as a result of rapid development in urban areas.

The primary aim of the research is to demonstrate the role of traditional streets in shaping the urban environment and urban public life. In this context, the research focuses on critically examining the distinctive characteristics of such streets through street quality indicators that have been developed in urban design discourses. A qualitative inquiry is chosen as the main research method with multiple case studies and a research strategy based on research questions, research knowledge, and expertise. The techniques to gain data were field observations (walk-by observations, pedestrian counts, and behavioural mapping) and in-depth interviews. The analysis procedure was a rationale-inductive method and relied on the data from the field work as the emerging information (data-led analysis).

The research concludes that there are five major characteristics of traditional streets that play important roles to support urban public life; these are: the physical and visual quality of the street; traditional street as mixed-use urban space; as multi-cultural urban space; as a cultural path and public space of the city; and traditional street activities as intangible culture. The results of the study confirm the earlier findings that suggest that Asian street are vibrant places with mixed-use pavements that contribute significantly to the vibrancy of the city. This study adds to the knowledge of the potential of the traditional street in Indonesia as one of the primary urban spaces, as public space, as creative space, as cultural space, and as urban heritage that should be safeguarded and conserved for its outstanding value not only for its architectural diversity, but also for its intangible cultures.

The research also recognises the important role of traditional streets in Indonesia to the contemporary city. The recognition of the integral entity of these streets including their economic, social, and the cultural life of the surrounding context have led to a better understanding in terms of research and can be part of the foundation to formulate better policy and design intervention for the future of Indonesian cities.

Keywords: traditional street, urban quality, urban design, Indonesia

PUBLICATIONS

Conference Papers

1. Sholihah, A.B., Heath, T., Tang, Y., 2013, "Assessing the Quality of Traditional Streets: Case of Malioboro Street, Yogyakarta, Indonesia", in the proceedings of the 7th Symposium on Asian Heritage: Saving Traditional Streets of Southeast Asia, Universiti Teknologi Malaysia, Malaysia, 5-7 December 2013

2. Sholihah, A.B., Heath, T., Tang, Y., 2014, "Public Perceptions on Street Image and Place Attachment of a Traditional Street, The Case of Pecinan Street, Magelang, Indonesia" in the proceedings of ASEASUK (Association of Southeast Asian Studies in the United Kingdom) 14 Conference, University of Brighton, United Kingdom, 12-14 September 2014

3. Sholihah, A.B., Heath, T., 2016, "Assessing the Quality of A Traditional Street in Indonesia: The Diversity Indicator" in the proceedings of AMER Intnternational Conference of Quality of Life, Medan Indonesia, 25-27 February 2016

Journal Paper

1. Sholihah, A.B., Heath, T., 2016, "Assessing the Quality of A Traditional Street in Indonesia: The Diversity Indicator" in the Procedia Social and Behavioural Science Journal (fortcoming)

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TABLE OF CONTENTS

Appendices

LIST OF FIGURES

LIST OF TABLES

GLOSSARY OF TERMS

Alun-alun	Traditional city square
Angkringan	Traditional mobile food stalls, mainly in Java cities
Batik	A technique of wax-resist dyeing applied to whole cloth, or product, such as cloth or hand-craft made using this technique
Desa	Village, rural area
Diwali	or Festival of light is an ancient Hindu festival celebrated in autumn (northern hemisphere) or spring (southern hemisphere) every year
Dinas tata kota	Urban planning agency
Grebeg Gethuk	A traditional festival to commemorate the Magelang city birthday to perform giant Gethuk as Magelang most famous traditional cuisine
Jalan	Street
Kampung	Small district in urban/rural area
Klenteng	Chinese temple for the Confucian (Konghucu, in Indonesia)
Kota	City, town
Lesehan	Food stall offer a traditional way of eating on the mat which has become a famous attraction for tourist
Musholla	Small mosque inside the district/settlement
Pasar	Market
Preman	Street thug
Pecinan	Chinese district
Sekaten	A Javanese traditional ceremony, festival, fair and pasar malam (night market) commemorating Mawlid (the birthday of prophet Muhammad), celebrated annually started on 5th day through the 12th day of (Javanese Calendar) Mulud month (corresponding to Rabi' al-awwal in Islamic Calendar)
Waisak	A Buddhist festival to marks Gautama Buddha's birth, enlightenment and death

1

Introduction

1.1 Prologue: Personal Context

My personal interest in urban design, particularly in urban streets and conservation started when I was a student in the Department of Architecture Gadjah Mada University, Indonesia (Undergraduate Degree) and then continued as a student of Town and Regional Planning in Universiti Teknologi Malaysia (master degree). During the undergraduate degree, I was actively involved in campaigns on the implementation of the barrier-free environment in Indonesia through several projects, notably Malioboro Pilot Project. It was the first project on installing guiding blocks and ramps along Malioboro Street, which makes it the first accessible street in Indonesian cities (1998-1999). My acquaintance then continued when I was actively involved in the Centre for Heritage and Conservation, Gadjah Mada University and included in some studies on heritage conservation, especially in urban areas.

The interest in urban design and conservation then led me to study further on informal street activities and their role in conserving urban cultural entity: the case of Malioboro Street in 2006 for my master's thesis. This manuscript was then published as a textbook with the same title in 2012. During the master's degree, I joined the International Field School on Asian Heritage (IFSAH) in Malaysia, India, and Indonesia. This program aims to promote and establish the Asian Chapter for cultural heritage conservation and management.

After I join the Department of Architecture, Islamic University of Indonesia as a lecturer, then with some colleagues, I initiated the establishment of a research group on Nusantara Architecture (CITAR), which mainly attempt to make inventories of Indonesian Architecture including in urban areas. My position has led

me to be involved in some government projects, including helping Yogyakarta City Council to nominate heritage buildings to win the Mayor Prize in 2009.

The journey of my activities both in the practical and academic profession has led me to continue studying the traditional urban streets in Indonesia. Moreover, after I came to the UK and witnessed some examples of streets which have been claimed back to their position as vibrant public space, I believe the speciality and characteristics of traditional streets in Indonesia are worth to reveal and share both for knowledge and for the practical urban design profession.

The relevance of this research in the Indonesian context is quite high since there has been a rise of awareness on the importance of urban public space as well as urban heritage and conservation. The relevance of this research is seen from several design competitions on street revitalization particularly in several Indonesian streets, including in Pasar Baru and Malioboro Street (both are the case studies of this research) that happened during the fieldwork of this study. The result of this study is expected not only to add the theoretical conjecture but also encourage the establishment of the traditional streets as important public space for the cities under consideration.

1.2 Background of the Study and Problem Definition

Transformation of Asian Cities: from Traditional Cities to Modern, Global Cities

Recently, cities of Southeast Asia, including Indonesian cities have experienced rapid development and urbanisation. Many cities are transforming from traditional cities with precise cosmological order and socio-cultural patterns based on agrarian economies into centres of global consumption, advanced services and decision making. They are growing fast and are now often much more advanced than cities in the West in terms of infrastructure and services (Douglass and Daniere, 2009). According to recent records, 53 per cent of Indonesia's population now live in urban areas and this could reach 71 per cent by 2030, on an estimation of 32 million more people moving from rural to urban areas (McKinsey Global Institute, 2012). The

urbanisation phenomenon might lead to new cities whilst also increasing the size as well as the capacity of existing urban areas across Indonesia.

The rapid growth and development of Indonesian cities have not yet been anticipated through the provision of convenient and reliable public transportation systems. This condition has caused an over-dependence on private transportation, mainly cars and motorcycles. Indeed, the Indonesia Central Bureau of Statistics records that the number of registered vehicles has increased at a rate of 10.53 per cent a year since 2007 (see Table 1.1). Amongst all modes of transportation, motorcycles and private cars have maintained the highest growth and become the dominant means of transportation.

Table 1.1
The Growth of Motorised Vehicle in Indonesia (2007-2011)

year	Private car	bus	truck	motorcycle	total	growth
2007	6,877,229	1,736,087	4,234,236	41,955,128	54,802,680	
2008	7,489,852	2,059,187	4,452,343	47,683,681	61,685,063	11.15%
2009	7,910,407	2,160,973	4,452,343	52,767,093	67,336,644	8.44%
2010	8,891,041	2,250,109	4,687,789	61,078,188	76,907,127	12.44%
2011	9,548,866	2,254,406	4,958,738	68,839,341	85,601,351	10.1%
					Rate growth per annum	**10.53%**

Source: Indonesia Central Bureau of Statistics, 2013,
http://www.bps.go.id/tab_sub/view.php?tabel=1&daftar=1&id_subyek=17&notab=12, accessed in 30 April 2013

As a result of the increasing traffic entering the city centres, city streets have become solely vehicle circulation arteries rather than being attractive public places. Gehl (2002) describes this phenomenon as "the invaded city" where the domination of the car in city spaces (movement or parking) has gradually usurped space in streets and squares.

Figure 1.1 Street space in Indonesia is becoming a single use channel for vehicular movement.
Source: Kompas.com, antara.com, 2013

The impact of this situation has been that many local and central authorities not only plan to build new roads or highways, but also implement street widening schemes for existing streets that require new developments to reduce the pavements and greenery also demolish the original street frontage along the traditional streets. The result is a loss of urban heritage and unique character of traditional streets across the country. In fact, the street-widening scheme cannot successfully balance the functions of street and limit automobile domination. The result is on the contrary: the wider the street, the higher the desire of people to purchase automobiles. Moreover, the speed of new street development is unbalanced in relation to the growth rate of automobile purchasing each year. In the end, the reality is that almost 100 per cent of street space is for the automobile only.

Other Asian cities, such as Tokyo, Jakarta, Kuala Lumpur, and Mumbai, show that informal activities are endemic along the street space especially on the pavements. Many scholars, including Limin (2001), Miao (2001), Gehl (2010), Rapoport (1987), and Sulaiman and Shamsuddin (2001) have pointed out that the streets of Asian cities are full of human activities and interactions. Indeed, people use the street space to sell, to bargain, to work, to socialise, to do art, to protest, or even to pray. Indeed, the best Asian streets are viewed as inclusive multi-functional shared places for everybody. The domination of the street spaces by automobiles, however, is making the spending of time and causing interactions in street space impossible. The result in city after city is that only the most essential foot traffic battles its way between the vehicular movement and parked cars, and only a severely amputated selection of other activities can often now be found (Gehl, 2002).

Figure 1.2 Informal street activities along the streets of Asian Cities, a) Java Carnival, Solo, Indonesia, b) Jonker Street Night Market, Malacca, Malaysia
Source: www.kompas.com, www.gogomelaka.com, 2013

Modern Urban Planning Ideology and the Zoning System

Alongside this situation, modern urban planning ideology offers a new paradigm in the development of the city. In the early twentieth century, Le Corbusier and Frank Lloyd Wright's ideas about the future city involved a city with high dependency on the automobile. In addition to separating/zoning the functions of buildings, modern architecture also emphasises a functional approach based on new medical knowledge of health criteria that dwellings must have; light, water, sun, and ventilation and assured access of residents to open spaces. The building orientations are often more towards the sun, not the street. Thus, the most noticeable effect of modern (functionalist) city planning ideology is the disappearance of streets and squares from new building projects and new cities.

This separation of functions and activities through land use zoning has also occurred in Indonesia. Since the 1970s, the national development policy has focused primarily on economic growth. This situation has pushed housing programmes to the fore and encouraged the emergence of a large number of private sector housing projects. As a result, urban development started to spread outwards away from city centres and many new towns have developed (Siregar, 1998). Housing programmes on remote areas, similar to suburban phenomenon in the United States especially in the 1970s, have also spread out in Indonesian context. This suburban phenomenon has required people to drive every day from

their homes in the suburbs to their workplaces, mainly in the city centre, that increase the number of vehicles on the street exacerbated due to poor provision of public transportation.

The Invasion of the Shopping Mall Model

There is a tendency in Asia, that everything from the West (U.S. and Europe) is more sophisticated and modern. The modern architecture movement from the West was easily accepted and followed and the biggest change to the Asian streetscape has been the massive scale of commercial developments. As a result, air-conditioned shopping complexes are deemed almost a necessity in many urban areas of Southeast Asia. These indoor shopping malls not only appear as a new Asian streetscape phenomenon but are also dominant throughout the world (Utaka and Fawzi, 2010). They combine much of the commercial retails that have previously existed along the traditional streets in one large, massive built form. These include restaurants, cafes, anchor tenants, cinemas, department stores, fashion shops, medical centres, and sport facilities; all are co-located in a massive fully air-conditioned building.

This phenomenon has brought a new paradigm to commercial culture, from being horizontal in nature along a commercial street to one that is vertical in nature within a big or tall building. The changes of the street from being public in nature to a more private usage, from 'outdoor street' to 'indoor street', from continuity with pedestrian linkage to discontinuity in fragmented linkage. This new culture has emerged along with the rapid economic development and demands of people for a new, global, contemporary way of life. In Jakarta alone, for example, as many as 30 large shopping malls had been constructed, including Ratu Plaza Mall, the first shopping mall in the city built in 1986 and the largest one Cilandak Town Square (Citos) in South Jakarta. Meanwhile, some more large shopping malls, including Gajah Mada Square, Pacific Place and Citi-Walk Sudirman, are all in the city centre itself. The areas of shopping malls in Jakarta City have significantly increased from 1.4 million m^2 in 2000 to 2.4 million m^2 in 2005 (Tempo, 2006 in Firman (2009a)). These new shopping malls are usually located not far away from, or even located in

the traditional streets. Indeed, many traditional shophouses have been converted or demolished and rebuilt as shopping malls with a very different style and size than the surrounding buildings. This is damaging the continuity of the existing townscape; even in many cases new shopping mall designs do not fit well physically or aesthetically with their historic contexts.

Having a 'head-to-head' competition between small shops owned by local people and new shopping malls owned by predominantly foreign investors is not a stable situation. Furthermore, many people prefer to shop in the new mall for its convenience and sophistication. In the Indonesian context, a tropical country that is hot, humid, and sometimes has torrential rain, being in an air-conditioned building is often considered more comfortable. Thus in the end, many people would rather spend time in a shopping mall rather than walk in a traditional street, even though this provides better settings for social interaction and street life.

The Shifting of Human Scale Interaction in Urban Street

Originally, most of the urban streets were mixed use in nature. Various functions of the building were situated in the same area. Public buildings such as temples, schools, or mosques co-existed with residential and commercial functions. However, nowadays, most of the streets have changed towards more single-use commercial activities. As a result, the enormous diversity in mixed-use streets to sustain city safety, public contact and cross-use as advocated by Jacobs (1961) has been lost.

1.3 Importance of the Study

A worrying trend in the design of modern streets in Southeast Asia is the reduction of the role that the street plays as an important public urban place. Significantly, Kiang et al. (2010) have pointed out that in the rapid urbanisation of the Asian continent and transformation of its cityscapes, professionals and scholars need to pay urgent attention to the study of Asian streets and public space. It is expected that through recording them, learning from their complex nature, and

even applying distilled principles in new environments before they disappear under the assault of rapid urban transformation.

Even though a fair amount of literature has appeared and many conferences about Asian cities have taken place, most of them are about city/regional planning or studies of immaterial (e.g., economic or political) space. Physical places of human scale, such as a street or market, mainly remain absent from the discussions. Even when such a place is occasionally mentioned, the study usually focuses on its history or political symbolism rather than its functional and visual presence in today's daily life. This explains why Asian urban designers tend to consult research which draws its framework and examples mainly from the experience of Western (European and North American) cities. Many findings of these works appear universally applicable, however, Asia Pacific cities cannot solely copy the patterns of Western developed cities. Due to the unique demographic, social/cultural, and economic conditions, these cities have to find their own ways to develop their public spaces (Miao, 2001). For these reasons, in this research study, it is essential to analyse and reveal the quality of traditional streets of Southeast Asian Cities before they completely vanish.

1.4 Research Gap

This research about the traditional streets of Southeast Asia will complement several studies that have been conducted by Shamsudin and Sulaiman (2010) on *The Street and Its Influence on the Sense of Place of Malaysian Cities* and *The Vanishing Streets in Malaysian Urbanscape* (2001). Both studies reviewed the practice of street design and the role of the traditional street in the new 'urban' Malaysia. In addition, there is also a study conducted by Jaafar and Usman (2009) on the *Physical and Transportation Elements of Traditional Street in Malaysia*, and prior to that there is also a study conducted by Limin (2001) on *Mapping the Street: Reading Asian Cities.* Furthermore, several studies about streets in Southeast Asia featured in the Great Asian Streets Symposiums (GASS) 1 & 2 by the National University of Singapore. These symposiums aimed to provide a discussion platform for urban researchers and professionals committed to the study of streets and

public spaces in Asia. The initiative to organise such an event came from recognition that there is a need for an Asia-based node of excellence on networks of ideas and results of research projects that focus on Asian cities. Historically and today, research activity and literature on Asian cities and public spaces are often conducted and published by European and American institutions. By initiating and organising GASS, the Department of Architecture of the National University of Singapore responded to a dire lack of truly Asian perspectives within that field (Kiang et al., 2010).

However, after reviewing case studies presented at the symposiums, Jacobs (2010) pointed out that for the most part there seems to be little examination of how people actually use the streets and spaces, leading to ideas, programmes, and designs. This research is expected to reveal the distinctive qualities of Indonesian traditional streets, to examine the quality criteria of streets that respond to how people use and behave in the street space.

In the context of Indonesia, studies of the street as urban public space have started quite recently; however, most of these have yet to be published. Some are master's theses and student reports, for instance a study on *The Impact of Pedestrianisation at Pasar Baru, Jakarta* (Susanti, 2001). Others are published in journal articles and book sections, including *Study on Street as Public Space at Jalan Pemuda (Pecinan), Magelang* (Arifin et al., 2004) and *Competing for the Sidewalk: Street Peddling as an Unwanted Urban Activity* (Poerbo, 2010). The current research continues and deepens a study previously undertaken during a master's degree on *Informal Street Activities: Its Role in Conserving Urban Cultural Entity* that was published as a textbook (Sholihah, 2012).

For American and European urban designers, the interest in studying streets is not new. Jane Jacobs (1961) with her *The Death and Life of Great American Cities* proved the importance of streets and pavements in cities. In addition, Whyte's *The Social Life of Small Urban Spaces* (1980), Appleyard's *Livable Streets* (1981), Anderson's *On Streets* (1986), Gehl's *Life Between Buildings* (1987), Moudon's *Public Streets for Public Use* (1987), Rapoport's *Pedestrian Street Use: Culture and Perception* (1987), Moughtin's *Urban Design: Street and Square* (1992), Allan B Jacobs's *Great Streets* (1993), and Carmona et al.'s *Public Places Urban Spaces*

(2010) have all given us an insight that streets as one of the earliest components in the city are important public places rather than mere channels of movement. The most recent one is *The Street: A Quintessential Social Public Space* by Vikas Mehta (2012) which provides its readers with the tools to create sociable streets.

1.5 Research Questions

The research poses three main questions in assessing the quality of traditional streets in Indonesia. The questions are formulated as follows:

1. Do the distinctive characteristics of Indonesian traditional streets play roles in shaping the urban environment?
2. Is the urban public life is highly supported by the distinct characteristics of these streets? And how does the mechanism work, especially regarding the social, economic, and cultural activities along the street space and pavements?
3. Does the entity of traditional streets play a role as one of the primary ingredients of the whole city from its establishment to the present?

1.6 Aim and Objectives

The primary aim of this research is to reveal the distinctive characteristics of traditional streets in Indonesia and to recognise their role to support urban public life, including social interaction, economic activities, and cultural activities along the street spaces and pavements. In order to achieve the primary aim, research objectives are formulated as follows:

1. To demonstrate the distinctive characteristics of Indonesian traditional streets that play significant roles in shaping the built environment by critically examining the street quality indicators as developed in the urban design discourse;

2. To establish the role of distinct characteristics of traditional streets that support the urban public life, including social interaction, economic activities, and cultural activities along the street spaces and pavements;

3. To recognise the role of traditional streets in Indonesia as one of the primary ingredients of the city that can be part of the foundation to formulate a better policy and urban design intervention for the design of both new and existing streets

1.7 Structure and Organisation of the Thesis

Table 1.2
Organization of the Thesis

Part One	1 Introduction
	2 Streets in Urban Design Dimension
	3 The Concept of Traditional Street and Street Quality
	4 Streets in Indonesian Cities
	5 Research Methods
Part Two	6 Case Study 1: Pasar Baru Street
	7 Case Study 2: Pecinan Street
	8 Case Study 3: Malioboro Street
Part Three	9 Traditional Street Quality: Comparison and Contrast
Part Four	10 Key Conclusions and Future Work

This thesis is organised into four interconnected parts to provide sufficient information regarding the study on accessing the quality of Indonesian traditional streets. The first part of the study is to outline the background of the study, literature review, and research methods. Chapter 1 presents the background and problem definition of the study, aims and objectives, and the importance of the

study. It is followed with discussing the state of the art of the study and the structure of the thesis. Chapter 2 introduces the theoretical background regarding the role of street from an urban design dimension. The discourse on street quality and criteria of street quality are reviewed in Chapter 3 to develop framework in analysing the quality of traditional street. Chapter 4 presents an overview of streets in Southeast Asian cities that is followed by scaling down the context of Indonesian cities. It continues with by a review on urban design in Indonesia: history and practice and streets in Indonesian cities. Chapter 5 discusses the research method which traces the approach, design, strategy, and protocols adopted in the study. A summary of part one is presented in the end of this chapter. The structure of the thesis is formulated in figure 1.3 as follows:
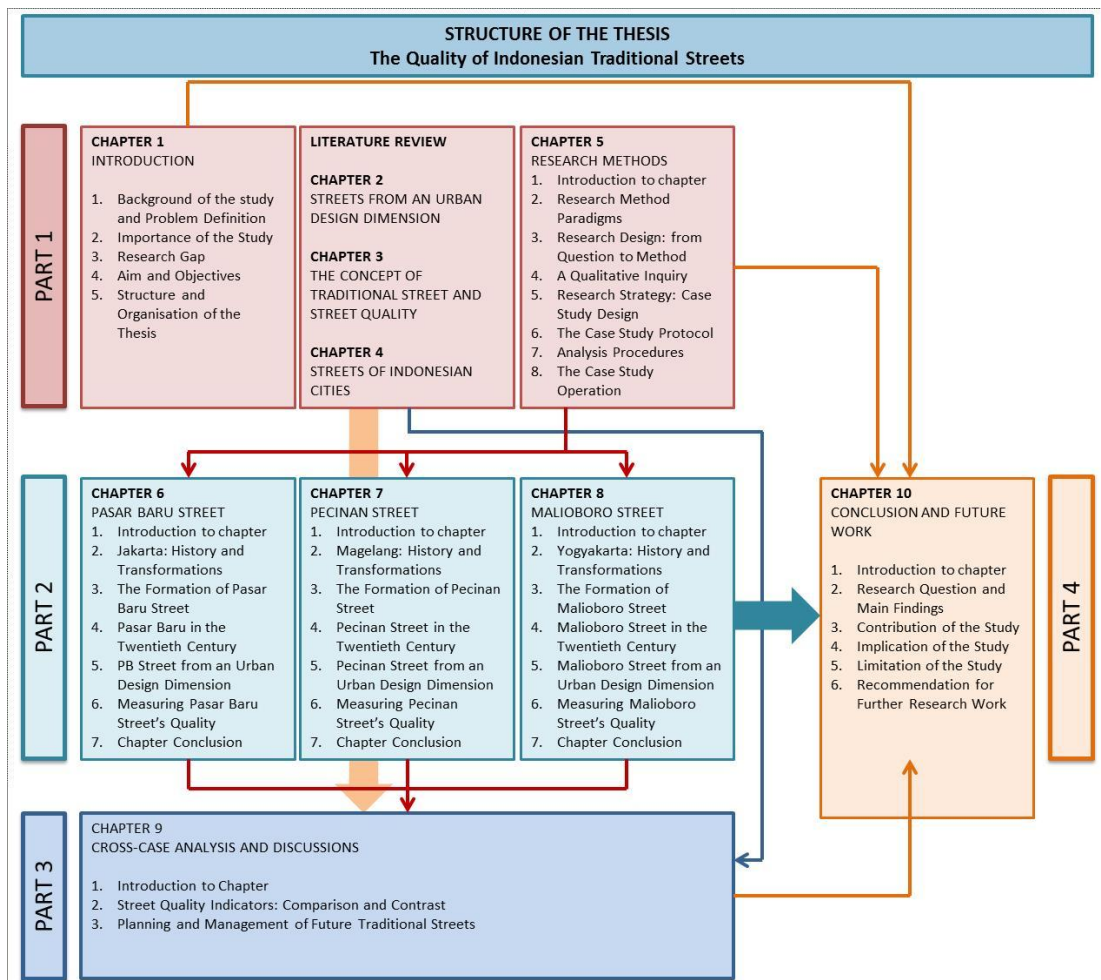
Figure 1.3 Structure of the Thesis

Part two presents the findings and result of the study undertaken in the three case studies on measuring the streets quality through field observations, behavioural mapping, and in-depth interviews. Chapter 6 to 8 focus on reporting the findings through thirteen street's quality indicators that have emerged in literatures and sub-themes analysis found in each of the case study. These indicators are: legibility; walkability, accessibility and connectivity; diversity; liveability; vitality; adaptability; creativity; form and visual richness; transparency and active frontage; safety; imageability; place attachment; and authenticity. It is also presents the findings regarding planning and management of the street. A summary of part two of the study is presented in the end of Chapter 8.

Part three presents the comparison and contrast of the main findings of each of the case study, which then relate to the literature or theory or previous studies and urban design practices to undertint their significance or contributions in Chapter 9. Finally, Chapter 10 as the last part of the thesis outlines the key conclusions of the research, contribution and limitation of the study, and also work to be suggested in the future research.

2

Streets from an Urban Design Dimension

2.1 Introduction

This chapter presents the concept of streets as one of the primary ingredients of urban settings and identifies its relation to urban design discourses. In this chapter, the concept and definition of the street are discussed, followed by the multi-functional dimensions of streets as stated by various scholars. The street in terms of its urban design qualities are discussed following the six main dimensions as suggested by Carmona et al. (2010), namely morphological, perceptual, socio-cultural, visual, functional and temporal dimensions.

An overview of the street in terms of its morphological dimension covers land use, building structure, plot pattern and street pattern, street scale and proportion, and pavements and pedestrians. This is followed by the perceptual dimension, which covers street image, meaning and symbolism, sense of place, and place attachment. The street as public space, street's public life and street culture are discussed under the socio-cultural dimension. The visual dimension of the street such as streetscape, architectural style, and façade design are then analysed. This continued with the functional dimension of street that covers the street network and movement and the street as an urban place. The temporal dimension of street, which covers street transformation and management, is also discussed,, before the conclusion of the chapter.

2.2 Street: Concept and Definition

The word of street has its origin in the Latin of *strata*, which means 'paved road'. According to the Oxford Dictionary (2015), a street is a public road in a city, town, or village, typically with houses and buildings on one or both sides. A street is distinguished as being wider than an alley or lane but narrower than an avenue or

boulevard. There are many urban design scholars who define streets in various ways. According to Rapoport (1987: 26-27), a street is *'linear space lined by buildings, found in settlements and used for circulation and sometimes for other activities.'* While providing the difference between a road and a street, Moughtin (1992: 129) defines the street as *'an enclosed, three-dimensional space between two lines of adjacent buildings'*.

A street has become a subject of intellectual discourse as early as Vitruvius (mentioned in his famous book *The Ten Books on Architecture, Book I, Chapter VI*), and during the Renaissance era by Palladio and Alberti. They were concerned with the classification of streets' characteristics in the paradigmatic environments of the Renaissance. More recently, the discourse on the concept of the street has been taken up by various scholars such as Krier (1979), Trancik (1986), Ellis (1986), Rykwert (1986), Moughtin (1992) and Jacobs (1993).

In the context of the urban physical form, a street is believed to be one of the earliest and the most un-changed elements of city pattern. Some scholars even believe that certain streets are older than the human settlements they serve (Rykwert, 1986). From a functional perspective, a street connects one place to another and provides a network of routes and whilst the buildings of a city may change, streets often remain the same throughout history. In the words of Celik et al. (1984: 1), streets are *primary ingredients of urban existence and they provide the structure on which to weave the complex interactions of the architectural fabric with human organisation*.

Streets, more than any other elements, often play a significant role in determining an urban form. Jacobs (1993) states that through the forms they have created, streets contain some characteristics that distinguish a city form from others. They help in determining the period when the city was built, its geographical characteristics, the underlying functions, design or political philosophies, technological demands, and the local culture. Additionally, a street or in other terms "path", according to Lynch (1960), is the first most significant element which forms the image of a city. Lynch identified that amongst the key urban elements of paths, nodes, landmarks, edges and districts, paths tend to be the most noticeable and memorable features in a city. It should be noted that other

channels of movement, including alleys, motorways, railways, canals and the like are also included in this category. A path is the only element amongst them which allows individuals to view the other four elements as well.

2.3 The Role of Street

'People have always lived on streets. They have been the places where children first learned about the world, where neighbours met, the social centres of towns and cities' (Appleyard, 1981: 268).

The multiple role of a street have been identified by various scholars including Jacobs (1961), Rykwert (1986), Czaenowsky (1986), Rapoport (1987), Moughtin (1992), Jacobs (1993), and Celik et al. (1984). This following section discusses various uses of streets, especially streets in an urban setting found in several previous studies.

2.3.1 Street as Channel of Movement

First and foremost, a street is a channel of movement for pedestrians as well as for vehicular traffic. As a channel of movement, a street connects one place to another. The street provides a link between buildings, both within the street and in the city at large. As a link, it facilitates the movement of people, as pedestrians or within vehicles, and the movement of goods. The movement could be walking, riding horses, camels and other animals, using animal's to pull carts, cycling, and driving cars and motorcycles, etc.

In correlation with this function, Eichner and Tobey (1987) have identified various activities regarding the use of streets as a channel of movement, that is presented in Table 2.1 as follows:

Table 2.1
The Street as a Channel of Movement

FUNCTIONAL USES
Vehicular Circulation • Through movement • Picking up/dropping off passengers • Curb side parking

- Access to parking
- Buses
- On-street service
- Off-street service
- Emergency vehicle

Pedestrian Circulation
- Through movement
- Waiting for, boarding and alighting from vehicles (buses, taxis, cars)
- Entering and leaving subways
- Crossing street
- Entering and leaving buildings

Source: Eichner and Tobey (1987)

The interpretation of the role of a street as a channel of movement is mainly regarding its functions in efficiently transferring traffic, goods, and services through urban spaces. These activities have led many streets to become inundated with vehicular traffic that to such extent, other parties, such as pedestrians and public life have slowly been squeezed out. However, streets, such as those in Barcelona, Copenhagen, Curitiba and Melbourne, have strived to regain a reasonable balance between traffic, market, and meeting places (Gehl, 2002).

2.3.2 Street as Social Space

The recognition of street as social space is not new in urban design discourse. Scholars such as Whyte (1981), Jacobs (1961), Appleyard 91981), Gehl (1987), Jacobs (1993), and Mehta (2013) have embraced the role of street as important social space in the city.

As social space, streets open to public. They serve as an arena for social interaction. People from different backgrounds are allowed to do various activities, both engaged individually or groups. They use the street space throughout day and night in different duration of time. The street space then acts as a place to see and be seen. Various activities such as strolling, sitting, resting, people-watching, talking, and waiting which are predominantly static form the functions of a street as social space.

In streets, most of the social interactions take place in the pedestrian area. Gehl (1987) generates type of pedestrian activities in the street space in three different activities, namely necessary activities, optional activities (urban

recreation), and social activities. In relation to the role of street as social space, optional and social activities might appeared to create vibrant public life of streets rather than necessary activities that only result in enhancing the dynamic activities in the streets, as people walking through the street space.

2.3.3 Street as Commercial Space

Some streets function as places for the exchange of goods or as places for doing business (Rykwert, 1986, Jacobs, 1993). People use such streets as places to offer goods and as places for displaying as much as they are 'allowed'. Pedestrians can see, compare, discuss with their companions, bargain and decide whether to buy the item displayed in the streets or not.

In Asian cities, streets, besides being a public space, have traditionally served as places to undertake commerce. While people use the street as a place for trading, numerous other forms of economic-based informal street activities, such as street vendors and street musicians, also occupy part of the street space.

Commercial activities, whether they are formal (shops) or informal (street vendor, street café), give the life or the street space for their bustle and vibrancy. Opening hours contribute to the liveliness of the street as the street will be left empty after hour. Traditionally, many streets are mixed-use in nature. Most of the commercial streets are also functioned as residential area especially for the shop keepers or owners. This mixed-use function keep the street inhabited in various activities and long hours of time duration.

2.3.4 Street as Political Space

The people of cities are familiar with the role of street as political space. The street is a place where personal and political life flows together and it is '*a meeting ground for the development and exchange of ideas and hopes or a stage for demonstration and mass expression*' (Jacobs, 1993). Streets are often used as routes for political rallies and marches towards power or political representations, such as governmental offices, parliament buildings, and city monuments.

The image of a street as a place of protests expresses its capacity as '*a place of power for people*' and as '*a place of political oppression*' (Mehta, 2013: 19). As a place of power for people, a street is an attractive place for doing protest for it is highly visible with highest possibility of audience. At the same time, the network of street offers flow of protesters movement especially towards the political representations.

In many cases, including the imperial axis to Tiananmen Square in Beijing and the avenue between the White House and the Capitol in Washington, streets function as place to hold national parades and Independence Day ceremonies, or on the contrary, sometimes streets are where people gather to protest against formal authority.

2.3.5 Street as Cultural Space

According to Rapoport (1987), the use of streets by pedestrians is primarily culturally based. In some occasions, a street can transform into space to do parade, performance, or play. People often celebrate their success, identity, or important occasions along the street space through street parade and processions. During the occasions, a street can be the setting for funerals and at the same time as wedding festivities setting. These streets are also place to perform for the street musicians or exhibition for artists.

The role of street as cultural space for the people is closely related to the people beliefs and customs. Street parade and festivals for example are often repeated over time, which then become tradition. The repeated occurrence of this event creates a ritual and history that is passed down to the young and new generations (Mehta, 2013).

2.4 Street from an Urban Design Dimension

2.4.1   The Morphological Dimension Street

The journey of streets in terms of morphological dimension of urban space has been viewed from the existence of streets as one of the earliest elements of urban space. The concept of streets in morphological dimension is inseparable to the concept of urban morphology which has been the attention of scholars in urban design. Scholars such as Conzen (1960) breaks down urban morphology into several key elements, including street pattern, plot pattern, building structure, and land use. Amongst these four morphological elements, street pattern tends to be the most enduring elements as '*a consequence of being a capital asset*', of '*ownership structure*', and in particular, of '*the difficulties in organising and implementing large-scale change*' (Carmona et al., 2010: 77).

The morphology of street itself can be divided spatially as a street wall and street space (Ellis, 1986). A street wall is an enclosure of street space, which can be formed by a building or landscape. Meanwhile street space refers to the volumetric entity created by the street wall. Speaking of street form, Trancik (1986) found there are two main types of street form, namely uninflected (straight) street and inflected (curved) street. In uninflected street, the entire street space can be perceived at a glance and displays a monumental physical form. Meanwhile, the inflected street space gradually unfolds due to its curvature, having variety of façade design, creating richness of visual quality, and it is much more in keeping with human figure rather than a monumental physical form.

Street Scale and Proportion

Two important aspects of a street are the street scale and proportion (Moughtin, 1992). Proportion concerns the relationship between different dimensions of space or an object in an urban street (McCluskey, 1992). Ashihara (1979) examined the proportion of streetscape using D for the *distance* between buildings on both sides of the street, and H for *height* of the street wall (buildings).

The observation has shown that D/H = 1 may be taken as a kind of median from which spatial qualities vary, depending on whether D/H is greater or less than 1, as shown in the following figure:
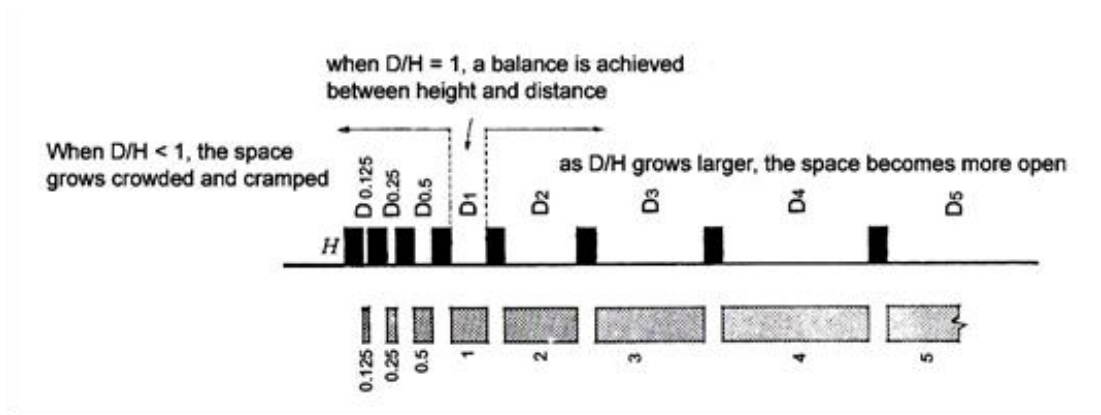
Figure 2.1 Proportion of streetscape: comparison of distance (D) and height (H) of adjacent buildings
Source: The Aesthetic Townscape, (Ashihara, 1979)

Furthermore, Ashihara (1979) explained the proportions of streetscape through architectural history. In the medieval walled cities of Italy, where the premium on space made the streets very narrow, the D/H ratio was approximately 0.5, although street width was very irregular. In contrast, the streets of Renaissance cities were comparatively wide with Leonardo da Vinci believing that a width equal to the height of surrounding buildings was the ideal proportion. The Baroque era reversed the proportions of medieval times, introducing streets twice as wide as the height of buildings, or D/H = 2. Modern architects have tended to rely on the concept of D/H since the turn of the century to calculate proportions that will ensure sunlight and privacy, but have not used it consciously as a technique in townscape design. The usual distance between buildings represents a D/H ratio of 1, 2, or 3, although Le Corbusier often employed a D/H of 5 and sometimes close to 10.

In parallel to Ashihara, McCluskey (1992) summarised a set of width to height ratios that can be applied to identify the ideal proportions of a street section based on human visual capability and psychological sensory perception. It ranged from an extremely high ratio of width to height, to the ratio which tends to lose its sense of containment, and to the one which can produce a psychological effect of claustrophobia.
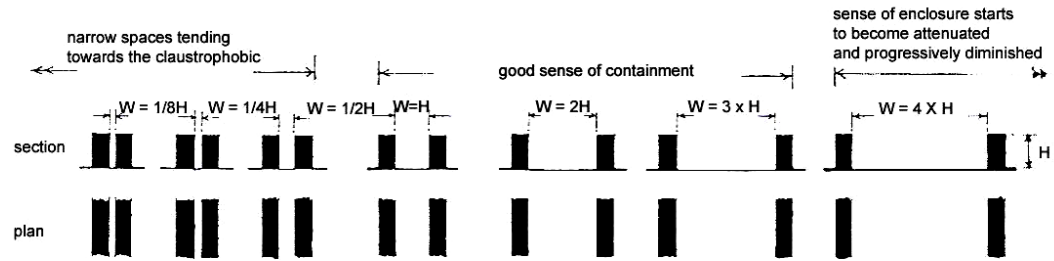
Figure 2.2 Ratio of streetscape; comparison of width (W) and height (H) showing degree of sense of enclosure of streetscape (Source: McCluskey (1992))

The above studies have mentioned the importance of street scale and proportion through period of architectural history for street activity, visual quality, and perceptual quality (psychological needs of the users). In fact, there are still a lot of opportunities to further reveal the role of this physical quality to the public life of streets.

Floorscape

'The importance of pedestrian public spaces cannot be measured, but most other important things in life cannot be measured either…pedestrian places are essential to a city's happiness' (Penalosa, 2004).

According to Jacobs (1961: 37) *'…street and their pavements, the main public spaces of a city, are its most vital organs.'* The fact that people can walk with ease and at leisure is one of the characteristics of best streets (Jacobs, 1993). Dimension, material quality of pavement, and the number of people who walk in pavements are amongst the concerns of urban designers when designing the best pavements.

The City of Portland (1998) published principles for pedestrian design that should be incorporated, to some degree, into every pedestrian improvement. They are ordered in terms of importance, such as safety pavement, accessible for all, well-connected, easy to use, good quality of amenities, flexible space, and economical. Another study complements the above pavement criteria, such as mobility, protection, ease, equity, enjoyment, and identity (Mateo-Babiano and Ieda, 2007: 1920). The importance of floorscape design quality is mentioned by Gehl (1987) as it may contribute to the occurrence of social and optional activities

along the street space. This kind of urban activity will embrace their vibrancy in places that are generally inviting and attractive for their design quality.

2.4.2   The Perceptual Dimension of the Street

The awareness and appreciation of environmental perception and, in particular, the perception and experience of 'place' is an essential dimension of urban design (Carmona et al., 2010: 111). Scholars including Lynch (1960), Relph (1976), Tuan (1977), and Proshansky et al. (1983) are amongst the pioneers studying environmental perceptions. Lynch (1960) for instance, concerned to study place image from people as environmental observers.

Relph (1976), Tuan (1977), and Proshansky et al. (1983) more concentrated to develop the concept of place-identity. Although each of them defines 'place' somewhat differently (Relph and Tuan are Geographers), many of their ideas and concepts are shared. Relph (1976) emphasises the concept of place-identity as having association to a sense of belonging and attachment to the place that people inhabit (concept of rootedness). In addition, Tuan (1977) adds the idea that place-identity can be developed by thinking and talking about a place through a process of distancing that allows for reflection and appreciation toward a particular place. Meanwhile, Proshansky et al. (1983: 60) believed that place-identity is '*a potpourri of memories, conceptions, interpretations, ideas, and related feelings about specific physical settings as well as types of settings*'.

Place Image and Environmental Meaning

Image of place is a central discussion in the studies of environmental perception in urban design. Lynch (1960) describes place image as the result of a two-way process between the observer and their environment. Place image and place identity are interrelated and can also be interchangeable; place image refers to a combination of place identity and how the place is perceived by the individual (i.e. it includes the individual's set of feelings about and impressions of the place) (Carmona et al., 2010). Lynch concludes that there are five physical elements that

form place image: paths (including streets), edges, districts, nodes, and landmarks. According to Rapoport (1977), place images are not only visual, but multi-sensory and they include visual form, socio-cultural attributes visual signs of human activities and people involvement.

In the past two decades, and in particular in the past ten years, there has been a significant increase in the attempts made by place leaders, urban planners, and decision-makers around the world to promote a positive and attractive image for their cities due to the growing competition between them (Avraham, 2004). The positive image may benefit the city in broader sectors, for example economy and tourism development. However, studying a city's image is not only for the benefit of the city planning but also for the important part it plays in revealing the citizens' level of satisfaction and pride (Luque-Martinez et al., 2007).

In the context of the urban street, *'image and meaning, and eventually identity of street as public space is not given, but produced through design, planning, and management, and most importantly from the use and appropriation of the street'* (Mehta, 2013: 13). This is in line to (Carmona et al., 2010: 112) finding that there are differences in environmental perception that, can be attributed to factors, such as *'age, gender, ethnicity, lifestyle, length of residence in an area, usual travel more, and also to the physical, social, and cultural environments in which we live in and raised.'*

Sense of Place

The word '*place*', based on Norberg-Schulz (1980) is totally made up of concrete things having material substance, shape, texture and colour. Together, these things determine the '*environmental character'*, which is the essence, character or 'atmosphere' of a place. A place is, therefore, a qualitative, 'total' phenomenon, which cannot be reduced to any of its properties, such as spatial relationships, without losing out of sight its concrete nature. The total phenomenon which composes a place, according to Norberg-Schulz (1980), implies a relationship of physical and non-physical aspects in inducing a character of the place. In parallel, Canter (1977) stated that a place is the result of relationships between activities,

conceptions, and physical attributes. It means that we have not fully identified the place until we know that activities are what behaviour is associated with, or what is anticipated. Physical attributes are what the physical parameters of that setting are and conceptions are the descriptions, or conception, which people hold of that behaviour in that physical environment.

Relph (1976) also points out that there is another important aspect or dimension of identity that is less tangible than these components and dialectics yet serves to link and embrace them. This is the attribute of identity that has been variously termed as the 'spirit of place', 'sense of place' or 'genius of place' (genius loci) – all terms which refer to the character of that place. Obviously, the spirit of place involves topography and appearance, economic functions and social activities, and particular significance deriving from the past events and present situations. It can persist in spite of the profound changes in the basic components of identity.

Montgomery (1998 after Relph (1976) and Punter (1991)) formulates diagram illustrating how urban design actions can contribute to and enhance the sense of place, as follows:
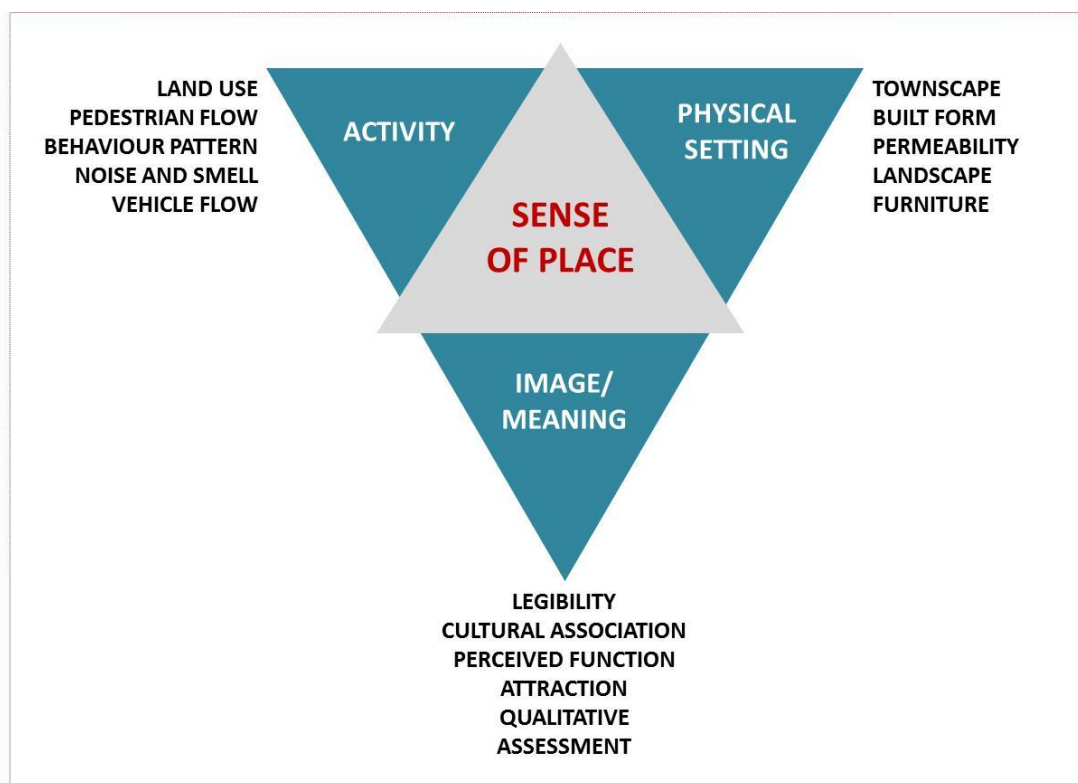
Figure 2.3 Sense of Place Diagram, adapted from Montgomery (1998)

Creating a place with a distinct character is not an easy task. Sense of place is a creation of the area as a whole rather than any specific part or element (Carmona et al., 2010). In other words, sense of a place can be found in the whole experience of place that constitutes from the interaction between the parts (activity, physical setting, and image/meaning). In the context of urban conservation Garnham (1985) argues that sense of place is a very important quality. Each town has its own individual uniqueness, character, identity, and spirit, which is different from all other places. The sense of place gives value and meaning to the people and without this sense, the quality of the place would be diminished.

2.4.3   The Socio-cultural Dimension of the Street

Understanding the relationship between people (society) and their environment (space) is an essential component of urban design (Carmona et al., 2010). Studies investigating the social dimension of street have been carried out in more than 50 years and still continue in recent years. Most of these studies (Jacobs, 1961, Rudofsky, 1969, Appleyard, 1981, Gehl, 1987, Jacobs, 1993, Montgomery, 2007, Mehta, 2013), for example have emphasized the role of a street more than merely as a channel of movement but as vibrant and lively social space.

According to Miles (2000), city is a product of culture, it is where most of the culture is made and received. As part of the role as social space, the activities in urban spaces are culturally based. They can be settings for variety of activities that is culturally based; for instance, urban street is the setting for funeral as well as wedding festivities. A street can be the place for music be performed, and so on. Thus, the socio-cultural life of urban space (particularly street) may vary as a result of different culture in each of places.

Street as Public Space

Public space is integral part of the public realm (Carmona et al., 2010), and plays an important role in sustaining that public realm (Sennet, 1971; Thomas, 1991; Lofland, 1998 in Mehta, 2013). It is the space that is not controlled by private

individuals or organisations, and hence is open to the general public (Madanipour, 1996: 144), and extends from the street, park, square of a town or a city into the buildings which enclose and line them (Tibbalds, 2012).

Carr (1992: 19-20) identifies three values of public space as: *'responsive, democratic and meaningful.'* Responsive spaces are those that are designed and managed to serve the needs of their users through comfort, relaxation, active and passive engagement, and discovery. Democratic space protects the right of user groups, accessible and provides freedom for action. Meaningful spaces are those that allow people to make strong connections between the place, their personal lives, and the world.

The degree of publicness of space can also be viewed under three qualities: *ownership* (whether the space is publicly or privately owned and constitutes 'neutral' ground), *access* (whether the public has access to the space), and *use* (whether the space is actively used and shared by different individuals and groups) (Carmona et al., 2010). The settings of public life are not necessarily only outdoor public space. Along a street or public space, areas for activities in-front and inside the buildings can also serve as public space.

Oldenburg (1999) describes such settings as "third places", as opposed to the 'first place' of home and the 'second place' of working space or school. Third places exist on neutral ground and serve to level their guests to a condition of social equality where; conversation is the primary activity and the major vehicle for the display and appreciation of human personality and individuality. Banerjee (2001) mentions that third places can be culture-specific – that have been historically associated with the culture and urbanism of different cities, for example, the pubs of England, the pavement cafes of Paris, and the beer gardens of Germany.

Street Public Life and Street Culture

> *'The greatest streets are in our mind – the street where I would…encounter you in discussion with Socrates, waiting for Pallas Athena to show me the cafe in which I could find Sartre discussing with Corbusier, Melville having a beer with Faulkner, etc. etc.'* (Dolf Schnebli, in Jacobs (1993).

The existence of some forms of public life is '…*a prerequisite to the development of public spaces and has been an integral part of the formation and continuation of social groups'* (Carr, 1992: 22-24). Public life can be broadly grouped into two interrelated types: *formal and informal*. The most interesting thing in urban design is informal public life, which, occurs beyond the realm of formal institutions and entails choice and voluntarism (Carmona et al., 2010). Informal street public life, or in other terms *'life between buildings'* (Gehl, 1987), *'street activities'* (Rapoport, 1987), and *'street culture'* (Wang, 1998, Idid, 2004) can involve all forms of activities taking place in the street space or within the buildings along the street, informal and public in nature, performed communally and culturally acknowledged as people's value and aspirations.

Social public life includes all communal activities within the street space as identified by Rapoport (1987), Gehl (1987) and Gehl (2002). Similarly, Mehta (2013: 24-25) defines the term of a sociable street as *'…a street that is open to the public, where people are present throughout the day and week, engaged – individually or in groups – in a variety of active or passive social behaviour that are predominantly stationary and sustained in nature. These are the streets that serve the commercial, leisure, and social needs of the people of the neighbourhood and the city'*. Whyte (1980) also notes that the street corner shows a great example of social life in urban space by showing all of the basic elements needed for vibrant public life: sitting space, a food vendor, and a heavy pedestrian flow; the middle of which is a favourite place for conversations.

Jacobs (1993), in his criteria for *Great Streets,* states participation in the life of a street involves the ability of people, who occupy the buildings, to add something to the street, individually or collectively, and to be part of it. That contribution can take the form of signs, flowers, awnings, colours, or in altering the buildings themselves. Responsibility, including maintenance, comes with participation. The use of streets is primarily cultural-based (Rapoport, 1987), in which cultural events along the street space are also part of public life. Cultural public life refers to parades, street events, art performances, street musicians, traditional foods, culture-based goods such as crafts, etc. that form the life of a street. As Rudofsky (1969) acknowledges, a street is where the action is. As part of functional public

life, street trading, in many cities of the world, is a common phenomenon. Whilst walking along the streets, including in Asia, there are street painters, stalls selling food, local art, merchandise and clothes, etc. They occupy part of the pavements, corridors, and other public spaces along the street for trading.

Duneier (1999) in his study of the informal life of pavements indicates that on pavements, the vendor, scavengers, and panhandlers have developed economic roles, complex work and mentors who have given them encouragement to try to live "better" lives. The pavements have therefore become 'places' for trading as well as 'living' and 'socialising' between the pedestrians and the vendors.

2.4.4 The Visual Dimension of the Street

The visual or aesthetic dimension of urban environment can be derived from *'the combination of its spatial (volumetric) and its visual qualities; the artefacts in those spaces and the relationships between them all'* (Carmona et al., 2010: 169). The aesthetic appreciation of urban environment has been studied by several scholars including Cullen (1961) who emphasises the importance of aesthetic qualities of urban environments through sequence, movement, and juxtapositions. He argues that urban environment should be considered and designed from the point of view of the moving person.

In conjunction to the visual quality of urban environment, Rapoport (1987) studied the effect of movement and artefacts that can be perceived by the users. He concluded that the pedestrians perceives more detailed features of the urban environment, especially the street rather than the people involved in high-speed activities, such as motorist. Meanwhile, Nasar (1998) observed the visual complexity of urban environment. He argues that interest towards urban artefacts increases with the complexity of an environment. The richer the details are, the more interesting they will be.
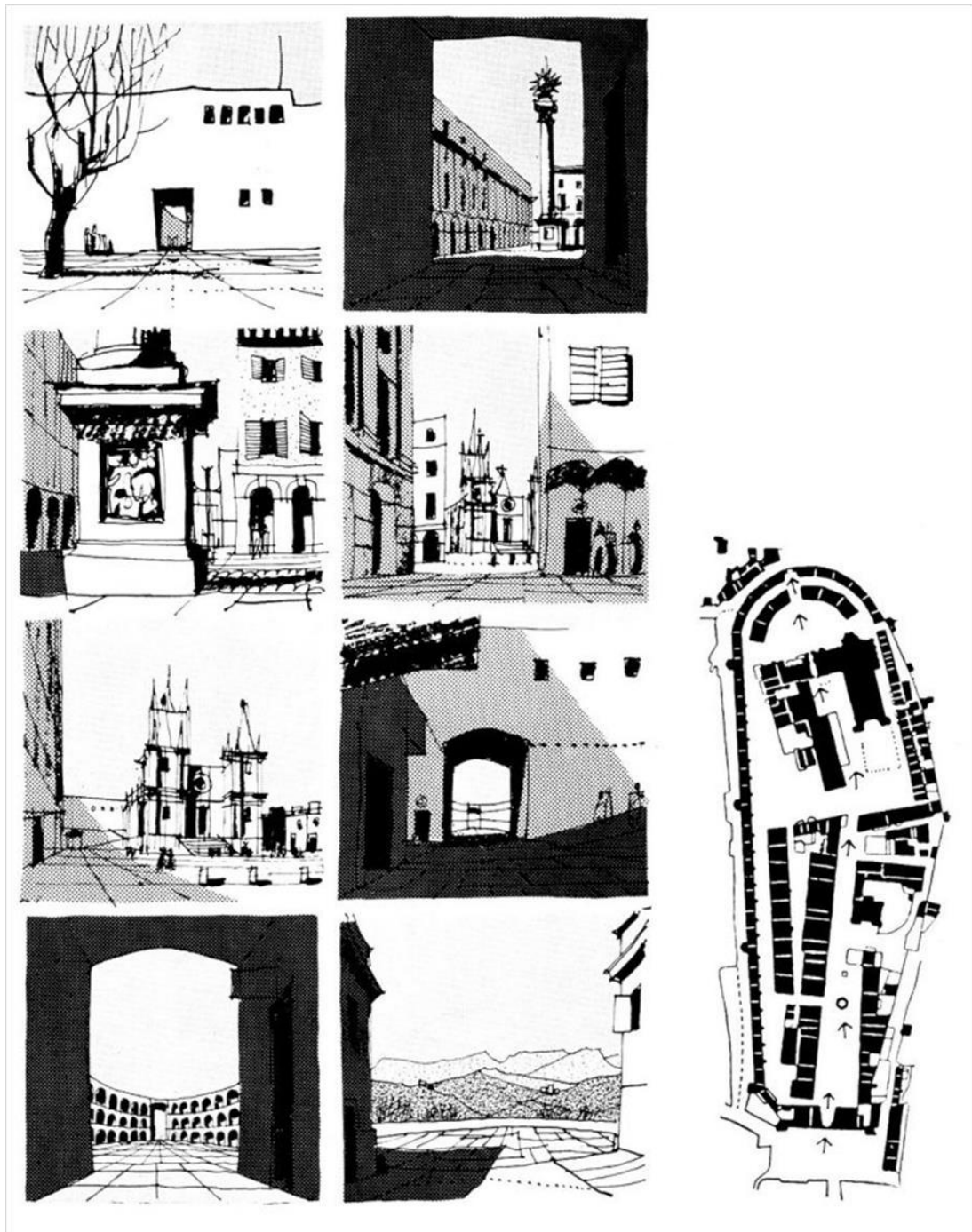
Figure 2.4 Gordon Cullen's Serial Vision of Qualified Urban Environment (Source: Cullen (1961: 17)

Aesthetic Quality of Urban Architecture

The aesthetic quality of urban places derives from their spatial qualities, colour, texture, detailing of the surfaces, and activities occurring within and around the urban space that can make significant contributions to its character (Carmona et al., 2010). The study on aesthetic qualities especially in urban architecture has been

conducted by scholars, for instance, Alexander et al. (1977) on the concept of 'positive' and 'negative' space. Positive and negative spaces in urban environment can be distinguished through figure-ground reversal.

Cullen (1961) defines the concept of 'enclosure' and 'closure'. Enclosure provides a complete private world that is inward looking, static, and self-sufficient. Closure, by contrast, involves the division of urban environment into a series of visual episodes. He argues that a balance of enclosure and closure is required to achieve more qualified urban spaces.

Meanwhile, Sitte (1889) establishes the concept of 'open' and 'bounded space'. According to Sitte, the ideal street must form a completely enclosed unit, a sense of enclosure to be the most important quality of public space, and stress the medieval street system's spatial enclosure.

Façade Design

Buchanan (1988a) argues that a building façade possess a number of roles in urban design, such as creating a sense of place, mediating the private and public space, boosting the visual quality of the building, and delight details. The good qualities of a façade design that interest people's eyes and are rich in details are elements of best designed streets (Jacobs, 2010). The Royal Fine Art Commission (RFAC) (Cantacuzino, 1994, in Carmona et al. (2010) identifies six criteria of what make a 'good building', such as *'order and unity'*, *'expression'*, *'integrity'*, *'plan and section'*, *'detail'*, and *'integration'*.

A study by Gehl et al. (2006) concerning the main pedestrian street in Copenhagen found that almost everyone interviewed had a strong sense of what was happening at the ground-floor level of the façade building– where the shops were located, and which displays were particularly interesting at that point in time. If the ground floors are interesting and varied, the urban environment is inviting and enriching. If the ground floors are closed or lacking in detail, the urban experience is correspondingly flat and impersonal. Furthermore, the transparent, welcoming and active facades give city space a fine human scale just where it means most: up close and at eye level (Gehl, 2010).

Scale and rhythm: A scale of 5 km/h is compact and rich in sensory experience. A scale of 60 km/h displays its virtues when you are moving at this speed, but rarely they meaningful to pedestrians.

Transparency: the various display windows and opportunities to perceive what is happening in the buildings enrich our experience considerably

Appeal to many senses: we can draw all of our senses when we are close to buildings, and we have sufficient time to look, listen, smell, and touch the good things on offer rather than a string of orange posters

Texture: attractive ground-level façade offer texture, good materials, and carefully crafted details

Diversity of functions: the functions inside the buildings have major impact on the activity and attractiveness of the spaces outside

Vertical façade rhythms: facades with primarily horizontal articulation intensify the feeling of distance – a long tiring perspective at eye level

Figure 2.5 Active Frontage and Urban Activities, Source: Gehl (2010: 35)

2.4.5 The Functional Dimension of the Street

To date, several studies have investigated the functional dimension of street, including Jacobs (1961), Appleyard (1981), Gehl (1987), and Mehta (2013). Jacobs (1961) studied the importance social interaction and economic exchange that flourish along the vibrant street. Gehl (1987) on *Life Between Buildings* emphasises the role of street mainly as public space (for optional and social activities) rather than only for necessary activities. The most recent study is about street as social public space by Mehta (2013).

Pedestrian Activity and Movement

Pedestrian movement is '*compatible with the notion of street as social space*', and there is '*a symbiotic relationship between pedestrian movement and economic, social, and cultural exchange and transactions*' (Carmona et al., 2010: 83). Pedestrian movement can be considered an outcome of two distinct components-the configuration of the street network or urban space and the location of particular attractions (shops, offices, public buildings, and so on) (Haklay et al., 2001).

Some research on pedestrian activity and movement, including Hillier et al. (1993) found that high integration streets have high numbers of pedestrians and car movements. In other words, the better the connectivity of the street is, the better pedestrian movement it may gain. This finding is in line to Gehl (1987) argument, that whenever a street or public spaces is of a poor quality, only necessary activities may occur. On the contrary, whenever public spaces is of a higher quality, necessary activities take place in a better frequency; it means, people choose to spend time longer in the space, and more importantly, optional and social activities will occur.

Activities in the Street as Public Space

An urban design is essentially about place-making, where places are not only specific space, but all the activities and events which make it possible (Buchanan, 1988b). Vitality of the city neighbourhoods depends on the overlapping and interweaving of activities and that understanding cities requires dealing with mixture of uses as the 'essential phenomena' (Jacobs, 1961).

Activities in the street as public space can be divided into passive and active engagement. The primary form of passive engagement is people watching. Other people and their activities are things that attract people (Whyte, 1980). Places like pavement café are places where, '*because of greater interaction with the street and good visibility, one can sit and watch the world go by*' (Montgomery, 2007: 99), as do '*fountains, public art, commanding views, and activities occurring in public spaces, ranging from formal lunch time to informal street entertainment*' (Carmona et al., 2010: 210).

Active engagement demands more direct contacts, whether with friends, family or strangers (Carr, 1992). Successful places provide opportunities for varying degrees of engagement among people, and vice versa, to disengage from the contact. The arrangement of urban amenities (benches, sculpture, fountains, public art, etc) can be configured in such a way that is conducive to social interaction (Carmona et al., 2010) and can be '*stimulus to provide a linkage between people and strangers to talk to other strangers as if they knew each other*' (Whyte, 1980: 94) .

2.4.6   The Temporal Dimension of the Street

The temporal dimension of the street can be seen as the fourth dimension that is 'time' dimension. Time and space are closely related (Lynch, 1972, Carmona et al., 2010). The relationship between time and urban space has been discussed through 'rhythmic repetition' as time goes by through time cycles. Lefebvre (1991) and Wunderlich (2008), for example, observed how places are often characterised

by particular rhythmic identities, which resulted from the time duration of space in every day uses (time-space rhythm).

Street Transformation: Continuity and Change

The transformation of the uses of a street in the city has attracted the attention of various scholars including (Celik et al., 1984), (Kostof, 1991), (Gehl and Gemzoe, 2000), and (Mehta, 2013). Gehl and Gemzoe (2000) found the use of streets as public space in terms of four different periods of the city history, such as the traditional city, the invaded city, the abandoned city, and the reconquered city. In the traditional city era, a street was having multi roles, such as being a meeting place or a market place, and there was a balance between traffic and pedestrians, as found in the medieval cities of Europe. In the invaded city, a street was primarily single use dominated by car traffic. During this period, it was unpleasant and difficult to get around the city on foot, and spending time in public spaces was made impossible due to lack of room and environmental problems.

The third is the *abandoned city;* it is when street as public space and vibrant public life has disappeared, where urban tradition is weaker and car culture has had more time to develop, a new type of city develops, it was mainly seen in Europe and US after World War II. The last is the *reconquered city;* it is where there have been strong efforts to find a new, workable balance between the uses of the street as a meeting place, market place, and traffic space. This has traditionally been a European phenomenon primarily, but it is interesting to note that corresponding urban policy strategies can now be found in cities in North and South America, Asia, and Australia to achieve a city as having better streets to live and spend time.

Mehta (2013) highlights some important points in time when major changes occurred in the social use and meaning of the street. Since the pre-Greco-Roman era, in Islamic cities of the Middle East, Medieval cities of Europe, until cities in seventeenth century Europe, streets have become legitimate public space and began to develop an identity as important open space for religious, commercial, political activities, leisure, communication, and other social purposes.

In the industrial age city, the street played an important role in the rethinking of the structure of the new city. During the modern era, the street transformed from public space of everyday use – a socially meaningful space that was central to people's lives – to space used primarily for the movement of vehicles. In the 1960-70s, in the USA and Canada, there was public outcry over the devastation of neighbourhoods and communities caused by the federal highway programme, for example in New York led by Jane Jacobs.

One of the most recent approaches is new urbanism as a reaction to the modernist planning ideologies of separating land uses in the city. New urbanism promotes several principles including walkable streets, good connectivity, mixed-use and diversity, and good quality of urban spaces. In new urbanism the meaning of the street as an essential fabric of the public realm is restored.

The Time Management of Urban Streets

As mentioned in the introduction of temporal dimension, every day uses of urban street create rhythm repetition that might be overlapping and conflicting. For this context urban designers need to understand the rhythm of activities (activity pattern) of each urban street to encourage more diverse uses but in better organisation and management.

The management of street activities should not only comprise day to day routine activities but also to promote longer street activities in a better activity program, such as a schedule for monthly or annual events. Programs involving street festivals, art exhibition, street parades, concerts, across range of time and venue may help users to see what is going on in the street. Thus, in the end this will enhance the stationary activities as people stay in longer time along the street space. 'Soft' infrastructure of events, programs, and activities is as important as the 'hard' infrastructure, such as buildings, street design, etc. for successful urban revitalisation (Montgomery, 1995).

2.5 Chapter Conclusion

Critical review introduced in this chapter sheds light on the concept and definition of the street. It helps to understand the variation of point of view of scholars in defining the street, especially in urban area. The second section reviews the role of the street in urban space. It helps to understand the multi-roles of the street as proven throughout history, that it is not merely a channel of movement. Rather, the street plays important roles as social space, as cultural space, as commercial space, and even as political space for the city.

The literature discussed in this chapter suggests that from a morphological point of view, the street pattern tends to be the most enduring elements compared to other urban morphology's elements. This finding shows the endurance of the street as one of the earliest elements of urban space. The literature also highlights the importance of street scale and proportion for embracing street activity, visual quality, and perceptual quality (psychological needs of the users). Pavement or floorscape of the street is the most vital organ of a city and its design quality may contribute to the occurrence of optional and social activities along the street space.

The perceptual dimension of street section reviews the debate of the environmental perception, which concerns place image, meaning, and sense of place. The previous studies help to understand the concept of environmental perception and its impact on urban street design. Streets with positive image and strong sense image will possess a distinct character (*placefulness*) to contrast with *placelessness* as occurring in many parts of the world. The socio-cultural dimension of street section reviews the relationship between people and their environment, in this case urban street. The literature in this section suggests that the street can play an important role to enhance the public life of the city through strengthening its position as public space, which has rich street culture.

The discussion on visual dimension of street highlights the importance of the aesthetic quality as part of the street design and the role of active frontage to enhance the liveliness of the street and vibrancy with informal activities. The functional dimension highlights the importance of network and movement in urban street to enhance urban public life. The challenge implied in this section is how

urban streets can be a stimulus to provide attractive environment that can make people, especially stranger to strangers, have contact and active engagement. The discussion on the temporal dimension put forward the rhythmic repetition of activities in urban street that can better be managed to enhance the stationary activities as people stay in longer times along the street space.

An elaborated overview of the street from an urban design dimension presented in this chapter serves as a source and a theoretical framework for revealing the distinctive characteristics of traditional streets in Indonesia. The next chapter (Chapter 3) will provide an evaluation of the traditional street concept, quality of place, and criteria of street quality which in turn will be a source and theoretical framework for the next stage of the study particularly for formulating the research method, which is presented in Chapter 5.

3

The Concept of Traditional Street and Street Quality

3.1 Introduction

This chapter presents a discourse on traditional streets, starting with discussing principles and definitions and then followed by understanding the concept of the traditional streets as heritage. An overview of urban quality as found in the in urban design literature is presented to provide a theoretical framework for the study. Indicators of urban quality as found in the previous studies of Jacobs (1961), Lynch (1981), Jacobs and Appleyard (1987), Tibbalds et al. (1993), Parfect and Power (1997), Montgomery (1998), Landry (2000), Florida (2002b), Trip (2007), Jacobs (2010), and Project Public Spaces (2014) are then discussed under the following sub-sections, including legibility, walkability, accessibility, connectivity, diversity, liveability, vitality, adaptability, creativity, form and visual quality, transparency and active frontage, safety, imageability, place attachment, and authenticity. Some examples of measuring urban quality inquiry and research are also presented under the Measuring Urban Quality section. The final part of the chapter will formulate an initial framework for measuring street quality that is presented in the conclusion to the chapter.

3.2 Traditional Street Concept

3.2.1 Principles and Definition of Traditional Streets

Traditional comes from the word 'tradition', which according to the Oxford Dictionary (2015), is related to several meanings: (1) *'the transmission of or a long established customs or beliefs that has been passed on from generation to generation'*; and (2) *'a doctrine believed to have divine authority though not in the scriptures'*. This definition represents three related concepts of *something handed*

down from previous generation or 'heritage', *unwritten rules* or 'custom/belief', and 'time' as it is *passed on over time*. These three basic meanings are important to understand to differentiate between a new street and a traditional street.

The term of traditional street has been used by some scholars in their research towards Malaysian cities, which refer to *'the traditional street configuration tends to be more organic in layout compared to the rigid grid-iron newer street'* (Shamsudin and Sulaiman, 2010: 152), and *'a traditional street would be among the earliest streets of the towns that determine the pattern of the town'* (Ja'afar et al., 2012: 645). In addition, in his study on Sri Lankan streets, Dayaratne (2010: 75) also emphasises that:

> *'Traditional streets are those which produce and maintain liveable spaces where walking, travelling, and social interactions are fused and exist complementary to each other. The order of these street are 'humane', there is a strong bonds between spaces and people, and the inhabitants possess a sense of identity and belonging to these streets and life exists as it is lived-in, known and understood to the permanent inhabitants of the street.'*

The above definition is quite similar to the definition of Mehta (2013) on the medieval streets of Europe and to the definition of oriental street (Asian Street). According to Mehta (2013), the medieval cities possessed streets with a human scale having an organic layout that were pedestrian-oriented and full of varying colours, textures and patterns, sound and smells. He also noted that oriental streets have quite similar characteristics but with more emphasis on the multiplicity of uses and meaning, but at the same time, the scene reinforces the image of a lack of a rational order and control over the street. This definition is also in line with Shamsudin and Sulaiman (2010) who identify that a traditional street's contribution to townscape creates a more robust sense of place together with qualities that contribute to making each place distinctive and unique. Moreover, as amongst the earliest streets in the city, a traditional street also contributes to the city's urban morphology and plays an important role as public urban space.

The traditional street concept cannot be separated from the traditional settlement and traditional city concept. According to Rapoport (1983: 52), *'a traditional city and settlement is highly place and culture-specific and many of their qualities derive from that fact. At the largest scale this means that they work well in*

their physical and socio-cultural milieu and also that a world composed of such settlement is very complex and rich perceptually, since varied places both exist and are noticeably different from one another, and transitions among them are clear.'

Based on the measurement of the uses of public space in the city (street and square), Gehl and Gemzoe (2000) identify the characteristics of a traditional city *'…where meeting place, marketplace, and traffic continue to coexist in balance, more or less'*, as existing in the era of the Medieval cities of Europe. Here they say that the streets were adapted for foot traffic and the squares tailored to uses that needed space, such as markets, town meetings, military parades, religious processions and so on. In addition, Rapoport (1983: 53-56) emphasises three qualities that are specific in the traditional cities when compared to modern cities:

1. Physical:

    Most people have more mobility in traditional cities rather than in modern cities, and also in the older parts of cities rather than in the newer parts of the city. Traditional cities also have human scale of streets, the invaluable function of courtyards which provide privacy, open space, urbanity and high density all at the same time, the visual quality of townscape and the social function of plazas, streets and markets.

2. Psychological:

    Traditional cities are both cognitively clear and legible and perceptually complex and rich. In terms of complexity they engage all of the senses (sound, smell, touch, kinesthetic, uses, and vision), sensory opulence, and involvement.

3. Cultural:

    Traditional settings also tend to be symbolic because they are related to lifestyle, values, and therefore communicate.

3.2.2 Traditional Streets as Heritage

The cultural heritage concept has evolved over time, since the Athens Charter in 1931 as the first charter on heritage protection which emphasised the protection and preservation of monuments especially in the context of their artistic and historical interest (Athens Charter, 1931). The term 'cultural heritage' emerged for

the first time at the UNESCO Convention (1972) on the protection of world, cultural, and natural heritage that broadened the scope to include monuments and their sites, which are of *'exceptional universal value from the point of view of history, art or science'* (UNESCO, 1972: 2).

The Washington Charter (The Charter for the Protection of Historic Cities, 1987) complemented the previous charter by emphasising the protection of heritage not only as a single artefact but also for conservation of historic towns and urban areas. This charter specifically mentions *'…the need of preservation including the quality of the historic character of the town or urban area and all those material and spiritual elements that express this character, especially urban patterns as defined by lots and streets'* (Washington Charter, 1987: Principle 2). A more recent charter on heritage is The Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003). In this convention, it is stated that intangible cultural heritage, which is manifested in the domains, including oral traditions and expressions, including language; performing arts; social practices; rituals and festive events; knowledge and practices concerning nature and the universe; and also traditional craftsmanship, together with the tangible cultural heritage, should all be safeguarded (UNESCO, 2003).

According to Adishakti (2013: 2), the traditional street is not only about *'a mean of infrastructure'* or a tangible aspect of heritage, but it also consists of *'symbolic meaning'*, *'various social and cultural activities'* including intangible culture heritage and also the *'lifestyle'* within the traditional street. Her insight is that Indonesian cities and the traditional streets of Indonesia were varied in terms of scale, symbols, characteristics and components. The conservation of the traditional street, within the combination of both concepts, tangible and intangible heritage, has attracted scholars, namely those who were involved in the 7th Symposium on Asian Heritage that specifically discussed on Saving Traditional Streets of Southeast Asia (IFSAH, 2013). This symposium focussed on the deterioration of urban characters namely the gradual diminution of the role of traditional streets as the centre of urban activities. The event also expounded clear messages on the need for safeguarding traditional streets, especially those in the

Southeast Asian region because in the past they were the centre of culture and traditions of society and essentially, the 'genius loci' of the city.

3.3 Urban Quality in Urban Design Literature: Concept and Definitions

The word 'quality' derives from Latin *qualitas*. According to the Oxford Oxford and Dictionary (2015), quality has two different meanings; first, it is *'the standard of something as measured against other things of a similar kind; the degree of excellence of something'*, and second, it is *'a distinctive attribute or characteristic possessed by someone or something'*. The word 'quality', as applied to urban environments, has been prominent in the planning and design professions, since the 1990s (Chapman and Larkham, 1999). The Urban Design Group specifically mentions quality of place as a principal objective and that planning should be more concerned with the improvement of the design of the physical environment and the quality of places and encourages all professions to combine them (Urban Design Group News, 1989, quoted by Linden & Billingham, 1996 in (Chapman and Larkham, 1999). Urban quality has also been used as a key component in variety of related terms such as: 'good city form' (Lynch, 1981); 'urban quality' (Parfect and Power, 1997, Talen, 2002, Chapman and Larkham, 1999, Trip, 2007, Montgomery, 1998); 'peculiar nature of cities' (Jacobs, 1961); 'environmental quality' (Rapoport, 1983, Kamp et al., 2003); 'qualities of good city' (Jacobs and Appleyard, 1987, Jacobs, 2011); 'urban environmental quality' (Pacione, 2003, Florida, 2002b); and 'spatial quality' (Moulaert et al., 2011).

Many scholars define urban quality as a complex concept and being multi-dimensional in nature. Some literature only gives an open and fluid 'clue' on urban quality, whereas others use theories, indicators, and components to describe it to the readers (Jacobs (1961), (Lynch, 1981), while others use case studies, which measure its quality in order to give the readers a more clear definition (Rapoport (1990). Kamp et al. (2003) also state that environmental quality is a container concept with different theories related to different aspects of environmental quality and that the concept is multidimensional. The essential element of quality in urban environment cannot be easily measured or fully identified (Parfect and

Power, 1997). Montgomery (1998), on the other hand, suggests that urban quality can be considered in much wider terms than the physical attributes of buildings, spaces, and street patterns, whilst Lynch (1981) identifies it as the impact of the relationship of the place and the society which occupies it. Rapoport (1983) also notes that urban quality is not a unitary phenomenon, but it is multidimensional and comprises both 'universal', pan-human aspects, and culture-specific.

3.4 Indicators of Urban Quality

There are various indicators of urban quality stated in urban design literature. *The Death and Life of Great American Cities* by Jane Jacobs (1961) was one of the earliest texts concerned with the quality of urban areas and stressed a number of key aspects: safety, public contact, mixture of uses, and diversity of ingredients, with four conditions: mixed-use districts, variation of building age, short blocks, and sufficient density. Indeed, Jacobs (1961) was the first to explore urban quality from the premise of activity both producing and mirroring quality in the built environment (Montgomery, 1998).

Kevin Lynch (1981) in *A Theory of Good City Form* formulates five basic dimensions of city performance: vitality, sense, fit, access, and control. He suggests that 'vitality' relates to the degree of the urban form that supports vital functions (survival basic needs), while 'sense' relates to the degree to which the settlement can be clearly perceived, differentiated, and structured. He relates 'fit' to the degree of urban form matching the pattern and quantity of people engagement, whilst 'access' refers to the ability of an urban form to be accessible towards urban activities. Finally, 'control' relates to the degree to which the use and access to spaces and activities are controlled by a city's users. Responding to the challenges of modern urban design such as poor living environments, the loss of control on urban development, the loss of public life, and urban placelessness, Jacobs and Appleyard (1987) proposed an 'Urban Design Manifesto' with the aim of improving the quality of future urban environment through seven indicators: liveability, identity and control, access to opportunity, imagination, and joy; authenticity and meaning; open communities and public life; self-reliance; and justice. They also

emphasised the importance of liveable streets and neighbourhoods with inclusive physical characteristics under liveability standards.

Francis Tibbalds et al. (1993) as Chair of the Urban Design Group produce a report focusing explicitly on the issues of urban quality. Figure 3.1 is the summary diagram of the report showing the inter-related elements of London's environmental quality containing inter-related elements that were intended to counter the Prince of Wales' *A Vision of Britain* (1998). The eight elements were expressed as the central concepts of much urban design thinking in a readily-accessible language and demonstrated the range of inter-related components, from activity, physical form, and management.
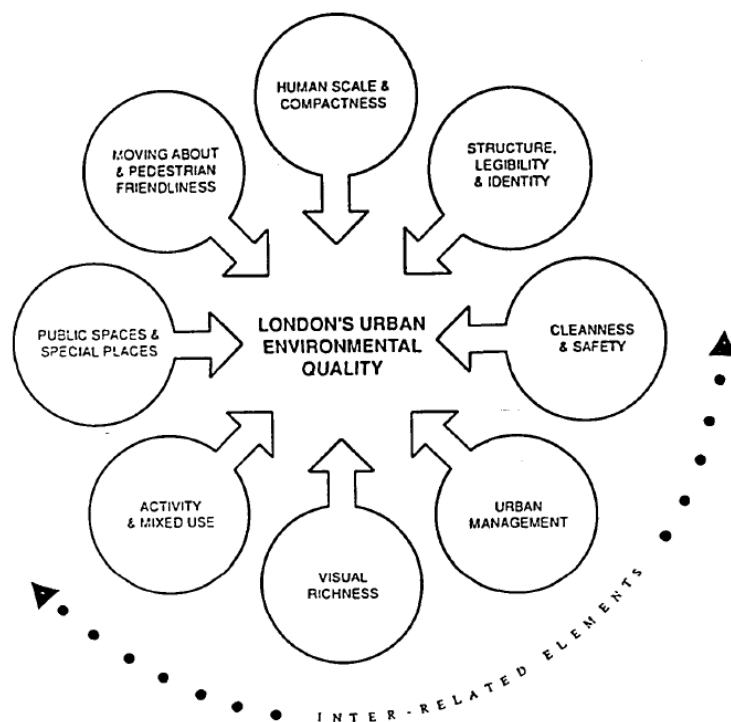
Figure 3.1 Factors in London's environmental quality
Source: Tibbalds et al. (1993: 213 in Chapman and Larkham (1999))

Parfect and Power (1997) in their book *Planning for Urban Quality* emphasise that elements of quality in urban environments may well spring from a combination of factors relating to sense of place, such as legibility, collective memory, issues of historical continuum, and diversity in a pluralistic society. They argue that these issues are fundamental in creating high quality of urban places, and as a result

quality of place is reflected in quality of life. According to Montgomery (1998) the notion of urban quality is bound-up in the social, psychological and cultural dimensions of place. He proposes three quality indicators which make up of a successful place: activity, form and image (see also Section 2.4.2), with sub-indicators in each of them.

Speaking of urban quality indicators, Florida (2002b) in proposing the term 'creative economy and creative class' states that there are six points of quality of place: diversity, social interaction, authenticity, lifestyle, identity, and creativity. According to Florida (2002b), quality of place has three dimensions: the first is *'What's there'*: the setting for creativity; the second is *'Who's there'*: pointing to the kinds of people and community; and the third is *What's going on'*: the vibrancy of street life, café cultures, arts, music and people engaging in outdoor activities – altogether create a lot of active, exciting, creative endeavours. Quality of place defined by Florida is specific and it entails a set of factors that collectively make a city an attractive place of residence for the creative class (Trip, 2007). Trip (2007: 503) summarises a list of the main elements of the quality of place and indicators suggested by Florida and related literature (see Table 3.1).

Table 3.1
Main Elements of Quality of Place and Indicators Suggested by Florida and Related Literature

Quality	Indicator
Diversity	Functional diversity, distinctive neighbourhoods, sufficient density
Specific Amenities	Individual sport facilities, recreation areas and restaurants per capita; (semi-) public spaces for informal meetings (third places)
Liveliness: culture	Cultural and musical events; live performance venues per capita
Technology: innovativeness	Patents per capita; relative percentage of high-tech output
Talent	Percentage of people with a bachelor's degree and above
Creativity, bohemia	Percentage of artistically creative people
Tolerance; openness	Relative percentage of foreign-born people; gays
Aesthetics	Architecture; parks; urban heritage
Environment; sustainability	Natural environmental assets; environmental quality; reuse of older industrial sites
Safety	Crime figures

Source: Trip (2007: 503)

Landry (2000) who introduced the term 'creative city' identifies the preconditions for a creative city. Durmaz (2012) summarises the quality of place indicators which are formulated by Landry (2000) as being: economic vitality, social vitality, environmental vitality, and cultural vitality. Landry (2000) also highlights the importance of actors in urban areas to ensure that a city is successful Including that visionary individuals, creative organizations and a political culture that share a clarity of purpose under good leadership; those are important in making cities creative. Indeed, policy makers and urban agents should share certain qualities, such as open-mindedness and willingness to take risks together with a clear focus on long term aims. As such, there needs to be a capacity to work with local distinctiveness and to find strength in apparent weaknesses and willingness to listen and learn.

The indicator of urban quality, particularly street quality also becomes a big concern of the Project Public Spaces (PPS) organisation. As such, they formulated eleven indicators to achieve a great street: attractions & destinations, identity & image, active edge uses, amenities, management, seasonal strategies, diverse user groups, traffic, transit and pedestrians, blending of uses and modes, and neighbourhood preservation (Project Public Spaces, 2014). In line with PPS, Jacobs (2010) proposes nine criteria for the designable characteristics of streets: an ability to walk with leisure (walkability), comfort, definition, transparency, buildings that compliments to each other, maintenance, physical qualities that combine to make the eyes move constantly, trees, clear beginnings, and endings. He also suggests that these nine indicators also require some quality contributors, such as trees, beginnings and endings, many buildings rather than few; diversity, special design features: details, places, accessibility, density helps, diversity, length, slope, parking, contrast, and time.

3.4.1 Filtering and Ordering the Urban and Street Quality Indicator

The above urban and street quality indicators as mentioned in the various urban design literatures such as Lynch (1981), Appleyard (1987), Tibbalds et al. (1993), Parfect and Power (1997), Montgomery (1998), Landry (2000), Florida

(2002), and Trip (2007) then ordered following the urban design dimension as formulated by Carmona et.al. After a content analysis process, these indicators then filtered, grouped, and ordered as follows:

Table 3.2
Ordering Urban Quality Indicators

No	Dimension	Indicator	References
1.	Morphological	**Legibility**	Legibility[3,4]; Clear beginning and ending[9]; buildings that complement each other[9]; clear definition[9]
2.	Morphological	**Walkability**	Pedestrians friendliness[3]; Walkability[9]; Pedestrians[10]
3.	Morphological	**Accessibility**	Access[1]; Access[1]; Accessibility[9]
4.	Morphological	**Connectivity**	Moving about[3]; Traffic Management[10]; Transit[10]
5.	Morphological; Socio-cultural	**Diversity**	Mixed-use activity[3]; Diversity[4,6,7,9]; Diverse users[10]; Blending of uses and modes[10]
6.	Functional	**Liveability**	Liveability[2]; Comfort[9]; Trees[9]; Amenities[7,10]; Environmental quality[7];
7.	Functional; Socio-cultural	**Vitality**	Vitality[1]; Joy[2]; Public spaces[3]; Activity[5]; Social interaction[6]; Liveliness[7]; economic, social, environmental, and cultural vitality[8]; Places[9]; Attraction[10]; Destination[10]; Active edge uses[10]
8.	Functional	**Adaptability**	Fit[1]; Self-reliance[2];
9.	Functional; Socio-cultural	**Creativity**	Imagination[2]; Special places[3]; Lifestyle[6]; Creativity[6]; Culture[7]; Innovativeness[7]; Talent[7];
10.	Visual; Morphological	**Form and Visual Quality**	Visual richness[3]; Human Scale[3]; Compactness[3]; Form[5]; Aesthetics[7]; Physical Qualities[9]; Details[9]
11.	Visual; Morphological	**Transparency and Active frontage**	Openness[2,7]; Transparency[9]
12.	Functional; perceptual	**Safety**	Justice[2]; Safety[3,7]; Tolerance[7];
13.	Perceptual	**Imageability**	Sense[1]; Meaning[2]; Identity[2,3,6,10]; Image[5,10]
14.	Perceptual	**Place Attachment**	Collective memory[4]
15.	Morphological; Perceptual	**Authenticity**	Authenticity[2,6]; Historical continuum[4]; Time[9]; Neigbourhood Preservation[10]

[1]Lynch; [2]Appleyard; [3]Tibbalds; [4]Parfect&Power; [5]Montgomery; [6]Florida; [7]Trip; [8]Landry; [9]Jacobs; [10]PPS

Apart from the above fifteen indicators, there is also an indicator mentioned in most of the literatures and can be stated as one of the key success for the urban or street space that is management or control. This indicator is closely related to the urban planning and management in the context of Indonesia which will be described in Chapter 4. Planning and management in each case study will be discussed in particular after addressing the fifteen indicators and in the end it will wrap up how the urban and street quality in particular is measured and managed.

These indicators later on will play roles to measure the quality of traditional streets in this study.

A number of indicators of urban quality in general and street quality in particular as discussed in urban design literature mentioned in this section will be described in a more details in the following sections.

3.4.2 Legibility

The idea of legibility as an indicator of urban quality was firstly mentioned in Kevin Lynch's Image of the City, 1960. Lynch (1960: 2) defines the legibility of cityscape *'…as the ease with which its part can be recognized and can be organised into a coherence pattern'*. Legibility is essentially considered to be a physical and spatial quality of the surroundings (Ramadier and Moser, 1998b) and it is cognitive rather than affective (Rapoport, 1977). The concept of legibility is a spatial consideration that is also interlinked with imageability (Southwell, 2001), but it appears that Lynch's notion of legibility is concerned mainly with the tangible elements, whereas his concept of imageability addressed the intangible and symbolic elements of the urban landscape (Yeung and Savage, 1996b). Carmona et al. (2010) argue that the importance of legibility as an important indicator of urban quality was 'reduced' in Lynch (1981) and revealed that he saw it as one kind of 'sense' that was just one dimension of city experience. Moreover, Lynch (1984) in his article 'Reconsidering the Image of the City' accepts that way-finding was a secondary problem for most people. Kaplan and Kaplan (1982) also propose 'coherence', 'legibility', 'complexity', and 'mystery' as informational qualities of environments that contribute to people preferences for particular physical environments.

MAKING SENSE

COHERENCE	LEGIBILITY
Environments easy to organise or structure	Environments suggesting they could be explored extensively without getting lost

PRESENT OR IMMEDIATE ← → FUTURE OR PROMISED

COMPLEXITY	MYSTERY
Environments with enough in the present scene to maintain interest	Environments suggesting that, if explored further, new information could be acquired

INVOLVEMENT

Figure 3.2 Environmental Preference Frameworks (Image: Adapted from Kaplan and Kaplan (1982))

In the context of the street, *'…legibility provides travellers with a sense of orientation and relative location and by physical elements that serve as reference points'* (Ewing et al., 2006: S226). A study in Singapore's Orchard Road conducted by Yeung and Savage (1996b) suggested that good legibility gives people an important sense of emotional security in their movements within a street. In view of all that has been mentioned so far, it can suppose that legibility can be considered an important urban quality indicator especially to measure the coherence pattern and way findings of such urban spaces, including streets.

3.4.3 Walkability

Southworth (2005: 248) defines the term walkability *as '…the extent to which the built environment supports and encourages walking by providing for pedestrian comfort and safety, connecting people with varied destinations within a reasonable amount of time and effort, and offering visual interest in journeys throughout the network'*. The word 'walkable' can be understood in terms of many different meanings, including a walkable environment encouraging physical activity, involves a short distance to a destination, barrier-free: traversable, without major barrier, safe in terms of perceived crime or perceived traffic, full of pedestrian

infrastructure and destinations, and also the pedestrian environment is pleasant for upper middle-class professionals, who have other choices for getting around (Forsyth and Southworth, 2008).

Walkability was essential in cities before the automobile era. Indeed, the streets of the pre-industrial city were by necessity walkable and the activity patterns had to be fine grained, the density of dwellings had to be relatively high, and everything had to be connected by a continuous pedestrian path network (Southworth, 2005). Traditional neighbourhoods therefore enabled residents to perform daily activities without the use of cars and many of these settings had places to worship, a local tavern, a coffee shops, or restaurants within walking distance (Leyden, 2003).

Residents living in walkable, mixed-use neighbourhoods are more likely to know their neighbours, to participate politically, to trust others, and to be involved socially (Leyden, 2003). While walking, we sense and develop a sense of place and by moving about in an urban space, we strengthen our relationship with it and learn that social space is a rhythmically structured whole, made of synchronised time-space everyday life routines. Sensory impressions and social interactions derived from our everyday walking practices also nurture a sense of belonging, familiarity, emotional attachment and thoughts for particular urban locations (Matos Wunderlich, 2008).

The studies presented have provided the evidence of the important role of walkable environment especially to connect places which can be reached within walking distance. It is also important to note that walkability develop social space, sense of space to emotional attachment for such urban locations.

3.4.4 Accessibility

The terms '*access*' and '*accessibility*' are often used indiscriminately in literature, however, access should be used when talking about a person's perspective, and accessibility when using a location's perspective (Geurs and Van Wee, 2004). Access can be defined as '...*the ability to reach a given destination based on geographic distance*' (Talen, 2002: 260), or the distance between

populations and an amenity (Hewko et al., 2002). Kevin Lynch (1981: 188-190) as mentioned in the previous section, suggests 'access' as a key component of ideal urban form. He formulates access in urban areas in several aspects:

1. Access to other people: to kin, to friends, to potential mates, and to a variety of more casual acquaintance, as part of the fact that human beings are social animals;
2. Access to certain human activities: work, residents, important services (health, financial, recreational, educational, and religious);
3. Access to resources: food, water, energy, and various other goods;
4. Access to natural environment: open space, landscapes, wasteland, or places with symbolic meaning for recreational activities; and
5. Access to information: an emergent key to urban quality

Geurs and Van Wee (2004) formulate a number of components of accessibility that can be identified and interconnected from different definitions: land-use, transportation, temporal and individual as presented in Figure 3.3. Indeed, Figure 3.3 shows the relationship between components mentioned above and accessibility, and a relationship between the components themselves. The land-use component is an important factor determining travel demand (transport component), and may also introduce time restrictions (temporal component), and influence people's opportunities (individual component).
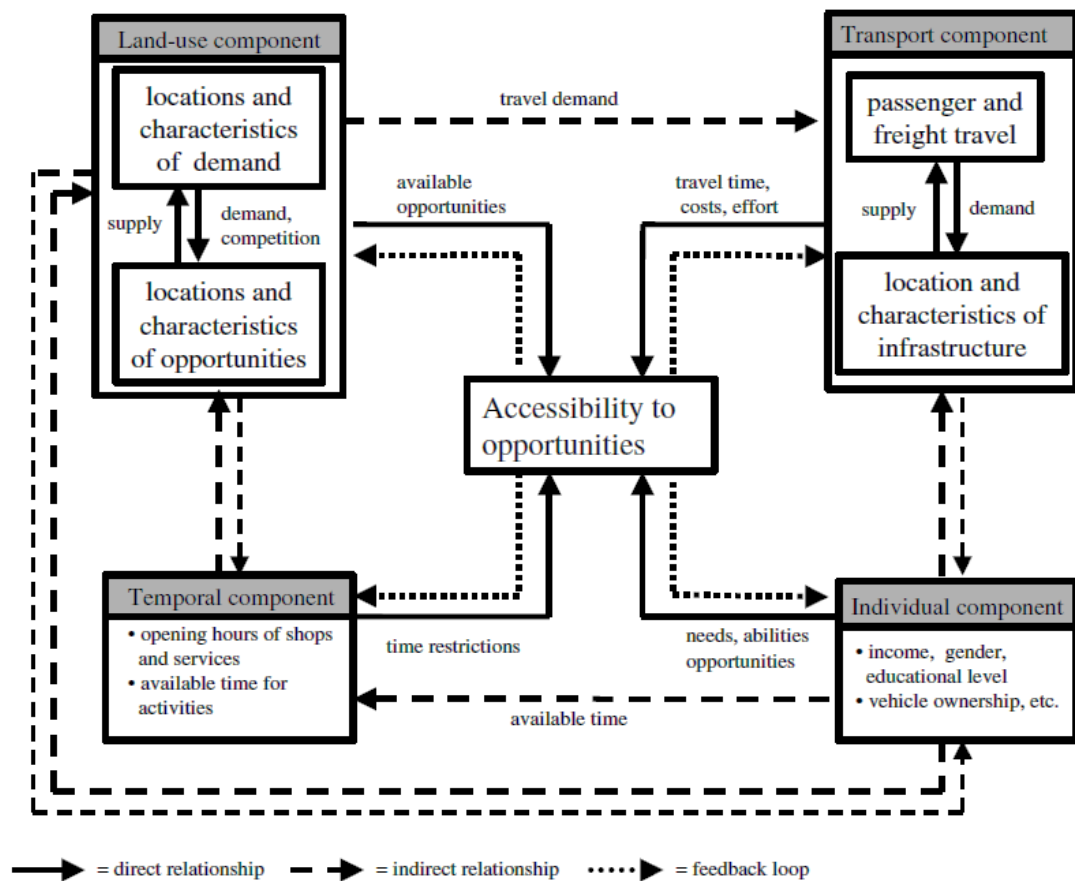
Figure 3.3 The relationship between components of accessibility (Source: Geurs and Van Wee (2004: 129))

Overall, these studies highlight the need for good accessibility of urban spaces and places. It is important to first ensure the function of such spaces and places to be reached and then can be used by a higher number of users. Successful space needs to be accessible in a direct or in an indirect relationship with lower constraints or restrictions as indicated in Figure 3.3.

3.4.5 Connectivity

A well-connected layout has many advantages, including: frequent point of access into and through the development, being more convenient, direct routes for pedestrians and cyclists, better opportunities for the provision of bus services through the site, clear views and easy orientation, traffic dispersal, scope in the long term for adaptation and change (DETR/CABE, 2000). Marshall (2005)

distinguishes the quality of connectivity and complexity in street patterns and identifies four broad types of connectivity:

- *Tributary* – deep branching with a systematic use of cul-de-sac and/or layered loop roads, and often associated with hierarchically based suburban expansion of the second half of the twentieth century;
- *Semi-tributary* – with some degrees of layering and use of cul-de-sac, but with less division between minor and major access roads and use of T junctions, found in older suburban neighborhoods;
- *Semi-gridded* – referring to typical distorted grid systems with a variety of T and X junctions, often found in inner areas or traditional settlements; and
- *Gridded* – featuring a high proportion of X junctions and reflecting the type of planned, regular layouts of grid-iron urban extensions or new cities.

As also related to accessibility and walkability indicators, connectivity emphasises the importance of a well-connected lay out of urban spaces to improve its service quality to large number of users. In this case, the provision of multi choices, multi possibilities, and multi layers of connection needs to be addressed. The choices of urban transport, including the provision of good and reliable public transport, bicycle lane, continuous and accessible pavement, and the balance of the street spaces to adapt the multi usage of the street are also important to be maintained or keep up.

3.4.6 Diversity

On successful city streets, people must be present at different times of day and night. This time is considered in a small scale, hour by hour through the day (Jacobs, 1961). It implies the need for diversity of uses along the streets, in buildings and on the pavements. In the last few decades, urban design and planning literature has suggested that mixed-use neighborhoods are a desirable pattern of physical development in urban areas. It is suggested that a mixture of various land uses will

achieve a more vital, vibrant, attractive, safe, viable, and sustainable pattern of urban lifestyle (Mehta, 2007). As the most successful streets are joyful, desirable places to be, to spend time, to walk with leisure (Jacobs, 2010), it is important to provide and design places for people that allow for optional, social, and stationary activities (Montgomery, 2007, Gehl, 1987, Carmona et al., 2010). According to Tarbatt (2012), the characteristic of diversity in an urban context is that it describes difference or heterogeneity, as opposed to homogeneity. This means, of course, that diversity is not a simple 'yes/no', but can be observed to occur at different degrees of intensity and across different sectors of community, economy, and place. As such, diversity can be expressed through the following key indicators:

-   Land uses – retail, office, residential, community service, live-work;
-   Housing types – apartments, single family dwelling houses, duplex, maisonettes etc.;
-   House sizes – measured in terms of bedrooms or bed space;
-   Tenure – private sector owned, private sector rental, rent controlled or affordable;
-   Urban form – block type, building size and shape, massing;
-   Urban grain – plot size and shape; and
-   Variety – design (and age) of buildings.

Diversity implies the acceptance of difference. Florida (2002b: 226) lists 'diversity' is amongst the most important factors for people in their choice of place to live in. Indeed, many people actively seek out places with diversity and look for signs of it when evaluating communities. This can include signs such as the inclusion of people of different ethnic group and races, different ages, different sexual orientations and alternative appearances such as significant body piercing or tattoos.

Considering all of the mentioned studies, it seems that diversity is one of the key ingredients of good quality of urban spaces. Diverse urban space in many different indicators as stated by Tarbatt (2012) should be highlighted. It is in line to Florida (2002b) findings that diverse places are the 'chosen' places for people to live in. Indeed, the degree of diversity may vary from one place to another. However, it

is important to note that this urban quality indicator can give large contribution to realise the most desirable places to be as Jacobs (2010) has been indicated.

3.4.7 Liveability

Urban liveability refers to places where people can live in relative comfort. This starts with the availability of most basic things such as places with clean air, clean water, a well-managed environment relatively devoid of dirt, trash, noise, danger, overcrowding; a physically healthy living environment (Jacobs, 2011: 177). The meaning of liveability has been broadened to include not only the proper management of traffic in neighbourhoods but also those qualities that are associated with sustainable cities and focused on the perception of concrete physical elements (Bosselmann, 2008: 143). The concept of liveability has been applied very broadly in physical planning since Appleyard and Lintell (1972) project on the liveable street. They examined the state of a street in neighbourhood environment that had become a dangerous and unliveable environment mainly due to traffic. They then defined a liveable street as a place where many people know each other because they spend time out-of-doors on pavements, on stoops, or in front yards, thus creating a sense of community and belonging. A liveable street was also noted as a place that residents know very well, take care of, and identify with as a part of their personal territory.

To measure liveability needs a process of inquiry that focuses on individual perception and cognition. Liveability research deals with environments where people express preferences for qualities associated with physical settings, such as streets with well-managed traffic, comfortable outdoor space, places to walk to, and, increasingly, a sound ecology – an integration of human activities with the forces of nature (Bosselmann, 2008: 155).

3.4.8 Vitality

The vitality of a street is defined as the presence of people engaged in sustained stationary and lingering activities that are social in nature. A street would therefore have a higher level of vitality if there are more people engaged in stationary and lingering social activities spread out throughout the day and week (Mehta, 2011). In other words, Montgomery (1998: 97) states *'…activity is very much the product of two separate but related concepts: vitality and diversity'*. Vitality is what distinguishes successful urban areas from others. Comprehensively, it refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively.

Vitality also means social interaction. Oldenburg (1999) notes the importance of 'third places' in modern society through venues such as coffee shops, bookstores, and cafes that comprise '…*the heart of a community's social vitality*' where people '*hang out simply for the pleasures of good company and lively conversation*'.

Vital urban space thus reflects its vibrancy of activities. A good quality of urban space needs variety of urban attraction mainly to invite people to come and enjoy the city's atmosphere. Hence, vitality of urban space is closely related to urban events, third space, and the presence of public having activities including along the urban streets.

3.4.9 Adaptability

Pike et al. (2010: 4) define the adaptability of a place as '…*the dynamic capacity to effect and unfold multiple evolutionary trajectories, through loose and weak couplings between social agents in place, that enhance the overall responsiveness of the system to unforeseen changes'*. This concept of '…*adaptability incorporated morphological, social and economic capacities to respond to change, it measured through the flexibility of the space along the street, social and economic complexity*

and diversity' (Hall, 2009: 209). Sennett's (2008a) interpretation of urban adaptability is based on the underlying principle that urban space should be able to absorb variety of appropriations over time. His distinction between 'open' and 'closed' systems requires a paradigm shift towards an understanding of the value of 'unstable evolution' as opposed *to* 'harmonious equilibrium'.
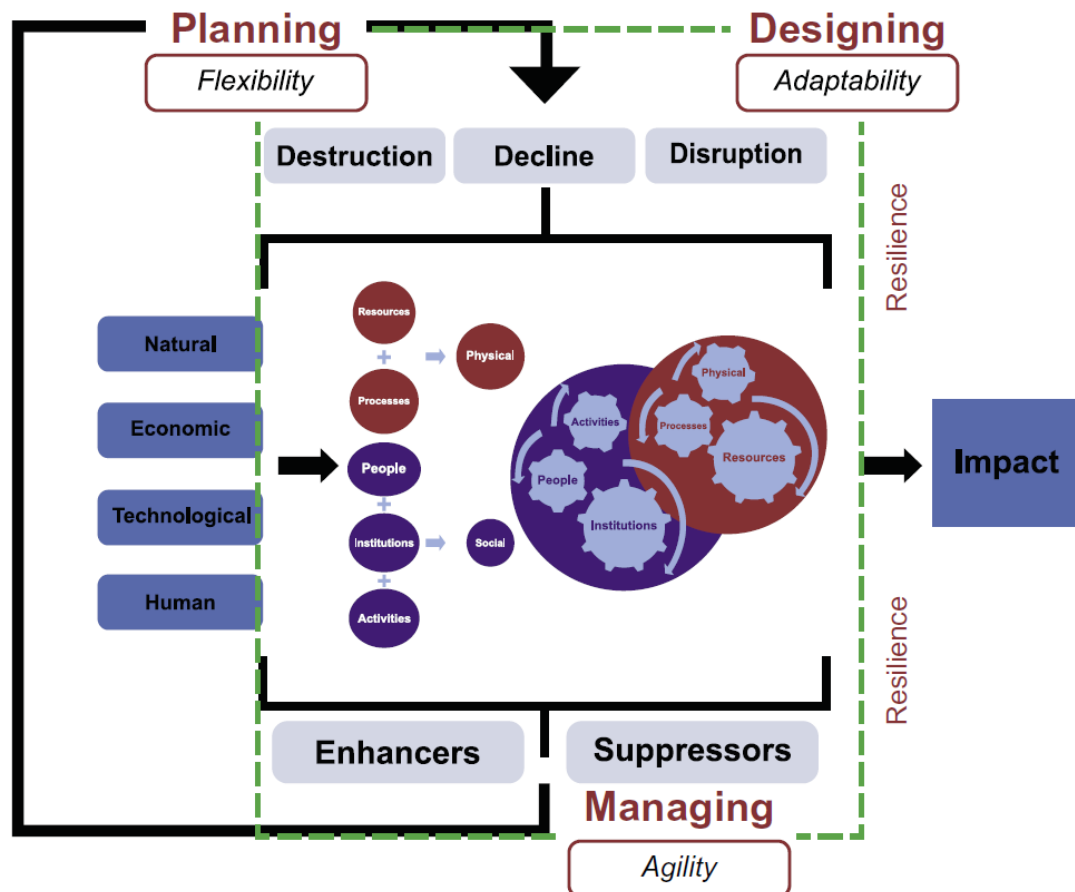
Figure 3.4 Resilient Cities (Desouza and Flanery, 2013: 94)

The concept of adaptability is closely related to resilience, whereby *'…an ability of a system, community or society exposed hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions'* (UNISDR, 2010: 13). Designing a city with focus on adaptability will ensure that we create entities that can be repurposed, stretched, and even modified during times of stress. Adaptable urban settings, therefore, have *'…a greater chance of taking the impact of a stressor, addressing its impact, and then quickly reconfiguring itself to continue its operation and generate value'* (Desouza and Flanery, 2013: 96).

From the perspective of urban planning and design, spatial resilience refers to the ability of spaces to cope with diversity and change while retaining their identity, bearing in mind that space is always related and dependent on other than themselves (Kärrholm et al., 2014 adapted after Hertzberger, 2001). Moreover, urban retail resilience may be understood as the ability of different types of retailing at different scales to adapt to changes such as crises or shocks that challenge the system's equilibrium, without failing to perform its function in a sustainable way (Barata-Salgueiro, 2009 in Fernandes and Chamusca, 2014).

Successful urban space should accommodate changes in various conditions. Urban tissue tends to sustain over a larger period of time than its contents (buildings, soft landscapes), which are subject to change due to new demands, utility, and tasks. As a general rule, the life of streets and urban areas is longer than the life of individual buildings, while the life of buildings is longer than the life of their original function (Montgomery, 1998).

3.4.10 Creativity

Creativity is rated as one of the most important terms, given its perceived role as the central element in the growth of modern knowledge economies (Bayliss, 2007). The creative economy refers to art and design, as well as science and technology as the engines of economic growth (Madanipour, 2013). The creative industries, according to Department for Culture, Media, and Sport, of the UK government, are '…*those that are based on individual creativity, skill, and talent and also have the potential to create wealth and jobs through developing and exploiting intellectual property*' (DCMS, 2009 in Madanipour, 2013: 13). These creative industries include advertising, architecture, art, computer and video games, crafts, design, fashion designer, film, music, performing arts, television and radio. The creative city or creative milieu has been used as a concept over the past fifteen years. According to Landry (2000: 133) in his *Creative City* book, creativity and city are interconnected, '…*a creative 'milieu' is a place – either a cluster of buildings, a part of a city, a city as a whole or a region – that contained the necessary preconditions in terms of 'hard' and 'soft' infrastructure to generate a flow of ideas*

and inventions.' 'Hard' infrastructure refers to the nexus of buildings and institutions, such as research institutes, educational establishments, and cultural facilities and other meeting places as well as support services such as transport, health, and amenities. 'Soft' infrastructure is the system of associative structures and social networks, connections and human interactions that underpins and encourages the flow of ideas between individuals and institutions.

Florida (2002b) in *The Rise of the Creative Class* reported the results from interviews and focus groups that provided invaluable insights on what creative people value in urban setting. These included '...*thick labour markets, lifestyle, social interaction, diversity, authenticity, identity, and quality of place*.' Significantly, diversity was consistently mentioned as one of the most important factors in their choice of location and as creative-minded people, they enjoyed a mix of influences.

Landry (2000) emphasises several main characteristics of a creative city:

- a place with the level of original and deep knowledge coupled with a ready supply of skills, competence and people who have the need and capacity to communicate to each other;

- having a sound financial basis, which is adequate to allow room for experimentation without tight regulation;

- where an imbalance between the perceived needs of decision-makers, business people, artists, scientists, and social critics and actual opportunity exists;

- where the capacity exists to deal with complexity and uncertainty about future changes in cultural, scientific and technological fields;

- good possibilities for informal and spontaneous communication internally and externally; an environment catering for diversity and variety;

- a multidisciplinary and dynamically synergistic environment which especially links developments in science and the arts; and

- Structural instability; needs to be launched within a controlled context, such as when the environmental movement in its demands creates an imbalance between what is and what could be.

The form of creativity in urban spaces can be seen in urban events or attractions such as street festivals, exhibition, street carnivals, parade, performances, concerts, and so on. In recent years, festivals and special events

become one of the fastest growing type of tourism attractions (Gursoy et al., 2004: 172 after Crompton & McKay (1997); Getz (1997); Thrane (2002)). Festivals are generally connected with culturally shared events, in a symbolic form; it demonstrates what a society believes to be its essential life, and thus '*festivals and special events reinforces social and cultural identity by building strong ties within a community*' (Gursoy et al., 2004: 173). Cultural events in particular, also have emerged as '*a means of improving the image of cities, adding life to city streets and giving citizens renewed pride in their home city*' (Richards and Wilson, 2004: 1932).

3.4.11 Form and Visual Quality

The visual – aesthetic character of urban places derives from more than their spatial qualities. Indeed, the colour, texture and details of the surfaces defining urban space make significant contributions to its character (Carmona et al., 2010). Ewing et al. (2006) describe the visual richness of a place as complexity, which depends on the variety of the physical environment, specifically the numbers and kinds of buildings, architectural diversity and ornamentation, landscape elements, street furniture, signage, and human activity. Herzog and Shier (2000) also identify that visual richness is similar to complexity (how much information the setting contains) and one of the predictors of building preference. As such, city buildings can hold attractions for pedestrians walking slowly. Appealing ground floors offer texture, good materials and a wealth of detail (Gehl, 2010). In parallel, Jacobs (2010: 165) mentions that buildings with much details attract our eyes and keep them moving more than buildings with less details. Moreover, details such as lights, benches, sculptures and fountains in public spaces can create a 'pause' for events or just to change the 'pace' of a street, and these become more important, particularly for long streets.

A Herzog and Shier (2000) study found that older buildings are preferred by respondents over modern buildings as long as maintenance levels are maintained. While a Hidalgo et al. (2006) study concluded that the most attractive urban environments differ significantly from the unattractive ones regarding several aesthetic attributes such as: vegetation, visual diversity, congruence, openness,

luminosity, historical place, cleanliness, maintenance, place for leisure activities, meeting place, and novel place. It suggests that these attributes constitute important criteria for determining visual quality.

Interestingly, signage or sign graphics can bring either charm or visual pollution to an urban context. A Nasar and Hong (1999) research study found that people judge a less-obtrusive sign-scape as more interesting, legible, and desirable as a place to visit and conclude that improvements in sign-scape appearance should improve the evaluative image of the city. The studies presented so far provide evidence that physical and visual quality of urban spaces enhance the character of such spaces and thus improve the attractiveness of the spaces.

3.4.12 Transparency and Active Frontage

Transparency refers to an *'…ability to see beyond whatever it is that defines a street'* (Jacobs, 2010: 165), more specifically, the degree to which people can see or perceive human activity beyond the edge. Physical elements that influence transparency include walls, windows, doors, fences, landscaping, and openings into mid-block space (Ewing et al., 2006). The concept of transparency within a street is mainly related to an 'active frontage' that implies a relationship between the ground-floor uses of the buildings that frame a space or a street and the people walking through or 'occupying' it. An active frontage is one that allows some kinds of movement or visual relationship between the person outside and the activity inside. At its most minimal, this might be one of simple observations, e.g. a window display or people working, or at the next level of interaction, an active frontage could encourage the pedestrian to come in and make a purchase, view an exhibit, come in to worship or pay a bill, for example. The most interactive frontages are those which spill out into the street or the space in front of a building, such as cafes or bars, or shops that place some of their merchandise outside (Roberts and Greed, 2001). In conjunction to this, Hillier (1996) states that providing an active frontage is particularly important in making new public spaces, or in re-animating the existing ones. Carmona et al. (2010) also argue that an active frontage adds interest, life and vitality to public spaces. Moreover, Moughtin (1992) adds that a

sense of place in a street design is best achieved if the spatial volume defined by the frontages is perceived as the positive form, the figure seen against the general ground of the surrounding architecture.

Research conducted in Copenhagen in 2003 examined the extent of activities in front of an active and a passive façade section in several city streets. In front of the open and active facades there was a noticeable tendency for pedestrians to slow down and turn their heads towards the façade, and they also stopped frequently. In front of the closed façade sections the walking tempo was markedly higher, and there were fewer turned heads and stops. The conclusion shows that the activity level in front of active façade is seven times greater than in front of passive facades (Gehl, 2010). Similarly, Ford (2000) in Carmona et al. (2010) argues credibly that environments with, for example, high concentration of street-level doors are more conducive to social interaction than environments characterized by fortress-like structures with blank walls. Similarly, residential neighborhoods where houses have front porches create more gregarious settings than neighborhoods where three-car garage doors face onto public space.

3.4.13 Safety

A great street is physically comfortable and safe (Jacobs, 1993). Jacobs (1961) suggests three qualities that make a safe street:

- There must be a clear demarcation between what public space is and what private space is. Public and private spaces cannot 'ooze' into each other as they do typically in suburban settings or in projects;
- There must be 'eyes upon the street', eyes belonging to those we might call the natural proprietors of the street; and
- The pavement must have users on it fairly continuously, both to add the number of effective eyes on the street and to induce the people in buildings along the street to watch the pavement in sufficient numbers.

Being able to walk safely in city space is a prerequisite for creating inviting well-functioning cities for people. Life in the street does have impact on safety, but life along the street also plays a significant role. If we reinforce city life so that more

people walk and spend time in common space, in almost every situation both real and perceived safety will increase. The presence of others indicates that a place is acceptably good and safe. There are "eyes in the street" and often "eyes on the street" as well because it has become meaningful and interesting for people in nearby buildings to follow what is going on in the street (Gehl, 2010).

Hillier (2004), however, found no correlation between crime and density, only poor correlation between affluence and crime, but a very strong correlation between layout type and all kinds of crime, with traditional street patterns as the best and the most 'modern' hierarchical layouts the worst. He suggests some design guidelines to create a safety street, i.e.: joining buildings together, avoiding any kind of secondary access, making sure that all public spaces is continuously 'constituted' by dwelling entrance's and maximising the inter-visibility of these entrances by a linear rather than a broken up layout.

3.4.14 Imageability

In the past two decades, and in particular, in the past ten years, there has been a significant increase of attempts made by leader of places, urban planners, and decision-makers around the world to promote a positive and attractive image for their cities, due to growing competition between them (Avraham, 2004). Nevertheless, studying a city's image is not only for the benefit of the city's strategic planning and marketing teams but also important in revealing the citizen's level of satisfaction and pride (Luque-Martinez et al., 2007).

Lynch (1960) describes place image as the result of a two-way process between the observer and their environment. Place image and identity are merely interrelated and somehow interchangeable with image being a combination of place identity and how the place is perceived by the individual (i.e. it includes the individual's set of feelings about and impressions of the place) (Carmona et al., 2010). Lynch concludes that there are five physical elements that form an urban image: paths (including streets), edges, districts, nodes, and landmarks. While according to Rapoport (1977) place images are not only visual but also "all senses"

enterring into their formation, including visual form, socio-cultural attributes, visual signs of human activities and people involvement.

The concept of imageability is the quality of a place that makes it distinct, recognizable, and memorable. A place has high imageability when specific physical elements and their arrangement capture attention, evoke feelings, and create a lasting impression (Ewing et al., 2006: 226). Thus, it is clear that from the studies presented in this section suggests that the degree of imageability can contribute to the quality of certain urban spaces.

3.4.15 Place Attachment

Place attachment refers to a 'positive bond' established between people and places (e.g., Altman and Low (1992); Brown et al. (2003); Lewicka (2011); Manzo and Devine-Wright (2014)). Altman and Low (1992) summarised the definitions of 'place attachment' adapted from several scholars:

1. *Topophilia* or love for place (Tuan, 1974). An affectionate bonding between human and a certain place that focuses on the whole experience of sensation, memory, cognitive integration, affection and other activities that support it;

2. *Place dependence* (Stokols, 1981) or the dependency towards a place, association between human and environment. It is created when a person feels that the place he/she is using has supplied for his/her needs, better than other alternative places he/she can be; and

3. *Place Identity* (Proshansky, Fabian, and Kaminoff, 1983), which becomes the sub-structure of the self-identity of a person. It includes: memories, ideas, suggestions, emotions, attitudes, values, preferences, meanings and concepts of behaviour and experience related to various and complex physical settings that define humans' existence in their daily activities. This concept focuses on the role of a place in memory organization and stimulates humans' expressions.

There is a significant body of evidence that suggests the majority of people worldwide feel attached to their place of residence, so place attachment seems to be a universal phenomenon (Lewicka, 2014). Scannell and Gifford (2010) proposed

place attachment is a multidimensional concept involving people, psychological process, and place dimensions. The first dimension is the actor or, 'W*ho* is attached?' and 'To what extent is the attachment?' The second dimension is the psychological process: How are affect, cognition, and behaviour manifested in the attachment? The third dimension is the object of the attachment, including place characteristics: *'What is the attachment to, and what the nature of this place is?'*
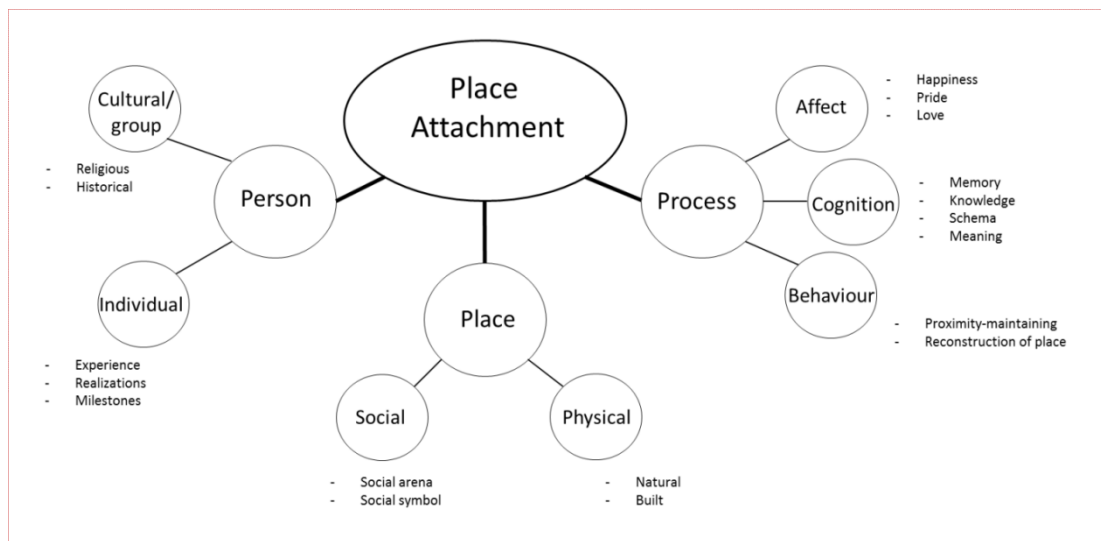
Figure 3.5 The Tri-partite Model of Place Attachment (Diagram: Adapted from Scannell and Gifford (2010))

Several studies categorise place attachment as: physical and social attachment (Hidalgo and Hernandez, 2001); and functional and emotional attachment (Ujang, 2012, Shamsuddin and Ujang, 2008). Physical attachment refers to attachment as a result of physical contact to a place, linked with the importance of spatial and architectural components of the street to a respondent's life. Functional attachment refers to attachment as a result of daily contact for necessary purpose, which can be linked to the importance of the street in satisfying an individual's goals and economic and personal needs. Social attachment refers to attachment as a result of a social relationship or bonding to others in and about the street. This can be with friends, family, or other street users. Emotional attachment refers to bonding that generates significant emotional responses, meanings, sense of belonging expressed by the respondents.

3.4.16 Authenticity

The most attractive places and cities can have a certain characteristic that might be summed up by the word 'authenticity'. *Authenticity is experienced subjectively: some places have 'got it' and others have not. Authenticity is hard to define, let alone measure, but this does not mean that it should be ignored* (Trip, 2007: 503). The term of authenticity in urban place is widely used in relation to architecture and urban conservation. Salah Ouf (2001) mentions 'authenticity' of a place has been in the spotlight of attention of urban designers and city administrators. It becomes the object of tourism that provides economic impact. They become interested in the genius loci and the power of place, and other urban phenomena that reflect a belief in a place with identity of its own.

The debate on 'authenticity' continued as Jive´ n and Larkham (2003) elaborates the kinds of 'authenticity' that should be given attentions in an urban area, as they concerned the need of a broad interpretation of authenticity, that would allow an evolutionary process of change in urban and architectural forms, spurred by socio-cultural change. Pendlebury et al. (2009) for example, highlight the authenticity of place not only in terms of the integrity of individual buildings and monuments, but also in urban spatial scales, which now remain problematic.

The Nara Document on Authenticity (ICOMOS, 1994: 47) states that *'Understanding the authenticity of cultural heritage plays a fundamental role in all scientific studies of cultural heritage, in conservation and restoration planning, as well as within the inscription procedures used for the World Heritage Convention and other cultural heritage inventories'.* In the operational guidelines of UNESCO World Heritage Convention (UNESCO, 2005: 21), authenticity of urban heritage can be expressed through variety of attributes including: *form and design; materials and substance; use and function; tradition, techniques and management systems; location and setting; language, and other forms of intangible heritage; spirit and feeling; and other internal and external factors.*

Wang (2011) proposes a model of attributes of authenticity in a historic city, especially in the context of eastern world (China in particular) and other historic cities under the influence of rapid development:
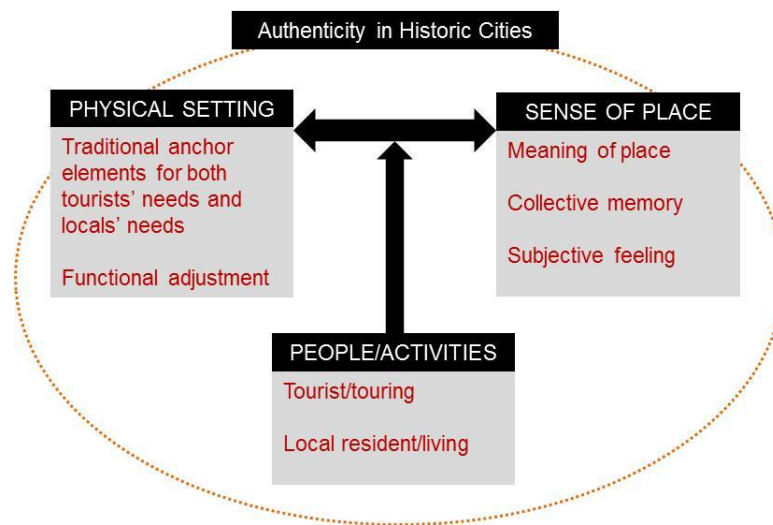
Figure 3.6 The diagram of attributes of authenticity in a historic city (Source: adapted (Wang, 2011)

The model shown in Figure 3.6 emphasises that the discourses of authenticity in a historic city should include the physical, social fabric and cultural aspects of historic settlements. The over emphasis on authenticity in tourist settings is not only beneficial for economic revenue, but has given a little help in shaping a sense of place for the local population. Based on the research, traditional anchor elements play an important role among local residents in forming social bonds and a sense of place. The urban conservation of historic cities, especially those under rapid development, is urgent, yet requires careful planning.

3.5 Measuring Urban Quality

According to Marans (2003), urban quality should be captured with multiple indicators and is a subjective phenomenon reflecting the lives of the urban residents. However, the objective condition of the setting themselves does not convey the true quality, rather, it is the meaning of those conditions to the users. Some urban quality indicators, as mentioned by Florida (2002b), are hard to define or measure and many are subjective (Brown and Meczynski, 2009). Trip (2007) claims that quality of place is a vague concept but this is because of its multiplicity and complexity, not because of its lack of content, meanwhile the attributes of quality of place are hard to define. However, it offers the potential for future

research; the main problem is how to measure it and its possible impact (Trip, 2007, Brown and Meczynski, 2009).

The Brown and Meczynski (2009) study, for example, has assessed urban quality by asking city workers using questionnaire-based interviews in a selected urban area. The respondents were asked about their main reasons for moving to the city, their satisfaction with a number of key urban quality factors, and about the quality of certain aspect of the city. Likert-type scales were used to quantify levels of satisfaction and perceptions of quality and standard questions were included on age, gender, income and level of education. The results revealed that although it is difficult to measure urban quality, in this case Amsterdam and Rotterdam, it was possible with the criteria applied (some adopted from Florida (2002b)) to obtain a satisfactory picture of the actual quality of place in both cases. It was concluded that Amsterdam had better quality than Rotterdam, particularly in the socio-cultural scene: cultural industries, gay and bohemian scenes, nightlife, culture, and image. Rotterdam appeared to perform better on some counts than was suggested by the official records. Lessons learned from the Trip's study include the need to carefully consider the scale to measure various aspects of quality of place and need to give further attention to the *'intangibles'*, as they constitute essential part of urban quality despite being difficult to assess.

Varna and Tiesdell (2010) formulate a Star Model for assessing the publicness of public space. The model is intended to be of value for comparative purposes (measuring one public space and another), as an analytic measure of publicness to be compared with more subjective interpretations of publicness, and as a departure point for deeper investigations of why particular places are more/less public than they should be. There are five indicators of 'publicness': ownership, control, civility, animation, and physical configuration. This model offered analysis of the social life of public space using qualitative descriptions to create quantified diagrams and provided a useful tool for grounding future empirical work on the subject.

In line with Varna and Tiesdell (2010), a study on evaluating public space by Mehta (2014) offered a comprehensive instruments which exist in the literature to measure the quality of public space using a *Public Space Index* (PSI) with indicators:

inclusiveness, meaningfulness, safety, comfort, and pleasure ability. The Public Space Index (PSI) was constructed from 42 to 45 variables to evaluate the five dimensions of public space that captured and measured both observed behaviour (use) and perceptions of public space. All variables were rated by the researchers by observing the space and interaction between the space and its occupants, with rating scale ranging from 0 to 3. The index offered a model that could benefit city stakeholders in evaluating various dimensions of public space.

Hall (2012) study revealed the quality of urban street through individual experiences alongside the histories of migration, racism and class that saturated in a London's multi-ethnic street, The Walworth Road. Hall used an ethnographic method and operated the research by sitting for six months in a coffee shop (Nick's Caff) on the street to meet local people and interviewing them with a snowballing process of looking for respondents. Through data-led analysis, contrasting ethnographic data with contemporary planning reports, Hall explored the diverse way of valuing the social, economic, and spatial qualities of the road (Hall, 2012, p.208). Hall revealed the adaptability of shop spaces (flexibility, social economic complexity, and diversity), longevity, and vitality as three major indicators revealed in valuing the quality of Walworth Road. Mehta (2013) used a mixed-methods strategy of inquiry that consists of both quantitative and qualitative methods used to study the characteristics of a street (street quality) that supports social activities along the street. Variety of techniques including direct observation, pedestrian count, a survey and interviews were simultaneously conducted in three locations of the study. Both qualitative and quantitative data were collected, analysed, and presented simultaneously as main findings of the study.

The above examples show that there are several different methods to reveal the quality of urban spaces. Quantitative methods as carried out by (Brown and Meczynski, 2009), (Varna and Tiesdell, 2010), and (Mehta, 2014) suggest urban quality indicators could be defined in advance prior to the study (deductive approach). The pre-determined indicators that have been set then are used as tools to assess the urban quality in numbers/quantitative result before interpreted as the key findings of the study. On the other hand, indicators in the qualitative method as used by Hall (2012) are obtained from the field observation (data-led analysis), such

as from in-depth interviews. In Hall's (2012) study, the findings that revealed the quality indicators were adopted from the research data and then confirmed with quantitative data from recent planning reports, census, maps, or street surveys, before appointed as the main/key findings of the research. Mehta (2013) used both methods (quantitative and qualitative) data which were collected simultaneously and merged during the analysis phase to add dimension to the findings. The chosen method of this research is discussed in details in Research Methods (Chapter 5).

3.6 Chapter Conclusion: Framework for Street Quality

A critical review and overview on traditional street concept and urban quality in urban design literature presented in this chapter offers a number of key findings. As a sources and theoretical framework for the next stage of the study, this chapter offers understanding on the traditional street concept. As something handed down from previous generation, traditional street are used by some scholars to address streets which have specific characteristics including a strong physical character, having organic layout, and plays an important role in the city formation (amongst the earliest streets in the city). The street produces and maintains liveable spaces and social interactions, the order are 'humane' and the street spaces are multi-usage; mostly informal in nature, and play an important role as a public urban space. The street creates a more robust sense of place; there is a strong bond between space and people, and has a strong image/memorable to locals as well as visitors. As part of urban heritage, it is important to conserve traditional street, as mandated through heritage charters. The conservation of traditional street should refer to its tangible and intangible aspects as those are the centres of culture and traditions of a society and essentially, the 'genius loci' of the city.

Urban quality has been widely discussed in urban design literature from the 1960s to the present day. Urban quality indicators have been promoted to measure urban quality in its 'tangible' and intangible distinctive characteristics of urban environment. Some indicators are 'subjective' phenomena reflecting the lives of the urban residents; however, the 'objective' condition of the setting does not convey the true quality, unless the meaning of those 'objective' conditions is

interpreted by the users. The main problems of urban quality are how to measure it and what possible impacts of having such qualities are. Indicators of urban quality that have been critically reviewed in this chapter offer the methods of measuring urban quality, particularly street quality observed in this study. This initial matrix below is proposed as an analysis framework based on the literature review for assessing the quality of traditional streets of Indonesia (see Figure 3.7).

Dimension	Element	Legibility	Walkability, accessibility, and connectivity	Diversity	Liveability	Vitality	Adaptability	Creativity	Form and visual quality	Transparency and active frontage	Safety	Imageability	Place Attachment	Authenticity
Morphological	Land Use													
	Building Height and composition													
	Plot and Street Pattern													
	Street Scale and Proportion													
	Floorscape													
Perceptual	Street Image													
	Meaning and Symbolism													
	Sense of Place													
	Place Attachment													
Socio-cultural	Street as Public Space													
	Street Public Life and Culture													
Visual	Streetscape													
	Architectural Style													
	Façade Design													
Functional	Pedestrian Activity and Movement													
	Activities in Street as Public Space													
Temporal	Street Transformation													
	Time Management of Street													

Figure 3.7 Matrix for Traditional Street Quality

The next chapter (Chapter 4) presents the general profile of Indonesian cities and continues to discuss the transformation of urban planning and design in Indonesia. This chapter also will cover streets of Southeast Asian cities including Indonesian cities in the context of their function as public space.

4

Streets in Indonesian Cities

4.1 Introduction

This chapter provides general profiles of Indonesian cities, and continues with a detailed discussion on the urban planning and design in Indonesia, in four phases of Indonesian urban history: traditional city era, colonial city era, post-independence era, and recent development era. The second part addresses the streets as public space in Southeast Asian cities before discussing the streets as public space in Indonesian cities. The third part is the conclusion of the chapter.

4.1.1 The General Profile of Indonesian Cities

Figure 4.1 Map of Indonesia (Source: Nations Online, 2004)

Based on the 2010 census (BPS, 2010), Indonesia has total population of 237,556,363 distributed in 33 provinces across 1,910,931 km^2 total area. The average density of the country is 124 people per km^2. Geographically, Indonesia is scattered onto thousands of islands with five major islands: Sumatera, Java, Kalimantan, Sulawesi, and Papua. The capital city, Jakarta is situated in Java, the most populated island in the country.

Indonesia today is an emerging economy with rapid transformation, rapid urbanisation, and rising incomes. Over the past decade, the economy has grown more rapidly and has been more stable; today it is more diversified than many outsiders realise. According to recent records, Indonesia is now the sixteenth largest economy in the world with 45 million members of the consuming class. Fifty-three per cent of the population are living in urban areas and could reach 71 per cent in 2030, and it is estimated 32 million people move from rural to urban areas (McKinsey Global Institute, 2012).

Indonesia, because of its location and openness as an archipelagic country, has long been *'a place for exchange and for the cross-breeding of various cultures and civilizations'* (Widodo, 2007: 17). According to Nas (1986: 1), every Indonesian city has *'a character of its own and people try to form and construct a detail image or mental map of the city that they lived in'*. Based on his research on 46 cities across Indonesia, Nas concluded that there are six clusters or types of cities: educational city, 'average' city, dense city, Christian city, Chinese city, and large city.

Despite that there are variety of typology of Indonesian cities, Nas (1986) also mentioned that there is a similarity shared among Indonesian cities, that is, every city has key elements, such as the *Kraton* (palace), *alun alun* (city square), the market place, the port, an ancient fortification and a certain degree of municipal autonomy (*kotamadya*). They are generally dominated by native and colonial ward; the native ward is called as urban kampong with a rural atmosphere, while the colonial ward is well-planned with an impression of a certain prominence. The Chinese ward (Pecinan) generally comprises of the shopping centres of the city.

Contemporary Indonesian cities have been transforming from agrarian based to industrial based cities. Until the mid-1990s, economic growth had appeared to contribute to urban development in Indonesia. However, the Asian economic crisis

in 1998s led urban economic activities in Indonesia to decline significantly (Firman, 2002).

The economic crisis in Indonesia (1998-1999) has led to regime changes in central government. President Suharto and his New Order Regime, which had been in power in Indonesia for more than thirty years with less democratic practices, then was replaced with a more democratic system (Reform Era). It was marked with a direct election of the president and the head of the region by the Indonesian people. Since the year of 2004, the Indonesian economy continued to rebound. Although as a new democratic country with noisy political situation and the world economic crisis of 2008, the records noted recent economic development in Indonesia was growing rapidly. This condition directly influenced the development of cities in Indonesia.
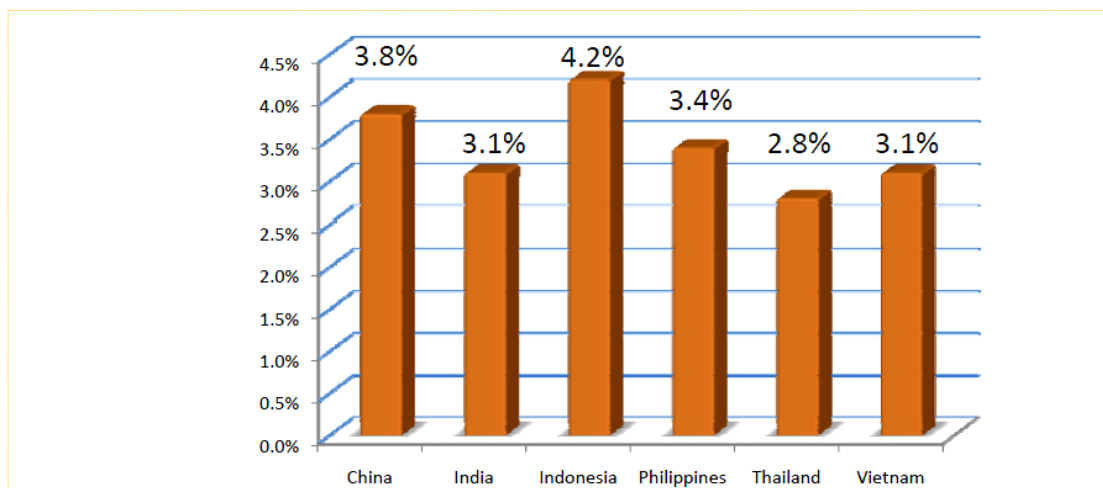
Figure 4.2 Compound Annual Growth Rates of Urban Population, 1970-2010 (Source: United Nations World Urbanization Prospects, 2009)

Compared to five other Asian emerging economic countries, Indonesia has the highest annual growth rates of urban population, that is 4.2 per cent per year, even higher than two giant new economies, namely China (3.8%) and India (3.1%) (UNWUP, 2009). This means that Indonesian cities are growing fast; besides, there are new towns and cities growing as the implication of democratization and decentralisation since the Reform Era back in 1999.

4.1.2 Urban Planning and Design in Indonesia

Traditional Cities in Indonesia

The oldest evidence of large densely-populated areas in Indonesia, where a multitude of economic, religious and administrative activities were conducted, dated only as far back as the late 11th century AD (Tjahjono, 1998c). According to Nas (1986), the traditional cities of Indonesia have a clear structure in which the cosmological order and socio-cultural patterns are reflected. Two types are distinguished: the first is the coastal city as the trading port with access to international maritime routes, and the second is the inland town as administrative centre of prosperous agrarian zones with a traditional and religious character (Tjahjono, 1998c, Nas, 1986).

The coastal cities have historically presented a striking contrast to the society of the interior *'characterised by a series of cosmopolitan trading ports, more outward looking than inward looking'* (Santoso, 1998). Some examples of established coastal cities are including Banten, Jayakarta (now Jakarta), Semarang, Tuban, and Gresik; all are mostly in the north coast of Java island. The coastal cities lived from market activities and they accommodated various group – generally living in separated part of the city – meeting each other at the market place (Nas, 1986). The coastal cities lied along the seafront and waterfront (river mouth), making the water as the main channel of movement. Houses were designed overlooking the seafront or the river front to serve the maritime trade activities by sea and from the hinterland.

During the early coastal cities era, people from China, India, Arabia, Persia, and other parts of the world had been passing through and many had settled down in early Southeast Asian cities. It was a common phenomenon in coastal Southeast Asia that an old Chinese temple was situated adjacent to an ancient mosque, and/or a Hindu shrine in close proximity to the waterfront (Widodo, 2012). During this era, Muslims from North East, India and even China, probably made up a significant proportion of early urban populations in Indonesia. Muslim quarters were important constituents of early Indonesian cities, especially in Java. Islam

encouraged the growth of cities wherever it spread. These immigrants from China and the Indian Ocean probably played a crucial role in the emergence of urban settlement patterns in Indonesia (Tjahjono, 1998a).
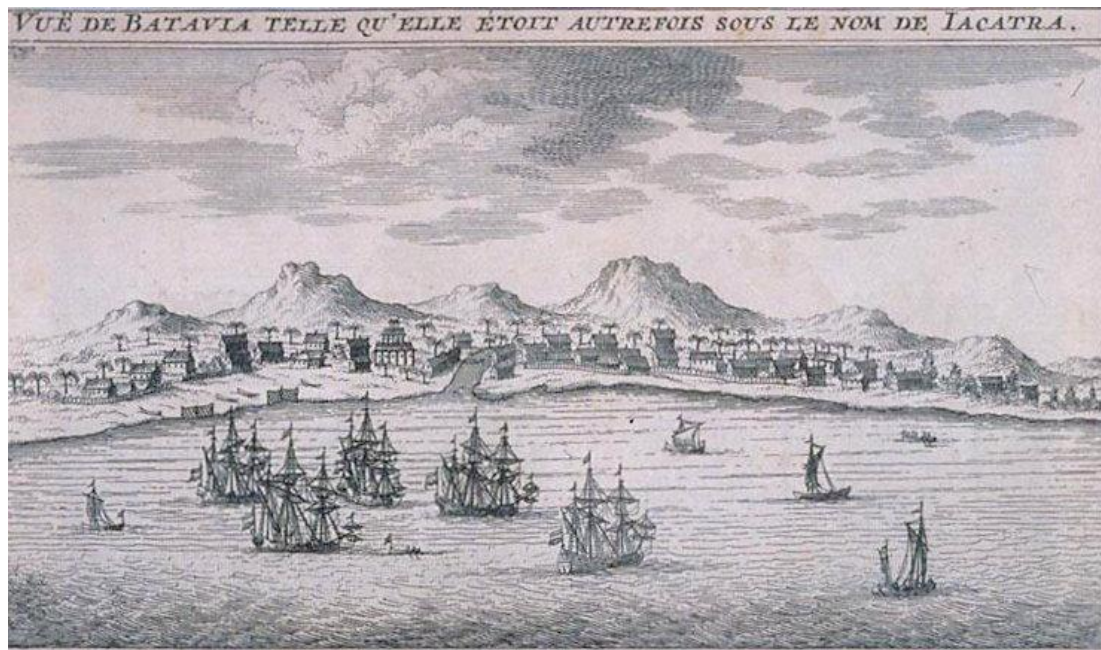
Figure 4.3 Jayakarta (now Jakarta) before colonial period (1605-1608)
Source:http://www.geheugenvannederland.nl/?/nl/items/KIT01:201700/&p=11&i=16&st=batavia&sc=%28batavia%29/&wst=batavia, accessed in 5 February 2015

On the other hand, the inland city morphology is usually a circular pattern, spreading its development from the centre to the periphery of the city. Economy of these cities is based on religious and administrative functions guaranteeing the supply of agricultural products from the hinterland (Nas, 1986). Traditional planning of the settlement follows this ordering principle, by situating the village in between the mountain and the water body (sea, lake or river). The most important buildings, such as temple, palace, or ancestral graves, are placed in the centre, and rice barn as the most important function for the rice growing community is situated facing the sunrise, symbolizing life (Widodo, 2012).

In inland cities, the palace (*kraton)*, which refers to the seat of the ruler (king), is widely used in many parts of Indonesia and plays an important role in the political symbolism of the state, not only as a territory but is also defined a kingdom's geographical image (Tjahjono, 1998b). There are four main urban elements in

inland traditional cities (Example: See Figure 4.4, Yogyakarta traditional inland city): palace (*kraton*), city square (*alun-alun)*, market (*pasar*) and mosque/temple (*masjid/pura*). At the centre of the city, the palace built in front of *alun-alun* serves as a place for public gathering, religious and state ceremonies, and urban spaces for the people. The mosque or temple built at one corner of *alun alun* and *kraton* as becomes the centre of religious activities and court (*pengadilan surambi*), and the last is *pasar,* as the economic centre of the city.
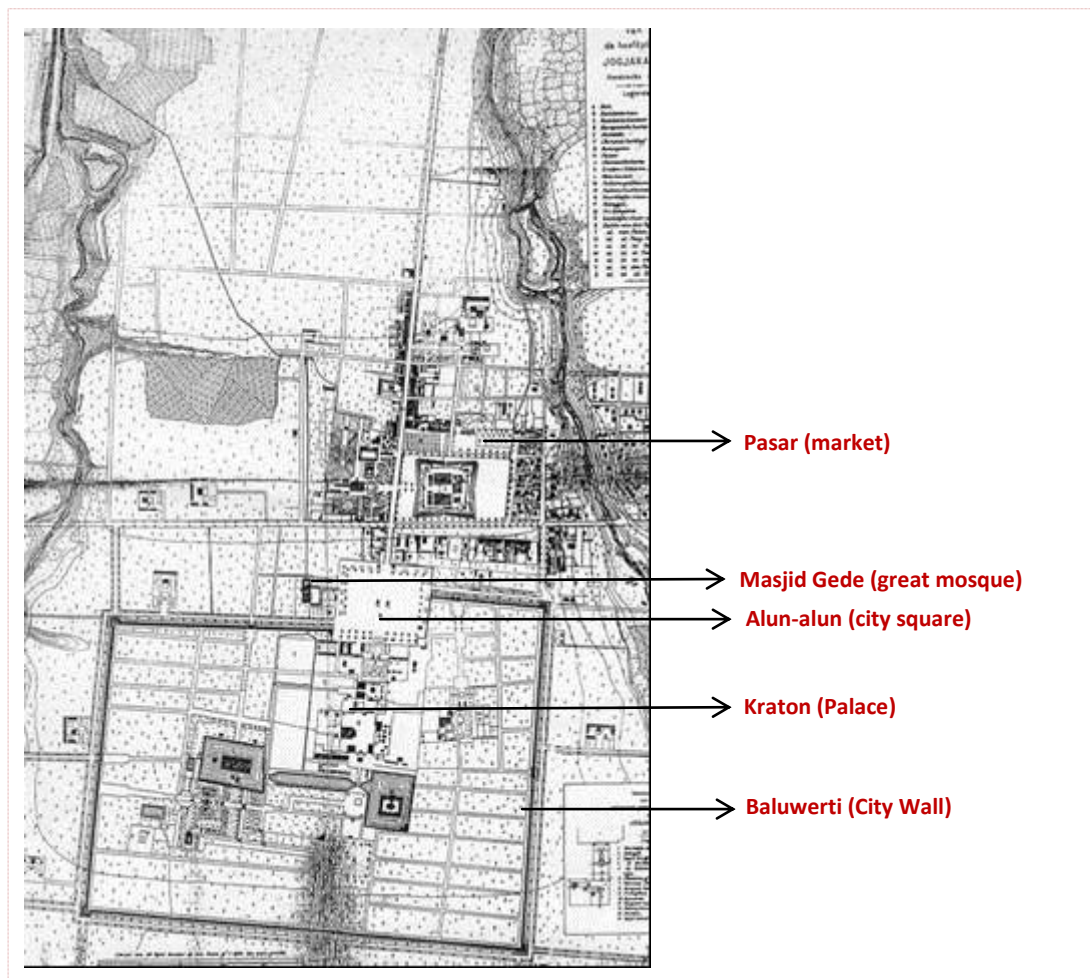
Figure 4.4 Yogyakarta Traditional Inland City (Map of 1830s) (Source: Sholihah (2012)

The traditional inland city concept also exists in Indonesia's Bali Island. The concept of centre is important to the Balinese as it is for most of the Southeast Asia tribes, not only in religious and cosmological terms but also in political realm (Tambiah, 1985 in Samadhi, 2001). According to Samadhi (2001) the physical manifestation of the concept of centre in the Balinese cities has taken the form of a 'grand crossroad' (*pampatan agung*), with important Balinese components of a city:

palace (*puri*), temple (*pura*), priest house (*griya*), public meeting hall (*wantilan*), and the market place (*pasar*); all are arranged in the surrounding area of the grand crossroad as a way to accumulate the power of religious, socio-economics, and political into one place (see Figure 4.5).
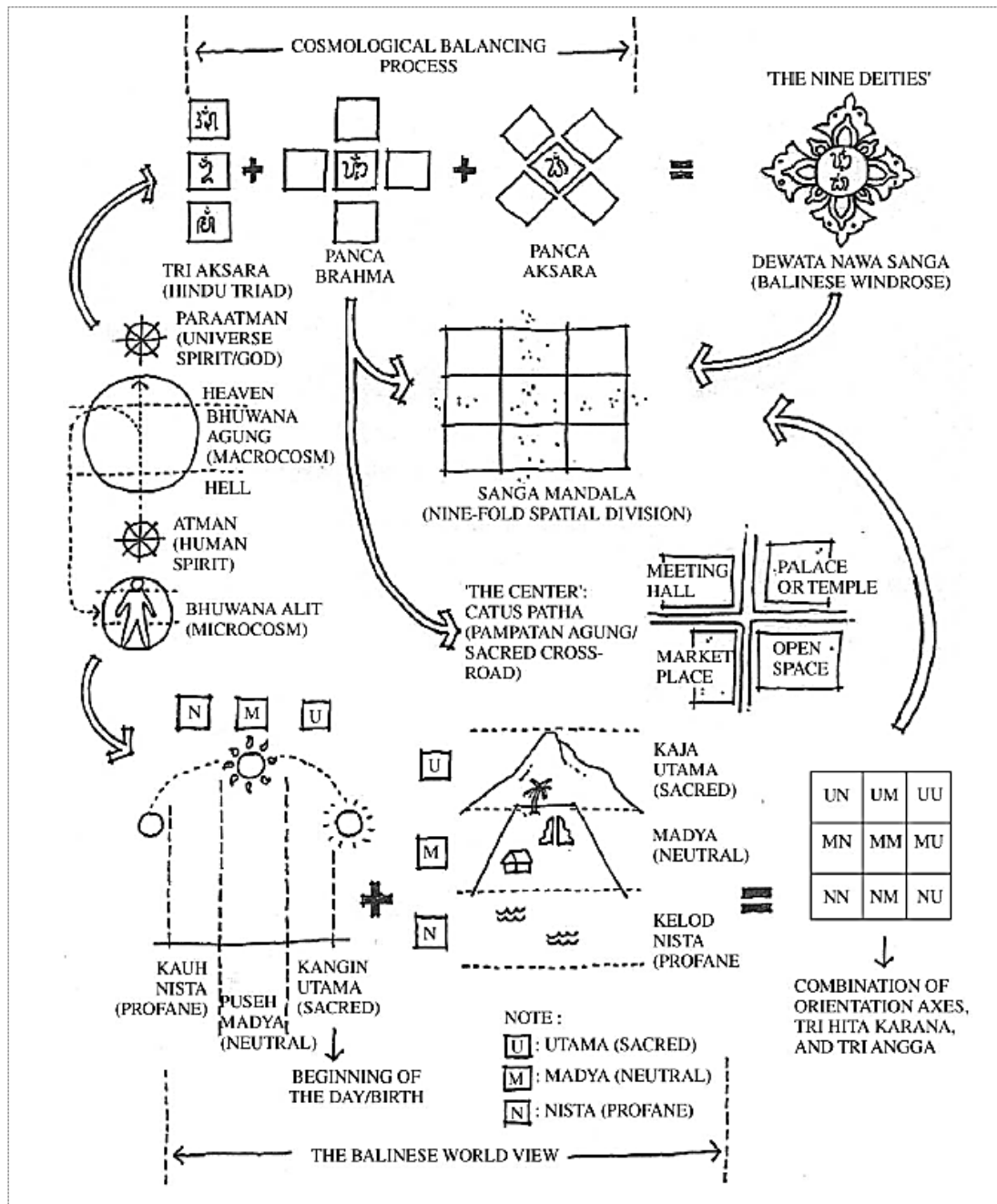
Figure 4.5 The Balinese Traditional City Conception (Source: Samadhi (2001))

Colonial City

International trade has therefore always been a major factor in the history of Southeast Asia (Reid, 1980). The vibrant and peaceful era of Southeast Asian cities in general, and Indonesia in particular as an international trade area when people from all over the world shared maritime trading, has come to an end in the first half of sixteen century, when the Europeans arrived and tried to colonialize them. The first western traders and army that came to Southeast Asia was Portuguese under Alfonso d'Albuquerque in 1511, which attacked and turned Malacca in Malay Peninsula into their mercantile base. The Dutch came to Indonesia a century later, and faced the competition amongst other European traders. In 1602, the Dutch founded the United East Indies Company (VOC) which succeeded to strengthen their position in Indonesia.

The early Dutch settlements in the seventeenth century Indonesia were generally *intra-muros* or within walled defences to protect them from attacks by other European trade rivals and native revolt. They built forts as military base, centre of commerce, and administration, that were usually located along the waterfront of a coastal or riverine port since most of the commerce were maritime trades (Sumalyo, 1998). The Forts became a dominant element (Van der Heiden, 1990); they typically included a governor's residence, officers' quarters, barracks, warehouses, offices, a church, and the houses of Dutch merchants.

As the Dutch position in Indonesia became more secure, cities grew beyond the walls of the fort. The ground plan of many Indonesian towns and cities, especially in Java, was originally laid down during the colonial era (Gill, 1998). In the beginning the Dutch copied their cities in Europe to be applied in Indonesia. Old Batavia for example, resembled Amsterdam in many ways (Nas, 1986). It was built with canals and dominated by the Dutch type of canal houses and drawbridges.

Figure 4.6 Ideal City of Batavia (Vue de la ville de Batavia, published in Paris, 1780)
Source: http://www.swaen.com/zoomV2.php?id=9792&zif_first=true, accessed 5 February 2015

It soon turned out that Dutch town planning and architecture implemented in Indonesia were unsuitable for the hot and humid climate of the tropics (Van der Heiden, 1990). Later on, when the Dutch came to extent their rule over much of Java and other parts of the Archipelago, they tended to adapt themselves to the native model of urban settlement when the Indonesian and Dutch culture were mixed and a kind of mestizo culture was established, called the '*Indische culture*' (Nas, 1986, Gill, 1998).

The typical blend of Dutch and Indonesian elements which characterised nineteenth century towns, particularly in Java, made the *'Indische'* town a remarkable phenomenon in colonial urban history (Gill, 1998). Weltevreden (new Batavia) was the best example of an *Indische* town, with its architecture and lay out showing both Dutch and Indonesian influences. The centre of Waltervreden was a large square which very much resembled the *alun-alun* and which was surrounded by public buildings (Van der Heiden, 1990), as existing in traditional city of Indonesia. During this period, according to Nas (1986), the Dutch divided parcels of land across the city according to racial groups: the Dutch, Indo-Europeans, Chinese

and Arabs, and the Indonesians. The Dutch dominated the city centres, while the Indonesian in majority lived in the kampong; a minor part of the city and poor in condition. Cities such as Semarang, Jakarta (New Batavia), Malang, Medan, and Surabaya were amongst cities under colonial urban planning.

In the latter years of the colonial era (first half of twentieth century) municipal towns had experienced important transformations. Town Development Plans established new residential districts, mostly for Dutch residents, which were planned under the concept of 'Garden City'. A range of public buildings, such as town halls, post offices and banks, were built to create new civic centres, in which together with the residential areas served, were situated in a park-like setting (Siregar, 1998). Thomas Karsten (1884-1945) and Henri Maclaine Pont (1884-1971) were two prominent actors who combined the idea of Modernist Movement and indigenous architecture or urban elements, creating a distinctively Indonesian style of modern architecture and urban design (Saliya and Siregar, 1998).

The influence of modern planning ideology in Indonesia started to be digested in a wider context in the final decades of the colonial era (1930s) by the Dutch architects who were keen to implement their modern ideas in Indonesian cities. One of the best examples was Bandung urban planning and design in West Java (see Figure 4.7). A.F. Albers, one of the foremost representatives of Modern Movement in Indonesia before WW II, designed some important buildings in Bandung that were highly celebrated, including the Savoy Homan Hotel (1939). His work has been favourably compared with that of the Dutch Architect Jan Duiker and the father of modernism Le Corbusier (Passchier, 1998).

Figure 4.7 Bandung in the First Half of Twentieth Century
Source:http://info-wisatadibandung.blogspot.co.uk/2013/09/bandung-tempo-doeloe-landmark-braga.html, accessed in February 9, 2015

Post-Independence Indonesia

Since independence, Indonesian architects continued to refer to Europe and America for inspiration, especially in adopting the International Style of Walter Gropius, Mies van Der Rohe, and Phillip Johnson (Saliya, 1998). The early independence period was notable for the emergence of the first fully-fledged Indonesian architects. According to Sukada (1998), those architects can be divided into two groups based on their architectural training and experience. The first group consisted of those typically as staff members in a Dutch-owned architectural firm (architect by training) including prominent names such as Susilo, Suhamir, and Silaban. The second group were those who attended the newly established school of architecture at the Bandung Institute of Technology.

The first president of Indonesia (1945-1966), Sukarno was a civil engineer and practised as a private architect for years before becoming a professional politician. He was passionately devoted to the idea that architecture and town planning could serve to create the ideal society of the 'New Emerging Forces' plan. His idea was to make Indonesia equal with other nations through architecture and city planning. Modern architecture in cities of Indonesia (especially Jakarta as the capital city) became the symbol of the country's progress to be aligned with developed countries, such as America and Europe. All Sukarno's 'lighthouse' projects were built in an international style using modern materials such as concrete, steel, and glass. *'At this point the historical continuity between modern Indonesian architecture and architectural tradition of the past was finally breaking a part'* (Sukada, 1998).

Figure 4.8 Jakarta under Sukarno's New Emerging Forces: Modern and International Style Buildings
Source: google.images.com, accessed in February 9, 2015

In 1950s and 1960s modern urban planning ideology was implemented in some Indonesian cities mainly through the implementation of zoning system. There were subdivisions of Indonesian cities into segregated areas; each was defined according to their purposes: residential, commercial, industrial, circulation and recreation (Siregar, 1998). In 1970s, oil booming prize had a major impact on the development of Indonesian cities. The government played a major role in urban development especially on housing programmes and satellite city projects, whilst *kampung* improvement programmes had also been reintroduced to improve conditions in the urban area. During this period, a number of large-scale construction projects were also executed, including Sukarno-Hatta Airport project (Saliya and Siregar, 1998), which was designed with a combination of modern architecture (wide-span structure, reinforced concrete) and traditional architecture in its interior and landscape. During the 1980s high rise projects were planned and constructed in the inner city, resulted in the removal of *kampungs* from the inner city areas and the destruction of many historical buildings (Siregar, 1998).

Recent Development of Indonesian Cities

Serious economic crises hit Southeast Asia that started in 1997 in Thailand, and spread quickly to Asian countries, including Korea, Malaysia, the Phillipines, and Indonesia which experienced the worst impacts including the flow away of foreign capital, loss of investor confidence, and drop of currency (Firman, 2009a). The result of economic crisis in Indonesia was the demise of New Order Regime under President Suharto, which already controlled the country for more than 30 years. With the new era so-called Reform Era (*Era Reformasi*), the democratization system in Indonesia grew after more than 30 years under an authoritarian regime, which was the main key stakeholder of urban development in the country. Firman (2009a) also noted that under the pressure of justice and democratization issues, Indonesian Parliament passed Law 22/1999 and 25/1999 concerning the Regional Autonomy and Fiscal Decentralization.

After the decentralization of power under Regional Autonomy Act No 22/1999, the urban and regional planning and development were under local development affairs, which should be planned and implemented according to the local needs by the local authorities. The role of central government which was very dominant during the New Order regime would be less important. A successful urban planning and design are dependent upon the institutional, financial, and technical capacity of the local government and communities to implement the urban development programs (Firman, 2002). There are two distinctive impacts after five years implementation of Regional Autonomy Act 1999; the first is inequality, as some districts and municipalities under excellent leadership have been able to use the new decentralization policy as instruments to improve the urban quality and quality of life, but some other did not perform as expected; second is the decentralization policy has also resulted in sub-national fragmentation, in which many local governments consider themselves the 'king' of their own authority (Firman, 2009b).

Under the Indonesian Spatial Planning Act No. 26/2007, the spatial plan system in Indonesia is following the hierarchy and operationalization, as follows:
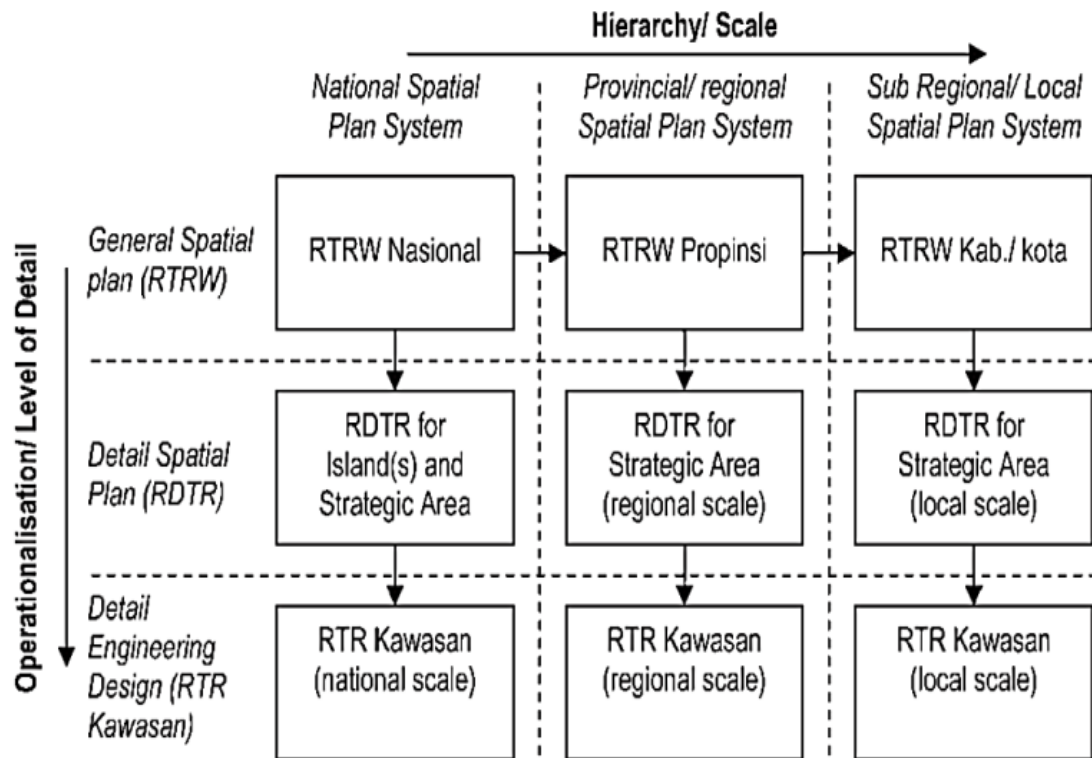
Figure 4.9 Spatial Plan Systems in Indonesia (Source: Spatial Planning Act, 2007 in (Hudalah and Woltjer, 2007))

This spatial planning system as indicated in Figure 4.8 is criticized due to ineffectiveness in directing sustainable urban development and inability to properly take into account the institutional-cultural forces. As a result, it develop an inconsistent and fragmented system; it needs a balance between institutional-cultural forces and 'neoliberal' ideas into the Indonesian planning system (Hudalah and Woltjer, 2007).

A recent report of McKinsey Global Institute (2012) on Indonesia shows Indonesia's economy has an enormous promise, is already the 16th largest economy in the world, and has potential to be the seventh biggest in 2030. Many Indonesian cities are growing rapidly, but the fastest growing urban centres are large and mid-sized middleweight cities with more than two millions inhabitants (excluding Jakarta); these cities include Medan, Bandung, and Surabaya as well as part of greater Jakarta such as Bogor, Tangerang, and Bekasi.

Figure 4.10 Some Indonesian cities skylines: a) Jakarta, b) Surabaya, c) Makassar, and d) Pekanbaru
Source: google-images.com, accessed in February 11, 2015

In order to achieve the predicate as the seventh biggest economy in the world, McKinsey Global Institute (2012: 61) pointed out five challenges of urban planning practices in Indonesia:

- lack of coordinated spatial planning: it needs a more parallel spatial planning in various levels: central and local government;
- communal land rights are not formally recognised especially in remote area (*adat* system);
- land zoning rules need to be implemented especially regarding land for agriculture;
- land parcels are highly fragmented and small, particularly land that is passed down to the generations tends to become divided into smaller parcels;
- Infrastructure constraints, such as public transport infrastructure is still centralised in Java and Bali.

Table 4.1 summarises the journey of urban planning and design in Indonesia since the traditional city era to contemporary era, as follows:

Table 4.1
Summary of Urban Planning and Design History and Practices in Indonesia

Period	Milestone	Urban Characteristics	Key Stakeholders
The Traditional City Period (- 1619)			
11th -17th century	• International trades from China, Arab, Persia, India: Ceramic Routes • The establishment of Kingdoms: Srivijaya (11-12th century AD) and Majapahit Kingdom (14-16th century AD)	• Coastal cities: cosmopolitan trading port along seafront and river front, market place mainly maritime trades • Inland cities: circular pattern, 4 main components: palace, city square, mosque, and market place	• Rulers/kings • Merchants • People
The Colonial City Period (1619-1945)			
1619-1869	• Jayakarta under Dutch colonial hegemony: Batavia	• *Intra muros* settlement: Fort is dominant element • Cities grew beyond walls of the fort: Dutch copied their cities in Europe to be applied in Indonesian cities, for example: Old Batavia resembled Amsterdam	• Colonial government
1870-1900s	• The position of Dutch Colonial became more secure • Dutch town planning and architecture implemented in Indonesia were unsuitable for the tropics	• Cities grew beyond walls • *Indische culture* established: mix culture Dutch-Indonesia • Town Planning for Indonesia	• Colonial government
1900s-1920s	• Ethical policy grew amongst the Dutch society in Indonesia • New development of colonial cities: Bandung, Malang	• Indische towns • Garden City concept • Health Issue in kampungs/cities	• Colonial government • Dutch Planner: Thomas Karsten and Henri Maclaine Pont
1920s-1945	• Modern movement in Europe • New Planning School: Bandung Institute of Technology	• Town development plan established • Modern movement influenced cities of Indonesia • Institutionalized of Town Planning Committee	• Colonial government • Dutch Architect and Planners • Private sector
The Post-Independence Period (1945-present day)			
During Old Order Regime (1945-1967)			
1945-1955	• Independence day, 17 August 1945: New Nation • Spread of administrative areas	• Continuing Dutch town planning concept • New National Planning Board • Modern Planning Ideology	• Central government

	• Political tensions: Dutch moved from Indonesia		
1956-1967	• Guided Democracy • New Emerging Forces Plan	• 'Lighthouse' projects: Parliament Building, Senayan Stadium, Istiqlal Mosque	• Central government
During New Order Regime (1968-1998)			
1970s	• Initial study on regional infrastructure, economic regional development • Oil Prize booming	• Top down approach • Repelita (Five Years Development Plan) • Government Housing Program • Satellite city project • Kampong Improvement Program	• Central government • Private sector
1980s	• P3KT: integrated development approach	• High-rise projects in large cities: Jakarta, Surabaya, Medan • Loss of urban heritage in inner cities due to rapid development • High demand on fast track development	• Private Sector • Central Government
1990s	• Spatial Planning Act No. 24/1992	• Levelling on planning and development • Integrated planning	• Private Sector • Central Government: National Planning Board and Dept. of Public Works
Reformation Era			
1999-2006	• Regional Autonomy Act No 22/1999	• Decentralization, bottom up approach	• Local government • Community Participation • Private sector
2007-2006 present	• Spatial Planning Act N0.26/2007	• Decentralization, bottom up approach	• Local government : Regional Planning Board • Community Participation • Private sector: local and international

Sources: Summarised from (Reid, 1980, Nas, 1986, Tjahjono, 1998b, Gill, 1998, Saliya and Siregar, 1998, Siregar, 1998, Santoso, 1998, Van der Heiden, 1990, Firman, 2002, Hudalah and Woltjer, 2007, Firman, 2009a, Widodo, 2012, Setiawan, 2013)

4.2 Streets as Public Space in Southeast Asian Cities

The idea of street as public space is historically rooted in Southeast Asian cities. Streets have specialities and significance in the context of urban public life. Streets have traditionally served the city as public space, a place where people come

together to do commerce, to eat, and to socialize. For example, according to Chua and Edwards (1992), streets of Singapore since its establishment in 18th century have become the sites for social life and trading activities, leading to congestions in the streets, as hawkers, pedestrians and vehicles jostled each other for space and right of way, while simultaneously enriching the street with a diversity of activities, colour, sights and sounds and also symbolising the vitality of the urban space.

Figure 4.11 A Singapore street market in 1960s (from an old postcard) (Source: Widodo (2012))

The duration of use of streets as public space in Southeast Asia, compared to those in western countries, is much longer and intensive. Drummond (2000) highlighted that Southeast Asian streets, in spite of unorganized and conflicting appearance, can provide far more activities and serve many more users for a longer period of time rather than those in western countries. In similar, Appleyard (1981) stated that streets in developing countries in particular are being much more complex than those in developed world because they contain more mixed modes of transport and mixed usage.

Several studies on Southeast Asian streets have indicated the uses of street as public space. Oranratmanee and Sachakul (2014) on their study on Thai streets pointed out that Southeast Asian streets could function for multiple uses, especially

for the socio-economic stimulation of the city, after demonstrated that Thai streets appeared to be space for people to do activities, or as public space. A study on a Malaysian city also noted that traditional streets of Malaysian city are vibrant due to the various types of passive and active activities associated with the economic transaction as well as the socio-cultural interaction taking place through the presence of people across different times (Shamsuddin and Ujang, 2008).

The Kim (2012) study on sidewalks of Ho Chi Minh City, Vietnam called for more attention to sidewalk as important public space; she concluded that Vietnam's vibrant sidewalk life as an example of a mixed-use sidewalk system can support multiple livelihoods and lifestyles as well as contribute to a city vibrant and civic life. The diversity of uses of Malioboro Street's sidewalk such as for street vendors, art performance, and social engagement of people have demonstrated as the most compelling attribute to street public life and being attractive for locals as well as for visitors (Sholihah, 2012).

Figure 4.12 Streets of Southeast Asian Cities: a) Petaling Street, Kuala Lumpur, b) Khaosan Road, Bangkok, c) 36 Streets, Hanoi, d) Malioboro Street, Yogyakarta (Sources: google-images.com, accessed in February 12, 2015)

The public life of Southeast Asian streets is not static; rather, they experience dynamic changes and transformations. For example, Chi (2013) noted the transformation of 36 streets in Old Quarter Hanoi in four different phases: 1) the Imperial Era (traditional city), 2) the colonial era (France colonial), 3) Closed Economy Era (Communist Era), and 4) Reform Era (*Doi Moi* Policy). Each phase created a distinct identity for the street, but there are important things retained, such as the informal activities have created attractive ambience for traditional street, the commodities sold in the street remain the same over time, and the commercial activity along the street has kept this area vital and attractive. This finding is in parallel to the fact that Southeast Asian cities are transforming *'from agrarian economies into centres of global consumption as they grow faster and now much more advanced than cities in the west in terms of infrastructure and services'* (Douglass and Daniere, 2009: 4).

The transformation of Southeast Asian cities can have major impact to the quality of life of the streets. Gehl (2010) noted that the economic growth in many Asian cities cause a reduction of the quality of life. The traditional outdoor life of Southeast Asian streets, including street trade, art and exhibition on street, street kitchen, and food stalls along buildings, is also under pressure. The street space is reduced due to traffic and on-street parking, while outdoor activities are also negatively impacted by noise, pollution, and insecurity. The street spaces nowadays is mostly functioned only for circulation (Celik et al., 1984).

Figure 4.13 Major streets of everyday Jakarta, streets function merely as a channel of movement
Sources: kompas.com, jepret-jakarta.blogspot.com, accessed in March 2013

4.3 Streets as Public Space in Indonesian Cities

The Indonesian government classifies streets according to their function, mainly as channel of movement or circulation. According to Traffic and Modes of Transport Act No 22/2009, streets are classified as follows:

1. Highways or Freeways;

2. Artery Streets, mainly for long-distance travel with high speed;

3. Collector Street, mainly for medium-distance travel with medium-speed;

4. Local Streets, referring to public streets that serve local transport, short distance travel, low-speed, and a number of modes of transport which are not limited;

5. Neighbourhood Streets public streets that serve the short distance travel in neighbourhood level and the average speed is low.

In the meantime, the government definition and regulation regarding the role of street as public space, has not been confirmed. However, the concept of street as public space has been acknowledged since the Indonesian traditional city era. Yogyakarta, for example, implemented the concept of an imaginary axis which is manifested as the city's main street.

Sultan Hamengku Buwono I planned Yogyakarta in 1755 with an imaginary axis which correlates Mount Merapi and South Sea as a symbol of supernatural power. The axis which links the kraton (palace), the city square (alun-alun), and the city statue (tugu pal putih) contains *'the meaning of sangkan paraning dumadi, refers to the origin and destination of being'* (Wardani, 2008 and Magniz Suseno, 1977, in Ikaputra, 2013: 4). The axis represents the process to be a human, where people came from, and where they are going to. It is noted the streets connect the kraton and the white statue consisted three names of street: a) *Margo Utomo* (Main Street), b) *Margo Mulyo* (Glorious Street), and *Malioboro* (Garland Bearing Street, or *Rajamarga* or royal path) (Carey, 1984) (see Figure 4.14).

Malioboro Street in particular, not only serves as the main channel of movement of the city, but study indicates that throughout history, it denotes a number of public functions and meanings, including economic, social, cultural,

political, and symbolic meanings. As a physical and symbolic manifestation of an urban imaginary axis and regarded as a sacred corridor to the people as well as to the Sultan, it was formally used as *Rajamarga* or royal path and in the contemporary era, it is used as a major procession path for public and urban parades (Sholihah, 2012).
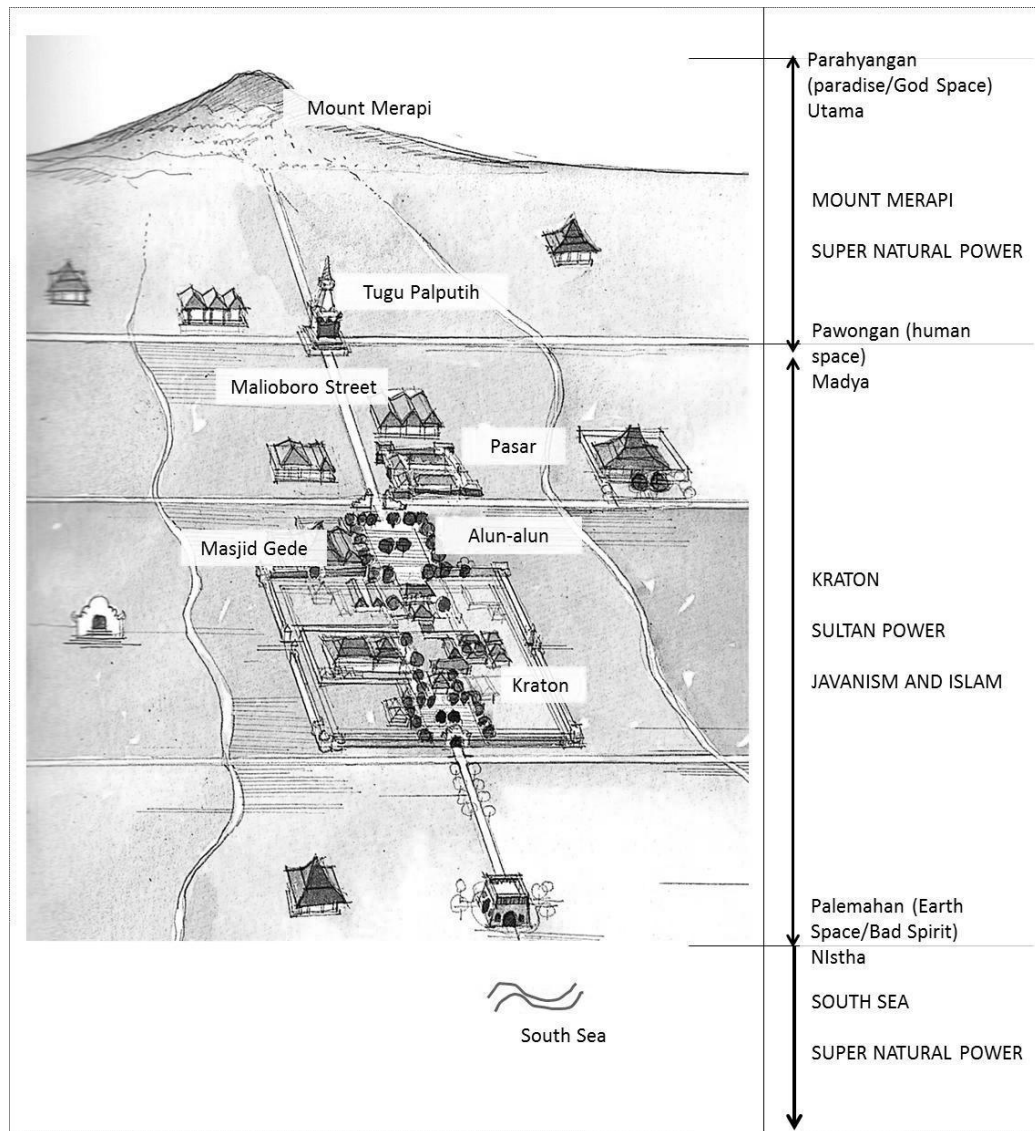
Figure 4.14 Yogyakarta Imaginary Axis correlates the Mount Merapi and South Sea
Sources: adapted from UU Keistimewaan Yogyakarta (2012) and (Ikaputra, 2013)

In the case of Old City of Kotagede, there is a traditional street called *Jalan Rukunan* (Harmonious Street) which connects private space in a neighbourhood between each main house and a hall (*pendapa*) (Adishakti, 2013). This street has public roles as 1) a link to connect one cluster of settlement to another, 2) public

open space for the whole families living along the *Jalan Rukunan*, 3) a social bond amongst the member of the neighbourhood, 4) a meeting place for guest, and 5) a place to hold traditional as well as religious ceremonies, social activities, and celebrations (such as weddings, funerals, prayers, or independence day celebration) (Indartoro, 2000).

During the colonial era, streets as public spaces were manifested at the design of public arcade or five-foot way (veranda way/arcaded sidewalks) in front of the shop house buildings along the streets. The shop house is attached with a unique urban housing form found in Southeast Asian colonial cities to accommodate the pedestrian movement, regularity and conformity of space, and provide shelter for pedestrian from hot sun and torrential rainfall (Ju and Omar, 2011). Singapore is experienced in these pathways and had their beginnings in 1822 under the instruction of Thomas Stamford Raffles (the founder of Modern Singapore) to build continuous verandas and covered passage on each side of the street (Yuen and Chor, 1998).
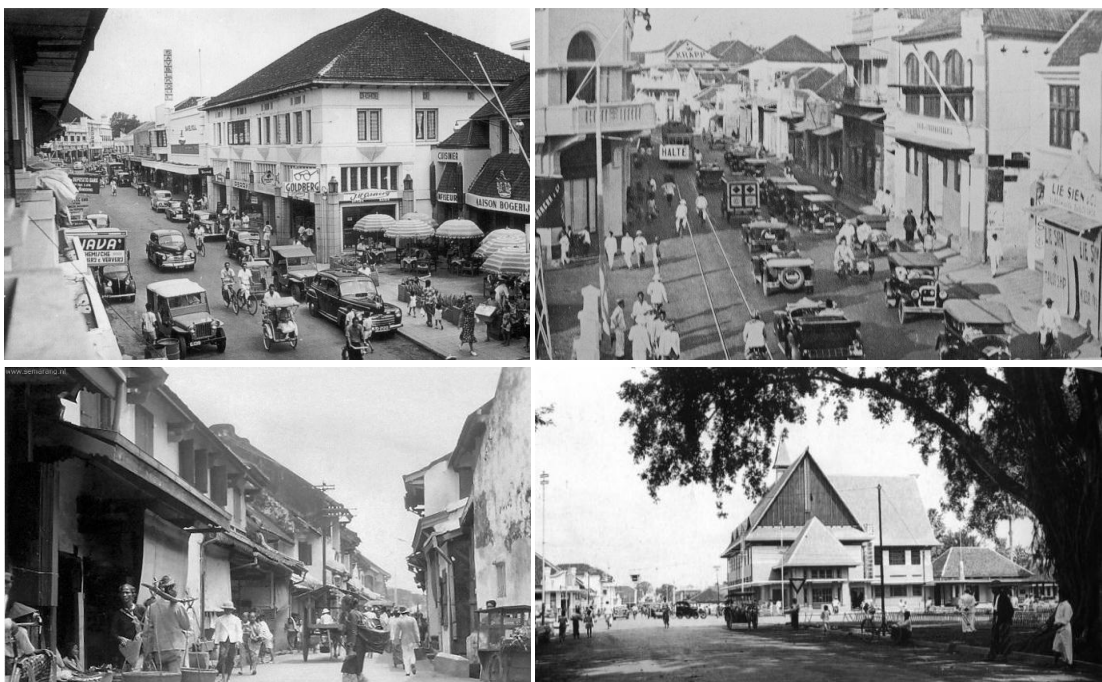
Figure 4.15 Indonesian Streets during the Colonial Era (Source: google-images.com, accessed in February 2015)

Street space including five foot ways and sidewalks also functions as public market. The street market can be considered one of the most common scenes in

cities across the world (Oranratmanee and Sachakul, 2014). The characteristics of street market are mostly temporary, mobile, moveable, and flexible. The vendors find a place, construct the vending, vend, and reconstruct it again, or move to another place; these are daily rituals for the street vendors across Southeast Asia as well as in Indonesia (Maharika, 2001 in Oranratmanee and Sachakul, 2014, Yatmo, 2008).
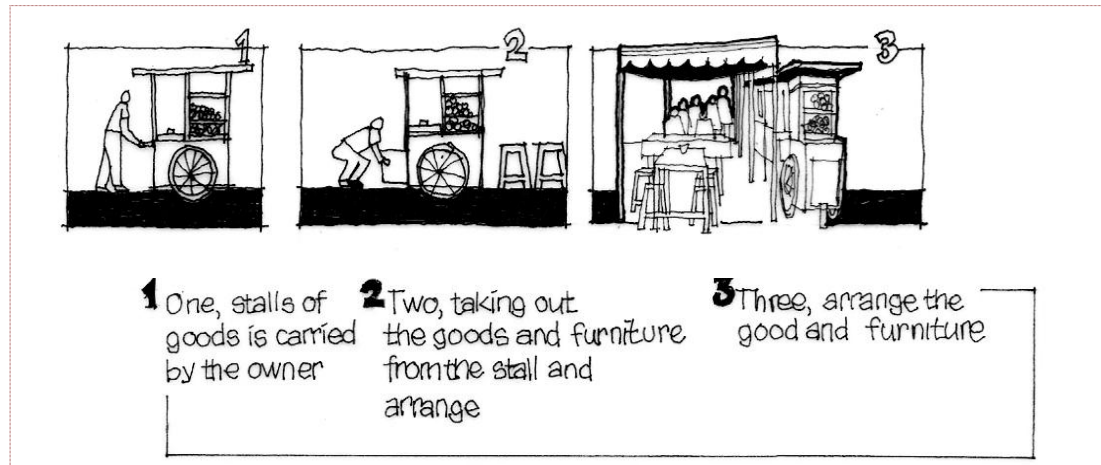
Figure 4.16 Street Vendor arrangements in Malioboro Street (Source: (Sholihah, 2012))

The phenomena of street as public market often gain negative opinions, since they often become over crowded (Hee and Ooi, 2003, Yatmo, 2008). However, Savage (1992) argued that 'this street culture' contributed considerably to the imageability of the city because of their richness and liveliness and for visitors from other regions in Southeast Asian cities, the vibrant street as public market has been remembered *'for its sensuous streets, mysterious streetscapes, cultural vigour and the exoticism of the east'* (Hee and Ooi, 2003: 87).

As indicated in streets in contemporary cities of Southeast Asia, Indonesian streets, in many cases, have been widened to ease traffic congestion rather than for pedestrians or street life. The functions of streets have been mostly reduced and narrowed to ensuring efficient vehicular traffic and pedestrian flows. There are many cases when the street vendors along the sidewalks were evicted forcibly by the municipality due to traffic flows and urban aesthetic considerations. However, the eviction strategy by the government is not always successful to remove

permanently street vendors from particular areas, as they often return and trade back as usual (Yatmo, 2008).

4.4 Chapter Conclusion

This chapter has summarised the journey of Indonesian cities from their establishment to their rapid development in recent times. Indonesian cities have been transformed over time in four main stages, namely the traditional city era (11-16th century), the colonial city era (17-20th century), the post-independence era (1945-1998), and the reform era (1999-present day). In the traditional city era, Indonesian cities implemented a traditional concept of urban planning with cosmological order as the main consideration. Meanwhile, in the colonial city era, the influence of the European cities planning started to be implemented in cities such as Jakarta, Semarang, Surabaya, and Bandung and influenced many more cities until the first decade after independence. In post-independence era, cities of Indonesia transformed in parallel to the development of Indonesia as a new nation. In recent development, many Indonesian cities grow rapidly and change the landscape of Indonesian cities as a whole.

Streets in Indonesian cities play an important role as public space. This role has emerged since the era of traditional city when the street became part of the establishment of the city and urban public life. The role of streets as public space continued in the colonial era. However, street transformation especially related to the increasing number and use of motorized vehicles, has created the demise of role of street as public space. Street space has been dominated by its function, but it is solely function as a channel of movement. This condition happens in the traditional streets as well. The transformation of street use needs to be addressed through measuring the quality of traditional streets as reference for existing and new streets in the rapid development of Indonesian cities.

Chapter 2, 3, and 4, being part two of the study provide an elaborate literature review and theoretical framework as a fundamental basis to conduct the further stages of the study on revealing the quality of traditional streets of Indonesia.

Chapter 5 discusses the methods that were employed in the study. It followed by Chapter 6, 7, and 8 that present the findings of the study.

5

Research Methods

5.1 Introduction

This chapter examines the research methods applied in conducting the study. It has four main parts; the first one is regarding the chosen research method and considerations based on research questions and knowledge claims; the second part is about the detail and operation of the methods; the third part is about the implementation of the methods through the data gathering processes, and finally, the fourth part is related to the strengths and limitations of the methods implemented.

The following sections cover nine sections: research method paradigms, the linkage between the research questions and the chosen methods, qualitative inquiry as a research method, followed by the case study as a research strategy, the case study protocol, analysis procedures, the case study operation, strengths and limitations of the method, and followed by the conclusion of the chapter.

5.2 Research Method Paradigms

The design of the research begins with the selection of a research method. The three most discussed research paradigms in the literature are qualitative, quantitative, and the combination of the two known as a mixed-method approach (Creswell, 1994, Groat and Wang, 2002). Creswell (2003) defines a quantitative approach as the one in which the investigator primarily uses positivist claims for developing knowledge (i.e. cause and effect) by employing strategies of inquiry such as experiments and surveys and collecting data from predetermined instruments that yield statistical data. On a methodological level, the quantitative paradigm is seen as involving a deductive process of inquiry that seeks cause-and-effect explanations (Groat and Wang, 2002: 28).

Alternatively, a qualitative approach is the one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences, meanings socially and historically constructed with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e., political, issue-oriented, collaborative. or change oriented) or both (Creswell, 2003: 18). This paradigm necessitates an inductive process of inquiry that seeks clarification of multiple critical factors affecting the phenomenon (Groat and Wang, 2002: 28).

A mixed-methods approach consists of both qualitative and quantitative methods of inquiry to collect and analyse data (Creswell, 2003: 21). Each research method paradigm has its own characteristics in terms of data collection, analysis procedures and interpretations as formulated in Table 5.1 as follows:

Table 5.1
Research Methodology Framework

Research Methods		
Quantitative Methods	Mixed Methods	Qualitative Methods
• Pre-determined • Instrument based question • Performance data, attitude data, observational data and census data • Statistical analysis • Statistical interpretation	• Both pre-determined and emerging methods • Both open- and closed-ended questions • Multiple forms of data drawing on all possibilities • Statistical and text analysis • Across databases interpretation	• Emerging methods • Open-ended questions • Interview data, observation data, document data, and audio visual data • Text and image analysis • Themes, patterns interpretation

Source: Creswell (2003: 21)

5.3 Research Design: From Questions to Method

There are three main considerations in the decision of the appropriate research method to be applied: the research problem, the personal experiences of the researcher, and the audiences for whom the report will be written (Creswell, 2003: 21). As stated in Chapter 1, this study aims to reveal the characteristics of Indonesian traditional streets and to critically examine the quality criteria of streets that support the urban public life of traditional streets, including social interaction, economic activities, and cultural activities along its street spaces and pavements. The inquiry fits a qualitative research method, which claim of knowledge is based

on '*constructivist perspective*' rather than on '*positivistic perspective*' with multiple case studies involving a variety of techniques to explore the characteristics of streets and to examine quality criteria that support urban public life. This type of approach is needed because little research has been done and there are no robust findings from previous studies regarding the indicators of street quality in Indonesia (see: Research Gap in Chapter 1).

Architecture, being the researcher's background, has led to the study towards a social science approach, utilising experience with design and detailed visual data based on field observations, document data, and audio-visual data. Key areas explored include: 'how' people shape the environment of street, how and to 'what extent' the physical environment affects people (i.e., 'how' important is the designed environment and in which context; 'what' are the mechanisms, which link people and environments in this two-way interaction, and; 'what' are criteria which lead to supporting street quality) and these important questions are considered more appropriate to tackle using qualitative research methods. The major strengths of qualitative research follow its capacity to take in the rich qualities of real-life, circumstances and settings. It is also flexible in terms of design and procedures, allowing for adjustments to be made as the research proceeds. As such, it is especially appropriate for the understanding of the meanings and processes of people's activities and artefacts (Groat and Wang, 2002).

5.4 A Qualitative Inquiry

As a chosen research method, a qualitative inquiry employs a philosophical concept, strategies of inquiry, and method of data collection, analysis, and interpretation that rely on text and image data. Denzin and Lincoln (1998: 3) offer comprehensive definition of qualitative research:

> '*Qualitative research is a multi-method in focus, involving an interpretive, naturalistic approach to subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people brings to them. Qualitative research involves the studied use and collection of a variety of empirical materials.*'

Studying things in their natural settings means that the objects of inquiry are not removed from the venues that surround them in everyday life. The researchers not only *'ground their work in the empirical realities of their observations and interviews'*, but they also *'play an important role in interpreting and making sense of that data'* (Groat and Wang, 2002: 176).

Furthermore, qualitative research focuses on how the respondents make sense of their own circumstances by letting the various stakeholders speak for themselves and make sense of the process they have experienced. This leads the researcher *'to present a holistic portrayal of the setting or phenomenon under study as the respondents themselves understand it'* (Groat and Wang, 2002: 177). The characteristic of qualitative research can be referred to as *bricolage*. A *bricolage* is *'a pieced-together, close-knit set of practices that provide solutions to a problem in a concrete situation'* (Denzin and Lincoln, 1998: 3). Tactics such as *'field surveys, physical inventories, face-to-face interviews, photographs, sketches, etc. can be used simultaneously although not every one of the tactics are exclusively qualitative, but the overarching research questions and the dominant mode of the research design are qualitative'* (Groat and Wang, 2002: 177).

Creswell (2009) adds more characteristics of qualitative research developed after Bogdan and Biklen (1992); Eisner (1991); and Marshall and Rossman (2006), including:

- **Researcher as the key instrument** – qualitative researchers collect data themselves through examining documents, observing behaviour, or interviewing participants. They may use a protocol – an instrument for collecting data – but the researchers are the ones who actually gather the information. They do not tend to use or rely on questionnaires or instruments developed by other researchers.

- **Inductive data analysis** – qualitative researchers build their patterns, categories, and themes from the bottom up, by organising the data into increasingly more abstract units of information. This inductive process illustrates working back and forth between the themes and the database until the researchers have established a comprehensive set of themes. It may also involve collaborating with the participants interactively, so that participants

have a chance to shape the themes or abstractions that emerge from the process.

- **Participants' meaning** – in the entire qualitative research process, the researcher keeps a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research or the writers express in the literature.

In parallel to Creswell (2009), Groat and Wang (2002: 179) emphasised additional attributes of the qualitative research as follows:

Table 5.2
Summary of Additional Attributes of the Qualitative Research Design

Holistic	"The goal of qualitative research is to "gain a 'holistic' (systematic, encompassing, integrated) overview of the context under study." (Miles and Huberman, 1994, p.6)
Prolonged Contact	"Qualitative research is conducted through an intense and/or prolonged contact with a 'field' or life situation." Hence, the emphasis in many studies on "fieldwork." (Miles and Huberman, 1994, p.6)
Open Ended	Qualitative research tends to be more open-ended in both theoretical conception and research design than other research strategies (e.g. experimental or correlational) because it typically eschews the notion of a knowable, objective reality. (Creswell, 1994, p. 44)
Researcher as Measurement Device	Since there is relatively little use of standardised measures – such as survey questionnaires, the researcher is "essentially the main 'measurement device' in the study." (Miles and Huberman, 1994, p. 7)
Analysis Through Words	Since the emphasis on descriptive numerical measures and inferential statistics is typically eschewed, the principal mode of analysis is through words, whether represented in visual displays or through narrative devices. (Miles and Huberman, 1994, p. 7)
Personal Informal Writing Stance	In contrast to the typical journal format of experimental or correlational studies, the writing style of qualitative work is typically offered in a "personal informal writing stance that lessens the distance between the writer and the reader." (Creswell, 1994, p. 43)

Source: (Groat and Wang, 2002) developed after (Creswell, 1994, Miles and Huberman, 1994)

5.5 Research Strategy: Case Study Design

This research study used a case study strategy, which refers to an empirical inquiry that investigates a settings phenomenon within its real-life context,

especially when the boundaries between a phenomenon and its context are not clearly evident. A case study strategy implies much more than simply studying a phenomenon "in the field". Rather, it involves studying a case in relation to the complex dynamics with which it intersects. The case study inquiry copes with a technically distinctive situation in which there will be many more variables of interest than data points, as a result. It relies on multiple sources of evidence, with data needed to converge in a triangulating fashion, and as another result. It also benefits from the prior development of theoretical propositions to guide data collection and analysis (Yin, 2009).

According to the study of Groat and Wang (2002) that was developed after Yin (1994), there are five general characteristics of case study design, as follows:

1. A focus on either single or multiple cases in their real life contexts

The essence of the case study strategy is its focus on studying a setting or phenomenon embedded in its real-life context. As Yin (1994) describes it, the case study strategy implies much more than simply studying a phenomenon "in the field." Rather, it involves studying a case in relation to the complex dynamics with which it intersects.

2. The capacity to explain causal links

One of the most frequently discussed issues in research design is that of causality. Case study can identify causal links among an array of socio physical factors and events.

3. The role of theory development

A case study research design is guided by theoretical development. What means by theory does not always mean a "grand" theory; rather, the goal is to have "a sufficient blueprint for your study" that will suggest what data must be collected and what criteria should be used for analysing it.

4. Using multiple sources of evidence

One of the key features of the case study is its incorporation of multiple sources of evidence. Observations, data archives, oral history, inventories of artefacts, and interviews; are amongst the sources of evidence to be analysed.

5. Generalizability to theory

The case study's strength is its capacity to generalise to theory, much the way a single "experiment" can be generalized to theory, which can in turn be tested through other experiments.
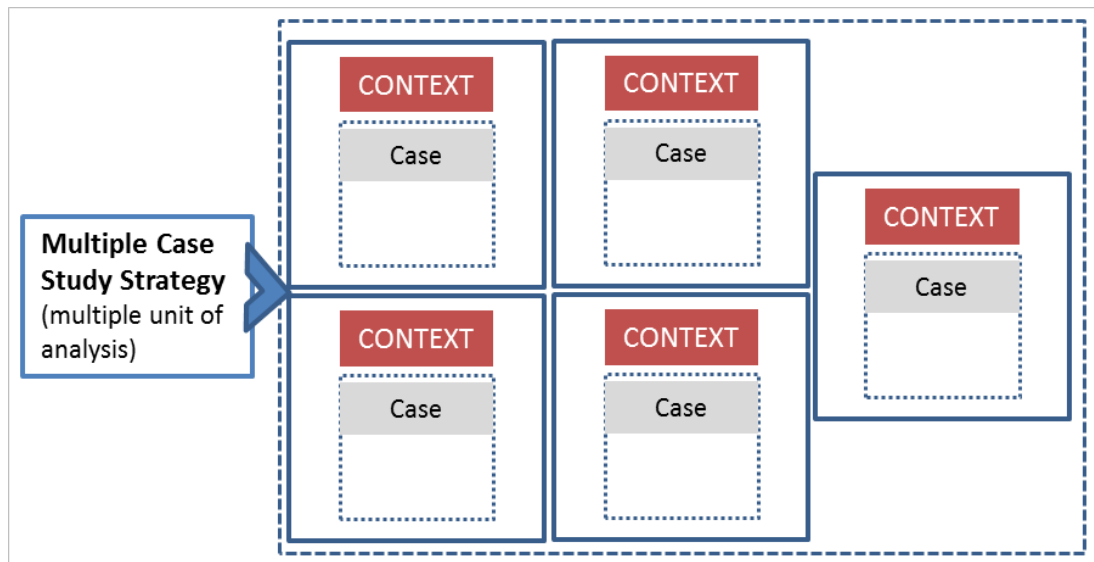
Figure 5.1 Multiple Case Study Strategy
Developed after Yin (2009)

A multiple case study strategy was used as a strategy to reveal the phenomena within real-life contexts. Multiple case studies have distinct advantages and disadvantages in comparison to single case study research. Indeed, the evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust (Herriot and Firestone, 1983).
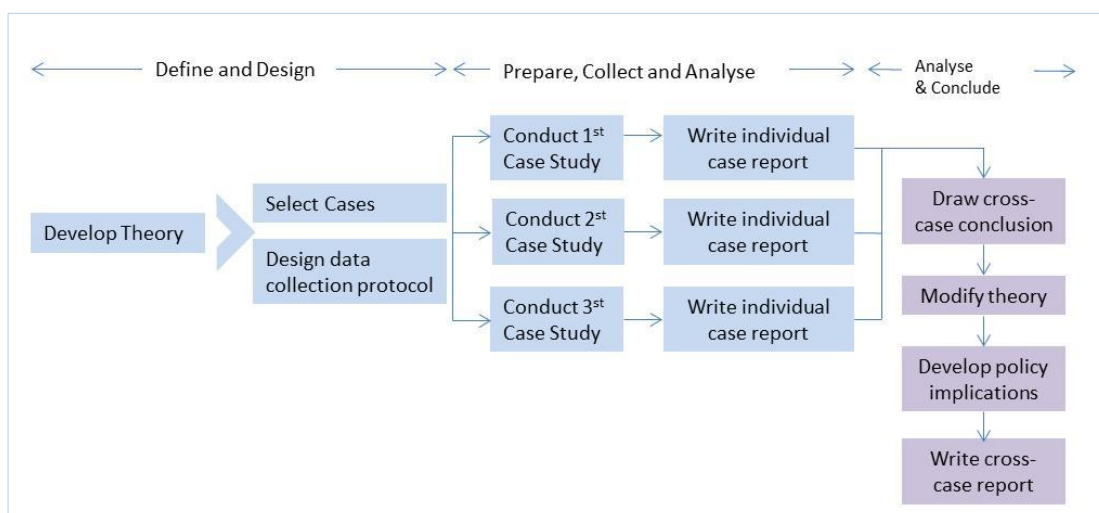
Figure 5.2 Case Study Strategies (Source: COSMOS Corporation in Yin (2009))

5.6 The Case Study Protocol

The protocol contains the instrument, procedures, and general rules to be followed during data collection. The protocol is a major way of increasing the

reliability of case study research and is intended to guide the investigator in carrying out the data collection from a single case or several cases in multiple case studies (Yin, 2009).

5.6.1 Primary Data

A. Visual Observation: Walk-by Observations, Pedestrian Counts, and Behavioural Mapping

In the research conducted for this PhD, the observations were used to record stationary and dynamic activities in the street, including social activities, performing arts, street parades, street vendors, food stalls, etc. through walk-by observations, pedestrian counts and behavioural mapping simultaneously.   The data were collected from early February to late May in 2014. The instruments for the observation were Walk-by Visual Observations, Pedestrian Count Recording Sheets and Behavioural Map sheets.

The observations were carried out between 7 am and 7 pm during weekdays and weekends, divided into several time periods to gain more robust outcomes. No observations were made when it was raining as the streets quickly became deserted at such times. A short video recording was used randomly in maximum 3-minute durations to also capture people's behaviour in the street, while photographs were also captured from different angles to gain optimum perspectives of the street scenes and activities.

Behavioural mappings were carried out during the weekdays and weekend with the time durations as shown in Table 5.3:

Table 5.3
Summary of Behavioural Mapping (Time and Duration)

Weekday	Weekend
7-8 am (morning)	7-8 am (morning)
12-1 pm (afternoon)	12-1 pm (afternoon)
6-7 pm (evening)	6-7 pm (evening)

B.   Physical Mapping

Physical mappings or street measurements were conducted to provide comparable information about the tangible or physical features of the streets including their plans, cross sections, dimensions, details and patterns. The physical characteristics of streets were identified and measured in order to understand which physical features of the street and surroundings affect and support the street activities, especially social interactions.

Street space plan was obtained from a block plan as the base of the street map. The measurement of the street was then conducted in order to get a more precise street plan than the base map in order to conduct the behavioural mapping. The measurement was not an easy task especially at the two case studies, Malioboro Street and Pecinan Street, since there was no provision of proper base maps from the local authority. Meanwhile, for Pasar Baru Street, this was relatively easy since the local authority provided a block plan file in .dwg format which was easy to adapt to the circumstances in the field study.

Cross sections were obtained from field measurements using measurement tools and then drawn in sketches before being presented in more detailed graphic drawings. Cross section drawings were repeated whenever the streetscape changed from the previous section. Alleys located along the street were also drawn to gain a more complete picture of the street sections.

C.   In-depth Interviews

According to Kvale (2007), interviews in the context of qualitative research are uniquely sensitive and powerful methods for capturing the experiences and lived meanings of the subjects' everyday world. They also allow subjects' to convey to others situations from their own perspective and in their own words.

The method of the interviews in this research was a semi-structured interviews, in which several basic questions were pre-prepared by the interviewer and further questions were formulated spontaneously during the interviews. The in-depth

interview sheet was organised into several sections (see in-depth interview sheet in Appendix 8):

- Personal profile of the respondent,

- The street quality: Physical Dimension,

- The street quality: Non-Physical Dimension,

- Street image and place attachment, and

- Planning and Management (special for interviewees from the Urban Planning Department).

The Interviewer Qualification: Selecting and Briefing the Interviewers

To enable a greater number of interviews to be conducted, there were at least three interviewers nominated to help the main researcher in the field work and prior selection of these was conducted in order to minimise any potential bias of the outcomes due to interview approach. The interviewers were selected from students at the Islamic University of Indonesia or Gadjah Mada University in Yogyakarta, Indonesia as the home base of the main researcher. All students were studying Architecture or Master of Architecture and all had taken at least a course on Urban Design and therefore had an interest and understanding on basic issues related to urban design and conservation especially in the context of Indonesian cities.

The selected interviewers were then briefed on the nature of the research, the aims and objectives, the purpose of the interviews, and their role in the overall research. The interviewers were familiarised with the semi-structured questions, to enable them to understand the context and then interview practices were held with the researcher before the actual case study interviews were conducted.

Sample Size

According to a literature search, there were several sources that provided guidelines for actual sample sizes in qualitative studies, including:

- Ethnography and ethno science: Morse (1994) suggests 30-50 interviews for both; Bernard (2000) states that most studies are based on samples between 30-60 interviews for ethno science;

- Grounded Theory: Creswell (1998) 20-30; Morse (1994) propose 30-50 interviews;

- Phenomenology: Creswell (1998) 5-25; Morse (1994) recommend at least 6 interviews;

- All qualitative research: Bertaux (1981) and Guest et al. (2006) suggest that 15 are the smallest acceptable samples

As this study applied a qualitative method, 10 to 15 interviews for each case study were conducted during the fieldwork with the following groups of people:

1. Users: Shop Owners/Residents of the buildings along the street;
2. Users: Visitors to the street;
3. Users: Street Vendors based along the pavements and alleys of the street; and
4. Local government: Officials within the Urban Planning Department.

The users of the street (Shop Owners/Residents, Visitors, and Street Vendors were interviewed in order to **obtain information on people's attitudes, feelings, and perceptions** about quality of the street, street image and place attachment. Interviews with local government (urban planning department) were conducted in order to gain **perceptions from a government's perspective** on the quality of the street (tangible and intangible), street image and place attachment, and also to understand more about the existing and planned planning and management of the street environment.

Interviewee Selection

In general the selection of the respondents was conducted through purposive random sampling with the purpose to enhance several aspects:

1. Ethnicity representation

   The three case studies are considered to be urban streets inhabited by various ethnic and community groups. The selection of the respondent in this research is pursued as far as possible to represent various users and ethnicity representation in order to gain response and aspirations of various ethnic groups as well as various users in the case study areas.

2. Gender representation

   The gender representation is also a concern before choosing the respondents so that representing genders will enrich the findings of the study.

5.6.2 Secondary Data

The secondary data for this research were obtained from literature (journals, textbooks, research papers, newspapers and magazines articles, etc.), local plans, archives, and other relevant plans and information.

5.6.3 Instruments of Data Sources

For the data collection, the following instruments were used:

1. Camera: To capture the subtleties that other methods might not record, to capture the physical settings and behaviours at certain times, the atmosphere, and people activities in the street spaces;

2. Video camera: To record activities and behaviour in the street at certain times to gain more real evidence of the usage of the street;

3. Notebook and sketchbook: To record and produce sketches on the spot during the observations, to gain a human perception of the built environment; and

4. Measurement tools: To measure the dimensions of street amenities, pavements, etc.

5.7 Analysis Procedures

This study was conducted using a rational-inductive method, which connects the theoretical, literature review and other secondary data with the primary data before analysing the findings. This study relied on the data from the fieldwork (observations and in-depth interviews) before generating the findings based on the emerging information (data-led analysis). Cross-case analyses (comparison and contrast) of the findings from each of the case study were then carried out to produce conclusions and recommendations of the research study.

5.8 Research Methodology Framework

Table 5.4
Research Methodology and Strategy

Research Method	Qualitative Research - **Emphasize on natural settings** - **A focus on interpretation and meaning** - **A focus on how the respondents make sense of their own circumstances** - **The use of multiple tactics** **(Groat and Wang, 2002 and Denzin and Lincoln, 1998)**
	• emerging methods • open-ended questions • interview data, observation data, document data, and audio visual data • text and image analysis • themes, patterns interpretation
Research Strategy	Multiple Case Study
Analysis Method	Inductive Data Analysis
	Text and Image Analysis

Source: Developed after (Creswell, 2009, Yin, 2009, Groat and Wang, 2002, Denzin and Lincoln, 1998)

Research Design: from Questions to Tools

Table 5.5
Research Design: from Questions to Tools

Objective	Data Collection	Analysis
To demonstrate the distinctive characteristics of Indonesian traditional streets that play significant roles in shaping the built environment through critically examines the street quality indicators as developed in the urban design discourse;	Walk-by and field observations; Physical Mapping; Behavioural mapping; in-depth interviews	Physical mapping; Pedestrian Counts; Walk-by Observations, Behavioural Mapping, In-depth Interview

To establish the role of the distinct characteristics of the traditional streets that support the urban public life of traditional streets, including social interaction, economic activities, and cultural activities along the street spaces and pavement;	Walk-by and field observations; Behavioural mapping; In-depth interviews	Physical mapping; Pedestrian Counts; Walk-by Observations, Behavioural Mapping, In-depth Interviews
To recognise the role of traditional streets in Indonesia as one of the primary ingredients of the city to the city as a whole that can be part of the foundation to formulate better policy and urban design intervention for the new design and existing streets.	Walk-by and field observation; Physical Mapping; Behavioural mapping; In-depth interviews	Physical mapping; Pedestrian Count; Walk-by Observation, Behavioural Mapping, In-depth Interviews

Source: Author, 2014
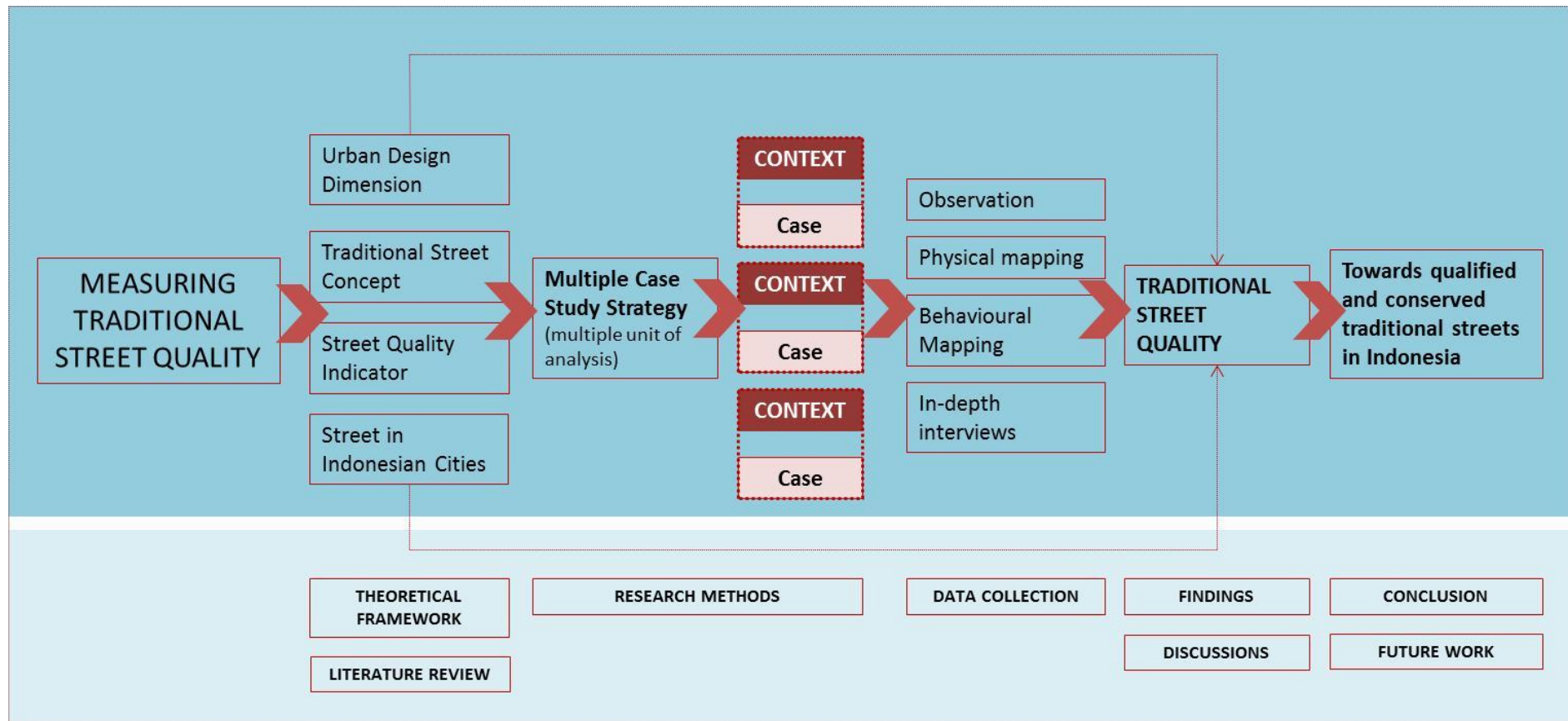
Figure 5.3 Research Method and Strategy Framework
Developed after (Creswell, 2009, Yin, 2009)

5.9 The Case Study Operation

5.9.1 Case Study Selection

The selection of case study for this research was conducted through several phases, <u>first</u> is: reviewing literatures of urban history of Indonesian cities, including *Town Formation in 19th-Century Java (Gill, 1998), Architectuur & Stedebouw in Indonesia* (Akihary, 1990), *The Architecture of Modern Indonesian Cities* (Siregar, 1998), and *The Indonesian City* (Nas, 1986). After reviewing these texts it was identified that several cities in Indonesia, especially in Java Island that played significant roles in Indonesian urban history and possesses traditional streets that still existed in the present day. These cities include Jakarta, Bandung, Semarang, Yogyakarta, Magelang, and Surabaya. Java Island as one of the most developed and populated island in Indonesia is chosen in order to assure that they possess similar context, as Indonesia has more than 17.000 islands with their own identity and uniqueness. Typically, cities in Java have transformed during at least three eras, namely the Imperial City era, the Colonial City era, and the era of Independence. After reviewing the mentioned literatures then continue by conducting screening to five Indonesian cities in Java through google-maps, google-images, periodicals, online media, and other websites. The result showed that there were four traditional streets potentials as case study for this research. These are 1) Pasar Baru Street, Jakarta, 2) Braga Street, Bandung, 3) Malioboro Street, Yogyakarta, and 4) Pecinan Street, Magelang.
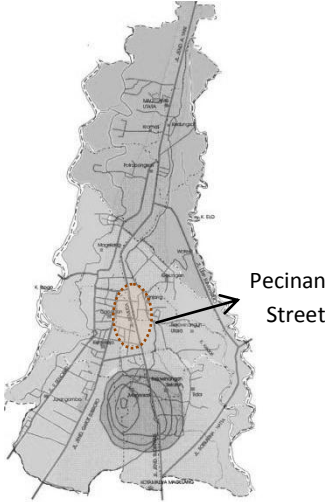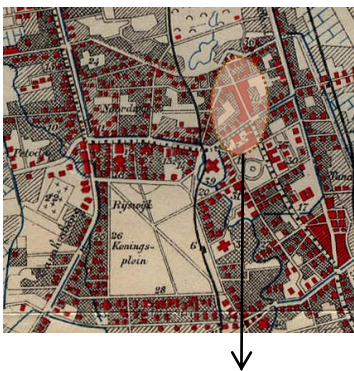
<u>Second</u>, formulates criteria of the traditional streets that possess similar context within comparable content. According to Yin (2009), a set of criteria is the subject that enables the justification of exploration. A case study criterion will help any researcher to identify relevant sites for information to be collected without being tempted to cover 'everything' about the subject, which is impossible to do. The more case studies built within the scope of a specific criterion to test, the more it will stay focused and within its test limit. This also helps to narrow down the body of knowledge to be discovered. The criteria were formulated after reviewing several publications related to traditional streets, including *Convention Concerning the*

Protection of the World Cultural and Natural Heritage (UNESCO, 1972), *Environmental Quality, Metropolitan Areas and Traditional Settlements* (Rapoport, 1983), *Charter for the Conservation of Historic Towns and Urban Areas (The Washington Charter)* (ICOMOS, 1987), New City Spaces (Gehl and Gemzoe, 2000), *Convention for the Safeguarding of the Intangible Cultural Heritage* (UNESCO, 2003), *The Street and Its Influence on the Sense of Place of Malaysian Cities* (Shamsuddin and Sulaiman, 2010), *An Insight into the Asian Streets: Streets in Sri Lanka and Their Transformations* (Dayaratne, 2010), *The Contribution of Landscape Features on Traditional Streets in Malaysia* (Ja'afar et al., 2012), *The Street: A Quintessential Social Public Space* (Mehta, 2013), and *A Comprehensive and Compact Instruments for Saving the Traditional Streets in Indonesia* (Adishakti, 2013), as follows:

1. **Historical Significance**: For each case study, the selected street must be built over 100 years ago, in order to make sure that it has been 'handed over' to more than one generation. To meet the criteria as a traditional street, it has to be:

   'Amongst the earliest streets in the city, situated in the city centre, all the public activities developed according to the time, handed down from generations to generations, types of merchandise usually well known by local people and also have their own memory and historical significance (Ja'afar and Usman, 2009: 670).';

2. **Importance of Street**: The selected street has to have strong correlation with its city's formation and play a role as the main street/important street;

3. **Multifunctional Street:** The selected street has to be mixed use with mainly retail uses at ground floor level and flats/residential above; and

4. **Similarities and variations:** The physical and non-physical characteristics and uses in the case study street have to provide an adequate sample for the study in order to gain more robust and holistic findings.

Third, screening the four case study potentials based on the above criteria with the result as follows:

Table 5.6
Case Study Selection

	Malioboro Street, Yogyakarta	**Pecinan Street, Magelang**	**Pasar Baru Street, Jakarta**	**Braga Street, Bandung**
Year of Construction	1755	1818	1820	1882
Historical Significance	Malioboro Street Imperial Era Colonial Era (European-Javanese-Chinese influenced) Post-Independence Era	Pecinan Street Imperial Era Colonial Era (Chinese-influenced) Post-Independence Era	Pasar Baru Street Colonial (Chinese-Indian-European influenced) Post-Independence Era	Braga Street Colonial Era (European influenced) Post-Independence Era
Importance of the street	Main street of Yogyakarta One of the main elements of the city formation	Main street of Magelang One of the main elements of the city formation	Main street of New-Batavia (Weltevreden) One of the main elements of the city formation	Secondary street of Bandung Developed at the later stage of city development
Multifunctional Uses	Residential, commercial, public facilities	Residential, commercial, religious building	Commercial, residential, entertainment, religious	Entertainment and commercial
Similarities and Variations	Rich of street culture, architectural diversity (Chinese, Javanese, Indies)	Rich of street culture, architectural diversity (Chinese, Colonial)	Rich of street culture, architectural diversity (Chinese, European, Indian)	Architectural homogeny (colonial)

Source: Author, 2014

Based on the above assessment as presented in Table 5.6 shows that Braga Street is not meet the first criterion on historical significance, second criterion on the importance of the street, and fourth criterion on similarities and variations due to Braga Street is not amongst the earliest street in Bandung which experiencing three era, i.e., imperial era, colonial, and post-independence era. Braga Street is also plays as Secondary Street in Bandung apart from Asia Afrika as the main street. In addition, Braga Street is relatively having homogeneity in architectural style as most of the buildings are representing colonial (European) style. Based on this assessment it can be concluded that Braga Street cannot be part of the case study of this research. Instead, Pasar Baru Street, Pecinan Street, and Malioboro Street meet the criteria as formulated in this section.

5.9.2 Data Collection

The process of data gathering commenced in Indonesia during the first week of February 2014. It then took a week to select and brief the research assistants who would assist in the fieldwork. Three research assistants were selected following correspondence with colleagues and former students of the Department of Architecture Islamic University of Indonesia (where the researcher is a lecturer) through e-mails. The students hold an Architecture degree and have an interest and understanding of the basic issues related to urban design, especially in the context of Indonesian cities. They were then interviewed and those selected were briefed on the nature of the research, the aims and objectives of the study and familiarised with the procedures to be undertaken during the observations and in-depth interviews of semi-structured questions. After a week of briefing, a pilot study was then undertaken to align their ability on conducting observations and in-depth interviews.

Pilot Study

The pilot study was undertaken at Malioboro Street during the second week of February 2014 to test the data gathering instruments, including pedestrian counts,

walk-by observations and behavioural mapping. It was found that the research assistants could follow the observation procedures according to the required quality, especially when doing the behavioural mapping. In addition, there were no major obstacles for them to undertake the walk-by observations and pedestrian counts as they were quite simple to do.

The pilot study was also performed in the in-depth interviews to test the effectiveness of the method and to demonstrate the research assistants' ability to conduct such activity. Two pilot studies on in-depth interview techniques showed that it was quite hard to conduct the in-depth interviews as suggested, since they had never done those activities before. It was then decided that only the main researcher would conduct the interviews to gain the optimum results.

5.9.3   Case Study: Malioboro Street

Observations: Walk-by Observations, Pedestrian Counts, and Behavioural Mapping

The Malioboro street observations were conducted between February and April 2014 for the visual observations, interviews, and secondary data compilation, such as historical maps, books, and research reports, local regulations and government planning reports. The first phase involved conducting physical mapping, walk-by visual observations, pedestrian counts, and behavioural mapping along the street.

Significantly, one week after the fieldwork started at the Malioboro Street, at dawn on 14th February 2014, there was a huge volcano eruption of Mount Kelud in East Java. Mount Kelud is situated hundreds of kilometres from Yogyakarta, however, the impact was massive and the city was covered by a large volume of volcano ash causing all the activities of people of Yogyakarta and many other cities in Java, including economic, education, and even transportation activities, especially air transportation to be paralysed for more than two weeks.

Figure 5.4 Malioboro Street after Mount Kelud eruption last February, 2014
Source: Observations, 2014

As a result, Malioboro Street as the economic centre of Yogyakarta became a 'ghost street', almost without occupants. The residents of Malioboro Street stayed at home and all the shops and market were closed. The situation made activities such as walking or, socialising on the street impossible. The authority also forbade the general public to have outdoor activities since the volcano ash was very dangerous for health and the eruption continued with no clear indication as to when it would stop. After several days, the eruptions weakened and people began to clean the streets and buildings together with the local authority. It took at least three weeks, however, to recover from the aftermath of this natural disaster.

In parallel to Malioboro Street, Pecinan Street also experienced the same condition, but was only slightly better due to its geographical position, yet it still took two weeks for Pecinan Street to gradually return to normal conditions. Apart from waiting for Malioboro Street to recover, the researcher shifted the observations to Pecinan Street. This experience showed that having a contingency plan is very important in such fieldwork especially when dealing with places prone to natural disasters.

The observations at Malioboro Street were re-continued in the second week of March 2014. However, after observing for several days, it was noticed that the street activities in Malioboro Street were still far from normal. Then, it was decided to postpone all field observations and move all the field observations to Pecinan Street in Magelang.

In April 2014, behavioural mapping was started again during the weekdays and weekend with the time durations as shown in Table 5.3. Technically, the behavioural mapping was conducted by dividing the street space into four segments (according to the number of researchers in the 'team'), with one for each observer. Mapping was conducted simultaneously in each segment within a maximum of thirty minutes duration. After completing the mapping, the team then gathered, discussed and compared the mapping findings and also prepared to conduct mapping in the next time duration. After the entire mapping was done, the researcher gathered the mapping results to be analysed and presented in a proper graphic format. The similar techniques was also conducted in two other case studies of the research.

The Interviews

Second phase of data gathering was the in-depth interviews that were conducted between March and May 2014. In total, there were thirteen participants involved as summarised in Table 5.6.

Table 5.7
Summary of In-depth Interview Participants in Malioboro Street

Case	Occupation/Profession	No of Participants	Codes
Malioboro Street	Shop Owner/Retail Manager/Resident	1	RES
	Visitor	6	VIS
	Local Government/Authority related to Urban Planning	4	GOV
	Street Vendor	2	SV
	Total	**13**	

Before the in-depth interviews were conducted, some key respondents such as local government officers were contacted via office e-mail and telephone or approached through personal connections. Visitors, shop owners, and street vendors in most cases were directly contacted at the study area. After setting a particular time and date, the in-depth interviews were then undertaken mostly on-site in the Malioboro Street area.

Overall, there were thirteen interviews: two for shop owners/retail managers, six for visitors, four for local government officers, and one for street vendor. At first, there were two street vendor interviews, but unfortunately one of the interviews was unsuccessfully recorded, due to equipment failure. The shortest interview was around thirty minutes and the longest one was five hours (two interviews). All of the interviews were recorded with the interviewees' permission and all interviewees signed a consent form.

5.9.4 Case Study: Pecinan Street

Observations: Walk-by Observation, Pedestrian Count, and Behavioural Mapping

The Pecinan Street observations were conducted between last week of February 2014 and April 2014. Previously it was planned to be conduct these between March and May 2014. However, after the Mount Kelud eruption event at the mid of February, this case study was brought forwards.

The observations were conducted in accordance with those in the other case studies. Therefore, these again commenced with the physical mapping, walk-by observations, pedestrian counts and behavioural mapping. There was a minor incident that occurred during the walk-by observations, that is, when the researcher was taking photographs of the façade of a building on the street. One of the security guards of a jewellery shop approached the researcher and started to ask questions regarding the photographs being taken and the purpose. After an explanation and after showing the research approval from the local government the guard began to understand and was even willing to provide further information regarding the street life. The security guard's suspicions were understandable since he seldom or even had never seen such research activities along the street before. This kind of incident did not occur in the two other case studies.

The Interviews

The distance between Yogyakarta and Magelang is 40 kilometres, which takes about one hour by car or bus. This gave the researcher the flexibility to perform interviews in different periods of time. Magelang as the smallest town compared to the two other case studies provided the researcher with a more comfortable circumstance in terms of getting positive responses for interviews. Indeed, the local community responded warmly to participate as interviewees, including the street vendors, whereas in the other two case studies they were more difficult to approach. However, this warm welcome did not apply to the Chinese community living along the street. The researcher approached potential interviewees for the research the participation of the Chinese as the dominant shop owners was highly expected. During interviews with two respondents (a local government staff member and a visitor), it was noted that the Chinese in the area tended to be more exclusive and less involved in public participation, especially in urban development process. The reason they gave to the researcher was that they were too busy to get involved with the study, but from the two respondents above, it was noted that it might link to the trauma from the past, especially during the New Order regime (1968-1998) when the government perceived the Chinese as foreign minority and wanted them to assimilate as native Indonesians, through diminishing their culture and disregarding Chinese identity and its existence in the Indonesian history (Pratiwo, 1990). Indeed, they were also banned from performing Chinese traditional performances in public and even prohibited from showing Chinese architecture and decoration in their buildings. Since this era, the Chinese was considered an exclusive community who mainly concentrated on their businesses, with little participation in public activities, especially politics and the government sectors. Fortunately, by the end of the fieldwork, there was one shop owner who was willing to be interviewed.

Table 5.8

Summary of In-depth Interview Participants in Pecinan Street

Case	Occupation/Profession	No of Participants	Codes
Pecinan Street	Shop Owner/Retail Manager/Resident	1	RES
	Visitor	8	VIS
	Local Government/Authority related to Urban Planning	3	GOV
	Street Vendor	2	SV
	Total	**14**	

Overall, fourteen interviews were achieved, one shop owner, eight visitors, three local authority officers, and two street vendors on Pecinan Street. Most of the interviews were in their homes or offices, with the remainder conducted on the street. The shortest interview was again around 30 minutes and the longest one was 2 hours. Similar to the interviews in the two other cases, all were recorded under interviewees' permission and all interviewees signed the consent form.

5.9.5 Case Study: Pasar Baru Street

Observations: Walk-by Observations, Pedestrian Counts, and Behavioural Mapping

The Pasar Baru Street observations were conducted between April 2014 and May 2014. As the most unfamiliar case to the researcher, compared to the other two cases, the researcher conducted a preliminary observation to be more familiar with the existing conditions before conducting the main observations. The distance between Yogyakarta and Jakarta is 550 kilometres, which require one hour flight to reach. As it is away from the researcher's home-base, it required a larger budget for transportation and accommodation for the research team. The preliminary observation was very useful to plan the main observations, since it had to be properly scheduled to fulfil the observations within reasonable time, due to time limitations and budget. At least one whole week was spent in Pasar Baru Street area to really understand the nature of the case study within the 24/7 duration. Apart from conducting the observations, during this duration the researcher and team also had a chance to spend time in the restaurants, food-stalls, visit the temple, church and mosque, and also mingle with other street visitors. The other

visit was by the main researcher to conduct the interviews and to add to the data collection mainly through photographs and video recording between April and May 2014.

Technically, behavioural mapping was conducted similar to two other cases, without any variation. After the experience of conducting the observations in the two other case studies, it was done smoothly without any major obstacles.

The Interviews

Table 5.9

Summary of In-depth Interview Participants in Pasar Baru

Case	Occupation/Profession	No of Participants	Codes
Pasar Baru Street	Shop Owner/Retail Manager/Resident	4	RES
	Visitor	4	VIS
	Local Government/Authority related to Urban Planning	4	GOV
	Street Vendor	3	SV
	Total	**15**	

As the most unfamiliar case compared to two other case studies, the in-depth interviews in Pasar Baru Street could be regarded succesful. Indeed, people along the street and surroundings were willing to participate the research interviews, including the Chinese community. Moreover, the public of Pasar Baru Street seemed to be more egalitarian and more open to talk about their public life in the street. This might link to the ethnic diversity living in the area and also the visitors of Pasar Baru coming from all over the world. Indeed, since the nineteenth century as the first place in Batavia to be visited by strangers, the Chinese, European (Dutch), Indian merchants, and Eurasian population have lived side by side (Ponder, 1935). Generally, the public of Pasar Baru have been accustomed to accept outsiders and coexist with the multi-national and multi-ethnic background of people.

Overall, there were four shop owners/retail managers, four visitors, four local government officers, and three street vendors interviewed. Most of the interviews were conducted along the street and surroundings, except for the local government officials that were conducted in their offices.

5.10   The Analysis Operation

Yin (2009) suggested, the analysis process is a holistic analysis of the cases rather than the embedded analysis for a specific part and aspect. The principal mode of analysis is through words, whether represented in visual displays or through narrative devices (Miles and Huberman, 1994).

Analytical operation as introduced in the earlier sub-section of this chapter was conducted relied on the data from the fieldwork (visual observations and in-depth interviews) before generating the findings based on the emerging information (data-led analysis). The emerging information from the data then connected with thirteen street quality indicators found in the literature review.

The visual observations of this study has resulted various output such as photograph, street map, street section, measured drawings, sketches, and so on. These data has helped this research to demonstrate the quality of the three case studies from an urban design dimension as mentioned in the literature review (see Chapter 2), as follows:

Table 5.10
Data Collection Technique and Its Output on Street Dimensions

Dimension	Element	Output	Data Collection Technique
Morphological	Land Use	Street Map	Physical Mapping
	Building Structure	Measured drawings, sketches	Physical Mapping, Visual Observation
	Plot Pattern and Street Pattern	Street Map	Physical Mapping
	Street Scale and Proportion	Street Sections	Physical Mapping, Visual Observation
	Floorscape	Street Sections	Physical Mapping, Visual Observation
Perceptual	Place Image and Environmental Meaning	Street Map, Photograph, Text	Visual Observation, In-depth interviews
	Sense of Place	Photograph, Text	Visual Observation, In-depth interviews
Socio-cultural	Street as Public Space	Plan, Photograph, Text	Pedestrian Count, Visual Observation, Behavioural Mapping, In-depth interviews
	Street Public Life and Street Culture	Plan, Photograph, Text	Pedestrian Count, Visual Observation, Behavioural Mapping, In-depth interviews

Visual	Aesthetic Quality of Urban Architecture	3D Drawing, Sketches	Physical Mapping, Visual Observation
	Façade Design	Serial view, façade drawing	Physical Mapping, Visual Observation
Functional	Pedestrian Activity and Movement	Plan	Physical Mapping, Visual Observation
	Activities in the Street as Urban Place	Plan	Physical Mapping, Visual Observation
Temporal	Street Transformation: Continuity and Change	Text, Photograph	Document Review, In-depth interviews
	Time Management of Urban Street	Text, Photograph	Document Review, In-depth interviews

Source: Developed after Street from an Urban Design Dimension in Chapter 2

The analysis of in-depth interviews requires a long, interactive process of identifying key themes, developing an elaborate coding scheme, and eventually synthesizing the results into a textual narrative for the article (Groat and Wang, 2002). The procedures of qualitative data analysis have been developed by Fanani (2010), as illustrated in Figure 5.5.
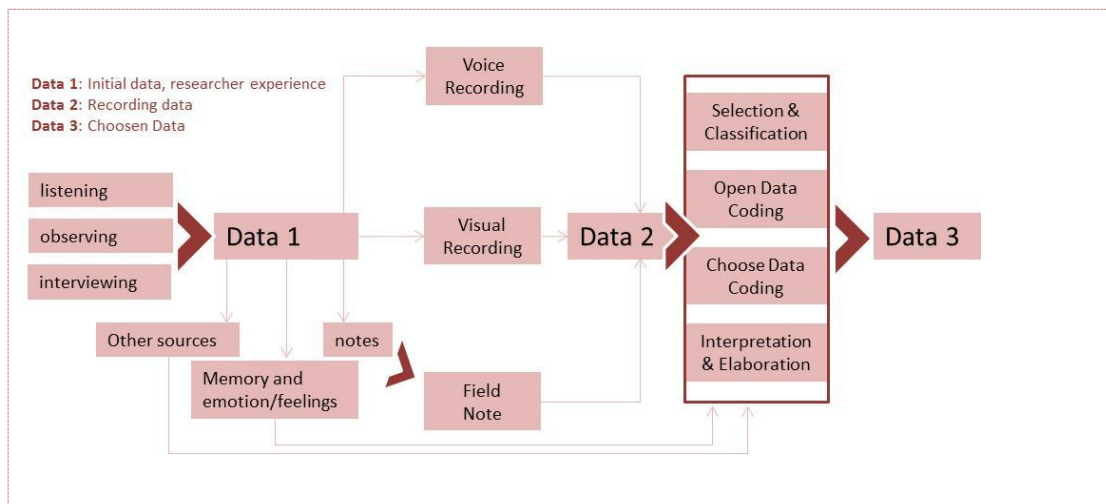
Figure 5.5 Qualitative Data Analysis
Developed after Fanani (2010)

The analysis of the in-depth interview in this study has followed the concept developed by Kvale (2007) on the interview analysis namely: coding and categorizing of texts, condensation, and interpretation of meaning. Coding involves attaching one or more keywords to a text segment in order to permit later identification of a statement. Whereas categorization entails a more systematic conceptualization of a statement, opening for quantification; the two terms are,

however, often used interchangeably. It will followed by condensation refers to an abridgment of the meanings expressed by the interviewees into shorter formulations. After condensing the expression by the interviewees then the interpretation of meaning is suggested. It often leads to a text expansion, with the outcome formulated in far more words than the original statement interpreted. These three modes of analysis focus on meaning in order to gain a more comprehensive and readable findings and results of this study. Figure 5.6 formulates the analysis procedure operated in this study, as follows:
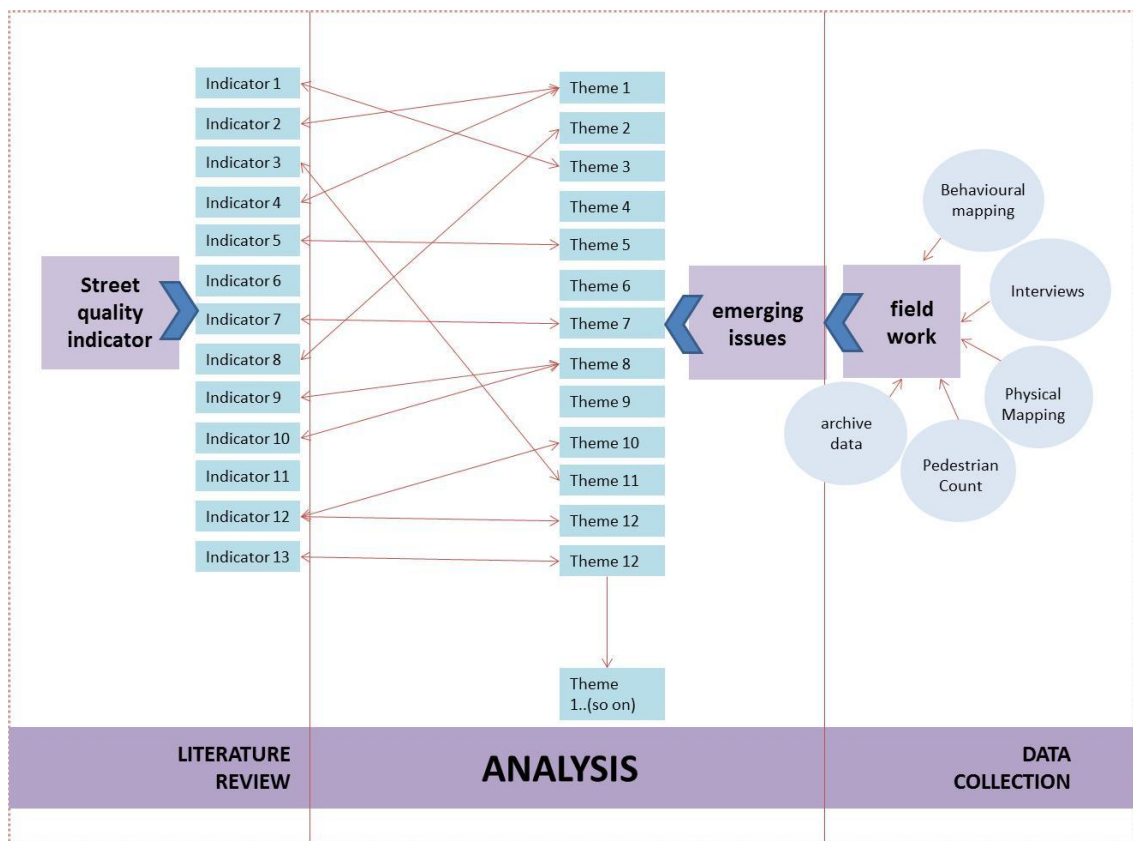
Figure 5.6 Data Analysis Process
Source: Author, 2015

The emerging issues from the field work is categorised into 'themes' which then connected to the street quality indicators that appeared in the literature reviews (Chapter 2 and 3). The themes in each of case study may vary depends on the emerging data from the field work. The finding on each theme is discussed in the finding Chapters (Chapter 6, 7, and 8) under sub-section of each street indicator and the in the comparison and contrast chapter (Chapter 9). Table 5.10 presents

the analysed themes that have been connected to the street quality indicators, as follows:

Table 5.11
Emerging Themes

	Theme	Quality Indicator
1.	Legibility journey	Legibility
2.	Transportation system in the street and surroundings	Walkability, Accessibility and Connectivity
3.	The connection of the street and surroundings/the whole city	
4.	Walkability of the street	
5.	Diversity of land use	Diversity
6.	Diversity of ethnic group/population (Pasar Baru Street)	
7.	Diversity of home industry (Pecinan Street)	
8.	Diversity of art and craft industry (Malioboro Street)	
9.	Ethnic diversity and special businesses (Malioboro Street)	
10.	Sitting space and street amenities	Liveability
11.	Canopy as an arcade (Pasar Baru Street)	
12.	Quality of natural features/Green space	
13.	Barrier free environment (Malioboro Street)	
14.	Pedestrian activity (weekday and weekend)	Vitality
15.	Street vendor activity	
16.	Uses and behaviour	
17.	The street corner society (Malioboro Street)	
18.	The twenty-four hour street: the street ambience after hour (Malioboro Street)	
19.	Meeting points (Pasar Baru Street)	
20.	Adaptability and the changes of physical and retail use	Adaptability
21.	Chain-retails versus independent shops (Pasar Baru Street)	
22.	Political adaptability and endurance of businesses	
23.	Urban gentrification: adaptability and the changes of use (Malioboro Street)	
24.	Shops versus street vendor and endurance of business (Malioboro Street)	
25.	Resilience of traditional street (Malioboro Street)	
26.	Cultural activity and facilities	Creativity
27.	Street festival and creativity	
28.	Cuisine and ethnic diaspora (Pasar Baru Street)	
29.	Special skills and creativity (Pasar Baru Street)	
30.	The richness of street culture: hybrid vs local cuisine	
31.	Malioboro Street as home for batik as UNESCO's intangible heritage	
32.	Street scale and proportion	Form and visual quality
33.	Building height and composition	
34.	Architectural diversity	
35.	Floorscape	
36.	Shop signs and cultural identity (Pasar Baru Street)	
37.	Transparency and active frontage	Transparency and active frontage
38.	Crime and street pattern (Pasar Baru Street)	Safety
39.	Street thug phenomenon (Pasar Baru Street)	
40.	Fire and heritage buildings	
41.	Pavement material and safety (Pecinan Street)	
42.	On-street parking: environmental comfort and pedestrian safety	

	(Malioboro Street)	
43.	The undesirables (Malioboro Street)	
44.	Street Image	Imageability
45.	Physical attachment	Place Attachment
46.	Functional attachment	
47.	Social attachment	
48.	Emotional attachment	
49.	Physical authenticity	Authenticity
50.	Socio-cultural authenticity	

Source: Author (2015)

5.11   Strength and Limitation of the Method

The major strengths of qualitative research are from its capacity to take in the rich qualities of real life circumstances, and its flexibility of design and procedures allowing adjustment in process (Groat and Wang, 2002: 199). Several different techniques were therefore used in this study to gain a comprehensive understanding of each case study. Every case study was treated evenly, although some minor changes were made when conducting the field observations due to natural disaster and time limitations as reported in the previous section. There were, however, not many differences in terms of the time period spent on each case. However, the Malioboro case took a longer period of time due to the natural disaster recovery and the complexity of activities along the street.

Since all case studies were located in the researcher's home country, it was an advantage to be able to use native languages, i.e. Indonesian and Javanese. It was also an advantage that the researcher could approach informally the offcial/government sources, especially in the Malioboro Street and Pecinan case studies. However, the secondary sources, such as base maps, historical maps, planning reports and statistical records were not easy to obtain due to bad archiving and overlapping authority of institutions. Informal approaches to get the secondary data from formal institutions demonstrated to be more effective rather than formal approaches such as sending a formal letter or email.

Most of the in-depth interviews were conducted in the interviewees' native language, either Indonesian or Javanese. The researcher sometimes used both languages to assist the flow of the interview. Although the researcher had prepared semi-structured questions, the interviews were more easily conducted in a more

informal way in order to maintain a fluid dialogue and it was recognised that the interviewees became more relaxed when answering the questions. Some interviews were held over more than three hours especially when the interviewees were telling their personal stories related to the street. In some cases, the interviewees were willing to have further contact/interviews when needed since they found that the study was very interesting for them.

The in-depth interviews also offered first hand information from the interviewees as street users and authorities. They told their perceptions, feelings, and experiences towards the street and its surroundings. Some interviewees were born in the area, and had seen the 'ups and downs' of the street throughout their life. This helped the researcher to have a better picture of the transformations of the street through interviewees' perspectives and personal meanings of the street. The method allowed the researcher to sensitively portray these meanings and reveal how people interact with the street.

However, undertaking face-to-face interviews took a long time to prepare and conduct. Some potential interviewees approached in the street were busy, especially shop owners and street vendors. They preferred a less time-consuming strategy, such as a survey or questionnaire. Another issue was keeping the interviewees focused on the topic. Sometimes the interviewees wanted to give information, which seemed to be far from the main topic/questions. Another major challenge concerned the vast amount of unstructured data that need to be coded and analysed; it was a task that was enormously time consuming (Groat and Wang, 2002). Indeed, it took almost four months to transcribe the interviews recorded for the three case studies.

5.12   Chapter Conclusion

This chapter examined the most appropriate research methods to answer the research questions on revealing the distinctive characteristics of traditional streets of Indonesia. A qualitative inquiry was chosen as the main research method with multiple case studies and the research strategy based on research question, researchers' knowledge, and expertise. The techniques to gain the data were field

observations (walk-by observations, pedestrian counts, and behavioural mapping), and in-depth interviews. The analysis procedures were a rationale-inductive method and relied on the data from the fieldwork first before generating the findings based on the emerging information (data-led analysis).

The data gathering was conducted in the first half of 2014 (February to May) for the three selected case studies. The data collected from the field work were expected to provide enough information to answer the research questions. The next chapters (Chapter 6, 7 and 8) will therefore proceed to present the results and discussions for each case study before a cross-analysis of the three streets in Chapter 9.

Pasar Baru Street

'Pasar Baru is a shopping arcade that still retains some of its colonial legacy in a vastly changing city space of Jakarta' (Kurnia, 2011: 552).

6.1 Introduction

This chapter presents findings of a case study undertaken in Pasar Baru Street. Situated in Central Jakarta, the Indonesian capital city, Pasar Baru is known as one of the oldest shopping streets of the city. This chapter presents the evolution of Pasar Baru Street in the context of Jakarta, Pasar Baru Street's history, Pasar Baru Street from an urban design dimension, and measuring Pasar Baru Street's quality. The measurement of Pasar Baru Street's quality is highlighted and commented in terms of themes of street quality indicators that have emerged from the analysis.

Administratively, the Pasar Baru District has a total area of around 1.89 km^2 and borders Lautze Raya Street at the north, at the south is the Lio River, at the east is the Ciliwung River, and at the west is Mangga Besar district. According to the Central Jakarta Bureau of Statistics (2013) the population density in this district is 8,212 people/km^2, with 7,783 male and 7,738 female residents. Amongst them, in 2002 there were around 2,000 Indian families registered as Jakarta residents, with most of them living in the centre of the city, particularly in the Pasar Baru and Pintu Air areas (Febrina, 2006).
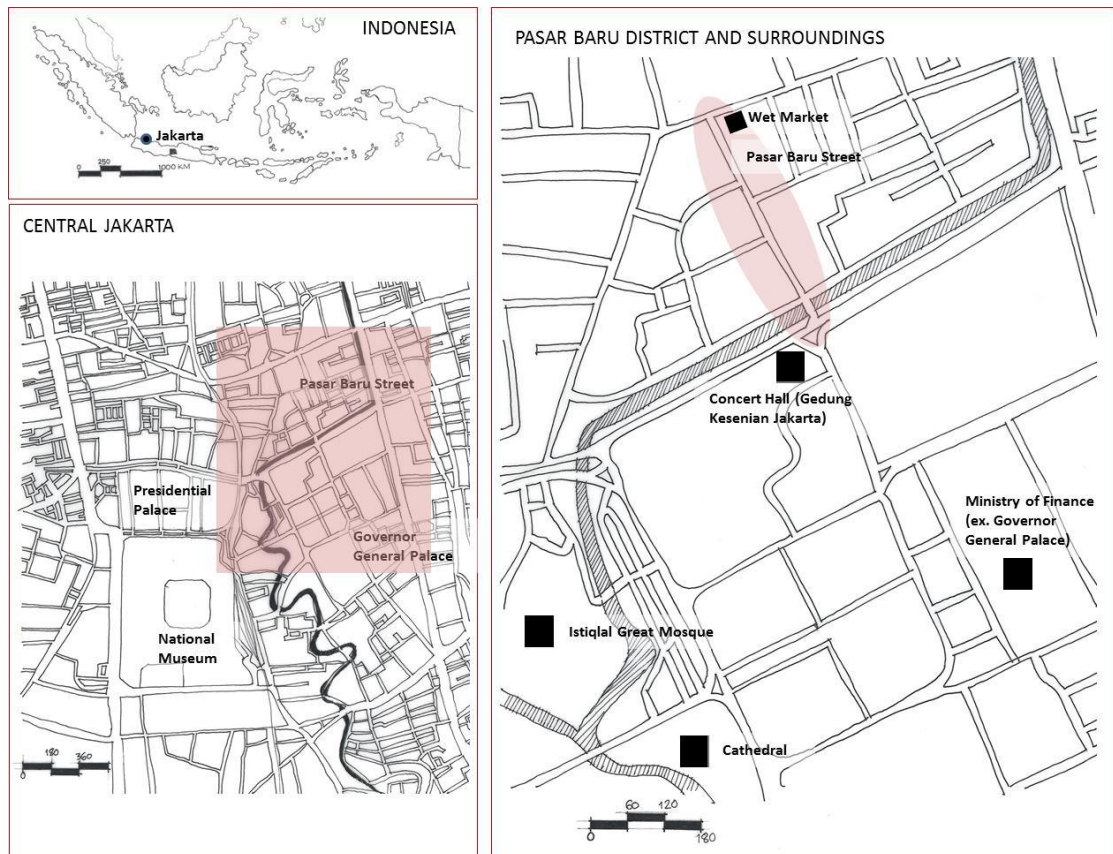
Figure 6.1 The Study Area of Pasar Baru Street (Map: Author, 2014)

6.2 Jakarta: History and Transformation

6.2.1 An Imperial City: 12th Century to 1619 AD

Jakarta's origins dated back to prehistoric times; its beginnings as a port and urban centre were generally traced to a 12th century settlement named *Sunda Kelapa* after the Kingdom of Sunda, of which the city was part of it, and the local word *Kelapa* means coconut. It was a principal harbour for traders from coastal Arabia, India and China, as well as from nearby Malacca and other Southeast Asian trade centres. After 1511, the city also traded with the Portuguese, the first Europeans in the region (Cybriwsky and Ford, 2001).

In 1522, Sunda Kelapa made an agreement with the Portuguese to guarantee that a certain amount of pepper would be traded annually, and in return the Portuguese would build a fort at Sunda Kelapa. When the Portuguese returned in 1527 to build their fort they found they had been forestalled by the Muslims from

the Sultanate of Banten. The rising West Javanese power, the Sultanate of Banten to the west of Sunda Kelapa, had sent a commander called Fatahillah to conquer the town, turning it to a vassal state of Banten. The Portuguese fleet was successfully turned back by Fatahillah, who renamed the port *Jayakarta*, (meaning Victorious and Prosperous), the origin of the present name of Jakarta (Abeyasekere, 1989).
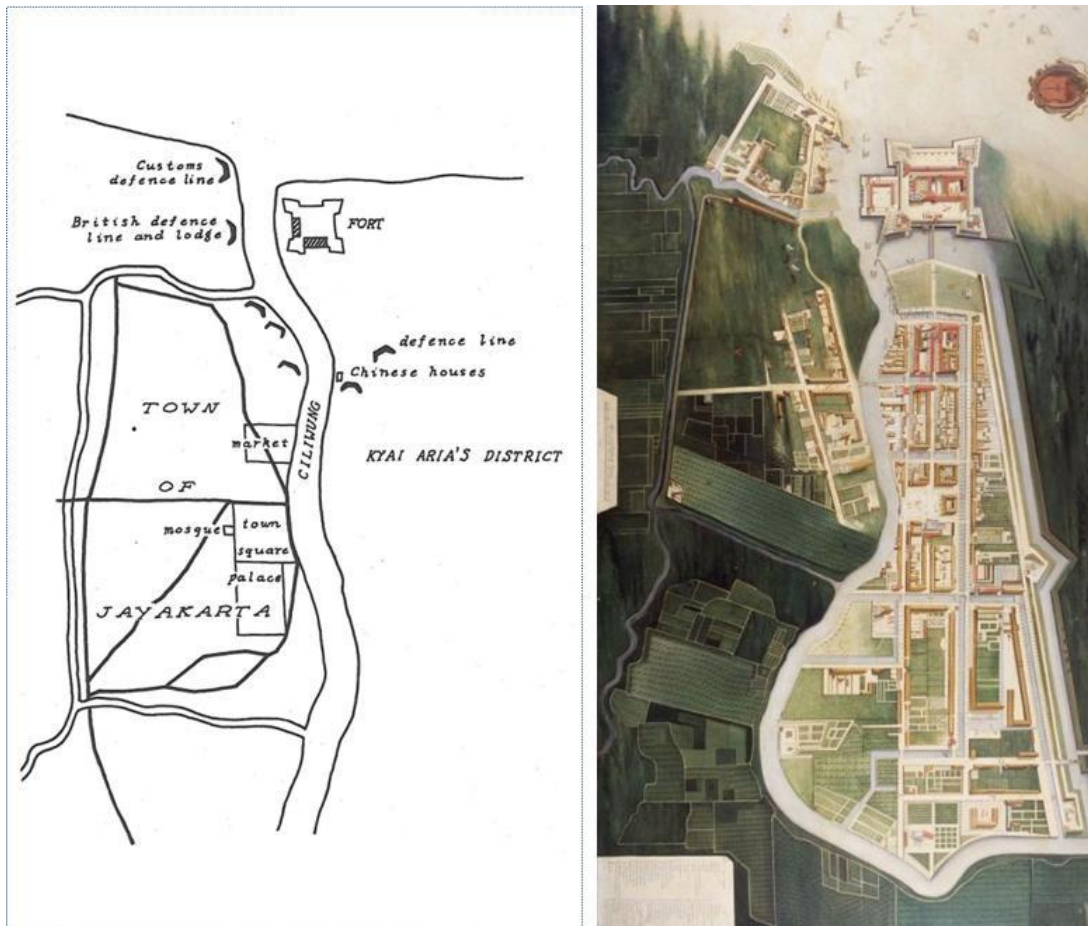
Figure 6.2 Map of Jayakarta/Old Batavia, a) 1618, b) 1627
Source: a) Reproduced from F.de Haan, Oud Batavia, 1922 in Abeyasekere (1989), b) COLLECTIE_TROPENMUSEUM_Reproductie_van_een_plattegrond_van_Batavia_uit_circa_1627,
 http://www.tropenmuseum.nl/ Tropenmuseum, accessed 24/07/2014

6.2.2 Jakarta as a Colonial City (1619-1820)

In 1619, Jakarta was colonialised by the Dutch and given a new Dutch name of Batavia. Simon Stevin, a prominent seventeenth century mathematician, scientist and advisor to the Dutch Prince Maurits, was commissioned to design a comprehensive plan for Batavia based on his concept of the 'ideal city'. Around

1730, Batavia grew into a wealthy metropolis with some 20,000 people of various nationalities within the wall and another 100,000 outside (Brommer, 1998).

The streets of Batavia contained the main public life of the city and were accessible to all heterogeneous groups (Chinese, various ethnic groups of Indonesia, European, etc.). Everyone mingled in the markets of Batavia, which were always described with great relish by European travellers. There were also the public festivals, enjoyed by all spectators, such as the Governor-General's birthday, which was celebrated as though he was an oriental monarch or emperor, which was all together appropriate considering his power (Abeyasekere, 1989).

Figure 6.3 Batavia: The First 100 years
Source: Brommer (1998)

Batavia's so-called 'golden period' was in the early to mid-18th century, when Europeans referred to it as the 'Queen City of the East'. Ironically, at the same time, they began to leave the city in large numbers and resettled outside the walls where the ground was higher and the surroundings were airier. The main complaints were

that Batavia was dirty and foul smelling, with putrid canals and stagnant wastewater, and that the low-lying water table was hopelessly polluted. Dysentery and typhoid took a deadly toll, as did mosquito-borne malaria. Many residents, unfamiliar with environmental causes of diseases, tried to hide from "foul breezes" by closing windows and drawing curtains, and sweltered as a consequence in their airless homes (Abeyasekere, 1989). At the beginning of the 19th century, the Dutch government decided to build a new town centre further inland, near the estate of Weltevreden.

New government offices, military quarters and the residences of more affluent Batavians were built in Weltevreden. Batavia has thus become a city with two centres: Batavia remained the hub of business, where the offices and warehouses of shipping and trading companies were located and Weltevreden provided a new home for the government, military, the well-to-do and a growing number of shops (Brommer, 1998).

Weltevreden and Koningsplein had central role and meaning during the second Dutch colonial period in the nineteenth century, after the British period in Batavia (1811-1815); they were also the symbols of victory and power. All buildings surrounding this special place were monumental buildings with Neo-classical architectural style of 19th century Europe, such as the beautiful and monumental Waterlooplein Palace (now Finance Ministry Office) in east Weltervreden, the Schouwburg cinema (now Gedung Kesenian or Concert Hall), the pseudo-Greek façade of Supreme Court building, the Protestant Willemskerk Church, and the neo-Gothic Roman Catholic Cathedral (Sihombing, 2004).

6.2.3 Jakarta after Independence (1945 to present)

In 1945, Indonesia became a new nation, and Jakarta (Batavia and Weltevreden new name) was chosen as the capital city of the country. Weltervren area in the central of Jakarta became the centre of the country. Most of the Weltevreden colonial buildings were adaptive re-uses, such as for the presidential palace and other higher national ranking offices.

The first president of Indonesia, Sukarno, was a civil engineer and practised as a private architect for a year before becoming a professional politician. He was passionately devoted to the idea that architecture and town planning could serve to create the ideal society. His view of Jakarta as the 'lighthouse', the city which would personify the new spirit, was expressed in this speech of 1962:

'Comrades of Jakarta, let us build Jakarta into the greatest city possible. Great, not just from a material point of view; great, not just because of its skyscrapers; great, not just because of it has boulevards and beautiful streets; great not just because it has beautiful monuments; great in every aspect, even in the little houses of the workers of Jakarta there must be a sense of greatness' (Djakarta, 1962: 27, 30)

Sukarno took up residence in the old Governor-General's Palace, which is now renamed as Istana Merdeka (Palace of Independence). He took a keen of personal interest in the city and stressed the importance of art in urban life. At home, in the presence of artists (Istana became the country's main art gallery), he gathered around him a large group of architects and artists to discuss the progress of projects for buildings, statues, streets and gardens. To inspire and educate, Sukarno also took architects with him on his overseas tours (Abeyasekere, 1989). The Sukarno policies in Jakarta between 1957-1965 involved the reconstruction of Jakarta (as Capital City) to demonstrate the regime's commitment to form a *'national discipline'* and the need to attract *'international recognition'* (Kusno, 2000).

A number of monuments, skyscrapers, and large buildings were the results of Sukarno's ambitious policy, including the Istiqlal Mosque, which was claimed by Sukarno as the biggest and most beautiful mosque in the world. Then, a 132m high National Monument (Monas) erected in the centre of the old Dutch Koningsplein, followed with sport facilities at Senayan for the 1962 Asian Games, a new suburban residential district named Kebayoran Baru, new government buildings, new shopping plazas (including Sarinah, the earliest and biggest shopping mall in Jakarta), hotels, and highways through the city centre.

The urban development of Jakarta continued during the Suharto New Order regime that took control of the country in 1967 and linked it to the emerging global economy. Under Governor Ali Sadikin (1966-1977), there were a number of

Sukarno's projects which were handed over him, including the Istiqlal Mosque, new parliament building, and Ancol waterfront recreation area. Sadikin also added projects of his own, such as new highways and interchanges, the Ismail Marzuki Arts Centre, and industrial zones at Tanjung Priok and Pulo Gadung to attract foreign investment.

Another well-known project during 1970s was Taman Mini Indonesia Indah, a theme park initiated by Mrs Suharto to show the Indonesian compendium of traditional houses, which constitute the traditional heritage and natural environment of Indonesia in miniature; although it gained some controversy, the project continued and was realised in 1975 (Cybriwsky and Ford, 2001, Kusno, 2000). The other distinctive project during New Order era included the new International Sukarno-Hatta airport at Cengkareng, at the west of Jakarta that was built in the late 1970. Because of a long period of generally rapid economic growth, Jakarta was able to sustain its construction boom under successor-Governors until the financial crisis of the late 1990s and to developed an impressive and modern look (Cybriwsky and Ford, 2001).

After the economic crisis in 1997-1998, which was followed with President Suharto's succession in May 1998, the lives of many people in Jakarta changed significantly. The powerful, relatively stable and repressive regime of Suharto was dismantled in just a few days and the collapse of Suharto's New Order finally brought down the framework of 'nationalist urbanism' with which the state's elite had been playing since Independence. The residents of Jakarta from various classes found themselves in a more advantageous position to criticise developmental projects in the city that seek to represent the image of the nation (Kusno, 2004).

6.3 The Formation of Pasar Baru Street (1820-1900s)

Pasar Baru (or Passer Baroe in the olden days) literally means 'New Market' and was established in 1820 as the main commercial area of Weltevreden. Since the beginning of construction, land use in Pasar Baru Street and surroundings have been dominated by commercial buildings along the main channel and residential buildings in its back alleys.

The urban fabric of Weltevreden as seen today was built simultaneously during early nineteenth century period. Pasar Baru Street was situated in the main axis of Weltevreden towards the Schowburg (Concert Hall) and Governor General Daendels Palace (known as White Palace) divided by the Ciliwung River as part of the transportation system in Batavia. Adjacent to Pasar Baru Street there was a housing district for the colonials, known as Rijswijk, which nowadays becomes the district for Indonesian President Palace and high officials including central offices.

In Weltevreden, Dutch people built their houses with large trees and gardens, in contrast to those in Old Batavia, where the two-storey houses were directly adjacent to the pavement. In Weltevreden, they built houses on one level that were more spacious, airy, and modern, and followed the European 'garden city' trend. As a result, Weltevreden suddenly *'evolved very rapidly with the construction of new churches, schools, clubs, theatres, in short, all the hallmark of a modern European city belongs to Weltevreden'* (Hanna, 1988: 191). In *Oud Batavia* de Haan (1922) noted that the land for the Pasar Baru site was purchased by Deandels the Governor-General of the Dutch East Indies (1808-1811) in 1809 with the plan to build a new market. The wet market was ready to use in 1821, and four years later, in January 1825 the market began to rent space to the public. Stalls consisted of a collection of shops and adjoined the longitudinal direction of the bridge across the Schowburg. In 1828, the government also sold several parcels of land located on the east and west side of this market (Mijarto, 2009).

According to Kurnia (2011), Pasar Baru was originally a Chinese district, as it was built within a place where many Chinese migrants resided as plantation workers before the Dutch expanded Batavia city to the hinterland. Chinese skilled workers also moved to this area with the moving of the Dutch masters. Soon the forests and living space along the Ciliwung River grew into a place for trading, and the Pasar Baru Street, with the highly skilled workers opening their trades, became a place for the Dutch to shop. The Chinese traders were amongst the first shop owners in Pasar Baru and this was followed by other ethnic groups such as the Indian, Arabs, Pakistani, Malays/locals, as well as Europeans. The Batavia map from 1877 showed that commercial buildings had flourished in Pasar Baru Street during that period, whilst a picture taken from 1900 showed the street was dominated by

Chinese shop houses and Chinese pedestrians strolling complete with their ethnic identity of long hair tails and Chinese caps. The development of Pasar Baru Street was also supported by its strategic location since it was perfectly situated in the centre of Weltevreden. The public life of Pasar Baru Street was also enhanced after the Dutch built a concert hall in 1821; right after previously under the British colonial government in Batavia in 1811 (only 5 years before taken over by the Dutch once more in 1816) Governor General Stamford Raffles built a theatre building.
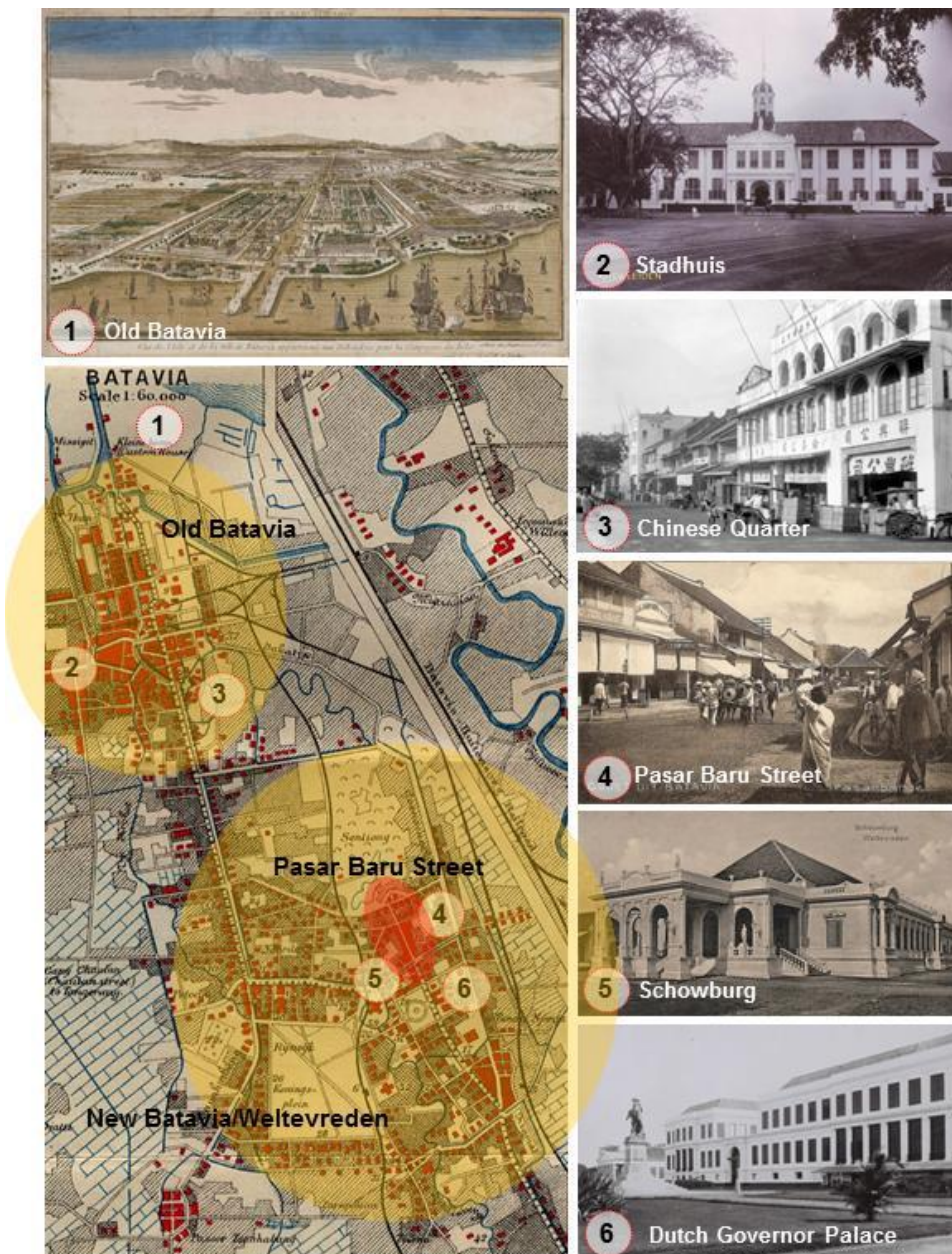
Figure 6.4 Pasar Baru Street in the context **of** Jakarta under 1897 map
Source: Map of Batavia 1897 (Bemmelen and Hoover, 1897) http://www.lib.utexas.edu/maps/indonesia.html, accessed in 21/7/2014 , KITLV Leiden, www.asiafinest.com, accessed 24/7/2014

6.4 Pasar Baru in the Twentieth Century (1900s to 2000s)

The development of Weltevreden continued in the twentieth century. During this period, Pasar Baru Street was well-paved and grew as the main commercial street of Weltevreden. The shops competed with Glodok (the older Chinese Quarter in Batavia), serving all tastes and pockets, both for European and Asians. In Batavia, there were some weekly markets, such as Pasar Senen (Monday Market), Pasar Rebo (Wednesday Market), and so on. Most of these markets were wet markets, selling groceries with none of them selling other commodities such as fashion/clothing. The Dutch colonial government then built Pasar Baru to meet the demand for such items. After the 1930s, shop owners along Pasar Baru Street were no longer dominated by the Chinese with some shops being taken over by Indians and even Japanese apart from the European shop owners. During this period, Pasar Baru Street was famous for fashion, shoes, groceries, pharmacies, book stores and electronics, whilst the quality and price were comparable to other shopping streets not only across Indonesia but also in European countries. According to Abeyasekere (1989), the Dutch communities in Batavia lingered in places like Pasar Baru, the narrow market street to the north-east of what was Weltevreden.

Figure 6.5 Pasar Baru Street a) 1910, b) 1940
Source: http://collectie.tropenmuseum.nl accessed in 5/6/2014

Since its establishment in the early 1800s, Pasar Baru District has been a melting pot of different ethnic groups including Chinese, Indian, Pakistanis, Japanese, European, and the natives from many parts of Indonesia (Post, 1999). Until today, various ethnic groups still live in this area, except for the Europeans and Japanese who have no longer lived in this district since Indonesian

independence in 1945. Interestingly, the language used by each of these ethnic groups was different; however, in addition to their own native languages; they needed a 'bridging' language to be able to communicate with each other. The Malay language, which later became the Indonesian national language, was chosen as the *lingua franca* (vehicular language, or in economics: trade language). Indeed, the Malay language itself has been used as a *lingua franca* throughout *Nusantara* or the Indonesian Archipelago since the time of Srivijaya in 7th century AD (Yazidi, 2014).

Figure 6.6 Pasar Baru Street a) 1949, b) 1954
Source: http://infolite-infolite.blogspot.co.uk/2012_04_08_archive.html accessed in 5/6/2014

Everyday people from all ethnic backgrounds were living side by side despite their different religious and cultural backgrounds. Most of the Chinese were Kong Hu Chu (Taoist) and only a small number of them were Muslims. Meanwhile, the Indian community were Hindus and Buddhists, and Europeans were mostly Christians. The natives, as with other Indonesians were mainly Muslims.
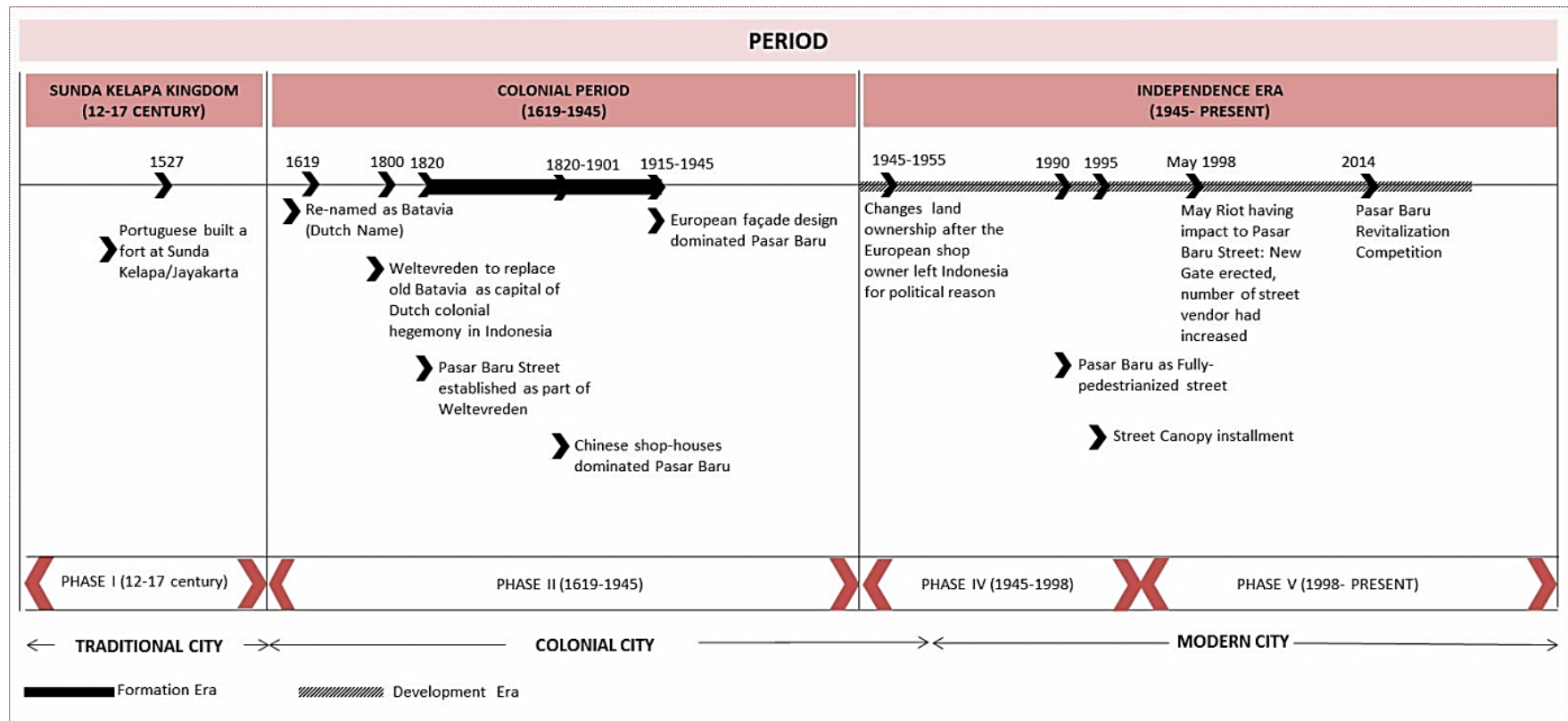
Figure 6.7 Jakarta and Pasar Baru Area: Historical Transformations
Source: Author, 2015

6.5. Pasar Baru Street from an Urban Design Dimension

6.5.1 Land Use

| BATAVIA MAP, 1920 | JAKARTA BLOCK PLAN, 2001 | JAKARTA MAP, 2014 |
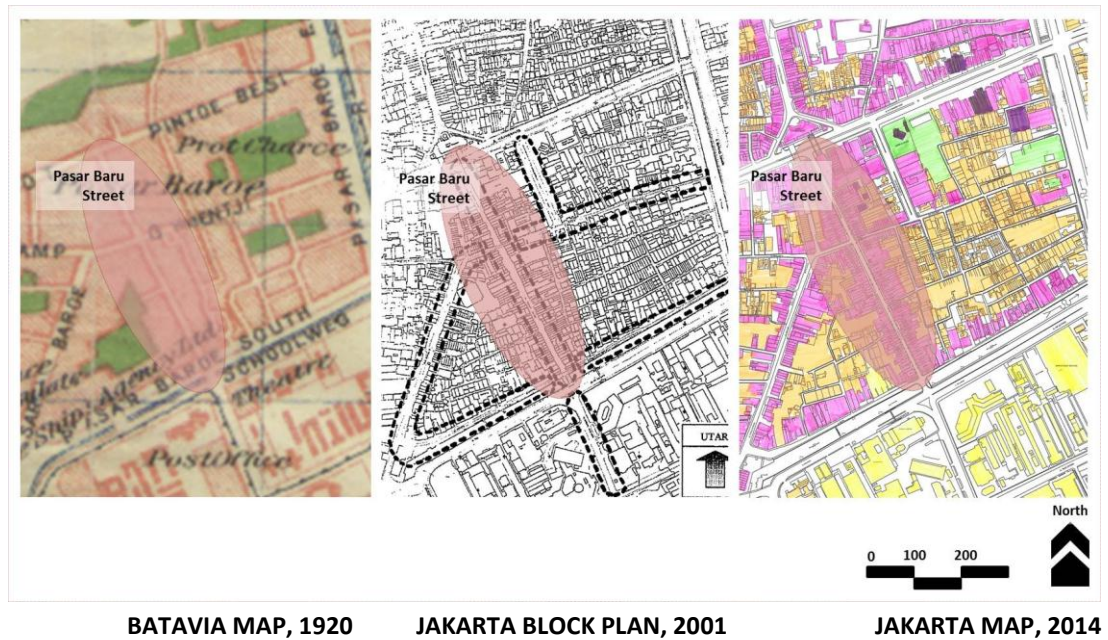
Figure 6.8 Spatial Transformation of Pasar Baru Street and its surroundings
Sources: Batavia Map, 1920, Susanti (2001) , Dinas Tata Kota Jakarta Map, 2014

The layout of the buildings, space and functions in Pasar Baru Street and its surroundings are shown in Figure 6.8. As established in 1820, the spatial forms, building functions, and density in Pasar Baru Street have been gradually and incrementally transforming. In the 1920 map, the area only indicates the dominant functions as being residential and commercial place. The green space can be perceived in some spots mainly inside the street blocks. Meanwhile, in the block plan map of 2001 and 2014, the area is seen to be denser and most of the green areas have been filled by hardscapes (buildings, bridges, and pavement) without leaving any soft-scape such as green or open space.

The building plot is not clearly indicated in the 1920 map. However, the 2001 map and 2014 map indicate the changes to building plots, from a single building plot to a bigger plot (some buildings also merge into a large block) which has established a superblock system in the area. The observation in 2014 shows the functions of the buildings along the main street of Pasar Baru are mixed between residential and commercial (shop-houses) and residential and office buildings

(home-offices). The land uses at the back of Pasar Baru Street were mostly residential, with many being rented houses for the shop workers and hotel staff of Pasar Baru Street and its surroundings. There are around 10 hotels (1-3 stars) in this district, 9 religious buildings, and 2 theatres. The wet market of Pasar Baru was redeveloped as a 3 storey building, with a wet market at the ground floor, and a food court and clothing stores on the upper floors.

6.5.2 Plot Pattern and Street Pattern

Pasar Baru Street, 1920   Pasar Baru Street, 2001   Pasar Baru Street, 2014
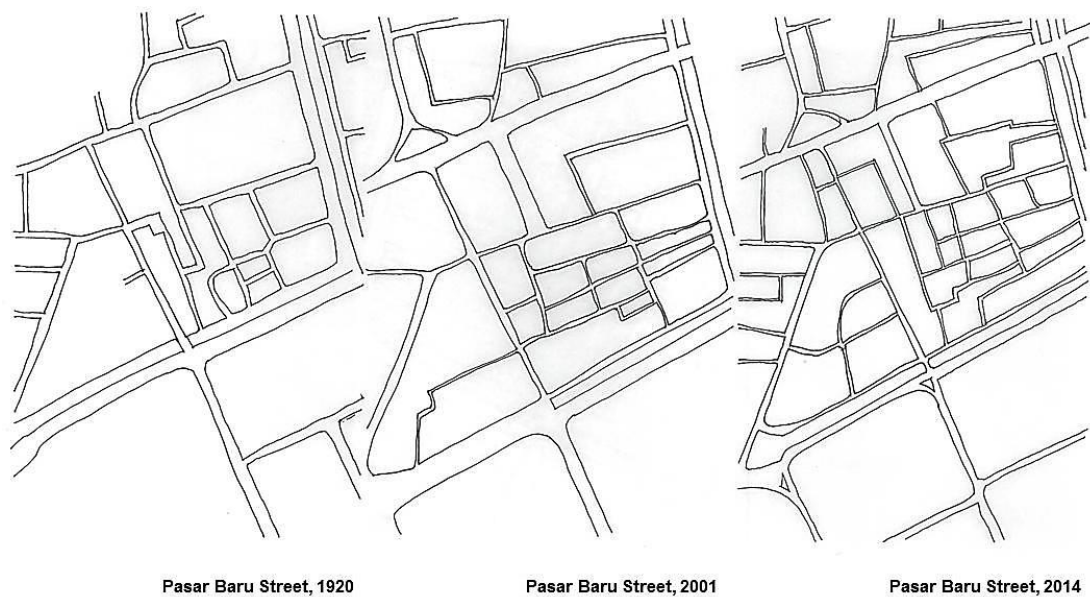
Figure 6.9 Transformation of Pasar Baru Street pattern
Sources: Batavia Map, 1920, Susanti (2001) , Dinas Tata Kota Jakarta Map, 2014

The main pattern of Pasar Baru Street is seen in Batavia map of 1920 a hundred year after its establishment. The street pattern of Pasar Baru Street consists of a grid-iron type combined with an *Altstadt* type (typical of the core area of old cities) with its organic in form, especially inside the street blocks. The primary street pattern in Pasar Baru Street and its surroundings, however, has never changed, although some additional alleys have appeared (see Figure 6.9). The plot pattern of Pasar Baru Street divides the individual plot into a rectangular configuration where the façade is narrower compared to the length of the building. In general the façade is 6-8 meters wide and the length of the building could reach more than 20 meters. The plot pattern in Pasar Baru Street allows the buildings to face onto the

main street at the front with service alleys at the rear. The back alleys are smaller in dimension and most of the buildings located along these are residentials and service buildings to serve the shop houses in the main street. In some cases, the plots of the buildings at Pasar Baru have changed, with some plots being merged or amalgamated.

6.6 Measuring Pasar Baru Street's Quality

6.6.1 Legibility

To measure the quality of legibility along Pasar Baru Street, it is important to walk through the street in order to reveal the sense of orientation and way findings of the street. Yeung and Savage (1996b) argue that legibility has far more interactive components than those which Lynch (1960) and subsequent researchers in many disciplines have thought of. Figure 6.10 shows a legibility journey along Pasar Baru Street. The point of entry to the street is marked by 'start' on the diagram, where the Chinese style gate is erected, which clearly defines the entrance of the street. The gate itself can be regarded as a 'landmark' as expressed in one of the interviews:

> 'For me, one of the most memorable elements is **the gate**; it was strongly memorable…'
> (PB-VIS-004, In-depth interviews, April 2014)
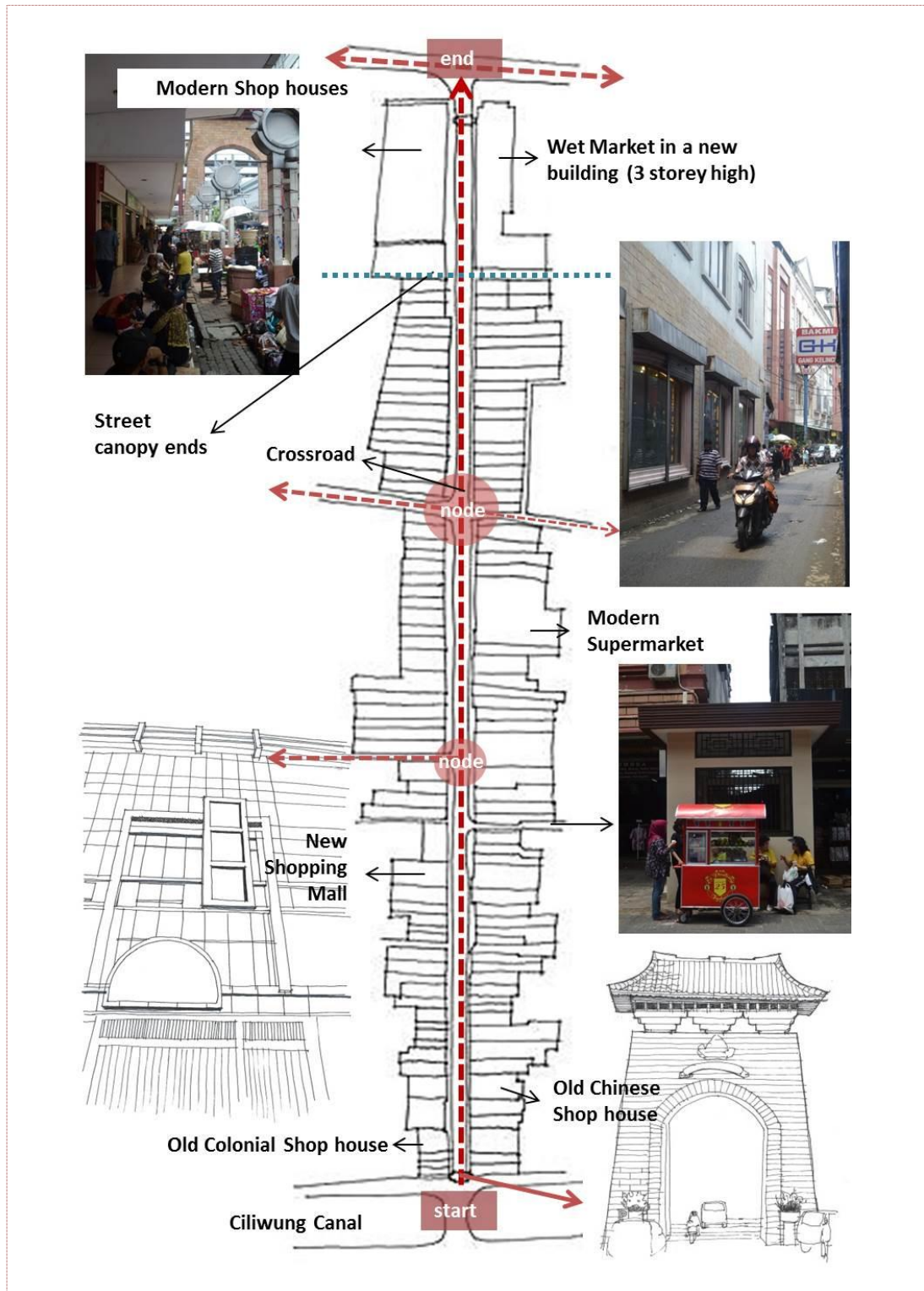
Figure 6.10 Legibility journey of Pasar Baru Street
Sources: Observation, 2014

Entering the street space, it was noticed that the buildings at the left and right side of the corridor act as street wall thereby creating a strong sense of enclosure. The buildings along the Pasar Baru Street have diversity in style; at the left side,

there is an old building with the colonial style and at the right side, there are some Chinese shop houses retaining their original style. A clear node is seen at the street intersection of Kelinci Alley, making the street and its surroundings more legible through a change in the built form of the townscape at this point. Most of buildings near the intersection have active frontages at the front and rear, allowing the pedestrian to clearly see the merchandise inside the shops. Near this intersection, the number of street vendors drastically increases as a result of the strategic location of the intersection and its surroundings. The traffic crossing this intersection is heavy and many street vendors near the intersections were busy. There is also a clear smell of the food stalls that help to make this nodal point more 'imageable'. At the end of the street, there is also a similar gate, which also functions as the end of the street. Hence, this might be referred to Pasar Baru Street having '…*a clear beginning and ending*' as Jacobs (2010) mentions that it becomes an important indicator of street quality. Some narrower alleys as indicated in Figure 6.10 connect the district at the back side of the street. The street pattern inside the district is a *cul-de-sac* type following the organic type of street pattern. The way finding inside the district contrasts with the main corridor of Pasar Baru. Indeed, the alleys are more intriguing and create mystery yet a surprise for the users who wander inside the small and winding alleys.

Being located in the city centre of modern Jakarta and having close proximity to the central government offices of the country gives Pasar Baru Street an advantage as a shopping destination. For the locals of Jakarta, Pasar Baru as a shopping destination has become a tradition for generations. There are many alternative modes of transport to go to Pasar Baru Street, meaning that the area is accessible and well connected (see walkability, accessibility and connectivity indicators). The interviews for this research reveal that the proximity of Pasar Baru Street and central government offices attracts the local officers on duty in Jakarta and living in nearby hotels to shop and look for souvenirs to take to their homes across the country. Overall, it can be interpreted that Pasar Baru Street is having a clear way finding, sense of orientation in and between places, and intense of human experience through diversity of use.

6.6.2 Walkability, Accessibility and Connectivity

To evaluate Pasar Baru Street's quality in terms of walkability, accessibility, and connectivity, three points were assessed: the transportation system in the area, the connection of the area and surroundings/city in a whole, and the walkability of the area.

Transportation system of Pasar Baru Street and its surroundings
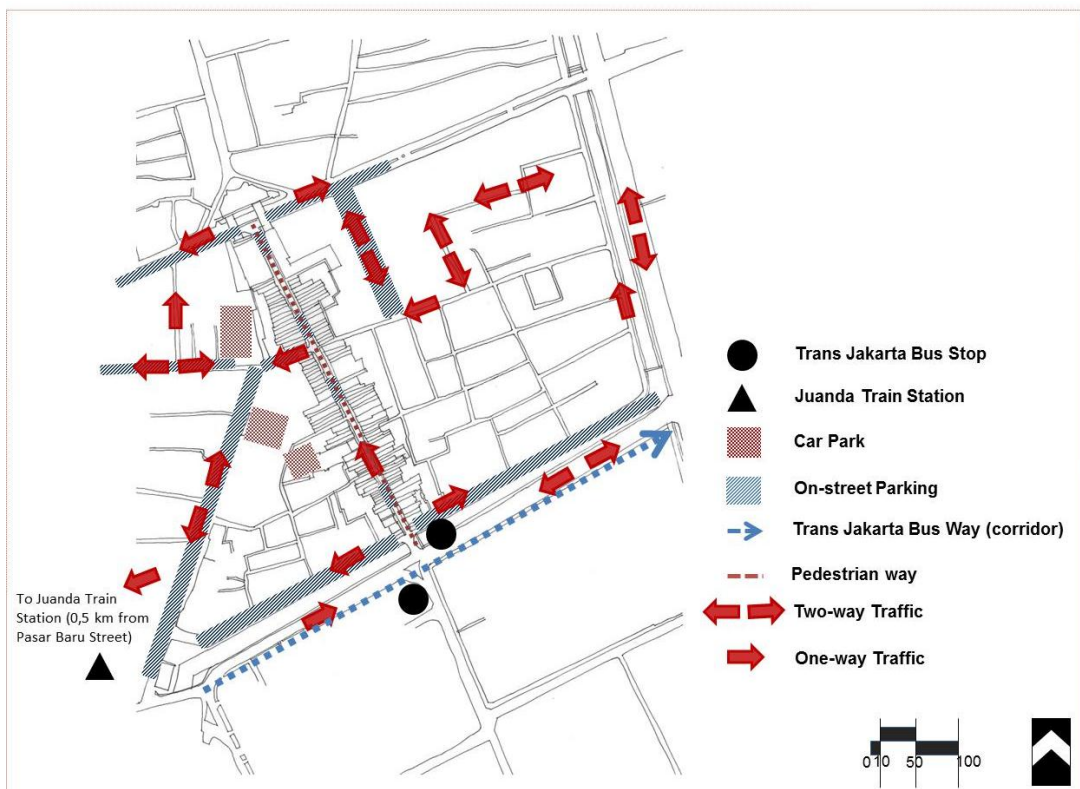
Figure 6.11 Accessibility and connectivity of Pasar Baru Street (Source: Observation, 2014)

In general, Pasar Baru Street and its surroundings are well-connected. There is a direct route to every corner for pedestrians and cyclists. Public transportation is also well connected with the Trans Jakarta bus system and Juanda Interchange Train Station is only around half kilometre from the area. Other public transport includes taxis, trishaws and motorbike taxis available for almost 24 hours in front of Pasar Baru gate.

The traffic system in Pasar Baru Street and its surroundings has changed overtime. Prior to 1990, Pasar Baru Street was a one-way street from the south to

the north although it has since been turned into a fully pedestrianised street. The traffic system in Pasar Baru Street and its surroundings is disposed towards the rear and back alleys of the main corridor, but can also be entered from the intersection of Kelinci Alley leading from the east to west of Pasar Baru Street. Now, when motorised vehicles would re-enter the main corridor, the traffic system has changed back, although after the intersection of Kelinci Alley, motorised vehicles are still prohibited (see Figure 6.11).

The availability of public car parking within and nearby Pasar Baru Street is important to see the support facility which plays an important role, especially for successful shopping areas. In some places around Pasar Baru Street, a group of people use the pavements for illegal on-street parking. In fact, there are some parking lots and parking buildings nearby, which according to interview respondent 012 are '…*enough to accommodate all of the visitors*'. The on-street parking phenomena can also be seen at the overcrowded Jalan Antara on the Ciliwung riverbank. Visual observation shows that on-street parking made the pavements narrower and crowded and hindered the environmental comfort in Pasar Baru Street and its surroundings.

Since 1990s, when the main street of Pasar Baru changed into a fully pedestrianised street, the movement and accessibility patterns in and around the area have altered significantly. As such, the local authority allowed people to use the street in the outer part of the district for on-street parking space whilst the Main Street of Pasar Baru was made only for pedestrian movement. Since the implementation of the Pasar Baru Street as a fully-pedestrianised street, there has been a challenge for the loading and unloading of goods. The implementation of Pasar Baru Street for pedestrians only, means cars must be parked on Antara Street and Kelinci Alley. The distribution of goods is then continued by motorcycles and carts to the shops. At night after the store has closed, loading and unloading activity can be done by cars that stop in front of the shops. As a result, *'the longer chain of loading system has caused the price of goods to be a little higher'* (Susanti, 2001). However, the observation shows, that the fully pedestrianised street concept is not well implemented, indeed the unloading activity from cars which stop in front of the shops also occurs during the shop opening times. This in turn causes more

crowded pavements and makes it inconvenient for pedestrians who are sightseeing and shopping.

The connection of Pasar Baru Street and surroundings/city in a whole
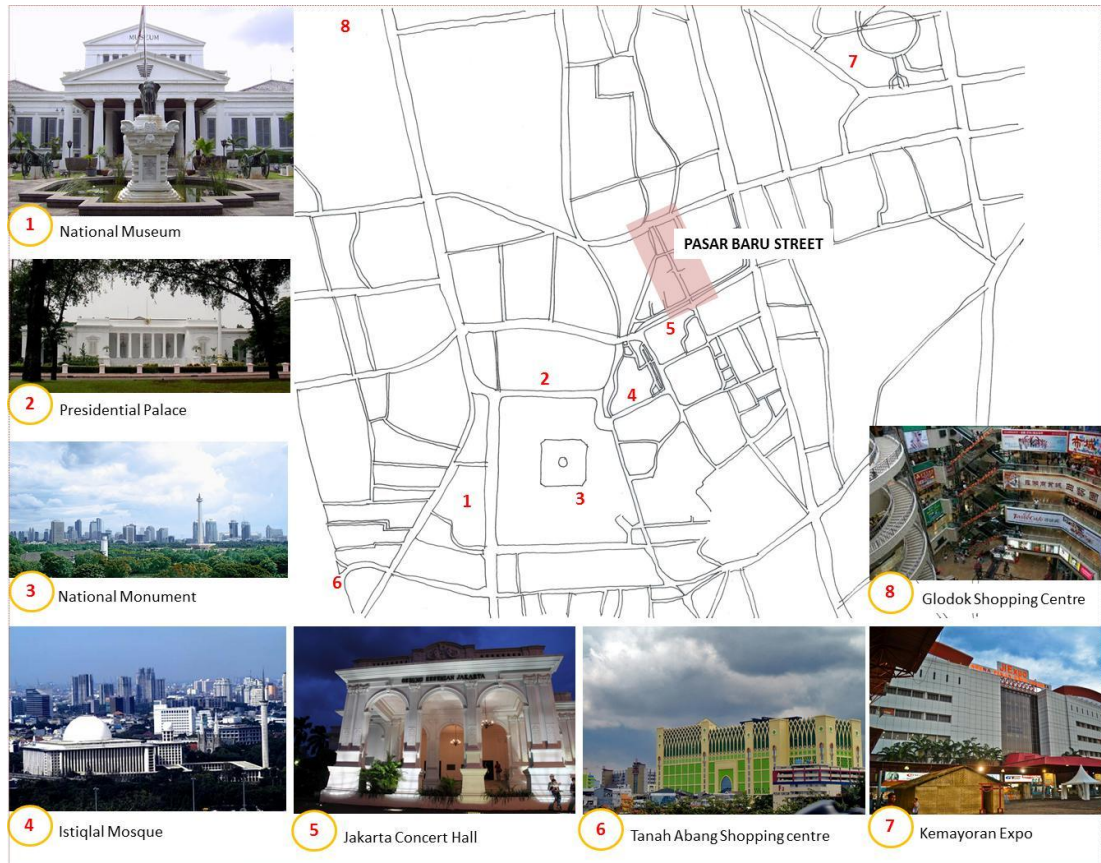
Figure 6.12 Connectivity of Pasar Baru Street and nearby places
Sources: Observation, Google-images, 2014

The strategic location of Pasar Baru Street has been indicated in early period of the formation of the street (see Section 6.3). Being located in the centre of Jakarta as the capital city of the country, could mean that this place is reachable from various directions/city places. Figure 6.12 shows the connectivity of Pasar Baru Street in the context of Jakarta as analysed from the commercial space, working space, and other destinations within 2 kilometres radius.

It can be explained that Pasar Baru Street and surroundings can be reached from various places, with various modes of transport and connections. This finding may help us to understand that the street is having a good quality of connectivity within the street, within the district, and the city as a whole.

Figure 6.13 Pedestrian flows in Pasar Baru Street
Sources: Observation, 2014

The porosity of urban fabric of Pasar Baru contributes to the permeability of the street and has an impact on walkability and movement. Figure 6.13 shows people walking along Pasar Baru Street and gives sense of 'order within disorder'. Indeed, there are different speeds of flow between the pedestrians and vehicles, and there are a number of different activities being performed, such as walking, walking and talking, sitting, standing, standing and talking, eating and drinking, vending, etc.

There are various comments, expressing both positive and negative feelings regarding the experience of walking through Pasar Baru Street in the interviews. One of the interviewees felt the enjoyment of walking for it also gave her other experiences such as eating and relaxing, as follows:

'…compared with the shopping malls, it is better to walk in here, [enjoy] eating at the food stalls, relax,...' (PB-RES-001, In-depth interview, April, 2014)

Another interviewee felt uncomfortable walking in Pasar Baru Street. As a local government staff member, she specifically mentioned the 'legal' standing of the street vendors and the cars passing an area that is supposed to be pedestrian only:

> '…almost at the end of the street suddenly the corridor is full of the street vendors, we do not know whether they are legal or not [to vending there], the street space is suddenly narrower, full [of people and vendors] and suddenly the cars are honking, so uncomfortable…' (PB-GOV-002, In-depth interview, April, 2014)

There is a balanced comment from a visitor interviewee, for walking in Pasar Baru Street was 'quite comfortable' compared to other streets of Jakarta, but then, when she compared the street to shopping streets abroad, she believed that streets in other countries may have a better condition. She also hints the need for improvement to create better walkability in the place, as expressed below:

> 'In terms of physical quality, Pasar Baru Street is quite comfortable to walk, but when compared to other shopping streets abroad it needs to be improved…' (PB-VIS-004, In-depth interview, April, 2014)

As mentioned in the literature review, there are some aspects to measure walkability, such as pedestrian comfort, safety, and visual quality. The findings suggest that the provision of good quality pavement can be stated as adequate. However, as suggested by the interviews, the physical quality of floorscape along the Pasar Baru Street needs to be improved. Meanwhile, safety and visual quality will be discussed in the following sub-sections (see sub-section 6.6.8 and 6.6.10).

6.6.3 Diversity

The diversity of Pasar Baru Street is discussed under two points: diversity of land use and diversity of ethnic group/population, as follows:

<u>Diversity of land use</u>

Table 6.1
Building Use of Pasar Baru Street in 2014

No	Building Use	2014	
		number	Percentage (%)
1.	Shoes and Bags	32	24
2.	Textiles and Tailor	27	20
3.	Jewellery and Watches	17	13
4.	Department Stores	7	5
5.	Clothing	6	4
6.	Restaurants and Karaoke	5	4
7.	Art-shop and Music	5	4
8.	Optic and Eyeglasses	5	4
9.	Sport Shop	5	4
10.	Empty/closed down/under construction	5	4
11.	Photo Studio	3	2
12.	Tailor	3	2
13.	Drugstore and Pharmacy	2	1
14.	Bookstores and Stationary	1	1
15.	Money Changer	1	1
16.	Residential	1	1
17.	Telecommunication	1	1
18.	Bank	1	1
19.	Others	7	5
	Total	**134**	**100**

Source: Visual Observations, 2014

'To understand cities, we have to deal with the combination or mixture of uses, not separate uses, as the essential phenomena' (Jacobs, 1961: 188). Table 6.1 shows the different categories of retail along Pasar Baru Street of which there are 18 categories of retails. Shoes and Bags shops (32 shops - 24%), followed by Textiles and Tailor (27 shops - 20%), and Jewellery and Watches (17 shops - 13%) are the largest three. They are followed by Department Stores (7 shops - 5%) selling various merchandise, especially clothing and groceries. In addition, buildings at Pasar Baru Street are occupied by some other retail functions with relatively average in percentage (4-5%), i.e. clothing, restaurant, art shops and music, and some empty/closed down or under construction lots. There are also some new functions including a bank and money changer, but the number is quite small (1%).

Overall, the building use at Pasar Baru Street reflects the image of Pasar Baru Street as a centre for clothing, shoes and bags, textiles and tailor, and jewelleries (see Figure 6.14). This place is also famous for a place to search for wedding gifts

such as high quality silk and cloths, and as a centre of fashion offered by traders from various nationalities (Post, 1999).
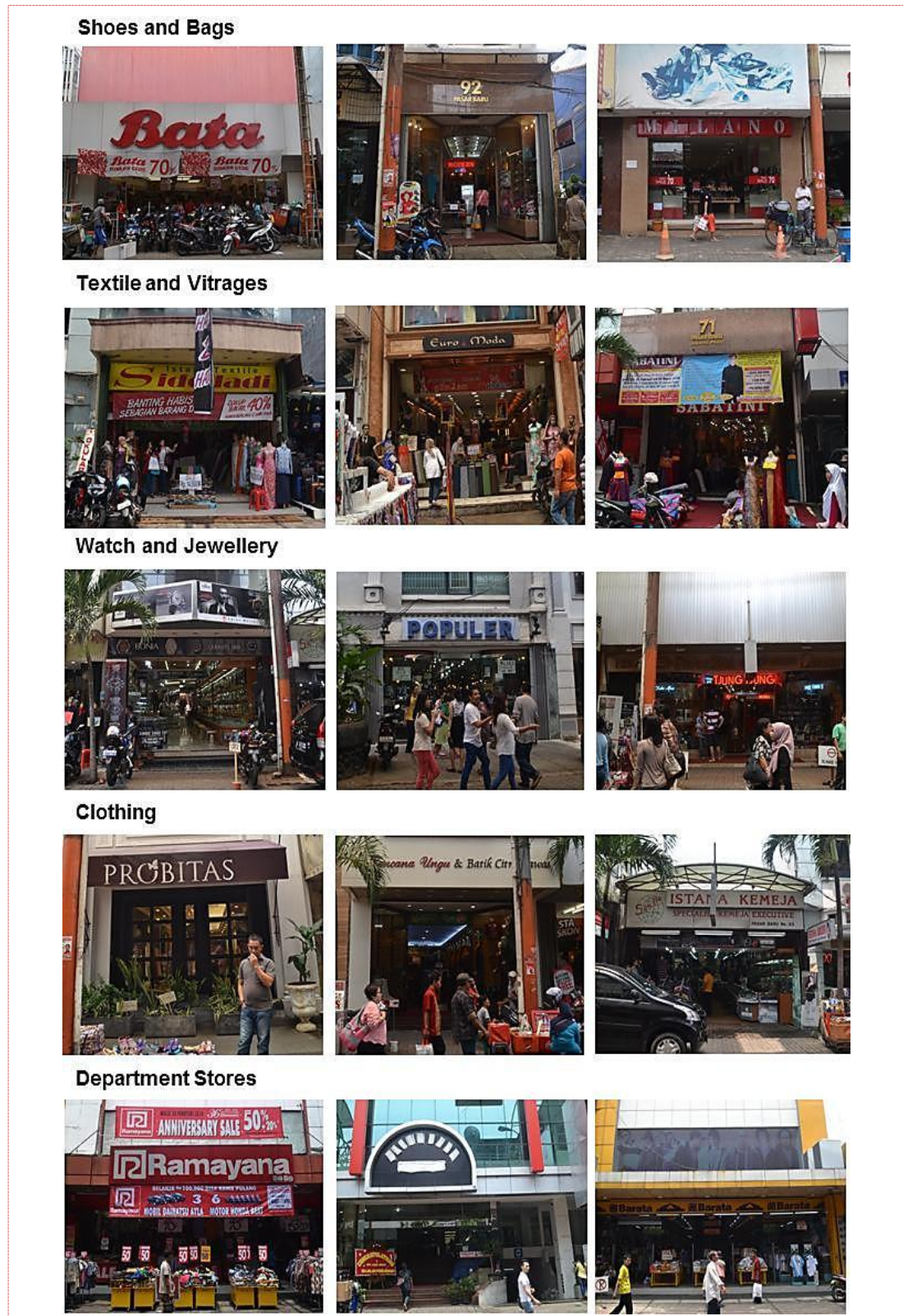
Figure 6.14 Retail Diversity of Pasar Baru
Sources: Observation, 2014

Diversity of ethnic group/population

The ethnic background of the population living in Pasar Baru has remained diverse since the early formation of this area excluding the Dutch/Europeans that had already left the country after its independence in 1945. The Chinese community remained dominant as the shop owners followed by the Indian and Pakistani communities. Some local merchants are also renting the shops as well as trading as street vendors.

The ethnic diversity of Pasar Baru is also manifested in the religious life of the community. There are two Chinese Temples (Sin Tek Bio Temple and Kuan Im Bio Temple), two Mushallas (small mosques), two Churches (Pniel Church and GKI Church), and a Sikh Temple. Since the 2000s, there are three new worshipping centres for Sai Baba, Graha Sindu, and Hare Krishna for Hindus as seen in Figure 6.15.

Figure 6.15 Religious Building Diversity of Pasar Baru
Sources: Observation, Google-images, 2014

The multicultural nature of Pasar Baru, especially related to the ethnic and religious background of the population, might create a cross-cultural interaction that has evolved over period of time living. It is clear by the existence of religious

buildings that are standing side by side, showing the religious tolerance amongst the community living in the area.

6.6.4 Liveability

Liveability of Pasar Baru Street is discussed under three main points: sitting space and street amenities, canopy as arcade, and the quality of natural features.

<u>Sitting Space and Street Amenities</u>

Sitting space which has been identified as one of the most important characteristics in retaining people in urban public space and possibly supporting social behaviour (Whyte, 1980) seems to be absent along Pasar Baru Street and its surroundings. Indeed, there are not enough opportunities for a visitor to spend their time sitting around while enjoying the atmosphere of the street. However, the opportunity to enjoy the street atmosphere through sitting has been 'provided' by the street vendors, who put plastic chairs for people who are buying their goods. The nature of this sitting space is therefore movable and non-permanent (see Figure 6.16). The provision of the sitting space by the street vendors enhances the opportunity for pedestrians to rest, enjoy the street atmosphere, have social interaction while visiting the street. This was noted by a respondent:

'With the new Gate erected it makes the street more enjoyable, we can walk comfortably, it's just there is no place to sit, **if there are places to sit, it would be more enjoyable**. Well, if we buy a drink from the street vendors, **then we can sit**.' (PB-VIS-005, In-depth Interviews, April, 2014)

Figure 6.16 Sitting space offered by eating stalls along Pasar Baru Street
Sources: Observation, 2014

Looking at historical pictures of Pasar Baru Street, the provision of sitting spaces along the street has never been available since its formation. Those willing to enjoy the atmosphere of the street will often sit in one of the cafes or restaurants along the street. In some restaurants, such as "Snoep Huis" which is very popular, *'people can sit at a marble table while drinking hot or cold beverages or eating ice cream covered with chocolate cream and delicious pastries, while sitting to relax looking at the people passing by'* (Hanna, 1988).

Canopy as an arcade

The canopy as an arcade has been installed along Pasar Baru Street since 1995. It provides an adequate environmental comfort for people using the street. As the weather in the tropics is hot, humid and has high rainfall, the canopy brings more opportunities for the visitors to walk and enjoy the street in whatever weather conditions. This canopy has a similar role to the 'five-foot way arcades' that have been endemic in Southeast Asian cities since 18th century. One interview respondent specifically mentioned the environmental comfort brought by the existence of street canopy:

'[Street canopy] **makes the street cool, avoiding the rain too**, it is enjoyable…' (PB-GOV-002, In-depth Interviews, February, 2014)

Figure 6.17 Street Canopies along Pasar Baru Street
Sources: Observation, 2014

The experience of walking under the canopy creates the feeling of being 'inside' while actually being 'outside', which brings a certain sense of place and identity that makes the place distinct compared to other places in the city, as reflected in the interviews:

> '…walking through Pasar Baru Street, there is **a feeling of being inside a building or a space**, moreover it is also covered by a canopy… Yes, it [street canopy] actually **characterizes the atmosphere** of the place' (PB-VIS-004, In-depth Interviews, February, 2014)

In addition, the street canopy can also be seen as a 'noticeable element' identified by the respondent that is beneficial to differentiate Pasar Baru Street with other commercial areas in the city:

> 'Yes, like in a room. **Here, is very different with other markets in Jakarta,** for example, Pasar Senen, it really complicated, chaotic. If they [the buildings] are face to face like in this place, it is great.' (PB-SV-009, In-depth interview, April, 2014)

These results suggest that shade on the street space in the tropics, in this case in the form of canopy, is an important feature to enhance the environmental comfort for the pedestrians as well as for the street vendors (in some spots street vendor add tents, see Figure 6.17) and the quality of shop merchandise that are spilled out in the street space from the rain and sun radiations.

Quality of Natural Features

Green space especially trees is an important urban space feature to provide shade, induce activity (Whyte, 1980), and facilitate recreation activity (Appleyard, 1980). Visual observation shows that palm trees were planted along the street spaces of Pasar Baru. Although it seemed less dominant than the canopy, they did help to create the feeling of being outdoors. Apparently, before the palm trees were planted simultaneously with the canopy in 1995, green space along Pasar Baru Street was absent. Green space, in the form of shady trees would have existed along the riverbank in front of the street gate. Unfortunately, the river bank was currently an area of on-street parking, so that the pedestrians felt less enjoyed

despite the presence of the trees. This condition was also noted by a respondent, as she mentioned as follows:

'…but you know there is no green space, it is just on the edge of the Ciliwung River, that's it, **along the street is less**.' (PB-GOV-011, In-depth interview, April, 2014)

Meanwhile, when green space is less dominant, the water area seems to be one of the dominant elements in front of Pasar Baru Street. The Ciliwung River that runs from east to west was used as a key waterway in Jakarta in the olden days. Many boats transported goods from the hinterland to the coast and vice versa. Moreover, there were many people carrying bamboo rafts into the Ciliwung River, while being careful not to disturb any people who were bathing or washing along the river bank (Hanna, 1988). Those using the Ciliwung River water were not only people living in Pasar Baru Street and its surroundings, but also Dutch Colonial Soldiers and other Europeans living in Weltevreden. They used the canal water not only for bathing but also for consumption on a daily basis. This was based on a history that during the early years of Europeans living in Indonesia, they tended to avoid any acquaintance with the natives, for fear of contracting various diseases. They even wore heavy clothes to avoid contact with the natives. Nonetheless, when there was new understanding from health scientists, the Dutch government in Batavia made an effort to familiarise the Europeans to bathe, one of the efforts was to provide a clean canal right in front of Pasar Baru Street. This channel was provided and facilitated with the stairs down to the water to enable bathing as seen in Figure 6.18a (Setiati et al., 2009).

Figure 6.18 Ciliwung River in front of Pasar Baru Street a) 1901, b) 2014
Sources: http://collectie.tropenmuseum.nl, accessed in 10/6/2014 and observation, 2014

Furthermore, Ciliwung River as a waterway in front of Pasar Baru Street and its surroundings was used for a boat race held during the Peh Cun festival, which is a Chinese tradition that is held every 5th of the fifth month in Chinese calendar. Traders and shop owners of Pasar Baru Stret would join the crowds of Jakarta people cheering the Dragon decorated boats that raced for a leafy bamboo stick tied with a handkerchief with a pack of opium in it (Setiati et al., 2009). However, nowadays, when street connectivity was upgraded and the river silted up during the dry season, eventually the waterways were no longer utilised (see Figure 6.20b).

Recently, in March-June 2014 there was a design competition for Pasar Baru Spatial Planning organized by PT. Trikarya Idea Sakti in collaboration with the Indonesian Institute of Architects, Jakarta Branch. The terms of reference stated that the water areas become one of the important points to be revitalised. The organiser specifically highlighted the Clarke Quay Revitalization Project (1993-2006) in Singapore as one of the precedents for the future of Pasar Baru. The vision of the Clarke Quay project is a clear and strict conservation concept by synergising the old buildings and bringing back a historical atmosphere integrated with a modern lifestyle including cafes and restaurants along the waterfront. The evidence shows that the existence of natural features along the street needs to be improved to enhance the quality of the street.

6.6.5 Vitality

<u>Pedestrian Activity</u>

Table 6.2 and 6.3 show the result of pedestrian count during weekdays and weekends in three duration of time, as follows:

Weekdays Pedestrian Activity

Table 6.2

Number of people engaged along Pasar Baru Street in 8 different activities during the weekdays

Activity	Symbol	7-8 am (morning)	12-1pm (afternoon)	6-7 pm (evening)	Percentage
Standing	○	19	33	133	13.47%
Standing and Talking	●	2	52	45	7.21%
Sitting	□	16	106	52	12.6%
Sitting and Talking	■	8	23	39	5.1%
Walking	△	62	536	235	61%
Eating and Drinking	★	0	12	0	0.08%
Performing	⬟	0	0	0	0
Sleeping	⬬	0	0	0	0
Total Pedestrian		107	762	504	

Source: Pedestrian Count, 2014

Using the walk-by pedestrian count technique, 1,373 people were recorded to engage in various activities within three time measurement duration in a weekday. The pedestrian count shows that all street segments were used for various pedestrian activities. However, the result revealed that some parts of the street were better at supporting the activities than other parts of the street, for example, the last segment before the end gate of the street. Pedestrian count recorded that walking exhibited the highest activity along the street (61%), followed by standing (13.47%), and sitting (12.6%). Furthermore, pedestrian count also recorded social activities, such as standing and talking (7.21%) and sitting and talking activities (5.1%). Table 6.2 also shows the correlation of duration of time and pedestrian activity. Afternoon time was recorded as the peak time of the pedestrian activity (55.5%), followed by evening time (36.7%) and morning time (7.79%).

Weekend Pedestrian Activity

Table 6.3
Number of people engaged along Pasar Baru Street in 8 different activities during the weekends

Activity	Symbol	7-7.30 am (morning)	12-12.30 pm (noon time)	6-6.30 pm (evening)	Percentage
Standing	○	19	26	50	6.17%
Standing and Talking	●	2	62	63	8.25%
Sitting	□	16	94	82	12.5%
Sitting and Talking	■	8	20	48	4.93%
Walking	△	61	662	372	71%
Eating and Drinking	★	0	6	2	0.05%
Performing	⬟	0	0	0	0
Sleeping	⬭	0	0	0	0
Total Pedestrian		106	870	617	

Source: Pedestrian Count, 2014

Table 6.3 shows 1,539 people were engaged along Pasar Baru Street within three times duration of measurement in a weekend day. Walking again exhibited the highest activity (71%), followed by standing (6.17%), and sitting (12.5%). Meanwhile, social activities such as standing and talking (8.25%) and sitting and talking (4.93%) were also recorded. It reveals that the pattern of pedestrian activity during the weekdays and weekend time was similar. Walking exhibited the highest activity, while sitting and talking exhibited the lowest activity. In parallel, the pattern of pedestrian activity in different duration of time during the weekend is also in parallel to the result during the weekdays. Afternoon time was recorded as the peak time of the pedestrian activity (56.5%), followed by evening time (40%) and morning time (6.8%). It is interesting to note that performing and sleeping were absent in Pecinan Street at the time of the observation.
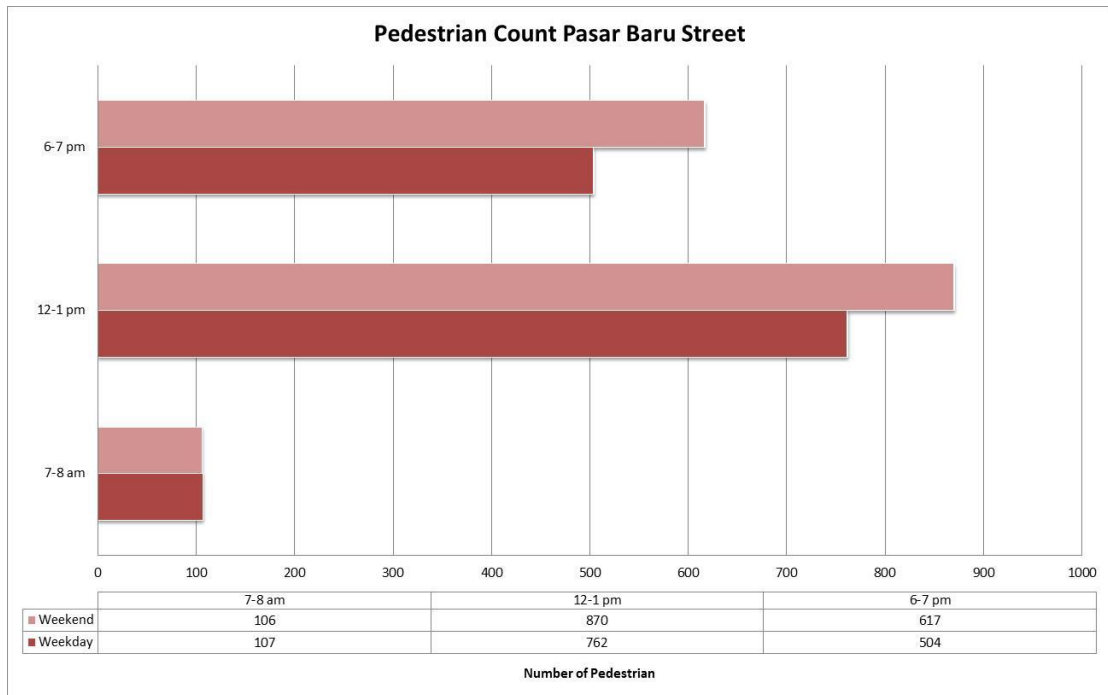
Figure 6.19 Number of Pedestrians along Pasar Baru Street during the weekday and the weekend
Source: Pedestrian Count, 2014

Figure 6.19 shows the comparison of number of people engaged along Pasar Baru Street during a weekday and a weekend. The result revealed that in the morning time the number of pedestrian was quite equal to 107 people during the weekday and 106 persons during the weekend. Meanwhile, in the afternoon and evening time, the number of pedestrians during the weekend was higher than during the weekday. Overall, it can be stated that during the weekend time, Pasar Baru Street was more vibrant compared to during the weekday.

Street Vendor Activity

Number of Street Vendor Pasar Baru Street

	7-8 am	12-1 pm	6-7 pm
Weekend	33	217	162
Weekday	33	167	216
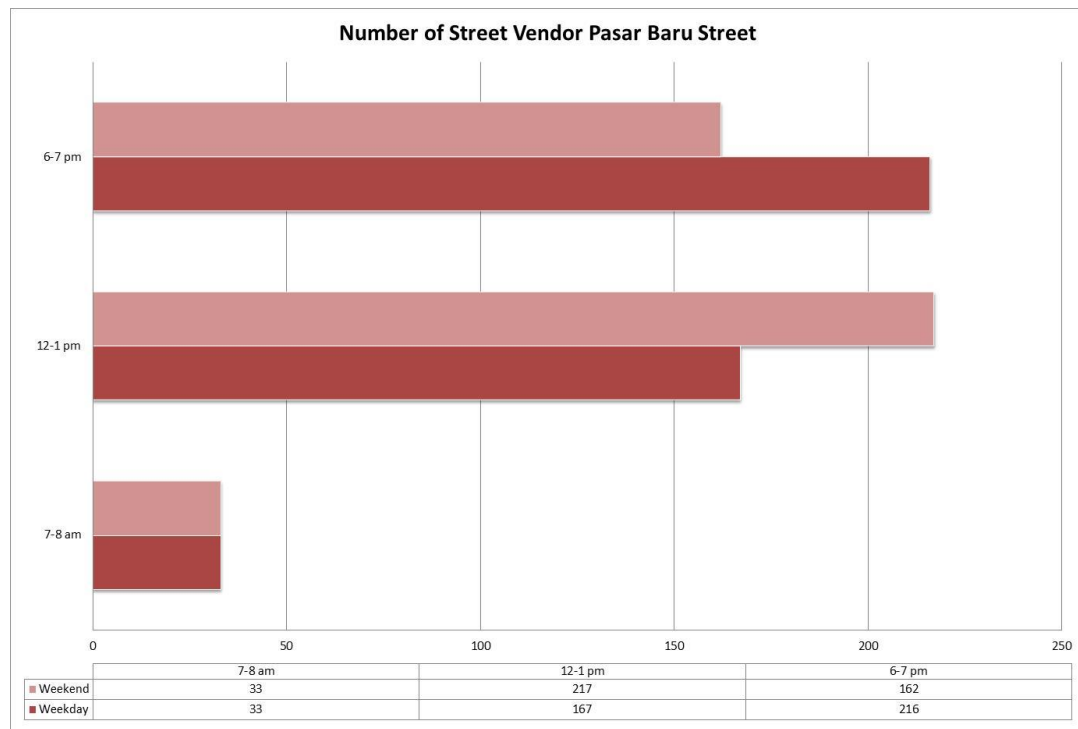
Figure 6.20 Number of Street Vendors along Pasar Baru Street during the weekday and the weekend
Source: Pedestrian Count, 2014

As part of the pedestrian activity, the existence of street vendors varied amongst the three durations of time. Figure 6.20 shows that during morning time, the number of street vendors in the weekday was similar to the weekend time. Meanwhile, in the duration 2, the number of street vendors during the weekend was fifty higher compared to the weekday. On the contrary, the number of street vendors during the weekday in the duration 3 was 54 higher than in the weekend. It can be stated that the number of street vendors was not always in parallel to the number of pedestrians since the number of pedestrians during the weekend was marginally lower than during the weekday.

The observation shows the diversity of street vendors along the street. Figure 6.21 indicates the map of street vendors and its variety which contribute to the liveliness of the street spaces.

Figure 6.21 Street Vendor Diversity of Pasar Baru
Sources: Observation, 2014

The street vendors along Pasar Baru Street have been mushrooming after the street pedestrianisation project in 1990s and followed by the presence of street canopy in 1995. They used part of the street space to trade and then associated sitting activities emerged as well. This development indicates improvement of the quality of facilities on the street as a trigger for social and optional public activities. It is in line with the study of Gehl (1987) who observed that when public space is of poor quality,- only strictly necessary activities occur; however, when public space is of higher quality, necessary activities take place with approximately the same frequency but people tend to spend longer time for doing them, but more importantly, a wide range of optional and social activities also occur.

<u>Uses and Behaviour</u>

Based on the analysis of pedestrian use and the behaviour of people visiting Pasar Baru Street, further graphics show the dynamic life of Pasar Baru Street as public space (see Figure 6.22 to Figure 6.27). These graphics record how people use the street for activities such as sitting, walking, gathering, vending, and so on. Overall findings indicate that the pedestrians prefer to have activities along Pasar Baru Street during the afternoon and evening time compared to the morning time.

Pedestrian activities in the morning time are mostly necessary activities, such as walking to work, waiting for the shop to open, vendors preparing, and so on. Meanwhile, during the afternoon time, the pedestrian activities are dominated by social and optional activities by shoppers visiting the stores and street vendors, and workers from nearby offices during their lunch break at some restaurants or food stalls. In the evening time, the pedestrian activities are mostly sightseeing and visiting to shops and street vendors, mostly by officers on duty from many regions of Indonesia shop some souvenirs of Jakarta, as mentioned in the interviews:

> '…so most of the costumer in this place are not local people [Jakartanese], but people from other region of Indonesia such as officers on duty from different region to central government [Jakarta], they shop here, looking for souvenirs, or tailoring formal suits from these tailors…'(PB-SV-008, In-depth interview, April, 2014)

There was no street performance recorded in the observation. It can be argued that the life in Pasar Baru Street depends upon shopping and related activities, such as street performances can attract more people to come and enjoy the street. Water feature in front of the street gate also seems to be un-optimally used to support the life of Pasar Baru Street. Moreover, the existence of Jakarta Concert Hall in front of the street which stages various art performances was not yet well-connected to the life of Pasar Baru Street.

The legend includes:
- ○ Standing
- ● Standing and Talking
- □ Sitting
- ■ Sitting and Talking
- △ Walking
- ▲ Walking and Talking
- ▨ Street Vendor
- ★ Eating/Drinking
- ⬠ Performing
- ⬭ Sleeping
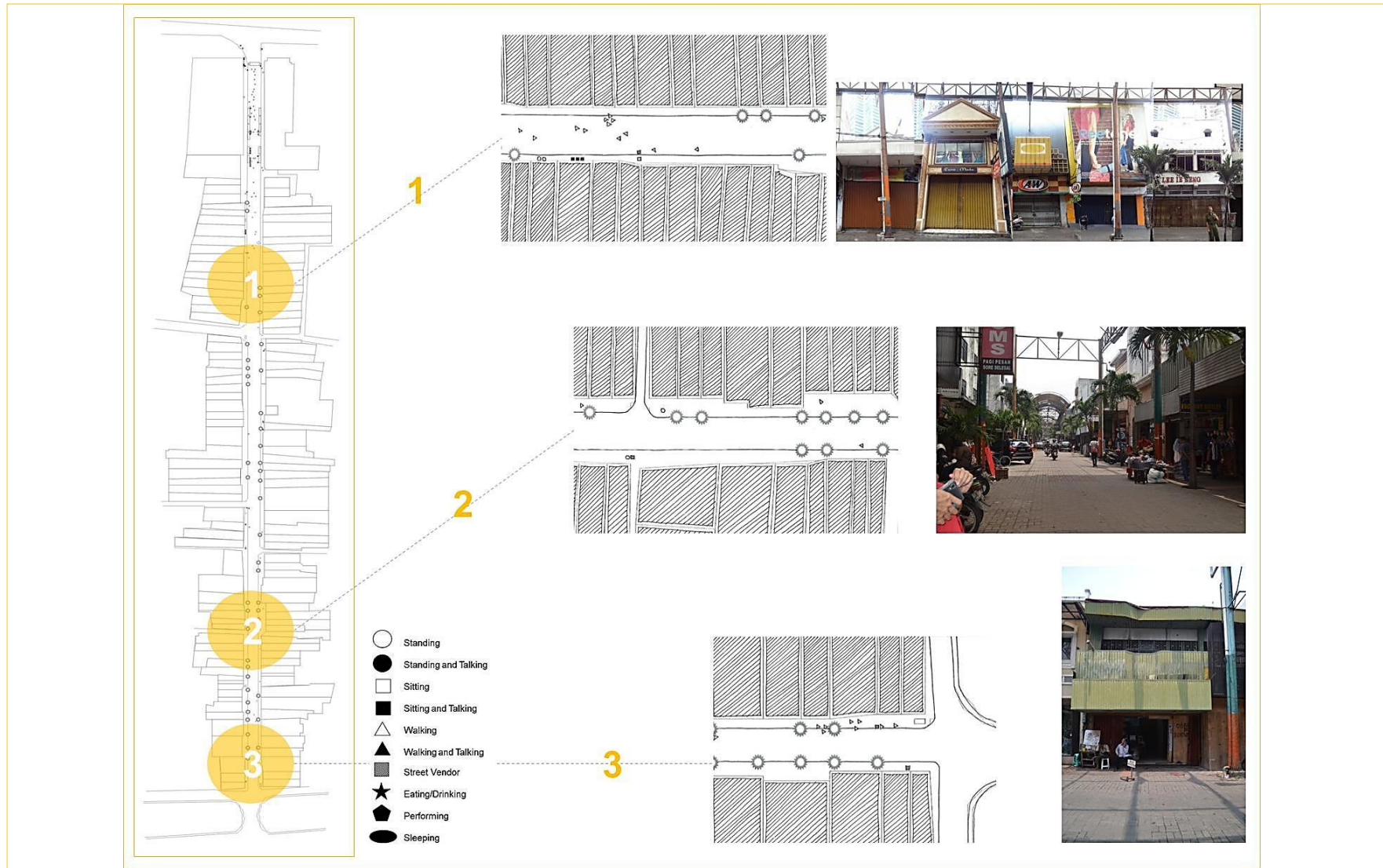
Figure 6.22 Pedestrian activities in Pasar Baru Street, weekday, morning time,7-9 am
Sources: Observation, 2014
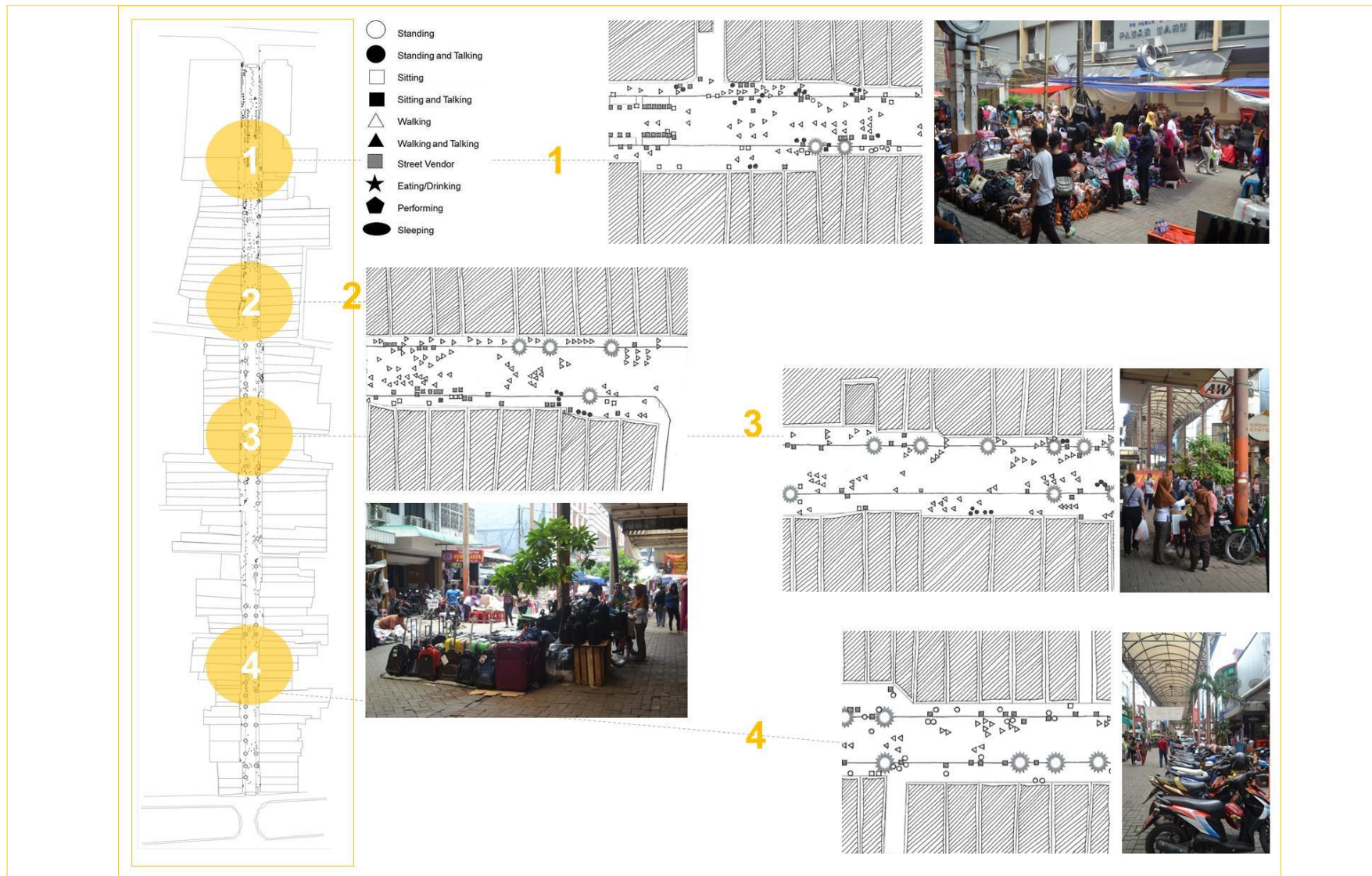
Figure 6.23 Pedestrian activities in Pasar Baru Street, weekday, noon time, 12-1 pm
Sources: Observation, 2014

Figure 6.24 Pedestrian activities in Pasar Baru Street, weekday, evening time, 6-7 pm
Sources: Observation, 2014
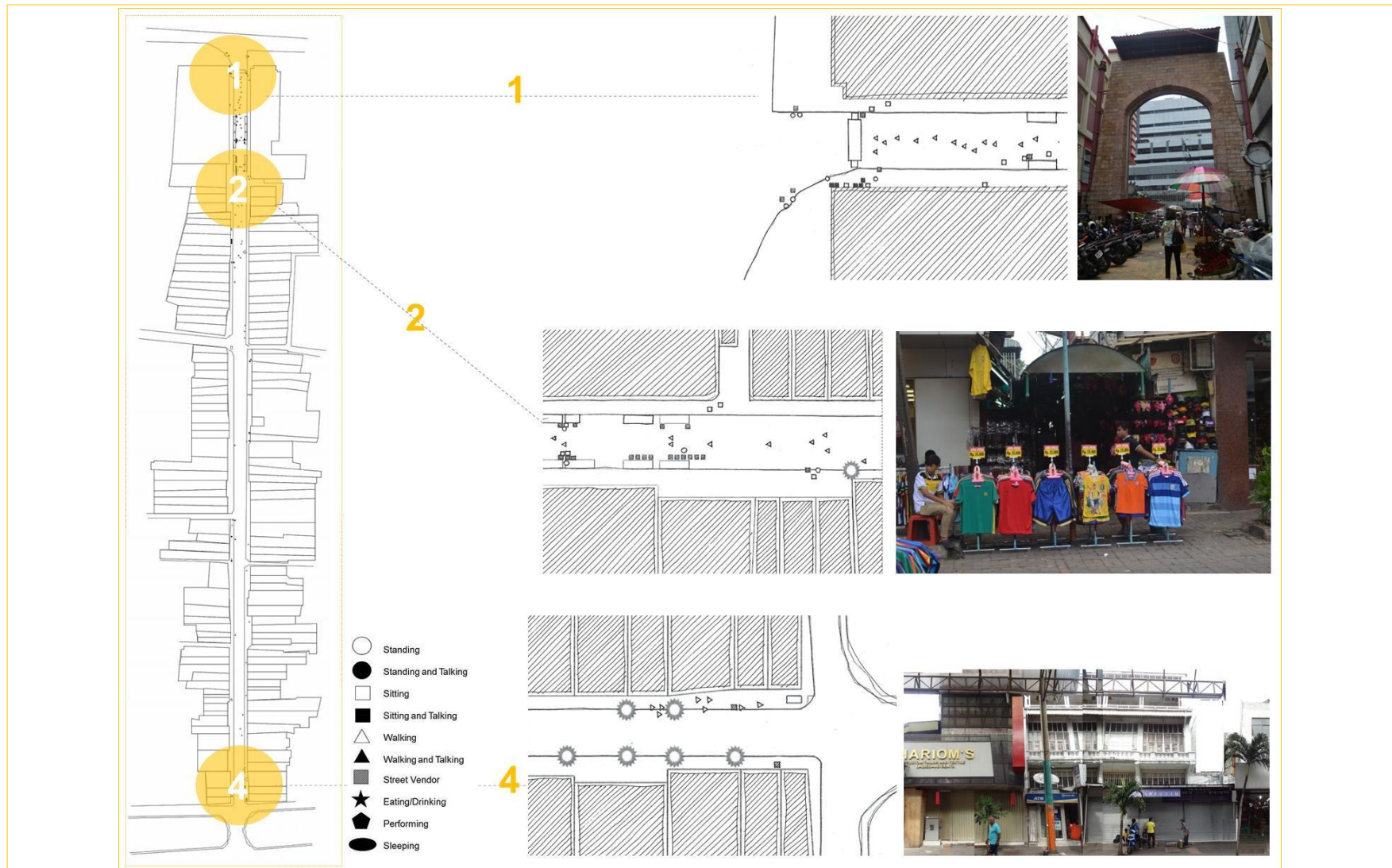
Figure 6.25 Pedestrian activities in Pasar Baru Street, weekend, morning time, 7-9 am
Sources: Observation, 2014

Figure 6.26 Pedestrian activities in Pasar Baru Street, weekend, noon time, 12-1 pm
Sources: Observation, 2014

Figure 6.27 Pedestrian activities in Pasar Baru Street, weekend, evening time, 6-7 pm
Sources: Observation, 2014

Legend:

- ○ Standing
- ● Standing and Talking
- □ Sitting
- ■ Sitting and Talking
- △ Walking
- ▲ Walking and Talking
- ▬ Street Vendor
- ★ Eating/Drinking
- ⬟ Performing
- ⬤ Sleeping

Meeting Points in Pasar Baru Street

Figure 6.28 Meeting points along Pasar Baru Street
Sources: Observation, 2014

Several places emergeas popular meeting points and 'third places' in Pasar Baru Street, as indicated in Figure 6.28. The places include:

Restaurants and street food stalls (street cafés)

Restaurants along Pasar Baru Street and its surroundings such as Bakmi Aboen and Bakmi Gang Kelinci play important roles as meeting points in this place. Instead of enjoying the 'Bakmi', speciality culinary of Pasar Baru Street, the shoppers also used the restaurants as meeting points with their friends/group, especially after being separated for shopping. Although the location of some restaurants were slightly deep in the alley, the popularity of the restaurants over a period of time and

the clarity of the signage, did not deter the visitors from finding them. In addition to the restaurants, the street food stalls also acted as meeting points. The shoppers would take a break after long walking or shopping, especially during hot sunny days. The beverage stalls selling coconut water, *Rujak*, juice, or other cold drinks tended to be full of visitors taking a break or having short conversations with friends or other visitors.

Street Gate

Both of the street gates located at the entrance and exit of Pasar Baru Street also serve as meeting points. Their strategic location, scale and physical appearance help to identify the two gates as meeting points. Indeed, shop workers at the end of their shift often waited there to be picked up or wait for public transport to get home (see Figure 6.28).

Street Intersection

As a street node, the street intersection also plays a role as a meeting point in Pasar Baru Street especially the Kelinci Alley intersection. In this intersection, a security post was erected to ensure safety along the street. Some security guards were always stand-by especially during the peak times. The presence of the security post also invited shoppers to use it as an easily identifiable meeting point (see Figure 6.28).

6.6.6 Adaptability

The adaptability of Pasar Baru Street is discussed under three main points: adaptability and the changes of physical and retail use, chain-retail versus independent shops, and political adaptability and endurance of the businesses.

Adaptability and the Changes of Physical and Retail Use

Morphologically, the plot pattern in Pasar Baru Street is small individual plots with shared walls (see section 6.5.2). One of the visitors (PB-VIS-005) commented and captured the attempt to change the scale from a small-scale retail street, which has existed since its establishment in 1820, to a large-scale retail street:

'But I noticed that now there are many new Shopping Malls in Pasar Baru Street, more stores now get in turn into Malls,...' (PB-VIS-005, In-depth Interviews, April, 2014)

The observation noticed the changes of land use that could slowly change the street patterns from small blocks into superblock street pattern; for instance, two lots merge into one, thereby creating bigger space, with more storeys and a new architectural style (modern/contemporary style).

Figure 6.29 Some of the lots that have amalgamate into bigger lots (lots merger)
Sources: Observation, 2014

However, the observation also showed the *vice-versa* constellation when some retail units were divided into several commercial functions as found in the Saung Bambu restaurant lot. In this lot, there were several shared functions, owned by siblings (a toy Shop in the front and the Saung Bambu restaurant at the back). The lot was inherited from their parents as a shared ownership, and now they also rented a front space upstairs to a tenant of Beauty SPA. The back side of the lot continued to function as dwelling for the Saung Bambu restaurant family (see Figure 6.30). The changes of space functions as shown in this case presented an example of the adaptability of the space as a result of ownership and socio-economic changes. Thus, the lot was adapted as 'shared space'.
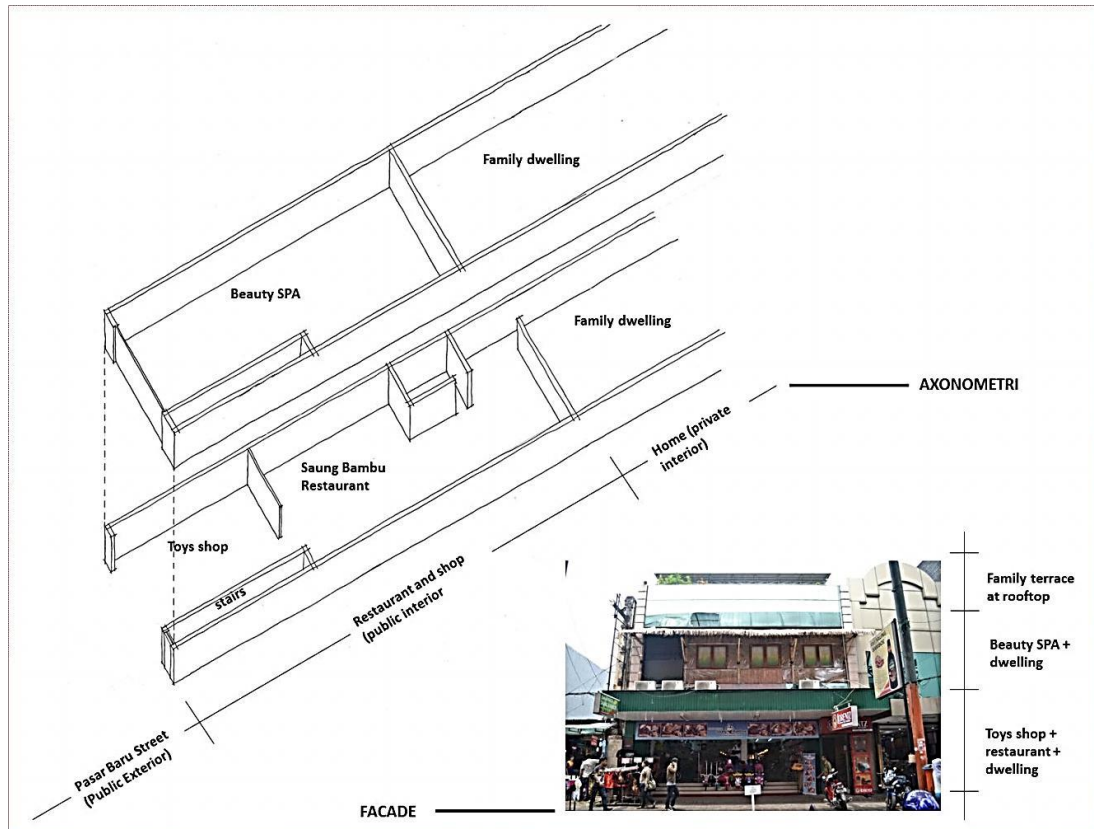
Figure 6.30 The sub-division of spaces in a lot (Sources: Observation, 2014)

Chain-retails versus independent shops

The shops of Pasar Baru Street were individually/family owned with diverse ethnic backgrounds. Every family or community group traditionally had their own merchandise speciality. The Chinese community, for example, are famous as the merchants for watches and jewellery, shoes and bags, and also fashion. For example, *Sapie Ie*, a Chinese shoemaker was famous for the quality of shoes for the military, parties, and high heeled shoes for Dutch high officials during the colonial era (Setiati et al., 2009). Meanwhile, the Indian and Pakistani community are famous for their speciality as textile merchants imported from their home country (especially India), high quality of tailors, and sport equipment traders. Some examples of these textile merchants include Bombay Textile, Maharaja Textile, Hiro Textile, and Istana Textile. The tailors offer tailoring services for suits, trousers, and dresses at reasonable prices and some examples include the Isardas tailor, now owned by the third generation of the Isarda family, Sri Vishnu Tailor, and Harlom tailor (Kurnia, 2011).

This demonstrates the 'uniqueness' of local shops with certain expertise and services oriented by the shop owners. In addition, some products are handmade such as shoes and fashions. However, their existence is now being challenged by large-scale economic powers represented by national/international chain retailers. Apparently, Pasar Baru is the birthplace of a big and well-known chain department store in Indonesia called 'Matahari Department Store' in 1958. It was once called 'de Son' (the Sun in Dutch) which was later renamed 'Matahari' (the Sun in Indonesian). Matahari is one of the pioneer chain-department store in Indonesia and there are now 127 stores all over the country (Matahari, 2015). This also shows Pasar Baru Street's position as a prominent and pioneering shopping centre, not only in Jakarta but in the Indonesian context. In Pasar Baru alone, there are now four new shopping malls apart from the Matahari Department Store, i.e., the Ramayana Department Store, Pasar Baru Square, Metro Pasar Baru, and Metro Mall with a contemporary architectural style (see Figure 6.29). The last two are managed by PD Pasar Jaya, a municipal-owned enterprise. These four shopping malls have bigger space and some of them are more than 4 stories in height. Apart from the shopping malls, there are also now a number of national/international chain retail shops, such as Bata Shoes, Polo T-Shirt, A&W restaurant, Optik Seis, and Bucherri shoes utilising single rented shop.

The transformation of the retail use in Pasar Baru Street might link to the changing demands of the customers in the present day and this has also enabled Pasar Baru to maintain its position as one of the famous shopping centres in Jakarta. In fact, there are many new shopping malls being built in Jakarta that allow the customers to buy branded and more sophisticated national and international products. However, this change may result negatively to the identity of Pasar Baru, which was formed over a period of time, as captured in the interview comments:

> '…and then I think, what is the difference between Pasar Baru Street and other shopping malls now? It is better to bring back to the past, let the usual [independent] shops, so there is a distinct character.' (PB-VIS-005, In-depth Interviews, April, 2014)

The interviews with the municipal government revealed that there is a lack of proper regulation or guidelines regarding the new development in a historical area and the conservation effort including for Pasar Baru Street:

'…we have no regulation so far for the redevelopment and conservation of Pasar Baru Street, the last street improvement was the project of pedestrianising the Pasar Baru Street in 1990s, after that, we have no effort yet…'(PB-GOV-002, In-depth Interviews, April, 2014)

Political adaptability and endurance of the businesses

During the New-Order era (1968-1998), the government prohibited the performance of Chinese culture and the use of Chinese names in public including for shop names due to political reasons. Many shoes and bags shops, therefore, used foreign city and country names, such as Canada, Italy, Toronto, Holland, and Milano for their shops for the sake of 'popularity' or showing the 'modernity of the shops', since imported or international brands were often seen as having better quality than the local brands. This might be the reason for choosing western names for their shops (Kurnia, 2011). It also showed the adaptability of the Chinese shop owners to the government regulations to sustain their business. However, after the reform era (1998-present) some shops returned back to their original Chinese names such as the *Sing Lie Seng* and the *Tjung Tjung* shops to get back their loyal customers. The shop owners are also aware of the customer's trust for their brand, which is already well known for their quality for longer period of time, as many older Jakartans will remember Pasar Baru as the place to shop during their childhood (Post, 1999).

6.6.7 Creativity

Creativity indicators are discussed under four themes: cultural activity and facilities; street festivals and creativity; cuisine and ethnic diaspora; and special skills and creativity.

Cultural Activity and Facilities

Figure 6.31 Cultural Facilities around Pasar Baru Street a) Jakarta Concert Hall, b) Painting Stalls, c) Antara Gallery and Café (Sources: Observation, 2014)

'Cultural venues can act as a catalyst for both urban activities and investment through attracting people to come and use the facilities surroundings' (Wansborough and Mageean, 2000: 184). Through history, the 'hard' infrastructure that facilitates the creative activity in Pasar Baru and surroundings ranges from theatres, an art gallery, cafés, and a concert hall. Since the 1920s, there have been several theatres showing films especially from abroad (Hollywood and Bollywood); the theatres established in this place included *Schawtz Bioskop, Globe Bioskop, Capitol Bioskop, Elite Bioskop,* and *Satria (Astoria) Bioskop*. However, since the 2000s, there have been some new cinemas, such as *XXI Cineplex* and *Megablitz cinema* open in shopping malls nearby, and as a result, one by one, the theatres in Pasar Baru have closed down.

As mentioned in Section 6.3, in 1821 the Dutch built a concert hall in front of Pasar Baru Street to replace a theatre built with non-permanent materials during the British Colonial Era (1811-1815). Schowburg, now known as the Jakarta Concert Hall, offers concerts and other kinds of entertainment, played by local actors or actresses and travelling players. During the colonial era, *'…the performances were always popular such as Miss Tjitjih show'* (Hanna, 1988: 211). Nowadays, there are various kinds of performances held in this building, which is now owned by the municipal government.

The other cultural facility near Pasar Baru Street is Antara Building. It is a heritage building that used to play an important role as a radio station during WWII. Nowadays, the Antara building still serves as a radio station and the news agency owned by the central government. Some parts of the Antara Building are also now

used as a photograph and archive gallery. The gallery features the history of Pasar Baru Street and its surroundings during the colonial and the era of the struggle for independence (1942-1945). It also has a café and art gallery that have become integral part of socio-cultural life of Pasar Baru.

Street Festival and Creativity

Figure 6.32 Street Festivals in Pasar Baru Street (Source: jakarta-panduanwisata.com, metronews, viva.co.id, antarafoto.com, accessed in 02/10/2014)

As a source of creativity, some street cultural festivals through history wwere held annually at Pasar Baru Street, such as Sinterklasfeest, celebration of St Nicholas on December 5th every year with the tradition of exchanging gifts amongst people living in Pasar Baru, and Dutch Queen Wilhelmina's Birthday on August 31 enlivened by children's musical performances from schools and local art so-called Tanjidor, and Cap Go Meh on the 15th day of the Chinese New Year which was noted as the most exuberant celebration of all.

The Peh Cun Celebration was traditionally held every fifth day of fifth month on Chinese calendar. During this event, there was a glorious Dragon boat race of a leafy bamboo stick tied with a handkerchief with a pack of opium in it (Setiati et al., 2009). In the present day, The Chinese New Year and Cap Go Meh still exist and are held annually in this place. In addition, the Jakarta Municipal Government has initiated the Passer Baroe Festival since the 1990s; this is held on the 22nd June each year to commemorate Jakarta's birthday. This is celebrated with exhibitions, parades, music performances, culinary festivals, sailing boat competitions, and a Great Sale in every shop along Pasar Baru Street (DKI Jakarta, 2012). However, the promotion of the Pasar Baru festival still needs to be optimised as captured in the interviews:

> '…the promotion of the Pasar Baru Festival is minimal; I don't know why, the public notice when there is a festival after a few days…such a pity…' (PB-RES-001, In-depth Interviews, April, 2014)

Cuisine and Ethnic Diaspora

The creativity potential of Pasar Baru Street also emerges as a result of diversity of the ethnic groups living in Pasar Baru Street and its surroundings. It is seen from the diaspora of food or culinary culture, for example the Chinese and Indian cuisine, which has adapted to local taste. *Bakmi Aboen* and *Bakmi Kelinci* are some famous examples of Chinese-Indonesian restaurants established in this place, and also some Indian restaurants at the Pintu Air Street at the left side of the street. Tropic Restaurant is one of the old restaurants established in the 1950s, and serves hybrid Chinese-European-Indonesian dishes (Kurnia, 2011). The diversity of street food also strengthens the position of Pasar Baru as one of the culinary centres of Jakarta. Local street foods such as *Kue Pancong, Kerak Telor, Kue Ape*, and also a famous street food called *Martabak* examples of hybrid street foods from the Indian community living in this area. Indeed, the Pasar Baru cuisine as a product of the cultural hybrid that exists in this place has a significant creativity potential to enhance the economy of the place as well as to boost place identity.

<u>Special Skills and Creativity</u>

Since its establishment, there have been well known, special skills associated with community in Pasar Baru, such as the Chinese as shoe makers and the Indians as tailors (see adaptability indicator, Section 6.6.6). These authentic special skills can also become a potential to demonstrate the street creativity. However, these special skills have begun to decline in prominence or have even vanished in recent years. For example, the Chinese shoe shops are no longer making their own products but selling shoes from other factories especially imported brands. In contrast, the Indian tailors, who are now in their third generation, continue to conserve their skills; however, their prominence has also started to decline. This might link to the availability of ready-to-wear clothes in many other shopping areas, and as such the old fashion of the tailor, and also the high prices compared to the mass or ready-to-wear clothes, have led to diminished popularity amongst customers. The special skills potential of Pasar Baru Street should be maintained and safeguarded through innovation, as Landry (2000: 13) argues that '*creativity is a necessary precondition for innovation, but innovation is what counts in maximising the potential of a city*'.

6.6.8 Form and Visual Quality

The form and visual richness indicator is discussed in five main points: street scale and proportion, building height and composition, architectural diversity, floorscape, shop signs and cultural identity.

Street Scale and Proportion
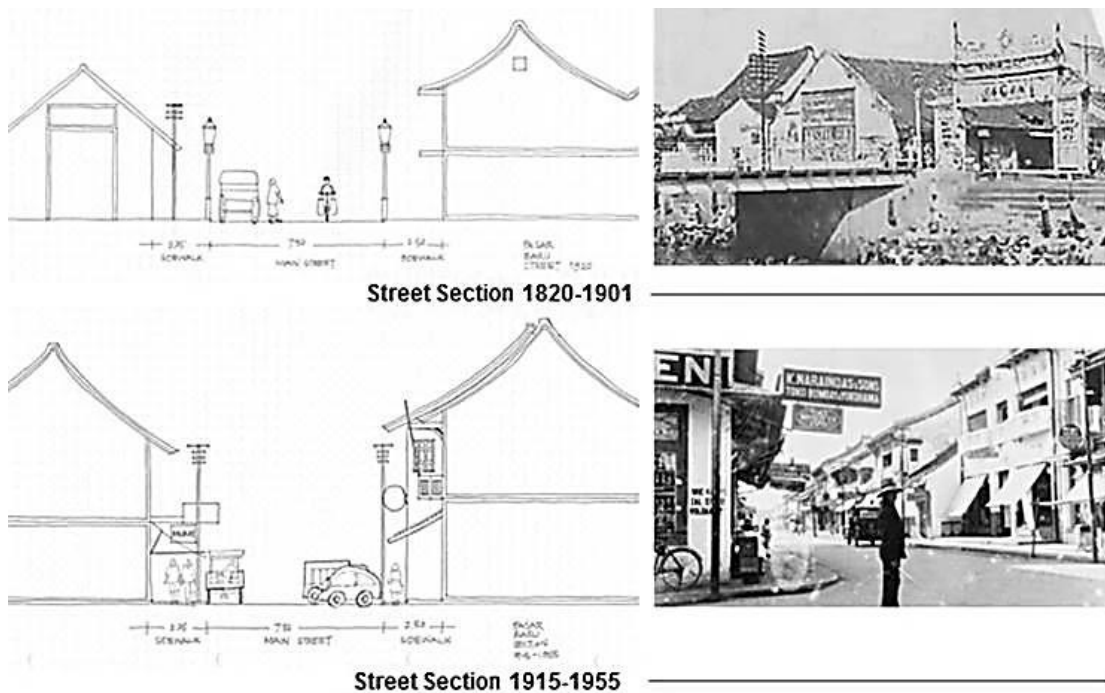
Figure 6.33 Pasar Baru Street Section, 1820-1955 (Sources: Author redrawn 2014 adapted from 1901 and 1915-1955 pictures, http://collectie.tropenmuseum.nl accessed in 10/6/2014)

'The ratio of width of street to height of enclosing buildings is critical for good street design' (Moughtin, 1992: 141). The proportions of Pasar Baru Street have been transforming over time. At the beginning of its formation, most of the buildings were one or two storeys in height, creating a Distance/Height (D/H) ratio of approximately 2:1. In the first half of 20th century, the shop houses along Pasar Baru Street began to raise building heights in parallel to the expanding economic activity in the street as it became one of the most bustling shopping centres in the city. The comparison between D/H then became smaller at 1.3:1 to 1.5:1, and furthermore nowadays some parts of the street D/H had reached 0.5:1.
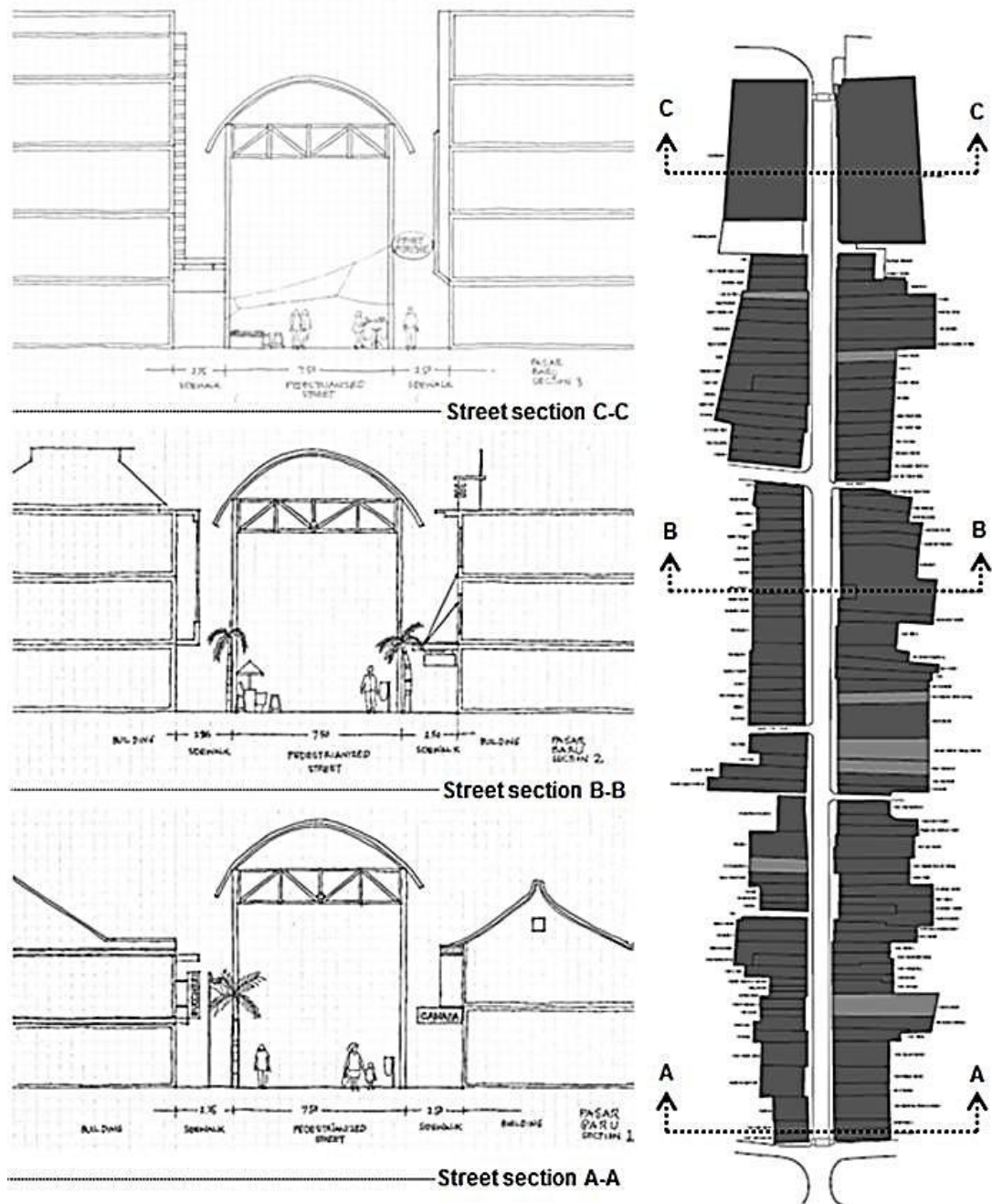
Figure 6.34 Pasar Baru Street Section 2014
Sources: Observation, 2014

On the next period when the D/H = 1.3 - 1.5, the height of the street wall was closer to the width, this significantly increased the sense of enclosure along the street. Nowadays, the proportion of Pasar Baru Street is narrower. The street section shows that D/H is less than 1, even at some points it can reach 0.5. This proportion could be considered similar to the proportion of the Medieval towns and cities of Italy, where the street becomes very narrow, grows more crowded and

cramped (Ashihara, 1979) but plays an important role as vibrant public space and other social purposes.

Building Height Composition
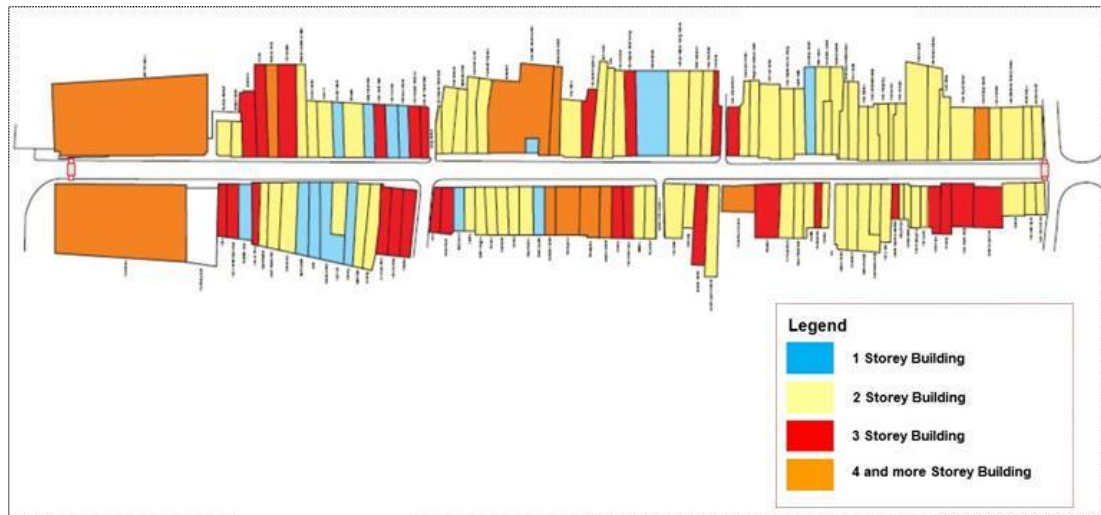
Figure 6.35 Building Height Compositions in Pasar Baru Street (Source: Observation, 2014)

The visual observations identified that the building height composition in Pasar Baru Street varies from single storey buildings up to four and more storeys with composition, i.e., one storey buildings account for 10.23%, two storey buildings 58.26%, three storey buildings 22.04%, and four and more storey buildings 9.44%. Figure 6.35 shows that some of buildings that are four storeys high or more are large in size, more likely to be a result of an amalgamation of several lots.

Architectural Diversity

The façade designs along Pasar Baru Street are dominated by a modern style, with only a few buildings still retaining their original style. However, the transformation into a modern façade does not always permanently change all of the whole elements, with many of them only covering the façade by adding new elements such as zinc and glass to give a new look with a 'modern style'. Some of the buildings that still retain their original façade design are Kompak Shop, Suryo Textile Shop, Batik Surya Putih Shop, Lee Ie Seng Shop (no 5, Figure 6.36), Taner Textiles, Pasar Baru 37 Shop, 70 Shop and also the Jamu Nyonya Meneer Shop.

Meanwhile some buildings that still retain their original façade but have covered it with additional materials, include the Ramayana Photo Shop (no 4, Figure 6.36), Bata Shop, Tjung Tjung Shop, and the Cantik Textile Shop. The rest now have modern façade design as shown in Figure 6.36.
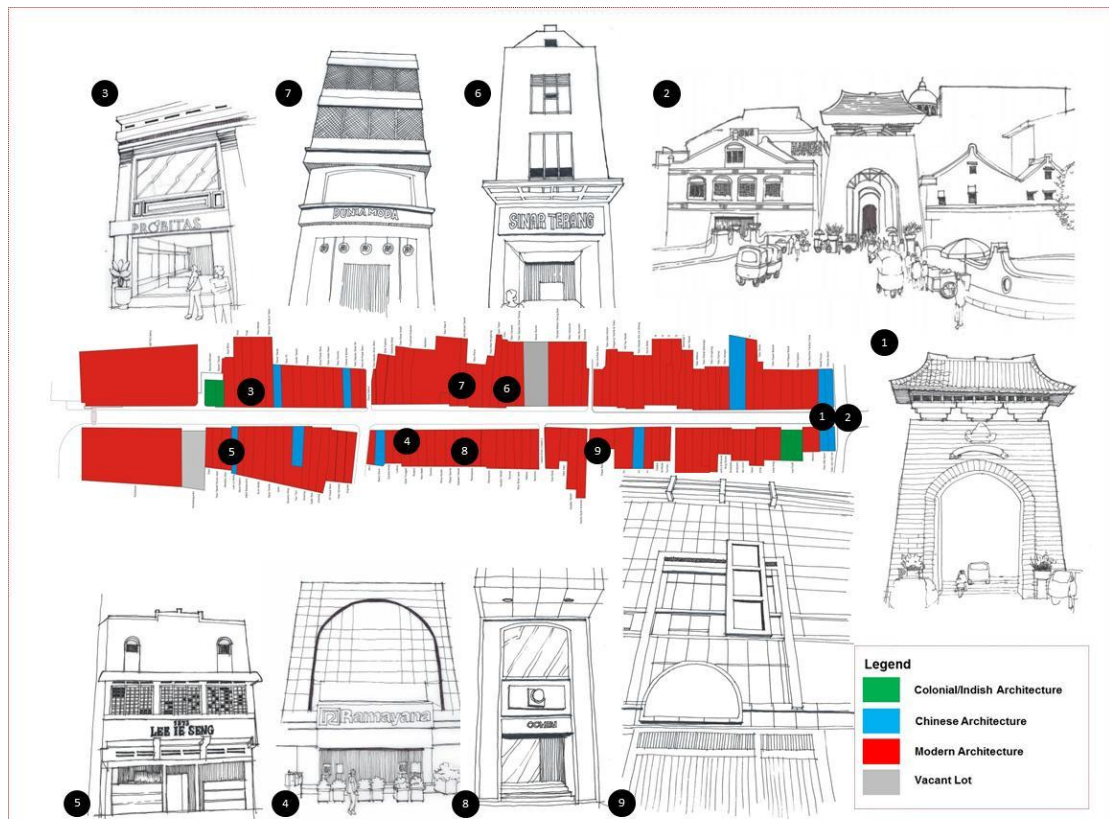
Figure 6.36 Façade Design of Pasar Baru Street (Sources: Observation, 2014)

Speaking of today's façade designs, some interview respondents commented on their desire to see the original façades retained:

'So maybe when I say, I do not pay any attention to the façade, because it was covered by the billboard. In fact, if it can be arranged, then the façade will be more visible to public.' (PB-VIS-004, In-depth Interviews, April, 2014)

'…[façade design] already covered by billboards anyway, so it is not pretty anymore, but if [we] look at the old the photographs, it was once great. Suppose in a heritage building, billboard should not cover the façade. Should be, [I] just don't get it why [it happens].' (PB-GOV-002, In-depth Interviews, April, 2014)

'…[original façade] has gone, but it depends on the concept [of urban regeneration], if the [new] Gate resembles old buildings, then the [original] façade should be maintained.' (PB-GOV-003, In-depth Interviews, February, 2014)

'So we still maintain the existing façade, there is the traditional Saung Bambu if you see, it is right in front, still retaining its uniqueness, we won't change it…' (PB-RES-001, In-depth Interviews, February, 2014)

Floorscape

Figure 6.37 Pavements of Pasar Baru Street (Sources: Observation, 2014)

In streets, floorscape patterns can '*reinforce the linear character of space, by emphasising its character as 'path', by providing a sense of direction, by checking the flow of space or by suggesting a feeling of repose*' (Carmona et al., 2010: 195). At the beginning of its formation, Pasar Baru Street's floorscape consisted of three lanes, the left lane being the pavement, the middle being the main street mainly for vehicles, and the right lane being for another pavement. The proportions between the three lanes were as follows: pavement (2.25m), main street (7.5m), and pavement (2.5m) = 1:3:1. These dimensions and configurations of Pasar Baru Street remained until 1990 when the shop owners along the street attempted to revitalise a declining Pasar Baru by closing or restricting the street space to traffic and constructing a pedestrian mall. The implementation of this concept started in 1990 and got a good reaction from the public in general. Visitors felt safer and walking was easier and more enjoyable with the entire street becoming fully pedestrianised with colourful ceramic tiles.

This revitalisation programme continued with support from the Central Jakarta Municipal Council in 1995 with the installation of a canopy along the street (Susanti, 2001). This created an arcaded pedestrianised street that enhanced the environmental comfort on the street. This generated greater opportunity to

enhance public life along the street and to help deal with Jakarta's hot weather, high humidity, and high rainfall.

In 1998, not so long after the national regime change from the New Order to the Reform Era, the shop owners with a project funded by the Jakarta City Council built two new gates, displaying emblems of Chinese identity at either side of the street entrance (Kurnia, 2011). The floorscape material was also renovated from colourful ceramics into a grey concrete block pavement. Moreover, street amenities, such as palm plants, street lights, and litter bins were also installed to enhance the quality of the street.

Shop Signs and Cultural Identity

Figure 6.38 Shop signs and cultural identity (Source: Observation, 2014)

The ethnic and cultural differences of shop owners are not only distinguished by the speciality of the shop's products, but also the specific appearance of shop

signs. Figure 6.38 shows that the shop signs are used to advertise and at the same time act as a cultural expression of the owners. Indeed, they tend to show the identity of the owners as well as the well-known quality of the shop's products to prospective customers.

6.6.9 Transparency and Active Frontage

Figure 6.39 Active and Interactive Frontages along Pasar Baru Street a) Probitas Restaurant, b) Ramayana Store, c) Pasar Baru 71 Shop (Source: Observation, 2014)

Nowadays, almost all of buildings along Pasar Baru Street can be regarded as having active and interactive frontages, which refer to the relationship between the ground-floor uses of the buildings that frame a space or a street and the people walking through (Roberts and Greed, 2001). The degree of relationship between the ground floor uses and pedestrians of each building is varying. Indeed, some buildings use transparent materials to separate the outside and inside space, but are still visually permeable, as seen on the Restaurant Probitas building. However, most of buildings along Pasar Baru are open without any 'barrier' materials, as seen in Ramayana and Pasar Baru 71 shop. Moreover, as seen in Figure 6.39, some merchandise spills out into the street, so that the pedestrians can directly view and select merchandise outside the stores. Sometimes on a Saturday night, one or two of the Ramayana store staff members will hold a microphone and stand outside to

invite pedestrians into their shop. The evidence shows that active frontage could add interest, life and vitality of such urban space (Carmona et al., 2010).

Figure 6.40 Active and Interactive Frontages along Pasar Baru Street a) 1909, b) N/A, c) 1935, d) 1955 Source: http://collectie.tropenmuseum.nl, accessed June 2014

Through old pictures (see Figure 6.40), it can be seen the degree of active frontage in the olden days when wooden doors and windows were the main elements of the building frontages. In fact, almost all of the buildings used curtains as sunshades to reduce solar radiation within the buildings. However, active and interactive frontage of the shops can be strongly perceived, especially while walking along the pavements. The number of openings through doors and windows brings the private sphere into the public eyes. It is in line with the argument of Carmona et al. (2010: 215) that *'the number of doors/entrances with activity directly visible from public space is a good indicator of potential street life and activity: the greater the intensity, the greater the potential'*.

6.6.10 Safety

The safety indicator is discussed under three points: crime and street pattern; street thug phenomenon; and fire and historical buildings:

Crime and Street Pattern

Significantly, during the observations and in-depth interviews no one noted that crime happened along Pasar Baru Street. In addition, visual observation showed that in general Pasar Baru Street could likely be regarded as a safe street. This is in parallel to Hillier (2004) who suggests that there is a very strong correlation between the type and layout of all kinds of crime, and that traditional street patterns are the best as opposed to 'modern' hierarchical layouts. The buildings along Pasar Baru Street, for example, are attached to one another to restrict any kind of secondary access, and the public space is therefore continuously 'constituted' by building entrances and linear in nature. However, there was an emerging issue regarding the safety of pedestrians because of passing vehicles. Since the area was designated as a fully-pedestrianised street, motorised vehicles were no longer allowed to enter Pasar Baru street corridor. However, lately Pasar Baru Street has become a one-way street not only for pedestrians but also for cars and motorcycles. Moreover, some parts of the pavements were also being used as on-street parking areas. This situation was addressed by some of the respondents in the in-depth interviews; indeed, all of them deeply regretted this situation and felt less safe when walking in the street, due to fear of the sudden passing of vehicles behind them:

> 'But now a lot of cars parked haphazardly so, even cars also entered [the street], so right, this is hell. **We're so insecure**, so weird; you know why there is a car? [It is] not consistent.' (PB-GOV-002, In-depth interviews, April, 2014).

The fully-pedestrianised street concept was also questioned by another respondent, by comparing it to streets in other countries. The condition of Pasar Baru Street today was disappointing, and not in line with her expectations. She said:

'[Before visiting Pasar Baru Street] **I imagined streets of Rotterdam, where streets are really a fully pedestrianized,** I was thinking that Pasar Baru Street was going to follow that concept, maybe once this place was a real pedestrianized street, and now I hope to have it, that is why **I was disappointed** when visit it today, why it is like this [motorized vehicle can enter the street].' (PB-GOV-003, In-depth interviews, February, 2014)

Street Thug Phenomenon

Another safety issue in Pasar Baru Street was the emerging phenomenon of street 'thugs' or Preman (*Vrijman* in Dutch that refers to Freemen, people who are make living by blackmailing others, especially in the street). They are a group of people who play roles to arrange pavement space for the street vendors who want to trade. The interviews revealed how the Preman asked money to the street vendor monthly as 'tax' for vending in the street, as follows:

'Q : Are you open your stall only at night?
A : No, I can trade at noon time, I asked permission from the security (Satpol PP), they are members of FBR [Forum Betawi Rempug, an organization of Betawi tribe, a native Jakartanese, but people often identify them as *Preman*/thugs] people. They are *Preman*, they have no legal permission, they supposed to have one, so that they have legal stand
Q : If you do not ask their permission, so you cannot open your stall?
A : No way, so we give some money, **we pay them**
Q : So you do not rent from the shop owner instead?
A : No.

(PB-SV-009, In-depth interviews, April, 2014)

Another respondent, a shop owner even felt scared of the Preman, although she is legally the owner of the shop, as expressed clearly in her statements:

'Here we are, there is no data collection of street vendors. Like I said, we do not mind [for them to trade], they also want to make a living, but if it is coordinated, it is better. No one coordinates, every thug group has their leaders, **they [street vendor] have to meet them [thug leader] if they want to open a stall**. I don't know. If we ask them to **pay the rent**, they pay, it is about 1.5 million rupiahs per month, it is expensive.' (PB-RES-001, In-depth interviews, February 2014)

The phenomenon of Preman in Indonesian cities has been growing during the hard economic times and high unemployment (especially during the monetary crisis in 1997-1998). In these conditions, a group of working-age people finding ways to earn money through extortion usually in the form of the provision of services which actually are not needed (Wingarta, 2012). For instance, Preman at the bus terminal

illegally charge the drivers, and if rejected, they will harm the safety of both vehicle and the driver. Other example occurred in Pasar Baru Street; they picked up extortion of street vendors, and if rejected, they would disturb the existence of the stalls or the street vendors and thus they are no longer allowed to sell in the place.

Fire and Heritage Buildings

Fire safety, especially in the heritage buildings also became the concern in the interviews. It seems that that the old buildings are susceptible to fire because of the materials that have weathered, deteriorated, and also due to poor electrical fittings and supply. A recent fire event was recorded on the 8th January, 2013 when there were five old buildings on fire: Sinar Terang Shoe Shop, Saung Bambu Restaurant, Rimo Dept Store, Canada Shoe Shop, and Apin Tailor (Sholeh, 2013). One of the interview respondents, the owner of Saung Bambu Restaurant was the victim of this fire; she described the condition during the night of fire as follows:

'The fire was because, the building exactly next to us was an old building, vacant, then the security-guard was "mischievous", he rent it to street vendors, they carelessly used the electrical connection. Eventually short-circuit and fire occured. It was at night, no one knew, people just realized when the flame was up. The old building directly collapsed then the fire widened to the next buildings. Nobody took responsibility from this event...' (PB-RES-001, In-depth interviews, February 2014)

Figure 6.41 Fire in buildings of Pasar Baru Street on the 8th January 2013
Source: www.metrotvnews.com, accessed in June 2014

As irreplaceable structures, the protection of heritage buildings especially from fire is urgently needed and requires a more comprehensive approach for their vulnerability and significant values. A series of principles for heritage risk management including *disaster planning for a cultural heritage, disaster*

preparedness and mitigation strategy inventory of heritage building, maintenance, aftermath conservation (Taboroff, 2000: 75) needs to be prepared and applied not only for fire, but also for other disasters, including natural disaster, as Indonesia is prone to natural disasters such as earthquake, flood, and volcano eruption.

6.6.11 Imageability

The imageability indicator is discussed under two themes: Pasar Baru Street image in the eyes of a traveller during the colonial era and Pasar Baru Street image in user's perception as the result of the interviews.

<u>Pasar Baru Street image in the eyes of a traveller during the colonial era</u>

The image of Pasar Baru Street was firstly perceived by H.W. Ponder in his book *Java Pageant: Impressions of the 1930s*, which he described as follows:

> 'It is usually the first place to be visited by strangers, who, lured by descriptions of it as the Chinese shopping quarter, expect to find it a glorious vista of perpendicular ideographic signs something like Nankin Road at Shanghai. But to their surprise, and often disappointment, they find sober shop-fronts, quite quasi-European in character; for the Pasar Baroe is less Chinese in outward appearance than the streets of any country town in Java…' (Ponder, 1935: 29)

As perceived by Ponder (1935), Pasar Baru Street is '…*the first place to be visited by strangers'* in Jakarta showing the popularity of Pasar Baru Street in the 1930s. Nevertheless, there is a different perception of most people during that time who perceived Pasar Baru Street as a *'Chinese shopping quarter'* with the experience of Ponder, who described it as more *'quasi-European'* in character, and even *'less Chinese'*. Ponder also suggested that Pasar Baru Street is more like a street in *'a western town of white people'* as he described in the following statements:

> 'It is a long, straight, narrow street, with nothing more individual in its appearance than there is in that of Bond Street, and it is crowded at all hours of the day. It is the only street in Weltevreden whose **pavements are as full as those of a Western town of white (or approximately white) people**, and those **people** are almost as entertaining as the **shops** themselves' (Ponder, 1935: 29)

Signage, buildings/shops, shop-fronts, architectural style, and pavements were street characteristics that were first perceived by Ponder. In addition, he also mentioned 'people' as being a memorable feature as well.

Figure 6.42 a) Bond Street, London 1930s, b) Pasar Baru Street, 1930s
Source: Google-images.com, accessed in June 2014

Pasar Baru Street image in the user's perception

The interviews of this research study posed two key questions in terms of the user's perception on the 'image' of Pasar Baru Street: Firstly, *'What first comes to your mind and what symbolises the word Pasar Baru for you?'*, and secondly, *'How would you broadly describe this street in a physical and non-physical sense?'* The entire responses given by the respondents were then clustered and categorised into two major components: physical and non-physical features. Table 6.4 shows the summary of user's perception on Pasar Baru Street's Image.

Table 6.4
Summary of User's Perception of Pasar Baru Street's Image

PASAR BARU STREET IMAGE PERCEPTION BASED ON IN-DEPTH INTERVIEWS				
Component	Category	Frequency	Value	Total
Physical	Buildings	IIIII III	8	
	Street Gate	I	1	
	Street Corridor	I	1	10
Activity	Shopping activity	IIIII I	6	
	Product Diversity	II	2	8
Socio-cultural attributes	Multi-Ethnic District	II	2	3
	Culinary	I	1	
Meaning	High-Class Shopping Street	III	3	
	Historical significance	IIIII	5	
	International Shopping Street	II	2	10

Source: In-depth Interviews (2014)

Table 6.4 shows that physical features appeared to be one of the most noticeable features of the street. One resident mentioned some important buildings along the street and nearby as captured in the interviews:

'I remember one day when I was a kid, there was **Satria Cinema**, which is now converted as a Bank… then also **Gedung Kesenian (Concert Hall)**, it was very famous. At the **Antara Building** there are many documentaries [of Pasar Baru Street] since the Dutch era.' (PB-RES-001, In-depth interviews, February, 2014)

Another resident acting as the Chinese Temple keeper who has lived in the area for more than seventy years perceived the street from some famous old shops/buildings built in the area:

'At the beginning, this temple was built [**Sin Tek Bio Temple**], and then some shops were built, including **Kompak and De Son Shop**. **Europa Shop** was thereafter. Then **Sin Lee Seng Shop** and **Lee Ie Seng**, then there was an Ice Cream restaurant nearby, it was old, then De Son and Europa Shop [were built].' (PB-RES-010, In-depth interviews, April, 2014).

Another respondent mentioned the other physical features, such as the "gate" and the street "corridor" as the most memorable elements of the street as reflected in interviews:

'Pasar Baru … yes it is, **the gate and the corridor**, because those were the first things [I perceived] when I came here…' (PB-GOV-004, In-depth interviews, April, 2014).

With regard to intangible characteristics, such as activities and meaning attached to it, two respondents specifically captured Pasar Baru Street as a multi-ethnic district. Indeed, six respondents mentioned the shopping activity in Pasar Baru Street, which has been established since the colonial era, as express in the interviews as follows:

'…this street was called 'Passer Baroe' and it has been famous since the Dutch Colonial Era, it was a place for my grandmother to shop…' (PB-GOV-002, In-depth interviews, April, 2014).

Some respondents also had some feelings and impressions about Pasar Baru Street in correlation to the variety of merchandise that is sold in the street and the perception on how "luxurious" and "classy" the place is, as suggested in the statements below:

"[Pasar Baru Street] is **the first shopping centre** [in Jakarta], **the most luxurious** since the Dutch era." (PB-RES-001, In-depth interviews, February, 2014).

'**Complete, various merchandises** were [sold] here…' (PB-GOV-011, In-depth interviews, April, 2014).

'Textile and Tailor shops like [this] were rare, they were one day order; you ordered a suit in the morning, getting ready in the evening. That's what made **this place classy**…' (PB-SV-008, In-depth interviews, February, 2014).

However, the actual condition in Pasar Baru Street today to some extent does not always have a positive image; indeed, some interviewees complained the condition of Pasar Baru as now it has a quite different image from that of constructed over years:

'…now people are rarely going for a walk to Pasar Baru because of it [street vendors occupying most of the pavements and there is no control], so it is real that [segment market of] Pasar Baru downgrades to the lower classes.' (PB-RES-001, In-depth interviews, February, 2014).

The overall evidence shows that Pasar Baru Street used to have strong image as a luxurious shopping street in the olden days. However, nowadays this image starts to fade, due to a lack of management of the street. The 'negative' image' especially regarding the condition of the street as a result of the lack of management should be solved. In fact, there is a growing awareness of the importance of a city's positive image, as many local government leaders believe that their city's negative image is an obstacle that prevent it from becoming a more attractive place and forestalls a brighter future (Avraham, 2004). Thus, a better street management is indeed required in Pasar Baru Street.

6.6.12 Place Attachment

Place attachment as a positive bond between respondents to Pasar Baru Street is revealed through the in-depth interviews. Two questions were posed: 1) Do you have particular feelings about the street? If yes, what are they, and what makes you feel that way? And 2) Do you have any attachment to some part of the street? If yes, why do you think it happen and can you describe it? Responses from the respondents were then clustered and categorised based on two previous studies: physical and social attachment (Hidalgo and Hernandes, 2001); and functional and

emotional attachment (Ujang, 2012, Shamsuddin and Ujang, 2008). Those are presented in Table 6.5.

Table 6.5
Summary of Degree of Place Attachment

Degree of Attachment	Attachment Expression	Respondent
Physical Attachment	Yes I do, I remember one day when I was a kid, there was **Satria Cinema**, which is now converted into a Bank… then also **Gedung Kesenian (Concert Hall)**, it was very famous. At the **Antara Building** there are many documentaries [of Pasar Baru Street] since the Dutch era.	PB-RES-001
	At the beginning, this temple was built [**Sin Tek Bio Temple**], and then some shops were also built, including **Kompak and De Son Shop**. **Europa Shop** was thereafter. Then **Sin Lee Seng Shop** and **Lee Ie Seng**, then there was an Ice Cream restaurant nearby, it was old, then De Son and Europa Shop [were built].'	PB-RES-010
	Pasar Baru ... yes it is, **the gate and the corridor**, because those were the first things [I perceived] when I came here…	PB-GOV-004
Functional Attachment	Yes, If you want to buy good quality textile, it is definitely here, because Pasar Baru is the first Textile Centre in the city, and Shoes too, everyone would find good quality of shoes in Pasar Baru	PB-RES-001
	I come here [Pasar Baru Street] to buy some shoes, because from this point forward all are shoes stores, three-quarters of this street are shoes stores, and in the middle, there are many textiles stores. Right here, there is an old shoes store, maybe has been established since 1960s. Yes, maybe [memory of] **this place is always about shoe stores**, I always buy one here	PB-VIS-005
	Those who are coming here are loyal costumer, [they] wants to come over and over again	PB-GOV-011
Social Attachment	This street was called 'Passer Baroe' and has been famous since the Dutch Colonial Era, it was a place for **my grandmother to shop**…	PB-GOV-002
	Yes, I am happy to shop here, especially before Eid celebration, we [she and **her husband**] usually buy some shoes for the **kids**, and also almost every week I shop to Matahari store, there are often special discounts…	PB-RES-012
Emotional Attachment	**So when I am longing for the atmosphere of Pasar Baru Street in the olden days, I often go there [Antara Building] to look at those old photos.** During weekend there are art exhibitions [at this building] or whatever, all sorts, I also go to the second floor, the great room, **I always bring my son along, he said "Mom, this is Pasar Baru at the olden days…look like this and that". Let them [younger generation] read it**	PB-RES-001
	I think yes, most people who shop here are those **who are fanatics on memories of the past**	PB-GOV-011

Source: In-depth Interviews, 2014

Physical Attachment

Physical attachment to a place is a result of physical contact to a place that links with the importance of physical features of a place to a respondent. Some respondents have strong association with some buildings in the street, such as some old shops (PB-RES-010), cultural facilities (PB-RES-001), and street gate and corridor (PB-GOV-004). This results seems to be in accordance with the findings of Hidalgo and Hernandez (2001) that urban space has a strongest impression in regards to physical attachment, while the smaller scale of environment (house) is stronger in terms of giving social attachment.

Functional Attachment

Functional attachment refers to attachment as a result of daily routine contact for necessary purposes, which can be linked to the importance of the street in satisfying an individual's goals and needs for economic and personal needs. Some respondents, who are not living in the area, but visiting Pasar Baru Street over period of time, show their association to that place through the shops they have visited over and over again as expressed in PB-GOV-011 above statement. The statement can also be related to the special quality of merchandise that Pasar Baru Street has and that has become popular to general public. It has been noted by a visitor who commented that she is one of the 'loyal customers' of Pasar Baru Street, especially for shoes, and she described Pasar Baru as being full of famous shoe and textiles stores (PB-VIS-005).

The *place ballet* or an interaction of individual bodily routines rooted in Pasar Baru Street as commented in the interviews above may be significant as one important foundation for long-term involvement to the place, as also indicated by Seamon (2014: 13) that this '*in turn sustain and are sustained by feeling of attachment to the place*'.

Social Attachment

Social attachment as a result of social ties can be operationalised in various ways, including a number of friends and relatives in the neighbourhood and the extent of involvement in informal social activities, and probably many others (Lewicka, 2010). In the context of Pasar Baru Street, the social attachment is commented by a resident of the street who regularly shops in the street with her family. The association of the place with the members of the family reinforce a sense of belonging towards the street. This result is in accordacnce with a study that *social attachment or 'bondedness' consist of social ties, sense of belonging to the neighbourhood, and familiarity with fellow residents and neighbourhood children* (Riger and Lavrakas (1981) in Scannell and Gifford, 2010: 4) This social bond is also commented by a visitor who has become the loyal costumer, not only herself but also the other members of her family, her grandmother in particular. This result may be explained by the fact that the remembrance on her grandmother has made her more familiar to this place, through the family ties.

Emotional Attachment

The in-depth interviews also revealed the sense of association or sense of belonging by some groups of people, especially the local residents. One of the respondents expressed her sense of attachment to Pasar Baru Street through showing her 'longing' by visiting a 'particular place' that for her is associated with the history of this place. The sense of attachment for long-time residents is in line to the findings of Gustafson (2014: 39 after Savage (2010)) that dwelling represents historical attachment to a place where one has spent all or most of one's life and has strong social ties.

6.6.13 Authenticity

Authenticity indicator is discussed under two main points, namely physical and socio-cultural authenticity.

<u>Physical Authenticity</u>

The historical significance of Pasar Baru Street was mentioned in various interview statements. Indeed, respondent 001, a shop owner, who has lived there for more than 40 years, spoke in detail about her memory of this place and surroundings. She also spoke about her personal experiences and memories during her childhood. Some important buildings were recognised apart from the ambience of the place, as she mentioned '*places where people were hanging around and watching movies*', or '*the famous*' Gedung Kesenian (Concert Hall):

> '…then also Gedung Kesenian (Concert Hall), it was very famous. **It was when I was young, now it is no longer famous. Pasar Baru, once used to be very popular, the most famous commercial area.**' (PB-RES-001, In-depth interviews, February, 2014).

Another respondent (002), a government officer of Dutch ancestry, also recognised the ambience or activities of the place as having historical value that should be retained. She was disappointed that this value was not being understood by the younger generation:

> '**That's where the Dutch people hanging around. Young generation doesn't know. They do not know if it has historical value.** Instead they say, "I thought it is new [from Pasar Baru = New Market]". Actually, there is a relation, people living in Old Batavia would shop at Pasar Senen, then developed a new area, new Batavia [Weltevreden], thus they shopped at Pasar Baru…'(PB-GOV-002, In-depth interviews, April, 2014)

For another respondent (010), a temple-keeper, he thought that Pasar Baru was very precious. He mentioned the value of Pasar Baru Street to the city's history as being "priceless". Hence, looking at Pasar Baru Street today, with less maintenance and management, he was upset because the government seemed to be giving less attention to the management of Pasar Baru Street:

> '**Yes, the [historical significance] is priceless. Just the government gives less attention.**' (PB-RES-010, In-depth interviews, April, 2014).

He also mentioned some important and memorable buildings for him, some of which still exist today namely:

'At the beginning, this temple was built [Sin Tek Bio Temple], and built some shops were built, including Kompak and De Son Shop. Europa Shop afterwards. Then Sin Lee Seng Shop and Lee Ie Seng, then there was an Ice Cream restaurant nearby, it was old, then De Son and Europa Shop [were built].' (PB-RES-010, In-depth interviews, April, 2014).

As mentioned previously, the field observations showed that many important and historical buildings along the Pasar Baru Street have had their appearance changed beyond recognition. For example, the De Son Shop has now been empty for 4 years after destroyed by fire in 2010 (PB-RES-001). Also, the Kompak Shop is now not well-maintained and has changed into a place for street vendors to trade while other parts of the building are rented as storage.

Together these results provide important insight regarding the changes of architectural styles of buildings along Pasar Baru Street that may have a strong impact on the authenticity of the place, as Florida (2002b: 228) offers an understanding of authentic place as the opposite of generic:

'An authentic place offers unique and original experiences. Thus a place full of chain stores, chain restaurants and nightclubs are not authentic. Not only those venues look pretty much the same everywhere, they offer the same experience you could have anywhere.'

Socio-cultural Authenticity

The mix culture as the result of the multi ethnic living in Pasar Baru Street is reflected in the socio-cultural life of the place. Hybrid cuisine is an example of the acculturation amongst the culture in this place. Meanwhile, the cultural activity that is performed along the street seems to be less compared to those on the other case studies. This may be related to the regulation to prohibiting the Chinese especially to show their culture in public domain during the New Order Era (1968-1998) in the country. However, the diversity of religious facilities, including two Chinese temples (Sin Tek Bio and Kuan Im Bio), two small mosques, two churches (Pniel and GKI), three Hindu and Sikh Temples (Sai Baba, Hare Krishna, and Graha Sindu) that demonstrate the inter-religious harmony make Pasar Baru Street a place that is socially and culturally authentic.

6.7 Planning and Management

Planning Policy and Management of Pasar Baru Street

There were three respondents from government officials: 1) *Dinas Tata Ruang DKI* (Urban Planning Agency of Central Jakarta); 2) *Dinas Museum and Pemugaran, DKI* (Museum and Conservation Agency of Central Jakarta); and 3) *Departemen Pekerjaan Umum* (Department of Public Works, Republic of Indonesia). All of these interviewees noticed that until now there have been no specific policies regarding the planning and management of Pasar Baru Street. The only related regulation regarding this area is the gazette of some buildings as heritage buildings under the Governor Decree No. 475/1993 on the Determination of Historical Buildings in Jakarta Special Province as Cultural Heritage (see Table 6.6).

Table 6.6
List of Heritage Buildings in Pasar Baru Street and Surroundings

No	Name of Building	Building Information	Status
1.	Gedung Kesenian Pasar Baru (Schowburg/Concert Hall),	built in 1821, Corinthian Architecture	Government/Public Building, Grade A
2.	Kantor Berita Antara (Antara Building)	built in early 20th Century, Classical Architecture, the proclamation of independence the republic of Indonesia was first time echoed	Government/Public Building, Grade A
3.	Kantor Pos Pasar Baru (Pasar Baru Pos Office)	Built in the middle of 19th century, first Post Office in Jakarta, Classical Architecture	Government/Public Building, Grade A
4.	Shophouse Building, No.2 Pasar Baru Street (Kimia Farma Shop)	Built in early 20th century, European Architecture	Private Ownership, Grade A
5.	Shophouse Building, No.8 Pasar Baru Street (Toko Kompak)	Built in 19th century, Chinese Architecture	Private Ownership, Grade A
6.	Shophouse Building, No.30 Pasar Baru Street (Toko TjungTjung)	Built in 1935, Chinese Architecture	Private Ownership, Grade A
7.	Shophouse Building, No.46 Pasar Baru Street (Lee Ie Seng)	Built in 1873, Chinese-European Architecture	Private Ownership

Source: Governor Decree No. 475/1993 on the Gazetted of Historical Buildings in Jakarta Special Province as Cultural Heritage, 1993

The field observations show that the government/public buildings listed above have been renovated and conserved by the government under the Department of Tourism and Culture. However, the buildings that are private ownership cannot be approached for conservation, even if they are also included in the grade A. This listing denotes that the building should not be changed, must be preserved and, must remain in their original form. In such cases, the government does not have binding rules for the preservation of these buildings and this is mentioned in the interviews:

'Just unfortunately yes it is, you know it's good architecture, it is a blend of Colonial and Chinese style, yes the owner pay less attention, even though some of them are heritage buildings, **but we have rules though not strong enough in the incentives and the disincentives.** So **in the new regulations that we arrange now, we plan to enforce the incentives and disincentives [of conserving heritage buildings].'** (PB-GOV-002, In-depth interviews, April, 2014).

The interviewees believed that planning and management, especially the provision of urban planning policy and urban design guidelines are urgently needed for Pasar Baru Street. There are intentions of officials to provide and implement such planning policies; however, some obstacles including the coordination and synergy amongst the agencies in the government office must be enhanced so that implementation and monitoring can be applied well. So far, it seems there is an overlap of duties and responsibilities and weak synergy, which was reflected in the interviews:

'…**there should be an integration between sectors,** such as the urban planning office, monitoring agency, tourism office, municipal police departments, **all should play a role, cannot be separated…'** (PB-GOV-002, In-depth interviews, April, 2014).

In addition, there are also obstacles in terms of priority. During an interview with respondent 009 from the Museum and Conservation Agency there was an assumption that recently the priority of urban conservation areas in Jakarta is still focused on the Old Batavia, to the exclusion of other areas. Even though other historical areas, including Pasar Baru Street are actually experiencing rapid development and as such, changes are still happening quickly so that the tangible and intangible qualities might soon disappear without being noticed.

The implementation of Pasar Baru Street as fully-pedestrianised street in 1990s now seems ineffective. The re-use of pavements for motorised vehicle movement and on-street parking is responded negatively by the interviewees. It appears that the field monitoring of the management is a key for the successful planning and management of urban areas such as Pasar Baru.

Respondents Opinions and Expectations of the Future of Pasar Baru Street

Opinions on the quality of Pasar Baru Street followed by expectations on the future of the street that were reflected in all of the interviews are summarised in Table 6.7, as follows:

Table 6.7
Opinions and Expectations on the Future of Pasar Baru Street

1. Government Agency		
Themes	**Opinions on the Existing Quality of the Street**	**Expectations on the Future of the Street**
Quality of the Street: Physical Dimension	- Good quality of architecture, but less attention to it - No incentive for owner to conserve historical buildings - Good façade design is covered by billboard - Street canopy is a good effort - On-street parking and motorised vehicles disturb pedestrian movement and safety - Inconsistency of fully-pedestrianized street concept - No sitting area and green space	- Giving incentives for shop owners who are willing to conserve their historical building - Sign and billboard management - Implemented back the fully-pedestrianized street - 24 hour street concept
Quality of the Street: Non-Physical Dimension	- Having unique merchandises and rich of street food - Street vendors gives an ambience but also make the area crowded	- Developing multicultural space and the culinary diaspora amongst the ethnic group living in the area - Managing the street vendors
Street Image and Identity	- It was a high class area, now it is downgrading	- Bringing back and induce new street image
Place Attachment	- There are many loyal customers	- Retaining the unique shops and traditional street food

Historical Significance	- Having historical significance	- Bringing back the historical value and uniqueness of Pasar Baru
Planning and Management	- There is not enough urban policy applied in Pasar Baru Street so far - Weak synergy of governmental agencies	- Better management of Pasar Baru Street - The need of Master plan, Urban Design Guidelines, and Urban Development and Investment - Participatory planning - Developing habit to maintain and conserve urban area - The need of better synergy amongst the governmental agencies

2. Shop owner and Residents

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Street canopy is good for pedestrians - Original façade design should be retained - Many independent shops have changed into shopping malls	- Repairing the street canopy - Cleanliness, environmental comfort, and management of the area should be improved - The need of building conservation effort
Quality of the Street: Non-Physical Dimension	- Street vendors cause the area crowded - Fear for street gangsters	- The need of data collection and management of street vendors
Street Image and Identity	- Pasar Baru was a high class shopping area but now it is downgrading - Changes of street identity, now more identified as street vendor haven rather than high class shopping street	- Bringing back the street image and identity as the olden days
Place Attachment	- Having deep association with the street and surroundings	- Not always to bring back the buildings as in the olden days, but at least better street management
Historical Significance	- Historical value is precious but gets less attention from the government - Many historical buildings were very famous in the olden days	- The need of historical revival
Planning and Management	- Less coordination amongst the stakeholders of the street - Bad street management	- The need of street promotion - The need of art event and bazaar to enliven the public life - The need of better street management and better attention from the government

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Proper environmental comfort for pedestrians - Good quality of sense of enclosure - Motorized vehicles and on-street parking disturb pedestrian movement - The absent of sitting spaces - Chaotic signage and billboard - Original building façade covered by billboards - Good street connectivity - Heritage buildings are unexposed, many buildings have changed to a modern style - Many independent shops have changed into shopping malls	- The need of comfort enhancement - The need of sitting space, green space, and other proper street amenities - The need of billboard management - The need of building conservation
Quality of the Street: Non-Physical Dimension	- There is traditional street ambience - The street is considered chaotic, un-comfortable, so that people prefer going to shopping malls	- There should be a strong concept on creating a traditional street with heritage uniqueness and developing a shopping tourism concept
Street Image and Identity	- Gate and Street corridor as street identity - Street canopy can be street identity - Building use and changes have transformed the street identity - Merchandise (shoes and textile) as street identity	- Reviving back the street identity
Place Attachment	n/a	n/a
Historical Significance	- Pasar Baru Street was the economic centre during the Weltevreden Era	- The need of better planning and management for conserving the area
Planning and Management	- There is no street promotion	- The need of street promotion - Making Pasar Baru Street as a tourist destination

4. Street Vendors

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Spacious pavement - The street canopy is to cool the area but is now getting deteriorated - The constant changes of floorscape materials - It was fully pedestrianized street, but now vehicle can pass the street during noon time	- The street vendors agree to have better street management, but their existence should be accommodated

	- On-street parking disturb the pedestrians - There are fire on old buildings many times - Some street amenities (dust bin, street canopy) have been deteriorated - Good street form (linear street)	
Quality of the Street: Non-Physical Dimension	- Street gangster as street "ruler"	- The need of more 'safety' street
Street Image and Identity	- Once called as an international market (Pasar Internasional) - A classy shopping street	n/a
Place Attachment	n/a	n/a
Historical Significance	- Many foreigners came and as forerunner to the city of Jakarta	n/a
Planning and Management	- Street gangsters rule	- The need of street revitalization

Source: In-depth Interviews, February-April, 2014

6.8 Chapter Conclusion: The Quality of Pasar Baru Street

The chapter highlights some important quality indicators that can be regarded as the distinct characteristics of Pasar Baru Street which play significant roles in shaping the built environment and its public life. <u>First</u> is the existence of Pasar Baru Street as a fully-pedestrianised street. Although the concept is not fully implemented, it becomes an important basis to invite a more vibrant public life of Pasar Baru Street. <u>Second</u> is the presence of street canopy that gives more opportunities for the street users and vendors to do such street activities in variety of weather conditions, especially in the hot, humid and high rainfall tropical climate.

<u>Third,</u> the diversity of retail uses which survive and adapt over time has emerged as the 'image of the place'. The street has been famous for high quality of commodities, such as shoes, textiles, tailor, and hybrid cuisine. <u>Fourth,</u> the ethnic diversity living in this place makes Pasar Baru Street the evidence of how various

ethnic group with different cultural background and beliefs can coexist in harmony and even more acculturated as reflected in, for instance, the diversity of hybrid cuisine.

Fifth, the vibrant activity of street vendor enhances the liveliness of the street. Sixth, the adaptability of independent shops as 'shared space' by combining several retail uses in a building plot to adapt with the contemporary conditions, especially economic pressures. Seventh, the existence of hybrid cuisine is a result of the creativity of the heterogenic community living in the place. Eighth, the straight form of the street and compact buildings as street wall have created Pasar Baru Street with a good sense of enclosure that provides spatial and intimate atmosphere for the street user to enjoy the street. Ninth, the sign-shop as cultural identity expression adds the unique visual quality of the street. Tenth, the active and interactive frontage of buildings enhances the vibrant of the street spaces. Eleventh, the outstanding historical significance of the street in Indonesian historiography adds the authenticity of the place.

The chapter also indicates some fading quality indicators, but may be revitalised further as adapted to the contemporary conditions. First, there is the need of better provision of sitting spaces, amenities and also green space to improve the liveability and environmental comfort of the place. Second, there is the need of better regulation on plot building changing for there are many buildings merge into a bigger plot in order to change the plot pattern into superblock rather than the rich small building plots. Third is the need of revitalisation of some closed cultural facilities and street festivals aims to revive the cultural life of the street. As the observation shows the absent of cultural activities performed during the weekday and weekend time, street festival and other cultural activities can be re-emerged in contemporary forms to further enhance the function of Pasar Baru Street as public space.

Fourth, the special skills possessed by the Pasar Baru Street community, for example the popular handmade shoes by the Chinese or high quality tailor by the Indian diaspora are now beginning to fade. This is expected to be once again developed by the next generations of Pasar Baru Street community. This quality indicator is important since special skills are regarded as one of the imageable

features of the place. <u>Fifth</u>, the historiography of Pasar Baru Street shows the architectural diversity reflecting the identity of the ethnic background of the shop owners. The architectural diversity of Pasar Baru Street is starting to fade and be replaced by a modern architectural style which tends to be similar to other streets of Jakarta. Restoring the original building facades can be an alternative to bring back the street atmosphere and invite people to come and enjoy the street space. <u>Sixth,</u> better safety management including parking management improvement and the improvement of safety, including for pedestrians is required. Better fire management, especially for heritage buildings, also needs to be addressed. Last but not least, there is a necessity of street revitalisation as a whole to restore the glory of Pasar Baru Street.

The results of this chapter suggest that in general Pasar Baru Street possesses some qualities such as good **walkability** (a fully-pedestrianised street), **liveability** (street canopy), **diversity** (retail use and ethnic), **vitality** (street vendor activity), **adaptability** (shared space), **creativity** (hybrid cuisine), **transparency and active frontage**, **form and visual quality** (good street configuration, sign-shop and cultural expression), and **authenticity** (historical significance).

The next chapter (Chapter 7) will proceed to present results for the Pecinan Street case study that was treated similarly to the Pasar Baru Street, before presenting a cross case analysis and discussion in the following chapter.

7

Pecinan Street

7.1 Introduction

This chapter presents findings of a case study undertaken in Pecinan Street. It is situated in Magelang City, Central Java, about 500 km southeast of Indonesia's capital city, Jakarta. In the beginning of the chapter, the history and transformation of Magelang are presented in three sub-sections: Magelang under Islamic Mataram Kingdom (1755-1810), Magelang as a colonial city (1810-1945), and Magelang after Indonesian independence (1945-present). The next part of the chapter presents the formation of Pecinan Street (1810-1900s) and its development in the twentieth century to the present era.

Pecinan Street from an urban design dimension is presented and followed by the quality of the street under thirteen indicators as emerged from the data analysis. The chapter conclusion is presented at the end of the chapter before proceeding to the next case study result, The Malioboro Street case study.

The city of Magelang is situated in the valey of Mount Tidar at the centre of Java Island. Historically, Magelang was a royal village known as Mantyasih (now Meteseh Village, in modern Magelang). According to Mantyasih and Poh Pitu ancient inscriptions, Mantyasih village was an autonomy and free tax region given by King Rake Watukara Dyah Balitung (898-910 AD) from the Hindu Mataram Kingdom to a landlord called Patih in 907 AD. The inscriptions also mentioned another village name, Glanggang, and these two village names can be interpreted to be the origin of the name of Magelang city (Magelang, 2009a).
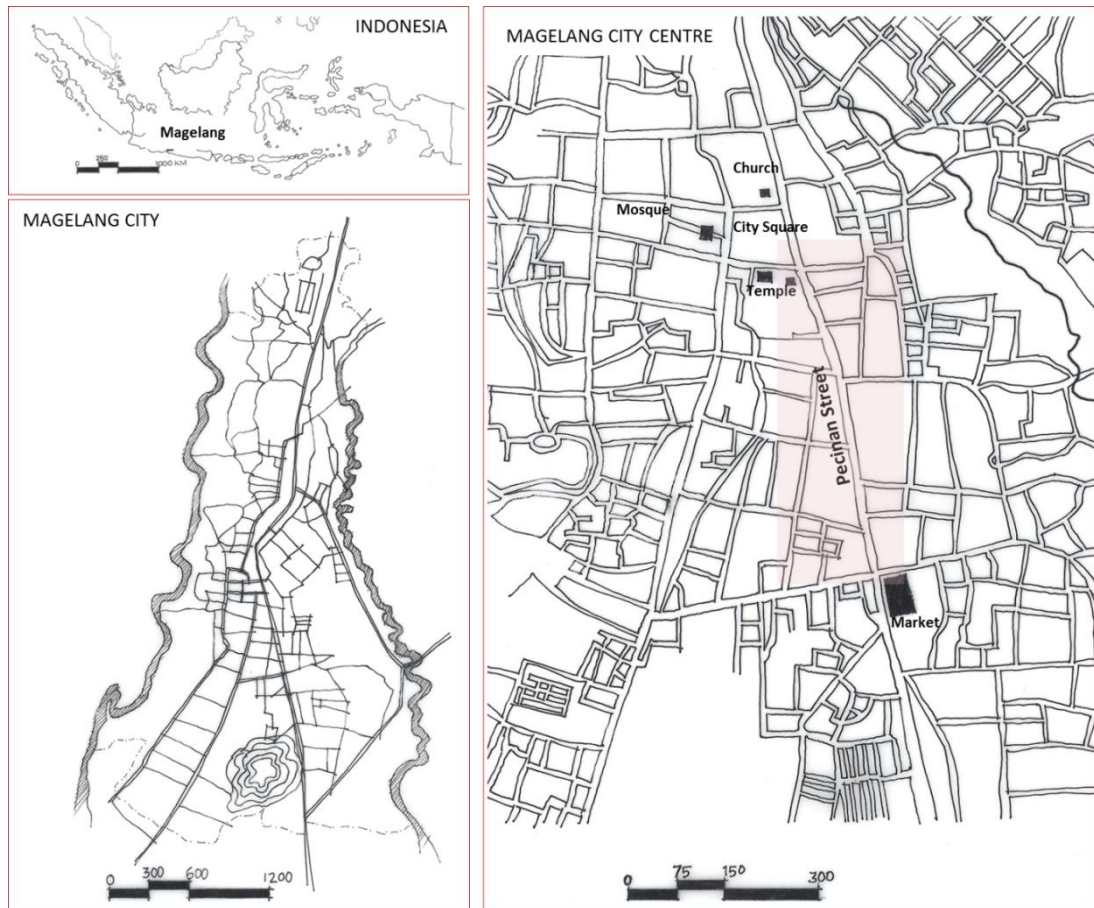
Figure 7.1 Magelang as a Study Area (Map: author 2014)

After experiencing the glory days of its civilisation for more than two centuries, Magelang and its surrounding areas, according to the theory of Van Bammelen, disappeared after the eruption of Mount Merapi in 1006 (Utami, 2009). Magelang reappeared in history after the formation of a new power centre: Demak Kingdom in sixteen century and New Mataram Kingdom or Islamic Mataram centred in Yogyakarta as a Negaragung region (Centre of the Kingdom) in the eighteenth century.

7.2 Magelang: History and Transformation

7.2.1 Magelang under Islamic Mataram Kingdom (1755-1810)

1 Chinese District (Pecinan)
2 Administration Building
3 City Square (Alun-alun)
4 Liong Hok Bio Temple
5 Great Mosque (Masjid Agung)
6 Church
7 Pecinan Street
8 Rejowinangun Market
9 Railway Station
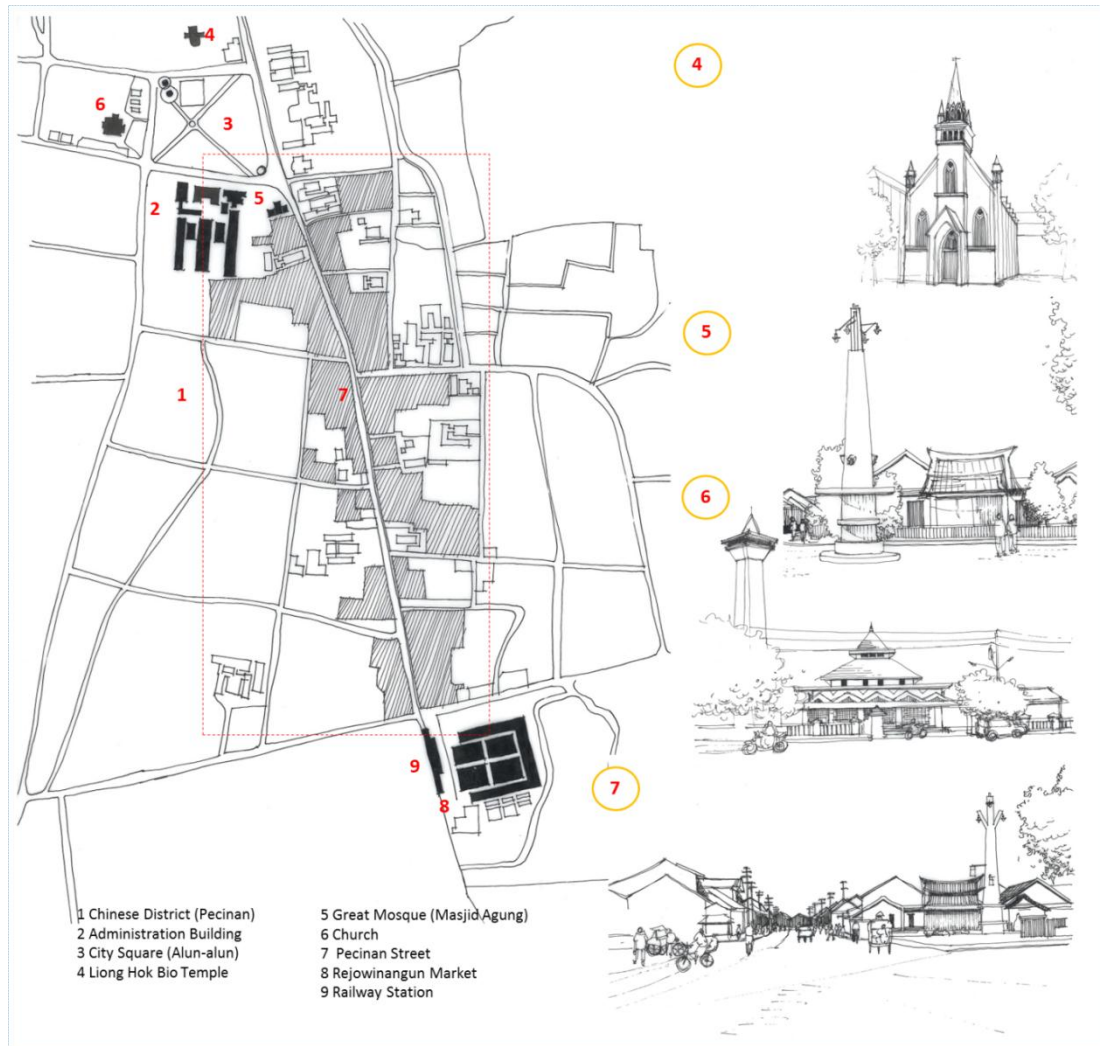
Figure 7.2 Magelang City and its key components (Drawing: Author, 2014, based on 1923 map and historic photographs)

In 1545 AD, the regions of Kedu and Bagelen (Magelang is included) were inherited to Mas Adipati Timur, the son of Demak Kingdom (in the northern side of Java). After the fall of Demak Kingdom and the rise of Islamic Mataram Kingdom, Magelang became part of this kingdom. During this era, Magelang was treated as *Negaragung* or the centre of the kingdom, which functioned as Kebon Dalem or Garden of the Kingdom. The areas of the garden included Coffee Plantation (*Botton Koppen*), Nutmeg Plantation (*Kebon Polo*), Kemiri Plantation (*Kemirikerep*), Guava

Plantation (*Jambon*), and Spinach Farm (*Bayeman*) (Utami, 2009). Magelang also functioned as the rice barn of the kingdom for its fertile land and beautiful sceneries.

The era of Magelang as Negaragung ended in 1810 AD after British Colonial hegemony under Governor Raffles, who forced Sultan Hamengku Buwono II to give some Negaragung areas including Magelang as their territory especially for their rice barns.

7.2.2 Magelang as a Colonial City (1810-1945)

Figure 7.3 Magelang City and its key components during the colonial era, a) Grand Mosque, b) Chinese Temple, c) Post Office, d) Pecinan Street, e) City Church, f) City Market
Sources: Google-earth, 2013 and various sources

Between 1811 and 1813 AD Magelang, was under British Colonial hegemony. During this era, Magelang was allocated as a municipal city and Mas Ngabehi

Danukromo, a member of the local noble family, was appointed as the first regent of Magelang with the new title *Raden Tumenggung Danuningrat* (Utami, 2011).

Regent Danukromo was believed to be the mastermind of Magelang city planning and utilised ancient Javanese city planning techniques; he divided the city centre into four main elements: the *Kraton* (Palace or Regent House), *Masjid Gede* or *Masjid Agung* (Great Mosque), the *Alun-alun* (Town Square), and the *Pasar* (Rejowinangun Market). Beginning from the *Alun-alun* to the *Pasar*, the main street of the city lain, known as *Pecinan* Street (formally Jalan Pemuda). The British colony during this era also built other facilities, including churches and colonial residences (Utami, 2001).

After the Napoleonic War (1803-1815), Java Island was restored back by the British to the Dutch in exchange for Malay Peninsula (Malaysia). In this era, Magelang has increased its position as the centre of economic growth because of its strategic location which is in the centre of Java Island, surrounded by the fertile plantation areas, especially then during *Cultuurstelsel* (Forced Cultivation System) era after the Java War in 1830s.

In 1817 AD, the Dutch built a military base in Magelang and appointed Magelang as the capital of Kedu Residency. As a residency city and as a military base, Magelang grew as a bigger city with various facilities. New housing for the officials, hospitals, military base, Chinese district, European district, Arab district, and so on were built during this era (Van Lissa, 1930 in Utami, 2001). Infrastructures such as street and railways were also built after 1830 (Djuliati, 2000).

The Java War that occurred in 1825 to 1830 AD and, led by Prince Diponegoro cost more than 25 million Dutch guilders. The huge impact was the Dutch colonial government in Indonesia was almost bankrupt. To reimburse the state reserve, the Dutch colonial government in Indonesia run a new farming system called *Cultuurstelsel* or Forced Cultivation System. The practice of this regulation was issued by the Governor General Johannes van Den Bosch in 1830. It was when the entire agricultural area shall be planted by some export crops, mainly coffee, sugar cane, and tarum (Tilapia) and the harvest result must be submitted to the colonial government. Meanwhile, people with no land should work a full year in the farm.

The transformation of Magelang city was getting more significant after Java Island was open as a free trade area for private traders from Europe to collect agricultural product from the island in 1860. This huge expansion from many European traders to produce, process, and sell agricultural products to all over the world have expanded the city's role and development. The fast growing economic activity due to plantation activities directly resulted in changes in the city form, land uses and townscape in a whole. The cities in the interior of Java were solely designed for an administrative centre, then transformed into more economic hub to global market (Handinoto, 2005).

Magelang city is one of the cities in Java that is, which is hugely affected by the existence of forced cultivation system. This policy requires good security for the whole city. It involves a new defence system to replace "Fort Defence" security system in the past by establishing "Garrison City" system. Magelang is chosen as one of the Garrison Cities in Java, along with Malang and Cimahi (Handinoto, 2005). A military complex in Magelang was built in the northern side of the city. It was not built as a separated new town, but merged with the existing form, structure, and street network of the city (Gill, 1995).

In the early twentieth century, along with the rapid transformation of Magelang city, the Dutch colonial government built various urban facilities there, both as a plantation business city and a Garrison City. These facilities were planned to accommodate the process of production of plantation, processing the product before shipping to Europe, space that accommodated the necessities for the colonists and traders, such as housing, market places, schools, health centres, recreation lace, and religious facilities. Moreover, the Dutch colonial government continued to provide security and control facilities, such as military facilities, town hall, administrative buildings and other infrastructures, including railway system, canal system, station, etc. to ensure the sustainability of the economic activities (Tunas, 2004).

The Dutch government also provided the city with clean water by building a government agency on water and sanitation. A tall water tower for the city was built in 1918 and it was followed by the provision of electricity supply in 1927.

During this period, Magelang was celebrated as *de Tuin Van Java* or The Garden of Java.

7.2.3 Magelang after Independence (1945- present)

After the independence of Indonesia in 1945, Magelang became a *kotapraja* (district) and then a *kotamadya* (municipality). Magelang municipality is divided into three districts and 17 sub-districts, with more than 4000 civil servants to serve 128,513 people in 2009 (Magelang, 2009b). Magelang city has a strategic location since it is located on the crossroad of other main cities in Central Java, including Semarang, Yogyakarta, Purworejo, and Temanggung. This strategic location has benefitted for the economy, tourism, and service sectors.

The position of Magelang as a military city continues after the independence. In 1957 the new Indonesian government established a National Military Academy and in 1962 the government also set up a new military base in the northern part of the city (Armed Complex) (www.akmil.ac.id, 2015). In addition, the government also built residential areas for the military officers at Rindam and Panca Arga housing complexes. Hence, up to the present, Magelang continues to be celebrated as the Garrison City as well as the centre for military education in Indonesia.

In the 1980s, most of the government offices moved from the city centre area (Alun-alun area and surroundings) to Mako district in the northern part of the city. Only a few offices remain in the city centre, such as PLN and PDAM offices. As the city develops, during this era some housing estates were built by the government and private sectors, including Perumnas Kalinegoro which was constructed by government, and Armada Estates, Bumi Mertoyudan, and Lembah Hijau which were constructed by the private sectors.

In 1990s, the development of Magelang city was highly influenced by two neighbouring cities, i.e. Yogyakarta and Semarang (Utami, 2001). As a transit city Magelang started its position as a destination following the establishment of Kyai Langgeng Park built to facilitate public recreation in Magelang and surrounding cities. Other public facilities set up in Magelang since the 1990s are Sukarno-Hatta Bus Terminal, Gardena Mall, Matahari Mall, Shopping Centre (ex. Railway Station),

and some hospitals, such as RSU Harapan and RST Dr. Soejono (for special military officers and families). In the era of the 2000s, the development of commercial areas in the city and surrounding Magelang had grown rapidly, especially after the construction of the Armada Town Square shopping centre and hotels nearby.

PERIOD

HINDU MATARAM KINGDOM (800-1000)	DEMAK KINGDOM (1500-1600)	ISLAM MATARAM KINGDOM (1755-1800)	COLONIAL PERIOD (1800-1945)	INDEPENDENCE ERA (1945- PRESENT)

898-910   1006   1500-1600   1755-1800   1811-1815 1816-1942 1942-1945   1945-1966   1966-1998   1998-present   1998-present

Magelang as Mantyasih royal village under Dyah Balitung

Magelang as 'rice-barn' during Demak Kingdom

Magelang as Mancanegara region, act as 'rice barn and leisure place' or Kebondalem

Under British Colonial, the formation of Magelang City, establishment of **Pecinan Street**

Old Oder era, the formation of new nation, continue as military town

Reform Era, rapid economic development , new shopping malls across Magelang city centre

Sidewalk regeneration, new city branding, new mayor

Disappear 1006 after Mount Merapi eruption

Under Dutch Colonial, as Military Town and known as Tuin van Java (Garden of Java), 1898 Railway built passing through **Pecinan Street**

Chinese community culturally oppressed by New Order Regime

Under Japan Colonial as Military Town

Urban transformation/d evelopment era

PHASE I (800-1000)   PHASE II (1500-1600)   PHASE III (1755-1800)   PHASE IV (1800-1945)   PHASE IV (1945-1998)   PHASE V (1998- PRESENT)

←——————— TRADITIONAL CITY ———————→←— COLONIAL CITY —→←——————— MODERN CITY ———————→

▬▬▬▬ Formation Era   ▨▨▨ Development Era

Figure 7.4 Magelang and Pecinan Street as study area: Historical transformations (Diagram: Author, 2014 adapted from Utami (2001))
Source: Author, 2015

7.3 The Formation of Pecinan Street (1810-1900s)

The history of Pecinan Street began with the establishment of Magelang under the first regent Raden Tumenggung Danuningrat during the British colonialisation of Java (1811-1815 AD). Pecinan Street stretched from north to south connecting the Alun-alun to Rejowinangun Market. Since 1818, Pecinan Street has been the main commercial street of Magelang alongside Rejowinangoen Market at the street corner. The Dutch colonial government that ruled between 1815 and 1945 implemented the *'devide et impera'* policy through dividing the urban territory based on ethnicity in order to easily control multi ethnic groups within the city. Pecinan Street was allocated for the Chinese known as Pecinan (Chinatown), the area nearby the Great Mosque was allocated for the Arabs, the Bayeman and Kwarasan area for the Dutch, and the rests were for the natives (Komunitas.Kota.Toea.Magelang., 2012).

The architecture of Pecinan Street was originally dominated by the style of Chinese shop houses; mainly single storey with proper air/light well in the middle of the lot to allow sunlight and air into the interior. The façades tended to have Chinese ornaments and a Chinese roof style as found in many Southeast Asian cities inhabited by immigrants, especially those from South China (Guangzhou and Fujian).

In 1898, a railway was built along Pecinan Street as part of the Yogyakarta-Semarang route, mainly for transporting the agricultural products and mass transportation system. The railway station was constructed in the corner of Pecinan Street (now Shopping Centre area) nearby the Rejowinangun market. This station was very vital indeed, to supply agricultural products from the farms and plantations in Magelang and surroundings. Plantation products such as coffee, tobacco, spices, or farming products such as rice and vegetables were sold in the market or sent to the port of Semarang before departing to Europe via Java Sea.
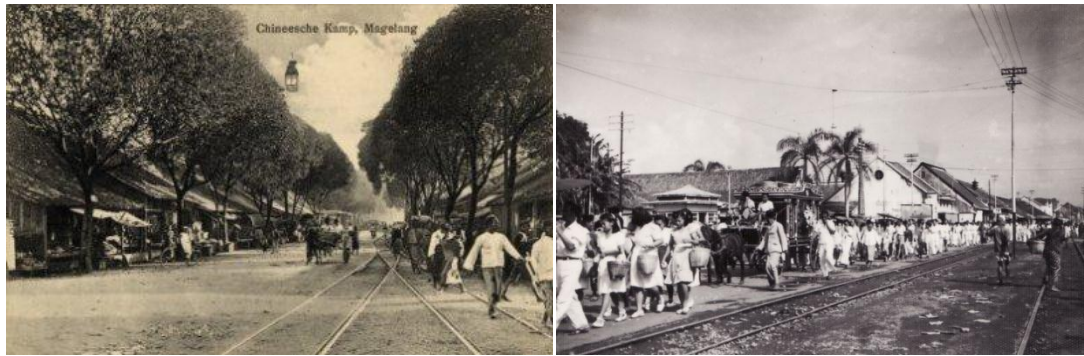
Figure 7.5 Pecinan Street during the colonial era
Source: kotatoeamagelang.wordpress.com, accessed on 08/04/2015

7.4 Pecinan Street in the Twentieth Century (1900s-2000s)

Figure 7.6 Pecinan Street today (Photograph: Author, 2014)

Since its formation, most of the shop houses were owned by the Chinese, except some textile shops owned by Indian community, for instance, Aneka Textile and Mac Mohan Textile. Being the dominant owners of the shops along Pecinan street, the Chinese also live in this district and run business especially tobacco-based industries such as cigar factories (Ko Kwat Ie, Lo Ban Jiang, and Putri Rimba), cigar paper company (Garet 33), hotel and restaurant (Khoe A Bwan and Joe Jan), and tobacco exporter (Oei Kok Tien, and Ki Ik Sui) (Komunitas.Kota.Toea.Magelang., 2012).

After the independence, various industries related to crop exports to Europe stopped due to unfavourable political constellation, especially with Dutch as the former colonial power in Indonesia. This affected the life of Pecinan District in particular and Magelang city in general. The overseas markets shifted into the domestic market, especially for agricultural products. This drastic change has made some export-related industries owned by the Chinese community inside the district collapsed.

In the new order era (1968-1998), the Indonesian government imposed discriminatory regulation for the Chinese. They were not allowed to show the Chinese culture in the public domain and even the Chinese person name and shop/business must also be changed into Indonesian name. It also affected the appearance of Chinese-style façade. During the 1980s, the building façade along Pecinan Street has started to transform, from using the Chinese architecture style to following the modern one as the new trend of an architectural style. Many colonial buildings in the city centre were also renovated by adding 'modern' elements, for example PLN building and Gardena Department Store (ex. Lotze Hotel) (Utami, 2001). Nowadays, Pecinan Street is still referred as the main commercial centre of Magelang, although its importance began to decrease with the opening of new modern shopping malls such as the Matahari Department Store, Gardena, and more recently the Armada Town Square.

7.5 Pecinan Street from an Urban Design Dimension

7.5.1 Land Use

| Magelang Map, 1923 | Magelang Map, 1945 | Magelang Map, 2014 |
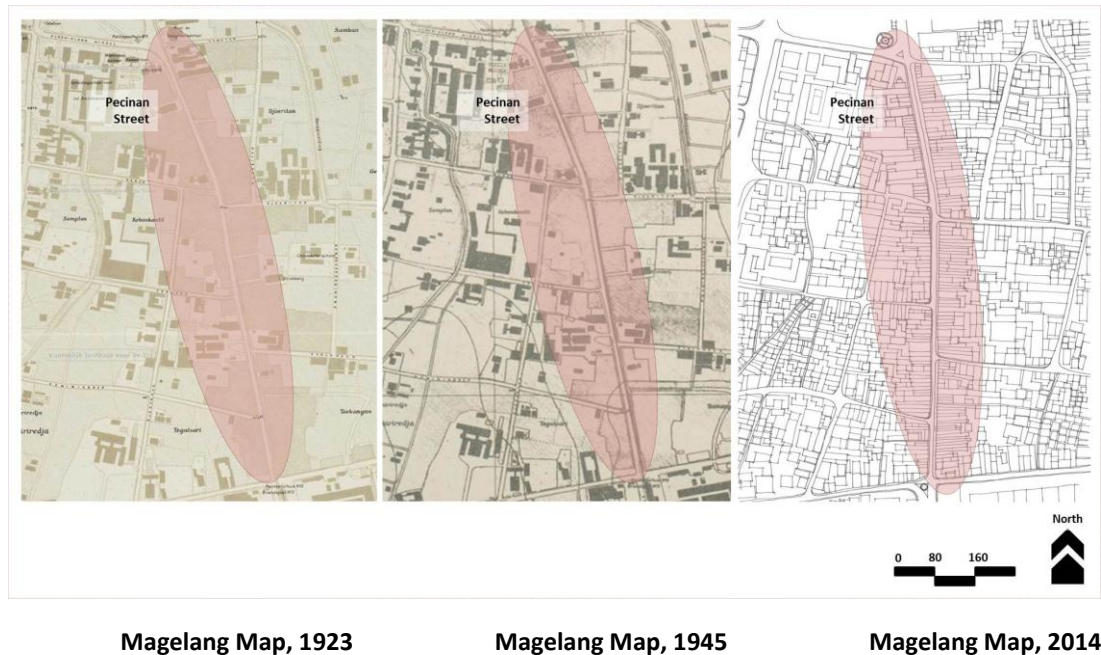
Figure 7.7 Spatial transformations of Pecinan Street and Surroundings
Sources: Utami, 2014, Google-map, 2014

The transformation of land uses in Pecinan Street and its district is presented in Figure 7.7. The map of 1923 and 1945 shows that buildings along Pecinan Street are only indicated by hatched without showing details of its building plots. Between these two maps, there are no radical changes occurring on its spatial transformations. However, the map of 2014 shows the large changes showing the high density of the area, as part of the development era in Magelang city. In this map, most of the areas in Pecinan district are built areas leaving insignificantly open or green space, which can be seen clearly in the first two maps.

7.5.2 Plot Pattern and Street Pattern
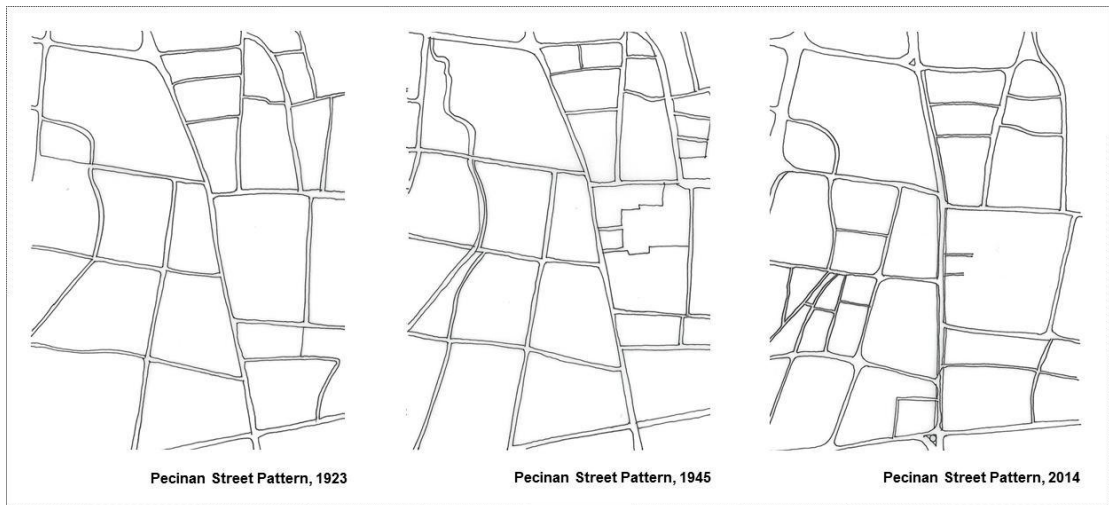
Figure 7.8 Transformations of Pecinan Street pattern and surroundings
Sources: Utami, 2014, Google-map, 2014

The street pattern of Pecinan district was established since the early formation. As seen on map of 1923 (see figure 7.8), the street pattern of Pecinan district has been established and there are only minor changes in 1945 as well as in 2014 especially there are new narrow alleys in the western side of the street as the residential area has been developed. The pattern of these alleys is organic, following the building plots in the district. Some of these blocks form 'perimeter blocks' as seen on the map of 2014 and indicated in Figure 7.9. Other block structures are defined by a network of interconnected streets that has been the dominant form of the district since the early twentieth century as seen in 1923 map.

The building plot pattern along Pecinan Street is mainly narrow depth detached shop house buildings with one to four-storey shop houses. There are several free standing buildings along Pecinan Street as indicated in 1923 and 1945 maps, with spacious space for building and yard, including the Lion Hok Bio Temple at the northern corner of the street and some free standing houses inside the district as indicated in Figure 7.9. These free standing houses are located inside the district, creating a perimeter block configuration with organic layout of the residential in surrounding areas.

Figure 7.9 Perimeter block and plot pattern of Pecinan Street and district
Source: Google-earth, 2015

7.6 Measuring Pecinan Street Quality

7.6.1 Legibility

Legibility is an essential indicator to determine the coherence pattern of a street (Lynch, 1960) and considered to be a physical and spatial quality of the surroundings (Ramadier and Moser, 1998a). The legibility journey of Pecinan Street is shown on Figure 7.10. The point of entry of this street is marked by point 'start' on the figure at the southern end of the Alun-alun. Long Hok Bio temple exists at the beginning of the 'starting' point, making it feasible to be regarded as a landmark as well as the edge of Pecinan Street. The street edge at the end point cannot be clearly seen from the starting point, since the street is slightly turn to the left, thus giving an impression of rhythm and sequence of the street. At this point, the street legibility can be indicated as giving stimulation of our sense of position through moving either side. The signage and continuous green spaces on the left pavement can serve as street's vista director so that the street legibility can be considered rich and there is a strong coherence, especially created by the buildings as street wall on both sides of the street.

The buildings along Pecinan Street are diverse in style. From the very traditional style of Chinese temple at the start point to a new four storey building with contemporary architectural style, both are standing side by side. Two storey shop houses with modern façade design but the whole building remain with its original Chinese shop house style dominated the view of the streetscape with some interruption from some new taller buildings.

Some nodes are seen at some street intersections with heavy traffic crossing from or toward the Pecinan Street. For pedestrians, these street intersections may interrupt their journey since they have to stop and look at the traffic before crossing the alleys to continue walking on the pavement. The street is having a clear end, when there is a statue at the centre of the street intersection. It gives an indication that the rhythm of the street wall will finish after this street ends.

Chinese Temple at the beginning of the street as **Landmark**

Streetscape view from the start point

Totally renovated, 4 storey building, with roof garden

Danamon Bank, five storey building, interrupt the rhythm of buildings height/composition

Some buildings which still retain its original Chinese roof, only the façade has changed, most probably during the 1980s

Jewellery shops before the street end

City Market Crossroad as the edge of the Pecinan Street

Amongst old shop with original building and merchandises sold

Figure 7.10 Legibility Journey of Pecinan Street (Sources: Observation, 2014)

7.6.2 Walkability, Accessibility and Connectivity

To evaluate Pecinan street quality in terms of walkability, accessibility, and connectivity, there are three points assessed: transportation system in the area, the connection of the area and surroundings/city in a whole, and the walkability of the area.

Transportation system of Pecinan Street and surroundings
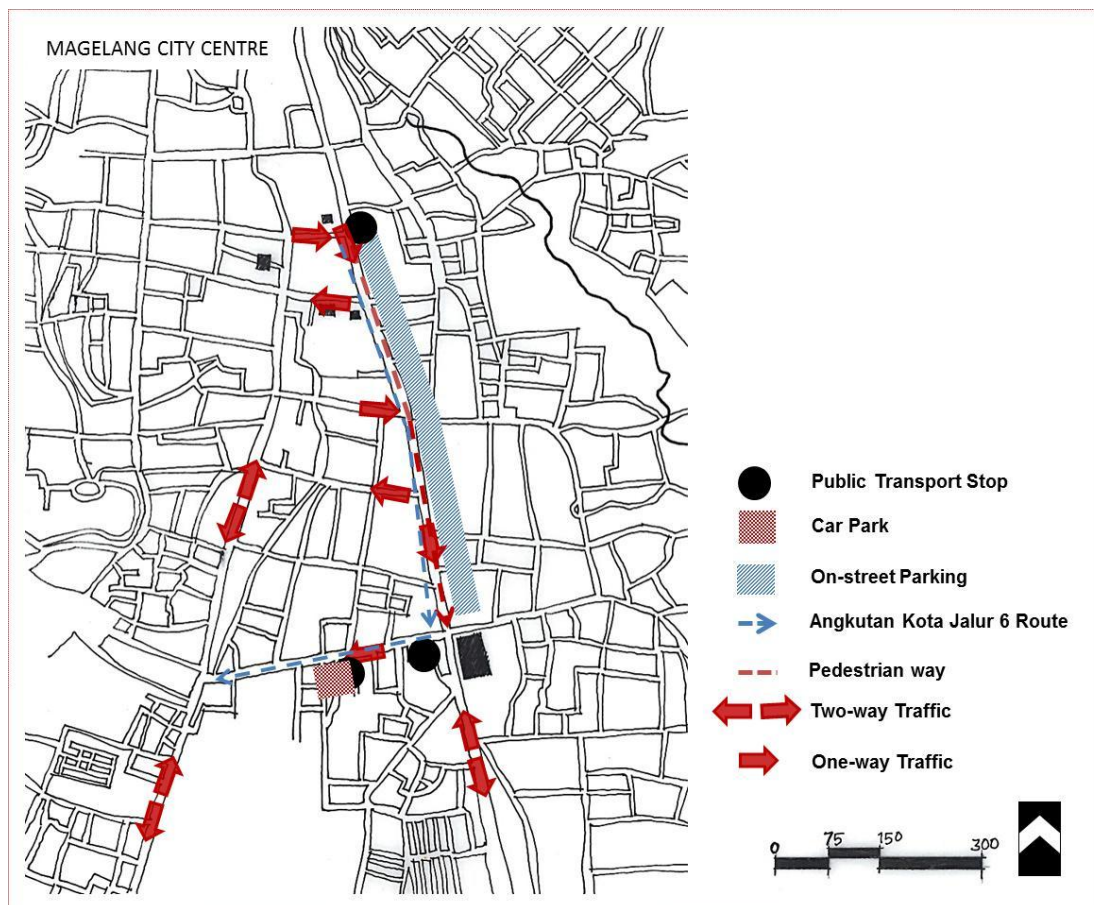
Figure 7.11 Accessibility and connectivity of Pecinan Street (Sources: Observation, 2014)

The quality of access in a public space can be measured through its transportation system. As situated in the city centre, Pecinan Street is connected with several public city transport lines managed by the city council. However, public transports are not allowed to stop along the Pecinan Street in order to accelerate the traffic flows. Meanwhile, street users with private mode of transport such as motor bike and private car can park along the street space (on-street parking).

There is a potential issue regarding the public campaign to use public transport versus the policy that pampers the private vehicle users by allowing them to park along the street spaces.

Before the pavement improvement project (2011-2012), there was another lane dedicated for trishaw (*Becak*), Bicycle, and Motor Bike. However, after the project was implemented in 2012 the lane was merged into wider pavement. It has triggered an issue on safety for the pedestrians as they have to walk side by side with other modes of transport, such as Becak, Bicycle and Motor Bike. The issue on this matter is discussed in detail under the Safety indicator (7.6.10 sub-section).

The connection of Pecinan Street and surroundings/city in a whole

Figure 7.12 Public Transport of Magelang City (Sources: Observation, 2014)

Physical and visual connections from building to street, building to building, space to space or one side of the street to the other is one of the urban design quality indicators (Ewing et al., 2006). The strategic position of Pecinan Street has made it well-connected to other areas in the city of Magelang. Public transport as seen on Figure 7.12 is operated along the Pecinan Street and adjacent with stops in both side of the street corner. Taxis are not much operated in this area (they are mainly stop at Artos Shopping Mall area). However, after 8 pm in the evening car city transport is no longer available, so that *Becak*, Motor Bike Taxi and Taxis are the only public transportation provided.

Figure 7.13 Connectivity of Pecinan Street and nearby places (Sources: Observation, 2014)

Figure 7.13 shows the connectivity of Pecinan Street in the context of Magelang city as analysed from the prominent facilities, commercial spaces, or other destinations within the Magelang city centre and surroundings. It reveals that Pecinan Street area is surrounded by important buildings and landmark within Magelang city. The connectivity between Pecinan Street and other important buildings as indicated in figure 7.13 can be regarded as well-connected as these buildings are reachable within walking distance and easily accessed.

Walkability of Pecinan Street

Walking is a mechanism that turns road into streets where social interaction and economic exchange flourish (Carmona et al., 2010: 202, after Jacobs, 1960). The walkability and movement at Pecinan Street are influenced by the good permeability of the street which is accessible from many directions. Some alleys along the street also help the flow of movement from and to this street. The width dimension of Pecinan Street pavement also has been enhancing pedestrian movement and walkability.

Figure 7.14 Pedestrian Flow of Pecinan Street (Sources: Observation, 2014)

The width dimension of pavement has not directly raised the desire of respondent to walk along the street, mainly because of the presence of on-street parking along the street. Motor bike and private car users can easily access the street and park their vehicle on the street space, but not for the public transport users as they have to get off at the street corner only. Nevertheless, during street events, such as street carnival or Sunday morning car free day, the users are forced to walk along the street as it is pedestrian only, as commented in the interviews:

> 'I used to go to Pecinan Street, but rarely spend time for walking along, [I] usually direct to the shop that I need to go, park in front and then shop, and go again. Unless there is an event, such as car free day or morning leisure walk, [I will walk along the Pecinan Street]…'(P-VIS-002, In-depth Interview, March 2014).

It can be interpreted that the existence of on-street parking brings several implications, namely the decreasing street quality, discouraging the users to utilise public transport as it is more convenient to use private vehicles, reducing the street space, enhancing the air pollution and noise, and reducing the function of street as public space. The evidence shows that during the car free day people tend to walk and enjoy the street more rather than on the normal days when motorised vehicles can access the street.

7.6.3 Diversity

The diversity of Pecinan Street is discussed in two points: diversity of land use and diversity of home industry.

Diversity of land use

Table 7.1
Building Use of Pecinan Street in 2014

No	Building Use	2014	
		number	Percentage (%)
1.	IT and Electronics	43	19
2.	Clothing	42	18
3.	Closed down/Empty	32	14
4.	Shoes and Bags	20	9
5.	Accessories	19	8
6.	Jewellery and Watches	14	6
7.	Building materials & Décor	13	6
8.	Drugstores and Pharmacy	12	5
9.	Photo Studio	6	3
10.	Bank	4	2
11.	Optic	4	2
12.	Textiles and Curtains	3	1
13.	Beauty and Cosmetics	3	1
14.	Restaurant and Karaoke	3	1
15.	Hotel	2	1
16.	Bookstores and Stationary	2	1
17.	Sport Shop	1	0
18.	Clinics	1	0
19.	Temple	1	0
20.	Artshop	1	0
	Total	**232**	**100**

Source: Visual Observations, 2014

There is a need for diversity in the functions of a street to achieve a successful city street (Jacobs, 1961). At least, 20 categories of shops along Pecinan Street are shown in Table 7.1. Almost all types of merchandise that are demanded by people of Magelang and surroundings are traded along Pecinan Street, with the largest percentage being IT and Electronics (19%), Clothing (18%), and Shoes & Bags (9%). They are followed by Accessories (8%), Jewellery and Watches (6%), while Building material and Décor also 6%. Drugstores and Pharmacy is at 5 per cent, followed with Photo Studio (3%), Bank (2%) and Optic also 2 per cent. Textiles and Curtain, Beauty and Cosmetics, Restaurant and Karaoke, Hotel, and Bookstores are each in 1 per cent.

This is in parallel to the findings from the interviews showing that the products sold along the street are very diverse and particular, as expressed as follows:

‘Shops along Pecinan Street are jumbled, there is material building shop, and decorative plant shop, everything there, and all the merchandisers are there, Jewellery shops in the

southern part and in the middle of the street, most of them are drug stores…'(P-VIS-002, In-depth Interviews, March, 2014).

The retail diversity of Pecinan Street as indicated in Figure 7.15 has also enhanced the public interest to shop along, as commented in the interview as follows:

'Yes because everything is there, it doesn't exist in other streets…'(P-VIS-006, In-depth Interviews, April, 2014).

However, the emergence of new shopping centres, especially the shopping malls, creates an uneven competition between the shopping mall and independent shops that eventually can have an impact to the revenue and sales of the shops along the street. The urban policy especially from the local government regarding this matter is highly required.
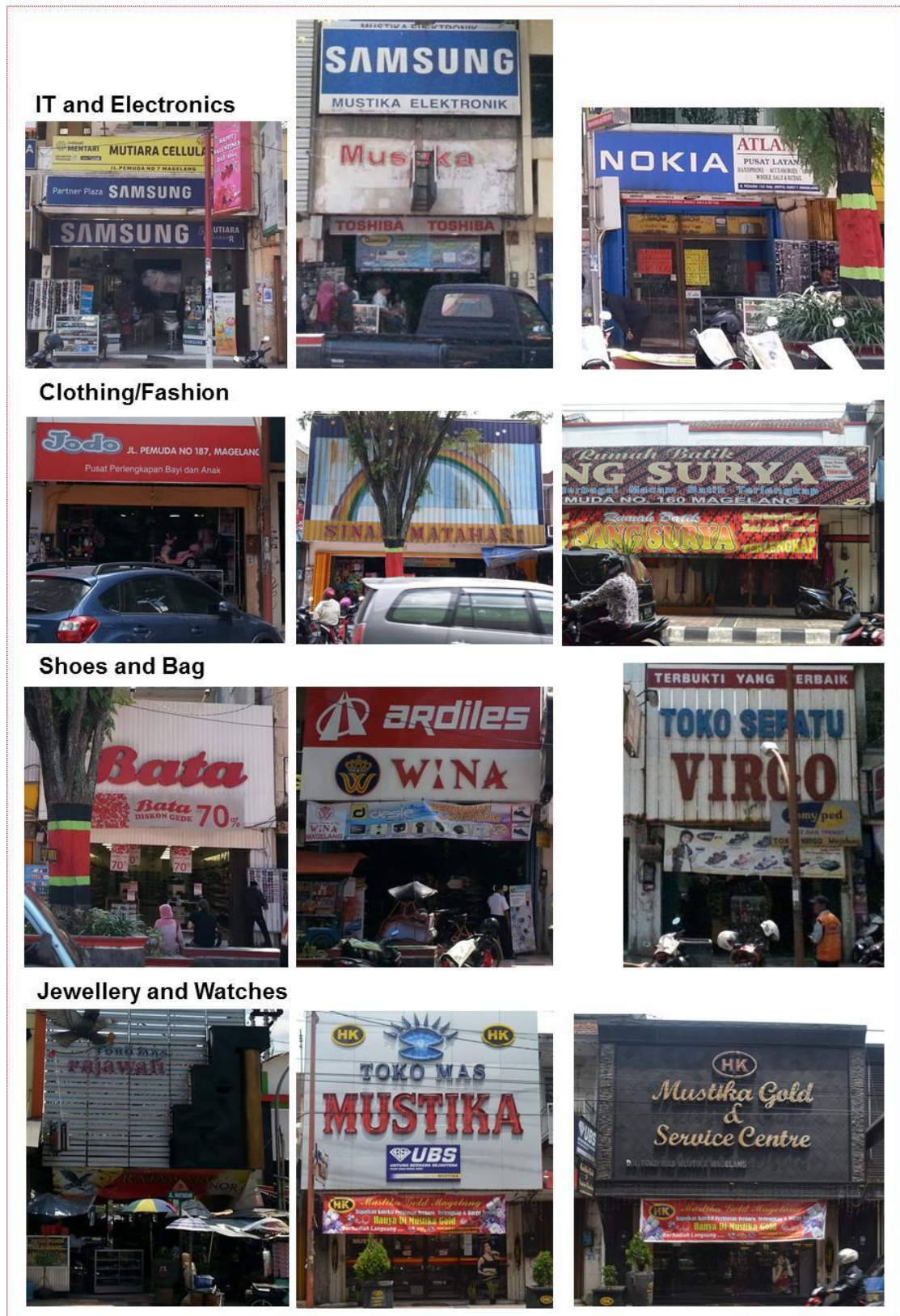
Figure 7.15 Retail Diversity of Pecinan Street (Sources: Observation, 2014)

Diversity of Home Industry inside the Pecinan District

As mentioned in the earlier sub-section (7.3 and 7.4), the Chinese merchants living along Pecinan Street and its district are engaged on industry based on agricultural product, especially tobacco and its derivatives, such as tobacco processing industry, cigar industry, and cigar paper industry. Some of the shops along Pecinan Street sell tobacco and cigars such as Ong Hok Liem Shop and Ong Sioe Sing Shop (Komunitas.Kota.Toea.Magelang., 2013).

Figure 7.16 Culinary Diversity of Pecinan Street and surrounding alleys (Tukangan and Cepit Market)
Sources: Observation, 2014 and http://m.kompasiana.com/post/read/521533/3/jajanan-ndeso-di-pasar-tukangan-magelang.html, accessed on 15/04/2015

Food is an important ingredient to seed a place with activity, as it attracts people who will also engage more people (Whyte, 1980). The Chinese community is also famous for their culinary industry located in the residential area inside the district. They then market their products at some shops along Pecinan Street, such as Holland, Sanitair, and Iriani bakeries and some local markets inside the district, such as Tukangan and Cepit market. These markets are informal in nature, situated along alleys in Pecinan district as seen on Figure 7.16. In fact, the existence of

culinary product by the Chinese community has been well-known since the colonial era and become the European tourist attractions when they visit Indonesia (Sunjayadi, 2006: 17).

The culinary diversity and skills as also occurred in the other two case studies shows that intangible culture may add the quality of the street as intangible heritage. The hybrid culinary by the Chinese and the natives continues to flourish as also having enjoyed during the field observation in 2014.

7.6.4 Liveability

Liveability of Pecinan Street is discussed under two main points: sitting spaces and amenities, and green spaces.

Sitting spaces and amenities

Figure 7.17 Sitting spaces, amenities, and Pecinan Street's ambience at night
Sources: Observation, 2014

The provision of sitting spaces and amenities is essential for public life. Whyte (1980) claimed that the prerequisite for people to stay longer in public spaces are places to sit. Sitting spaces provided along the Pecinan Street can be regarded as inadequate. Nevertheless, the barrier between the pavement and the automobile lane is often used as sitting space, as shown in Figure 7.17. The unavailability of proper benches for visitors can be one of the reasons of the users for not having longer social activities along Pecinan Street, for example hang out activity for the youngsters. Many of them prefer to choose Alun-alun (city square) area to spend time as it has better street amenities, as expressed in the interview as follows:

> 'There is no place to sit here, it is not good for hanging out…'(P-VIS-003, In-depth Interview, March 2014).

> 'The Alun-alun area is more vibrant for public activity compared to Pecinan area, [we] can sit, eat *Ronde* from the food stalls, *Angkringan*, or *Martabak* in front of the Great Mosque…'(P-VIS-002, In-depth Interviews, March 2014).

The observation reports that the provision of dust bin is relatively sufficient. However, some plant pots are misused as places to litter as it might reduce the cleanliness of the area. In fact, littering behaviour is still a problem in urban areas in Indonesia. Some interviewees express the provision of sitting spaces and amenities, as follows:

> 'Street light and dust bin are enough provided; special sitting space is not available ...' (P-GOV-001, In-depth Interviews, March 2014).

The street amenities design also draws the attention of the interviewees. The observation shows that the condition of pavement and other street amenities along the Pecinan Street is in good quality as the result of the pavement improvement project in 2011-2012. However, the quality of design and pavement materials are seems lower than the public expectation, as expressed in the following:

> 'The only street amenities available are street lights and neon boxes, but, the design is less attractive…'(P-VIS-002, In-depth Interviews, March 2014).

> 'I don't agree with the latest pavement improvement, it is slippery. Many elderly were slipped there…my opinion is, do not use the ceramics, it is slippery when wet, use other materials…'(P-SV-009, In-depth Interviews, March 2014).

The street light is specially designed by city council *'in lower post with yellow dim light to revive the atmosphere of the Pecinan Street in the past'* (P-GOV-007, In-

depth Interviews, May 2014). However, the street ambience that has been pursued by the Magelang city council still does not succeed to improve the public life on the street. One of the reasons could be related to the lack of the provision of sitting spaces and street amenities.

Green spaces
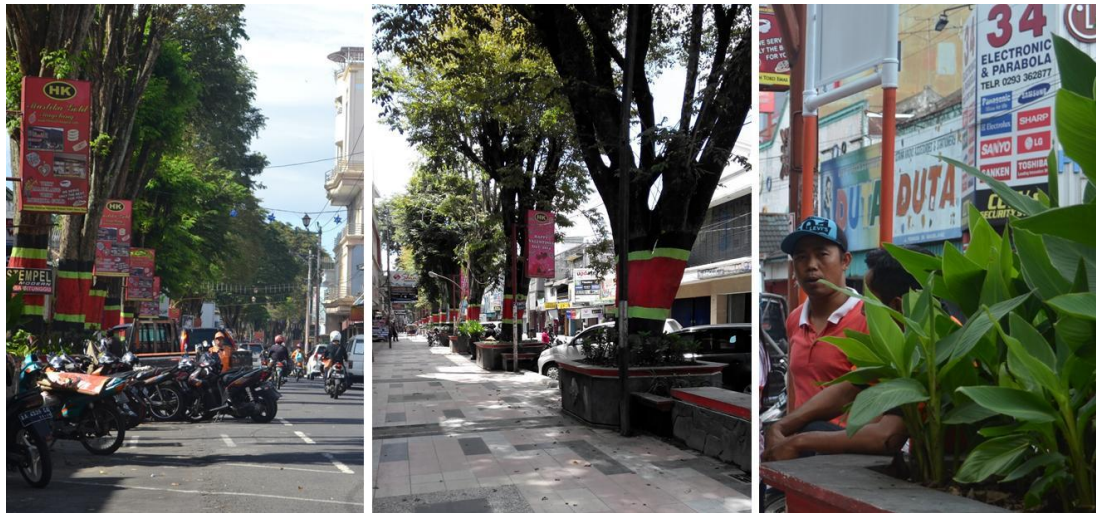
Figure 7.18 Green spaces along Pecinan Street (Sources: Observation, 2014)

'Public green space is important to city life for many reasons, for example recreation, health (filtering the noise and pollution), and setting and understanding (visual quality)' (Montgomery, 1998: 111). The existence of green space along Pecinan Street is manifested by trees that line along the pavement's barrier at the left side of the street as shown on Figure 7.18. Their presence is dominant and gives the impression of 'green' street. The respondents highlighted their comments on green space along the Pecinan Street as follows:

> 'The vegetation at Pecinan Street is well-maintained, in my opinion it is satisfactory, if it is too tight, it might disturb the existence of the building façade…'(P-GOV-001, In-depth Interviews, March 2014).

> 'The trees have been erected evenly along the street, but the maintenance should be improved, some plant pots are turned into dust bin…'(P-VIS-002, In-depth Interviews, March 2014).

The observation shows that the maintenance by the city council is sufficient and routine. Every day before 7 a.m. in the morning, the City Sanitation

Department sweeps the street and hauls trash along the Pecinan Street. Only, indeed, the public awareness for not littering seems need to be encouraged and enhanced in order to achieve a better street quality.

7.6.5 Vitality

Vitality indicator is discussed under three main points: pedestrian activity, uses and behaviour, and street vendor activity, as follows:

Pedestrian activity, uses and behaviour

The pedestrian activities that have been recorded in weekdays and weekends in Pecinan Street are presented on Table 7.2 and 7.3 as follows:

Weekdays Pedestrian Activity

Table 7.2
Number of people engaged along Pecinan Street in 8 different activities during a weekday

Activity	Symbol	07-08 am (morning)	12-1 pm (noon time)	6-7 pm (evening)	percentage
Standing	○	35	50	50	16%
Standing and Talking	●	18	14	23	6%
Sitting	□	19	16	16	6.06%
Sitting and Talking	■	0	0	23	2.73%
Walking	△	121	241	200	66.8%
Eating and Drinking	★	5	4	6	1.78%
Performing	⬟	0	0	0	0
Sleeping	⬭	0	0	0	0
Total Pedestrian		198	325	318	

Source: Pedestrian Count, 2014

Table 7.2 shows 841 people recorded were engaged in various activities in three measurement time of one weekday duration. It was recorded that walking exhibits the highest activity along the street (66.8%), followed by standing (16%), and standing and talking (6%). The noon time duration was recorded as the peak of pedestrian activity (38.64%), followed by duration 3 (evening time) 37.8%, and duration 1 (morning time) 23.54%.

Weekend Pedestrian Activity

Table 7.3
Number of people engaged along Pecinan Street in 8 different activities during a weekend

Activity	Symbol	07-08 am (morning)	12-1 pm (noon time)	6-7 pm (evening)	percentage
Standing	○	1	20	33	8.61%
Standing and Talking	●	6	21	9	5.74%
Sitting	□	1	4	8	2.07%
Sitting and Talking	■	0	6	8	2.23%
Walking	△	131	203	174	81%
Eating and Drinking	★	0	0	2	0.03%
Performing	⬠	0	0	0	0
Sleeping	⬭	0	0	0	0
Total Pedestrian		139	254	234	

Source: Pedestrian Count, 2014

Table 7.3 shows 627 people recorded were engaged in various activities along Pecinan Street in three measurement time of one weekday duration. Walking activity exhibits 81 per cent of all the pedestrian activity followed by standing (8.61%), and standing and talking (5.74%). As also found in the weekdays, noon is considered the peak time of pedestrian activity (40.5%), and slightly below noon time is evening time (37.2%), and morning time has the lowest activity (22.16%).
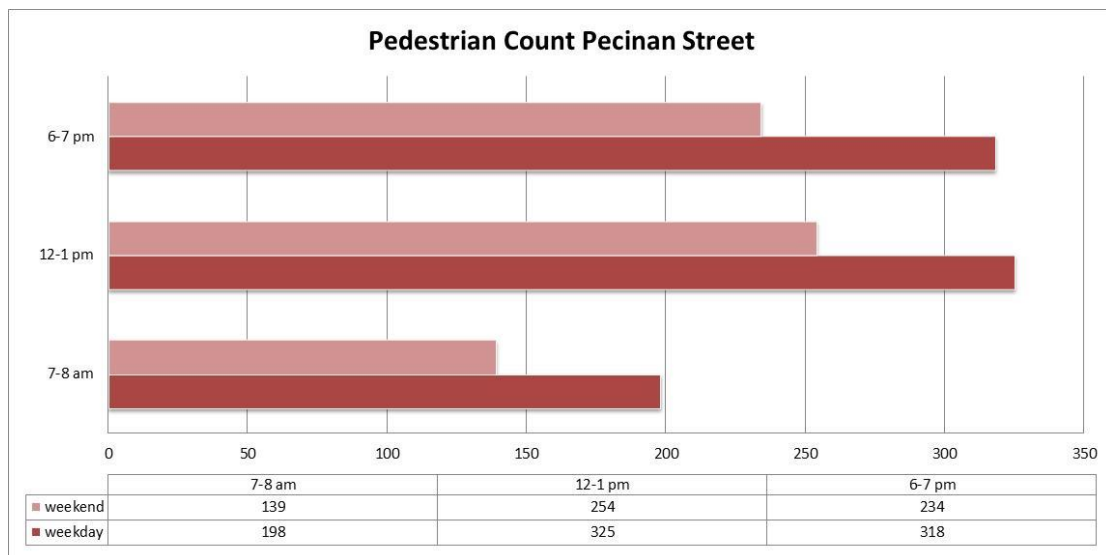
Figure 7.19 Number of pedestrian along Pecinan Street during a weekday and a weekend
Sources: Pedestrian count, 2014

Figure 7.19 shows the comparison of number of people engaged in activities along Pecinan Street during a weekday and a weekend time. Overall data show that pedestrian activity in a weekday is higher than in a weekend. The afternoon time is considered to be the peak time of pedestrian activity (39.44%), followed by the evening (37.6%) and the morning time (22.95%).

Overall, during the weekday and the weekend, walking continues to be the highest number of the pedestrian activity. It is in line to Penalosa (2004) which claimed that humans are pedestrians; just as deer need to run, or birds to fly, humans need to walk and pedestrian behaviour is culturally specific, especially in Asia (Mateo-Babiano and Ieda, 2007).

The behavioural mapping result as presented in Figure 7.20 to 7.25 indicates that most of the activities performed along the street space during the weekday and weekend are walking, sitting, gathering, and vending. The number of pedestrian recorded during the weekday is larger than of during the weekend time. Most of the activities in the morning time along the street are walking for work or schools. The number of pedestrians during the weekday morning is larger than during the weekend morning. It can indicate that activities such as going to work or schools are the dominant activities in the morning duration of time.

The graphics show that during the noon time, many students pass through the street after school for sightseeing or having photograph of with classmates at Kawan photo studio (see Figure 7.21). *Becak* and cyclists are using the pavement especially during this duration of time, making the pavement 'shared space' between them and the pedestrians. In some cases, safety issue raises, especially for the pedestrians (this issue is described in a more detail in sub section 7.5.10 on pavement safety).

In the evening time, some mobile vendors including *Bakso* sellers are roaming along the street and attracting visitor to enjoy the street food on the pavement benches or plastic chairs provided by the vendors. These eating and drinking activities then enhance the social interaction between the pedestrians. However, compared to that of other two case studies, the social interaction along Pecinan Street can be regarded as the lowest.

The number of pedestrians along Pecinan Street also seems to be the lowest one compared to that of the other two case studies, as the pavement appears to be quieter especially during the morning and the evening time. The quieter condition of the street is expressed in the interviews, as follows:

'Since the Artos (Armada Town Square) mall was built, now Pecinan Street is getting quieter. Walking along the street is also hot in a sunny day, so it is better to go to Artos [the building is fully air-conditioned], and also we can shop all things in one building…'(P-VIS-008, In-depth Interviews, April 2014).

The interviews also reveal that Alun-alun area in the northern part of the street appear to be more as 'public space' compared to Pecinan Street. Here at the Alun-alun area, people use the open space to have social interaction and experience the local culinary from the street vendors that have been given a designated area with an attractive lay out, thus the Alun-alun area is more representative for the public to conduct outdoor activities in urban space, as expressed in the interviews as follows:

'Whenever my relatives from other cities to visit Magelang, I often bring them to Alun-alun area to see the city atmosphere, as now this area is vibrant with public life, especially at night. Many street vendors, such as *Ronde* sellers, I really enjoy the atmosphere, but not to Pecinan Street…' (P-VIS-002, In-depth Interviews, March, 2014).
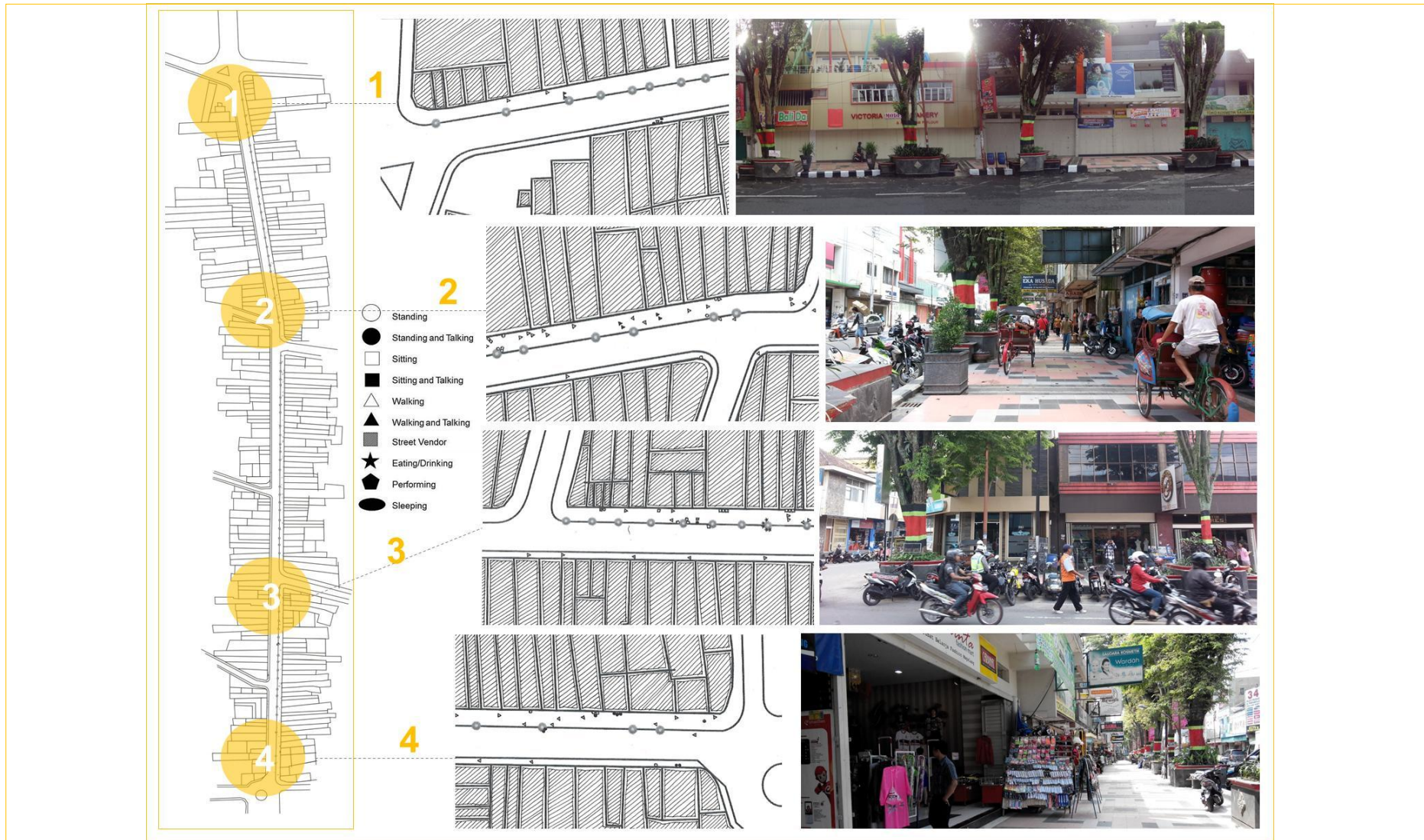
Figure 7.20 Pedestrian activities in Pecinan Street, weekday time, 07-08 am
Sources: Observation, 2014
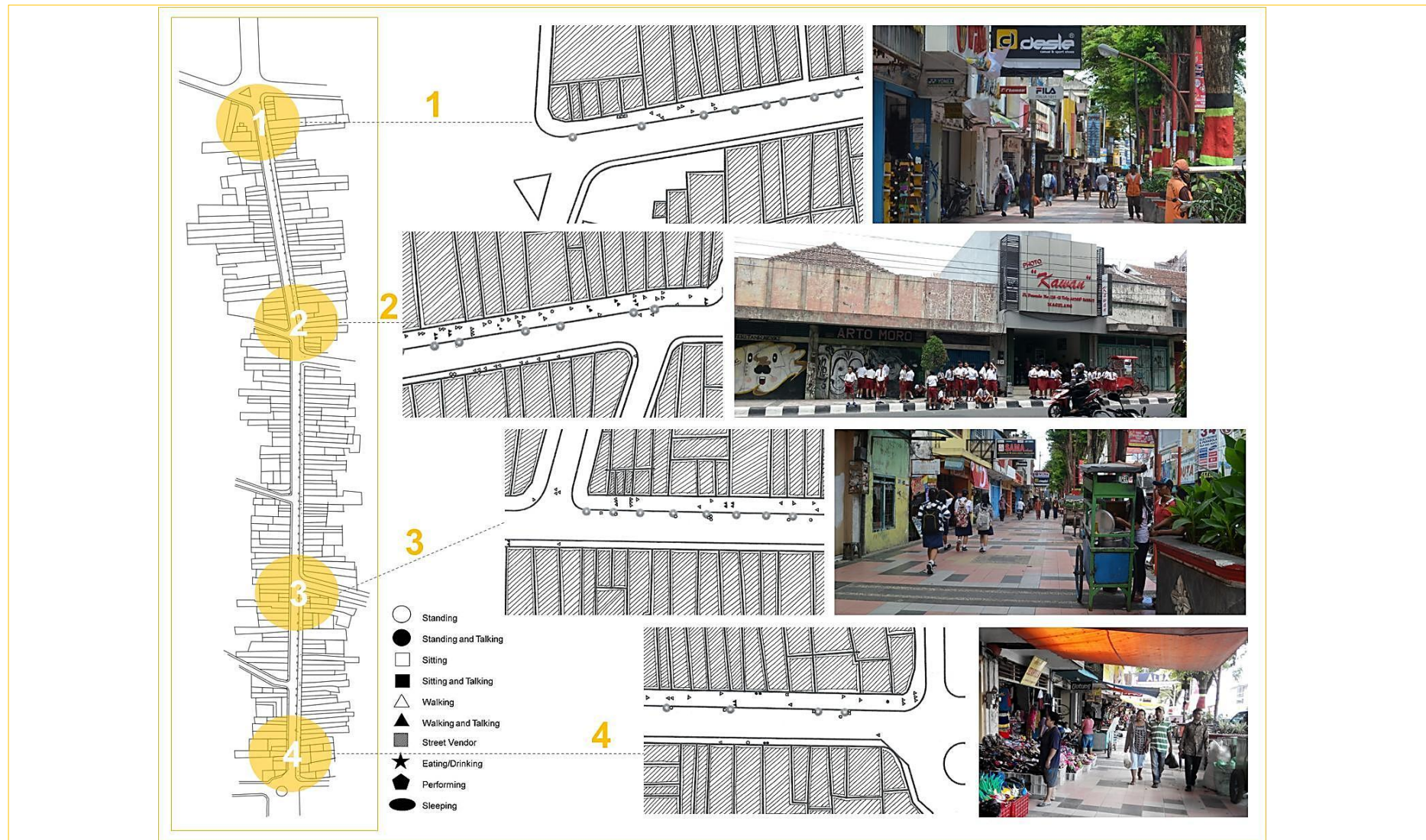
Figure 7.21 Pedestrian activities in Pecinan Street, weekday time, 12-1 pm
Sources: Observation, 2014

Legend:
- ○ Standing
- ● Standing and Talking
- □ Sitting
- ■ Sitting and Talking
- △ Walking
- ▲ Walking and Talking
- ▨ Street Vendor
- ★ Eating/Drinking
- ⬟ Performing
- ⬬ Sleeping
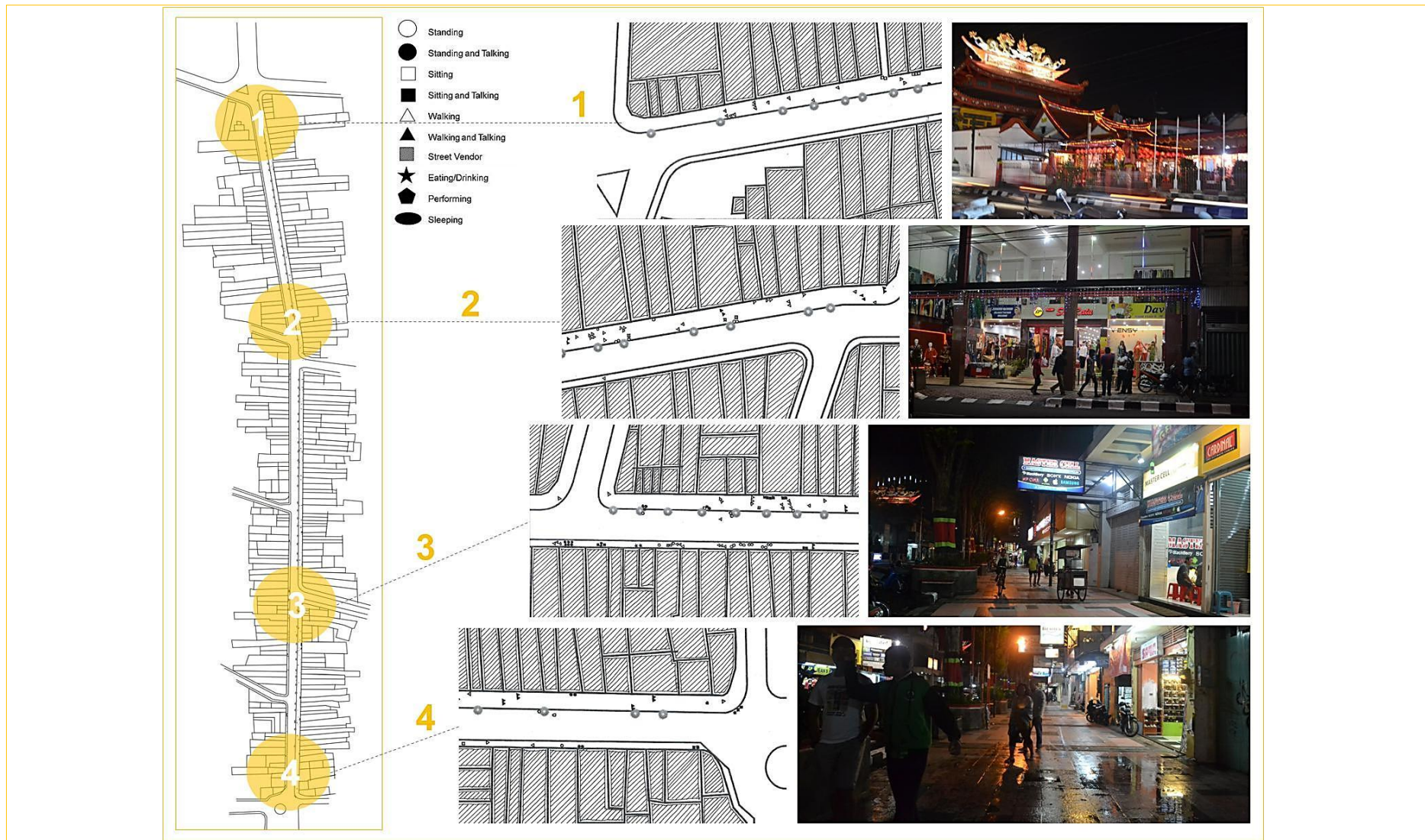
Figure 7.22 Pedestrian activities in Pecinan Street, weekday time, 7-8 pm
Sources: Observation, 2014
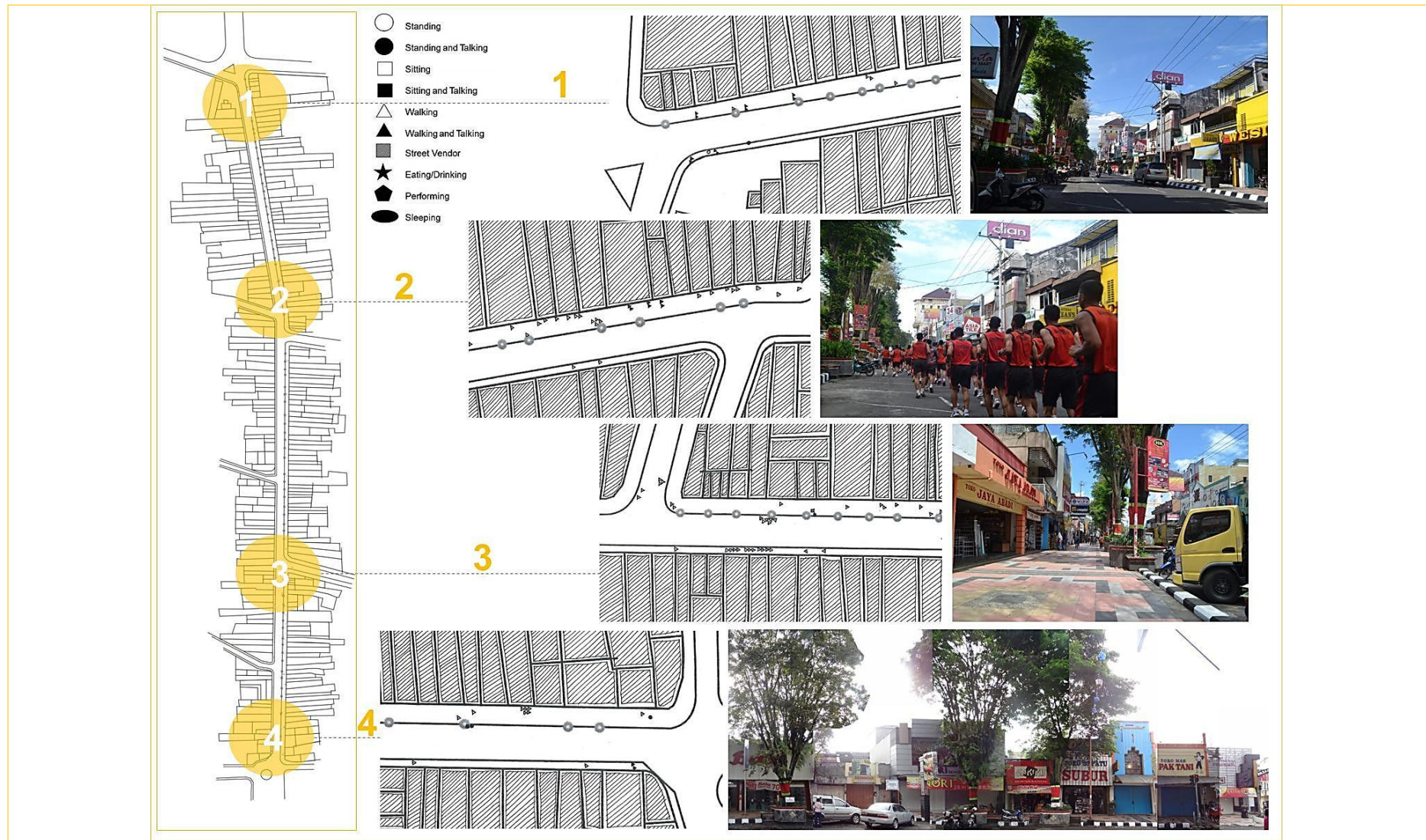
Figure 7.23 Pedestrian activities in Pecinan Street, weekend time, 07-08 am
Sources: Observation, 2014
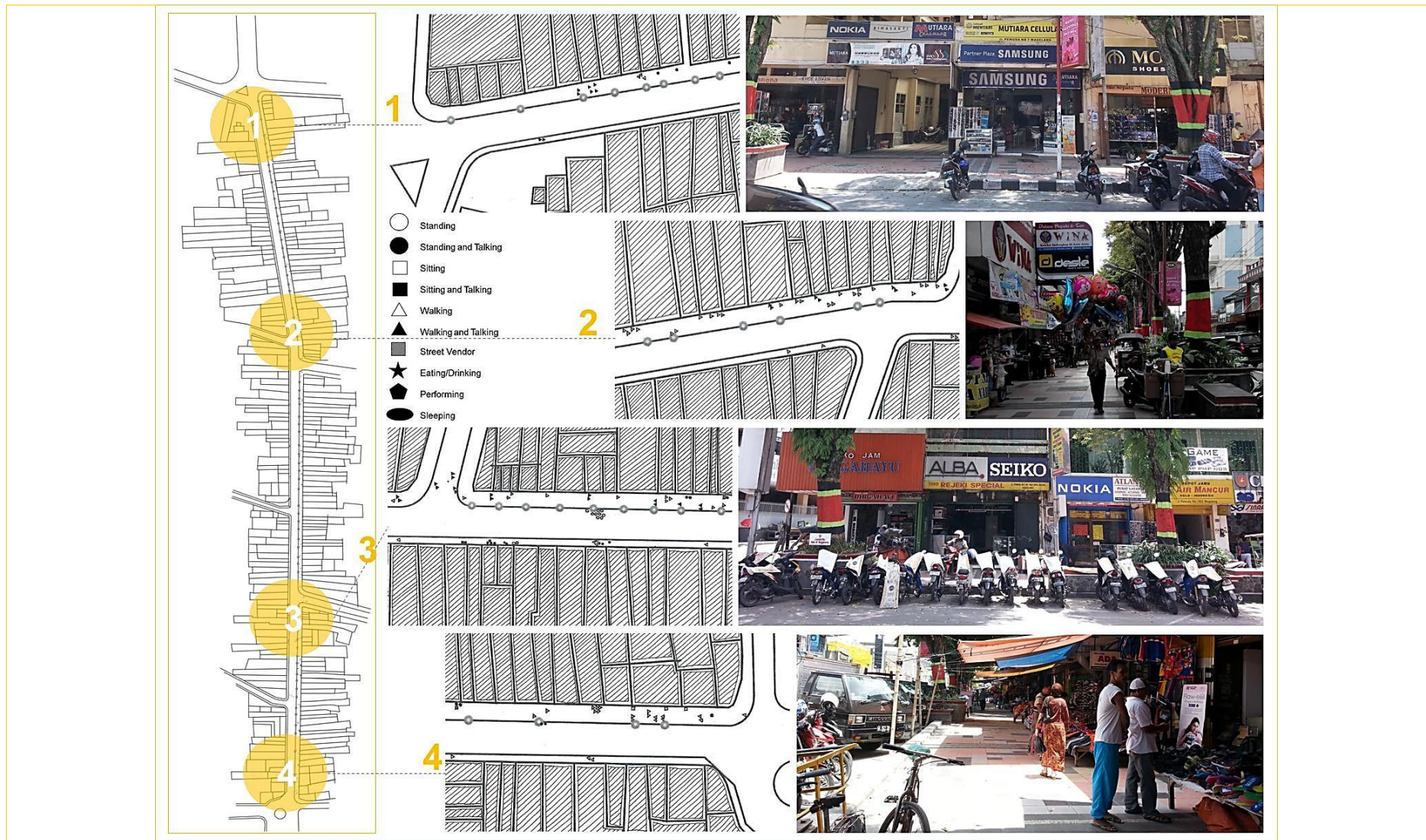
Figure 7.24 Pedestrian activities in Pecinan Street, weekend time, 12-1 pm
Sources: Observation, 2014
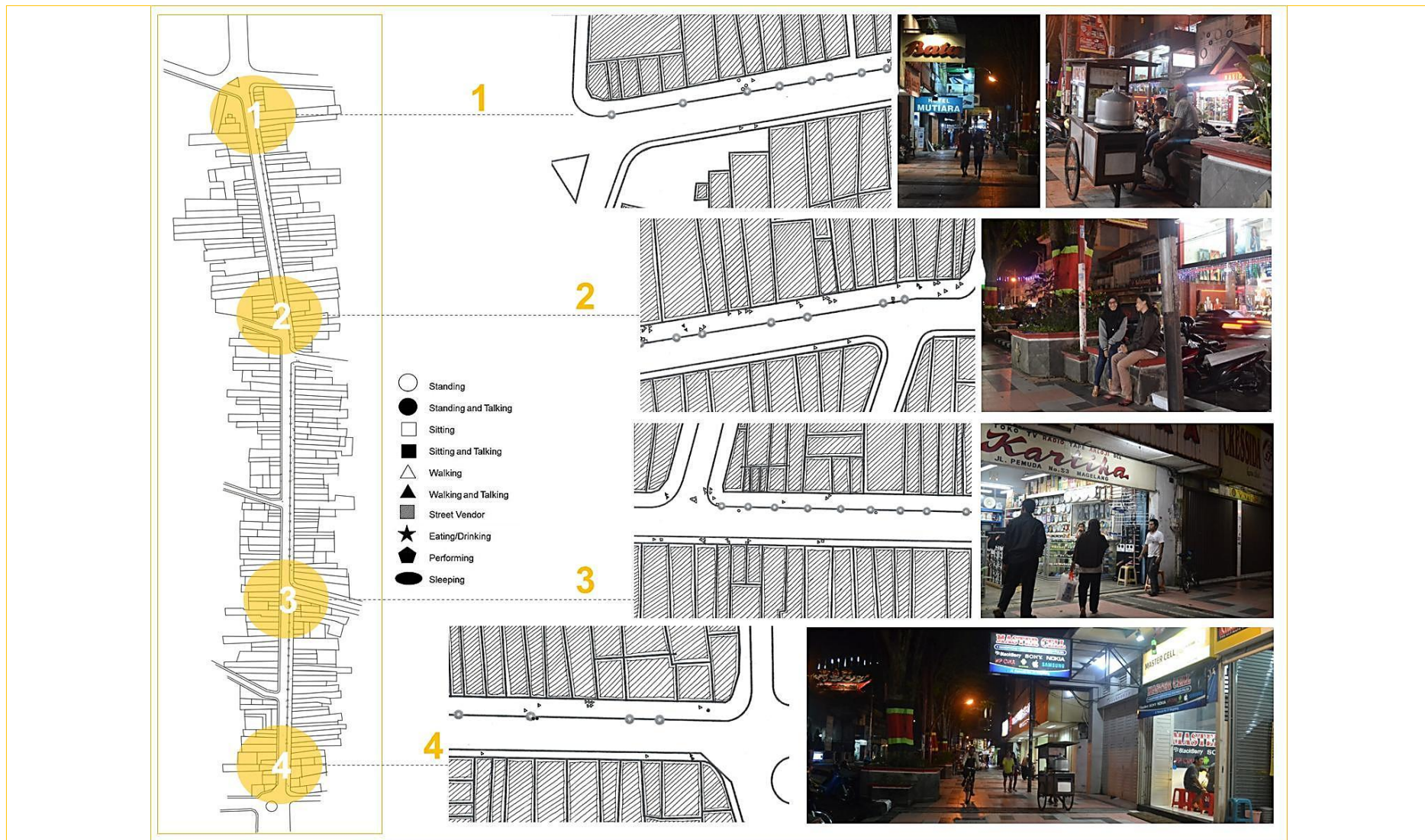
Figure 7.25 Pedestrian activities in Pecinan Street, weekend time, 7-8 pm
Sources: Observation, 2014

<u>Street Vendor Activity</u>

Whyte (1980: 50) argued that *'by default, street vendors have become the caterer of the city's outdoor life'*. They flourish because they are servicing a demand not being met by the regular commercial establishment. Street vendor activity was recorded simultaneously during the behavioural mapping of Pecinan Street. Figure 7.26 shows the variety of street vendor activity along Pecinan Street through three duration of time. Of the overall data, the number of street vendors in the weekday is higher than in the weekend. It is in parallel to the number of pedestrians in the weekday that is higher than in the weekend (see Table 7.2 and 7.3).

Number of Street Vendor Pecinan Street

	7-8 am	12-1 pm	6-7 pm
weekend	1	2	8
weekday	6	4	12
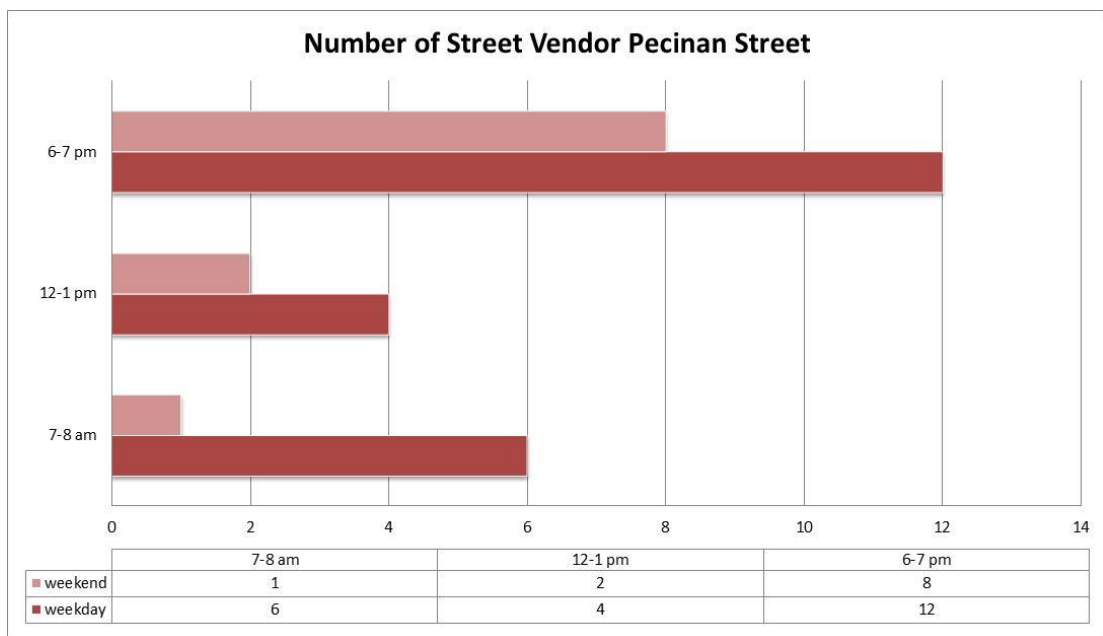
Figure 7.26 Number of street vendor along Pecinan Street during the weekday and the weekend
Sources: Pedestrian count, 2014

Regarding the existence of street vendors along Pecinan Street, some interviewees specifically mentioned vending activity as a memorable activity when visiting Pecinan Street, including the street food vendor.

'Oh yes, one more thing why I still always want to go to Pecinan is to buy *Martabak*, from the time of my grandmother, she is their loyal costumer, the owner is an Indian, also the *Serabi* seller in front of Sumbing Pharmacy, since I was a child, I managed to queue until late evening, even though I was already sleepy, [I was still] willing to buy…'(P-VIS-008, In-depth Interviews, April, 2014).

'Martabak, Tahu Petis, Gethuk, Martabak Asin, all very famous, *Bolang-Baling*…'(P-VIS-006, In-depth Interviews, April, 2014).

'[there is] *Tahu, Buntil,* and other street foods, all made by the Chinese, including *Mie, Lotek*, and the famous *Tahu Takwa*' (P-VIS-007, In-depth Interviews, April, 2014).

The dynamic life of street vendors especially food stalls is also discussed in sub-section 7.6.7 on cuisine and ethnic diaspora. During the field observation, there is a concern on the city council planning to move the street vendors to one of the floor in the newly rebuilt Rejowinangun Market. The city council intention is especially regarding the cleanliness and visual quality of the street. The contribution of street vendors to live up the street life seems to be less acknowledged especially by the local authority.

7.6.6 Adaptability

Adaptability of Pecinan Street is discussed under three main points: adaptability and the changes of physical and retail use; new shopping centres and endurance of businesses; and political adaptability and endurance of businesses, as follows:

<u>Adaptability and the Changes of Physical and Retail Use</u>

Montgomery (1998: 106) perceived that *'adaptable places continue to succeed despite changes in economic conditions, technology, and culture because their built form is mixed or highly adaptable'*. Since most of the shops along the Pecinan Street have been established for more than a generation, the changes of physical and retail use seem to be unavoidable. The observation identifies the physical changes of shops along Pecinan Street, especially through its façade design and building height and compositions as seen in Figure 7.27.

Figure 7.27 Some of the lots that have changed their physical appearances along Pecinan Street
Source: Observation, 2014, www.lokanesia.com, accessed in 15/04/2015

Figure 7.27 shows the significant changes of some buildings, including the architectural style and structural system. Traditionally, buildings along Pecinan Street are detached buildings and have inter-related construction with neighbour buildings. However, the new KFC building is a free-standing building in contrast with other buildings along the street. A building at the upper-right in Figure 7.27 is also leaving pros and cons amongst the street stakeholders. As mentioned by an interview respondent (P-GOV-007, In-depth Interviews, March 2014), this building was built for Swallow Bird Nest, which has high economic value. This building task is not encouraged by the government since it has higher storey with minimum openings, leaving bird droppings for the street and surroundings. Since it has higher

storey, it can also cause undesirable sun-shade effect for buildings inside the Pecinan district.

It is interesting to note that 32 retails (14%) are closed, poorly maintained or empty including Kresna Theatre at the left side of the street start point (in front of the Chinese Temple). As most of the shops along the street have been running more than a generation, this inter-generational inheritance can be the issue of the endurance of the businesses. Respondent (P-VIS-002, In-depth Interviews, March 2014) described how some old shop houses have deteriorated and the lack of maintenance has changed the physical appearance of Pecinan Street as shown in Figure 7.28.

Figure 7.28 Some closed down and deteriorated Kresna theatre and some shops at Pecinan Street
Sources: Observation, 2014

The significant number of closed and empty buildings can give bad impact on the quality of the street especially regarding the visual and vibrant economic quality. As seen in Figure 7.28 those buildings have become victims of social vandalism for example graffiti at the building façade.

New shopping centres and endurance of businesses

As a shopping street that has been established over two hundred years (1811-2015), Pecinan Street is not only frequently visited by visitors from the local Magelang city, but also as a shopping destination for people in the surrounding regions such as Temanggung, Wonosobo, Purworejo and Kebumen. This was commented in the interviews as follows:

'…in the olden days people spent special time to shop at Pecinan Street, Iriani bakery for example, as a bakery with various baking ingredients was visited by visitors from

Wonosobo and Kebumen, [they came] that far to buy special ingredients with special quality…'(P-VIS-008, In-depth interviews, April 2014).

However, along with the city development, the position of Pecinan Street as a prominent shopping street for the city and surrounding regions might have shifted. The openings of Gardena and Matahari Department Stores in 1990s near the alun-alun area, and followed by the opening of Armada Town Square in 2010 have a major impact to the endurance of business along Pecinan Street, as revealed in an interview with a shop owner, as follows:

‘I was born and live here, but **now is a difficult time** for our business…'(P-RES-012, In-depth Interviews, March 2014).

The concern regarding development of new nearby shopping malls has also something in common with the experience of Reading city in UK. Crosby et al. (2005) suggested that developing new shopping malls in traditional high street has positive impact to enhance the vitality of the street. However, alongside the positive benefits, there are negative impacts that have to be addressed by policy makers in town centre redevelopment and management, especially the concern regarding the competitive position of small independent shops within the town centre that are weakened by such developments.

New commercial centres also began to grow in nearby cities in the early 2000s. Shoppers from these cities do not have to go quite far to shop along the Pecinan Street. This condition is similar to the local Magelang city and region. People from villages now can easily shop closer to their home at the local market rather than go to Magelang city centre which can cost them more money and time to spend. Moreover, on June 28, 2008 the Magelang traditional city market (Rejowinangun Market) at the corner of Pecinan Street was caught on fire. Almost the entire market, which contained 2.088 of kiosks, vanished and all the commercial activities at this market were collapsed (Suyitno, 2012). It took five years for Rejowinangun market to be rebuilt (started in 2013), and its construction finished in the first quarter of 2014. During the field observation, Rejowinangun market only started to re-open their business. During the recess of the market life, many traders moved their stalls to other traditional market across Magelang regions so that they can still run their businesses as well as the costumer from villages can buy their

merchandises even closer. The five years period of the market recess and the development of other local markets can have an impact on the declining visitors of Pecinan Street. Since the Rejowinangun market was situated at the Pecinan street corner, their public life cannot be separated.

Political adaptability and endurance of the business

As also found in Pasar Baru Street (see Chapter 6), during the New Order Era (1968-1998) the central government implemented the discriminative act to the Chinese community, including prohibiting them to show their culture in public domain and to use Chinese name in their shops. The Pecinan Street followed the regulation through changing their shop names and hiding their identity through the façade designs. It shows the adaptability of the Chinese shop owners to fit into the government regulation to sustain their businesses. After the reform era (1988-onwards) there are no shops which return to their Chinese names, as what happened at Pasar Baru Street.

The impact was, in order to sustain their business; the Chinese community was willing to cover their culture in the public domain. In a broader perspective, the above government regulation reduced the cultural diversity of the Indonesian cities and caused the loss of streets identity.

7.6.7 Creativity

Creativity indicator is discussed under three themes: cultural activity and facilities; street festival and creativity; and cuisine and ethnic diaspora.

Cultural Activity and Facilities

Magelang Theatre and Kresna Theatre are two cultural facilities located at Pecinan Street and surroundings. However, both of the facilities are now closed down. The other cultural facility is OHD Museum of Fine Arts located inside the Pecinan district. It is a private museum of modern and contemporary Indonesian

art, founded and owned by a well-known local art collector Dr. Oei Hong Djien (OHD). Dr. Oei inherited a tobacco company and became a tobacco expert and business partner of PT. Djarum, one of the most prominent cigar companies in Indonesia. His wealth came from the tobacco company and his love of Indonesian fine arts had motivated him to build a museum in his family house inside the Pecinan District. The facility has become a cultural oasis for the public of Pecinan District in particular and the general public of Magelang. The establishment of cultural facility in Pecinan District can be an ideal vehicle to attract more visitors and generate revenue for the facility and surrounding urban spaces. Cultural facility especially museum can be used as a catalyst for economic development and enhance the city image (Grodach, 2008: 196 after Zukin, 1995).

Figure 7.29 OHD Museum at Pecinan District
Source: http://ohdmuseum.com/accessed in 16/04/2015

Street Festival and Creativity

Urban attraction such as street festivals have emerged as a means of improving the image of cities, adding life to city streets and giving citizens renewed pride in their home city (Richards and Wilson, 2004). The festivals, with their connotations of sociability, playfulness, joviality and community provide a ready-made set of positive images upon which to base a reconstruction of a less than perfect city image (Quinn, 2005). The observation recorded street festivals are held along Pecinan Street annually as presented in Figure 7.30. Festival *Kupat Tahu* (from a Magelang culinary dish) held annually every January. Cap Go Meh parade is held annually at the fifteenth day after Chinese New Year, usually around February. Every April, there is a *Grebeg Gethuk* (also from a Magelang culinary dish), held in *Alun-alun* and paraded along the Pecinan Street afterwards.

Figure 7.30 Street Festivals at Pecinan Street within one year duration
Sources: antarafoto.com, walubi.or.id, sangnanang.wordpress.com, accessed in 02/10/2014

During the Waisak festival, there are two street festivals held along this street that is Pindapatta procession, it is when the Buddhist monks are walking through the Pecinan Street pavement and the shop owner gave the charity, and Tri Suci Waisak parade. The other celebration is Independence Day carnival held in 17 of August to commemorate the Indonesian Independence. During this celebration, almost all of Magelang people gather around Pecinan Street and wear national costumes to commemorate the struggle for Independence. The street festivals along Pecinan Street are also commented during the interviews, as follows:

'The Independence Day carnival passes Pecinan Street; there are also Chinese New Year and *Grebeg Gethuk* parades. The Buddhist monks also parade every year along Pecinan Street [heading] to Borobudur Temple…'(P-VIS-001, In-depth Interviews, March, 2014).

'Street carnivals are quite often held in Pecinan Street, and during the occasion the street will be closed for cars, it happens during Sunday Morning Car Free Day as well…'(P-VIS-002, In-depth Interviews, March, 2014).

'Pecinan Street is the city centre for Magelang, whenever there is a carnival; it must be there… parades from Alun-alun to Pecinan…'(P-VIS-006, In-depth Interviews, March, 2014).

Despite the variety of street festivals along Pecinan Street, it is obvious that those festivals are traditionally performed through the history. Festivals have been historically construed as mechanisms through which place-based communities express identities, celebrate communally held values and strengthen communal bonds (Jackson, 1988; Marston, 1989; Smith, 1996, in Quinn (2005)). The exploration towards organising contemporary street festivals is still absent, although it is widely understood that street festivals can be a promotion tool to enhance the number of visitor to an urban place, and a worldwide tourism phenomenon (Prentice and Andersen, 2003).

Cuisine and Ethnic Diaspora

Figure 7.31 Street cuisines as the product of diaspora at Pecinan Street
Sources: Observation and various sources, 2014

As indicated in diversity indicator (Sub-section 7.6.3), the Chinese community is famous for their culinary industry located in the residential area inside the district. Although the Pecinan Street and its district are dominated by single ethnic group: the Chinese, they also interact with the locals (the Javanese). The long-standing interactions over period of time have produced cuisines which have been adapted to local taste and vice-versa. *Gethuk, Kupat Tahu, Buntil, Jenang*, and *Tahu Takwa* are examples of hybrid cuisines, which have been accepted as special cuisines of Magelang. Furthermore, some of these cuisines have been sold for tourist's

souvenirs as they visit the city. The implication of culinary richness of the street and the street quality has also been mentioned in the diversity of home industry (see sub-section 7.6.3) as food is important element to attract people to come and enjoy the atmosphere of the street.

7.6.8 Form and Visual Quality

Form and visual richness indicator is discussed in four main points: street scale and proportion; building height and composition; architectural diversity; and floorscape of Pecinan Street, as follows:

<u>Street Scale and Proportion</u>

The importance of street scale and proportion to determine the physical quality of a street has been studied by scholars including Cullen (1961), Ashihara (1979), McCluskey (1992), Moughtin (1992), and (Bosselmann, 2008). The street scale and proportion of Pecinan Street have been slowly transforming over period of time. In the early of its formation, most of the buildings were single storey so that the distance/height ratio was approximately 3:1. In 1980s in parallel to the changes of façade design, some buildings began to raise its heights. The observation in 2014 shows the comparison between D and H in Pecinan Street has become smaller and reached its ratio at 1:1 as seen in Section A-A, Figure 7.32. This ratio can be regarded as ratio with good sense of containment (McCluskey, 1992) or a balance is achieved between height and distance (Ashihara, 1979).
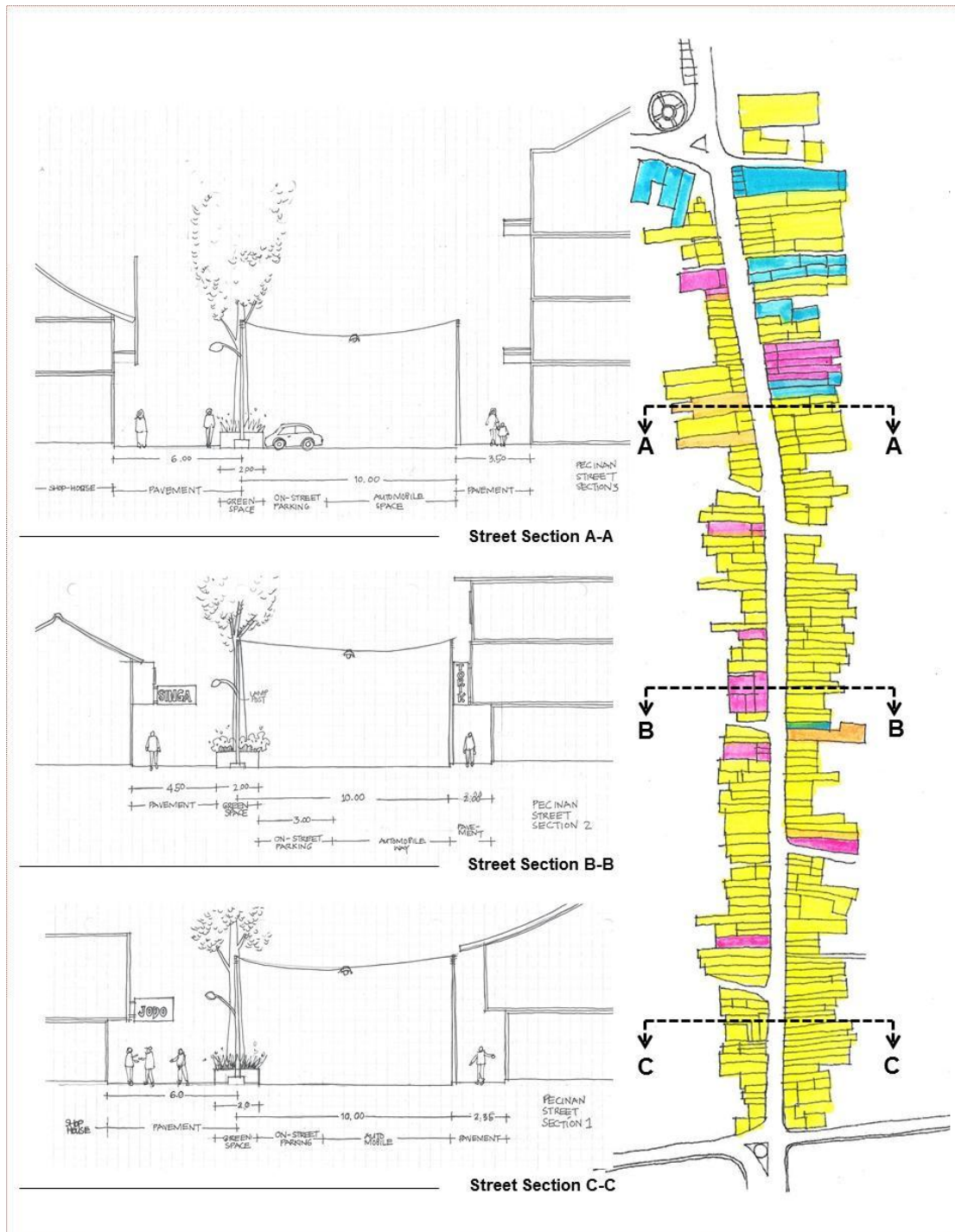
Figure 7.32 Pecinan Street section and its transformations (Sources: Observation, 2014)

The section B-B indicates that there is a gradual change to the height of the street wall as indicated at building on the right side of the street (three storey building), which reduces the sense of enclosure of the street segment. Meanwhile the section C-C shows that the street scale and proportion of the street segment is remain the same as in the early days of its formation, which allows the space to be

more open and sense of enclosure starts to become attenuated and progressively diminished (McCluskey, 1992).

Building Height Composition

Figure 7.33 Building Height Composition of Pecinan Street (Sources: Observation, 2014)

The visual observation identified the building height composition of Pecinan Street varies from single storey building to four storey building with composition, i.e., one storey building accounts for 4.25% , two storey building 86.7%, three storey building 6.91%, and four storey building 2.12% as shown in Figure 7.33. The composition shows that Pecinan Street is dominated by two-storey buildings with approximately ratio of D/H equal to 2.5:1, creating a spacious, towards open (Ashihara, 1979) and good sense of containment (McCluskey, 1992).

Architectural Diversity

'Physical elements on streets that catch our eyes, interest our eyes, keep our eyes moving, are elements of the best designed streets' (Jacobs, 2010: 165). At the early days of its formation, the buildings along Pecinan Street were dominated by architecture of shop houses with Chinese and colonial style influences, as indicated at Pocung shop in Figure 7.34. The architecture of Pecinan Street then transformed in accordance with the time and was influenced by the regulation during the New Order Era, when the Chinese culture should not be displayed to the public, including

the architecture and shop names. Thus, nowadays, especially at the façade design, the architecture style of Pecinan Street is dominated by modern and contemporary style, such as the Victorian Modern Bakery shop, which is totally rebuilt from the previous building. Meanwhile at the Barokah shop, the façade design has a modern nuance, yet the interior still uses the Chinese shop house style.
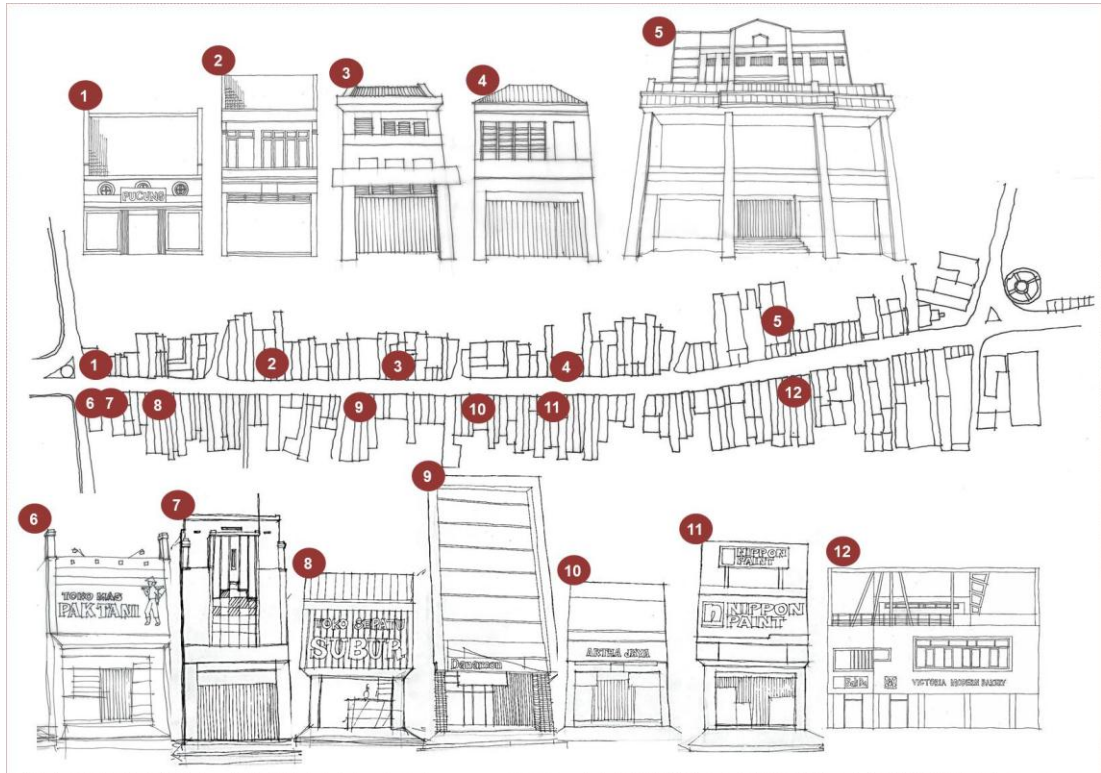
Figure 7.34 Façade Design of Pecinan Street (Sources: Observation, 2014)

The current condition of façade design at Pecinan Street varies. Some buildings retain its original façade design, such as Pocung Shop (no.1 on Figure 7.34). However, the trend indicates that the façade design transforms into a modern or contemporary architectural style. Motives behind this transformation can be related to the government regulation that forbids the Chinese culture expressed in public domain, back in the new order era (1968-1998). At the same time, most of the shops along Pecinan Street have deteriorated due to aging and needs to be renovated. Modern and contemporary architectural style seems fit as an option for its trendy, up to date look, and low maintenance.

However, the transformation of façade design was responded negatively by the respondents and some of them expressed views of how the loss of the old buildings had negatively affected them. Some examples of respondents' views include:

'…most of Chinese-style buildings have been lost, although some have been maintained, they are actually new buildings, the only genuine is Pucung store, it's the only one that can bring the atmosphere of the past…'(P-VIS-001, In-depth Interviews, March, 2014).

'[Buildings along Pecinan Street] are great, but the original Chinese model has gone, apart from the Sanitair shop, many memorable events are along this street, so when one old building has dissapeared, there is a disappointment…why has it now become like this [modernised]…'(P-VIS-009, In-depth Interviews, March, 2014).

A response from one visitor, who is also an architect working in a firm near the street, raised an issue regarding the fact that there are no conservation efforts that have been made, for example the provision of incentives for the shop owners to safeguard their old buildings. He notes that:

'…the old façades have been dismantled, much have been lost, because there is no compensation for the owner to maintain them, so they think, it's my building, there should be an incentive [for them]…'(P-VIS-004, In-depth Interviews, April, 2014).

Floorscape

Figure 7.35 Floorscape of Pecinan Street **(**Sources: Observation, 2014)

Hard and soft landscaping is an important element in determining successful spaces. Carmona et al. (2010: 194) argued that *'floorscape patterns have an aesthetic effect to organise the space aesthetically and can be designed to enhance the character of the space, by introducing scale; reinforcing spatial and visual character; and aesthetically organising and unifying the space'*. The street space of Pecinan Street is approximately 19.35 metres wide and 800 metres long. It is divided into four main parts: (1) pavement (5 metres); (2) space for trees and benches (2 metres); (3) main street space for heavy vehicles and on-street parking (9 metres); and (4) pavement (2.25 metres).

The pavement of Pecinan Street was designed with specific pattern of materials, shape, colour, and textures. Visually, the pattern of pavement forms a centralised pattern which is adapted to the building plots. The centralised geometric pattern creates a sense of enclosure in every composition that gives the pavement a more spacious spaces and open opportunities for the pedestrians to perform outdoor activities. Fine ceramics is used as the materials which turns out to have undesirable impact on users for it is slippery when wet (see sub-section 7.6.10). As a result of street improvement project in 2012, the condition of pavement along Pecinan Street can be considered in well condition (see Figure 7.35), although it needs extra cleaning attention especially after the rainfalls. Leaves falling from the surrounding trees should immediately be cleaned up to reduce the safety concerns for the pedestrians.

7.6.9 Transparency and Active Frontage

Figure 7.36 Transparency and active frontage of Pecinan Street shops, a) Mutiara Seluler, b) Apotek Waras, c) Victoria Bakery (Sources: Observation, 2014)

Active frontage with richness of openings, such as doors, shop windows, niches, columns, display details, signs and decorations is significant to attract people walking along (Jacobs, 1993, Gehl et al., 2006). The current condition of ground floor uses of buildings along Pecinan Street is mostly having active frontages as seen in Figure 7.36. At the Samsung shop, some merchandises spill out to the pavement, making it more interactive for the pedestrians. Meanwhile, Apotek Waras maintains its store displays since the olden days to give the loyal customer's identity on their quality of products over a period of time. It is expressed in the interviews as follows:

> 'Waras drug store maintain its traditional Chinese displays, every afternoon people would stand in line to buy some medicine there, it has been well known since the time of my grandmother…'(P-VIS-009, In-depth Interviews, March, 2014).

It can be stated that traditional display is having an impact to the street quality for it is showing the authenticity of the street and enhances the street identity (see sub-section 7.6.14).

As a renovated building, Victoria Bakery uses transparent glass at their ground floor façade. The use of air conditioning (AC) in the building causes this building to have limited opening to maintain the cooler condition inside the building. In the tropics, the use of AC is becoming necessary to maintain building comfort as the weather is mainly hot and humid especially during the day time. A solid transparent glass divider and door are utilized to maintain the active frontage. However, it is then utilised by a food stalls to trade. The phenomenon of using building front to trade is also found in some closed down buildings, especially in the southern part of the street. The street vendors have incidentally enhanced the active frontage quality as they covered the closed buildings without interesting features on their façades.

7.6.10 Safety

Safety indicator is discussed under two main points: pavement material and safety; and fire and historical buildings, as follows:

Pavement material and safety

'The protection against traffic and accidents is an important characteristic which should be provided by the public space' (Carmona et al., 2010: 209, adapted from Gehl 2008: 108). The issue on pavement material's safety rose after the implementation of pavement improvement project (2011-2012) by the local government. After this project, the pedestrian are complaining about the condition of pavement during rainy days and the mixing lane between pedestrian and non-motorised vehicles, such as *Becak* and Bicycle, as express in the interviews as follows:

> 'Walking at Pecinan is comfortable, the pavement is wide, the street vendor is not too dominant, only during the rain, it can be a problem, it is slippery...'(P-GOV-001, In-depth Interviews, March 2014).

> 'After the project, the pavement is wider, more comfortable, but initially there are many pros and cons, especially regarding the pavement material and the mixing lane [pedestrian and non-motorised vehicle lane), so safety for the pedestrian is reduced...'(P-VIS-002, In-depth Interview, March 2014).

> 'Walking at Pecinan will be more comfortable if the pavement is not mixed between pedestrian and Becak, just like in the earlier times, it is more comfortable...'(P-VIS-012, In-depth Interview, April 2014).

Figure 7.37 Pavement's safety after the 2012 improvement project (Sources: Observation, 2014)

The observation shows that the pavement is not only used by the pedestrians and *Becak*, but also for the Motorbike, even though there is a clear signage telling that they cannot use the pavement as seen on Figure 7.37. The condition needs to be addressed for the future safety and quality of Pecinan Street, otherwise the users tends to avoid walking and having activities along the street when there is no improvement from the city council. The users, especially motorcyclists have also

been aware of the safety issue for the pedestrians and thus, the city council needs to implement law enforcement for the motorcyclists who keep breaking the rules.

Fire and historical buildings

Figure 7.38 Building caught on fire: a) Liong Hok Bio Temple, 16 July 2014, b) Rejowinangun Market, 28 June 2008 (Sources: solopos.com and mashanafi.wordpress.com, accessed in 16/04/2015)

Fire has long been an enemy of heritage buildings with architectural and historical significance (Salleh and Ahmad, 2009). Rejowinangun market at Pecinan Street corner was caught on fire on 28 June 2008. As a traditional market built during the Magelang city formation era (1811-1815), the loss did not only impact the traders and the Magelang economy, but most importantly, the significance and importance of the market as the historical building in the city.

Only a month after the study observation, there was another fire on historical building at Pecinan Street. Liong Hok Bio Chinese Temple at the start point of the

street was collapsed partially on the night of 16 of July 2014. Fortunately, the fire only affected the front part of the *Tua Pek Kong* (main deity) altar. These two fire incidents have recalled on fires observed at Pasar Baru Street case study (see Chapter 6, sub-section 6.6.10).

There is an urgent need to apply better management of fire protection for heritage buildings. Salleh and Ahmad (2009: 2-3) suggested that regular fire risk assessment with close monitoring and reviewing; i.e. '*prevention is better than cure*' is needed. The heritage building owner and manager should play an important role in safeguarding their building and must possess a good fire safety management. Moreover, the government should provide better fire brigade to minimize the damage of such heritage structures.

7.6.11 Imageability

The imageability indicator is discussed under the theme of Pecinan Street in user's perception as the result of the interviews. Two key questions were designed to allow respondents to suggest more than one opinion on Pecinan Street's image; the first one is: "What first comes to your mind, and what symbolises the word *Pecinan Street* for you?", and second: "How would you broadly describe this street in a physical and non-physical sense?" The response given by the respondents were then clustered and categorised into four major components: *physical elements* (buildings, street as a path, building as a landmark, and building as an edge); *activity* (type of activity, variety of product, street vendor, street carnival, and religious/cultural event in the street); *socio-cultural attributes* (ethnic groups living in the street, street food, and trishaw, etc.); and *meaning* (street as a destination and historical value). A summary can be seen in Table 7.4.

Table 7.4

Summary of Public Perception on Pecinan Street's Image

PECINAN STREET IMAGE PERCEPTION BASED ON IN-DEPTH INTERVIEWS				
Component	**Category**	**Frequency**	**Value**	**Total**
Physical	Buildings	IIIII II	7	
	Street as a Path	I	1	
	Building as a Landmark	I	1	
	Building as an Edge	I	1	10
Activity	Shopping activity	IIIII	5	
	Product diversity	IIIII	5	
	Vending activity and Street Food	IIIIII	6	
	Religious/Cultural Event in the street	III	3	19
Socio-cultural Attributes	Ethnic Group Living in the street (Chinese Community)	III	3	
	Trishaw	II	2	9
Meaning	Street as a Recreational Destination	IIIII	5	
	Historical Value	II	2	7

Source: In-depth Interviews (2014)

Table 7.4 shows that buildings appeared to be one of the most noticeable features for respondents. Seven out of the fourteen respondents noted that buildings along Pecinan Street were memorable to them. Amongst those buildings were Kelenteng (Chinese Temple), Chinese shop houses, and Rejowinangun traditional market. Important buildings or landmarks have been recognised as key components of city image. This is in parallel to Lynch (1960) that concluded landmark as one of the image of the city elements.

Commercial diversity was not only within the respondents' image of the street, but also, according to Jacobs (1961), commercial diversity is in itself immensely important for cities, in a social as well as economical capacity. Shopping activity and products diversity sold were the next most commented up elements in Pecinan Street for interviewees, for instance:

'[In Pecinan Street] there variety of merchandises compared to other shopping streets…' (P-VIS-012, In-depth Interviews, April 2014).

Liu and Chen (2007) revealed festivals or special events have quite remarkable functions in moulding the image and impelling the construction and development of the host city. Street carnivals and religious/cultural street events were the next most prominent activity that symbolised Pecinan Street according to respondents, as commented in the interviews as follows:

'Pecinan is like the centre of the city, whenever there is street carnival or festival in Magelang, it will certainly passing this street only, not in other streets…' (P-VIS-006, In-depth Interviews, April 2014).

A socio-cultural attribute that was stated by respondent is the Chinese community. They were revealed by the respondents as being a minority ethnic group in Magelang in particular, and Indonesia in general. However, they appeared to be the dominant shop keepers along the Pecinan Street. Indeed, they were inseparable from the period when the Dutch colonial hegemony allocated land between City Square and City Market, then known as Pecinan district, to the Chinese. Even today, Indonesians of Chinese origin constitute about three percent of the country's two hundred million population; yet, they are perceived as dominating the country's economy (Kusno, 2000).

Significantly, five out of the fourteen respondents also called Pecinan Street a "destination". Pecinan means the "storefront for the local community" (P-VIS-007). Pecinan Street means the "place to see and be seen", and sometimes they will "see a street carnival along the street, but at other times they are the ones who will do parade there" (P-VIS-001), creating a sociable and meaningful street for the social community.

7.6.12 Place Attachment

To critically determine whether the respondents have a place attachment to Pecinan Street, two basic questions were posed: 1) Do you have particular feelings about the street? If yes, what are they, and what makes you feel that way? And 2) Do you have any attachment to some part of the street? If yes, why do you think this is and can you describe it? Responses from the respondents were then clustered and categorised based on two previous studies: physical and social attachment (Hidalgo and Hernandez, 2001); and functional and emotional attachment (Ujang, 2012, Shamsuddin and Ujang, 2008) that is presented in Table 7.5.

Table 7.5

Summary of Degree of Place Attachment

Degree of Attachment	Attachment Expressions	Respondent
Physical attachment	Yes, when I pass Pecinan Street, I often **look at Pucung Shop or Lan Shop**, only to make sure that they still exist here	P-VIS-001
	I think the building façade along Pecinan Street has changed a lot, most of the designs are [now of] minimalist design, or the old shops have deteriorated, less maintained, or damaged, or when they are renovated the will change the façade completely, **the only one still existing is Pucung Shop**	P-VIS-002
	Yes, **Jaya Shop, Bookshop**, we often go there, even though only window shopping, **every shop has its own memory**, from **Sumber Waras Shop** until the **Shopping area [market place]**, every day since I was in High School I always pass this street, until now, when there is a shop change [its appearance], **I feel lost**	P-VIS-008
	I don't agree with the pavement improvements, I want them to change the pavement material and the diversion as it was before, it is spacious now, but slippery when wet	P-SV-009
Functional attachment	Yes, I am **a loyal customer** for school books, uniform, and clothes, I do it over and over again	P-VIS-001
	My activities related to Pecinan Street are **shopping and passing** by	P-VIS-002
	I think yes, because every day **I pass** this street	P-VIS-004
	I come **for window shopping and looking at** new things	P-VIS-006
	I pass this street every day, **to send** and **pick up** my children from school	P-VIS-008
	Form me, some things are only available here, so I have to go to this street **to shop**	P-VIS-008
	[Not only trading] I come here when my children **need school things** (uniform, shoes, bag), but often, I go to Waras **shop** for some medicine. Every Ramadhan, I come here, **spending time for walking**, and **window shopping** for Eid festivities.	P-SV-009
	Nowadays people **only come for a purpose**, then go back	P-SV-010
Social attachment	I usually come **with my mother**, walking up to the street corner [market place]	P-VIS-001
	Yes, frequently **my father invited me** to go with him, once a week he purchased certain herbs here [Pecinan Street]	P-VIS-001
	Yes, I often went there **with my school friends**, they treated me to lunch	P-VIS-002
	I do feeling nostalgic here, spending time **with school friends** buying some music things, **my aunty** is also selling *Jamu* here, so I often visit her stall **with my dad**	P-VIS-003
	Because some of **my friend lives here**, you can contact him as well	P-VIS-005
	Because **I live here,** at the back alley, I am **window shopping with friends**, if I want to buy something I **go with my parents**	P-VIS-006
	Yes, **My mother** loves to bake, me too, so we love to go together to a bakery supplies shop	P-VIS-008
	Yes, I trade here to replace **my father**, he started in 1972	P-SV-010
	Yes, I live here, I am the second generation, **my parents** started this business	P-RES-012
Emotional	Yes, I went there [Pecinan Street] often purely **to remember**	P-VIS-001

attachment	my childhood	
	I think because Pecinan is Magelang city centre, when it **changes**, the city becomes **different**	P-VIS-006
	Yes, there are too many memories, every day since I was in High School I always pass this street, until now, when there is a shop change [its appearance], **I feel lost**	P-VIS-008
	Pecinan is a treasure, there are **many stories there**. I want to know more	P-VIS-014

(*Source: In-depth Interviews, 2014*)

Physical Attachment

Physical attachment can be predicted through length of residence, ownership, and plan to stay (Riger and Lavrakas (1981) in Scannell and Gifford, 2010: 4). Meanwhile, Stedman (2003) proposed that individual do not become directly attached to the physical features of a place, but rather to the meaning of those featured represent. Some respondents in Pecinan Street commented their physical attachment as a result of physical contact to the street that links to the importance of the physical features of this place to respondents, such as old shops (P-VIS-001, P-VIS-002), popular shops (P-VIS-008), and the street pavement (P-SV-009).

Functional Attachment

Functional attachment was identified by eight respondents in this research. Two of them merely used the street as channel of movement, to pass by, or to send and pick up their children from school without undertaking a specific activity along the street. Seven of them, instead of passing through the street, also spend time shopping or just window shopping. These activities are done over a period of time, making them loyal customers to the local shops. They perceived Pecinan Street as having all the merchandise that they needed and even some merchandise that was only available in this place, so they have no choice but to come and shop in the street. This has led to a situation whereby Pecinan Street has a significant impact on their lives due to dependency they have upon commercial activities to satisfy their personal needs.

Functional attachment will increase when interaction is constant over a long period of time. This then fosters familiarity with the products that are sold in every shop along the street. The visitor will have a set of specific preferences for consumer goods, so that every shop has their own speciality that creates an impression on the visitor's image of the shop and thus it is easily identifiable to the visitor. This important foundation for long-term interaction to a place corresponds with Fullilove (2004) and Seamon (2014) claims that attachment to a place may be sustained by regular environmental actions and routines that, in turn, are maintained and strengthened through that attachment. In Lewicka (2011) words, time spent in a place is consistently found to be the best predictor of place attachment. This is part of the 'process' dimension of place attachment as formulated by Scannell and Gifford (2010).

However, some studies indicated that the 'time period of interaction' does not always positively correlate to stronger place attachment. Indeed, Gustafson (2014) stated that those who are mobile may perceive places as meaningful for different reasons, and develop a different type of attachment from long-term residents. He made a distinction between 'place as roots' and 'place as routes'. He suggested that 'place as roots' represents a traditional understanding of attachment to a home place, based upon long-term residence, strong community bonds and local knowledge, whereas 'place as routes' suggests that places may be also important to less rooted, more mobile persons. In this regard, functional attachment to Pecinan Street is not only applicable to locals, but also to tourists or people from outside the city. The interviews revealed that even people from outside Magelang visited some of the bakery supply shops that met their needs and don't exist in other places (P-VIS-008). Moreover, some shops and street vendors that sell traditional street food were well known to visitors from other areas who often buy these goods as a souvenir, for example, *Gethuk* as traditional street food of Magelang.

Social Attachment

Social attachment can be formed via an attachment to others who partake in similar activities along Pecinan Street. Many respondents recalled doing activities in

this street with people who were no longer part of their lives, for instance parents or old school friends. For them, Pecinan Street was deeply associated with their memories of these people; they shared the same experiences such as shopping for special occasions. The feeling of being together with others seems to be an important part of creating a sense of belonging to a place. This is in parallel to the findings of Lewicka (2010) who identified that close social ties may make the place more meaningful and thus contribute to emotional bonds.

For shop owners or street vendors, the social attachment to Pecinan Street should, inevitably, be stronger. As one of the street vendors (P-SV-010) noted, his father was one of the pioneer stamp makers in the street since 1972. Soon after his father died, he continued to run the business. Since he was a child he would often spend time on his father's stall and interact with the people around him. He knew the owners of all of the shops that surrounded his father's stall, their stories, and how the street has transformed over time. Meanwhile, for the owner of the Sanitair Shop (P-RES-012), the people living around them were families and relatives, such as nieces, cousins, grandchildren, and so on.

The longstanding social entanglement reinforces a strong sense of belonging as well as generating a more personal and emotional attachment to this street. Places in which people reside for many years typically acquire meanings associated with several life stages such as growing up, dating partners, marrying, having children, and getting old, all of which result in a rich network of place-related meanings, and offer a deep sense of self-continuity, something that more mobile or transient people do not experience (Lewicka, 2011). This concurs with the findings of Hidalgo and Hernandez (2001), who showed that social attachment was greater than physical attachment in their research on place attachment in several neighbourhoods of Santa Cruz de Tenerife.

Emotional Attachment

Emotional attachment is deeply associated with the meaning that arises from the strong and long attachment between a person and a place. Of the four respondents that had emotional responses to Pecinan Street, all of them have lived

in Magelang and surrounding areas for more than 20 years (the youngest interviewee was 23 years old). Once again, time can be treated as place attachment predictor, as routine activities in particular places can lead to the development of a relationship between people and places. In Lewicka (2014) words, memory is a "glue" that connects people to their places, or as Seamon (2014) suggested, "time-space routines or place-ballet" are an interaction of individual bodily routines rooted in a particular environment that may become an important place of interpersonal and communal exchange, meaning, and attachment.

For one respondent (P-VIS-001), although she then lived in another town, she returned to Magelang at least once a month. Her parents had passed away, but still she always remembered how her parents took her to walk and shop along Pecinan Street. The street is therefore very meaningful to her, and she felt that the traditional shops once again put her in touch with her loved ones. Indeed, as Lewicka (2014) suggested, place attachment implies an "anchoring" of emotions in the object of attachment, a feeling of belonging, a willingness to stay close, and a wish to return when away. This corresponds with Gustafson (2014) arguments that even if people have moved and settled elsewhere, a different form of mobility enables them to maintain an association with their former home (engaging with local events, social networks, etc.). Both corporeal mobility (return visits) and mediated forms of mobility such as telephone communication, emails, and access to local newspapers, are important in this respect.

7.6.13 Authenticity

Authenticity indicator is discussed under two main points, physical and socio-cultural authenticity.

Physical authenticity

'An authentic place offers unique and original experiences' (Florida, 2002b: 228). Physically, the authenticity of Pecinan Street has declined, since most of the architectural styles of the buildings have been changed into a more contemporary

style. Some renovated and rebuilt buildings are now using modern architectural style with simpler façade and modern materials, such as concrete, glass and steel on their appearances. It can be said that the appearance of Pecinan Street is rather typical to other city's streets. However, the traditional display of some shops, which still retain its original design and pattern as indicated in the interviews, (see sub-section 7.6.9), safeguards the physical authenticity of the street.

Ling Hok Bio Temple as one of the landmark in Pecinan Street that was caught on fire last 2014 is now on going for reconstruction. The restoration of Liong Hok Bio temple to its original design will add the physical authenticity of Pecinan Street that is fading. On the other hand, the reconstruction of Rejowinangun Market to a new design and architectural façade has added a new appearance of buildings along the Pecinan Street.

Socio-cultural authenticity

Socially, the lifestyle of public of Magelang has shifted from being a traditional and rural lifestyle into modern and urban lifestyles. New shopping and public facilities, has influenced the social life of the people. Most of the people now prefer to shop at the modern shopping malls in an 'air conditioned building' rather than to walk at a traditional street with hot and humid weather, with sometimes heavy rains, as at the Pecinan Street. However, the special culinary of Magelang city still remains to be one of the best hunted items once visiting Magelang. Hybrid cuisines along Pecinan Street and its district as mentioned in Creativity indicator (see sub-section 7.6.7) are amongst the intangible culture that can retain the socio-cultural authenticity of the street.

7.7 Planning and Management

Planning Policy and Management of Pecinan Street

Paragraph 6, Article 52 concerning The Spatial Planning Policy of Magelang city 2011-2031 categorises Pecinan Street as a commercial area, but not as an area of

urban heritage (RTRW, 2012). It means that the development of Pecinan Street is solely related to the economic development, let alone conservation efforts for its cultural heritage.

The only conservation effort recorded is the restoration of the Liong Hok Bio Chinese Temple in the decade of 2000s by the private sector associated with the Chinese community. It can be regarded as an attempt to bring back the street to have past nuance in the middle of modern Magelang. A respondent from the government stated that the local authority was not able to solve all urban problems, especially with regard to the conservation of old buildings along Pecinan Street. He explained that he would rather seek an enhancement of public participation on improvements to the quality of the urban environment. Many of the respondents commented on Pecinan Street's deteriorating architectural quality and this is clearly one of the main challenges in attempting to retain its street image and identity.

The pavement improvement project (2011-2012) is dedicated to improve the pavement quality that has been deteriorated over a period of time. However, this project has resulted pros and cons regarding the mixing area between the non-motorised vehicle and pedestrian lane and also regarding the pavement materials as mentioned in the Safety indicator (see sub-section 7.6.10).

Respondent's opinions and expectations of the future Pecinan Street

Opinions on the quality of Pecinan Street followed by expectations of the future of the street that were reflected in all of the interviews are summarised as follows:

Table 7.6

Opinions and Expectations on the Future of Pecinan Street

1.	Government Agency	

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Good quality of green space - Lost identity of façade design - Street amenities are adequate for a small city - Spacious and better quality of pavement	- Incentives for the shop owners who conserve their old buildings - Façade revitalization - Bringing back the railway - Fully-pedestrianised street in the future
Quality of the Street: Non-Physical Dimension	- Place for street carnivals - Having strong Chinese culture potentials - Chinese street food as a unique character	- Reveal the Chinese culture potentials to develop the street
Street Image and Identity	- It is a Chinese district and old shopping street - Old buildings as street identity - Pecinan street as a display for street foods produced inside the Pecinan District	- Street image revitalisation
Place Attachment	- Functional attachment: loyal customer - Emotional attachment: childhood memory,	- n/a
Historical Significance	- The oldest shopping street in Magelang - Have existed since the colonial era and have a significant role during the independence war	- n/a
Planning and Management	- The minimum involvement of the Chinese community in government projects - The low capacity of local government as urban regulator	- The need for management of street vendors - Maximising the Pecinan Street potentials - Enhancement of government's role - Better fire management

2.	Shop owner and Residents	

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- n/a	- n/a
Quality of the Street: Non-Physical Dimension	- Pecinan Street is quieter than years before	- n/a
Street Image	- n/a	- n/a

	and Identity	
Place Attachment	- n/a	- n/a
Historical Significance	- n/a	- n/a
Planning and Management	- n/a	- Need better street management to enhance the sales

3. Visitors

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Spacious and better pavement appearances, but slippery when wet - The mixing lane between pedestrians and non-motorised vehicles creates confusion and raises safety issue - Massive façade design changes - Green space	- Need better maintenance on green space - Better design on street amenities - Need sitting space
Quality of the Street: Non-Physical Dimension	- As a cultural path of the city (place for street carnivals) - Various activities and merchandise - The famous street foods	- n/a
Street Image and Identity	- Pecinan street as a city centre of Magelang - Pecinan street as a famous shopping street of Magelang, but now starts to downgrade, especially for the young generation - Chinese temple as the landmark - *Becak* as a unique vehicle in the street - Hybrid architecture: Chinese-Colonial-Javanese style	- Create street uniqueness to enhance street image and identity
Place Attachment	- Functional attachment: constant interaction to Pecinan Street - Emotional attachment: childhood nostalgia	- n/a
Historical Significance	- Pecinan Street as Mixed-use District: Commercial, Education, and Religious street	- The need of street branding - The need of revealing the historical value of the street
Planning and Management	- On-street parking creates a crowded area	- Street revitalization and conservation - The need of parking management - Better street maintenance and regulation - Street event as revitalization effort

4. Street Vendors

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Slippery and mixing pavement - Changes in architectural style	- Need better and safer pavement material
Quality of the Street: Non-Physical	- The removal of street vendor from the pavement has changed the street activities	- n/a

Dimension		
Street Image and Identity	- Pecinan Street as a Chinese shopping street	- n/a
Place Attachment	- Functional attachment: constant interaction to Pecinan Street	
Historical Significance	- Railway along Pecinan Street as a historical element	- n/a
Planning and Management	- Street vendor will be shifted to a new market building	- Pavement improvement - Street vendor management

Sources: In-depth Interviews, March-May, 2014

7.8 Chapter Conclusion: Pecinan Street Quality

This chapter highlights some important quality indicators that can be regarded as the distinct characteristics of Pecinan Street. First is the existence of continuous green space (trees) along the street that creates a good quality of environmental comfort especially in the tropics. However, falling leaves on the slippery pavement may reduce the safety of the pedestrians. A better cleaning management needs to be addressed to solve this matter. Second is the diversity of retail uses along the street that are well-known for its high variety of commodities, as also appreciated by the interview respondents.

Third is the hybrid cuisine as a result of cultural acculturation between the Chinese and the locals that are sold in several bakeries as well as street vendor along the pavement. This emerges to be a distinct image for the street. Fourth is the traditional street festivals which are handed down through generations, making this street the only venue for street parades or carnival in Magelang. Fifth is the high point of place attachment, especially for social and emotional attachment which shows a deep meaning of the street for the respondents.

The chapter also indicates some declining quality indicators, such as: First is the change of the façade design of buildings along the street that has been in the spotlight of the respondents. Façade design restorations to its original form might restore the physical authenticity of the street. Second is that the existence of a spacious and aesthetic design of pavement is not followed by material safety especially during the rainfall. Third is that the removal of street vendors to Rejowinangoen Market has further aggravated the quiet condition of the pavement. Reconsideration of this policy is worth doing to improve the quality of public life in

Pecinan Street. <u>Fourth</u> is regarding the fire in heritage buildings. As also found in Pasar Baru Street case study, heritage building on fire has become a concern in Pecinan Street as in the case of the fire of Rejowinangoen Market in 2008 and Liong Hok Bio Temple in 2014, the event occurred two months after the research field observation.

Overall, this chapter has shown that in general Pecinan Street as one of the earliest streets in the city possesses some qualities such as good **liveability** (natural feature), **diversity** (mixed use of buildings), **creativity** (hybrid cuisine and traditional street festival), and **place attachment** (social and emotional attachment). Meanwhile, some other indicators may be revitalised further and adapted to the contemporary condition of the street to enhance the quality of Pecinan Street as public space of the city.

The next chapter (Chapter 8) will present results for the Malioboro Street case study, which will enrich the findings of the study. Chapter 9 will presents a cross-case analysis and discussions of the three case studies before drawing the research conclusions in Chapter 10.

8

Malioboro Street

8.1 Introduction

This chapter presents findings of a case study undertaken in Malioboro Street. It is situated in the heart of Yogyakarta as part of the city philosophical concept as the 'imaginary axis' that correlates the city with two supernatural powers: the mountain and the sea. In the beginning of this chapter, the history and transformation of Yogyakarta are presented within three sub-sections: Yogyakarta under Islamic Mataram Kingdom, Yogyakarta under colonial hegemony and Yogyakarta after Indonesian independence. The formation of Malioboro Street and the development of the street in the twentieth century are then reviewed in the historiography of Malioboro Street.

Malioboro Street from an urban design dimension is discussed before reviewing the quality of the street under thirteen indicators that emerge in the analysis. Sub-themes are reported from the findings of the observations and in-depth interviews. At the end of the chapter, a summary of part three of the study is presented before proceeding to the cross-analysis of the three case studies reported in Chapter 9.

Administratively, Malioboro Street and district is situated in three sub-districts, i.e.: Kelurahan Sosromenduran, Kelurahan Suryatmajan, and Kelurahan Ngupasan. According to the Yogyakarta's Central Bureau of Statistics, in 2013 there are 21.575 people living in Malioboro District (BPS, 2013). The inventory of physical environment in 1999 shows that the district of Malioboro is dominated by residential buildings (56%), followed by a mix between commercial and residential buildings (34%), and public facilities (10%) (YUIMS, 1999).
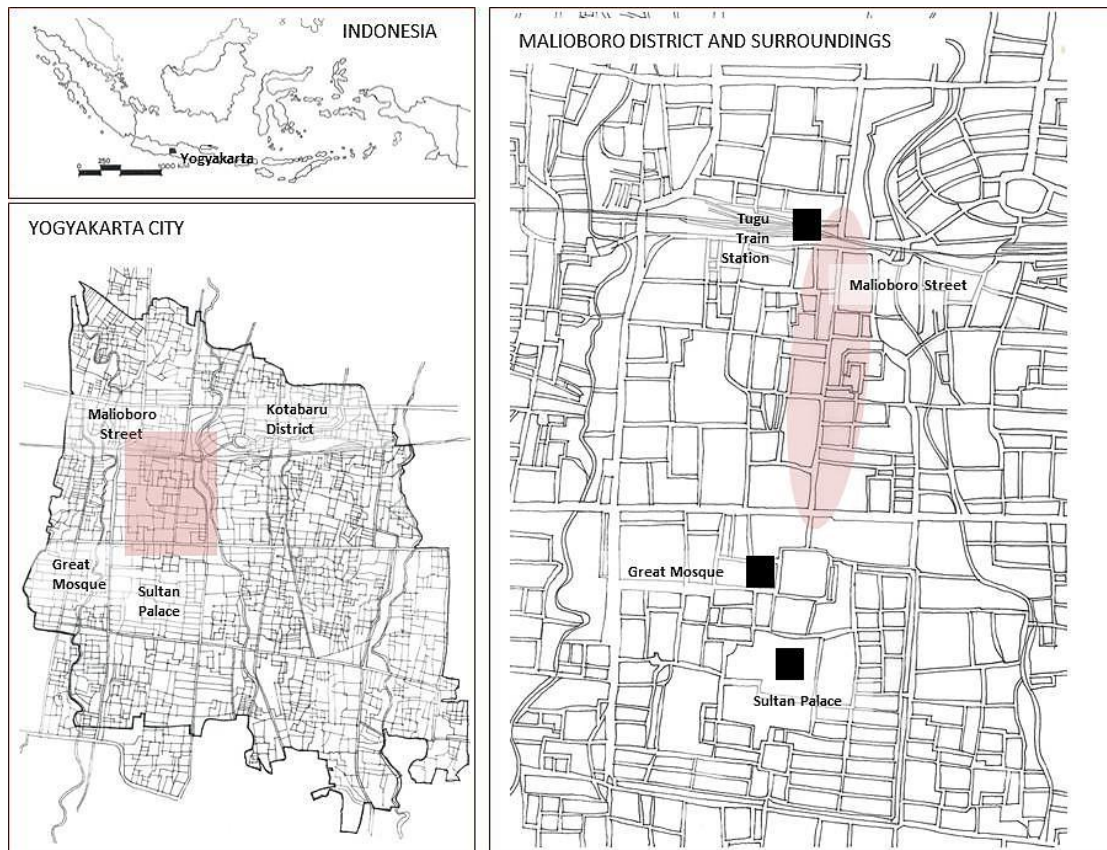
Figure 8.1 The Study Area of Malioboro Street (Map: Author, 2015)

8.2 Yogyakarta: History and Transformation

The city of Yogyakarta is situated in the southern part of Java Island, about 500 km southeast of Jakarta, the Indonesian capital city. It was established in 1755 AD, but its existence has been established since the eight century as the centre of Hindu Mataram Kingdom, which produced an incredibly refined, complex civilization and monuments, such as Borobudur and Prambanan Temple (UNESCO World Heritage Sites). The name of Yogyakarta is derived from the Sanskrit Ayodhya (Ngayogya in Javanese), the capital city of the Indian Epic Ramayana.

8.2.1 Yogyakarta under Islamic Mataram Kingdom (1755-1790)

The Islamic Mataram Kingdom in Yogyakarta was established after the Giyanti agreement between Prince Mangkubumi and Sultan Pakubuwono III, his rival sibling from Surakarta kingdom early in 1755. Prince Mangkubumi then changed his title as

Sultan Hamengku Buwono I and planned Yogyakarta as the capital of this new kingdom.

Yogyakarta was designed based on the ancient traditional Javanese town concept, which gained a great influence from the Hinduism concept on city planning (mandala). An imaginary axis lies in the centre of the city that correlates Mount Merapi in the north and the South Sea in the south; those are as symbols of supernatural powers that protect the kingdom's sovereignty. It consists of the Palace (Kraton: 1756); the Great Mosque (Masjid Agung: 1775), the market (Pasar Beringharjo: 1756), the Square (Alun-alun: 1756), North-south axis (Malioboro Street: 1756), the Water Palace (Taman Sari: 1778), City Wall (Beteng Baluwerti: 1756), the Stage (Panggung Krapyak: 1756), the White Statue, and the residential neighbourhood (Adishakti, 1997) as seen in Figure 8.2.
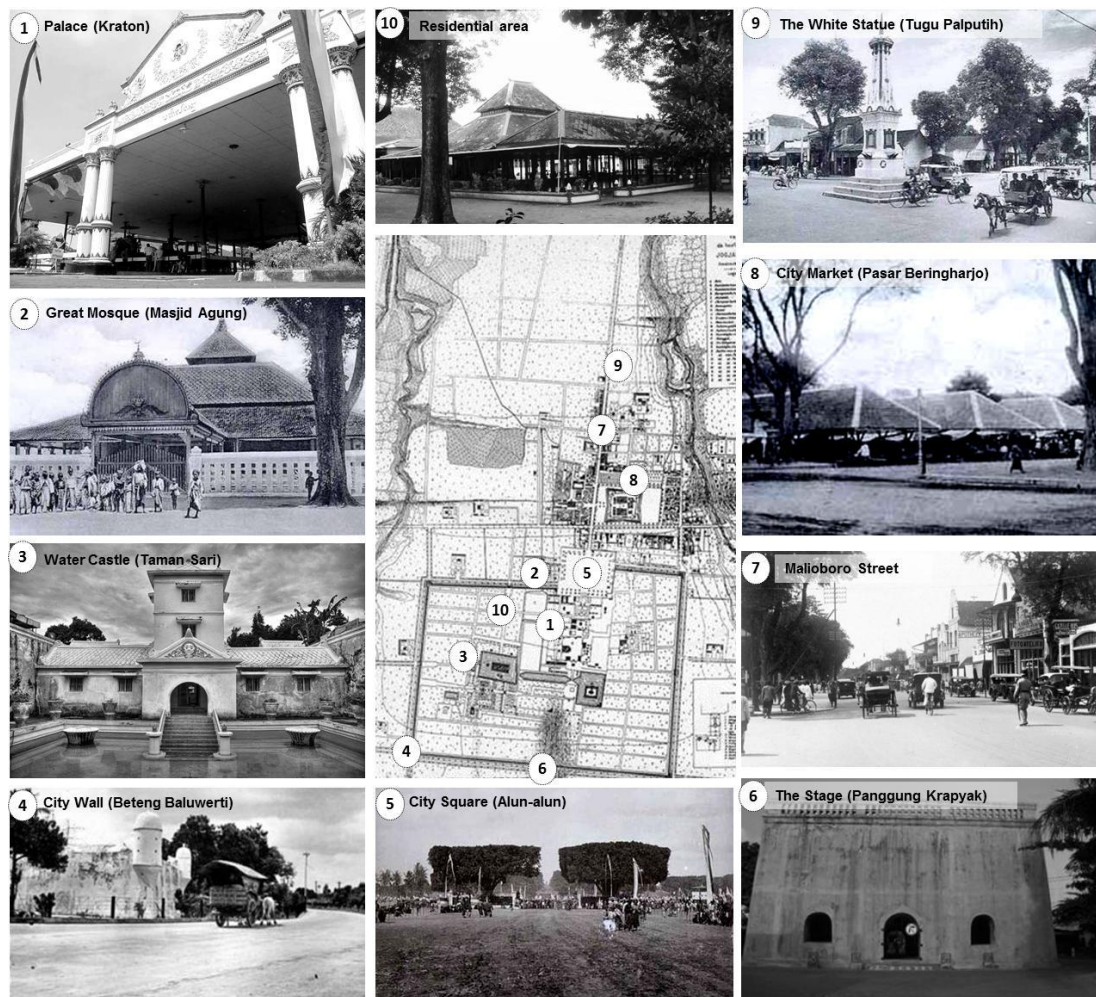
Figure 8.2 Primary elements of Yogyakarta City under 1830 map (Source: Sholihah, 2012, Google-images.com, accessed in 22/05/2015)

8.2.2 Yogyakarta under Colonial Hegemony (1790-1945)

The Dutch colony started to influence the sultanate administration and policy making around three decades after its establishment. In 1790 the Dutch built Vredeburg Fort at the corner of Malioboro Street (in front of Alun-alun) to show their domination towards the kingdom. After the Dutch set a stronger position in Yogyakarta, they started to build Dutch regency and residential area on the next site of Vredeburg Fort, causing an interruption of Yogyakarta urban structure that had been planned by the first sultan. In 1811 the British colony took over Java, including Yogyakarta from the Dutch colony during the Napoleonic Wars. However, only after four years occupying Java, the British restored back Java to the Dutch as the result of the Treaty of Paris in 1814. The short period of British colony in Yogyakarta gave less effect on the urban design of Yogyakarta, compared to the significant changes that they have made in Jakarta and Magelang.

Since then, especially after Java Wars (1825-1830) the Dutch society had gradually been influencing the Yogyakarta urban living space. Some buildings for the Dutch society and other public buildings were also built around the corner of Malioboro Street such as the Dutch Governor Residence (1830), the Dutch Club House (1822), The Java bank, Post Office and Mataram Bank.

The development of Yogyakarta during this period was dominated by the Dutch buildings and supporting facilities to run the Dutch economy and power. The first railway station for connecting Yogyakarta-Semarang (a harbour city in the northern coastal area of Java) was built in the eastern part of Kotabaru (Lempuyangan) in 1872, followed by a main station of Yogyakarta (1887) built at Malioboro Street.

The peak of the physical development during the colonial era was, in the early of twentieth century (1920s), when the Dutch built a new town called Kotabaru (New Town) situated in the northeast of Yogyakarta inner city. It was designed to provide the housing needs of the booming number of Dutch society in Yogyakarta as a result of the rapid economic development especially regarding the increased demand of agricultural products to be sent to Europe.

8.2.3 Yogyakarta after Independence (1945- present)

The independence era started in 1945, but during 1946-1949 the Indonesian republic was in fact still struggling against the allied forces led by the Dutch to once again try to colonialize the country. Yogyakarta is one of the cities in Indonesia which has played an important role for independence and known as the city of revolution. During this era, Yogyakarta served as the capital city of Republic of Indonesia after the fall of Jakarta in 1946. The sultan's palace under Sultan Hamengku Buwono IX became a hidden headquarters of the Indonesian army. The former Dutch Governor Residence in front of Vredeburg Fort was used as the residence of the first president of Indonesia, Sukarno to lead the revolution battle. Many battles were conducted along Malioboro Street, such as the famous attack of 1st of March 1949, led by the latter Presiden Suharto.

In the independence era, Yogyakarta grew as the capital of Yogyakarta Special Territory Province. The important role of Sultan during the revolution of independence has encouraged the Indonesian government to appoint Yogyakarta as special territory with Sultan as the governor. This is then sustaining the existence of Islamic Mataram Kingdom under the Republic of Indonesia, even though, there is a shift of the Kraton's role from the centre of power and political control to the centre of cultural establishment (Moejanto, 1984 in Wibisono, 2001).

In 1949, Gadjah Mada University was established in Yogyakarta. Some of the Kraton's buildings used as classrooms for this new university before sultan allocated Kraton's land to build the main campus in the northern part of the city. The establishment of Gadjah Mada University then was followed by a number of new universities, including Islamic University of Indonesia, Indonesian Institute of Arts, Yogyakarta State University, and so on. The record shows that in 2013 there are more than twenty-one universities, five institutes, and more than forty colleges across the city. This finding supports Yogyakarta to gain a predicate as the city of education.

During the new order era (1968-1998) Yogyakarta transformed physically and socially from a traditional city to a more modern urban living space. New infrastructure and facilities including new roads, ring roads, public buildings, airport,

terminals, hotels, shopping malls, and so on were constructed during this so-called 'development era'. During this era, the central government under President Suharto was too dominant to control the spatial development. Most of the public projects were under top-down policy leaving the public to have less participation.

During the reform era (1998- present) the urban development of Yogyakarta was carried out by strengthening the public participation through bottom-up planning. The private sector also plays a significant role in urban space development mainly driven by market demands. In some cases, this condition has caused a discrepancy between the urban planning policy and the implemented physical development. Nowadays, the city is well-known by many predicates, such as the cultural heart of Indonesia (Smithies, 1986), the city of education, the city of tolerance, and recently as the second biggest tourist destination of Indonesia after Bali Island.
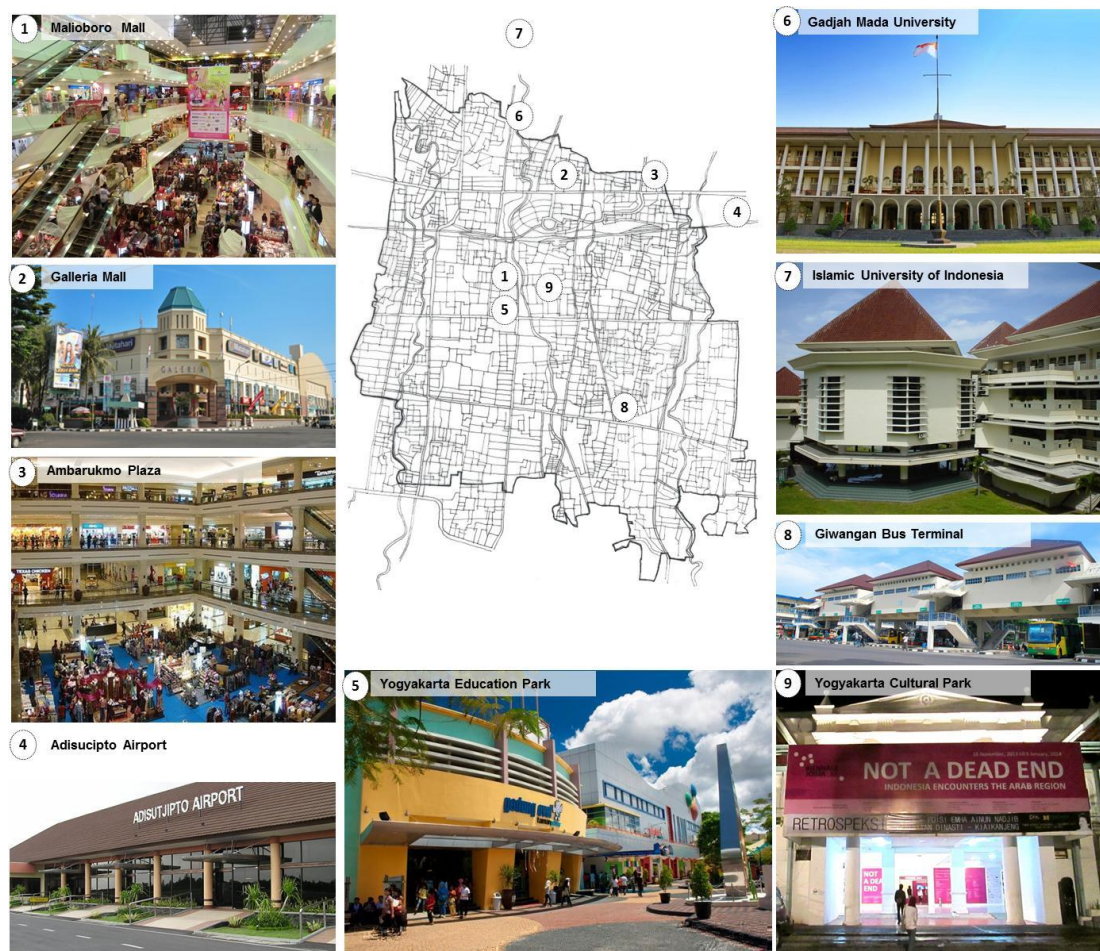
Figure 8.3 Yogyakarta City and facilities after the Independence (Sources: Author, 2014 and Google-images.com, accessed in 22/05/2015)
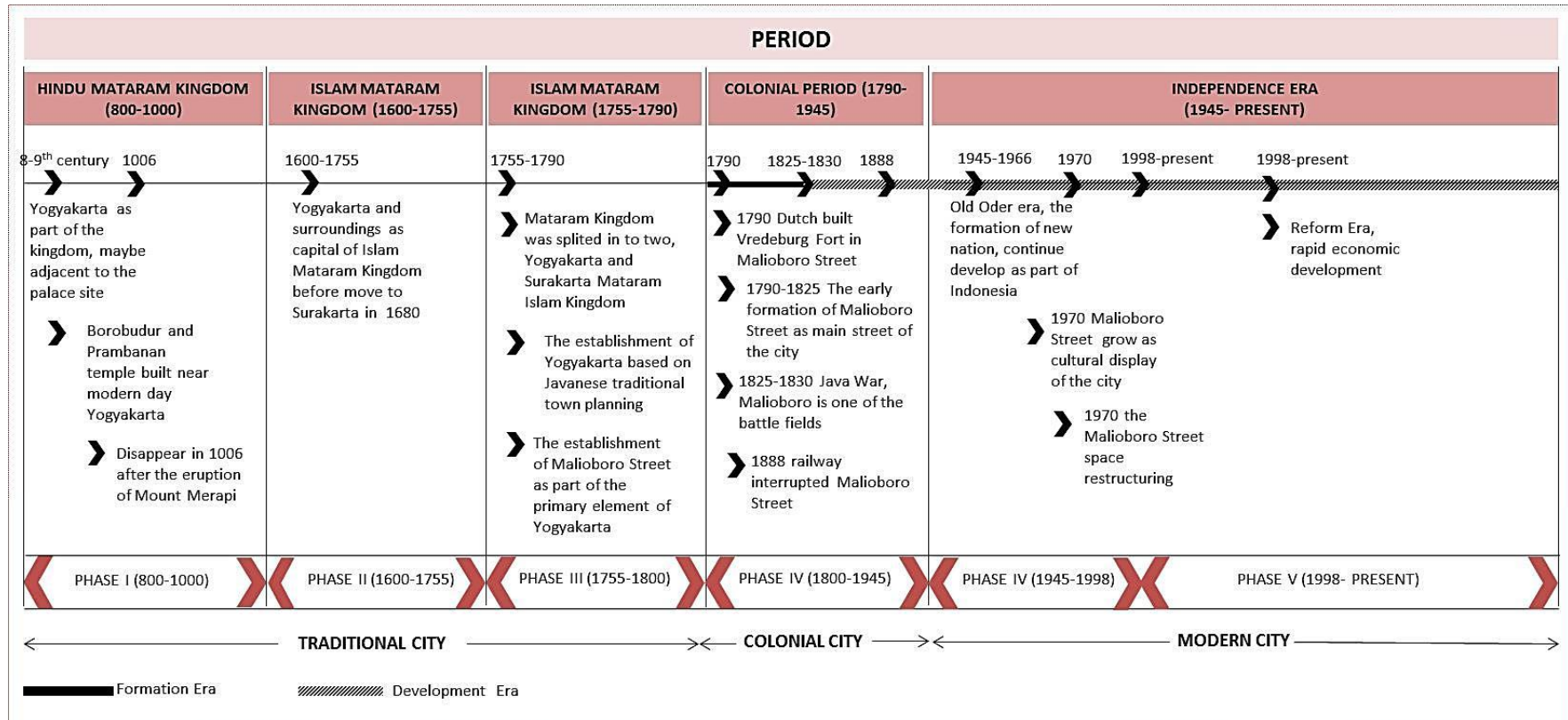
Figure 8.4 Yogyakarta and Malioboro Street: Historical transformations
Source: Author, 2015

8.3 The Formation of Malioboro Street (1756-1900s)

The history of Malioboro Street began with the establishment of city of Yogyakarta in 1756. Yogyakarta has been shaped by a cosmological axis that connects the two supernatural powers, i.e. the Mount and the Sea. Philosophically, the city imaginary axis contains the meaning of 'sangkan paraning dumadi' literally means '*the origin and the destination of being*', it is '*a process to be a human, where we came from and where we are going to*' (Ikaputra, 2013: 5). It stretches from the South Sea-Kraton (Palace)-Malioboro Street-Tugu Pal Putih-Mount Merapi. The palace that is situated in the centre of the axis is considered the 'imago mundi', the replica of the universe which maintain the balance between macrocosm and microcosm (Ikaputra, 2013 after Widyastuti (2012)). Malioboro Street as part of the imaginary axis was designated as Rajamarga or the royal street, functioned as ceremonial path for the royals as well as for the official visits for example by Governor Generals and other European dignitaries during the colonial era (see Figure 8.5).

The name of Malioboro is derived from Sanskrit term Malyabara, which means 'Garland Bearing Street' (Carey, 1984). From his throne in the Siti Hinggil inside the Kraton, the Sultan enables to envision his people and the urban living of his capital city through the Alun-alun, the Malioboro Street, the White Statue, and towards Mount Merapi as the supernatural power.
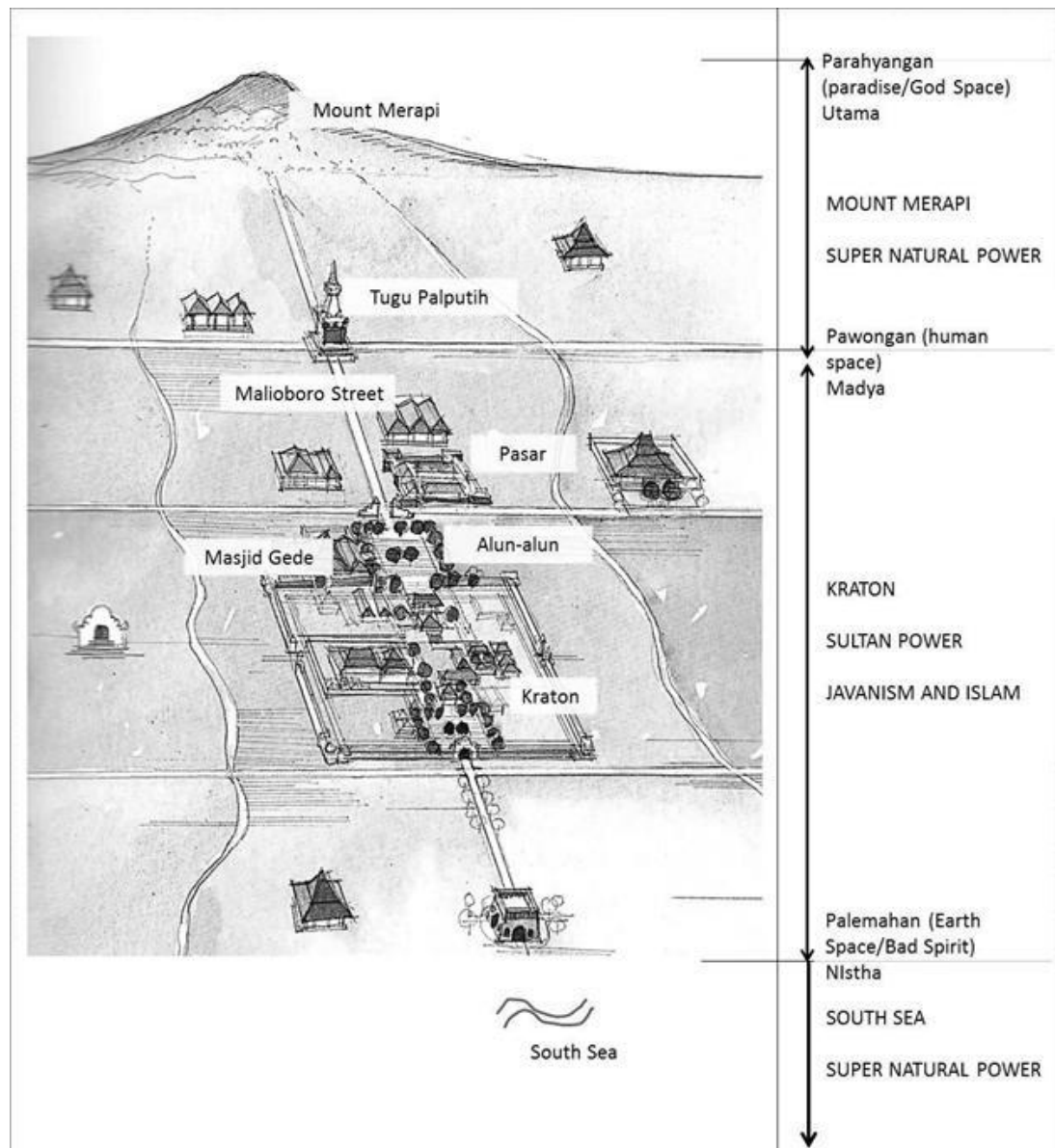
Figure 8.5 Yogyakarta City Concepts and Planning
Source: adapted from UU Keistimewaan Yogyakarta (2012) and (Ikaputra, 2013)

Besides as the royal path for the kingdom, since its early days, Malioboro Street also functions as a commercial area for the city. The Beringharjo Market, being one of the four primary elements of the city form, is also situated in Malioboro Street. The activity of the market is believed to be existed as early as the city was born in 1756.

The growth of Malioboro Street as commercial area was then marked by the establishment of shop houses surrounding the Beringharjo Market so-called the Pecinan or Chinatown (Ikaputra, 2013), allocated by the Sultan in the end of

nineteenth century. The Chinese immigrants came to Indonesia due to the dense population and poor social conditions in China and the challenges for work in Indonesia created by the colonial government (Wibisono, 2001). Although only a small number of community, their significant role in the economy has set an important position for them. Moreover, during certain periods the Sultan was even financially dependent on them.

In 1790, the Dutch built Vredeburg Fort in the southern part of Malioboro Street. During this period Malioboro Street started to become part of the struggle power of Mataram Kingdom. Besides being a royal path from the palace, Malioboro Street was, at the same time a place for the Dutch army parades and parties for the colonial's community.

During the Java War (1825-1830), Malioboro Street was one of the many battles sites (Carey, 1981). Vredeburg Fort was treated the centre of hatred amongst the people who support the rebels for fighting against the Dutch colony in Java. However, in 1830 Prince Diponegoro the leader of Java War was captivated by the Dutch and since this era, the opposition towards the Dutch colony in Java came to an end.

Although the Java War had relentlessly drained the Dutch finances, the favourable security condition of Java after the war enabled the colonial government to implement Cultuurstelsel (The Culture System) in 1830. This cultivation system requires 20% of village land to be devoted to government crops for export. This policy brought the Dutch to regain their wealth through the export of agricultural products to Europe.

After the Java War, the Dutch hegemony and influence across the kingdom rose stronger especially in the government power constellation. In this case, Malioboro Street has become an important site to build many monumental colonial buildings. The Dutch governor residence was built in front of the Vredeburg Fort in 1830, pioneered by a Dutch Club Building in 1822. The Protestant Church (1857), the Java Bank, Post Office, and Mataram Bank were also built over the next side of the corner of Malioboro Street.

The establishment of the main city railway station in 1887 has physically divided Malioboro Street, as part of the city imaginary axis, into two parts. The

result was, the northern part of the railway towards the White Statue is recognised as Mangkubumi Street to date, while the southern part of the railway towards the Alun-alun is considered Malioboro Street.
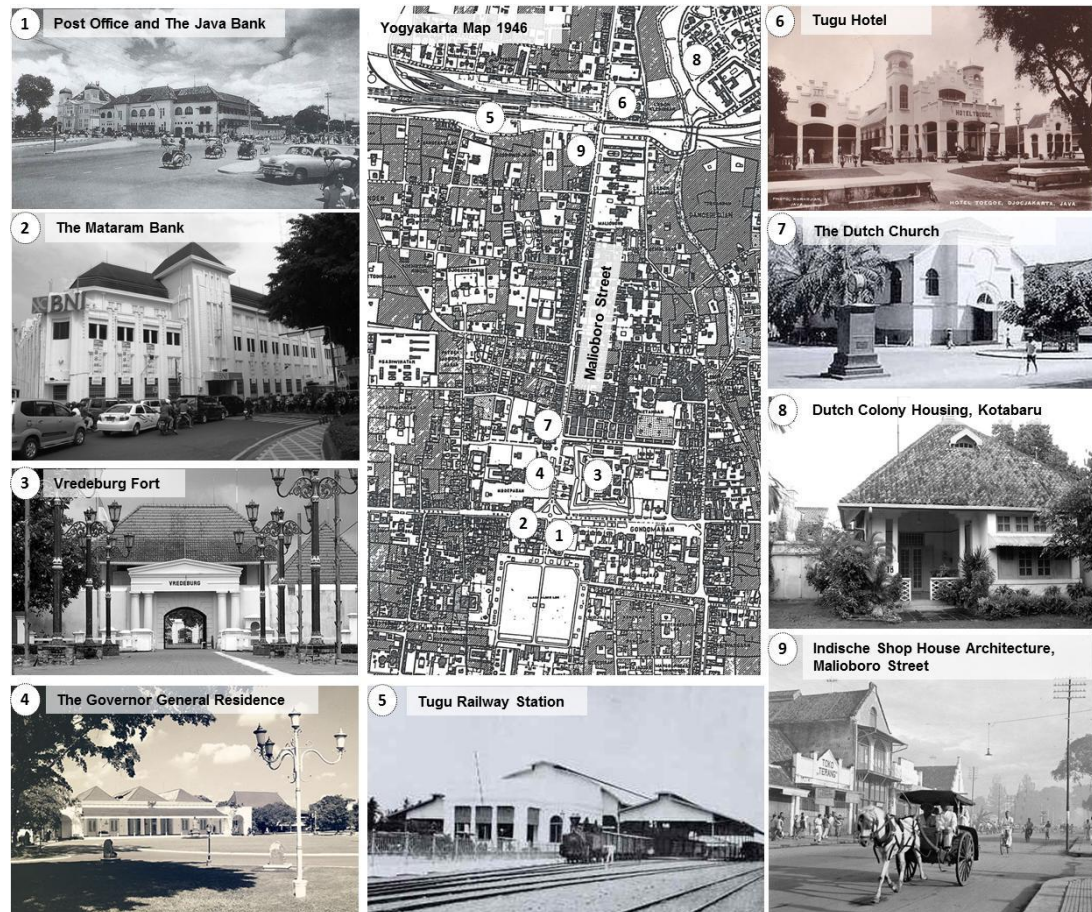
Figure 8.6 Colonial Buildings along Malioboro Street and surroundings
(Sources: http://collectie.tropenmuseum.nl, Google-images.com, accessed in 22/05/2015)

8.4 Malioboro Street in the Twentieth Century (1900s-2000s)

In the early twentieth century, the physical development in Malioboro Street was marked by the establishment of Clock Tower (1914), Hotel Toegoe (1911), and Grand Hotel de Djokja in 1925. The significance of Malioboro Street as the commercial area increased by the renovation of Beringharjo Market in a permanent building (1926), the development of Chinese Shop houses towards the northern part of the street, and the emergence of the new Indisch style architecture, which refers to a mixed-blended style of the Dutch, Javanese, and Chinese architecture in the northern part of the street.

In the early period of independence era (1945-1960s) the colonial buildings along Malioboro Street were taken over by the new republic government. In 1946-1949 the Dutch Governor's Residence was utilised as the residence of the first Indonesian President, before returned back to Jakarta, the former capital city. The Vredeburg Fort turn into museum, the Dutch Club changed into Concert Hall, and others such as The Java Bank, The Post Office, and Grand Hotel de Djokdja (now Inna Garuda Hotel) were continued to serve in their functions.

In 1970s, cultural activities began to emerge along the Malioboro Street. Local artists utilised Senisono Concert Hall for performing art and gathering space. During this era, many national artists were born such as Ebiet G. Ade, Emha Ainun Nadjib and the legendary artist known as 'President of Malioboro': Umbu Landu Paranggi. The pavement of Malioboro Street was also used to display paintings, batik, and art performances.

The cultural activities along Malioboro Street attracted visitor to come and enjoy the nuance and artistic spheres of the street. Stalls of souvenirs and art products appeared along the street as a result of the cultural activities in Malioboro Street. Following the trend, shop owners also started selling paintings, batik, and leather puppets, three main products of the local artists in Malioboro Street. Since this era, Malioboro Street started to grow as a tourist destination of the city.

As situated in the heart of the city with prominent public buildings, such as Sultan's Palace, Governor's office (the former Prime Minister of Mataram Kingdom residence), Gedung Agung (the former Dutch Governor's Residence), and the local parliament building, Malioboro Street also serves as space for political expression by the people. Its best example was the large gathering of hundreds of thousands of people in May 1998 to demands reforms of the new order era (Suharto Regime). In some occasions, students and people protests can be seen regularly along the street as a consequence of the more democratic Indonesia.

8.5 Malioboro Street from an Urban Design Dimension

8.5.1 Land Use
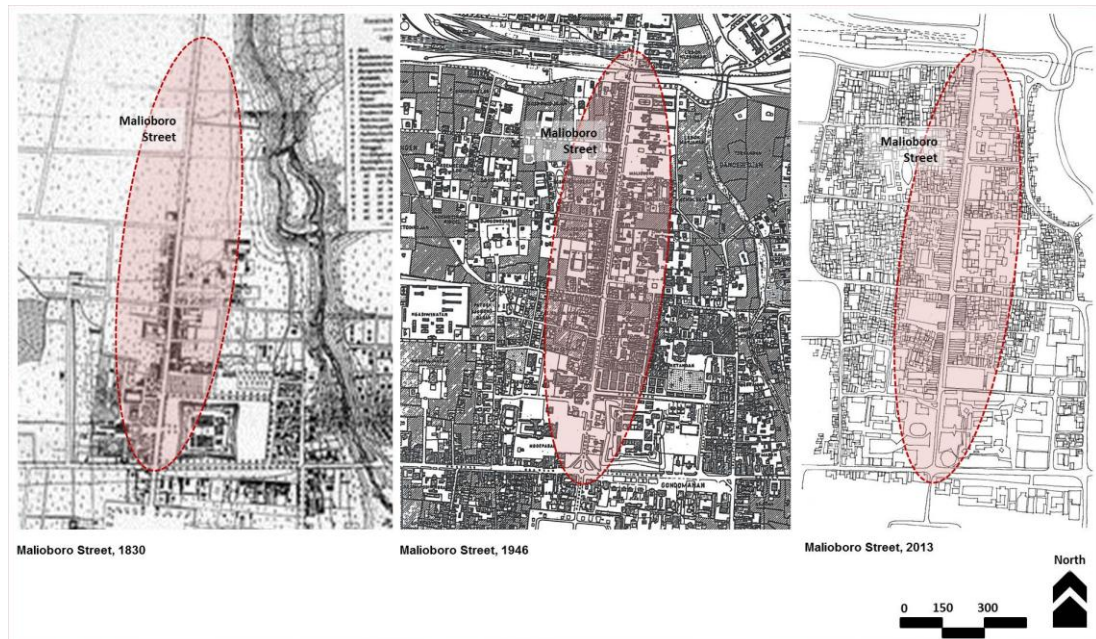
Figure 8.7 Spatial transformations of Malioboro Street and surroundings
Sources: Yogyakarta Map, 1830, 1946, and 2013

The transformation of layout of land uses in Malioboro Street and its surroundings is shown in Figure 8.7. As shown on 1830 map, the development of Malioboro Street and surrounding is marked by the establishment of Beringharjo Market in 1756 and followed by the Vredeburg Fort in 1790 and later by other colonial buildings nearby the fort. The shop houses are mushroomed along the street towards the north, which still appear as open areas or farms.

On 1946 map, only a year after the independence, Malioboro Street and its surrounding has been fast growing as the centre of the city. As seen on the map, the railways has interrupted the street flows, which then physically divides the street in two parts as mentioned in the previous sub-section. The district behind both sides of Malioboro Street has been utilised as built environment rather than open areas as seen in the previous map.

The development of Malioboro Street and its surroundings in the later decades continues as seen on 2013 map. Malioboro Street has become a high density district and continues to be the centre of commerce of the city. The secondary data in 2008 shows that the density of Malioboro Street district has reached 260 people

per hectare (Zahnd, 2008: 206) and in 2012, it has reached 285 per hectare (Kimpraswil, 2013: III-10). According to Indonesian National Standard (SNI 03-1733-2004) on Procedure for Environmental and Housing Urban Planning (BSN, 2004), the population density in Malioboro Street can be classified as high density (201-400 persons/ha).

8.5.2 Plot Pattern and Street Pattern
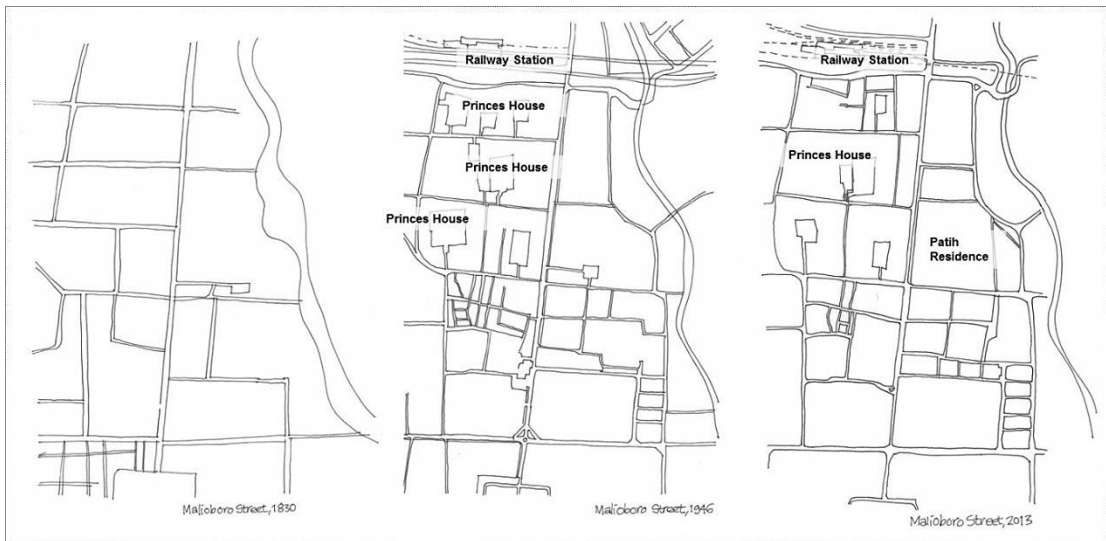
Figure 8.8 Transformations of Malioboro Street pattern and surroundings
Sources: Yogyakarta Map, 1830, 1946, and 2013

The transformation of Malioboro Street pattern is shown in Figure 8.8. In 1830 era the Malioboro Street as part of the city imaginary axis has several branches of alley, mainly alley after the Vredeburg Fort towards the Beringharjo Market, an intersection in the middle of the street and some other intersections in the northern part, in which the street wall remains soft space (open area/farms). The street pattern of Malioboro Street has developed to be more complex in 1946 by the establishment of new alleys, including an alley towards Prince's houses (Dalem Pangeran) which have spacious lot with open and green spaces creating perimeter block system for the district (see Figure 8.8). Prince's house or *Dalem Pangeran* is special land allocated to the royal princes by the Sultan including in Malioboro District. They are not only become the landlords for the surroundings but they are also play important roles for the development of Yogyakarta city. There are not many changes occurred in 2013 Malioboro street pattern, although the density of

Malioboro Street and its district are continually increased as seen in the land use map (see figure 8.8).

The perimeter blocks inside Malioboro District are mainly functioned as residential areas (kampongs) that act as activity support for the main street activities. The observation in 2014 shows that kampong Dagen, Sosrowijayan, and Pajeksan in the north-west side of the street grow as tourist kampongs which provides the tourist of Malioboro Street to stay longer in homestays and hotels, with facilities, such as restaurants, bar, souvenir shops, internet cafes, and so on. The art and food products sold along the Malioboro Street arcade and pavements by the street vendors as well as in the shop houses were traditionally produced inside the perimeter districts of Malioboro. Public buildings including schools, religious buildings, and community centres are also located inside the district, showing the diversity of uses of Malioboro Street and surroundings (see Figure 8.9).

Figure 8.9 Perimeter block in Malioboro Street district (Source: Google-Earth, 2015)

There is a wide variety of plot pattern of buildings along Malioboro Street. The shops along the street are mainly two-three storeys shop houses with a plot pattern typical to the Chinese shop houses in Indonesia, that also exist in Pasar Baru and Pecinan Street. The depth of the shop houses may vary, but it can be seen as narrow depth detached building lots. The name of Pecinan was formally used to call small district surroundings Beringharjo Market which then the Chinese community grows to other part of Malioboro Street and surroundings, including in Beskalan and Pathuk area at the northern part of the street. The plot pattern of public buildings is mostly free standing with spacious gardens for instance Gedung Agung (ex. Governor General Residence), Vredeburg Fort, Kepatihan (ex. Patih Residence), and the local parliament building (see Figure 8.10).

Figure 8.10 Plot Patterns of Gedung Agung and Vredeburg Fort
Source: Google-Earth, 2015

8.6 Measuring Malioboro Street Quality

8.6.1 Legibility

The legibility journey of Malioboro Street is shown in Figure 8.11. The entrance of the street is marked by point 'start' at the northern side of the street. At this point, a vista toward the end of the street can be clearly seen, indicated by the appearance of Sultan Palace at the far end of the street. Entering the street, the complexity vista of the street spaces is dominant through the diverse style of buildings, green spaces, and advertisements along the street walls. The small shop houses with Indisch Architectural styles which are located at the west side of the

first segment of the street give the impression of richness on visual details and patterns. On the other hand, the façade rhythm of Malioboro Mall on the next street segment can be regarded as monotonous compared to the previous segment, which provides a more contrast and variety of the façade designs.
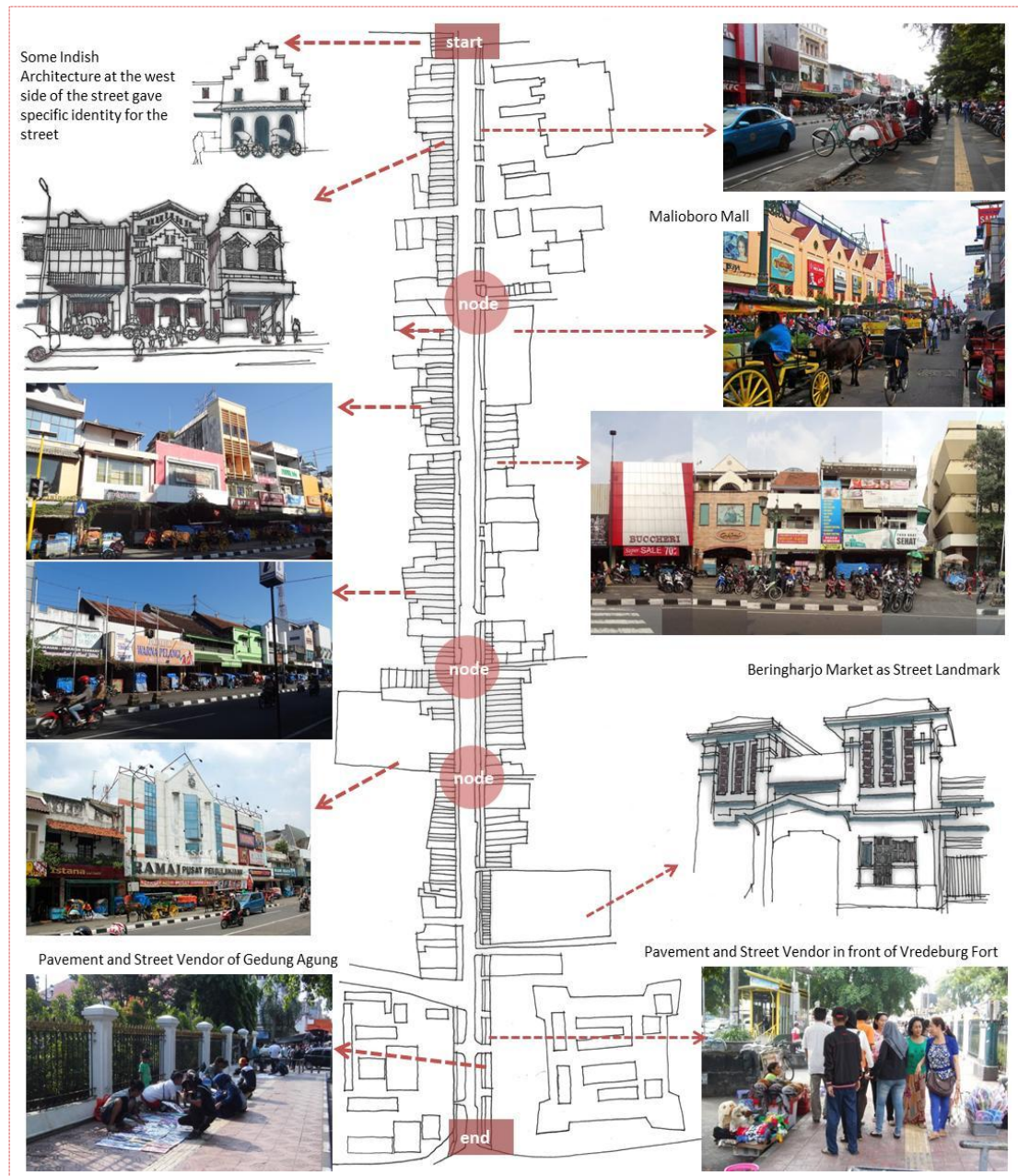
Figure 8.11 Legibility Journey of Malioboro Street
Sources: Observation, 2014

At the east side of the street space, the Garuda Hotel (ex. Grand Hotel de Djokja built in 1925) and local parliament buildings are located protrudes backwards, with the presence of the street wall dominated by green space, making

it contrast to the other side of the street wall. After the first node, which is situated before Malioboro Mall, the street wall on the west and east side are more visually balance. At each side the street wall proportion seems to cohere that produces a relative symmetrical balance.

After the Malioboro Mall, the east side street wall is dominated by big lots of Mutiara Hotel buildings, and then is suddenly dominated again by green space in front of the Kepatihan building complex. Meanwhile, the west street wall continues to be dominated by commercial shop houses with a more Chinese architectural style influences. This scenery continues towards the Beringharjo Market segment which maintains its colonial style. In Malioboro Street context, this building can be regarded as landmark for its vivid colonial character and having two unique towers which are easily recognised by the users.

After Beringharjo Market, the street wall of Malioboro Street is again to be dominated by soft landscapes with buildings protrudes backwards, creating D/H grows larger and the street spaces becomes more open compared to the previous street segments. Large trees with grass open spaces lie in front of Vredeburg Fort and Gedung Agung (ex. Governor Residence building) and continue towards the street corner nearby a monument to commemorate the attack of 1st of March 1949. At this segment, the existence of street vendors along the street is easily recognised and add to the complexity of the street space, although it is not quite disconcerting the legibility of the street.

The corner of the street vista towards the city square (Alun-alun) and Sultan Palace are disturbed by the appearance of two colonial buildings namely Post Office and BNI Bank (ex. Mataram Bank) buildings. However, the street furniture provided has given the traditional nuances especially towards the Sultan Palace street segment. Overall, the legibility journey of Malioboro Street shows that it has a high quality of legibility with variety of visual richness, such as architectural style, details, human activities, green space, and advertisements that add to the quality of legibility and yet also to the aesthetic quality.

8.6.2 Walkability, Accessibility and Connectivity

To evaluate Malioboro street quality in terms of walkability, accessibility, and connectivity, there are three points that were assessed: transportation system in the area; the connection of the area and surroundings/city as a whole; and the walkability of the area.

Transportation system of Malioboro Street and surroundings
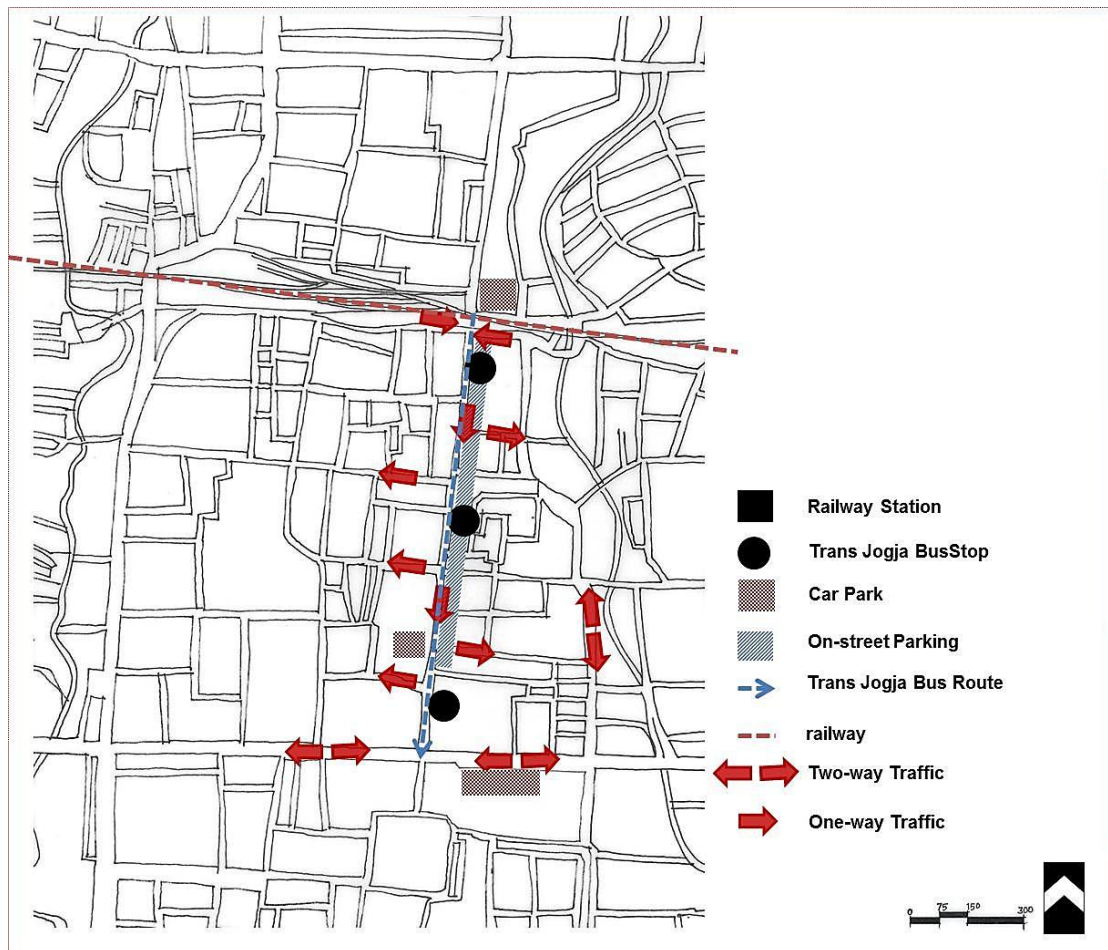
Figure 8.12 Transportation System and Accessibility of Malioboro Street and surroundings
Sources: Observation, 2014

Malioboro Street is connected by choices of modes of public transports, including trains, Trans Jogja buses, taxis, Becak, and Andong as seen in Figure 8.13. There are three Trans Jogja bus stops along the street, making it easy for visitors to come and enjoy Malioboro Street day and night (the last service is 10pm).

Meanwhile, Becak and Andong are nowadays mainly hired by domestic or international tourists for its uniqueness and entertainment.

Figure 8.13 Modes of Public Transportation at Malioboro Street
Sources: Observation, 2014

Despite the availability of on-street parking for motorbikes, there are some major car and buses parking lots, including Abu Bakar Ali car park, Indra Theatre car park, BI car park, and on-street car parking along some alleys situated in the eastern side of the street. During busy days or holidays the availability of car park along Malioboro Street is still lacking due to the explosion volume of visitor vehicles.

The vehicular lane of Malioboro Street is one-way traffic in order to reduce the vehicular volume passing by. The effort to reduce vehicular volume is also managed by treating the entire alleys one-way moving outward the street and forbidding the tourist buses to enter the street (see Figure 8.12). However, this effort seems less effective to reduce the vehicular volume since Malioboro Street is one of the most important tourist destinations in the city. This result indicates that there is an urgent call for revitalisation of Malioboro Street and District especially regarding the traffic management, to enhance the quality of connections between destinations as well as the pedestrian comfort.

The connection of Malioboro Street and surroundings/city as a whole

The connection between places is important and '*successful people places must be (and are) integrated with and embedded in local movement systems*' (Carmona et al., 2010: 202). Figure 8.14 shows the connectivity of Malioboro Street and places nearby in the context of Yogyakarta city. As Malioboro Street is situated in the city centre, the connection across nearby places can be considered well-connected.

There are continuous pavements and good provision of variety of modes of public transports.

Figure 8.14 Connectivity of Malioboro Street and nearby places
Sources: Observation and google-images.com, 2014

However, the high volume of vehicular especially during the busy days and holidays has triggered traffic congestion around the city centre area. The traffic congestion is also aggravated by moving around vehicular especially along Malioboro Street to find available car park. This condition was commented in the interviews as follows:

> '…now [Malioboro Street] is very crowded with vehicles, if you want to park, [you] must be confused, especially during the long holidays, I am definitely have to turn around the street once more [only] to find a parking space…(MAL-VIS-001, In-depth Interviews, March, 2014).

The non-motorised vehicles, such as Becak and Andong, provide an alternative service of public transport during the busy days to help visitors, especially tourists, get connected to other tourist destinations nearby, such as Bakpia Pathok Culinary centre, Taman Sari (Water Castle), Kraton (Sultan Palace), and so on. The result suggests that overall the quality of connectivity in Malioboro Street can be viewed as having a good quality. However, the issue regarding better traffic management once again needs to be addressed.

<u>Walkability of Malioboro Street</u>

Figure 8.15 Pedestrian Flow of Malioboro Street
Sources: Observation, 2014

Pedestrian flows through public space are both at the heart of urban experience and it is important in generating its life and activity (Carmona et al., 2010: 201). There are variety of pavement dimensions and types along Malioboro Street, including covered pavement in front of the shops (five-foot way arcade) at both side of the street wall and non-covered pavement especially at the eastern side of the street. Meanwhile, there is a special lane dedicated for non-motorised vehicles, such as bicycle, *Becak* (trishaw) and *Andong* (horse carriage). The last two traditional modes of transport are nowadays only available along Malioboro Street within the context of Yogyakarta city.

The condition of the arcaded pavement is always full of pedestrians and street vendors, creating a shared space for movement as well as for commercials. The crowded condition of arcaded pavement was commented in the interviews to a European tourist as follows:

'It is too crowded, the pavement sometimes leaves with not enough space, we have to try to use the other pavement, and moving back in order to walk comfortably. Sometimes there are Motors and Becaks, so it is not secure' (MAL-VIS-006, In-depth Interviews, March, 2014)

The condition of non-arcaded pavement at the eastern side of the street is also crowded during the day as it is also used for on-street parking for motorbikes as indicated in Figure 8.15c. This condition has reduced the comfort of walking for

users as the motorbikes also contribute to the noise and air pollution along the street.

Overall, the number of pedestrians along Malioboro Street has remained high compared to the other case studies as it is a domestic and international tourist destination. Meanwhile for the locals, the less comfortable walking environment has hindered them in visiting Malioboro Street especially for necessary walking activities, as expressed in the interviews:

> '…for me, as a local, I rarely visit this street, because I do not need anything [here], except when there is a parade, but not for daily activities…' (MAL-VIS-003. In-depth Interviews, March, 2014).

In fact, there is a plan from the local authority to shift Malioboro Street to fully pedestrian only. The feasibility study regarding this plan is still under progress by the time this study is conducted.

8.6.3 Diversity

The diversity of Malioboro Street is discussed under three points: diversity of land use; diversity of home industry inside the Malioboro District, and ethnic diversity and special skills/business.

Diversity of land use

Table 8.1
Building Use of Malioboro Street in 2014

No	Building Use	2014	
		number	Percentage (%)
1.	Batik Shops	50	27.93
2.	Fashion and Clothing	32	17.87
3.	Shoes and Bags	17	9.4
4.	Tools and Materials	9	5.02
5.	Textiles	7	3.9
6.	Souvenir shops	7	3.9
7.	Restaurant and Culinary	7	3.9
8.	Watch and Jewellery	6	3.35
9.	Malls and Department Stores	5	2.79
10.	Drugstore and Pharmacy	5	2.79
11.	Closed and Empty building	4	2.23
12.	Government Office	4	2.23
13.	Bank	4	2.23
14.	Salon	3	1.67
15.	Grocery	3	1.67
16.	Hotel	3	1.67

17.	Stationary	2	1.11
18.	Library	1	0.55
19.	Photo Studio	1	0.55
20.	Accessories	1	0.55
21.	Mosque	1	0.55
22.	Church	1	0.55
23.	Museum (Vredeburg Fort)	1	0.55
24.	Public Building	1	0.55
25.	Concert Hall (Senisono)	1	0.55
26.	Market (Beringharjo Market)	1	0.55
27.	IT and Mobile Phones	1	0.55
28	Tour and Travel	1	0.55
	Total	**179**	**100**

Source: Visual Observations, 2014

Table 8.1 shows there are twenty eight categories of retails along Malioboro Street. The big three are Batik shops of fifty retails (27.93%) followed by fashion and clothing (17.87%), and Shoes and Bags (9.4%). It is interesting to note that the fourth rank is occupied by Tools and Materials (5.02%), a commodity that is not directly related to tourism or daily groceries. The next category is textiles, souvenir shops, and restaurants that respectively range in 3.9 per cent. Watch and Jewellery and Malls and Department Stores range in 3 per cent, and followed by the Drugstore and Pharmacy in 2.79 per cent. Although in a small percentage, Drugstore is one of the most memorable merchandise sold in Malioboro Street for the local Yogyanese respondent who has long association to Malioboro Street as follows:

'It's the Chinese's drug store; we become loyal customers, since I was a kid…' (MAL-VIS-001, In-depth Interviews, March, 2014).

In addition, Drugstore and Pharmacy are special businesses run by the early Chinese Community living in Malioboro Street and nearby district, as commented by the resident as the interviewee of this study:

'One of the prominent business communities in Malioboro Street was the Chinese. In the early era, they manage the drugstore 'chains', there were Sinsei [traditional Chinese Doctor] who stayed inside the kampong, and the drug stores were their pharmacist…'(MAL-RES-009, In-depth interviews, April, 2014).

Public and religious buildings exist along Malioboro Street in a smaller percentage, such as Government Offices (2.23%), Mosque (0.55%), Church (0.55%), Museum (0.55%), and Concert Hall (0.55%). Meanwhile, even though Beringharjo Market is recognised as one building, but inside the market, there are 5.441 kiosks

and stands of various commodities (UPT-Malioboro, 2009), including Batik, craft and souvenirs, jewellery, wedding Gifts, housewares, wet Market, culinary, and so on (see Figure 8.17).
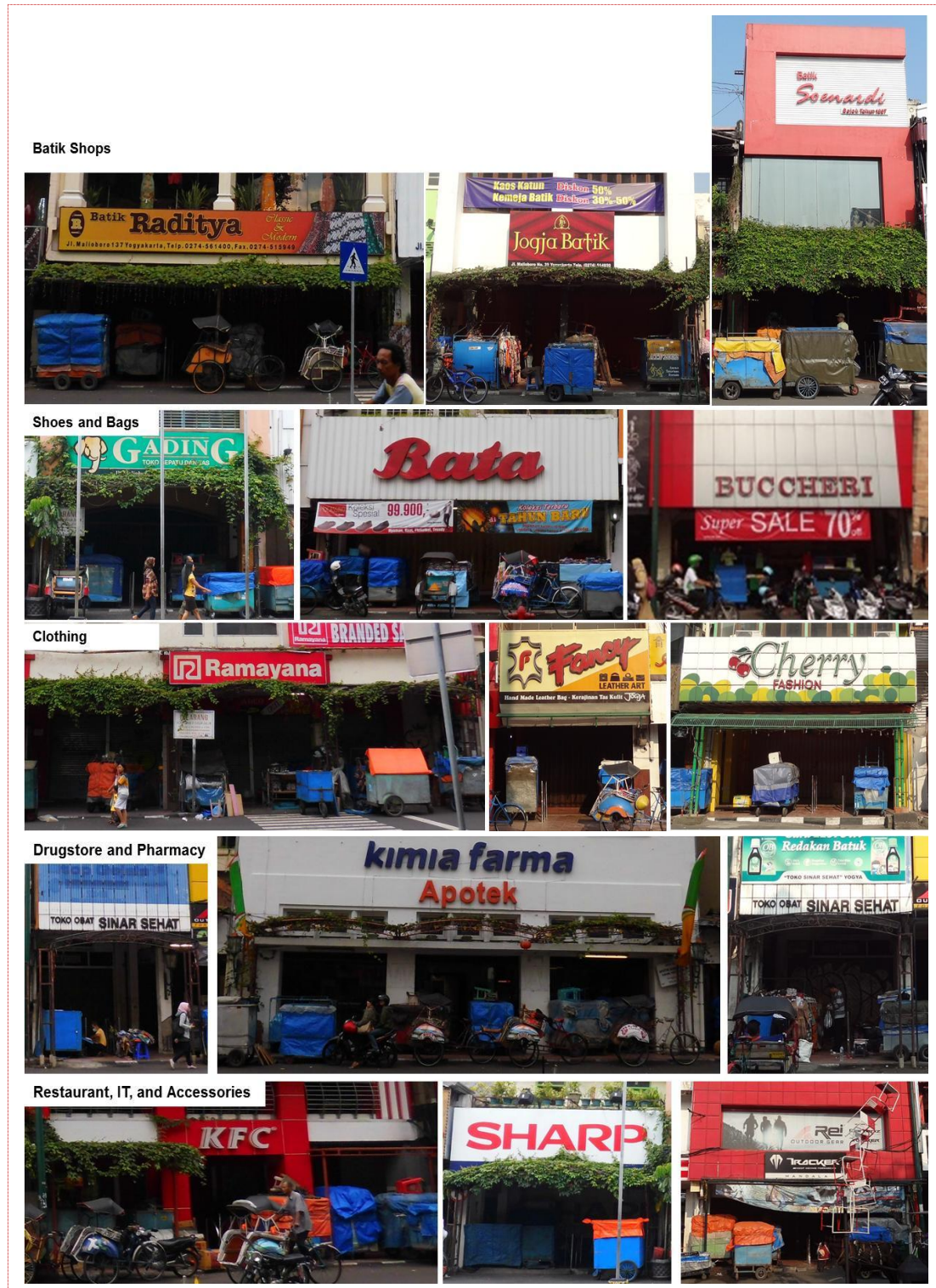
Figure 8.16 Retail Diversity of Malioboro Street
Source: Observation, 2014

Figure 8.17 Kiosks and Stands Diversity of Beringharjo Market
Source: Observations, 2014 and google-images, accessed in 07/07/2015

Diversity of Art and Craft Industry inside the Malioboro District

Craftsmen produced art works and sold them along Malioboro Street through street vendors. They did the activities by profession and learned their skills traditionally, which were handed through generations. They are scattered in various part of the city, particularly in the kampongs inside Malioboro District, such as in Dagen, Sosrowijayan, and Pajeksan located in the western side of the street.

However, their existence nowadays is continues to be interrupted by the urban gentrification that emerges in their kampongs as more buildings change into hospitality facilities, such as hotels, homestays, internet café, tour and travel, restaurant, and so on to support the tourism industry which blooms in Malioboro Street and surrounding districts, as commented in the interviews as follows:

> 'The kampongs used to be there [inside Malioboro District], but many of buildings were converted into hotels, for tourism, in fact it was the interesting thing in Malioboro, as there were areas of activity support behind the main street, now many of them have changed [it's function]…'(MAL-VIS-003, In-depth interviews, March, 2014)

Indeed, the existence of art and craft kampongs can also be a cultural tourism potential that enhances the value of the district instead of handing over the buildings to outsiders and changing its functions. However, land conversion that tends to be un-well controlled by the local government triggers the art and craft

home industry to move to other areas around the city of Yogyakarta (see Sub-section 8.6.6 on Urban Gentrification).

Ethnic Diversity and Special Businesses
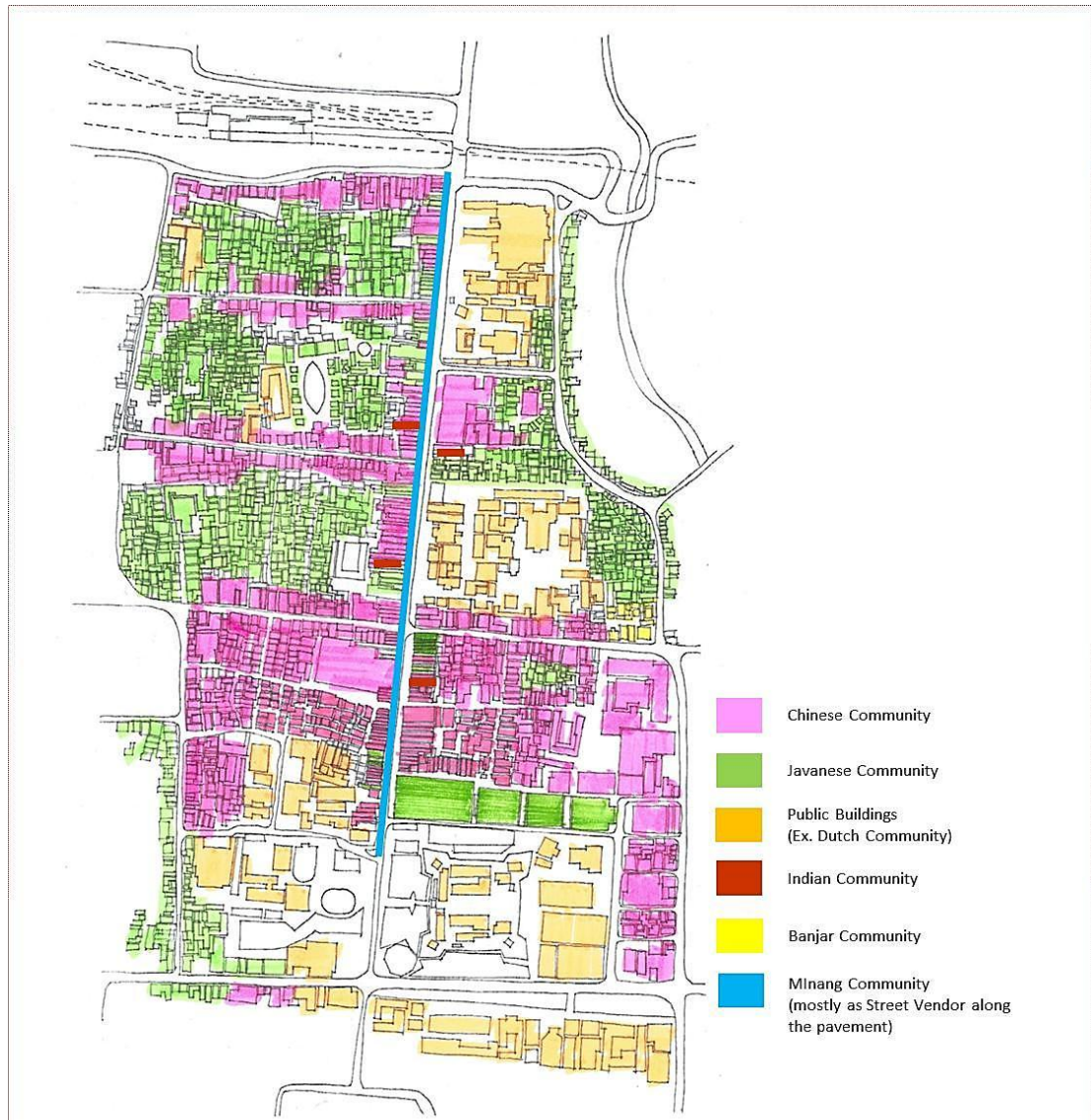
Figure 8.18 Distribution of Ethnic Group Living in Malioboro District
Source: Analysis, 2015 adapted from the Interview to Ir. Ismudiyanto (MAL-RES-009), March 2014

The observation and interviews indicate the ethnic diversity living and 'make a living' in Malioboro District. As mentioned in the formation of the street section (Section 8.3), in the nineteenth century, the Sultan allocated land for the Chinese in the northern part of Beringharjo Market. The observation in 2014 indicated that Beskalan and Ketandan Kampongs until today are dominated by the Chinese community, even though many of those have been 'acculturated' with Javanese

culture. Meanwhile, in several other kampongs, such as Pajeksan and Sosrowijayan the Chinese only occupy parcels of land facing directly to the street due to strategic location for running businesses. This phenomenon is also occurred along the main corridor of Malioboro Street. Most of the shops are running by the Chinese, followed by the Javanese, and some are by the Indian diaspora. In addition, after independence in 1945 colonial buildings in Malioboro District were handed over to the government and adapted to be governmental and public buildings.

Meanwhile, apart from running their businesses in shops along the street, the Javanese are also the dominant inhabitants of the district kampongs, such as Dagen, Pajeksan, Sosrowijayan, and Sosrokusuman. In Sosrokusuman, a small parcel of lands is inhabited by the Banjar community (originally from South Borneo), especially around the Quwwatul Islam mosque. They mainly work as gold sellers along the Kemasan Street in the northern part of Beringharjo Market.

The Minang community (originally from Sumatra Island), is an example of group of ethnic which 'make living' along the pavement of Malioboro Street as a street vendor. Although the commodities they sell are made by the locals (Javanese), they are the main vendors to sell them along the street's pavement. In addition, food stalls, such as Angkringan and Bakso stalls are operated by Javanese migrants from nearby regions, such as Gunung Kidul and Wonogiri.

The ethnic diversity in Malioboro District is reflected in the speciality of business run over generations. Chinese community for instance, are well-known for their speciality in traditional medicine, while the Indian are well-known as the textile merchants, and the Javanese as Batik or Silver merchants (adapted from the interviews of MAL-RES-009). In details, the distribution of ethnic group and speciality of business is presented in Table 8.2 as follows:

Table 8.2
Ethnic Group and Speciality of Business Distribution

Ethnic Group	Speciality of Business	Living in Malioboro District	
		Inside	Outside
Chinese	Drugstore and Pharmacy	V	
	Shoes and Bags	V	
	Malls and Dept. Store		V
	Tools and Materials	V	
	Watches and Jewellery	V	

	Grocery	V	
	Stationary	V	
	Some Batik Shops	V	
Javanese			
- **Jogyanese**	Batik Shops	V	
	Souvenir Shops (e.g. Silver, Leather crafts)	V	
	Street Vendors along the Pavement	V	V
	Various commodities in Beringharjo Market		V
	On-Street Parking	V	V
	Andong and Becak Driver		V
- **Javanese** urban migrant from nearby regions	Food Stalls along the Pavement		V
	Becak Driver		V
Indian	Textiles	V	
Minang (from Padang, West Sumatra)	Street Vendors along the Pavement		V
Banjar (from South Borneo)	Gold Seller along Kemasan Alley	V	

Source: Observation and interviews, 2014

8.6.4 Liveability

Liveability of Malioboro Street is discussed under three main points: sitting spaces and amenities, green spaces, and Malioboro Street as barrier-free environment.

Sitting spaces and amenities

Figure 8.19 Sitting spaces, amenities, and Malioboro Street ambience at night
Source: Observation, 2014

The provision of sitting spaces and amenities in Malioboro Street can be regarded as adequate with interesting and unique designs. Malioboro Street lamp

post (see figure 8.19c) for example, has become an icon for the place. The field observations indicate that street benches, lamp post, signage, dust bin, and rest space under trees are amongst the street amenities found in all street segments, as *'the organisation and distribution of street furniture/amenities is a prime indicator of the quality of an urban space and can also establish quality standards and expectations for subsequent development'* (Carmona et al., 2010: 196).

However, during the busy days of weekend or holiday season the number of sitting space is less compared to the visitor volume that need a break after shopping or doing social interaction, as shown in Figure 8.19d. In addition, the field observation also found an issue regarding the lack of maintenance of the street amenities, especially the issue on cleanliness around the sitting spaces. It was also commented in the interviews as follows:

> '[The provision of] street amenities seems quite adequate and complete, but sometimes the sitting spaces cannot be used optimally because of being blocked by the on-street parking. It seems [they are] also never be cleaned, if you want to sit, you might be suspicious, whether it was used by the homeless…' (MAL-VIS-003, In-depth interviews, March, 2014).

The lack of sitting space maintenance seems not solely because of the street manager's carelessness (local authority), but also the low awareness of the visitors to take part in maintaining the cleanliness of Malioboro Street spaces, whereas the local authority has improved the number of dust bins along the street, as commented in the interviews:

> '…it is also because of the users of the street, no matter how good the government maintains the street, when the users are ignoring [continue littering], then it is useless…'(MAL-VIS-010, In-depth Interviews, April, 2014).

This situation should be a concern in the days to come, for example by applying heavy fines to those who are littering, so that the cleanliness of Malioboro Street can be improved and maintained.

Green spaces

'Landscaping often plays an important aesthetic role in adding coherence and trees and can provide a sense of enclosure and continuity' (Carmona et al., 2010:

199). Field observation shows that amongst Malioboro Street segments, the street wall of segment 1 and 4 are dominated by green spaces, especially large tropical trees and grassland in front of the buildings. Meanwhile, the street walls of segment 2 and 3 are dominated by buildings, especially shops and shop houses. The existence of green spaces along these two segments is optimised by the pergola plants in front of shops and some trees as well (see Figure 8.20).

Figure 8.20 Green spaces along Malioboro Street
Source: Observation, 2014
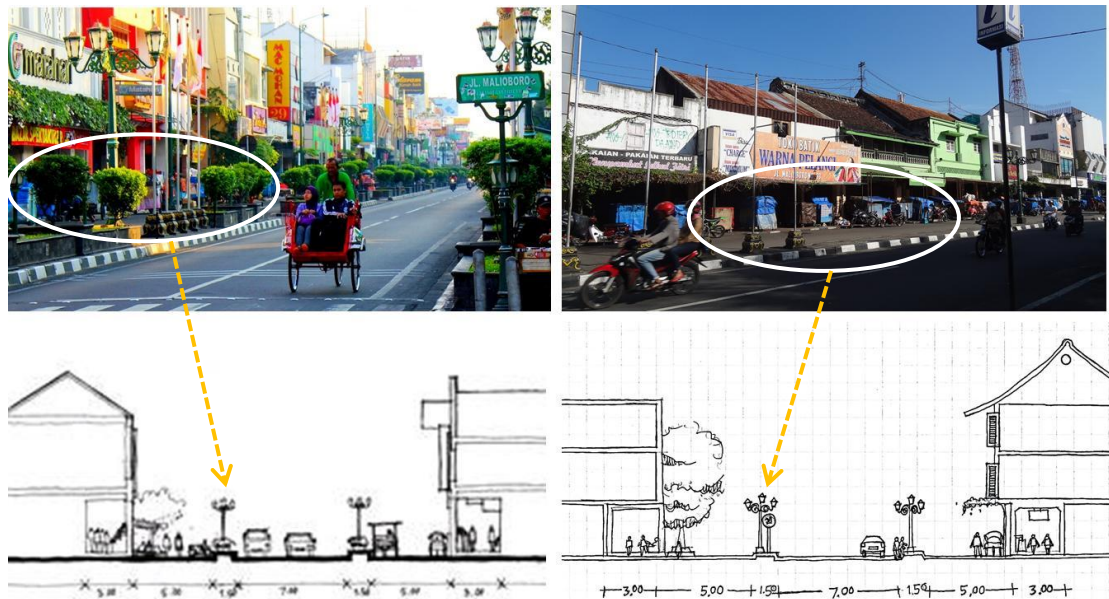
Figure 8.21 The appearance of 1.5 metre lane for green space and street furniture, a) before 2012, b) after 2012, Source: Observations, 2014 and www.doindobali.wordpress.com, accessed on 29/06/2015

Before the street space improvement project in 2012, there was a 1.5 metres lane dedicated for green space and street furniture, but now the green spaces was removed to tidy up the street vista and to reduce its complexity of the street spaces. However, the observation shows that during the sunny afternoon, when the street temperature can reach around 30-35 degree Celsius, the weather in Malioboro Street can be very hot for the users, including the street vendors as commented in the interviews, as follows:

> 'Since [the plant divider] was removed, now [the weather] getting hotter, especially because of the high volume of vehicles and the air pollutions, whereas the oxygen produced by green spaces, I am not sure why, maybe the government plans to widen the street...' (MAL-SV-012, In-depth Interviews, March, 2014).

The issue on the adequate provision of green space has been a concern of the Indonesian central government, given the hot and humid tropical climate, global warming and urban heat island phenomena which are endemic in urban spaces of Indonesia. Law No. 26/2007 on Spatial Planning mandates that 30 per cent of urban spaces must be in the form of green area (20% public, 10% private domain). Under this law, all cities across Indonesia shall implement it to gain better composition between the built form and green urban spaces. However, the result of Malioboro

Street improvement project in 2012 is the reduction of the green area. It seems that the effort towards the provision of 30 per cent of urban green space in the city of Yogyakarta has not been fully achieved. The secondary data shows, so far the provision of green spaces in Malioboro District in 2013 is 6.83 per cent (Kimpraswil, 2013). It shows the minimum availability of green urban spaces that has implication to the less availability of social space and hinders the creation of better micro climate and urban environment quality, as 't*rees and other vegetation can be particularly effective in reducing carbon dioxide build-up and restoring oxygen; reducing wind speeds in urban spaces; acting as shelter-belts; and filtering dust and pollution*' (Carmona et al., 2010: 199)

Malioboro Street as Barrier Free Environment

Figure 8.22 Guiding Blocks and Malioboro Street as barrier-free environment
Source: Observation, 2014

'Good cities should be accessible to all; every citizen is entitled to environmental livability and levels of identity, control, and opportunity' (Jacobs, 2011: 178). The awareness of the need for barrier-free environment in Indonesia emerged in the decade of 1990s. The lack of accessible environment in Indonesia gave pressure in realising the creation of barrier-free environment. In 1999, the department of architecture, Gadjah Mada University in collaboration with the Public Works Department implemented the so-called 'Malioboro Pilot Project'. This project is the first pilot project in Indonesia to implement the barrier-free environment in urban street (Ikaputra and Sholihah, 2001). The effort of Malioboro Pilot Project then was adopted by several cities in Indonesia and the regulation to implement barrier-free

environment was launched in 2006 to require all public buildings and public spaces in Indonesia to implement the barrier-free environment standards (Ministry of Public Work Regulation No. 30/PRT/M/2006).

However, the effort to implement the barrier-free environment in Malioboro Street has not been fully accompanied by the public awareness. Field observation shows that the continuous guiding blocks for the blind are interrupted by the food stalls making it impossible to be easily accessed (see Figure 8.22b). Law enforcement regarding public amenities maintenance and usage should be applied, so that the goals of barrier-free environment in Malioboro Street can be fully achieved.

8.6.5 Vitality

Vitality indicator is discussed under five main points: pedestrian activity; street vendor activity, uses and behaviour, the street corner society, and the twenty-four hour street: the street ambience after hour, as follows:

Pedestrian Activity

Weekdays Pedestrian Activity

Table 8.3
Number of people engaged along Malioboro Street in 8 different activities during the weekdays

Activity	Symbol	07-08 am (morning)	12-1 pm (afternoon)	6-7 pm (evening)	percentage
Standing	○	65	285	246	11.7 %
Standing and Talking	●	13	70	65	2.9 %
Sitting	□	154	784	748	33.11 %
Sitting and Talking	■	60	70	163	5.75 %
Walking	△	125	656	1279	40.45 %
Eating/Drinking	★	23	48	209	5.49 %

Activity	Symbol	07-08 am (morning)	12-1 pm (afternoon)	6-7 pm (evening)	percentage
Performing	⬟	0	0	29	0.5 %
Sleeping	⬬	0	0	0	0
Total Pedestrian		**440**	**1913**	**2739**	**5092**

Source: Pedestrian Count, 2014

Table 8.3 shows in total 5092 people were recorded to have activities along Malioboro Street in three different duration of time in a weekday. It was recorded that walking exhibits the highest activity along the street (40.45%), followed by sitting (33.11%), sitting and talking (5.75%) and eating/drinking (5.49%). The evening time was recorded as the peak time of pedestrian activity (53.79%), followed by afternoon time (37.56%), and morning time (8.64%) was recorded to be the quietest time of the day.

Weekend Pedestrian Activity

Table 8.4

Number of people engaged along Malioboro Street in 8 different activities during the weekends

Activity	Symbol	07-08 am (morning)	12-1 pm (afternoon)	6-7 pm (evening)	percentage
Standing	◯	99	248	388	10.91%
Standing and Talking	⬤	40	145	107	4.33%
Sitting	☐	110	803	736	24.48%
Sitting and Talking	■	66	164	189	6.22%
Walking	△	317	1167	1522	44.63%
Eating/Drinking	★	76	197	272	8.09%
Performing	⬟	41	5	42	1.3%
Sleeping	⬬	0	0	0	0
Total Pedestrian		**749**	**2729**	**3256**	**6734**

Source: Pedestrian Count, 2014

Table 8.4 shows in total 6734 people recorded were engaged in various activities along Malioboro Street in three different duration of time in a weekend.

Walking activity remains as the highest activity (44.63%), followed by sitting activity (24.48%), and eating/drinking activity (8.09%). The evening time was recorded as the peak time of pedestrian activity (48.35%), followed by afternoon time (40.52%), while morning time recorded to be the quietest time (11.12%) as also occurred in the weekday.

Pedestrian Count Malioboro Street

	7-8 am	12-1 pm	6-7 pm
weekend	749	2729	3256
weekday	440	1913	2739
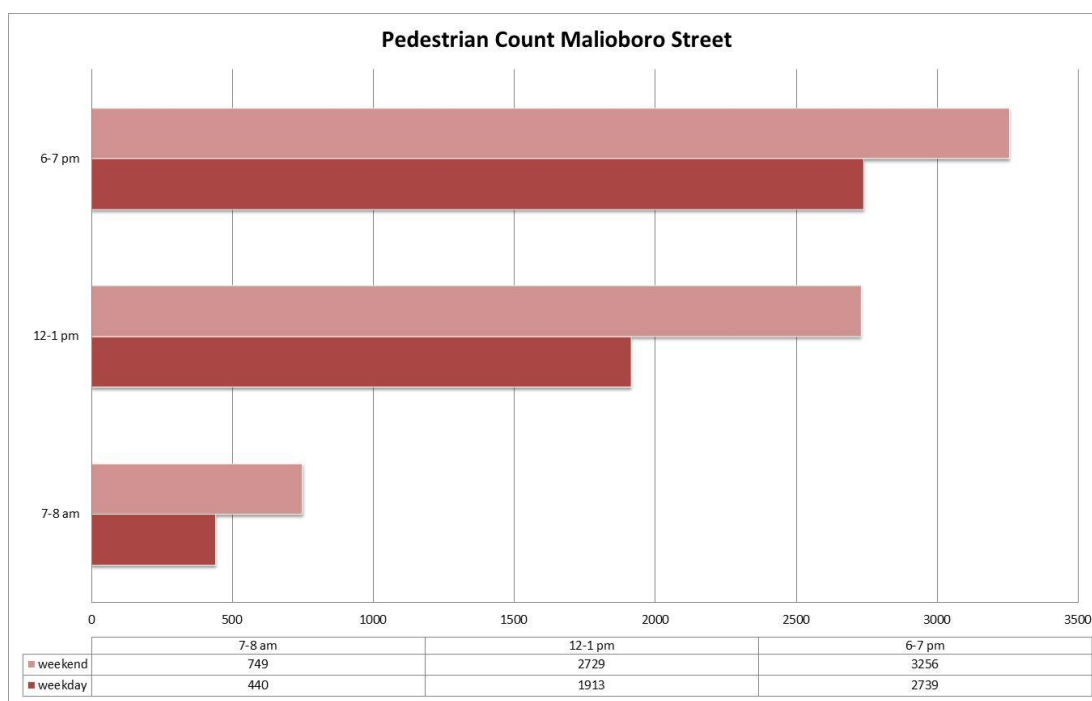
Figure 8.23 Number of pedestrian along Malioboro Street during the weekday and the weekend
Source: Pedestrian count, 2014

Figure 8.23 shows the comparison of number of people doing activities along Malioboro Street during a weekday and a weekend time. The data shows that pedestrian activity in a weekend is higher than in a weekday. The evening time duration consider being the peak time of pedestrian activity (50.96%), followed by the afternoon time (39.25%), and the morning time duration (10.05%).

Uses and Behaviour

The following figures (Figure 8.24-8.29) present the uses and activities recorded along Malioboro Street in three duration of time (morning, afternoon, and evening) in a weekday and a weekend, as follows:
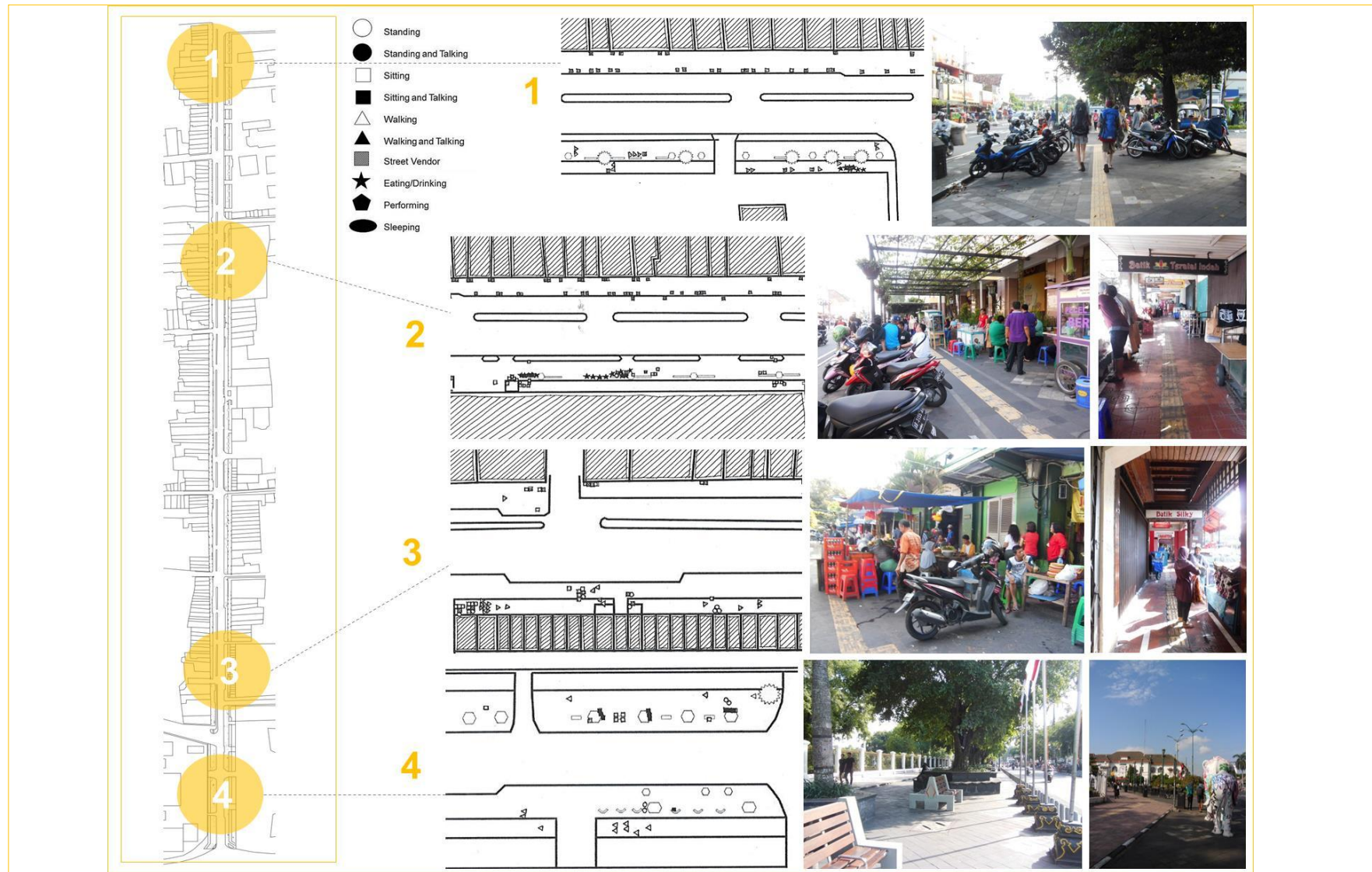
Figure 8.24 Pedestrian activities in Malioboro Street, weekday time, 07-08 am
Sources: Observation, 2014
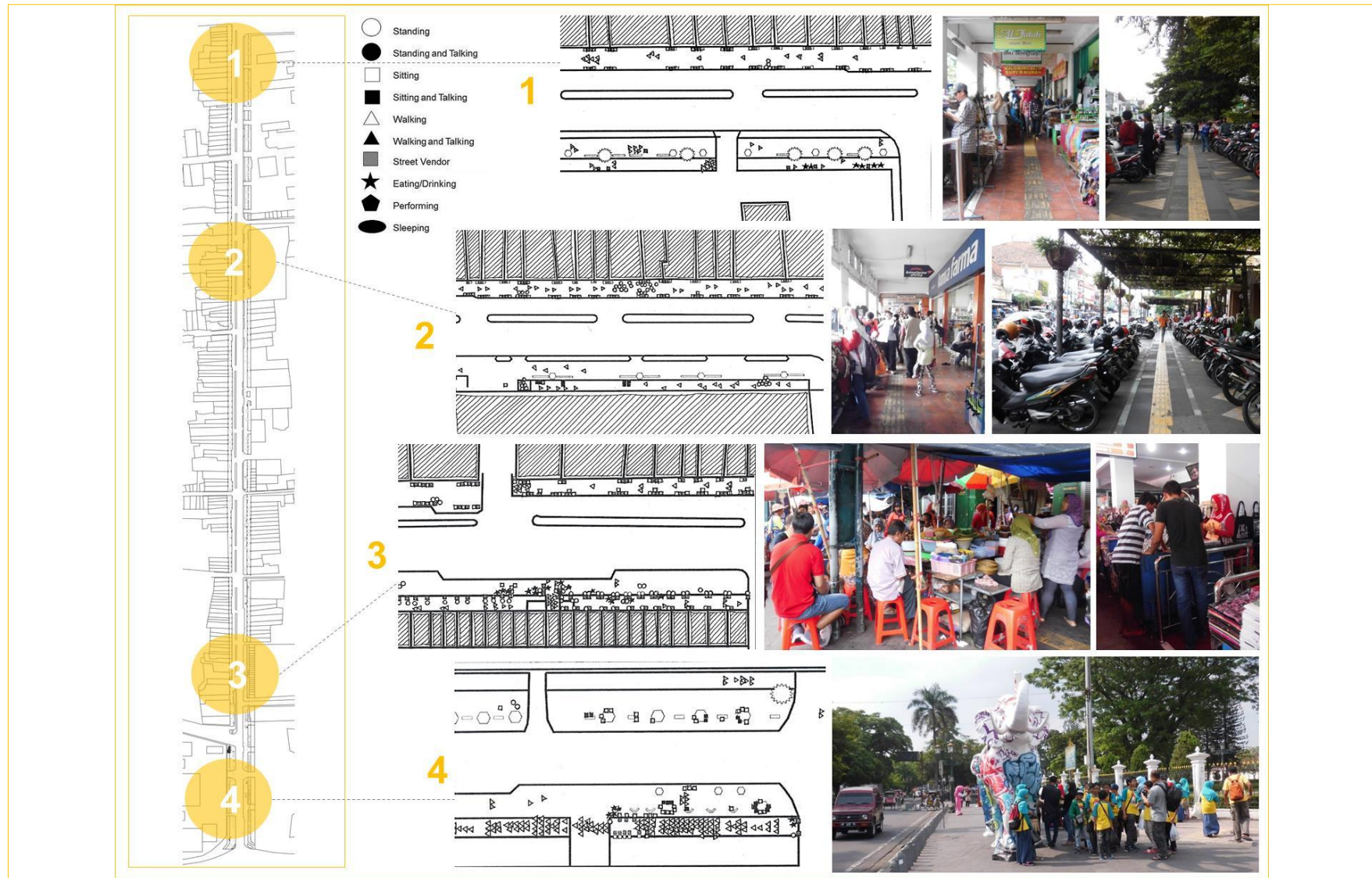
Figure 8.25 Pedestrian activities in Malioboro Street, weekday time, 12-1 pm
Sources: Observation, 2014

Figure 8.26 Pedestrian activities in Malioboro Street, weekday time, 7-8 pm
Sources: Observation, 2014
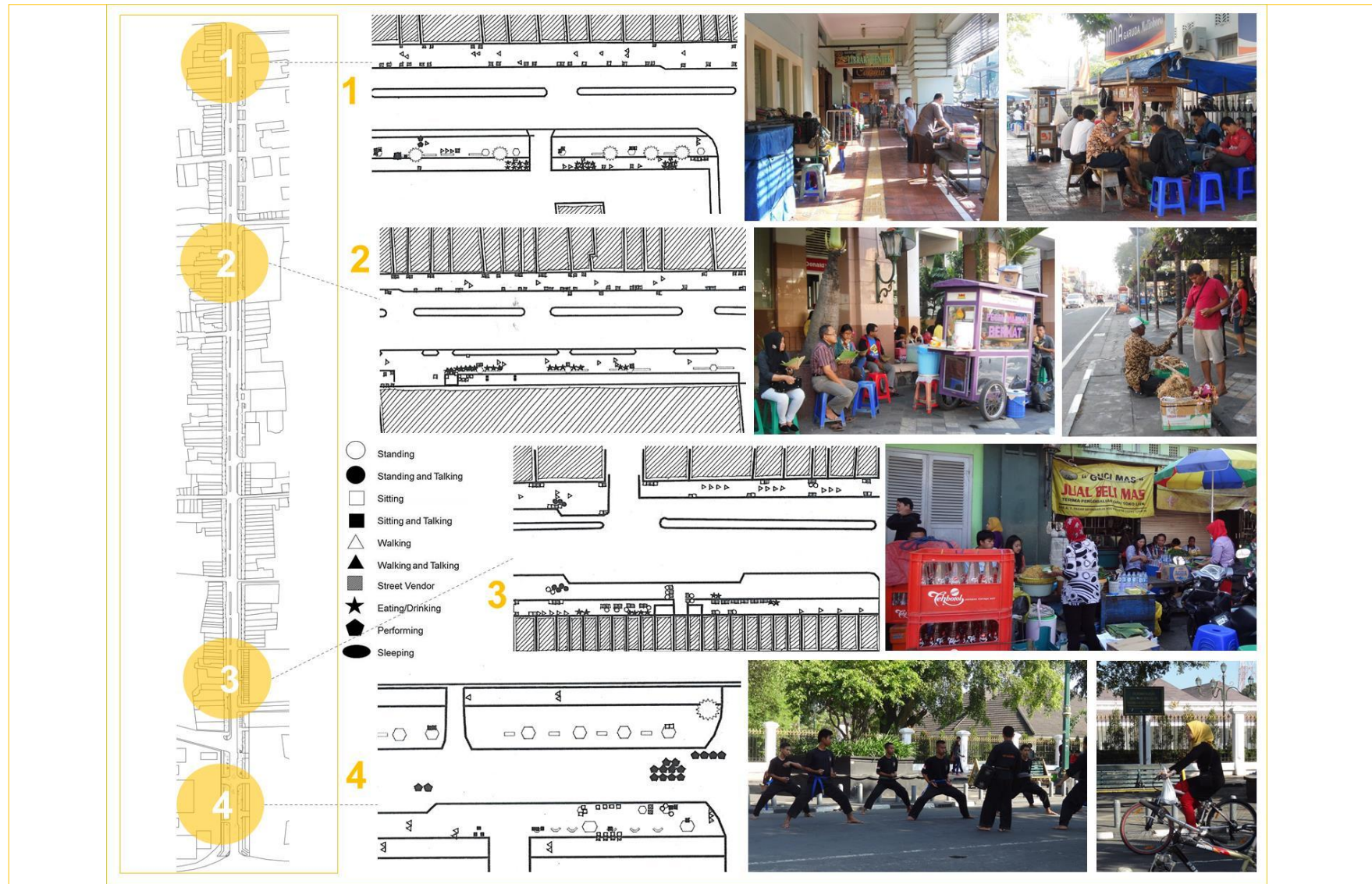
Figure 8.27 Pedestrian activities in Malioboro Street, weekend time, 07-08 am
Sources: Observation, 2014
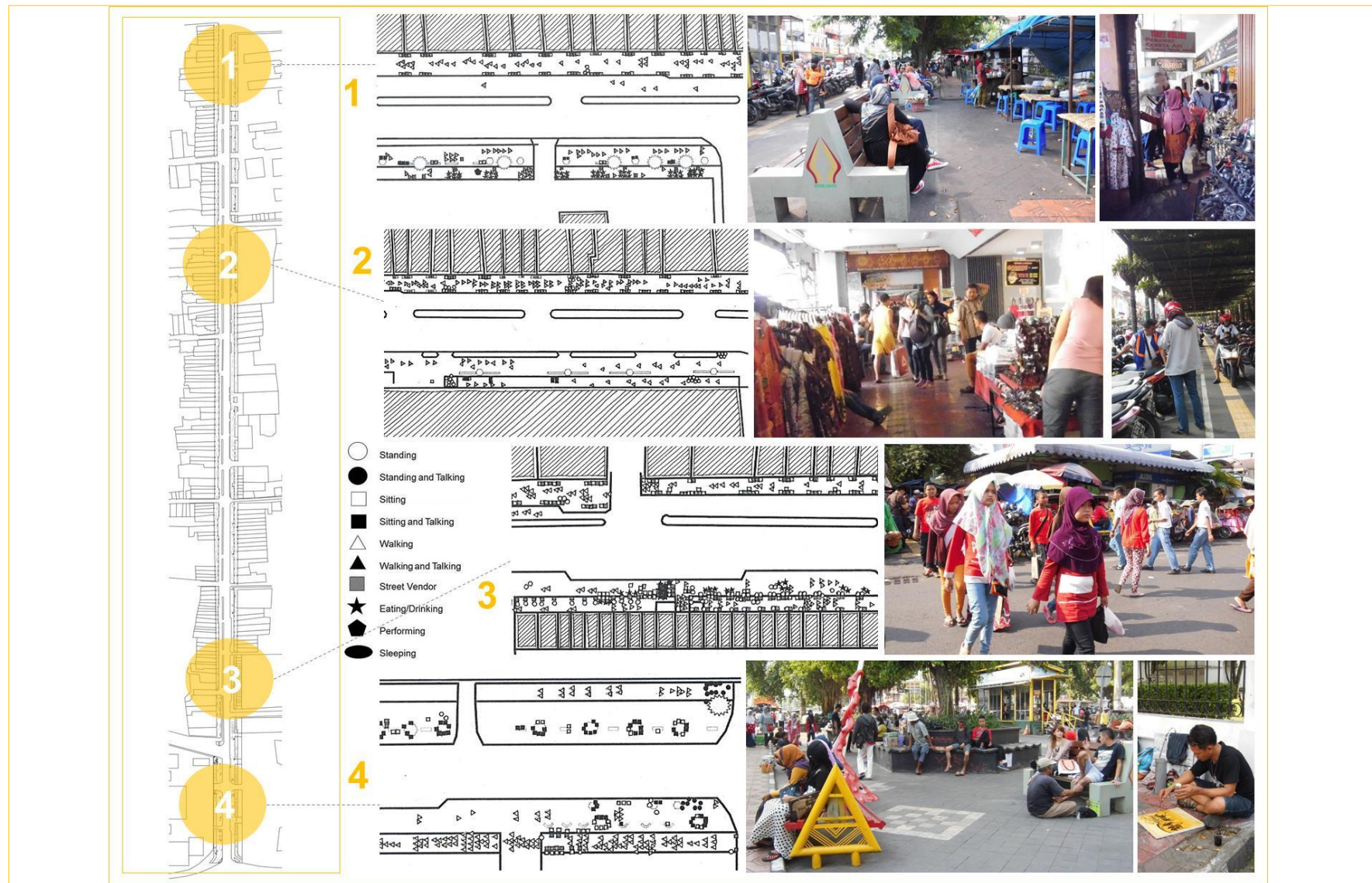
Figure 8.28 Pedestrian activities in Malioboro Street, weekend time, 12-1 pm
Sources: Observation, 2014
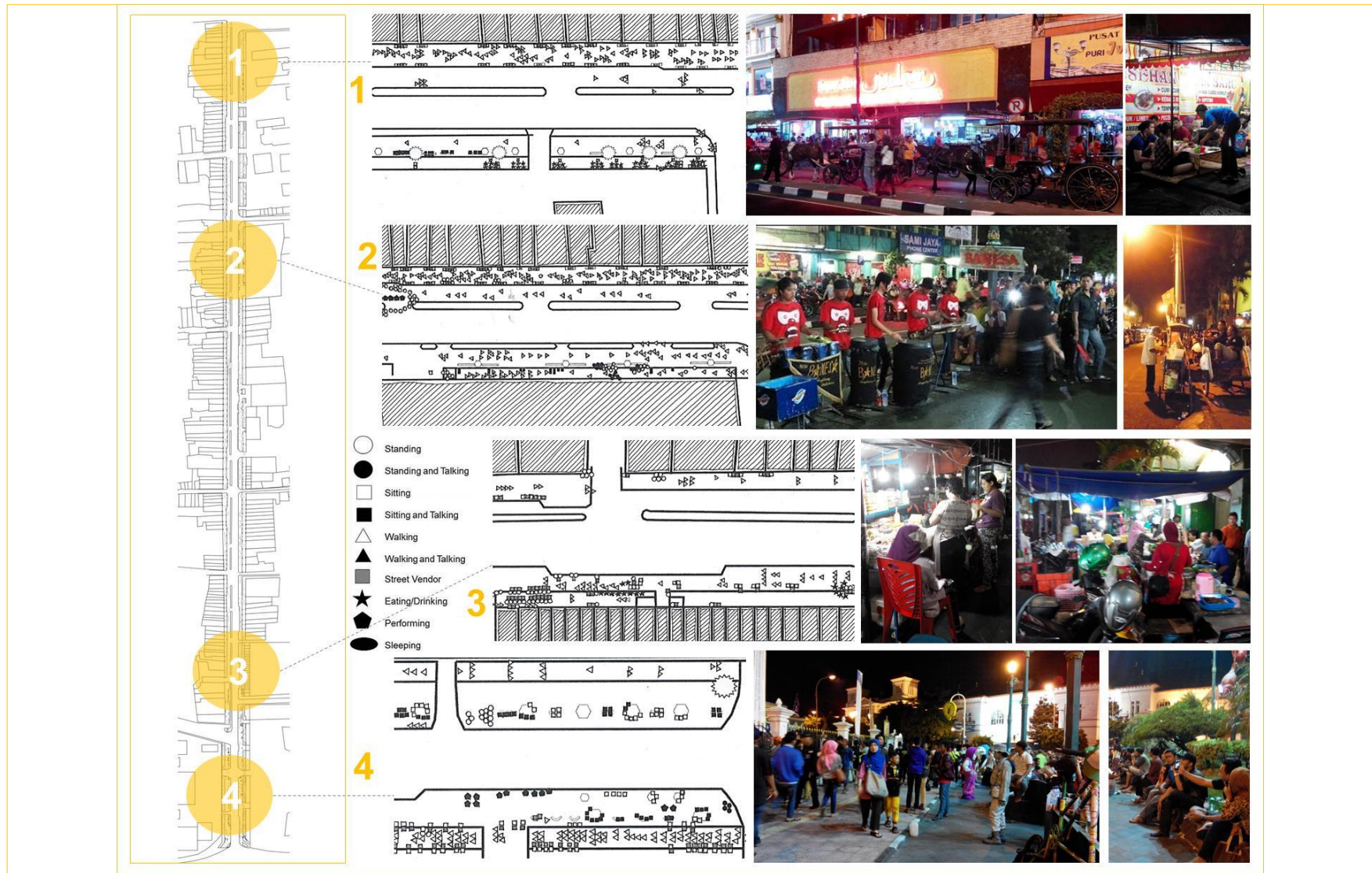
Figure 8.29 Pedestrian activities in Malioboro Street, weekend time, 7-8 pm
Sources: Observation, 2014

Figure 8.24 shows weekday morning time activities in some spots of Malioboro Street. It can be seen that the activities mostly were walking for necessary activities, such as going to work or school. Other recorded activities were eating or drinking in some food stalls which only appeared before 9 am when the shops were open and some of the pavement functioned as on-street parking space, especially in the eastern non-arcaded pavement. Preparing the vendors was also recorded activity during this duration of time, when some of the street vendors brought their commodities to be sold around 9 am onwards.

Figure 8.25 shows the vibrancy of Malioboro Street in a weekday afternoon. In spot 1, it was recorded the walking and selling activities along the arcaded pavement and the rise number of on-street parking activity in the eastern pavement, as also highlighted in spot 2. In spot 3, the dominant activity was eating or drinking in front of Beringharjo Market and the bustling shopping activity in the arcaded pavement and shops. On the contrary, in spot 4, the dominant recorded activities were optional and social activities, such as sitting and talking, also enjoying the art on street in front of Vredeburg Fort.

Figure 8.26 shows the evening activities of a weekday that were recorded as the peak time of pedestrian activity. In spot 1 pavements at both sides of the street were busy with pedestrians for walking, bargaining, and eating along the Lesehan food stalls especially at the eastern pavement that also occurred in spot 2 and 3. Meanwhile, in spot 4, most of the pedestrian activities are optional and social activities, especially sitting and talking while also eating street food from the mobile vendors.

The activities of weekday morning continued to occurr during the weekend, except the necessary activities such as going to work or school (see Figure 8.27). In this duration, most of the activities were optional and social activities, such as eating or drinking from the food stalls, buying local crafts, performing, and doing sports especially in spot 4, which is closed to the traffic for Sunday Car Free Day.
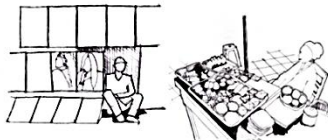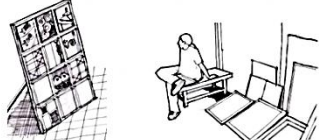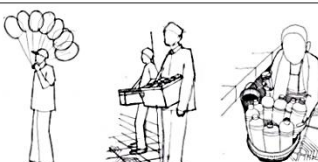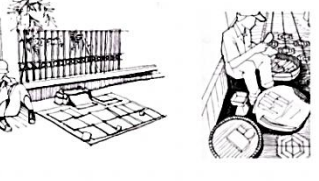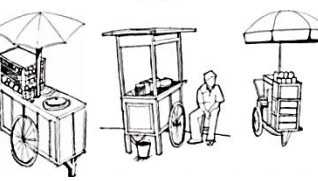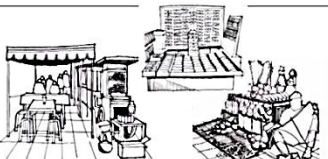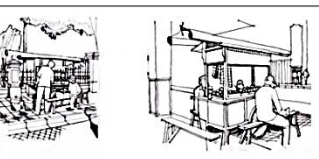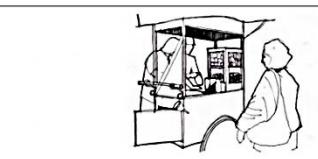
In a weekend afternoon the street was vibrant for shoppers as seen in spot 1, 2, and 3 in Figure 8.28. The number of visitor was seen to be higher compared to the same time at the weekday for the pavements, which were seen to be crowded and busy. In spot 4, the activities continued as more social and optional, where

many visitors were sitting, talking, taking pictures, or even painting the atmosphere of the street.

The public life of Malioboro Street reached to a peak in the weekend evening. Figure 8.29 highlight the activities, as in spot 1 most of the activities were walking for shopping and eating or drinking in the Lesehan food stalls. In spot 2, it was recorded a number of street musicians performed and gained attention from the pedestrians. The street suddenly became vibrant with the sound of music from these performers. Meanwhile, in spot 3, the activities continued for eating while enjoying the local street foods. In spot 4, as also occurred in the weekday evening, the street became very sociable. The sitting space was full of people talking and enjoying the atmosphere of the street.

Street Vendor Activity

Figure 8.30 Malioboro Street Vendor Typology
Source: Sholihah (2012: 91)

Economic-based informal street activities or street vending have deep cultural roots amongst the people, as in other Asian cities like in Kuala Lumpur (Idid, 1985), other developing cities such as Mexico City and Lima, (Pena, 1999) and also developed cities including New York and other European cities (Gehl, 1987). Malioboro Street has become a prominent setting for street vending. It grows naturally and traditionally in line with the transformation of the street (Sholihah,

2012). Figure 8.31 shows the number of street vendor activities along Malioboro Street through three duration of time during the weekday and the weekend.

Number of Street Vendor Malioboro Street

	7-8 am	12-1 pm	6-7 pm
weekend	696	749	847
weekday	615	838	866
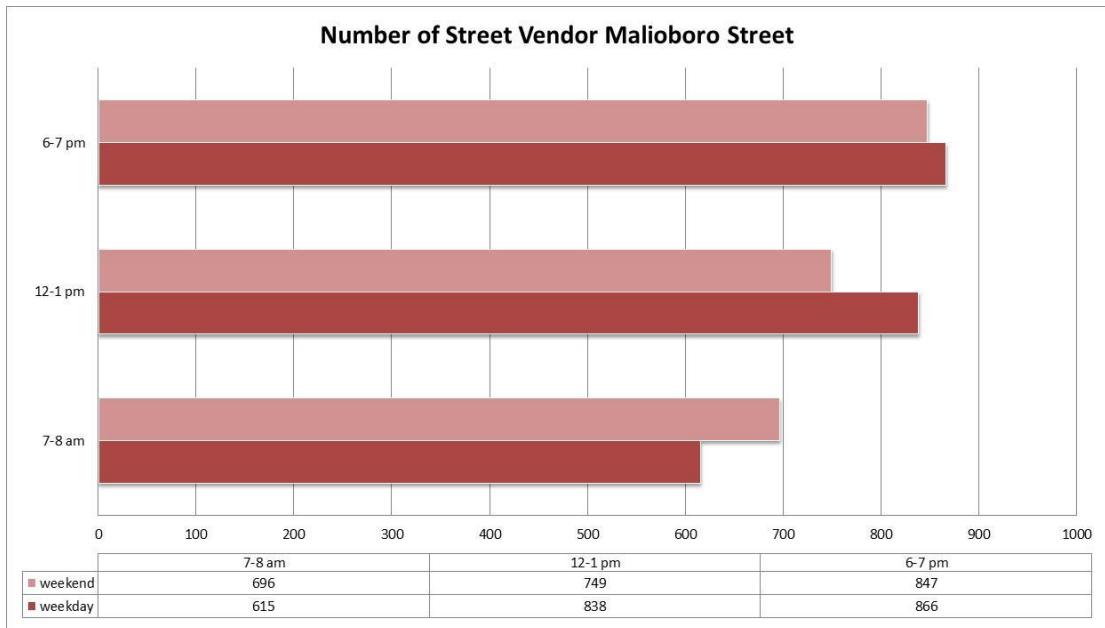
Figure 8.31 Number of Street Vendor along Malioboro Street during the weekday and the weekend
Source: Observations, 2014

The most common products sold by the street vendors are the art products, including clothing, especially Batik, leather products and various traditional souvenirs (craft, puppet, key chains, bag, etc). In addition, food stalls also dominate the street vending especially along the eastern side pavement. Traditional culinary such as *Gudeg*, *Bakso*, *Es Teler* and so on are traded creating a street food ensemble along the street pavement. The street vendors at Malioboro Street organise their opening times and take turns with other vendors as recorded in the field observations as follows:

Activity Pattern 1: 9 am to 5 pm: In this duration, street vendor are selling art products, including batik for clothing and bags, leather puppet, silver products, etc that are located in both sides of arcaded pavements. Mobile food stalls (*Angkringan* and *Gerobak*) selling traditional foods are observed along the eastern non-arcaded pavement and also along the non-motorised vehicle lane.

Activity Pattern 2: 5 pm to 9 pm: In this duration the street vendor along arcaded pavements continue to trade up to 9 pm in the evening. The number of *Angkringan* along the non-motorised vehicle lane increases by the night falls. The

night life of Malioboro Street starts to glitter as the street lamps enlighten the atmosphere of the street. At the non-arcaded pavements, the food stalls are closed and *Lesehan* food stalls start to open their stalls. *Lesehan* is a way of eating on the mat which has become a famous activity especially for tourist after all the shops and other street vendors are closed. Around the *Lesehan*, street performer will linger to entertain the visitors at the *Lesehan*.

Activity Pattern 3: 9 pm to 9 am: At 9 pm all of the street vendors in the arcaded pavements will finish their trading and be replaced by the *Lesehans* that started to open their stalls along the pavement. The public life of Malioboro Street in this duration is highly activated by the existence of *Lesehans* and can be regarded possess the lowest grade of activities.

The diversity of street vendors along Malioboro Street has a strong relationship with the existence of the street as a tourists' destination. This was commented in the interviews as follows:

> 'In fact, street vendor is one of the charms of Malioboro Street, if we eliminate them, then the essence of Malioboro Street will be lost…'(MAL-GOV-007, In-depth Interview, April, 2014).

However, the existence of street vending along the street sometimes seen as major obstacle of urban management for its occupying public space, decreasing the dimension of pavements and reduce the cleanliness of the area.

The Street Corner Society

'*The activity on the corner is a great show and one of the best ways to make the most of it is , simply not to wall it off* ' (Whyte, 1980: 57). The field observation shows that the southern corner of Malioboro Street appears to be an active place for optional and social activities. The sitting space is always full and busy, not only for the visitors to sit, relax and have conversations, but also for street performers as well as artists in action. The street corner functions as superb space for many reasons, at it has all of the needs for the pedestrians, such as sitting space, street

vending, more spacious space, meeting place; thus this can be a favourite place to stay longer in the street as perceived by the pedestrians.

Figure 8.32 Street Corner Activities: Social Interaction and Cultural Performances
Source: Observations and Google-images.com, 2014

The Twenty-Four Hour Street: The Street Ambience after Hour

The observation shows that after all the shops and craft street vendors are closed at 9 pm, the activities along the Malioboro Street pavement continue to be vibrant. Although the activity pattern within this time duration (9pm -9 am) can be regarded as the quietest compared to the other two duration of time, it has 'a deep impression' for the visitors of the street.

Figure 8.33 Malioboro Street Ambience after Hour
Source: Observations, 2014

The midnight activities at the street are enlivened with the street musicians, impromptu concert especially in front of the Vredeburg Fort, and of course enjoyable midnight supper in Lesehans along the street pavement (see Figure 8.33), as it was commented in the interviews as follows:

> '…to feel the unique ambience of Malioboro Street, you better come around midnight, it is different, there is a magical feeling for me, when we join other people to enjoy the street, sit, or eat in Lesehan food stalls, these makes Malioboro Street different to other places…' (MAL-GOV-002, In-depth Interview, March, 2014).

The existence of vibrant midnight activities in Malioboro Street has led the street to be regarded as 'live' in twenty-four hour duration per day. This situation is in line to the concept of twenty-four hour city which has three primary intentions, such as '*developing the evening economy of the city; improving the city's image to attract investment; and providing a safer city centre for a broader spectrum of the users with different ethnic and ages to enjoy the city without fear*' (Stickland, 1996 in Heath, 1997: 194).

8.6.6 Adaptability

Adaptability of Malioboro Street is discussed under three main points: urban gentrification: adaptability and the changes of use; shops versus street vendor and endurance of businesses; and resilience of traditional street, as follows:

Urban Gentrification: Adaptability and the Changes of Use

Figure 8.34 The atmosphere of Dagen, Pajeksan and smaller alleys in Malioboro District
Source: Observations, 2014

The land conversion from housing to hospitality facilities has occurred across Malioboro District as the impact of the existence of Malioboro Street in particular and Yogyakarta in general as a popular tourist destination. Tourism facilities, such as hotel, hostel, homestays, restaurants, internet café, money changer, etc. are blooming in the district. As a result, Malioboro District which was predominantly functioned as a residential area with communal and social facilities, such as schools, is now transforming and adapting to the new functions. Many houses have new rental businesses such as for internet café or restaurants that remain at the same owner, but also many of the houses have been sold to developers to be converted into new functions. The most common phenomenon is conversion of houses for hotels, as commented in the interviews by a street vendor in the eastern pavement, as follows:

> 'Currently the kampongs behind this street mostly have been converted into hotels, once they were residential, now they turn into hotels. It is because of the [strategic] location, they were purchased at high prices…'(MAL-SV-012, In-depth Interviews, April, 2014).

These changes have direct impacts on the displacements of Malioboro District inhabitants that were, commented in the interviews as follows:

'if we go to the kampongs at the back of Malioboro Street, for instance Sosrowijayan, now almost all the houses were converted into new hotels, and those hotels are large, this has changed the district pattern, even some neighbourhoods have been lost [relocated]…(MAL-VIS-003, In-depth Interviews, March, 2014).

The urban gentrification which results in people displacement has changed the kampong plot pattern and eliminated the distinct character of the kampong as activity support for the main corridor of Malioboro Street, as indicated in Sub-section 8.6.3 on the migration of art and craft community that once lived in the area to other parts of the city or nearby regions.

Shops versus Street Vendor and Endurance of Businesses

The business competition in Malioboro Street is not only occurs between the independent shops versus shopping malls (as found in the two previous case studies) but it also happens between the street vendors and the shops. The street vendors occupying the arcaded pavement traded to also capture the visitors to visit their shops. Moreover, the street vendors nowadays have become one of the main attractions for Malioboro Street visitors. It was commented in the interviews, as follows:

'Street vendors have become the street 'trademark', although they also exist elsewhere, but perhaps street vendors along Malioboro Street are different, the street ambience also supporting, it is comfortable, full of people walking as well as vending…'(MAL-VIS-004, In-depth Interviews, April 2014).

The unique, artistic, directly accessible characteristics along the pavement and inexpensive goods are advantages for the street vendors. The cheaper tax and management (no need to supply air conditioning, shopkeepers, and building maintenance) makes the street vendor commodities are very competitive to those sold in the shops. Moreover, their existence also covers part of the shop entrances, which can hinder the visitors to enter the shops. Hence, the relationship between street vendors and shops that once was 'a symbiotic mutualism' now can turns into

'a symbiotic parasitism'. It was also expressed in the interviews with a shop owner, as follows:

> 'Those street vendors are trading in our building lot, we do not get any benefit, but they occupy the pavement, it is not their right, it is an injustice ... the street vendors feel protected by the city government after the government made an organisation to organise them...' (MAL-RES-009, In-depth Interview, March, 2014).

Indeed, the observation shows that the number of street vendors along the pavement highly increases and interferes with the movement and comfort of the pedestrians. The management of street vendors to create a mutual benefit amongst the street stakeholders including the shop owners should become a concern especially by the government as the urban regulator. The concern towards the number of street vendors was also expressed in the interviews, as follows:

> 'The number of street vendors is too many, whereas the street space of Malioboro is not increased, then how? It needs to be balanced and well-managed..' (MAL-VIS-001, In-depth Interviews, March, 2014).

Resilience of Traditional Street

'Planning for resilience in the face of urban disaster requires designing cities that combine seemingly opposite characteristics, including redundancy and efficiency, diversity and interdependence, strength and flexibility, autonomy and collaboration, and planning and adaptability' (Godschalk, 2003: 141). As mentioned in the research methods chapter (sub-section 5.9.3), Indonesia is a country prone to natural disasters, especially volcano eruption and earthquake. In the last ten years, there have been three natural disasters that directly impacted to Malioboro Street, namely The Java Earthquake, May 2006; Merapi Volcano Eruption, November 2010; and Kelud Volcano Eruption, February 2014. The two latter disasters have great impact to the Malioboro Street. Thus the materialisation of a traditional street that is able to cope natural hazards is important to accommodate, address impact, and and then reconfigur itself to continue its existence and sustainability.

Figure 8.35 The impact of natural disaster in Malioboro Street, a) Merapi Volcano Eruption, November 2010, b) Kelud Volcano Eruption, February 2014
Source: www.kompas.com, 2010 and observations, 2014

Figure 8.35 shows how the community worked together to clean up the volcano ashes that filled the street spaces to restore to the normal condition. Community mitigation capacity is one of the important point in creating resilient cities, amongst other capacities, such as '*mitigating for social and institutional resilience, monitoring vulnerability reduction, hazard mitigation capability and commitment, adopting recognised equity standards, assisting vulnerable neighbourhood and also mitigating business interuption impacts'* (Godschalk, 2003: 140-141).

In the case of Kelud volcano eruption that occurred during the field observation of this study (February 2014), it showed that Malioboro Street had totally paralysed for two or three weeks to recover. Moreover, the pedestrian activity along the pavement was not recovered for more than a month or so. Hence, the re-occurrence of natural disaster in Malioboro Street should be highly anticipated by the various street stakeholders, especially by the city council to be able to increase their disaster mitigation and preparedness capacity so that the impact of natural disaster can be minimised in the future.

8.6.7 Creativity

Creativity indicator is discussed under four themes: cultural activity and facilities; street festival and creativity; the richness of street culture: hybrid vs local cuisine; and Malioboro Street as home for Batik as UNESCO's intangible heritage.

Cultural Activity and Facilities

Figure 8.36 Cultural Facilities at Malioboro Street and surroundings
Sources: Observation and Google-images, 2014

Since its establishment in 1755, Yogyakarta flourished as the centre of Javanese art and crafts, and therefore it is acknowledged as the cultural heart of Indonesia (Smithies, 1986). As situated in the centre of Yogyakarta, Malioboro Street is the home for at least six cultural facilities, including museum and art gallery in Vredeburg Fort, Yogyakarta Cultural Park, Societet Militer Concert Hall, Senisono Concert Hall, Indra Theatre (now was closed down), and large pavement of 1st of March Attack monument at the Malioboro Street corner.

As the centre of Javanese culture, the majority of arts and performance held in above cultural facilities are adapted from the Javanese traditional culture. The Javanese inherited a rich aristocratic culture dated back in eighth century when the Hindu Mataram Kingdom built the magnificent work of art of Borobudur and Prambanan Temple (listed as UNESCO World Heritage Site in 1982) nearby the present day of Yogyakarta. However, nowadays, as the creativity journey of the local artists, especially young artists continues to evolve, so that the art performance is not limited only to the traditional art, but also to the contemporary arts, known for the locals as '*kreasi baru*' or new creation, as shown in Figure 8.36.

The findings show that Malioboro Street possesses a rooted cultural capital that can be one of the excellence qualities of the street. In this case, Malioboro Street is having an essential pre-requisite for a cultural quarter, that is the presence of '*cultural activity'*, including '*cultural production*' (making objects, goods, products, and providing services) as well as '*cultural consumption*' (people going to shows, visiting venues, and galleries)' (Comedia (1991) in Montgomery, 2003: 296).

Street Festival and Creativity

Figure 8.37 Street Festivals at Malioboro Street within one year duration
Source: Observation and various sources, 2014

The observation identifies fourteen festivals held annually along Malioboro Street. The number of street festivals held along Malioboro Street is higher compared to the other two case studies. Table 8.5 presents the characteristics and detailed description of each festival held along the street in one year duration, as follows:

Table 8.5

Characteristics and Detail Description of Street Festival in Malioboro Street

No.	Festival	Characteristic	Detail Description	Held Every
1.	Biennale Jogja	Contemporary Festival	An art festival held since 2011 in Yogyakarta Cultural Park and along Malioboro Pavement	January
2.	Prosesi Miyos Gongso (Gamelan Sekaten) dan Grebeg Maulud	Traditional Festival	A festival to commemorate the birth of Prophet Muhammad PBUH by holding a procession of traditional music ensembles along Malioboro Street and Alun-alun area, a night market held a whole month in Alun-alun (city square)	Every Maulud (Islamic Calender), in 2014, it was in January
3.	Jogja Dragon Festival (Chinese New Year)	Traditional Festival	A festival to celebrate the Chinese New Year. A culinary festival and performance held along the Ketandan Alley in a week duration, and the peak of the festival is the performance of Dragon and Lion Dance (Barongsai) along Malioboro Street	January-February
4.	Pencak Silat Malioboro Festival	Contemporary Festival	A martial art festival held along Malioboro Street since 2013 to perform many kinds of martial arts from Indonesia and abroad	June
5.	ARTJOG Festival	Contemporary Festival	A festival held every year in Yogyakarta Cultural Park (Taman Budaya Yogyakarta) to display and perform Yogyakarta contemporary art, from paintings, installation arts, and performing arts	June
6.	Festival Kesenian Yogyakarta (Yogya Art Festival)	Contemporary Festival	An annual art festival held since 1989 in Vredeburg Fort and along Malioboro Street	June-July
7.	Jogja Fashion Week Carnival	Contemporary Festival	A carnival held along Malioboro Street as part of the Jogja Fashion Week held every year since 2005	June
8.	Festival Budaya Ruwahan Apeman	Traditional Festival	A traditional procession but in a contemporary form to perform art installation and music instrument from recycle products to enhance the public awareness on protecting the environment	Every Ruwah (Islamic Calendar), in 2014 was in June
9.	Malioboro Festival	Contemporary Festival	Various street performances and shopping sale held in Malioboro Street	July
10.	Independence Day Festival	Traditional Festival	A festival to commemorate the Indonesian Independence day in 17th of August 1945. A vibrant public carnival is held, as the people celebrate it together along the street of Malioboro	August
11.	Museum Festival	Contemporary Festival	A festival held since 2010 in more than 30 museums in Yogyakarta city. The highlight of the festival is a carnival to display museum	September

			collections along Malioboro Street to enhance the public awareness on the importance of museum and history	
12.	Jogja International Street Performance	Contemporary Festival	A festival to perform contemporary art, especially dance performances by university students not only from Yogyakarta but also from abroad, held in Yogyakarta Cultural Park and the procession the dance performance is along Malioboro Street	September
13.	Garebeg Mall	Contemporary Festival	A festival to commemorate the birthday of Yogyakarta, joined by 5 shopping malls, including Malioboro Mall	October
14.	Pawai Budaya Taman Abu Bakar Ali dan Senopati	Contemporary Festival	A festival to celebrate the birth of Yogyakarta through a street carnival, held from Taman Abu Bakar Ali (Car Park at the northern side of Malioboro Street) to Senopati (Car Park at the Southern side of Malioboro Street)	October

Sources: Observations, 2014 and various sources

Of the fourteen annual street festivals recorded to be held in Malioboro Street in 2014, four of them are traditional festivals that have been held for decades or even for hundreds of years. At the same time, ten contemporary festivals are held. It shows the vibrant cultural life of Malioboro Street in particular and Yogyakarta in general.

It is interesting to note that during the street festival held along Malioboro Street, the public of Yogyakarta gather and fill the street spaces to enjoy the carnival and street atmosphere. It is the point where the Yogyanese 'claim back' the street as regularly being used more often by the tourists as expressed in the interviews to two locals, as follows:

> 'I usually go to Malioboro when there is an event, such as a festival or carnival, it can be two or three times in a month...but not for shopping, except to accompany my relatives who are on vacation to Yogyakarta...'(MAL-VIS-001, In-depth Interview, March, 2014).

> 'Street festivals are the time when the Yogyanese are back to Malioboro Street and it is the only street in Yogya that often performs parades, and therefore I say, Malioboro is not just a street, but there is a philosophy behind it,...' (MAL-VIS-003, In-depth Interview, March, 2014).

In addition, as also found in Pecinan Street case study, Malioboro Street is the only street in Yogyakarta that becomes the venue of festivals especially those in the form of procession or carnival.

The Richness of Street Culture: Hybrid vs Local Cuisine

As identified in the two previous case studies, there is a hybrid cuisine as a result of cultural acculturation especially among the Javanese and the Chinese cultures. Bakpia Pathuk is one of the manifestations of hybrid cuisine that has transformed into a culinary icon of Yogyakarta. Moreover, the centre of Bakpia Pathuk home industry situated at the western district of Malioboro Street has become one of tourist destinations of the city.

However, it is interesting to note that in Malioboro Street case study, the local cuisine is also as iconic as the hybrid cuisine. It is reflected in the vibrancy of local cuisines sold along the pavement of Malioboro Street, inside Beringharjo Market, and in some modern food courts of Malioboro Mall and Ramai Mall. The richness of local cuisines are including Gudeg, Pecel, Geplak, Cendol and Coconut Ice, Chicken Sate, Gado-gado, and other various street foods as presented in Figure 8.38.

Figure 8.38 The Richness of Street Culinary of Malioboro Street
Source: Observation and various sources, 2014

In addition to local cuisine, Yogyakarta as the centre of Javanese culture is also famous for the traditional way of eating that does not exist in other areas of Indonesia so-called Lesehan. Lesehan is a way of eating through sitting on a mat, which reflects the modest and egalitarian way of life. Lesehan can be found along the night food stalls especially after 9 pm when all the shops and other street vendors end their opening times, as mentioned in Vitality sub-section.

Figure 8.39 Lesehan and Angkringan in Malioboro Street
Source: Observations, 2014

Besides Lesehan, the other traditional way of eating is offered by Angkringan. Angkringan is a traditional mobile food stall serving traditional foods especially enjoyed by the urban poor for they are cheap. However, nowadays Angkringan is also enjoyed by the upper class for it offers a unique way of serving foods and special tastes. Hanging out all night in Angkringan while chatting with friends is regularly conducted by the local Yogyanese, especially for artist community and nowadays also for university students. When Dolf Schnebli have in mind about the greatest street as: the street where he would have a coffee in a café in which he

could find Sartre discussing with Corbusier or Melville having a beer with Faulkner (Jacobs, 1993), then in Yogyakarta he should go to a Lesehan or Angkringan especially along Malioboro Street.

Malioboro Street as Home for Batik as UNESCO's Intangible Heritage

Batik is a technique of producing coloured designs on textiles by dyeing them, after first having wax applied to the parts to be left undyed. Indonesian batik is made in Java, which has a long history of evolution, with diverse patterns influenced by a variety of culture, and is the most developed in terms of pattern, technique, and the quality of workmanship (Santosa, 2003). Batik has inscribed in 2009 as UNESCO's as Masterpiece of Oral and Intangible Cultural Heritage of Humanity (UNESCO, 2009). Furthermore, in 2014, Yogyakarta is titled as the World City of Batik by the World Craft Council (WCC). The coronation mentioned that the home of batik in Indonesia is centralised in Yogyakarta and batik as Indonesian traditional work of art has become indispensable part of Yogyakarta (Utami, 2014).

Figure 8.40 Batik product and shop in Malioboro Street
Source: Observation and Google-images, 2014

Batik produced in many part of Yogyakarta city and surrounding regions and Malioboro Street is the most important sales centre. Beringharjo Market is the famous market for batik that is visited by domestic and international tourists and the more important thing is that shops along Malioboro Street are dominated by Batik Shops (see Diversity sub-section) with fifty batik shops out of 173 shops that exist in Malioboro Street. In addition, the street vending along the arcaded-pavement is also dominated by batik products. Batik products along Malioboro Street vary, not only clothing, but also painting, bag, scarf, sandals, and so on (see Figure 8.40). The uniqueness of product sold along Malioboro Street, in this case Batik can represents the cultural quality of the place that may enhance the imageability of the street.

8.6.8 Form and Visual Quality

Form and visual richness indicator is discussed in four main points: street scale and proportion, building height and composition, floorscape, and the architectural diversity of Malioboro Street, as follows:

<u>Street Scale and Proportion</u>

In the first half of twentieth century the ratio of distance and height (D/H ratio) of Malioboro Street sub-segment especially along the shop houses rows is approximately 2:1, meanwhile, in 2014, the ratio of D/H is approximately 1:1. The changes of the street proportion has resulted in the good sense of containment of the street (McCluskey, 1992) that produces comfortable space for the users (see Figure 8.41).
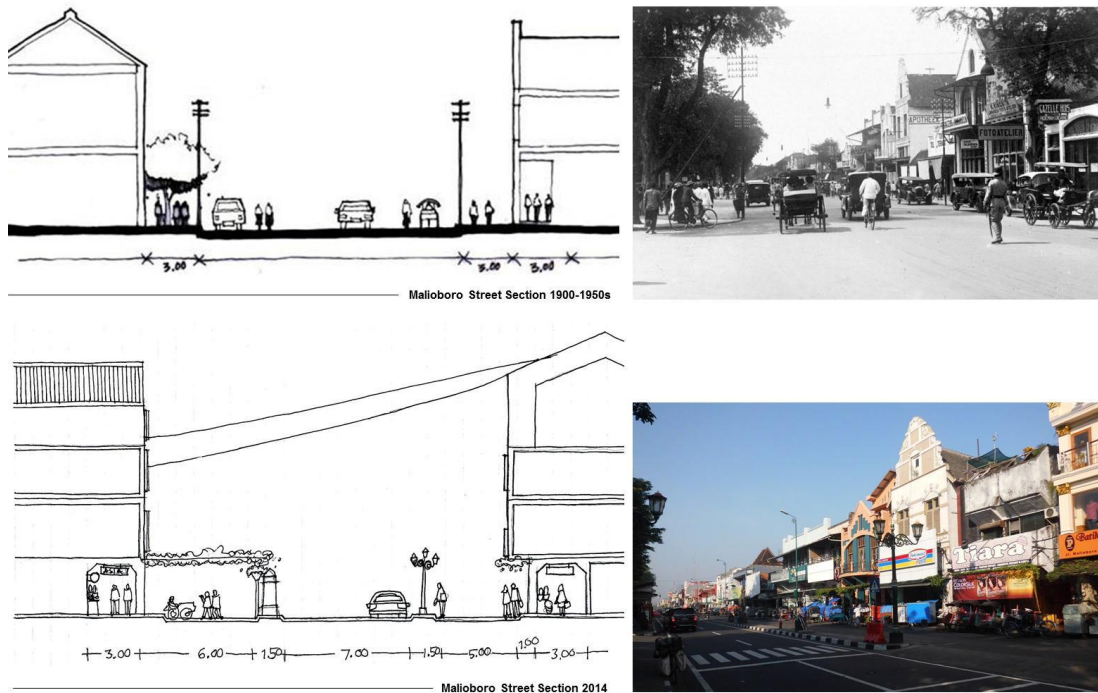
Figure 8.41 Malioboro Street section in the past and present
Sources: Observation, 2014, Sholihah, 2012 adapted from pictures of 1900 and 1933, http://collectie.tropenmuseum.nl, accessed in 27/05/2015

The changes of street spaces also occurred in the division of the lane as the result of the physical restructuring of the street in 1975. As seen in Figure 8.41, the street spaces of Malioboro Street is divided into three lanes, with main vehicle lane is the dominant space (14 metre). After 1975, physical restructuring of the main vehicle lane drastically decreased into 7 metres wide (half of the previous dimension) to accommodate the non-motorised vehicle and green spaces at both sides. This shows the good will from the government to balance the street spaces and divide it into various functions, not only for vehicles.

Building Height Composition
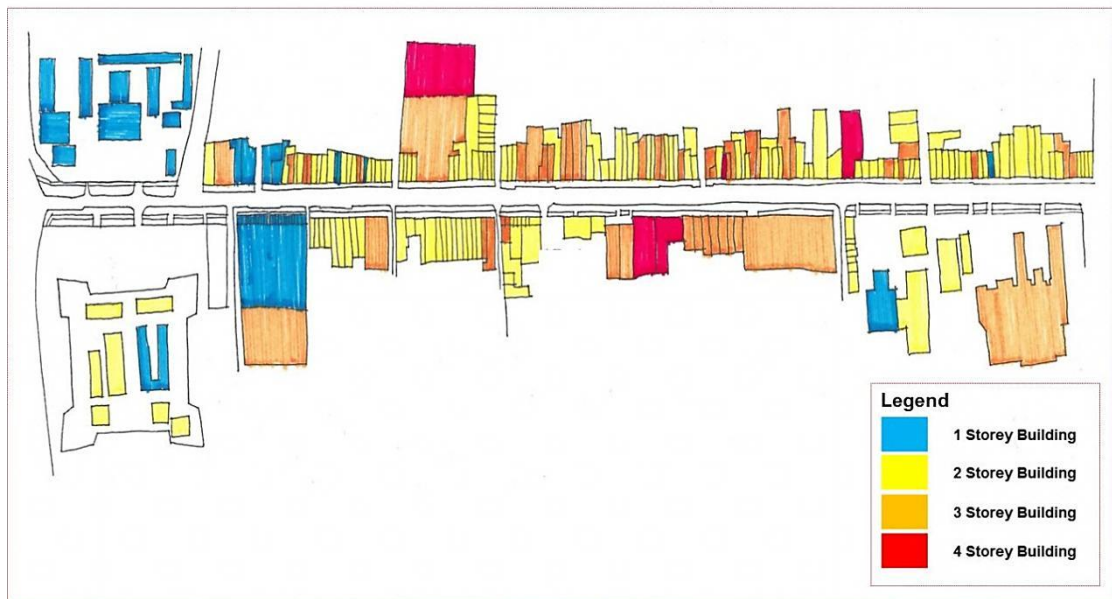
Figure 8.42 Building height composition of Malioboro Street
Source: Observation, 2014

The building height and composition of Malioboro Street is varied from single storey to more than four storeys. Single storey buildings account for 6.4%, two storey building account for 66.48%, three storey building account for 24.32%, and four storeys and above buildings account for 2.7% as shown in Figure 8.42. The overall data shows that Malioboro Street is dominated by two storey buildings, creating D/H ratio of approximately 2.5:1 that leads to spacious and good sense of enclosure or containment. The stronger sense of enclosure lies in segment 2 with D/H ratio of approximately 1.66:1. On the contrary, in street segment 4, especially in front of the Vredeburg Fort, the D/H ratio is approximately 15:1, so the space can be regarded as more open, which sense of enclosure become attenuated and progressively diminished.

Floorscape

In early twentieth century, the street space of Malioboro Street was divided into three parts, i.e. main lane for heavy vehicles and pavements on both sides of the street. The street wall was mainly one and two storey shop houses buildings

approximately in average six metres in wide and eight metres in heights in average. The public buildings were mainly single storey, had a monumental building form, large yard, trees, and had proper street amenities, such as lamp posts and benches.

The physical restructuring of Malioboro Street in 1975 had a significant change for pavement of Malioboro Street with the establishment of a continuous pedestrian arcade along the street, particularly along the shop houses. The shop houses without arcade were tunnelled through their wall to create a three metre wide covered pedestrian arcade. Before the reconstruction, some of the shop houses already had arcade space in their buildings.

In 1982, the street space of Malioboro Street was divided into five parts, i.e. a non-motorised vehicle lane in the western part of the street (5 metres), space for plant and street furniture (1.5 metres), main vehicle lane (7 metres), space for plant and street furniture (1.5 metres), and pavement in both sides of the street (5 metres each). This space restructuring lasted up to the present condition of Malioboro Street.

The dimension of continuous pedestrian arcade as a result of the street restructuring in 1975 is 3.5 metres in height, 3 metres in width, with some variations according to the street segment as seen in Figure 8.43. The arcaded pavement is designed in red colour with no specific patterns; meanwhile, the non-arcaded pavement is designed in grey/natural colour of the stone materials. In some segment of arcaded pavement the quality of the pavement materials starts to deteriorate and needs regular maintenance for it is dusty and un-clean.

Figure 8.43 The Malioboro Street arcade at both side of the street space
Source: Observations, 2014

Figure 8.44 Façade Design of Malioboro Street
Source: Observation, 2014

Architecturally, the buildings along the street Malioboro have high diversity of architectural styles. On the north end of the street, the street wall is dominated by Indisch style buildings (mixed between Colonial and Javanese style), such as Kimia Farma and Indo Maret Shops. Meanwhile, at the opposite street wall, the Inna Garuda Hotel (ex. De Grand Hotel de Djokdja) retains its colonial style. In the next segment, Malioboro Mall, Ibis Hotel and Mutiara Hotel represent the modern building styles.

In the middle street segment, shop houses are dominated with Chinese influence styles. On the contrary, at the opposite side, the Kepatihan Building Complex represents the traditional Javanese architecture Style even though it is not obviously seen from the street spaces. The shop houses with Chinese influences ends up by the Beringharjo Market which retains its colonial style. The colonial style buildings remain until the street corner, such as the Vredeburg Fort, Gedung Agung, Post Office, BI Office, and BNI Office.

Since the implementation of Mayor Regulation on Billboards along Malioboro Street No.85 in 2011, to ban the billboard to cover the façade of buildings, the diversity of façade design is revealed and the general public could enjoy it. This situation has enhanced the quality of architectural diversity compared to the previous times of the regulation as a result of the large billboards that cover the building facades.

8.6.9 Transparency and Active Frontage

Figure 8.45 Transparency and active frontage of Malioboro Street shops (Sources: Observation, 2014)

The variety of building fronts along Malioboro Street was taken into consideration during the observations. Shop buildings are mostly transparent, active and interactive, which become one of the liveliest setting along the street. Most of the shops leave their façade fully open, allowing the people outside to see and hear the activities inside, and often smells the good for sale, especially

restaurants. However, Malioboro Mall as one of the newest building in the street has different strategy for its fronts. It is a massive continuous blank wall with transparent display above the eye level. As the result, Malioboro Mall store fronts are the quietest space along the street (see Figure 8.45c).

On the other hand, public buildings, such as Parliament Building and Vredeburg Fort offer greener frontages which are treated as a fence but visually accessible. The green space, however, cannot be used for pedestrians to have static activities, such as taking rest, having conversation, or other optional and recreational activities (see Figure 8.45d).

8.6.10 Safety

On-street Parking: Environmental Comfort and Pedestrian Safety

Figure 8.46 On-streets parking along the eastern side pavement of Malioboro Street
Source: Observations, 2014

The observation shows that most of the pavement on the eastern side of the street is occupied by the on-street parking. The pedestrians have to share the

pavement spaces with the vehicular, especially motorcycles. Pavement that is designated as a place to walk with comfort has become crowded space, which is full of air pollution and noise and leave only about 1-1.5 meters to the pedestrians. Hot mufflers left in the motorcycles can easily injure pedestrians for its crowdedness as seen in Figure 8.46. In addition, the position of the motorcycles which are parked nearby food stalls in some part of the pavement can also reduce the safety of the food being sold especially concerning the air pollution.

The condition is confirmed by the measurement conducted by Yogyakarta Environmental Agency (Badan Lingkungan Hidup (BLH) Yogyakarta). It was found out that the highest point of air pollution in Yogyakarta is in Malioboro Street (Esa, 2013). The high volume of vehicles (cars and motorcycles) passing through the street and the decreasing green space along the street and surroundings can be the biggest cause in this matter (Andayani, 2014).

The existence of on-street parking is inseparable to the interest of some stakeholders, especially the people who utilize the pavement for parking business and the city council to collect taxes from this business as part of the locally-generated revenue. Therefore in the future, the on-street parking should be transferred to new parking area nearby the street, especially towards Malioboro Street to be friendlier to the pedestrians. The provision of new parking areas was also commented in the interviews to a government agency respondent, as follows:

> 'In 2015 the city government plans to build a parking lot to remove the on-street parking on the pavement of Malioboro Street. For the medium term, we will build an eight storey parking building at Abu Bakar Ali parking lot, so it is expected within the next five or six years, Malioboro Street can be a semi-pedestrianised street, only the public transport (Trans Jogja Bus) is allowed to pass through…'(Mal-GOV-002, In-depth Interviews, March, 2014).

The 'Undesirables'

Whyte (1980: 63) argues that *'the best way to handle the problem of undesirables is to make place attractive to everyone else'*. The observation showed, homeless, street children, and beggar could be found in some segments of Malioboro Street spaces. The homeless utilises sitting space to sleep over or stay. Meanwhile, some street children usually wander around as street performer and

ask for money from the visitors. Their presence draws the attention of the city council with the publication of Local Regulation No 1/2014 on Homeless and Beggars. The head of Malioboro Technical Management Unit (UPT Malioboro) stated that the existence of homeless and beggar is troubling and needs further action immediately, such as to move them to Social House run by the Social Agency, in order to keep up the cleanliness of the street (Tribun-Jogja, 2014).

Figure 8.47 Homeless and Street Children in Malioboro Street
Source: Observations, 2014

8.6.11 Imageability

The imageability indicator is discussed under the theme of Malioboro Street in user's perception as the result of the in-depth interviews. As mentioned in the two previous case studies, two questions were designed to allow respondents to suggest more than one perception on Malioboro Street's image, first is: "What first comes to your mind, and what symbolises the word Malioboro Street for you?, and second is: "How would you broadly describe this street in a physical and non-physical sense?" The responses given by the respondents were then clustered and categorised into four major components: physical elements (building and pavement); activity (shopping, street vendor, street carnival, street performance); socio-cultural attributes (the Chinese, Javanese culture); and meaning (historical value, unique street ambience, city's icon, the centre of Batik, and street as public space). A summary of the findings is shown in Table 8.6.

Table 8.6

Summary of User's Perception on Malioboro Street's Image

Component	Category	Frequency	Value	Total
MALIOBORO STREET IMAGE PERCEPTION BASED ON IN-DEPTH INTERVIEWS				
Physical	Buildings	II	2	
	Pavement	III	3	5
Activity	Shopping	III	3	
	Vending activity	IIIII	5	
	Street Carnival	II	2	
	Street Performance	II	2	12
Socio-cultural Attributes	The Chinese (as ethnic group living along the street and inside Malioboro District)	II	2	
	Javanese Culture	II	2	4
Meaning	Historical significance	II	2	
	Unique Street Ambience	II	2	
	City's Icon	IIII	4	
	The Centre of Batik	I	1	
	Street as Public Space	I	1	10

Source: In-depth Interviews, 2014

It can be seen from the data in Table 8.6 that the activity component was reported significantly as a noticeable feature perceived by the interview respondents, followed by meaning, physical elements, and socio-cultural attributes. Street vendor category acquires the highest value than the other categories in the activity component. It shows the significant existence of street vendor as the most memorable feature to the respondent (5 respondents).

Other street activities also appear as noticeable features in Malioboro Street, such as street carnival (2), and street performance (2). They demonstrate the important existence of Malioboro Street as public space for the users, which also confirmed in the meaning component, which found that a respondent perceives Malioboro Street as public space. This was commented in the interviews as follows:

'Malioboro street will find its philosophical meaning when for example, there is a street festival, then everyone [Yogyanese] go there, it has emerged as an urban place not only urban space…'(MAL-VIS-003, In-depth Interviews, February 2014).

The meaning as the second noticeable component (10) shows that Malioboro Street appears to be meaningful to the respondents. It is interesting to note that the value of Malioboro Street as the city's icon acquires the highest value (4), compared to the historical value (2), the unique street ambience (2), the centre of

Batik (1), and street as public space (1). A possible explanation for this might be that the existence of Malioboro Street as city's icon is related to the complexity of the street as main commercial corridor, yet as sociable and cultural path of the city.

One unanticipated finding is that physical elements appeared to be memorable to the respondents, but in lower degree. In fact, the local government especially, perceives Malioboro Street as having a unique architectural character, especially the blend of Javanese and Colonial Architecture (Indisch) and the Chinese Shop houses. This inconsistency might be due to the growing number of new buildings with modern architectural style or due to the dominant billboard to cover up the building façade. Another possible explanation is that most of the users are walking along the street through the arcaded pavements; however, the pavements do not allow them to enjoy the architectural beauty, except for the vehicles riders. However, the ability of vehicles rider to enjoy the architecture could be hardly expected, due to higher speed if it is compared to the pedestrians. It is in line to Rapoport (1987) who revealed a pedestrian perceives more detailed features of street space rather than a person involved in high speed activities, including motorist.

Socio-cultural attributes also appear as noticeable features in a smaller value. The Chinese as the ethnic group living along the street and inside Malioboro District appear to be a noticeable feature. In contrast, other respondent highlight Javanese culture as noticeable feature of socio cultural attribute. This result may be explained by the fact that the field observation found the street ambience made up of various street activities is the manifestation of Javanese culture. The Chinese descendant living along and inside Malioboro District have been blended with the local culture through various kinds of diaspora, especially culinary and street performances.

8.6.12 Place Attachment

To critically determine whether the respondents have a place attachment to Malioboro Street, two questions were posed: 1) Do you have particular feelings about the street? If yes, what are they, and what makes you feel that way? And 2)

Do you have any attachment to some part of the street? If yes, why do you think it happens and can you describe it? Responses from the respondents were then clustered and categorised based on two previous studies: physical and social attachment (Hidalgo and Hernandes, 2001); and functional and emotional attachment (Ujang, 2012, Shamsuddin and Ujang, 2008) that are presented in the Table 8.7.

Table 8.7
Summary of Degree of Place Attachment

Degree of Attachment	Attachment Expression	Respondent
Physical Attachment	I think so, I am always fond of the buildings along Malioboro Street, especially the old ones, I think it is different from other places	MAL-VIS-001
	For me, the architecture style of buildings along Malioboro is very interesting…there is diversity; it is also reflected in the life of the people, both socially and culturally	Mal-VIS-003
	I like the old buildings, they are different from other buildings in Yogyakarta, some of them are beautiful	MAL-VIS-006
	There is something special in Malioboro Street, that is the places, we can approach Palace, the Water Castle, and the City Square only within walking distance	MAL-GOV-008
Functional Attachment	Yes, my family is the loyal customer of the Chinese Drugstore, near Terang Bulan shop, also Ramai shop and I am a regular visitor of the Local Library, especially during my university time	MAL-VIS-001
Social Attachment	Yes, I usually go to Malioboro when there is an event, such as a festival or carnival, it can be two or three times in a month...but not for shopping, except **to accompany my relatives who are on vacation to Yogyakarta**	MAL-VIS-001
	Yes, when **there are friends coming to Yogyakarta, I always said 'Let's go to Malioboro…'** even only for sightseeing, taking pictures, and enjoy the atmosphere rather than for shopping	MAL-VIS-004
	As a native, Malioboro Street is my favourite place, the place is very sociable, **people are very friendly, the visitor talk to each other**, even ask my Facebook account, or offer me a job	MAL-VIS-010
Emotional Attachment	Well, I am always impressed by the atmosphere of Malioboro Street especially after midnight, enjoy Lesehan especially in front of Terang Bulan shop, you even can write a story about it…there is a 'magic', the visitors really enjoy sitting, chatting, eating, and so on.	MAL-GOV-002
	Actually, whenever people visit Yogyakarta, for surely they will visit Malioboro, there is no such street but in Yogyakarta, that's why	MAL-VIS-005
	I was born here, I remember many things about this street, it is like a circle of life, changing every time	MAL-RES-009

Source: In-depth Interviews, 2014

Physical Attachment

Table 8.7 shows four expressions of the interviewees regarding the importance of spatial and architectural components of the street to their lives. The expression of the fond of old buildings was commented by three respondents, whereas landmarks nearby the street, including the city Palace and Water Castle, were commented by one respondent (MAL-GOV-008). This finding may help us to understand that old buildings which also can turn up to be 'landmark' of the urban street can be a vehicle to enhance the street image. This result is also confirming the earlier studies of Lynch (1960), who places landmark as one of the city's image component.

Functional Attachment

The functional attachment as a result of daily contact and necessary purposes was commented by a local respondent who has long association to Malioboro Street by visiting some shops. As a regular visitor of the street, she then fosters familiarity for the product quality and making her a loyal costumer for the particular drugstore. As also occurred in the previous case studies, this '*place ballet*' or an interaction of individual bodily routine rooted in a particular environment may become '*an important place of interpersonal and communal exchange, meaning and attachment*' (Seamon, 2014: 13).

Social Attachment

As a result of bonding to others in and about the street, social attachment was commented by three respondents. Two respondents are in and about the street to accompany relatives and friends to Malioboro Street. This situation is inseparable to the position of Malioboro Street as a popular tourist destination in Yogyakarta. The enjoyment of the atmosphere of the street during the street events, such as carnival or festivals has caused Malioboro Street full of cultural life, yet it is strongly

sociable. As Lewicka (2010: 38) reveals, social tie is an unquestionable positive predictor of place attachment.

Emotional Attachment

The bonding that generates significant emotional responses, meaning, and sense of belonging towards Malioboro Street is expressed by three respondents. For respondent MAL-GOV-002, the night ambience of the street, especially at the Lesehan along the pavement is memorable, and there is 'magic' that makes the street very much sociable and create profound impression. The respondent MAL-VIS-005 further highlighted Malioboro Street as one of the most popular destinations in the city, as a proverb said 'whenever people visit Yogyakarta, they surely must visit Malioboro'. Meanwhile, for the respondent of MAL-RES-009 who was born, grows, and stay in Malioboro for the rest of his life, in the age of fifties to date, he knows the changes that occurred in Malioboro Street in detail. Many things he regretted, when the changes are beyond his expectations. As a shop owner, he found Malioboro Street life as a living being that has its 'circle of life', that transforms in accordance to the changing of urban eras.

8.6.13 Authenticity

Authenticity indicator is discussed under two main points, such as: physical authenticity and socio-cultural authenticity.

Physical authenticity

'Authenticity will be reflected in the continuation of traditions and traditional types of function and use. This will necessarily involve gradual changes in the built environment that may be seen as an expression of an authentic cultural and social spirit' (Jive´ n and Larkham, 2003: 78, citing Stovel, 1994). The observation shows, the overall condition of buildings along Malioboro Street still reflect the authenticity of the street compared to the previous two case studies. The diversity

of architectural styles of Indisch architecture, Chinese shop houses, Javanese and colonial public buildings, as well as some of the stores that have been transformed into modern stores/shopping mall add the architectural diversity that is unique and hard to find in other streets of the city.

The list of buildings and sites of cultural heritage of Yogyakarta released by the city council in 2011 launch 21 buildings in Malioboro Street and the surrounding area that have been gazetted as a cultural heritage that should be protected and preserved. The observation shows that the heritage buildings located along Malioboro Street, such as Vredeburg Fort, Gedung Agung, Kepatihan Building Complex, and Indisch and Chinese shop houses are seen to be well-maintained. However, the heritage buildings located outside the main corridor of Malioboro Street, such as PEPABRI building, Dalem Jayaningratan and Dalem Jogonegaran seem to be less-maintained. The cultural and economic potentials of cultural heritage should be optimised so that the added value of these assets can be utilised by the wider community, since cultural heritage can have a high economic value for the local economy, enhance the authenticity of the place, and can also *serve to attract tourists'* (Bowitz and Ibenholt, 2009: 1).

Socio-cultural authenticity

The sense of place of Malioboro Street is not only as a result of physical authenticity. As the centre of Javanese culture, Yogyakarta possesses a specific way of life that is reflected in the socio-cultural life of the city. Malioboro Street as one of the centre of Yogyakarta public space manifests this culture through its public life. The authentic local cuisines, unique Lesehan and Angkringan, the richness of traditional crafts, including Batik, silver craft, and traditional leather puppets; traditional street performances; and various vibrant street festivals performed along the street space of Malioboro have play important roles in shaping the authentic socio-cultural life of the street. The unique socio-cultural life of the street was also specifically commented in the interviews, as follows:

> '…I like the Angklung and Percussion performances, it is very interesting to see…'(MAL-VIS-001, In-depth Interviews, March, 2014).

'…the ambience of Malioboro Street after-hour with the Lesehan and street musicians, that is the most exciting thing for me, it makes me want to come back over and over again…' (MAL-GOV-002, In-depth Interviews, March, 2014).

8.7 Planning and Management

<u>Planning Policy and Management of Malioboro Street</u>

The Yogyakarta spatial plans 2010-2029 categorises Malioboro Street and surroundings as protected core area of culture, archaeology, and history and area for tourism development. Through this enactment, it is expected that the distinct character of Malioboro Street and surrounding districts can support the establishment of good image of Yogyakarta (RTRW-Yogyakarta, 2010). The development of Malioboro Street and surrounding districts should be directed under certain criteria, such as philosophy and cultural history, national awareness, aesthetic value, and cultural heritage.

The city government also has issued some detailed regulations regarding Malioboro Street in the last five years, such as Mayor Regulation No 37/2010 on the regulation of street vendor in Malioboro Street and A.Yani, Mayor Regulation No 85/2011 on Advertisement on Permanent Building in Malioboro District Yogyakarta, and an on-going project of Building Management and Environmental Plan on Malioboro Street (2013-2015). The mentioned regulations, particularly the on-going Building and Environmental Management Plan on Malioboro Street, hopefully can direct towards better planning and management of the street in the days to come.

<u>Respondent's opinions and expectations of the future of Malioboro Street</u>

Opinions on the quality of Malioboro Street followed by expectations on the future of the street that were reflected in all of the interviews are summarised as follows:

Table 8.8

Opinions and Expectations on the Future of Malioboro Street

5.	Government Agency	
Themes	**Opinions on the Existing Quality of the Street**	**Expectations on the Future of the Street**
Quality of the Street: Physical Dimension	- There are some plan and policies for the street, but lack of implementation due to complexity of street stakeholders and integration to other parts of the urban areas - On-street parking and street crowd - The implementation of billboard regulation - Good quality of connectivity	- the need of integrated transportation management - the need for implementation of better parking management - Signage simplification - More spacious pavement
Quality of the Street: Non-Physical Dimension	- Street performance and emerging issues (noise and disrupting non-motorised vehicles movement) - Street vendor and privatisation of urban areas - Malioboro Street as the city Icon - Unique street ambience (especially night time)	- The implementation of fully pedestrianised street - Street as public space
Street Image and Identity	- Night ambience as street image - Malioboro Street as part of urban imaginary axis - Street vendor as memorable feature - Heritage building as memorable feature - Street uniqueness: complexity - Street culture as memorable feature	- The need to eradicate the negative image of the street (on-street parking, crowded street, the undesirables)
Place Attachment	- Emotional attachment: night life of Malioboro Street	- n/a
Historical Significance	Malioboro Street as part of Urban Philosophical concept	- n/a
Planning and Management	- Some street plan need to be implemented with the support of all the street stakeholders	- Malioboro Street as a fully-pedestrianised street - Malioboro Street as the manifestation of city's philosophical concept - Traffic management - Street revitalisation and conservation - Street vendor management - Street marketing development - Street branding development

6. Shop owner and Residents

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Lack of awareness from the street vendor to clean up the area - The need for street vendor legality	- The need for better street vendor and food stalls hygiene quality
Quality of the Street: Non-Physical Dimension	- Ethnic diversity and business speciality - Cultural acculturation amongst the ethnic groups	- The need for better street vendor management - The conservation of living urban cultural entity, including the ethnic diversity
Street Image and Identity	- Bad image due to street vendor existence	- The need for better street vendor and food stalls management to enhance the street image
Place Attachment	- Functional attachment: place for living - Emotional attachment: family business	- n/a
Historical Significance	- Malioboro Street as part of imaginary axis of the city concept	- The need for better street management to preserve the historical value
Planning and Management	- n/a	- The conservation of living urban cultural entity, including the ethnic diversity

7. Visitors

Themes	Opinions on the Existing Quality of the Street	Expectations on the Future of the Street
Quality of the Street: Physical Dimension	- Crowded pavement - Good quality of architectural style, especially heritage buildings - 'Hotter' street after green space being reduced - Good street amenities and art - Good billboard policy - Malioboro Street as public 'place' - Good arcaded pavement quality	- Better street management regarding on-street parking - Better street amenities maintenance Signage simplification and management towards greener Malioboro Street
Quality of the Street: Non-Physical Dimension	- As cultural path of the city (place for street festivals and carnivals) As philosophical path of the city - Good street amenities to enhance street public life Street performance and street vendor give unique street ambience - Malioboro as a sociable street	- Preserving and conserving the urban culture
Street Image and Identity	On-street parking gives a negative image - The domination of economic image	- Street 'fine': to tackle negative behaviour, such as littering and to eradicate the undesirables

	(negative image)	
	- Malioboro Street as the city 'icon'	
	- Malioboro Street as a tourist destination	
	- Lesehan as street identity	
	- Malioboro Street as the commercial centre of the city	
Place Attachment	- Functional Attachment: Loyal costumer of Chinese Drugstores - Emotional Attachment: Unique ambience and memorable street, especially after hour (night time)	Street revitalisation and conservation
Historical Significance	- n/a	- n/a
Planning and Management	- Lack of masterplan for future Malioboro Street - Rapid development with lack of government plan	- Street vendor management - Fully-pedestrianised street - Parking management - Maximise the potentials through Street branding - Street Fine: Better management - Better street as public place

8. Street Vendors		
Themes	**Opinions on the Existing Quality of the Street**	**Expectations on the Future of the Street**
Quality of the Street: Physical Dimension	- Visual quality of pavement - Reducing the environmental comfort due to reduce green spaces - Urban gentrification	- Better quality of environment
Quality of the Street: Non-Physical Dimension	- The undesirables and the camouflages - The privatisation of public space (street vendor to rent the space)	- n/a
Street Image and Identity	- Batik and street vendor	- n/a
Place Attachment	- Functional attachment: As place for living	
Historical Significance	- Closely related to Kraton	- n/a
Planning and Management	- There is no implementation of street plan	- Street promotion enhancement

Source: In-depth Interviews, March-May, 2014

8.8 Chapter Conclusion: Malioboro Street Quality

This chapter highlights important street quality indicators that reflect the distinct characteristics of Malioboro Street. First, it is clear and rich legibility of the

street that show the quality of legibility and yet also the aesthetic quality. Second, it is the diversity of building use run by diverse ethnic group living in Malioboro Street and surrounding. Third, it is regarding the diversity of art and craft industry inside the Malioboro district to be sold along the street. However, this diversity starts to be challenged by the displacement of such small industries as the result of urban gentrification.

Fourth, it is the adequate provision of street amenities including sitting spaces, compared to the other two case studies. However, continuous improvement of such facilities needs to do in the days to come. Fifth, it is the vibrant pedestrian activity along the pavement with happening street corner. The vibrant of the pavement also continue during the midnight which makes the street is enlivened for almost 24 hours. Sixth, it is the street vendor activity that has emerged as the most noticeable feature of the street. The diversity of street vending products also has a close relationship with the existence of the street as a popular tourist destination.

Seventh, it is the vibrant cultural activities along the street spaces as recorded in the behavioural mapping that especially exist during the weekends. Eighth, it is the high frequency of street festivals, especially for the contemporary festivals showing the importance of Malioboro Street as public cultural space of the city. Ninth, there is richness of street cultures manifested in the rich of hybrid cuisine as well as local cuisine and Batik as UNESCO is also listed as intangible cultural heritage. Tenth, the active and interactive frontage and also the existence of street vendors along the pavement enliven the pavement's vibrancy. Eleventh, is good and diverse quality of architecture along the street wall enriches the visual quality of the street. Twelfth, is the strong image of the street becomes the city's icon with diverse public life. Thirteenth, quality on the historical significance of the street cannot be separated from the position of the street as the city's imaginary axis.

Apart from the street quality indicators that reflect the distinct characteristics of the street, some quality indicators appear to be in a lower degree of quality as follows: First, traffic congestion along the street and the presence of on-street parking along the pavement have decreased the transportation and walkability quality of the street. Second, there is a crowded condition of the pavement because

of the un-balanced volume of pedestrians, street vendor, on-street parking, and the pavement dimension. This condition has caused a lower degree of comfort which was also commented in the interviews.

Third, there is the need of enhancement of green space quality. In some street segments, the quality of green spaces is good, but in other segments, it needs to be improved. The green space along the street boundary between the main lane and the non-motorised vehicle lane needs to be restored as it may cause the air temperature along the street to be higher. Fourth, is the implementation of Malioboro Street as a barrier-free environment is not accompanied by law enforcement as some street spots, the street vendor are vending on continuous guiding blocks for the blind. Fifth, the displacement of people living inside Malioboro District is the result of urban gentrification. This situation has led to the changes of district land use and pattern as well as the shift of art and craft industries inside the district. Sixth, the resilience towards disasters especially natural disasters is still questioned.

The overall findings on this chapter show Malioboro Street possesses some qualities such as **legibility** (rich and clear); **diversity** (retail use, art and craft); **liveability** (sitting space and amenities); **vitality** (vibrant public life and street vendors); **creativity** (vibrant cultural activities, traditional and contemporary street festivals, and rich of street culture); **form and visual quality** (architectural diversity); **transparency and active frontage**; **imageability** (street vendor activities and city's icon) and **authenticity** (historical significance). Some other indicators which appear in a lower degree of quality need to be addressed to enhance the quality of the street as vibrant public space of the city.

The next chapter (Chapter 9) will present a cross-case analysis and discussions of the three case studies. It presents the comparison and contrasts between the cases before draws the research conclusion in Chapter 10.

Traditional Street Quality: Comparison and Contrast

9.1 Introduction

Chapter 6, 7, and 8 have outlined findings from each of the case studies to reveal the distinctive characteristics of the traditional streets. Thirteen quality indicators have been analysed after connected with the emerging themes from the field work as presented in Table 5.10 (Chapter 5). The discussion in this chapter leads to reveal which of the street quality indicators support the urban public life of the streets, including social interaction, economic activities, and cultural activities along the street spaces and pavements. The comparisons and contrasts amongst the results in each of the cases will be presented following the thirteen indicators that have emerged. The flow of the discussion within this chapter is presented in the figure 9.1 as follows:
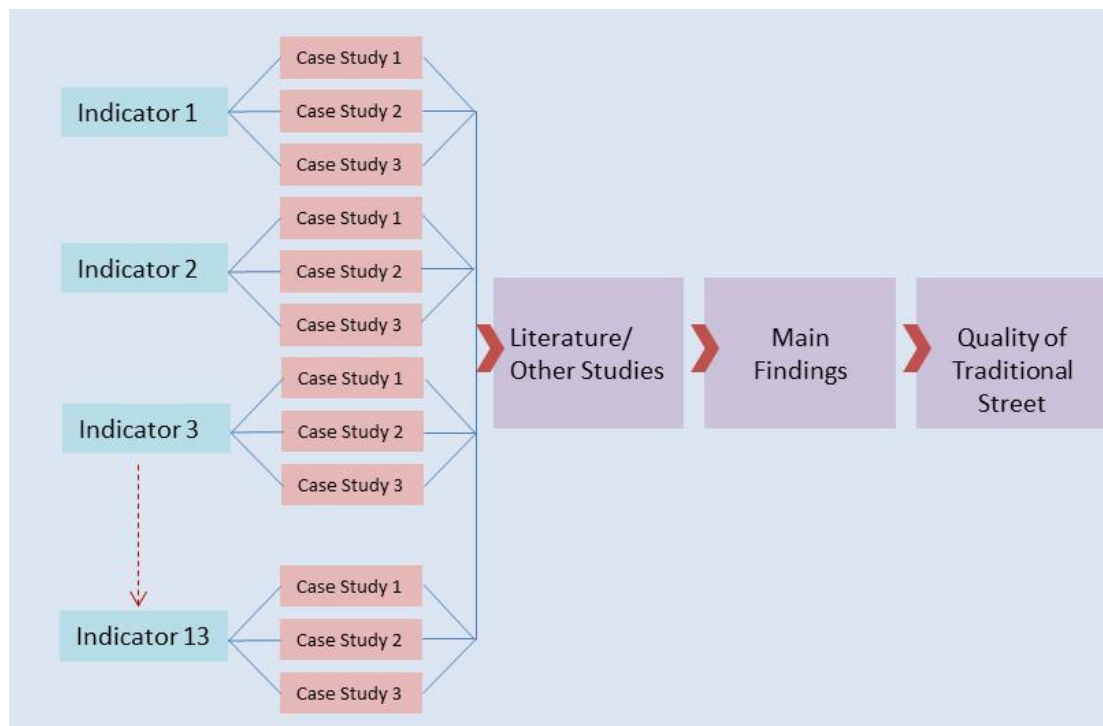
Figure 9.1 The Study Discussion Flow

9.2 Street Quality Indicators: Comparisons and Contrasts

The following sub-section presents the comparison and contrast amongst the three case studies in each of the quality indicators which then relate to the literature or theory or previous studies and urban design practices to understand its significance or contributions before the conclusion of the study in the next chapter.

9.2.1 Legibility

The overall finding shows that there is a good quality of way finding and sense of orientation in the three case studies. The three streets can be regarded as 'clear paths' with little variation especially in Pecinan Street. There are also variations at the beginning and ending of the three streets (edges) as well as the degree of sense of enclosure. Meanwhile, it seems that there is a similarity in terms of aesthetic point of view as shown by the richness of architectural style, detail, and signage; similarity on street permeability; and also the diversity of use/street activities which enrich the legibility journey of the three streets. The detailed legibility qualities in the three case studies are summarised in Table 9.1 as follows:

Table 9.1
Legibility quality of the three streets

Legibility	Similarities	Differences		
	Three Streets	Pasar Baru	Pecinan	Malioboro
Beginning and Ending (Street Edge)	Variation: from very clear to not so clear	Very clear: two gates at each corner	Clear beginning (Chinese Temple as Landmark), and clear ending (sculpture at the end of the street)	Not so clear beginning (railway as beginning and street node) and clear ending (Post Office as landmark)
Sense of enclosure	Variation: from a strong sense of containment a more open containment	Strong sense of containment	Good sense of containment	More open, with variation of the street wall (building and green open space)
Street wall richness	Rich of architectural style, detail, and signage	Richness of shop signs as cultural identity	Tends to more modern, some retail its original architectural style	Variety of architectural style, billboard to close the real building facade
Node and intersection	Similar of good of street permeability	Connects to street district mainly for	Connects through other places in the	Connects through other places in the

		pedestrian only	city, add the sense of orientation	city
Street Activities	Rich of street activities, diversity of use	Street vendor makes the street rich of senses	Quieter than the other two cases	Rich of street activities, add the richness of the street culture

Source: Author, 2015

The results of this study indicate that the three streets can be regarded as having a good quality of legibility with a richness of street activities. The diversity of activities sometimes creates a chaotic feeling in the street due to the presence of various street activities, as appeared in the arcaded pavements of Malioboro Street and Pasar Baru Street. The results show the importance of good legibility in a street, which is in line with a previous study that revealed good legibility gave people an important sense of security in their movements within a street (Yeung and Savage, 1996a).
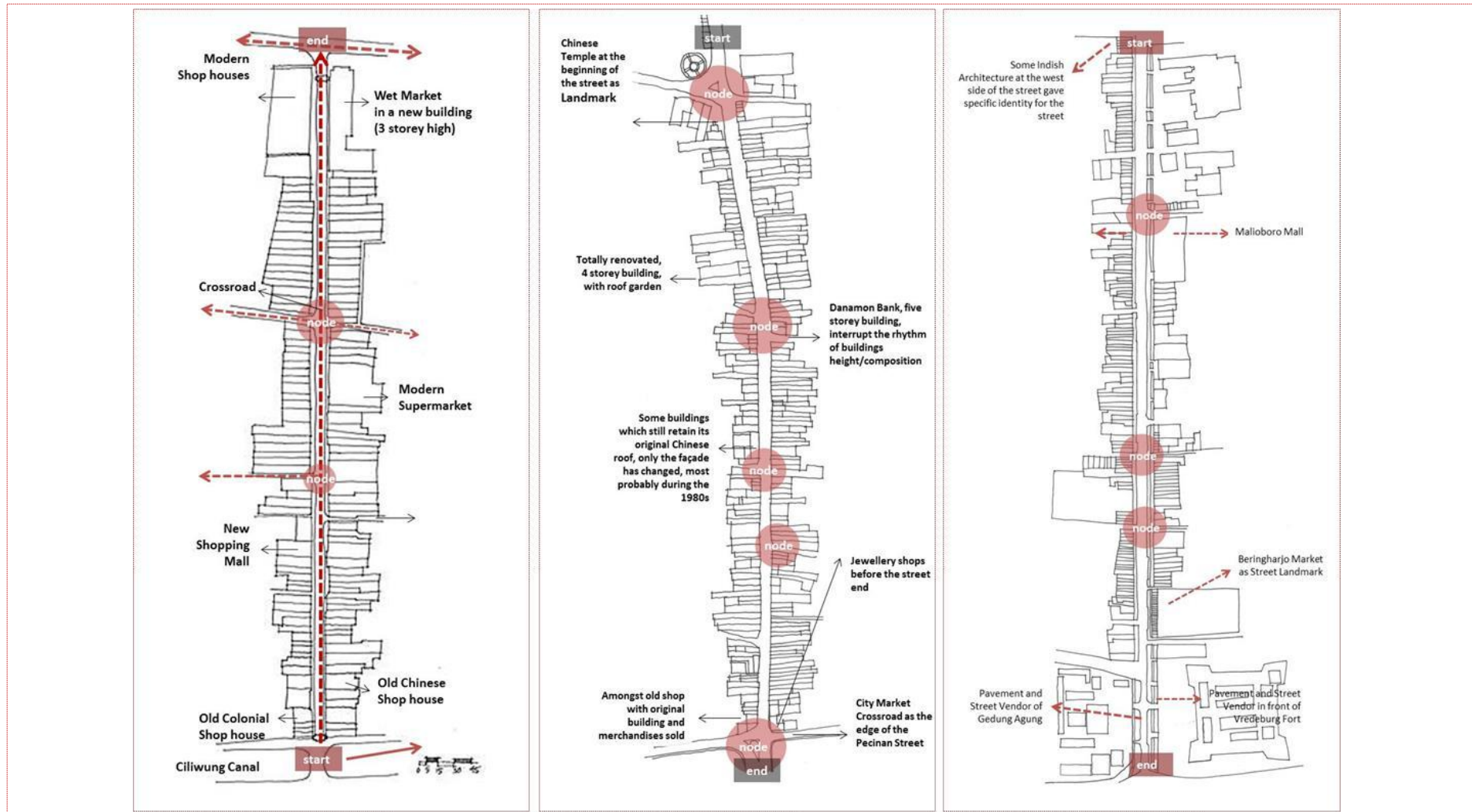
Figure 9.2 The Legibility Variation between the three case studies (Un-scaled drawing, Source: Author, 2014)

9.2.2 Walkability, Accessibility, and Connectivity

The three streets are in a premium location in their respective city, all having good proximity and being well connected to the city's public transportation. The connections to other places of the city are also good. However, there is a variation in quality with regard to the walkability, such as Pasar Baru Street as 'fully-pedestrianised' street that is not fully implemented, the material pavement safety of Pecinan Street, and crowded pavement in Malioboro Street, summarised as follows:

Table 9.2

Walkability, accessibility, and connectivity quality of the three streets

Walkability, Accessibility, and Connectivity	Similarities	Differences		
	Three Streets	Pasar Baru	Pecinan	Malioboro
Transportation system	Well-connected to the city public transport	Good accessibility	Issue on on-street parking	Issue on on-street parking
Connection of the street	Good quality of connection	Variety alternative of public transport	Important places within walking distance	Important places within walking distance
Proximity		Located in the centre of capital city	Located in the city centre	Located in the city centre
Walkability	Varies amongst the cases	Fully-pedestrianised street	Spacious pavement	Crowded pavement

Source: Author, 2015

The result shows that the walkability quality of the three streets needs to be addressed for its improvement since a walkable street has important attributes, such as connectivity, linkage, fine grain and diversity of use, safety, quality of pavement, and visual quality of the street (Southworth, 2005).

9.2.3 Diversity

The current study found that the three case studies are mixed-use mainly consisting of commercial as well as residential which means that the three places

are mainly known as the shopping streets. In the three streets, there are some cultural venues, which contribute to the diversity of activities and liveliness of the street, especially in Malioboro Street.

In Pasar Baru and Pecinan Street there are religious buildings, especially the Chinese Temples. Some prominent public buildings are also located in Malioboro Street such as the Parliament Building, Governor Office (Kepatihan Complex), and Gedung Agung (Presidential Palace). The study also found the diversity of ethnic groups within the case studies, which produce rich street culture reflected in the diversity of the home industries, especially hybrid cuisine as a result of the acculturation amongst the ethnic group living in the place. Table 9.3 summarised the similarities and differences of diversity quality, as follows:

Table 9.3
Diversity quality of the three streets

Diversity	Similarities	Differences		
	Three Streets	Pasar Baru	Pecinan	Malioboro
Land Use	Mixed-use	Mixed-use: - residential -commercial -cultural venue - religious building	Mixed-use: - Residential - Commercial - Religious buildings - Cultural venue	Mixed-use: - residential -commercial -public building -cultural venues
Retail Use	Mixed-use	The big three: - shoes and bags - textiles and tailor - jewellery and watches	The big three: - IT and electronics - Clothing/fashion - Shoes and bags	The big three: - Batik shop - Clothing/fashion - Shoes and bags
Ethnic Diversity	Multi culture streets	Ethnic diversity: - Chinese - Indian/Pakistan - European (colonial era) -Indonesians (many Indonesian ethnic group)	Ethnic diversity: - Chinese - Javanese - Indian	Ethnic diversity: - Chinese - Javanese -Other Indonesian ethnic groups (Minang, Banjar) - Indian
Home Industry Diversity	Variation of home industry inside the street district	- Food/culinary	- Food/culinary - Agricultural processing industry	- Art and Craft - Food/Culinary

Source: Author, 2015

In terms of retail use, the diversity was shown by the variety of commodities of retail that have created the reputation of the three streets as 'convenience streets'.

However, in each street there is distinctiveness, such as in Pasar Baru Street where shoes, bags, and textiles are the most common products, while in Pecinan Street it is electronics and fashion, and in Malioboro Street it is Batik and fashion. The diversity of retail use has continued to make these streets important destinations for the locals. Moreover, Pasar Baru and Malioboro are also tourist destinations, especially for shopping tourism.

In the midst of pressure for homogeneity, there seems to be increasing structural pressures on places to become similar everywhere leading to a negative impact on the diversity of place (Townshend and Madanipour, 2008). However, these three streets have maintained their local character of diversity in retail use and commodities. This unique character should be seen by the local authority as a good quality that can be the inspiration for future urban revitalisation or regeneration schemes. Thereby, the transformation of many urban streets around the world towards more homogeny in terms of functions, sense, and visual quality needs to be avoided for the future of these particular streets.

The diversity of ethnic groups living in these streets has strengthened the proof of the diverse quality of these traditional streets. The findings of this study shows that the ethnic diversity has not only impacted upon the heterogeneity of retail use, as traditionally each ethnic has special commodities and special skills (for instance: shoemaker, tailor, etc.). However, they are also contribute to the innovation of products as a result of hybrid culture, such as culinary and art/craft products.

These hybrid cultures have implications in terms of economic development as they are also a source of attraction, especially for the tourists. These findings confirm the earlier study that argued '*ethnic diversity and multiculturalism are celebrated in big Asian cities with salutary effects on economic growth, political participation, social harmony and tourism*' (Laquian, 1996: 43).

9.2.4 Liveability

The provision and quality of sitting space and street amenities varies in the three case study streets. Indeed, Malioboro Street appeared to be in best quality compared to the others. The overall findings show that good quality of sitting

spaces and street amenities significantly contribute to the liveliness of the street as seen in Malioboro Street's activities. The quality of natural features also varies in the three case studies, and the green space in Pecinan Street was in the best condition. The environmental comfort of Pecinan Street did not significantly contribute to the liveliness of the street, compared to the provision and good quality of sitting spaces and amenities. However, for the residents of the street, the environmental comfort is very important as commented upon in many of the interviews. The liveability quality in the three streets is summarised in the Table 9.4 as follows:

Table 9.4
Liveability quality of the three streets

Liveability	Similarities	Differences		
	Three Streets	**Pasar Baru**	**Pecinan**	**Malioboro**
Sitting Space and Amenities		- No sitting space, minimum amenities - Street canopy	- No proper benches - adequate amenities	- Available (benches, chairs) - good quality of street amenities
Natural Feature (Green Space)	Green space	- minimum green space - water feature (Ciliwung River)	- continuous trees - no water feature	- green street in some segments - no water feature

Source: Author, 2015

9.2.5 Vitality
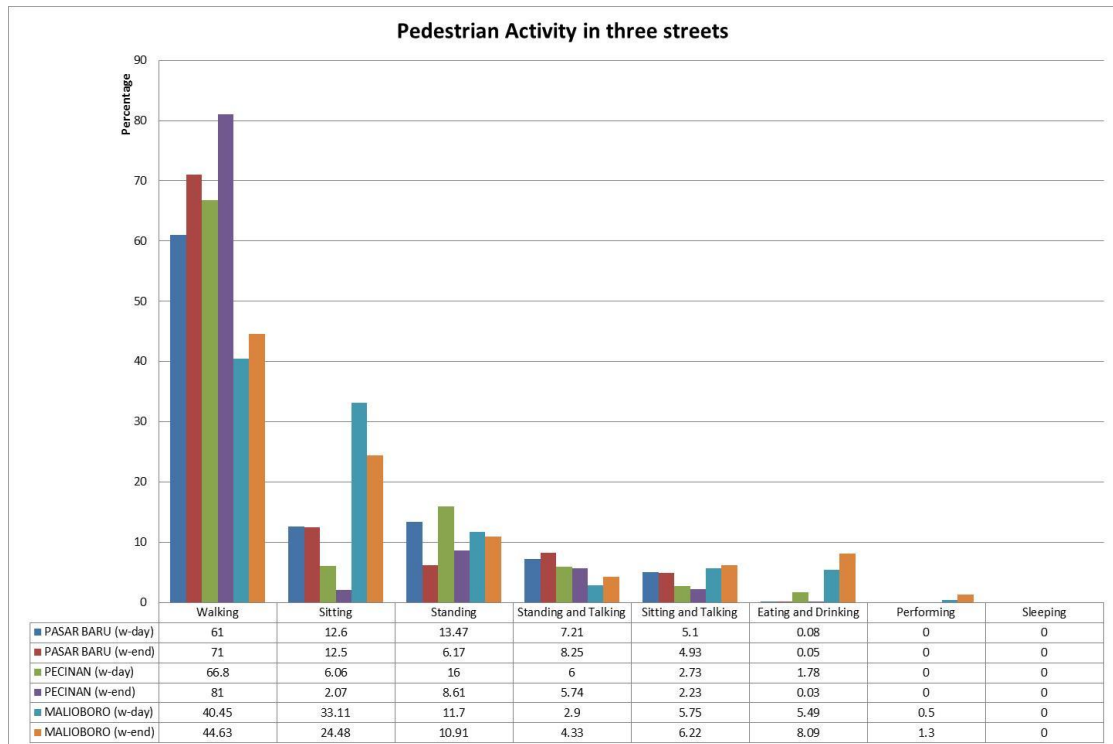
Figure 9.3 Pedestrian Activity in the three streets
Source: Author, 2015

Figure 9.2 shows the overall findings of the pedestrian activity in the three streets. Walking was the most dominant activity, followed by sitting, standing, standing and talking, sitting and talking, eating and drinking, and also performing. Connected to the theory on outdoor activities (Gehl, 1987), the findings of the study can be mapped as follows:
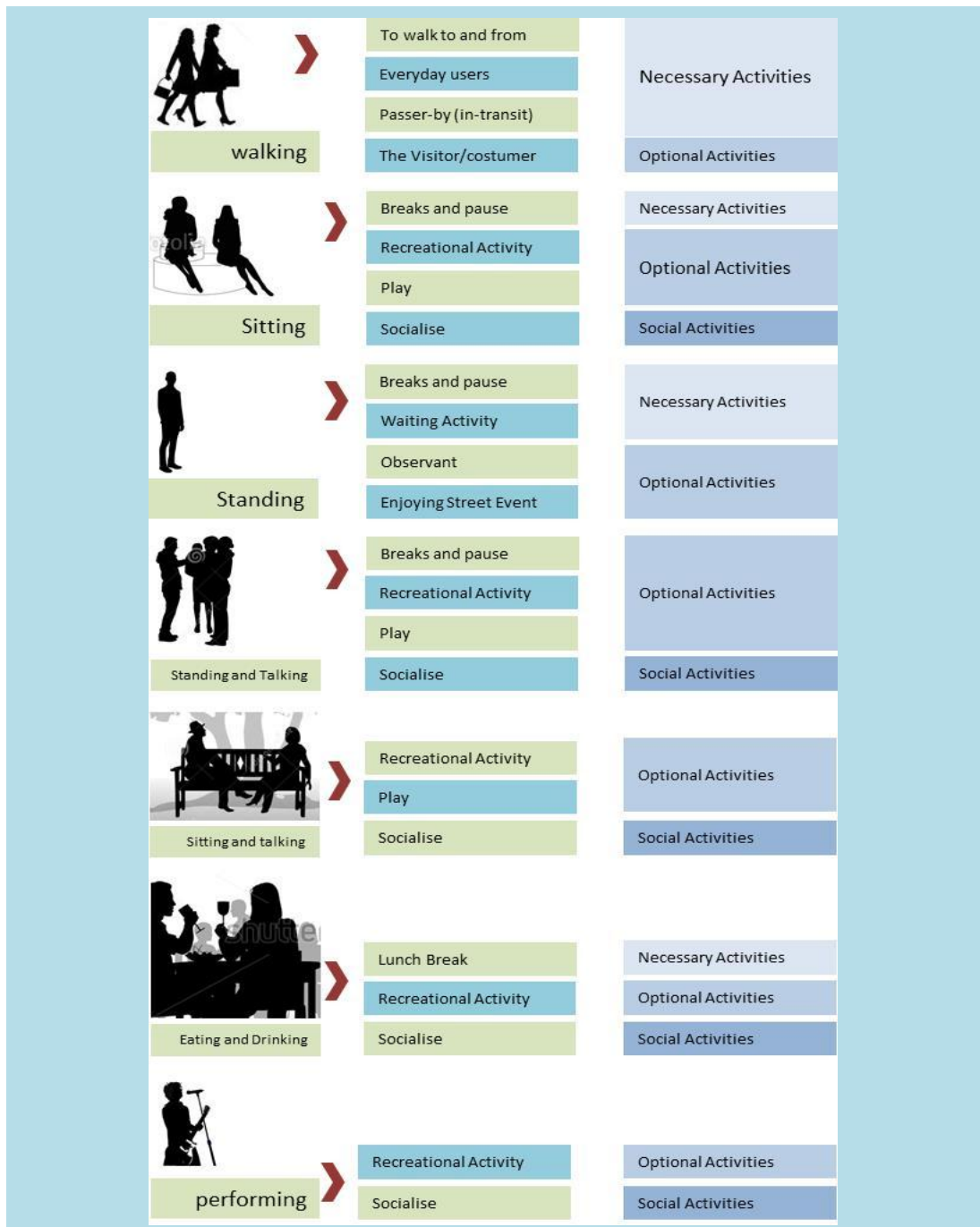
Figure 9.4 Variations of type of activities in the three case studies
Source: Author, 2015

In general, necessary activity may not be directly related to the street quality as people will go to work or often have to go shopping whatever the quality of the street spaces. However, if we look closely, people will walk or visit a place for necessary activities when the location (proximity) is permitted (strategic), as shown by the three case studies. Good connectivity, a highly walkable street, and lively

pavement can attract more people because they might feel more secure and subsequently undertake other optional and social activities.

Indeed, optional and social activities can be anchored by good quality of urban environment as people only tend to undertake optional activities in a place of their choice. In other words, optional and social activities can be indicators for a good quality of urban environment. The findings show that the highest number of optional and social activities is occurred in Malioboro Street, followed by Pasar Baru and Pecinan Street. Figure 9.4 proposes the relationship of outdoor activities and street qualities as follows:

NECESSARY ACTIVITIES	OPTIONAL ACTIVITIES	SOCIAL ACTIVITIES
- Proximity (location) - Walkability, Accessibility, and Connectivity - Legibility	- Diversity - Liveability (sitting space and amenities) - Creativity (cultural activity) - Form and Visual Richness - Transparency and active frontage - Safety - Authenticity	- Liveability (sitting space and amenities) - Creativity - Form and Visual Richness - Safety - Authenticity

Better Urban Policy

User participation

Good Urban Management

PLACE-MAKING = 'high quality of traditional streets'

Figure 9.5 Pedestrian Activities and Street Quality Consideration
Source: Author, 2015

In terms of uses over time in the street spaces, the findings reveal that Malioboro Street appeared to be the liveliest and can be regarded as 24-hour Street. The long duration of uses, especially midnight activities in a mixed-used street (including residential) is also seen as a positive impact by the residents of the street. A possible explanation for this might be that the midnight activities in Malioboro Street are mainly related to food stalls without an alcohol licence. These findings are in contrast to earlier findings in Soho, London (Roberts and Turner, 2005) which commenced as 24-hour street in 1993. Soho allowed venues to open until 3 or 4 am with alcohol licensing. In 1997, the residents felt that the noise and disruption had reached unacceptable levels and were granted leave in the High
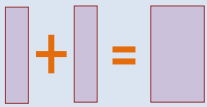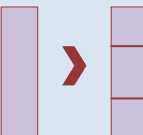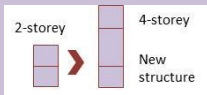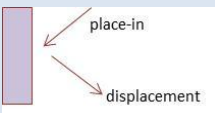
Court to take the council to judicial review. This previous study can be a lesson learned for Indonesian traditional streets and help to demonstrate that the current UK version of the 24-hour city, with its excesses of alcohol-related-night time activity is probably not desired and suggests experimentation of the 24-hour city concept within the context of UK urban centres.

9.2.6 Adaptability

Table 9.5 summarises the findings of the three case studies regarding the adaptability indicator, as follows:

Table 9.5
Adaptability quality of the three streets

Adaptability	Similarities	Differences		
	Three Streets	Pasar Baru	Pecinan	Malioboro
Adaptability of physical and retail use	- plot changes - gentrification	- building plot changes: small to big plot - shared space: some retails in single plot 	- building structure and façade changes 	- urban gentrification (changes of use and displacement)
Adaptability, Politics, and Endurance of Business	- Adaption to sectarian politics (during the New-Order Regime) - Business competition	- changes of façade design - changes of shop name -shop vs street vendor - shops vs shopping malls	- changes of façade design - changes of shop name - shops vs shopping malls	- closing the façade with billboard - shops vs street vendor - shops vs shopping malls
Resilience Street	- Disaster prepared-ness - Safer street	man-made disaster: heritage building fire management	- man-made disaster: heritage building fire management - natural disaster: community mitigation capacity	natural disaster: community mitigation capacity

Source: Author, 2015
Adaptability of Physical and Retail Use

The morphological capacity to respond to change in the three streets has been done mainly through building plot changes, structural changes, and urban gentrification. In Pasar Baru Street, building plot changes not only occurred in the amalgamation of the plots but also division of the plots into shared spaces. On the other hand, building plot changes in Pecinan Street were mostly through structural changes which have had implications such as the rise of building heights from 2-storey to 4-storey buildings. Moreover, in Malioboro Street, urban gentrification seems to have happened, especially in the kampongs behind the street. The above changes show the dynamic and variation changes that have occurred in the three cases when dealing with the changes of function, time, and economic pressure.

Adaptability, Politics and Endurance of Business

Table 9.6 summarises the connection of 'power in built environment theory' (Dovey, 1999) with the findings in the three case studies as follows:

Table 9.6
Power and Adaptability of the three streets

Power Action	Form	Reaction	Case Study Finding
Coercion	Domination	Defensive	Closing building façade with billboard
	Intimidation	Disorientation	No specific character/façade-less
		New identity	Modern architecture as new identity
			New shop name and signage/detail
Seduction	Access	Adaptation	Evolution of style/function
		Acculturation	Add new elements
		Assimilation	Hybrid architecture
	Negotiation	Authenticity	Back to original style (reconstruction)

Source: Dovey (1999) and Author, 2015

Some reactions occurred as the result of 'sectarian politics' to prohibit the Chinese from showing their culture in the public domain during the New Order Era (1968-1998) in Indonesia. Indeed, the 'coercion' strategy as shown by the government has affected the architectural appearance of the shops along the three streets. 'Defensive' reactions such as the closure of the building façade with a large

billboard or adding a new building skin has occurred in the three streets as a result of domination over the traditional Chinese culture. The outcome has often been 'disoriented architecture' or the use of modern architecture as a new/neutral identity, including changing the shop names and signage/building details.

As the Reform Era began in 1998, a 'seduction' strategy was mainly used by the government as now there is freedom for the Chinese to express their cultural identity. Moreover, in 2001 the Chinese New Year was commenced as one of the Indonesian National Holidays (Ministry of Religion Regulation No. 13/2001). Pasar Baru Gate, built in 1999 was one of the results of the 'authenticity' reaction to reconstruct the gate with a Chinese architecture style, only a year after the fall of the New Order regime.

Figure 9.6 Pasar Baru Street Gate, a) 1820s, b) 1999 Source: www.hipwee.com, accessed in 20/10/2014 and observation, 2014

Resilience of the Street

As revealed in the previous chapters, the three streets are prone to man-made (fire) and natural (earthquakes and volcanic eruptions) disasters. The situation has made the need of capacity building in terms of disaster preparedness as well as aftermath and long term recovery. As such, the concept of the 'resilient street' needs to be formulated towards more adaptable streets and urban spaces.

9.2.7 Creativity

Table 9.7 summarises the findings of the three case studies regarding creativity indicators, as follows:

Table 9.7
Creativity quality of the three streets

Creativity	Similarities	Differences		
	Three Streets	**Pasar Baru**	**Pecinan**	**Malioboro**
Cultural venue	Varies amongst the three streets	Antara Gallery, Jakarta Concert Hall	OHD Museum	Senisono concert hall, Vredeburg museum, BI Museum, Societet Militair Club House, Yogya Cultural Park (TBY), Indra Theatre
Street festival	Rich of street festival	-traditional festival (Chinese New Year and Diwali) - contemporary festival (Pasar Baru Festival)	- traditional festival	- traditional festival (4) - contemporary festival (10)
Street Culture	Rich of street culture	hybrid cuisine	hybrid cuisine	- local and hybrid cuisine - batik as intangible heritage

Source: Author, 2015

The overall findings show that the three case studies possess cultural values and have the potential to be further developed as part of a cultural economy. Cultural venues for example, have existed in the three case studies since their early formation. The findings revealed that these have acted as 'catalyst' for street diversity and vitality by attracting visitors at different time and for different durations. This finding is in line with Grodach (2008) study on the impact of cultural facilities for the urban public life. Nevertheless, this study also reveals that some of these cultural venues have been closed down or deteriorated, especially theatre buildings in the three streets.

The three case studies also possess a variety of traditional festivals as mentioned in the results chapters. However, it seems that Malioboro Street has been more advanced in terms of safeguarding the traditional festival as well as developing contemporary street festivals.

One interesting finding is that Pecinan and Malioboro Street are the 'only' venues for street festivals in their respective city. Meanwhile, Pasar Baru Street is one of the important festival venues in Jakarta, especially in the olden days. This finding shows the 'strong capital' possessed by the three cases that can be further developed to boost their cultural economy, not only to safeguard the traditional festivals but also to organise contemporary festivals as in Malioboro Street.

Another important finding is the richness of street culture reflected in intangible heritage such as cuisine and batik (Malioboro Street). This important cultural value also needs to be developed professionally to gain a more optimum value and revenue for the city.

9.2.8 Form and Visual Quality

Street Scale and Proportion

Street proportions in the three case studies vary from a strong sense of enclosure (Pasar Baru), good sense of enclosure (Pecinan and Malioboro) to a more open street (Malioboro). The overall findings of this study confirm previous studies (Gehl, 1987, Ashihara, 1979, McCluskey, 1992) that suggest that a narrower street plays an important role in the creation of vibrant public space and other social purposes. The findings of this study also suggest that the more open street spaces also offer more vibrant of optional and optional activities, as occurred at the Malioboro Street corner. A possible explanation for this might be the availability and good quality of sitting space and amenities in Malioboro Street. In addition, the richness of street culture that is reflected in the vibrant informal street activities (economic, social and cultural) invites people to stay longer in the street spaces.

The findings show pavement configurations in the three cases vary, reflecting the unique character and richness of pavement designs. Pasar Baru and Malioboro Street pavements have excellence in terms of their street canopy and arcaded pavements. Meanwhile, the Pecinan Street pavement is greener and has better environmental comfort compared to the other two cases. The spatial setting of the three case studies is summarised as follows:

Figure 9.7 Spatial setting of the three case studies (Source: Author, 2015)

Architectural Diversity

The overall findings show that diversity of architectural style in the three streets. The Chinese shop house model, the colonial architecture (blend with local architecture), and modern architecture are the three styles found in the three cases. Nowadays, modern architecture has become the dominant style in the three cases, especially in Pasar Baru and Pecinan Street. Meanwhile, the Chinese and Colonial styles appeared to be more dominant in Malioboro Street. The style change from the Chinese style (especially) is inseparable from the sectarian politics mentioned in the adaptability sub-section. The findings of this study are also in line with the argument that '*urban architecture can be considered to be that which responds to and contributes positively to its context and to the physical definition of the public realm*' (Carmona et al., 2010: 184).

Figure 9.8 Façade Design Variation of the three case studies (Source: Author, 2015)

The façade design variations, as indicated in Figure 9.7, have several implications for the visual quality of the three streets. First is the implication towards sense of place. The façade designs with a diverse style show the richness that relates to the visual interest and complexity that holds the eye. The rhythm of these building façades is the product of rhythmic elements varying from simple to more complex repetitive elements. Hence, the diversity of architecture along the three streets demonstrates the complexity as well as the harmony of the physical features of these streets. In addition, the imageability indicator shows that physical elements, mainly buildings as being the key element that contribute to the street image and identity.

The second implication is towards the symbolic expression of the urban architecture. As a means of communication, symbolic appropriateness is often considered as a key requisite of good architecture. The pre-modern buildings show the expression of the building functions through their elements, such as the shop houses and their façade design showing the specific character of shop in the ground floor and house in the upper floors. The symbolic differentiation of building types

also produces '*a hierarchy of building types, which increases the legibility of urban areas*' (Carmona et al., 2010: 186). On the contrary, the modern buildings only communicate their simplicity following the idea of form following function (functionalism) which fails to link such symbolic differentiation.

9.2.9 Transparency and Active Frontages
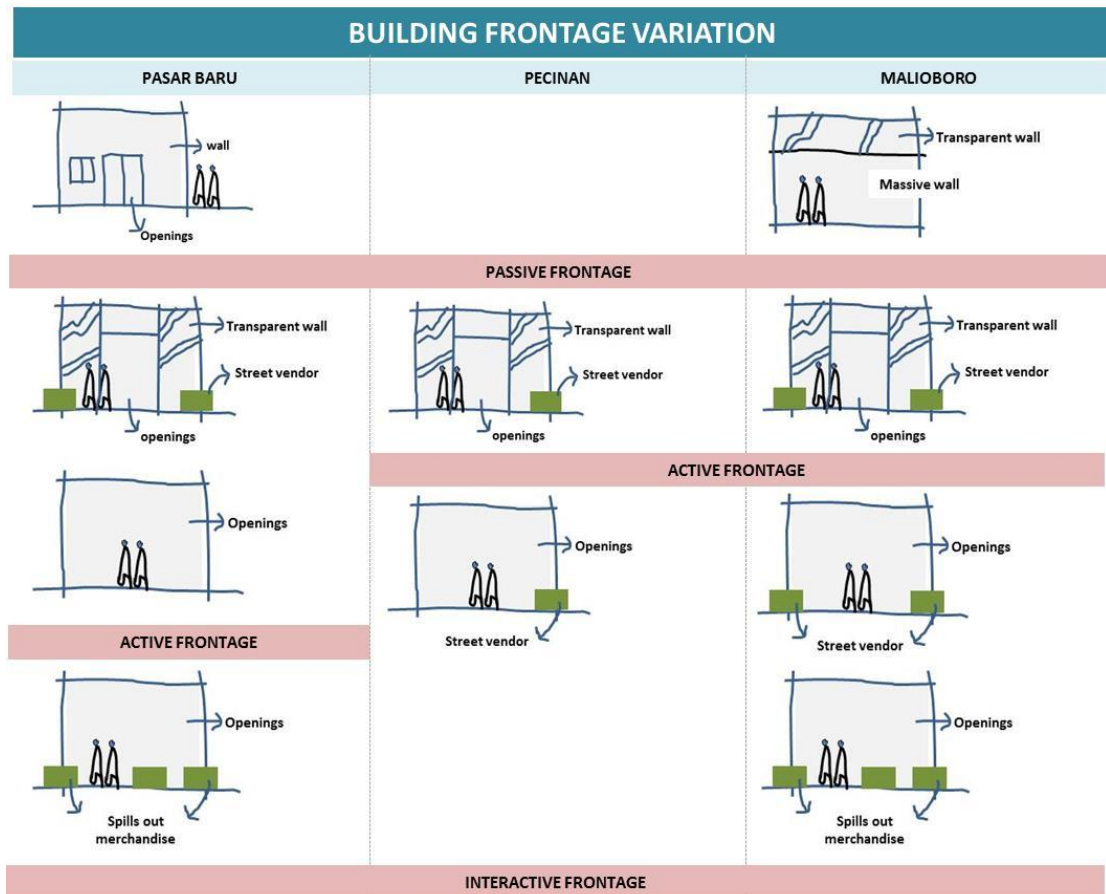
Figure 9.9 Variation of building frontage of the three case studies (*Source: Author, 2014)*

This study findings show the connection between the façade and the public life of the three streets. Passive frontages as appearing in Malioboro Mall and an old shop in Pasar Baru look emptier than the shops with active and interactive frontages. Visitor tends to walk faster in front of buildings with passive frontages compared to in front of buildings with active and interactive frontages. This finding supports previous research on the impact of ground floor on city life as the conclusion of the study shows that the activity level in front of an active façade is seven times greater than in front of the passive facades (Gehl et al., 2006). This

research and the previous study are in agreement to the fact that ground floor facades buildings have great impact upon public life and the general attractiveness of the city. The more active and interactive the façade is, the more inviting and attractive it is to the users and *vice versa*, the more passive the façade is, the duller and unattractive it is to the public.

The active frontage also helps '*to mediate between inside and out, the private and public space, and provide the gradation between the two*' (Carmona et al., 2010: 186). Moreover, the sense of place is best seen by the building frontages and the positive form that perceived by the users (Moughtin, 1992).

9.2.10 Safety

The findings show the variation of safety qualities in the three case studies. Physical/environmental safety occurred in the three streets, especially pavement safety and fire safety of heritage buildings in Pasar Baru and Pecinan Street. Meanwhile, the existence of Preman in Pasar Baru and homeless and beggars in Malioboro also emerged as important issues in terms of the safety quality of the two streets.

Issues on safety mentioned above affect the public life of the street, as being able to walk safely in an urban street is a prerequisite for creating and inviting well-functioning places for people. A safe street is not only the presence of 'eyes on the street' (Jacobs, 1961, Gehl, 2010) but also the quality of safety through environmental design (Wekerle, 2000), the good management of the place (Atkinson, 2003), and the participation of the people in making the street safe (Kearns and Collins, 2003).

9.2.11 Imageability

The overall findings of the imageability in the three streets show four components appeared to be the memorable features, such as physical elements, activities, socio-cultural attributes, and meaning. The detailed findings of the street image components and the user perception are presented in Figure 9.8 as follows:
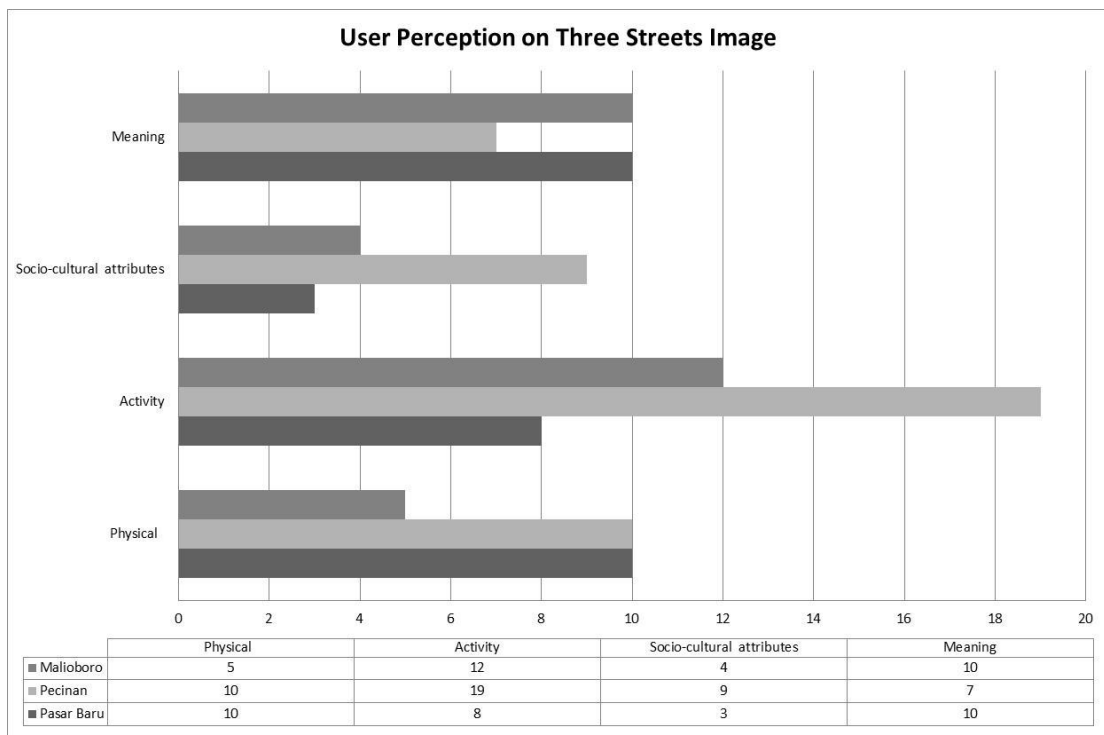
Figure 9.10 User Perception's on the three streets image
Source: Author, 2015

Figure 9.8 shows that the most interesting finding is that activity is the most memorable feature amongst the four components in the three streets, followed by meaning, physical components, and socio-cultural attributes. These results seem to be inconsistent with Lynch's (1960) study that revealed that physical components such as path, district, node, landmarks, and edge were the most memorable components in a city's image. In this study, the physical components are only in third place after activity and meaning components.

This rather inconsistent result is likely to be related to the fact that street activities, such as street vending, street festival, and street performance are endemic activities in these streets even though in various degrees or frequency. In addition, other explanations may be due to the fact that these streets have deep meaning to the local people, especially regarding the position of the street in the city and the historical significance that are inseparable to perception about the street for many users.

So in a broader perspective, according to Rapoport (1977) urban image is not only visual but 'all senses' enter into their formation, including visual form, socio-

cultural attributes, visual signs of human activities and people involvement. In his later works, Lynch (Lynch, 1976, Lynch, 1981) tends to emphasize that the physical determinant of imageability acknowledges that human activities are also significant contributor to urban image.

9.2.12 Place Attachment

Table 9.8 summarises the overall result of the place attachment quality of the three case studies:

Table 9.8
Place Attachment quality of the three streets

Place Attachment	Similarities	Differences		
	Three Streets	Pasar Baru	Pecinan	Malioboro
Physical attachment	Attachment to important buildings	Important physical feature attachment: old shops, cultural facilities, and street gate and corridor	Important physical feature attachment: old shops, popular shops, and street pavement	Street landmark attchment
Functional attachment	Long-term interaction between the user and the street space	Long-term interaction and popular merchandises	Long term interaction and special merchandises, including street food	Long term interaction and special merchandises, including Chinese drugstore
Social attachment	Inter-generational attachment	Family ties and loyal costumer	Social ties and strong sense of belonging	Family and social ties and street festivals
Emotional attachment	Meaningful streets	Resident and meaningful street	Resident, locals, and meaningful street	Street ambience and memorable street

Source: Author, 2015

The overall results show that place attachment in the three case studies is not only associated with the physical features and the changes that occurred to such places, but the constant interaction between the respondents and the case study streets, which repeated over period of time, creates a feeling of dependency and the familiarity with the activities along the streets. Attachment is also deeply associated to others (bonding to family and friends) who are doing similar activities and the feeling of being together with others also creates a sense of belonging to

the streets. Furthermore, other respondents suggested that emotional attachment can be created when the streets are meaningful to someone's life and there is sense of loss when something has changed in the tangible and intangible components of the streets.

9.2.13 Authenticity

Table 9.9 summarises the overall result of the authenticity quality of the three case studies:

Table 9.9
Creativity quality of the three streets

Authenticity	Similarities	Differences		
	Three Streets	**Pasar Baru**	**Pecinan**	**Malioboro**
Physical authenticity	Variety of physical authenticity	Less authentic, some buildings possess significant value	Less authentic physical feature, except the landmark (Lion Hok Bio Temple)	Relatively authentic
Socio-cultural authenticity	Strong socio-cultural authenticity	Authentic hybrid cuisine and inter-religious harmony	Authentic hybrid cuisine	Authentic socio-cultural life

Source: Author, 2015

The overall results show the variation of authenticity in the three case studies. Malioboro Street appeared to be the most authentic in terms of physical and socio-cultural authenticity compared to the other two case studies. These results are likely to be related to the fact that the physical features in Malioboro Street are more diverse in terms of architectural style (not only dominated by the Chinese shop houses as occurred in the two other case studies).

In addition, being located in the centre of Javanese culture, the socio-cultural life of Malioboro Street is strongly influenced by the Javanese culture as the local culture compared to other cultures including Chinese, Colonial or Indian cultures which can be regarded as 'imported' culture brought by the communities migrated from these places. Furthermore, the authenticity of socio-cultural life of Malioboro is mainly due to the diversity of intangible traditional cultures, not only hybrid

cuisine, but also unique local cuisine, batik products, traditional performance, and also the unique way of eating informed by the *Angkringan* and *Lesehans*. These findings corroborate the ideas of Stovel (1994) in Jive´ n and Larkham (2003: 78), as follows:

'authenticity will be reflected in the continuation of traditions and traditional types of functions and use. This will necessarily involve gradual changes in the built environment that may be seen as an expression of an authentic cultural and social spirit'.

9.3 Future Planning and Management of Traditional Streets

Table 9.10 summarises the planning and management in each of case studies as follows:

Table 9.10
Planning and Management in the three streets

Planning and Management	Similarities	Differences		
	Three Streets	**Pasar Baru**	**Pecinan**	**Malioboro**
Planning policy/regulation	Variation in planning policy/regulation	No policy/regulation regarding the street as historic asset	No policy/regulation regarding the street as historic asset	Some regulations special for the street's heritage, billboard and street vendor management
Street manager	Less proper street management	There is a shop owner group but not effectively manage the street	No special street manager, street management under the city council	There is a special board: UPT Malioboro to manage the street, but cannot solve all of the problems
Government Projects		Pasar Baru Pedestrianisation (1995)	Pavement Improvement Project (2012)	- Pavement Improvement Project (2011-2012) - Building and Environmental Management Plan (2013-2015)
Public participation		- Design Competition on Pasar Baru Spatial Planning organised by PT. Trikarya Idea Sakti and Indonesian Institute of Architects Jakarta Branch, 2014 - Street Gate project by the shop owner group, 1999	Liong Hok Bio restoration done by the private sector's associated with the Chinese community	-Restoration of Bank Indonesia building 2011 - Design Competition on Malioboro District Spatial Planning, March-May, 2014

Source: Author, 2015

The overall results show that there is a varied situation in the three case studies in terms of planning and management. Pasar Baru and Pecinan both have no special regulations/planning policy to better plan and manage the area. However, the government project in 1995 for the Pasar Baru Pedestrianised Scheme was the first project of pedestrianised street in Indonesia. On the contrary, Malioboro Street which has a more comprehensive planning policy and regulations is still striving to implement a pedestrianised street project.

Public participation has occurred in the three case studies which show the awareness of local community and private sectors in the streets well-being and maintenance. During the research fieldwork, two design competitions were held in Pasar Baru and Malioboro to gather the design ideas of architects, urban planners and designers towards the better future of these traditional streets as seen in the flyer of the competitions, as follows:

Figure 9.11 Flyer of Design Competition a) Pasar Baru Street, b) Malioboro Street
Source: IAI Jakarta and www.sayembaramalioboro.com, 2014

9.4 Research Questions, Research Objectives, and Main Findings

The research posed three main questions regarding the analysis on the quality of traditional streets in Indonesia. The questions were formulated as follows:

1. Do the distinctive characteristics of Indonesian traditional streets play roles in shaping the urban environment?
2. Is the urban public life is highly supported by the distinct characteristics of these streets? And how does the mechanism work, especially regarding the social, economic, and cultural activities along the street space and pavements?
3. Does the entity of traditional streets play a role as one of the primary ingredients of the whole city from its establishment to the present?

To answer the above research questions, some research objectives were formulated as follows:

1. To demonstrate the distinctive characteristics of Indonesian traditional streets that play significant roles in shaping the built environment by critically examining the street quality indicators as developed in the urban design discourse;
2. To establish the role of distinct characteristics of traditional streets that support the urban public life, including social interaction, economic activities, and cultural activities along the street spaces and pavements;
3. To recognise the role of traditional streets in Indonesia as one of the primary ingredients of the city that can be part of the foundation to formulate a better policy and urban design intervention for the design of both new and existing streets

9.4.1 The Synthesis of Research Objective 1: to demonstrate the distinct characteristics of traditional streets by critically examining street quality indicators, which have been developed in the urban design discourse

The overall research findings reveal distinct characteristics of the three case studies after examining the thirteen street quality indicators identified from urban design discourse, and have been elaborated in literature review chapters (Chapter 2 and Chapter 3). Factors, such as walkability, liveability, diversity, vitality, adaptability, creativity, transparency, form and visual quality, and authenticity are possessed by Pasar Baru Street. Meanwhile, street quality indicators such as liveability, diversity, creativity, and place attachment have been identified in Pecinan Street. Malioboro Street possesses some good quality of legibility, diversity, liveability, vitality, creativity, form and visual quality, transparency and active frontage, imageability, and authenticity. In more details, the following section will highlight the key findings of this research that addressed the first research objective:

The Physical and Visual Quality of Traditional Street

The traditional street form and street pattern as observed in the three case studies appear to be the main factor in walkability. The strong sense of enclosure can give intimate impression so that it is more inviting for people to make outdoor activities. In addition, some segments of the street, such as street canopy (Pasar Baru), street arcade (Malioboro), and continuous shady green space (Pecinan) create the street space more environmentally comfortable and walkable. This finding confirmed the previous study findings on the oriental streets (Asian Street) that have pedestrian-oriented layout full of varied colours, textures, and patterns and with more emphasis on the multiplicity of uses and meaning (Mehta, 2013).

On the contrary, in some more open street segments, for instance in Malioboro Street corner, it turned out that the street activities are not less vibrant. It is shown by the vibrancy of the street corner for cultural activities, especially street

performance. Moreover, the street corner is also busy for social and recreational activities as it is supported by adequate sitting facilities and street amenities.

The urban architecture shows the diversity of style that represents an expression of each style and era that has implication to sense of place and symbolic expression of the urban architecture. The diversity of architectural styles along the three case studies also demonstrates the spatial and visual juxtaposition which create harmony in diversity of the street quality.

The transparency and active frontage of the buildings along the street contribute to the attractiveness and the street's public life. The more active the façade is the more attractive and vibrant the place will be.

Traditional Street as mixed-use urban space

This study has identified that the three streets are mixed-use in nature. Having a primary function as commercial street, they are also residential districts with high-density of inhabitants. Public buildings, including cultural facilities, religious facilities, and government office are also inseparable elements of these streets.

Being mixed-use urban space, the three streets have demonstrated to possess diversity quality, primarily of activities, retail uses, architectural, and product diversity. The intensity of diversity quality can be found through the distinctive characteristic of the three streets, such as:

- Land use diversity: commercial, residential, office, public, cultural, and religious facilities
- Urban grain diversity (building plot): small, medium, and large size plot;
- Architectural diversity: style, design, age, and detailing;
- Tenure diversity: private, public, and rental (private);
- Housing types: shop house, landed house, apartment, and maisonette;
- Street activity: economic, social, cultural; formal and informal;
- Diversity of activity in different duration of time: morning, afternoon, and evening time

The current research strengthens the idea that diversity can be one of the key elements that construct good quality of urban space. It is in line to several previous studies, including Jacobs (1961), Gehl (1987), Florida (2002b), Montgomery (2007), Mehta (2007), and Jacobs (2010) that suggested diversity as one of the urban quality indicators that can give a large contribution to achieve the most desirable urban places to be, including for traditional streets.

Traditional Street as multi-cultural urban space

Apart from being mixed-use, the findings of this research demonstrate that multi-ethnic group is one of the key ingredients of traditional streets. People from various ethnic groups are living side by side for generations in peace and harmony. The long standing association amongst the people from diverse cultures have created hybrid culture which is embedded, for instance, in the hybrid cuisine, architecture, and cultural performances. However, the authenticity of each culture still can be seen through, for instance, special skills associated to certain ethnic and culture. In Pasar Baru for example, the Indian diaspora is famous for their tailor-made suits, while the Chinese is for the shoemaker and the locals are for the traditional food stalls.

Regardless the fact that there was a regulation to prohibit the Chinese culture to be performed in the public during the New Order Era (1968-1998), cultural acculturation continues to happen sufficiently. It has been tested during the Jakarta May Riot in 1998 Pasar Baru was not the prior target of the rioters which made the Chinese become their prime target for their economic welfare which was considered resulting a wide gap between the Chinese and the locals. Other places considered being the Chinese centres, especially Glodok district, became the victim of looting and burning by the angry mob. To be compared, Glodok is still seen as an exclusive Chinese centre in its ownership and dwellings than in the case of Pasar Baru (Kurnia, 2011).

During this riot which occurred on the final days before the fall of the regime many Chinese shops and residential areas were being looted even burned. In fact, not long after the riot, the shop owners of Pasar Baru who were funded by the

Jakarta City Council built a new gate exhibit a Chinese style as mentioned in Chapter 6. The display of Chinese style also represents the confidence of the Pasar Baru community regarding social integration and cultural acculturations amongst the ethnic group living in the place.

The construction of Chinese Gate is also occurred in Malioboro Street in 2012 to mark the Ketandan Alley as the Chinese Quarter. The epitome of traditional street as multi-cultural urban space has been tested for several generation since their establishment the imperial era, to the colonial era and the contemporary era, after the Indonesian independence. Nevertheless, the manifestation of traditional street as multi-cultural space model should remained to be confirmed and can become an alternative model to develop the multicultural space for Indonesian cities in the days to come.

Figure 9.12 a) Pasar Baru Street Gate (1999), b) Ketandan Alley Gate Malioboro Street (2012)
Source: Observation and Google-image, 2014

Traditional Street as cultural path and public space of the city

The third major finding of the research is that the three streets appear to be the cultural path of the city. Pecinan and Malioboro are the only streets to perform such cultural activities in each city, including street festivals and parades since its establishment to date. Meanwhile, Pasar Baru in the olden days (especially during the colonial era) was the main place for street festivals as mentioned in Chapter 6. However, as Jakarta develops after the independence, most of the street festivals

and parade are mainly performed in National Monument Square and MH Thamrin Street towards the Bundaran HI (HI roundabout).

Based on the findings, and as also confirmed in the previous section, it implies that traditional streets not only have a special and strong meaning for the people but also play a pivotal role as important public space. It is the place to see and to be seen. Indeed, the public realm in a city performs many functions, not only by providing a meeting place but also in helping to define the built environment, offering spaces for local traditions and customs such as festivals and carnivals, and representing a meaning and identity (Gehl, 1995).

The Traditional Street Activities as Intangible Culture

The street activities that take place along the street spaces are amongst the most important reasons for walking, window shopping, and people watching. The vibrant street activities can act as a generator for street public life for they enliven the street in various forms of activities, not only economic, but also social and cultural activities. They can also act as manifestation of local culture represented in various features, including street food, street performances, and art products.

As tested in the observation, street activities are dynamic elements of urban streets that have a wide range of possibilities for change, for different activities in different time and space. Together with other components, such as physical, socio-cultural attributes, and meaning, the street activities may be one of the most important aspects to induce the character of the street and contribute to form the street image. Thus, this intangible culture should be given serious consideration in planning and design process; yet, as sometimes they are still seen as an obstacle in urban management, especially for economic street activities (street vendor) as they may be conflicting with the occupation of public space, decreasing pavement and reducing the 'cleanliness' of the urban spaces.

9.4.2 The Synthesis of Research Objective 2: to establish the role of the distinct characteristics of traditional streets to support the urban public life

The distinctive characteristics mentioned in the previous research objective may support the public life of traditional street through various functions as discussed as follows:

Mixed-use urban space and urban public life

The contribution of mixed-use urban space to urban public life can be seen from the multi duration of activities taking place in the street spaces, not only the opening of the shops, but also the different duration of street vendor trading along the pavements. In addition, it can also be seen through various functions of buildings along the streets, not only for commercial space but also for residential as well as public buildings and cultural facilities.

The multi-function of these streets have significantly contributed to the public life of the streets as '*people will use the place for a variety of different reasons*' (Montgomery, 1998: 104). The mixed-use developments also create a far more active and socially interesting milieu, good setting for after-work night life that can also entice more employees to live near the workplace, which so much cut down on vehicular traffic (Cervero, 1988) and ensure many services are within a reasonable distance, thus encouraging cycling or walking (Thorne and Filmey-Sankey, 2003 in Jabareen, 2006).

Multi-cultural urban space and urban public life

The multi-cultural life of the three case studies has been well presented through the multi ethnic group with diverse culture living side by side in these streets. This condition has led to the exhibition of the richness of street culture that is manifested, for instance, in the richness of the architectural style, the special skills possessed by each ethnic group, and the special commodities sold by them. Moreover, Pasar Baru and Malioboro Street also perform the diversity of religious

buildings that proves the harmonious living; this can be a good example for the future urban street.

Figure 9.13 Street parade, festival, exhibition, and performance along the three case study streets
Source: Various sources, 2014

As multi-cultural urban space, the three streets are '*the venue of inter-ethnic interaction and social encounter*'(Carmona et al., 2010: 163). They are also places to exhibit each of the culture through traditional festivals or parade. The existence of these streets with their diverse kinds of festivals as also commented in the interviews makes the streets more familiar and famous for the general public. In the end, the multi-cultural urban space has contributed to the urban public life through its uniqueness, richness of street culture and venue for various street festivals.

Cultural space and urban public life

The finding of the research recorded the availability of cultural space in the three streets. The highest number of cultural space in the olden days existed in Pasar Baru. At least five theatres were located nearby the street, but now all of them have closed down. The only left are Jakarta Concert Hall and Antara Gallery as the cultural spaces in Pasar Baru. Meanwhile in Malioboro there were two concert halls, two museums, and two art galleries. In Pecinan, there was only one museum which appeared as cultural space. The findings from the interviews show that the cultural space that existed in the case studies had contributed to the urban public life through holding activities especially performance and exhibition that then attracted more people to use the streets and to do social activities.

Street activities and urban public life

The overall findings of the research confirm various street activities take part in the street spaces of the case studies. Indeed, Malioboro Street is recorded as the most vibrant place in terms of social and recreational activities, followed by Pasar Baru and then Pecinan Street. Informal public life which was occurring beyond the realm of formal institutions allows the users to have more choices to take part in the street activities. This includes the third places, such as street Lesehan and Angkringan in Malioboro, or street food stalls and traditional cuisine restaurants in Pasar Baru. Hence, the finding of the research suggests that the street activities play an important role to create and enhance street life and even the urban public life.

9.4.3 The Synthesis of Research Objective 3: to recognise the role of traditional streets in Indonesia as one of the primary ingredients of the city that can be part of the foundation to formulate a better policy and urban design intervention for the new design and existing streets

This research has highlighted the importance of assessing the quality of traditional streets as one of the primary ingredients of the city since its establishment to date. The integral entity of the traditional streets including its economic, social and cultural life of the surrounding context had led to better understanding of the research and can be part of the foundation to formulate a better policy and design intervention for the days to come.

The Recognition of the Traditional Streets as Primary Urban Space

Research on urban spaces in Indonesia, and on traditional streets in particular, point to the significant role of traditional streets as the primary urban space that contribute to the economic, social, and cultural life of the city. Chapter 6, 7, and 8 have valued the significant qualities of the three case studies which were barely explored so far. The significant role of the traditional street as primary urban space is invisible in the lens of power. Although the case studies are regarded as important streets or the main streets for the city, in terms of policy and positioning in urban development, their roles seem to be less valued.

Urban problems such as urban gentrification (Malioboro), the undesirables (Malioboro), urban gangster (Pasar Baru), illegal on-street parking (Pasar Baru), architectural conservation (Pasar Baru, Pecinan, and Malioboro) can be common issues to find due to insufficient policies as a result of the lack of studies that can be used by stakeholders, especially city council in managing urban areas.

Being the primary urban spaces, the three streets as revealed in the findings of the study play a major role as memorable places for the users. It is shown in the result of imageability and place attachment quality indicators that revealed how the streets have been perceived by the users. The distinct components of the traditional streets, including physical component, activity, socio-cultural attributes

and meanings are amongst the noticeable features that have been spotted by the users. Meanwhile, four kinds of bonding between the streets and the users, including physical, functional, social, and emotional attachment have been recorded in the interviews results. Hence, the recognition of traditional street as primary urban space that has special meaning for the users has been revealed in the study findings.

The Recognition of the Traditional Streets as Public Space

As it was answered through the second research objective, the findings show that the three case studies are not merely functioning as channel of movement but also be considered vibrant public space. The behavioural mapping shows that there are various activities happening in the street space and mainly are related to the function of these streets as public space. The recognition of traditional streets as public space is also confirmed through various social and recreational activities taking part in the street spaces such as standing, standing and talking, sitting, sitting and talking, eating/drinking, and performing activities.

Indeed, the function of traditional streets as public space nowadays is being challenged by various developments, such as the increased personal mobility (such as through the use of car), the increase in 'indoor street' development (such as the shopping mall models development), and the increase of privatisation of public activities (such as online shopping) (Carmona et al., 2010). However, there are various potentials to maintain the position of traditional streets as public space. As also were discussed earlier in the earlier chapters, the public life of the three streets is mainly influenced by the quality of the street spaces, not only in term of the physical but also in the intangible factors.

The Recognition of the Traditional Streets as Creative Urban Space

This research extends our knowledge of the special skills that emerged as an important socio-cultural invention of the life of societies in traditional streets. The mixed-use nature and the multi-cultural context of the streets have shaped these

places as creative urban space with a large number of production activities in similar characteristics, such as small-scale in production (home-industry), culture-based products, and process in tailor made with traditional equipment. The making processes of these products are mainly in the residential areas inside the street districts. The products are then displayed and marketed in the shops and street vendors along these traditional streets.

This research also observes the disappearance of some 'making activities' in the three streets, for instance the disappearance of shoe makers in Pasar Baru and the massive displacement of home industry of local craft and traditional cuisine in Malioboro. The missing of these creative economy embedded in the small-scale urban activities of making in these streets reflects the shift of the role of the street districts as the activity supports for the main street. Furthermore, it can also change the consumption pattern and the market of these local products as found in Pasar Baru, in which recently more street vendors prefer to sell imported cheap and fake products, mainly from China. Thus, in the end, the unique characteristics of traditional streets as creative cluster may disappear, leaving them to have less distinct characteristics and identity.

As the key point of creative economy is innovation, it is essential to note the importance of innovation to conserve the special skills in these particular streets. The attention from various parties, especially the city council on the importance of conserving special skills as intangible culture through a better street policy and management is urgently needed. It is also essential to foster 'new creativity' as a result of contemporary interpretation towards culture and to cultivate more hybrid culture so that the integration of these multi-cultural places will continue to grow and be sustainable. The general creative milieu of a place with a prominent presence of creative people increases overall creativity and innovation as it provide stimulus and inspiration for those who produce the innovations (Florida, 2002a).

The Recognition of the Traditional Streets as Urban Cultural Space

The empirical findings in this study provide new understanding on the role of the traditional streets as urban cultural space. The interviews reveal the perception

of users on the role of the streets as the cultural path of the city, especially in Pecinan and Malioboro Street, and in the olden days of Pasar Baru Street (nowadays most of the street parades and festivals have been extinct in Pasar Baru). This finding also leads to the fact that the three streets are the only streets in town for organising street parades and festivals (Pecinan and Malioboro), and amongst one of the important streets to do parades (Pasar Baru).

In addition, the finding also reveals the role of the traditional streets, especially Malioboro Street as part of the imaginary-axis of the city that correlates the two supernatural powers, namely the Mount and the Sea. It is also found that the street was initially as Rajamarga or Royal Path for the Sultan as well as for the foreign high-dignitaries officials during the colonial era. Nowadays, this street also appears as the political path of the general public. Political protests in Yogyakarta mainly occur from the Tugu (White Statue), and the pass Malioboro Street towards the City Square in front of the Sultan Palace. With respect to the existence of the traditional street as cultural path of the city, this once again confirms the role of the street not only as the primary urban space in the city but also as the street having a deep and important meaning for the people.

The Recognition of the Traditional Streets as Urban Heritage

The overall findings show that the three case studies can be regarded as urban heritage. Being the earliest and primary urban space, these streets have been established for more than 200 years, handed down from generations to generations, through three main different eras, namely the imperial era, the colonial era, and the independence era. The significant value of these traditional streets also appears in the diverse and unique characteristics of their architectural styles. In addition, the streets have important roles as the main street and as urban public place, too. The multi-facet of role of these streets shows their outstanding value that may lead to the conclusion that these streets deserve recognition as urban heritage.

9.5 Chapter Conclusion

Comparison and contrast of findings in the preceding section clearly indicate that the quality of traditional streets varied from one case to another. However, there is also a clear indication that the overall findings suggest some qualities that are significantly endemic and play major contribution to the life of the street and in a broader scope for the city as a whole. Each case has their own distinct characteristics that make them unique as compared to the other cases.

The findings demonstrate that distinct characteristics of traditional streets are not independent from one indicator to another. They are linked and elaborated together so that one indicator may not dominate to others. This finding also suggests that the cultural context of each case is important to understand what lies beneath the visuals as seen in the observation. Hence, it is possible to state that it is the overall complexity of the traditional streets that contribute to its distinct characteristics that in the end form the street image and identity for the users.

The initial matrix of street quality presented in Chapter 3 helps to measure qualitatively the thirteen indicators of street quality offered in the urban design discourse. The following diagram presents the final diagram/framework that can be suggested as tool to assess the quality of traditional streets, as follows:
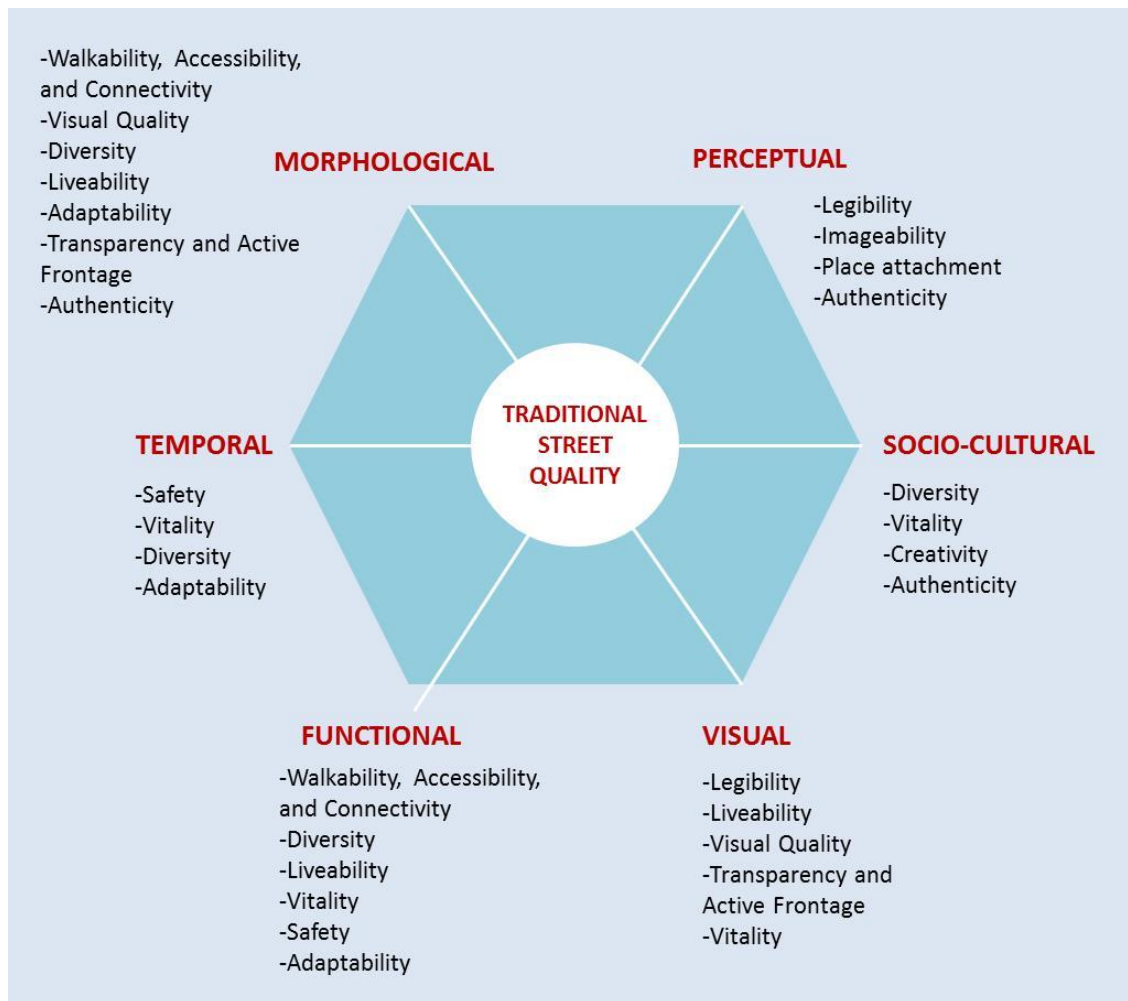
Figure 9.14 Traditional Street Quality Diagram
Source: Author, 2015

The main findings have also answered the three research questions posed in this particular study. The overall findings have demonstrated the distinct characteristics of traditional streets through critically examining the fifteen street quality indicators which have been screened and ordered in the Chapter 3. The main findings also reveal the role of the distinct characteristics of traditional street to support the urban public life through various functions as discussed in this chapter. Hence, this research has highlighted the recognition of the role of traditional streets in Indonesia as one of the primary ingredients of the city since its establishment to date.

The following chapter (Chapter 10) will address the main study conclusion, the contribution, and the implication of the research before suggesting further study for this particular subject of inquiry.

10

10.1 Introduction

This final chapter summarises the main findings of the research as expected through the research objectives, addresses the contribution and implication of the research, identifies the limitation of the study, and formulates suggestions for further study that will be the final part of the thesis.

10.2   Conclusion

To investigate the distinctive character of traditional streets, to establish their role in urban public life, and to recognise their role as one of the primary ingredients of the city, a set of empirical data was collected in three case studies of Indonesian streets. The field observations and in-depth interviews reveal that the distinctive characteristics of traditional streets can be formed by the physical and visual quality of the street, by the function of the street as a mixed-use space, by the nature of the street as multicultural space, and by the identity of the streets as cultural path and public space for the city. The last characteristics as cultural path and public space for the city appeared to be the most influential factor in determining the unique characteristics of traditional streets as they do not only have a special and vigorous meaning for the people but also play as important public spaces in the city. Hence, these qualities of the street, both tangible and intangible factors, have proven to inspire the public life of these traditional streets.

This study claims that the role of traditional streets in urban public life is remarkably seen through several functions: <u>first</u>, the multi-facet, multi-duration, and multi-kind of activities taking place in the street spaces not only from the buildings but also from the richness culture of the pavements have significantly

contributed the public life of the city. <u>Second</u>, as multi-cultural urban space, traditional streets add to the urban public space through their existence as main venue for festivals or parade in the city. <u>Third</u>, the presence of cultural space and facilities have contributed to urban public life through holding cultural performance and exhibition that attracts more people to use the streets and do social and recreational activities.

This study also claims that as one of the primary ingredients of the city, traditional streets have contributed to the economic, social, and cultural life of the city. These streets are also maintaining their position as public space despite urban development issues. This research extends our knowledge on the making activities (special skills) that potential to be creative economy capital for the city and once again confirms the role of the street as the cultural path of the city that may lead to the conclusion that traditional streets should be safeguarded as urban heritage.

10.3 Contribution of the Study

The contribution of this study is to confirm the distinct characteristics of traditional streets that play important roles supporting urban public life. This study also confirms previous studies findings on the multi-usage of Asian Street. Moreover, this study contributes additional evidence that suggests traditional streets play important roles in urban life, as they can be recognised as primary urban space, as public space, as creative space, as cultural space, and as urban heritage that should be safeguarded and conserved for its outstanding value, not only in terms of their architectural diversity but also for their intangible culture.

10.4 Implication of the Study

For the field of knowledge and student

The principal theoretical implication of this study is that this study adds the knowledge of the urban design literature in Indonesian context, especially in street configuration, street culture, street quality, and street conservation. This study will

enrich the knowledge of the student, especially architecture, urban design, urban planning, and sociology student, to challenge them with traditional street issues and problems and to give insight on how to measure the street quality with such methods offered in this study.

This study complements several studies on Asian streets that have been conducted by several scholars, including Limin (2001) on reading Asian Streets, Sulaiman and Shamsuddin (2001), Ja'afar and Usman (2009), and Shamsudin and Sulaiman (2010) on traditional streets in Malaysia. Drummond (2000) and Kim (2012) on pavements in Vietnam's streets, and Oranratmanee and Sachakul (2014) on Thai Streets as well as Kiang et al. (2010) on Great Asian Streets.

Although some scholars have attempted to conduct research on urban streets in Indonesian cities, most of them have approached solely from policy perspectives (Susanti, 2001), history and urban transformation (Wibisono, 2001), and urban problems (Arifin et al., 2004, Poerbo, 2010). Then, Sholihah (2012) started a study on street activities in Malioboro Street, which then has been deepened and expanded in scope in this particular research. Even though there are a fair amount of studies about Asian Streets, including Indonesian streets, there is little evidence of studies which focus on demonstrating the distinct characteristics of Indonesian traditional streets through various urban quality indicators developed in the urban design discourse. The result of the study also confirms the earlier findings that suggest Asian Street as places with complexity and multi-layered spaces (Limin, 2001), diverse in activities and multi usage (Chua and Edwards, 1992, Shamsuddin and Ujang, 2008), vibrant and mixed-use pavement that contribute to the vibrancy of the city (Kim, 2012, Sholihah, 2012), and sometimes with chaotic, unorganised and conflicting image (Drummond, 2000, Chua and Edwards, 1992).

For the practitioner

<u>Important implications for future practice.</u>

The overall findings of this study can be used in the architecture and urban design practices as a basis/approach to design new and existing streets. Diversity

quality is, for instance, the three streets have shown remarkable diversity in uses and functions, in a multi facet of the ethnic group, time, duration, and kinds of activity that reflect the vibrant life of the streets. It is important to note that mixed-use design can be very crucial for the future street design.

In terms of street configuration (pattern, scale and proportion, pavement and architectural quality), the study findings highlight the variation of street configuration influences on the legibility and vibrancy of the streets for they give different effects on the users, such as the narrow pavements full of street vendor invite people to walk and to do window shopping. Meanwhile, more open street spaces, especially in the corner, offer people to see and be seen by doing social and recreational activities.

The research also highlights the streets' walkability and vitality that are influenced by the street design. The design of pavement with proper materials is essential to bring the comfort and safety quality of the street. The availability of sitting space in an adequate quantity and street amenities in high-quality design can be an important aspect to creating vibrant public space of streets. Moreover, the liveability of the street is highly influenced by the environmental comfort that can be obtained from the availability of green space and street shading (canopy or arcade).

The importance of transparency and active frontage of building facades along the street also has gained a particular attention in this research. The result of this study confirms the earlier research that the more open and transparent a building façade is, the greater the potential of pedestrian activities will be.

Important Implication for Urban Regulation

The findings of the study mandate that traditional streets have richness quality both in tangible and intangible indicators. Future practices should address these distinctive characteristics so that the qualities are not only will be maintained but also will be developed in the future practices.

Multidisciplinary profession including urban designer, architect, planner, economist, and sociologist should use this study finding as one of the

considerations in managing urban streets. Together with the city manager (local authority) they need to incorporate in formulating urban regulation on managing these inevitable urban streets to be safeguarded and developed for the future, especially in the context of Indonesian cities.

For the policy makers

The need for proper regulation and enforcement on urban design and conservation guidelines

This evidence of this research reveals the minimum of adequate regulation applied in the three case studies. The interviewees from the government officials admitted and believed that planning and management, especially the formulation of urban design and conservation guidelines are urgently needed especially in Pasar Baru Street and Pecinan Street. Therefore, Malioboro Street experienced better provision of regulation in the form of Mayor Regulation and the on-going project of Building Management and Environmental Plan of Malioboro Street. However, the interviewees see that the provision of regulation is not enough without proper enforcement, as the field observation shows that regulation in Malioboro Street is not yet properly enforced. In the end, there is a need to provide adequate regulation in the traditional street, especially by the local authority as well as implementing these regulations so that the quality and uses of traditional streets will be maintained and developed.

The need for Street Management Board /Agency

The need of the establishment of street management board/agency is also revealed in this study. The local authority is expected to formulate this board to manage the streets in day to day operation. Technical Implementation Unit (UPT) Malioboro is established as 'manager' of this street. However, their authority and responsibility remain limited to the technical management of the street, such as for

the pavement cleanliness and security. There is a need to establish a board/agency with broader authority and responsibility regarding the management of traditional streets. Also, since these streets worth to be regarded as urban heritage, there is also a necessity to formulate conservation planning and action before these unique places vanished by the rapid development of Indonesian cities.

For the general public

This study may benefit to the general public by giving awareness on the importance of traditional streets as public space, as cultural space, and as urban heritage. This study also highlighted the evidence that traditional streets have special meaning for the people mainly related to the existence of these streets as urban festival and parade venue.

This study can also benefit the general public regarding the revelation of traditional streets quality that the public may enjoy better and more qualified traditional streets in particular and urban spaces in general in the future. The policy makers and practitioners should bind to safeguarding such streets and design existing streets using the findings of the study as one of the consideration/approaches.

This study reveals the respondents as part of the general public in the opinion and expectations of the future of the three case studies. Overall the respondents express their aspiration on the better management and quality of these streets. Therefore, this study also deliver essential message to the general public to actively participate in using, maintaining, and develop better traditional street quality through various efforts including maintaining the street spaces cleanliness, for the shop owners to preserve the architectural style and peculiarities of merchandises, for the street vendors and musicians to ensuring the environmental comfort of pedestrian flows, so on and so forth. Hence, the contribution of all stakeholders, including the general public to continue maintaining the quality of traditional streets is important to ensure their sustainability to be handed down to the future generations.

10.5 Limitations of the Study

The scope of the study was limited to traditional streets in Indonesia, and the results therefore might not apply to other settings. The respondents were street users and representatives from local authority i.e., urban planning departments. It seems possible that other representatives may react in a different way. Due to time and resource limitations, only three case studies have been used in this research. It is suggested that further research may apply more case studies to gain more robust results and comparisons/contrasts, such as comparing traditional streets in some Southeast Asian cities or even in other geographical regions or cultural context.

The other weakness of the study is the variation scale of the city and length of the street. Central Jakarta (Pasar Baru) is considered the largest city compared to the other case studies, while Malioboro Street is considered the longest street compared to the other case studies. However, this variation should be seen as enriching the study results rather than a mismatch amongst the cases.

10.6 Recommendation for Further Research Work

Based on the findings and contribution of the study, a further study in the form of cross-national research of Asian streets is recommended. This further study would enable more comprehensive results on the endemic qualities of Asian streets through a comparative study of several streets not only in terms of their spatial and visual dimension (tangible), but also for perceptual and social dimension (intangible). This cross-national research may help to establish the theoretical discourse regarding the qualities of traditional streets and to recognise their role in urban public life in Asian cities.

The further study should use the mixed-method approach consisting of both qualitative and quantitative methods of inquiry to collect and analyse data. This mixed-method is anticipated to offer more opportunities to answer the research questions. In addition, the future research can also involve interdisciplinary researchers, not only from an architecture and urban planning background, but also from different fields of expertise, such as Geography, Sociology, etc.

10.7 Final Words: The Future of Indonesian Cities

As mentioned in Chapter 1, the rapid urban transformation from traditional city to modern and global city has changed the face of Indonesian cities. The direction of the new design of cities in Indonesia that is mainly market driven has contributed to the loss of urban entity particularly in the context of this study, the traditional streets. The rise of urban development with less sensibility towards the urban heritage has given impact on the decrease of the quantity and quality of the traditional streets in Indonesia.

The present study has extended our knowledge in providing better understanding of the significant contribution of the traditional streets for the urban development in Indonesia. The empirical findings of this study confirm previous findings that suggest Asian streets as places with complexity, multi-layered space, vibrant and mixed-use in nature. This study also contributes to the knowledge that traditional streets in Indonesia play important roles in urban public life, since they can be recognised as primary urban space, as vibrant public space, as creative space, as cultural space, and as urban heritage.

The recognition of role of traditional streets in shaping the urban environment in this study is not intended to suggest that new street designs should thoroughly follow the design of traditional streets in order to be successful urban streets, which can be misleading. Rather, this research confirms the traditional street quality from various aspects not only physical but also non-physical (intangible) ones. The important implication of this study is that there are many ways in creating successful urban streets, and the study findings are some of them. Hence, it can be underlined that the impact of a successful urban street can contribute to the lively urban area and consequently can enhance the good quality of cities as a whole.

REFERENCES

Abeyasekere, S. 1989. *Jakarta: A History,* Singapore, Oxford University Press.

Adishakti, L. 2013. A Comprehensive and Compact Instruments for Saving the Traditional Streets in Indonesia. *7th Symposium on Asian Heritage: Saving Traditional Streets of Southeast Asia.* Universiti Teknologi Malaysia: Universiti Teknologi Malaysia.

Adishakti, L. 1997. *A Study on the Conservation Planning of Yogyakarta Historic-tourist City Based on Urban Space Heritage Conception, Dissertation, .* PhD, Kyoto University

Akihary, H. 1990. *Architectuur & Stedebouw in Indonesia,* Netherlands, De Walburg Pers.

Alexander, C., Ishikawa, S. & Silverstein, M. 1977. *A Pattern Language: Towns, Buildings, Construction,* Oxford, Oxford University Press.

Altman, I. & Low, S. 1992. *Place Attachment,* New York, Plenum Publishing Corp.

Andayani, T. 2014. Tiga Kawasan Ini Miliki Tingkat Polusi Tertinggi di Yogya. [Accessed 26/06/2015].

Appleyard, D. 1980. Livable Streets: Protected Neighborhoods? *Annals, AAPSS,* 451**,** 106-117.

Appleyard, D. 1981. *Livable Streets,* California, USA, University of California Press.

Appleyard, D. & Lintell, M. 1972. The Environmental Quality of City Streets: The Residents' Viewpoint. *Journal of the American Institute of Planners,* 38**,** 84-101.

Arifin, Z., Ikaputra. & Saifullah, A. 2004. Arahan Penataan Ruang Jalan Sebagai Ruang Publik pada Kawasan Komersial Kajian pada Setting Elemen Fisik dan Aktifitas, Studi Kasus: Jalan Pemuda - Kota Magelang. *Teknosains,* 17**,** 383-394.

Ashihara, Y. 1979. *The Aesthetic Townscape,* USA, The MIT Press.

Atkinson, R. 2003. Domestication by Cappucino or a Revenge on Urban Space? Control and Empowerment in the Management of Public Spaces. *Journal of Urban Studies,* 40**,** 1829-1843.

Avraham, E. 2004. Media Strategies for Improving an Unfavourable City Image. *Cities,* 21**,** 471-479.

Banerjee, T. 2001. The Future of Public Space: Beyond Invented Streets and Reinvented Places. *Journal of the American Planning Association,* 67**,** 9-24.

Bayliss, D. 2007. The Rise of the Creative City: Culture and Creativity in Copenhagen. *European Planning Studies Journal,* 15**,** 889-903.

Bemmelen, J. & Hoover, G. 1897. *Batavia [Jakarta] 1897 From Guide to the Dutch East Indies*. London: Luzac & Co.

Bernard, H. 2000. *Social Research Methods,* Thousand Oaks, Sage.

Bertaux, D. 1981. From the Life-History Approach to the Transformation of Sociological Practice. *In:* BERTAUX, D. (ed.) *Biography and Society: The Life History Approach in the Social Sciences.* London: Sage.

Bogdan, R. & Biklen, S. 1992. *Qualitative Research for Education: An Introduction to Theory and Methods,* Boston, Allyn & Bacon.

Bosselmann, P. 2008. *Urban Transformation: Understanding City Form and Design*, Island Press.

Bowitz, E. & Ibenholt, K. 2009. Economic Impacts of Cultural Heritage - Research and Perspectives. *Journal of Cultural Heritage,* 10**,** 1-8.

Bps 2013. Monografi Kelurahan tahun 2013. Badan Pusat Statistics Kota Yogyakarta.

Brommer, B. 1998. Batavia: The Realisation of An Ideal City. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Brown, B., Perkins, D. & Brown, G. 2003. Place Attachment in A Revitalizing Nirghborhood: Individual and Block Level of Analysis. *Journal of Environmental Psychology,* 23**,** 259-271.

Brown, J. & Meczynski, M. 2009. 'Complexcities': Locational Choices of Creative Knowledge Workers. *Built Environment,* 35**,** 238-252.

Bsn 2004. SNI 03-1733-2004 tentang Tata Cara Perencanaan Lingkungan Perumahan di Perkotaan. Jakarta: Badan Standarisasi Nasional.

Buchanan, P. 1988a. Facing Up to Facades. *Architects Journal,* 188**,** 21-56.

Buchanan, P. 1988b. What City? A Plea for Place in the Public Realm. *The Architectural Review,* 184**,** 31-41.

Canter, D. 1977. *The Psychology of Place,* New York, St. Martin Press.

Carey, P. B. R. 1981. *Babad Dipanegara: An Account of the Outbreak of the Java War (1825-1830),* Kuala Lumpur, The Malaysian Branch of the Royal Asiatic Society.

Carey, P. B. R. 1984. Jalan Maliabara (Garland Bearing Street): The Etymology and Historical Origins of a Much Misunderstood Yogyakarta Street Name. *Archipel,* 27**,** 50-62.

Carmona, M., Tiesdell, S., Heath, T. & Oc, T. 2010. *Public Places Urban Spaces: The Dimensions of Urban Design,* UK, Routledge.

Carr, S. 1992. *Public space*, Cambridge University Press.

Celik, Z., Favro, D. & Ingersoll, R. 1984. Introduction. *In:* CELIK, Z., FAVRO, D. & INGERSOLL, R. (eds.) *Street: Critical Perspective on Public Space.* England: University of California Press

Cervero, R. 1988. Land-Use Mixing and Suburban Mobility. *Transportation Quarterly,* 42**,** 429-446.

Chapman, D. & Larkham, P. 1999. Urban Design, Urban Quality, and the Quality of Life: Reviewing the Department of the Environment's Urban Design Campaign. *Journal of Urban Design,* 4**,** 211-232.

Charter, A. The Athens Charter for the Restoration of Historic Monuments. the 1st Int. Congress of Architects and Technicians of Historic Monuments, Athens, Greece, 1931.

Charter, W. 1987. Charter for Conservation of Historic Towns and Urban Areas (Washington Charter). *In:* ICOMOS (ed.). Washington DC, USA: ICOMOS.

Chi, L. Q. The Changes and New Identity of Traditional Commercial Streets in Hanoi, Vietnam. *In:* IDID, S. Z. A., ed. 7th Symposium on Asian Heritage: Saving Traditional Streets of Southeast Asia, 2013 Universiti Teknologi Malaysia. Universiti Teknologi Malaysia.

Chua, B. H. & Edwards, N. 1992. Public Space: Design, Use and Management. *In:* CHUA, B. H. & EDWARDS, N. (eds.) *Public Space: Design, Use and Management.* Singapore: Centre for Advanced Studies, Singapore University Press.

Conzen, M. P. 1960. Alnwick: A Study in Town Plan Analysis. *Transactions of the Insititute of British Geographers,* 27**,** 1-122.

Creswell, J. W. 1994. *Research Design: Qualitative & Quantitative Approaches,* Thousand Oaks, California, Sage Publications.

Creswell, J. W. 1998. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions,* Thousand Oaks, Sage.

Creswell, J. W. 2003. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches,* Thousand Oaks, USA, Sage Publications.

Creswell, J. W. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches,* USA, Sage Publications, Inc.

Crosby, N., Hughes, C., Lizieri, C. & Oughton, M. 2005. A Message from the Oracle: the Land Use Impact of a Major In-town Shopping Centre on Local Retailing. *Journal of property research,* 22**,** 245-265.

Cullen, G. 1961. *The Concise Townscape,* Oxon, The Architectural Press.

Cybriwsky, R. & Ford, L. 2001. City Profile Jakarta. *Cities,* 18**,** 199-210.

Czaenowsky, T. 1986. The Streets as Communications Artifact *In:* ANDERSON, S. (ed.) *On Streets.* USA: The MIT Press.

Dayaratne, R. 2010. An Insight into the Asian Streets: Streets in Sri Lanka and Their Transformations *In:* KIANG, H. C., ET.AL (ed.) *On Asian Streets and Public Space.* Singapore: Ridge Books, NUS Press.

De Haan, F. 1922. *Oud Batavia*, G. Kolff & Company.

Denzin, N. & Lincoln, Y. 1998. *Strategies for Qualitative Inquiry,* Thousand Oaks, California, Sage Publications.

Desouza, K. C. & Flanery, T. H. 2013. Designing, Planning, and Managing Resilient Cities: A Conceptual Framework. *Cities,* 35**,** 89-99.

Detr/Cabe 2000. By Design: Urban Design in the Planning System: Towards Better Practice. *In:* DEPARTMENT OF ENVIRONMENT, T. R. D. (ed.). London: DETR.

Djakarta, P. U. T. K.-K. 1962. Djakarta. Pemerintah Daerah Khusus Ibukota (DKI) Jakarta.

Djuliati 2000. *Eksploitasi Kolonial Abad XIX, Kerja Wajib di Keresidenan Kedu 1800-1890,* Yogyakarta, Yayasan untuk Indonesia.

Dki Jakarta. 2012. Perang Diskon Semarakkan Festival Passer Baroe. *Berita* [Online]. [Accessed June 25, 2014].

Douglass, M. & Daniere, A. 2009. Urbanization and Civic Space in Asia. *In:* DANIERE, A., DOUGLASS, M (ed.) *The Politics of Civic Space in Asia.* USA: Routledge.

Dovey, K. 1999. *Framing Places: Mediating Power in Built Form*, Routledge.

Drummond, L. B. W. 2000. Street Scenes: Practices of Public and Private Space in Urban Vietnam. *Journal of Urban Studies,* 37**,** 2377-2391.

Duneier, M. 1999. *Sidewalk*, Macmillan.

Durmaz, S. B. 2012. *Creative Clusters and Place-Making: Analyzing the Quality of Place in Soho and Beyoglu.* Doctor of Philosophy, University of Nottingham.

Eichner, R. & Tobey, H. 1987. Beyond Zoning. *In:* MOUDON, A. V. (ed.) *Public Streets for Public Use.* New York: Van Nostrand Reinhold Company Inc.

Eisner, E. 1991. *The Enlightened Eye: Qualitaitve Inquiry and The Enhancement of Educational Practice,* New York, Macmillan.

Ellis, W. C. 1986. The Spatial Structure of the Streets *In:* ANDERSON, S. (ed.) *On Streets* USA: The MIT Press.

Esa. 2013. Titik Pencemaran Udara Tertinggi Yogyakarta di Malioboro. [Accessed 26/06/2015].

Ewing, R., Handy, S., Brownson, R. C., Clemente, O. & Winston, E. 2006. Identifying and Measuring Urban Design Qualities Related to Walkability. *Journal of Physical Activity and Health,* 3**,** S223-S240.

Fanani, Z. 2010. Teknik Analisis Data Kualitatif. Indonesia.

Febrina, A. 2006. Traders Change With the Times in Pasar Baru: Jakarta, Indonesia. *Planet Mole: Indonesia in Focus* [Online]. [Accessed June 23rd, 2014].

Fernandes, J. R. & Chamusca, P. 2014. Urban Policies, Planning and Retail Resilience. *Cities,* 36**,** 170-177.

Firman, T. 2002. Urban Development in Indonesia, 1990–2001: from the Boom to the Early Reform Era through the Crisis. *Habitat International,* 26**,** 229-249.

Firman, T. 2009a. The Continuity and Change in Mega-Urbanization in Indonesia: A Survey of Jakarta–Bandung Region (JBR) Development. *Habitat International,* 33**,** 327-339.

Firman, T. 2009b. Decentralization Reform and Local-Government Proliferation in Indonesia: Towards a Fragmentation Of Regional Development. *Review of Urban & Regional Development Studies,* 21**,** 143-157.

Florida, R. 2002a. Bohemia and Economic Geography. *Journal of Economic Geography,* 2**,** 55-71.

Florida, R. 2002b. *The Rise of the Creative Class and How It's Transforming Work, Leisure, Community and Everyday Life,* New York, Basic Books.

Forsyth, A. & Southworth, M. 2008. Cities Afoot—Pedestrians, Walkability and Urban Design.

Fullilove, M. T. 2004. *Root Shock,* New York, Ballantine Books.

Garnham, L. H. 1985. *Maintaining the Spirit of Place,* USA, PDA Publisher Corporation.

Gehl, J. 1987. *Life Between Buildings,* Washington, Island Press.

Gehl, J. 1995. Creating A Human Quality in the City. Unpublished Paper.

Gehl, J. 2002. *Public Spaces and Public Life City of Adelaide 2002,* Copenhagen, Denmark, Gehl Architects Aps.

Gehl, J. 2010. *Cities for People,* Washington, Island Press.

Gehl, J. & Gemzoe, L. 2000. *New City Spaces* Denmark, The Danish Architectural Press.

Gehl, J., Kaefer, L. & Reigstad, S. 2006. Close Encounters with Buildings *Urban Design International,* 11**,** 29-47.

Geurs, K. T. & Van Wee, B. 2004. Accessibility Evaluation of Land-Use and Transport Strategies: Review and Research Directions. *Journal of Transport geography,* 12**,** 127-140.

Gill, R. 1995. *De Indische Stad op Java en Madura, een Morphologische Studie van haar Ontwikkeling.* Doctoral Thesis (PhD), TU Delft, Delft University of Technology.

Gill, R. 1998. Town Formation in 19th-Century Java. *In:* MIKSIC, J. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Godschalk, D. R. 2003. Urban Hazard Mitigation: Creating Resilient Cities. *Natural Hazards Review,* 4**,** 136-143.

Groat, L. & Wang, D. 2002. *Architectural Research Methods,* Canada, John Wiley&Sons, Inc.

Grodach, C. 2008. Museums As Urban Catalysts: The Role of Urban Design in Flagship Cultural Development. *Journal of Urban Design,* 13**,** 195-212.

Guest, G., Bunce, A. & Johnson, L. 2006. How Many Interviews Are Enough? An Experiment With Data Saturation and Variability. *Field Methods,* 18**,** 59-82.

Gursoy, D., Kim, K. & Uysal, M. 2004. Perceived Impacts of Festivals and Special Events by Organizers: An Extension and Validation. *Tourism Management,* 25**,** 171-181.

Gustafson, P. 2014. Place Attachment in An Age of Mobility. *In:* MANZO, L. C. & DEVINE-WRIGHT, P. (eds.) *Place Attachment: Advances in Theory, Methods, and Applications.* Oxon: Routledge.

Haklay, M., O'sullivan, D., Thurstain-Goodwin, M. & Schelhorn, T. 2001. "So Go Downtown": Simulating Pedestrian Movement in Town Centres. *Environment Planning B,* 28**,** 343-359.

Hall, S. 2009. *A Mile of Mix Blessings: An Ethnography of Boundaries and Belonging on a South London Street.* PhD, London School of Economics and Political Science.

Hall, S. 2012. *City, Street and Citizen,* New York, Routledge.

Handinoto 2005. Kebijakan Politik dan Ekonomi Pemerintah Kolonial Belanda yang Berpengaruh pada Morpologi (Bentuk dan Struktur) Beberapa Kota di Jawa. *DIMENSI (Jurnal Teknik Arsitektur),* 32.

Hanna, W. 1988. *Hikayat Jakarta,* Jakarta, Yayasan Obor Indonesia.

Heath, T. 1997. The Twenty-four Hour City Concept—A Review of Initiatives in British Cities. *Journal of Urban Design,* 2**,** 193-204.

Hee, L. & Ooi, G. L. 2003. The Politics of Public Space Planning in Singapore. *Planning Perspectives,* 18**,** 79-103.

Herriot, R. & Firestone, W. 1983. Multisite Qualitative Policy Research: Optimising Description and Generalizability. *Educational Researcher,* 12**,** 14-19.

Herzog, T. R. & Shier, R. L. 2000. Complexity, Age, and Building Preference. *Environment and Behavior,* 32**,** 557-575.

Hewko, J., Smoyer-Tomic, K. E. & Hodgson, M. J. 2002. Measuring Neighbourhood Spatial Accessibility to Urban Amenities: Does Aggregation Error Matter? *Environment and Planning A,* 34**,** 1185-1206.

Hidalgo, M. & Hernandez, B. 2001. Place Attachment: Conceptual and Empirical Questions. *Journal of Environmental Psychology,* 21**,** 273-281.

Hidalgo, M. C., Berto, R., Galindo, M. P. & Getrevi, A. 2006. Identifying Attractive and Unattractive Urban Places: Categories, Restorativeness and Aesthetic Attributes. *Medio Ambiente y Comportamiento Humano,* 7**,** 115-133.

Hillier, B. 1996. The City as A Movement Economy *Urban Design International,* 1**,** 41-60.

Hillier, B. 2004. Can Streets be Made Safe? . *Urban Design International,* 9**,** 31-45.

Hillier, B., Penn, A., Hanson, J., Grajewski, T. & Xu, J. 1993. Natural Movement: or, Configuration and Attraction in Urban Pedestrian Movement. *Journal of Environmental and Planning: Planning and Design,* 20**,** 29-66.

Hudalah, D. & Woltjer, J. 2007. Spatial Planning System in Transitional Indonesia. *International Planning Studies,* 12**,** 291-303.

Icomos, N. 1994. The Nara Document on Authenticity. International Committee on Monuments and Sites Paris.

ICOMOS. 1987. Charter for Conservation of Historic Towns and Urban Areas (The Washington Charter), Washington DC

Idid, S. Z. A. 1985. *The Alternative Approach in Expressing Malaysian National Identity - Human Aspect in Built Form.* Master Thesis, Oxford Polytechnic.

Idid, S. Z. A. 2004. Collaborating Informal Human Activities in the Design of Urban Centres. *Kolokium and Bengkel Seni Rekabentuk Bandar Nusantara.* Universiti Teknologi Malaysia.

Ifsah, I. F. S. O. a. H. 2013. Introduction: Saving Traditional Streets of Southeast Asia. *In:* IDID, S. Z. A. (ed.) *7th Symposium on Asian Heritage: Saving Traditional Streets of Southeast Asia.* Universiti Teknologi Malaysia: IFSAH, International Field School on Asian Heritage

Ikaputra. The Street Scape and Culture of City Philosophical Axis: The Case of Malioboro Street, Yogyakarta, Indonesia. *In:* IDID, S. Z. A., ed. 7th Symposium on Asian Heritage: Saving Traditional Streets of Southeast Asia, 2013 Universiti Teknologi Malaysia. Universiti Teknologi Malaysia.

Ikaputra & Sholihah, A. 2001. Mobility for All - Towards Barrier-Free Environment in Yogyakarta, Indonesia. *IATSS Research,* 25**,** 23-31.

Indartoro, L. 2000. The Role of Jalan Rukunan in the Kampung of Kotagede, Yogyakarta. *Media Teknik,* 1**,** 30-33.

Ja'afar, N. H., Sulaiman, A. B. & Shamsuddin, S. 2012. The Contribution of Landscape Features on Traditional Streets in Malaysia. *Procedia-Social and Behavioral Sciences,* 50**,** 643-656.

Ja'afar, N. H. & Usman, I. M. S. 2009. Physical and Transportation Elements of Traditional Street in Malaysia. *European Journal of Social Sciences,* 9.

Jabareen, Y. 2006. Sustainable Urban Forms Their Typologies, Models, and Concepts. *Journal of Planning Education and Research,* 26**,** 38-52.

Jacobs, A. 1993. *Great Streets,* USA, MIT Press.

Jacobs, A. 2010. The Importance of Streets *In:* KIANG, H. C., ET.AL (ed.) *On Asian Streets and Public Space.* Singapore: Ridge Books.

Jacobs, A. 2011. *The Good City: Reflections and Imaginations,* Oxon, Routledge.

Jacobs, A. & Appleyard, D. 1987. Toward an Urban Design Manifesto. *APA Journal,* Winter.

Jacobs, J. 1961. *The Death and Life of Great American Cities,* USA, Vintage Books.

Jive´N, G. & Larkham, P. J. 2003. Sense of Place, Authenticity and Character: A Commentary. *Journal of Urban Design,* 8**,** 67-81.

Ju, S. R. & Omar, S. B. 2011. Housing Typology of Modern Malaysia. *1st South East Asia Housing Forum of ARCH.* Seoul, Korea.

Kamp, I. R., Leidelmeijer, K., Marsman, G. & Hollander, D. A. 2003. Urban Environmental Quality and Human Well-Being Towards A Conceptual Framework and Demarcation of Concepts; A Literature Study. *Landscape and Urban Planning,* 65**,** 5-18.

Kaplan, S. & Kaplan, R. 1982. *Cognition and Environment: Functioning in an Uncertain World,* New York, Preager.

Kärrholm, M., Nylund, K. & Prieto De La Fuente, P. 2014. Spatial Resilience and Urban Planning: Addressing the Interdependence of Urban Retail Areas. *Cities,* 36**,** 121-130.

Kearns, R. A. & Collins, D. C. A. 2003. Crossing Roads, Crossing Boundaries: Empowerment and Participation in A Child Pedestrian Safety Initiative. *Space and Polity,* 7**,** 193-212.

Kiang, H., Liang, L. & Limin, H. 2010. Introduction. *In:* KIANG, H., LIANG, L. & LIMIN, H. (eds.) *On Asian Streets and Public Space.* Singapore: Ridge Books.

Kim, A. M. 2012. The Mixed-use Sidewalk: Vending and Property Rights in Public Space. *Journal of the American Planning Association,* 78**,** 225-238.

Kimpraswil 2013. Laporan Antara: Penyusunan Rencana Tata Bangunan dan Lingkungan (RTBL) Kawasan Malioboro Yogyakarta. *In:* YOGYAKARTA, D. P. D. P. W. K. K. (ed.). Yogyakarta: Dinas Permukiman dan Prasarana Wilayah (Kimpraswil) Kota Yogyakarta.

Komunitas.Kota.Toea.Magelang. 2012. Riwayat Kelenteng Liong Hok Bio, Saksi Sejarah Komunitas Tionghoa di Magelang.

Komunitas.Kota.Toea.Magelang. 2013. Menyusuri Jejak Sejarah Toko dan Usaha Dagang Etnis Tionghoa di kota Magelang di Tahun 1935-1938. [Accessed 15/04/2015].

Kostof, S. 1991. The City Shaped Urban Patterns and Meaning Throughout History. *Bulfinch, Boston*.

Krier, R. 1979. *Urban Space*, Rizzolli International Publication, Inc.

Kurnia, L. 2011. Pasar Baru: Colonial Space and Contemporary Hybridity. *Inter-Asia Cultural Studies* Taylor & Francis.

Kusno, A. 2000. *Behind the Postcolonial: Architecture, Urban Space and Political Cultures in Indonesia,* London, Routledge.

Kusno, A. 2004. Whither Nationalist Urbanism? Public Life in Governor Sutiyoso's Jakarta. *Urban Studies,* 41**,** 2377-2394.

Kvale, S. 2007. *Doing Interviews,* London, Sage Publications Ltd.

Landry, C. 2000. *The Creative City: A Toolkit for Urban Innovators*, Earthscan.

Laquian, A. A. 1996. The Multi-ethnic and Multicultural City: An Asian Perspective. *International Social Science Journal,* 48**,** 43-54.

Lefebvre, H. 1991. *The Production of Space,* London, Blackwell.

Lewicka, M. 2010. What Makes Neighbourhood Different from Home and City? Effects of Place Scale on Place Attachment. *Journal of Environmental Psychology,* 30**,** 35-51.

Lewicka, M. 2011. Place Attachment: How Far Have We Come in the Last 40 Years? *Journal of Environmental Psychology,* 31**,** 207-230.

Lewicka, M. 2014. In Search of Roots: Memory as Enabler of Place Attachment. *In:* MANZO, L. C. & DEVINE-WRIGHT, P. (eds.) *Place Attachment: Advances in Theory, Methods, and Applications.* Oxon: Routledge.

Leyden, K. M. 2003. Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *American Journal of Public Health,* 93**,** 1546-1551.

Limin, H. 2001. Mapping the Street: Reading Asian Cities *Urban Design International Journal,* 6**,** pp. 65-75.

Liu, Y. & Chen, C. 2007. The Effects of Festivals and Special Events on City Image Design. *Front Architeture and Civil Engineering China,* 1**,** 255-259.

Luque-Martinez, T., Del Barrio-Garcia, S., Ibanez-Zapta, J. A. & Molina, M. a. R. 2007. Modelling a City's Image: The Case of Granada. *Cities,* 24**,** 335-352.

Lynch, K. 1960. *The Image of the City* Massachusetts, USA, The MIT Press.

Lynch, K. 1972. *What Time is This Place?,* Cambridge, USA, The MIT Press.

Lynch, K. 1976. *Managing the Sense of A Region,* Massachusetts, USA, The MIT Press.

Lynch, K. 1981. *A Theory of Good City Form,* USA, MIT Press.

Lynch, K. 1984. Reconsidering the Image of the City. *In:* BANERJEE, T. & SOUTHWORTH, M. (eds.) *City Sense and City Design: Writings and Projects of Kevin Lynch.* Cambridge: The MIT Press.

Madanipour, A. 1996. *Design of Urban Space: An Inquiry Into A Socio-spatial Process*, Wiley Chichester.

Madanipour, A. 2013. *Knowledge Economy and the City: Spaces of Knowledge*, Routledge.

Magelang. 2009a. Profil Kota Magelang.

Magelang, P. K. 2009b. Profil Daerah Kota Magelang

Manzo, L. C. & Devine-Wright, P. 2014. Introduction. *In:* MANZO, L. C. & DEVINE-WRIGHT, P. (eds.) *Place Attachment; Advances in Theory, Methods, and Applications.* Oxon: Routledge.

Marans, R. W. 2003. Understanding Environmental Quality through Quality of Life Studies: the 2001 DAS and Its Use od Subjective and Objective Indicators. *Landscape and Urban Planning,* 65**,** 73-83.

Marshall 2005. *Streets and Patterns,* London, Routledge.

Marshall, C. & Rossman, G. 2006. *Designing Qualitative Research (4th ed),* Thousand Oaks, California, Sage Publications.

Matahari. 2015. Tentang Matahari.

Mateo-Babiano, I. & Ieda, H. 2007. Street Space Sustainability in Asia: The Role of the Asian Pedestrian and Street Culture *Journal of the Eastern Asia Society for Transportation Studies,* 7.

Matos Wunderlich, F. 2008. Walking and Rhythmicity: Sensing Urban Space. *Journal of Urban Design,* 13**,** 125-139.

Mccluskey, J. 1992. *Road, Form and Townscape* London, Butterworth Architecture.

Mckinsey Global Institute, M. 2012. The Archipelago Economy: Unleashing Indonesia Potential. Jakarta: McKinsey Global Institute.

Mehta, V. 2007. Lively Streets: Determining Environmental Characteristics to Support Social Behavior *Journal of Planning Education and Research,* 27**,** 165-187.

Mehta, V. 2011. Small Businesses and the Vitality of Main Street. *Journal of Architectural and Planning Research,* 28**,** 271-291.

Mehta, V. 2013. *The Street: A Quintessential Social Public Space,* USA, Routledge.

Mehta, V. 2014. Evaluating Public Space. *Journal of Urban Design,* 19**,** 53-88.

Miao, P. 2001. Introduction. *In:* MIAO, P. (ed.) *Public Places in Asia Pacific Cities: Current Issues and Strategies.* Dordrecht: Kluwer Academic Publishers.

Mijarto, P. 2009. Naik Kereta Api ke Passer Baroe. *News* [Online]. [Accessed June 10, 2014].

Miles, M. & Huberman, A. 1994. *Qualitative Data Analysis,* USA, Sage Publications.

Montgomery, J. 1995. Animation: A Plea for Activity in Urban Places. *Urban Design Quarterly,* 53 (January)**,** 15-17.

Montgomery, J. 1998. Making a City: Urbanity, Vitality, and Urban Design *Journal of Urban Design,* 3**,** pp. 93-116.

Montgomery, J. 2003. Cultural Quarters as Mechanisms for Urban Regeneration. Part 1: Conceptualizing Cultural Quarters *Planning, Practice & Research,* 18**,** 293-306.

Montgomery, J. 2007. Café Culture and the City: The Role of Pavement Cafes in Urban Public Social Life. *Journal of Urban Design,* 2**,** 83-102.

Morse, J. 1994. Designing Funded Qualitative Research. *In:* DENZIN, M. & LINCOLN, Y. (eds.) *Handbook of Qualitative Research.* Thousand Oaks, California: Sage.

Moughtin, C. 1992. *Urban Design: Street and Square,* Great Britain, Butterworth Architecture.

Moulaert, F., Schreurs, J. & Dyck, B. 2011. Reading Space to 'Address' Spatial Quality. SPINDUS: Spatial Innovation Planning Design and User Involvement.

Nas, P. J. M. 1986. *The Indonesian City,* USA, Foris Publications.

Nasar, J. L. 1998. *The Evaluative Image of the City,* London, Sage Publication.

Nasar, J. L. & Hong, X. 1999. Visual Preferences in Urban Signscapes. *Environment and Behavior,* 31**,** 671-691.

Norberg-Schulz, C. 1980. *Genius Loci: Towards a Phenomenology of Architecture,* New York, Rizolli.

Oldenburg, R. 1999. *The Great Good Place,* USA, De Capo Press.

Oranratmanee, R. & Sachakul, V. 2014. Streets as Public Spaces in Southeast Asia: Case Studies of Thai Pedestrian Streets. *Journal of Urban Design,* 19**,** 211-229.

Oxford & Dictionary 2015. Oxford English Dictionary. www.oxforddictionaries.com.

Pacione, M. 2003. Urban Environmental Quality and Human Wellbeing - A Social Geographical Perspective. *Landscape and Urban Planning,* 65**,** 19-30.

Parfect, M. & Power, G. 1997. *Planning for Urban Quality: Urban Design in Towns and Cities,* London, Routledge.

Passchier, C. 1998. Garden Cities and Suburban Bungalows. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Pena, S. 1999. Informal Markets: Street Vendor in Mexico City. *Habitat International,* 23**,** 363-372.

Penalosa, E. 2004. Towards more Egalitarian and Sustainable Cities in Developing Countries. *Public Forum: Rose Hall.* UN House, Tokyo, Japan.

Pendlebury, J., Short, M. & While, A. 2009. Urban World Heritage Sites and the Problem of Authenticity. *Cities,* 26**,** 349-358.

Pike, A., Dawley, S. & Tomaney, J. 2010. Resilience, Adaptation and Adaptability. *Cambridge Journal of Regions, Economy and Society***,** 1-12.

Poerbo, H. 2010. Competing for the Sidewalk: Street Peddling as an Unwanted Urban Activity *In:* KIANG, H. C., ET.AL (ed.) *On Asian Streets and Public Space.* Singapore: Ridge Books.

Ponder, H. W. 1935. *Java Pageant: Impressions of the 1930s,* London, Seeley Service & Co Limited.

Portland, C. O. 1998. Portland Pedestrian Design Guide. *In:* DEVELOPMENT, O. O. T. E. A. (ed.). Portland, USA: Office of Transportation Engineering and Development.

Post, T. J. 1999. Pasar Baru A Return to Elegant Times Past. *The Jakarta Post*.

Pratiwo. 1990. *The Architecture of Lasem: Typo-morphological Approach for Redefining Chinese Architecture in Lasem.* Master Degree, Katholieke Universiteit Leuven.

Prentice, R. & Andersen, V. 2003. Festival as Creative Destination. *Annals of Tourism Research,* 30**,** 7-30.

Proshansky, H. M., Fabian, A. K. & Kaminoff, R. 1983. Place-Identity: Physical World Socialization of the Self. *Journal of Environmental Psychology,* 3**,** 57-83.

Quinn, B. 2005. Arts Festivals and the City. *Urban Studies,* 42**,** 927-943.

Ramadier, T. & Moser, G. 1998a. Social Legibility, The Cognitive Map and Urban Behaviour. *Journal of Environmental Psychology,* 18**,** 307-319.

Ramadier, T. & Moser, G. 1998b. Social Legibility, The Cognitive Map and Urban Behaviour. *Journal of Environmental Psychology,* 18**,** 307-319.

Rapoport, A. 1977. *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design,* New York, Pergamon Press.

Rapoport, A. 1983. Environmental Quality, Metropolitan Areas and Traditional Settlements. *Habitat International,* 7**,** 37-63.

Rapoport, A. 1987. Pedestrian Street Use: Culture and Perception *In:* MOUDON, A. V. (ed.) *Public Streets for Public Use.* New York: Van Nostrand Reinhold Company Inc.

Rapoport, A. 1990. *History and Precedent in Environmental Design,* New York, Plenum Press.

Reid, A. 1980. The Structure of Cities in Southeast Asia, Fifteenth to Seventeeth Centuries. *Journal of Southeast Asian Studies,* 11**,** 235-250.

Relph, E. 1976. *Place and Placelessness,* London, Pion Limited.

Richards, G. & Wilson, J. 2004. The Impact of Cultural Events on City Image: Rotterdam, Cultural Capital of Europe 2001. *Urban Studies,* 41**,** 1931-1951.

Roberts, M. & Greed, C. 2001. *Approaching Urban Design: The Design Process* UK, Pearson Education.

Roberts, M. & Turner, C. 2005. Conflicts of Liveability in the 24-hour City: Learning from 48 Hours in the Life of London's Soho. *Journal of Urban Design* 10 171-193.

Rtrw-Yogyakarta 2010. Perda Kota Yogyakarta tentang Rencana Tata Ruang Wilayah Kota Yogyakarta. *In:* YOGYAKARTA, P. K. Y. D. D. P. R. K. (ed.) *No 2/2010.* Yogyakarta: Pemerintah Kota Yogyakarta.

Rtrw 2012. Perda No. 4 Tahun 2021 tentang Rencana Tata Ruang Wilayah Kota Magelang tahun 2011-2031. *In:* MAGELANG, W. (ed.). Magelang: Pemerintah Kota Magelang.

Rudofsky, B. 1969. *Streets for People: A Primer for Americans,* New York, Doubleday.

Rykwert, J. 1986. The Street: The Use of Its History *In:* ANDERSON, S. (ed.) *On Streets.* Cambridge, Massachusetts and London: The MIT Press.

Salah Ouf, A. M. 2001. Authenticity and the Sense of Place in Urban Design. *Journal of Urban Design,* 6**,** 73-86.

Saliya, Y. 1998. Modernism and the International Style. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Saliya, Y. & Siregar, S. 1998. Modern Architecture and Identity. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Salleh, N. H. & Ahmad, A. G. 2009. Fire Safety Management in Heritage Buildings: the Current Scenario in Malaysia. *22nd CIPA Symposium.* Kyoto, Japan: IIUM Repository.

Samadhi, T. N. 2001. The Urban Design of a Balinese Town: Placemaking Issues in the Balinese Urban Setting. *Habitat International,* 25**,** 559-575.

Santosa, D. H. 2003. *Batik: The Impact of Time and Environment,* Solo, Danar Hadi.

Santoso, J. 1998. Cities of the Pesisir. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Savage, V. R. 1992. Street Culture in Colonial Singapore. *In:* CHUA, B. H. & EDWARDS, N. (eds.) *Public Space: Design, Use and Management.* Singapore: Centre for Advanced Studies, Singapore University Press.

Scannell, L. & Gifford, R. 2010. Defining Place Attachment: A Tripartite Organizing Framework. *Journal of Environmental Psychology,* 3**,** 57-83.

Seamon, D. 2014. Place Attachment and Phenomenology; The Synergistic Dynamism of Place. *In:* MANZO, L. C. & DEVINE-WRIGHT, P. (eds.) *Place Attachment; Advances in Theory, Methods, and Applications.* Oxon: Routledge.

Setiati Et Al. 2009. *Ensiklopedia Jakarta: Jakarta Tempo Doeloe, Kini dan Esok,* Jakarta, PT Penerbit Lentera Abadi.

Setiawan, W. 2013. *Urban Development and The Urban Planning Responses to Social Diversity and Potential Conflict in Indonesia.* PhD, The University of Salford.

Shamsuddin, S. & Ujang, N. 2008. Making Places: The Role of Attachment in Creating the Sense of Place for Traditional Streets in Malaysia. *Habitat International,* 32**,** 399-409.

Shamsudin, S. & Sulaiman, B. 2010. The Street and Its Influence on the Sense of Place of Malaysian Cities *In:* KIANG, H. C., ET.AL (ed.) *On Asian Streets and Public Space.* Singapore: Ridge Books.

Sholeh, M. 2013. Kebakaran di Pasar Baru Padam, Api Berasal dari Toko Matahari. *Merdeka News* [Online]. [Accessed January, 8, 2013].

Sholihah, A. 2012. *Informal Street Activities: Its Role in Conserving Urban Cultural Entity* Germany, LAP Lambert Academic Publishing.

Sihombing, A. 2004. The Transformation of Kampung Kota: Symbiosis between Kampung and Kota: A Case Study of Jakarta.

Siregar, S. 1998. The Architecture of Modern Indonesian Cities. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Sitte, C. 1889. *City Planning According to Artistic Principles, (translated by Collins, GR & Collins, CC, 1965),* London, Phaidon Press.

Smithies, M. 1986. *Yogyakarta: Cultural Heart of Indonesia,* Singapore, Oxford University Press.

Southwell, K. 2001. Designing with Urban Tourism in Mind: Investigating the Potential of A Proposed Method for Assessing the Environmental Quality of A Tourist-historic Street Space. Edinburgh College of Art, United Kingdom.

Southworth, M. 2005. Designing the Walkable City. *Journal of Urban Planning and Development,* 131**,** 246-257.

Spaces, P. P. 2014. Street as Places: How Transportation can Create a Sense of Community. [Accessed 20/11/2014].

Stedman, R. 2003. Is It Really Just A Social Construction? The Contribution of the Physical Environment to Sense of Place. *Society and Natural Resources,* 16**,** 671-685.

Sukada, B. 1998. The Architecture of Early Independence. *In:* TJAHJONO, G. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Sulaiman, A. & Shamsuddin, S. 2001. The Vanishing Streets in Malaysian Urbanscape. *In:* MIAO, P. (ed.) *Public Places in Asia Pasific Region: Current Issues and Strategies.* Dordrecht: Kluwer Academic Publishers.

Sumalyo, Y. 1998. Architecture of the 17th to 19th Centuries. *In:* MIKSIC, J. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Sunjayadi, A. 2006. Peran Kaum Tionghoa dalam Turisme Kolonial di Hindia Belanda. [Online], .

Susanti, R. 2001. *Pengaruh Konsep Pedestrian Mall pada Revitalisasi Jalan Pasar Baru dan Kawasan Sekitarnya di Jakarta.* Master Thesis, Universitas Diponegoro.

Suyitno, H. 2012. Pedagang Pasar Rejowinangun Aksi Keprihatinan. *Antara Jateng*, June 26, 2012.

Taboroff, J. 2000. Cultural Heritage and Natural Disasters: Incentives for Risk Management and Mitigation. *Managing Disaster Risk in Emerging Economies. New York: World Bank. Disaster Management Risk,* 2**,** 71-79.

Talen, E. 2002. Pedestrian Access As a Measure of Urban Quality. *Planning Practice & Research,* 17**,** 257-278.

Tarbatt, J. 2012. *The Plot: Designing Diversity in the Built Environment: A Manual for Architects and Urban Designers,* London, RIBA Publishing.

Tibbalds, F. 2012. *Making People-friendly Towns: Improving the Public Environment in Towns and Cities*, Taylor & Francis.

Tibbalds, F., Colbourne, Karski, Williams & Monro 1993. London's Urban Environmental Quality. London: London Planning Advisory Committee.

Tjahjono, G. 1998a. Cities, Mosques, and Palaces. *In:* MIKSIC, J. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Tjahjono, G. 1998b. Palace and City. *In:* MIKSIC, J. (ed.) *Indonesia Heritage: Architecture.* Singapore: Archipelago Press.

Tjahjono, G., Miksic, J 1998c. The Genesis of An Urban Tradition. *In:* MIKSIC, J. (ed.) *Architecture: Indonesia Heritage.* Singapore: Archipelago Press.

Townshend, T. G. & Madanipour, A. 2008. Public Space and Local Diversity: The Case of North East England. *Journal of Urban Design,* 13**,** 317-328.

Trancik, R. 1986. *Finding Lost Space: Theories of Urban Design* New York, Van Nostrand Reinhold.

Tribun-Jogja. 2014. Malioboro dan Titik Nol Jogja Harus Bebas Gelandangan dan Pengemis.

Trip, J. J. 2007. Assesing Quality of Place: Comparative Analysis of Amsterdam and Rotterdam. *Journal of Urban Affairs,* 29**,** 501-517.

Tuan, Y. F. 1977. *Space and Place: The Perspective of Experience,* USA, University of Minnesota Press.

Tunas, D. 2004. The Re-positioning of Colonial Spaces in A Globalizing Metropolitan, The Case of Jakarta. *DIMENSI (Jurnal Teknik Arsitektur),* 32**,** 1-12.

Ujang, N. 2012. Place Attachment and Continuity of Urban Place Identity. *Procedia - Social and Behavioral Sciences,* 49**,** 156-167.

Unesco 1972. Convention Concerning the Protection of the World Cultural and Natural Heritage. *In:* UNESCO (ed.). Paris: UNESCO.

Unesco 2003. Convention for the Safeguarding of the Intangible Cultural Heritage. Paris: UNESCO.

Unesco 2005. Operational Guidelines for the Implementation of the World Heritage Convention Paris: World Heritage Centre.

Unesco. 2009. Indonesian Batik.

Unisdr 2010. Making Cities Resilient: My City is Getting Ready, 2010-2011. *International Strategy for Disaster Reduction, World Disaster Reduction Campaign.*

Unwup 2009. World Urbanization Prospects. New York: United Nations World Urbanization Prospects

Upt-Malioboro 2009. Data Pasar Beringharjo. *In:* YOGYAKARTA, D. P. K. (ed.). Yogyakarta: Dinas Pariwisata Kota Yogyakarta.

Utaka, Y. & Fawzi, M. 2010. The Malaysian Multicultural Streetscape: Challenges in New Millenium. *In:* KIANG, H. C., ET.AL (ed.) *On Asian Streets and Public Space.* Singapore: Ridge Books.

Utami, R. 2014. Yogyakarta Dinobatkan Sebagai Kota Batik Dunia. [Accessed 26/06/2015].

Utami, W. 2001. *Elemen-Elemen Dominan dalam Perkembangan Kota Magelang.* Master Program, Gadjah Mada University.

Utami, W. Studi Eksplorasi Ruang Kota Magelang Periode Kerajaan Mataram Kuno dan Mataram Baru. Diskusi Nasional Arsitek Sastra Matra, 2009 Semarang, Indonesia. Jurusan Arsitektur UNDIP.

Utami, W. 2011. Pendirian Negeri Magelang.

Van Der Heiden, C. 1990. Town Planning in the Dutch Indies. *Planning Perspective,* 5**,** 63-84.

Van Lissa, N. 1930. *Uit Het Verdelen Van Magelang,* Magelang.

Varna, G. & Tiesdell, S. 2010. Assessing the Publicness of Public Space: The Star Model of Publicness. *Journal of Urban Design,* 15**,** 575-598.

Wang, D. 1998. Street Culture: Public Space and Urban Commoners in Late-Qing Chengdu. *Modern China***,** 34-72.

Wang, S.-Y. 2011. In Search of Authenticity in Historic Cities in Transformation: The Case of Pingyao, China. *Journal of Tourism and Cultural Change,* 9**,** 18-30.

Wansborough, M. & Mageean, A. 2000. The Role of Urban Design in Cultural Regeneration. *Journal of Urban Design,* 5**,** 181-197.

Wekerle, G. 2000. From Eyes On the Street to Safe Cities [Speaking of Places]. *Places,* 13.

Whyte, W. H. 1980. *The Social Life of Small Urban Spaces,* Washington D.C, The Conservation Foundation,.

Wibisono, B. 2001. *Transformation of Jalan Malioboro, Yogyakarta: The Morphology and Dynamics of a Javanese Street.* Ph.D Thesis, The University of Melbourne.

Widodo, J. 2007. Modern Indonesian Architecture: Transplantation, Adaptation, Accommodation and Hybridization. *In:* NAS, P. J. M. (ed.) *The Past in The Present Architecture in Indonesia.* Leiden: KITLV Press.

Widodo, J. 2012. Urban Environment and Human Behaviour: Learning from History and Local Wisdom. *Procedia-Social and Behavioral Sciences,* 42**,** 6-11.

Wingarta, I. P. S. 2012. Mewaspadai Ormas Sebagai Wadah Praktek Premanisme. *Majalah Tannas.* Jakarta: Majalah Tannas.

Wunderlich, F. M. 2008. Walking and Rhythmicity: Sensing Urban Space. *Journal of Urban Design,* 13**,** 125-139.

Www.Akmil.Ac.Id. 2015. *Sejarah Akademi Militer* [Online]. www.akmil.ac.id. [Accessed 8 April 2015].

Yatmo, Y. A. 2008. Street Vendors as 'Out of Place' Urban Elements. *Journal of Urban Design,* 13**,** 387-402.

Yazidi, A. 2014. Bahasa Indonesia Sebagai Identitas Nasional Bangsa Indonesia (Indonesian Language As Indonesian National Identity) [Accessed June 24, 2014].

Yeung, H. W.-C. & Savage, V. R. 1996a. Urban imagery and the Main Street of the nation: The legibility of Orchard Road in the eyes of Singaporeans. *Urban Studies,* 33**,** 473-494.

Yeung, H. W. & Savage, V. R. 1996b. Urban Imagery and the Main Street of the Nation: The Legibility of Orchard Road in the Eyes of Singaporeans. *Urban Studies,* 33**,** 473-494.

Yin, R. 1994. *Case Study Research: Design and Methods,* Thousand Oaks, California, Sage Publications.

Yin, R. 2009. *Case Study Research: Design and Methods,* USA, Sage Publications, Inc.

Yuen, B. & Chor, C. H. 1998. Pedestrian streets in Singapore. *Transportation,* 25**,** 225-242.

Yuims 1999. Malioboro Area: Profile of the Physical and Social Environment. *Supplementary Report for Agenda Malioboro 2000+.* Yogyakarta Urban Infrastructure Management Support.

Zahnd, M. 2008. *Model Baru Perancangan Kota yang Kontekstual,* Yogyakarta, Penerbit Kanisius.

APPENDICES

APPENDIX-1A: Behavioural Mapping Pasar Baru Street (Weekday Morning)
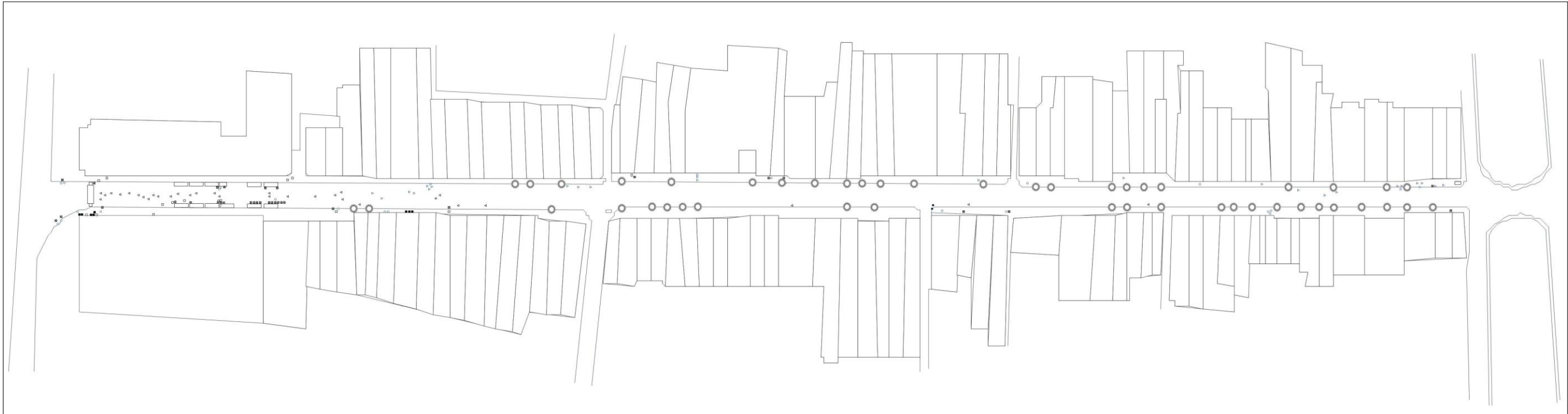
APPENDIX-1B: Behavioural Mapping Pasar Baru Street (Weekday Afternoon)
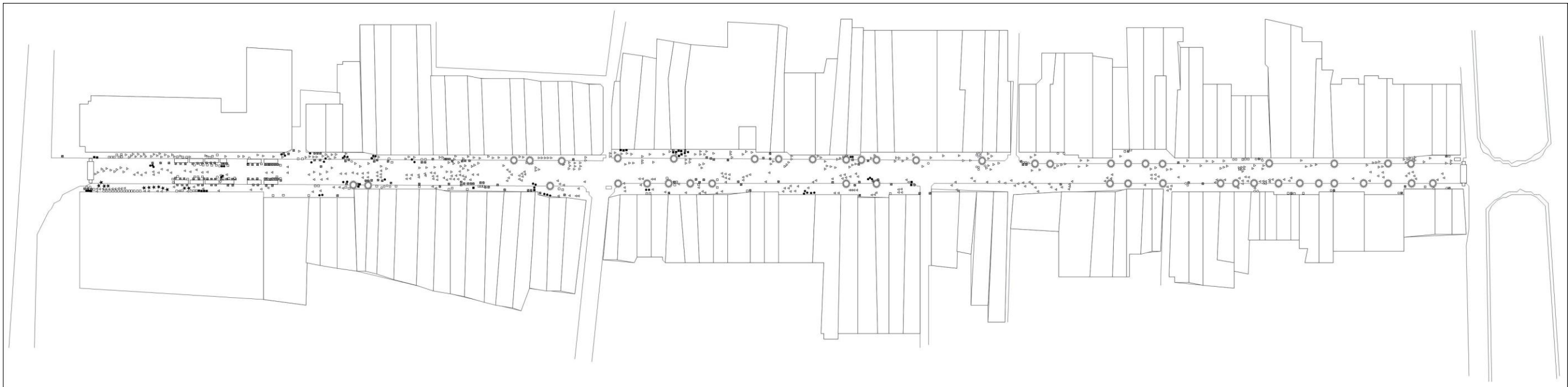
APPENDIX-1C: Behavioural Mapping Pasar Baru Street (Weekday Evening)
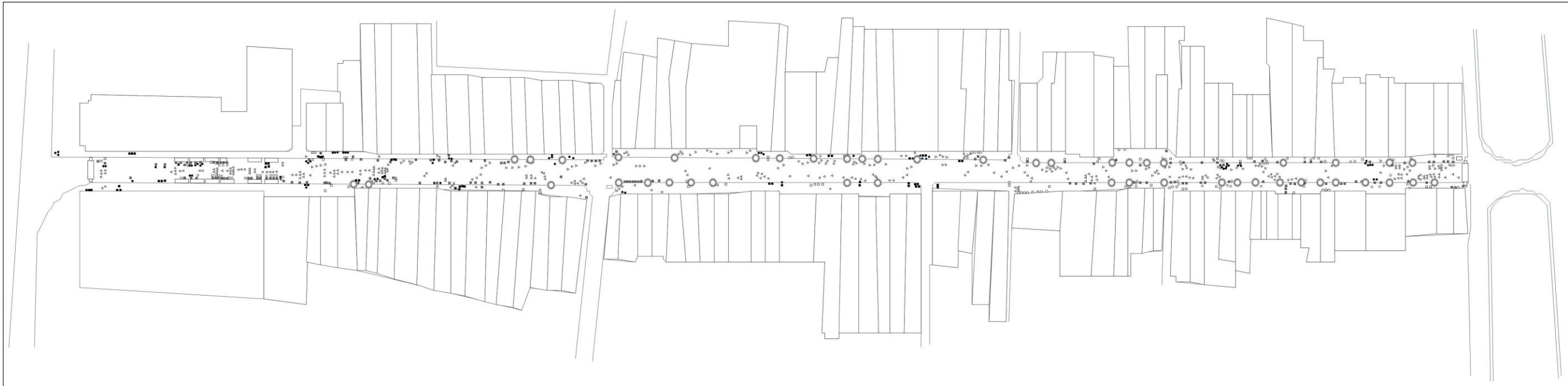
APPENDIX-1D: Behavioural Mapping Pasar Baru Street (Weekend Morning)
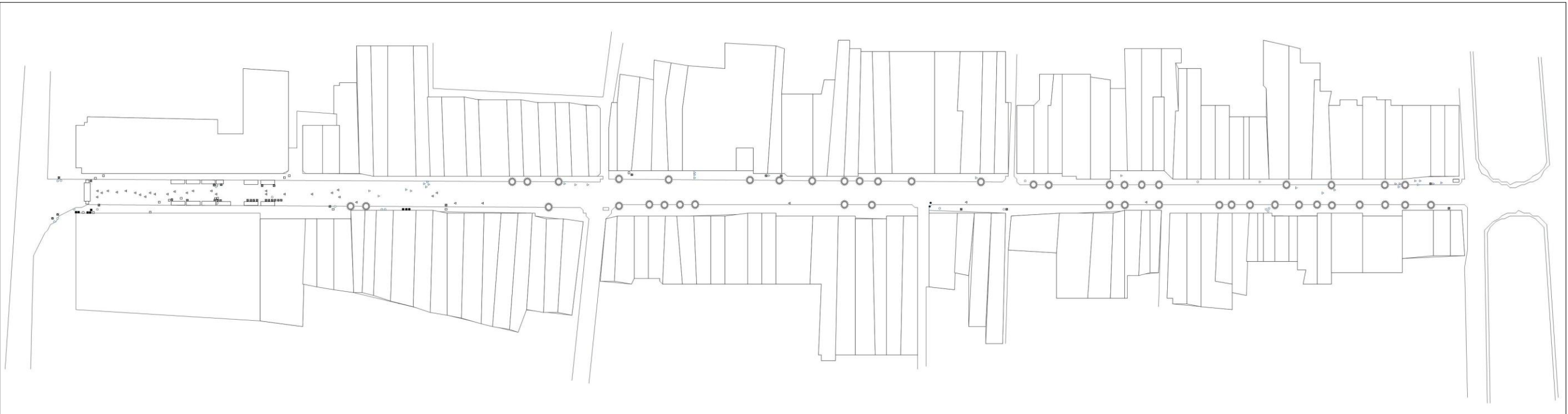
APPENDIX-1E: Behavioural Mapping Pasar Baru Street (Weekend Afternoon)

Pasar Baru Street, Weekend Time, 12-1 pm (noon time)

APPENDIX-1F: Behavioural Mapping Pasar Baru Street (Weekend Evening)
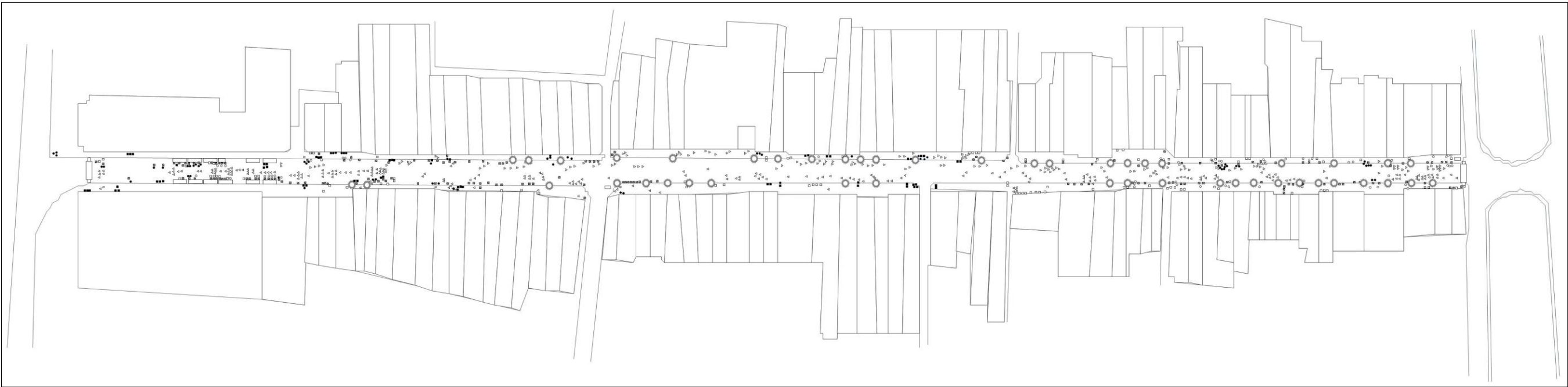
APPENDIX-2A: Behavioural Mapping Pecinan Street (Weekday Morning)
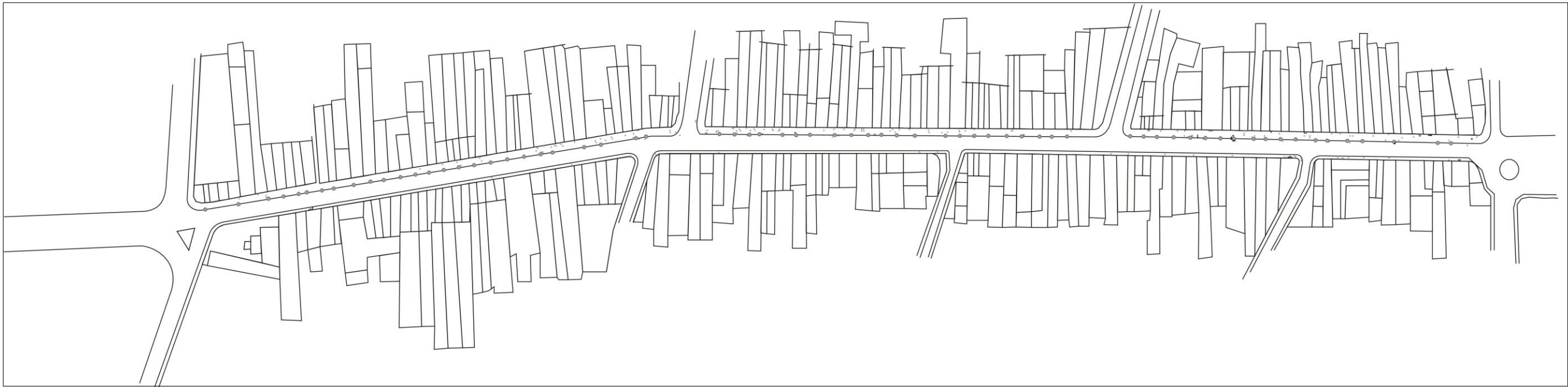
APPENDIX-2B: Behavioural Mapping Pecinan Street (Weekday Afternoon)
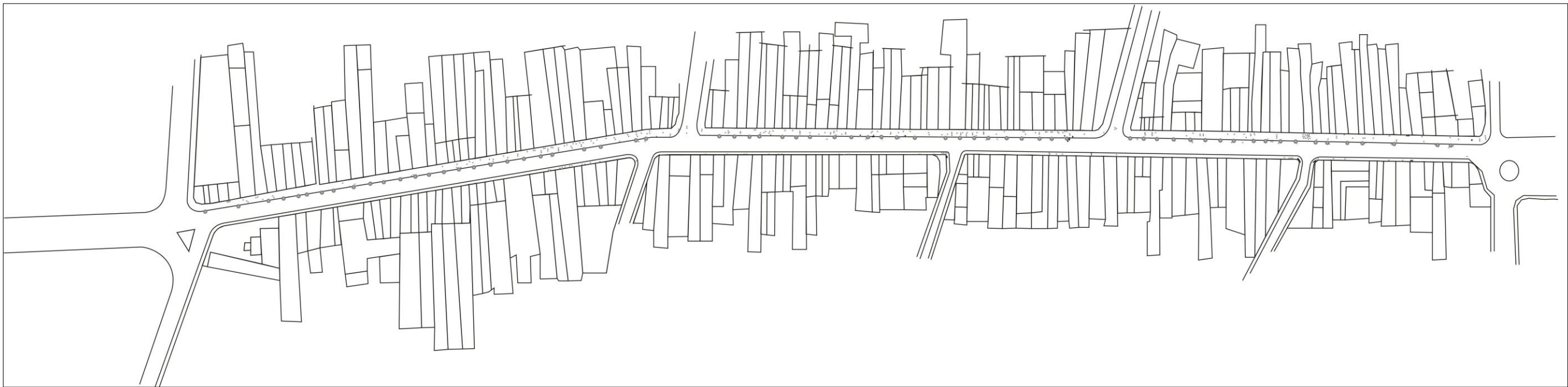
APPENDIX-2C: Behavioural Mapping Pecinan Street (Weekday Evening)
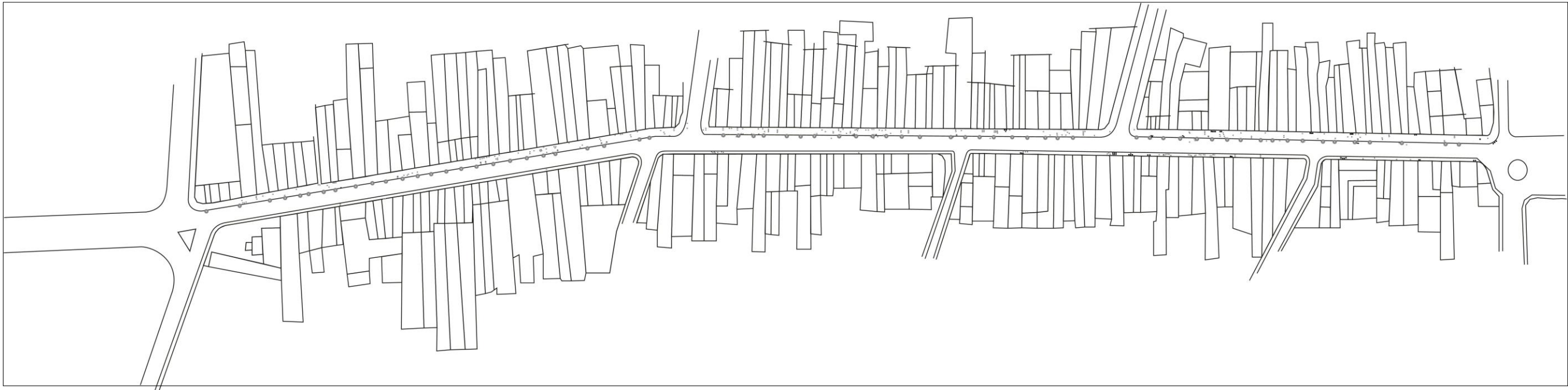
APPENDIX-2D: Behavioural Mapping Pecinan Street (Weekend Morning)
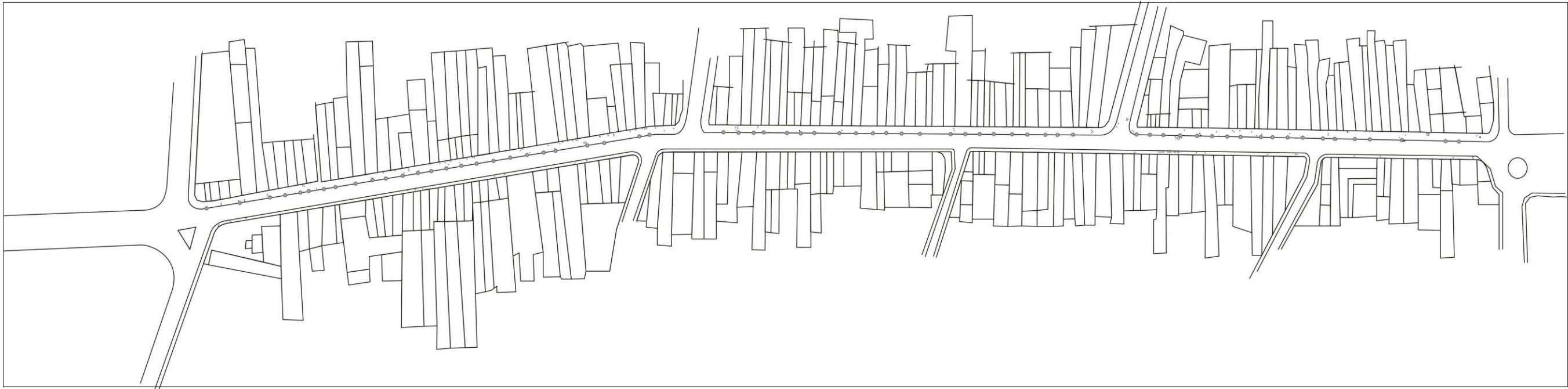
APPENDIX-2E: Behavioural Mapping Pecinan Street (Weekend Afternoon)
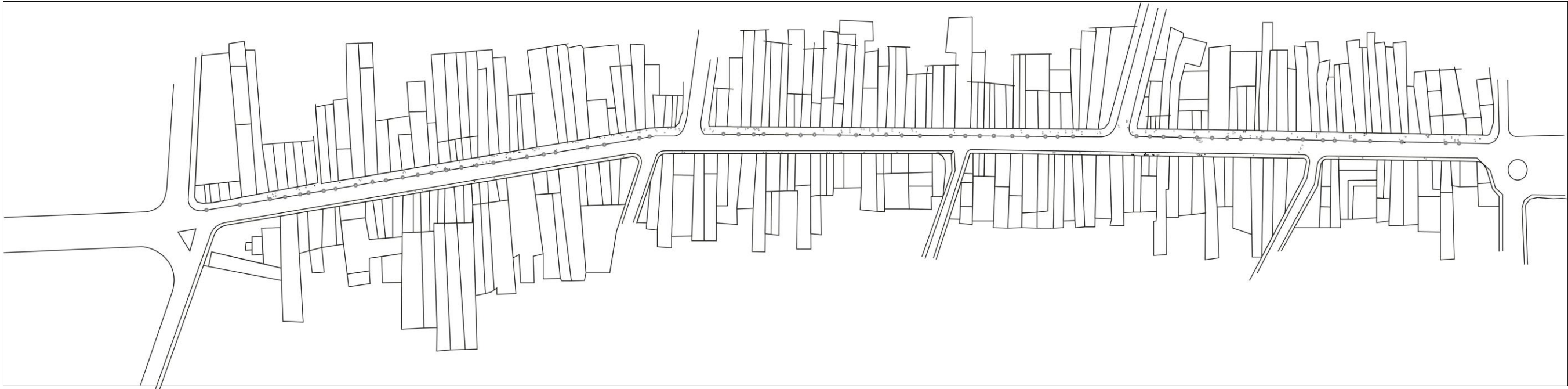
APPENDIX-2F: Behavioural Mapping Pecinan Street (Weekend Evening)
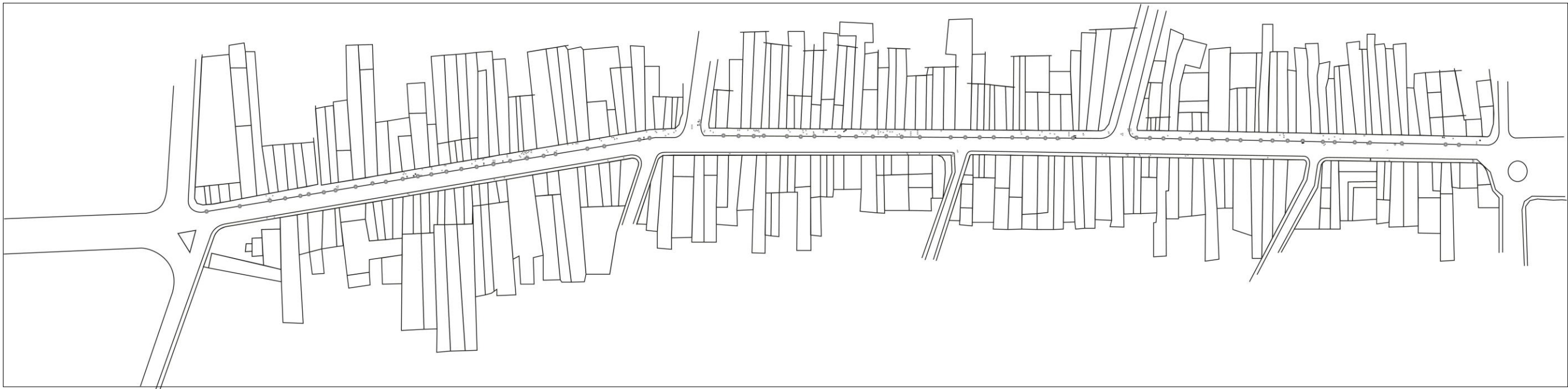
APPENDIX-3A: Behavioural Mapping Malioboro Street (Weekday Morning)
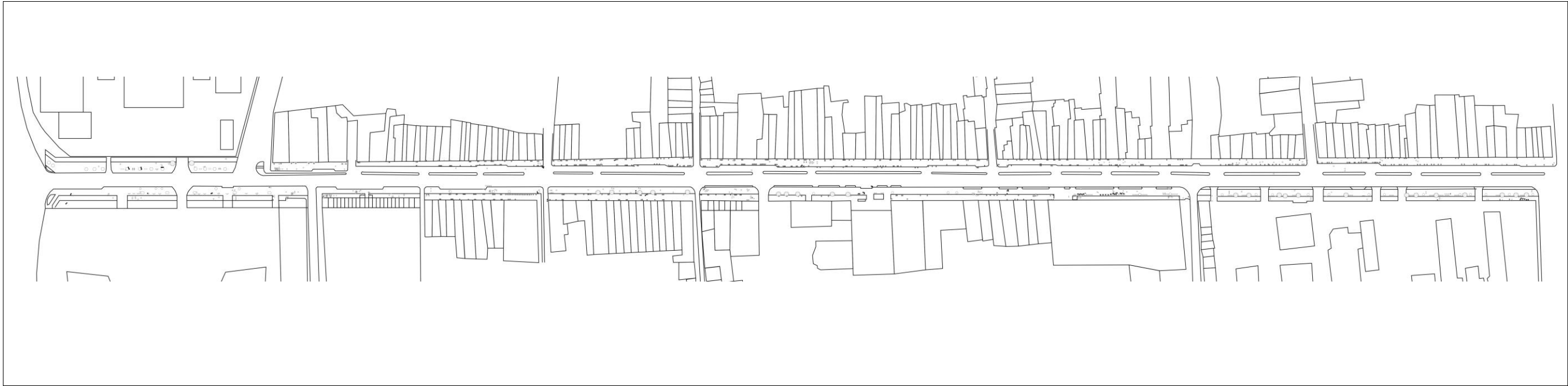
APPENDIX-3B: Behavioural Mapping Malioboro Street (Weekday Afternoon)
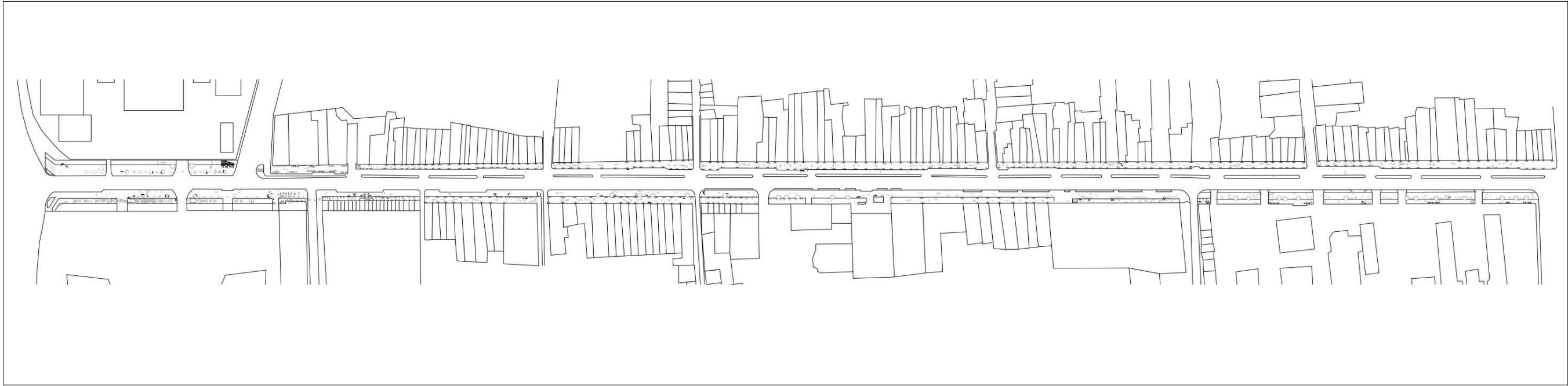
APPENDIX-3C: Behavioural Mapping Malioboro Street (Weekday Evening)
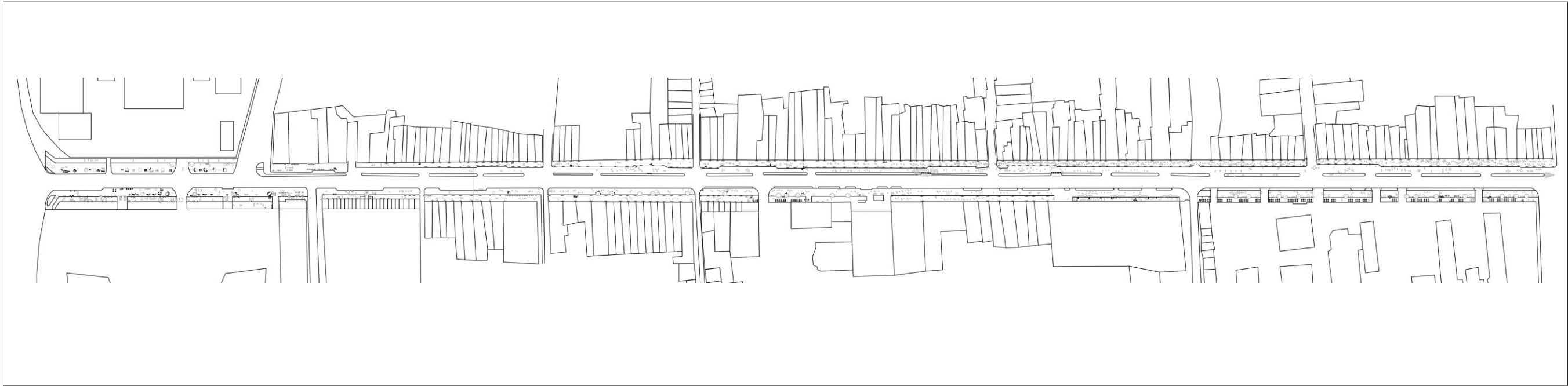
APPENDIX-3D: Behavioural Mapping Malioboro Street (Weekend Morning)
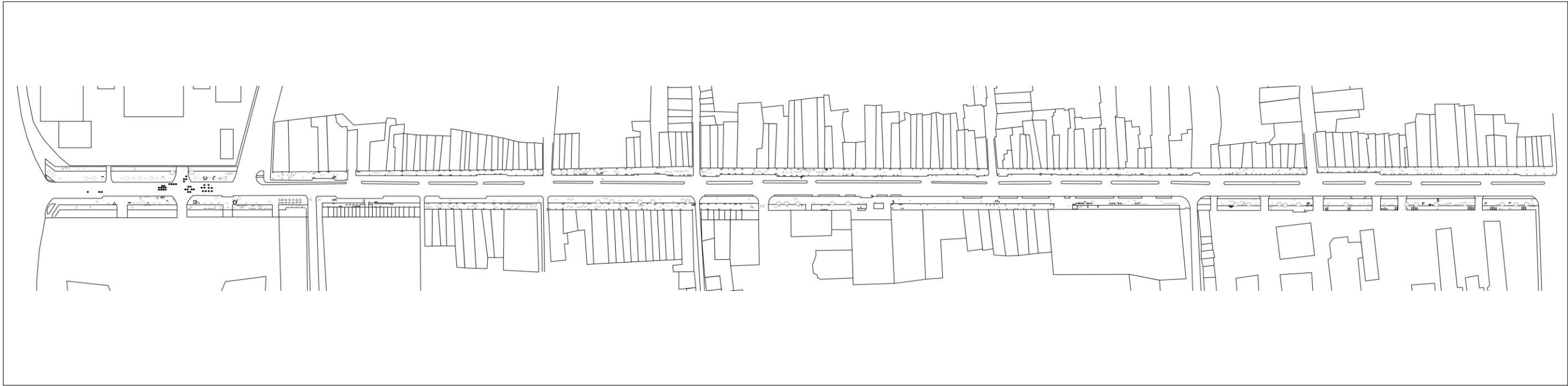
APPENDIX-3E: Behavioural Mapping Malioboro Street (Weekend Afternoon)
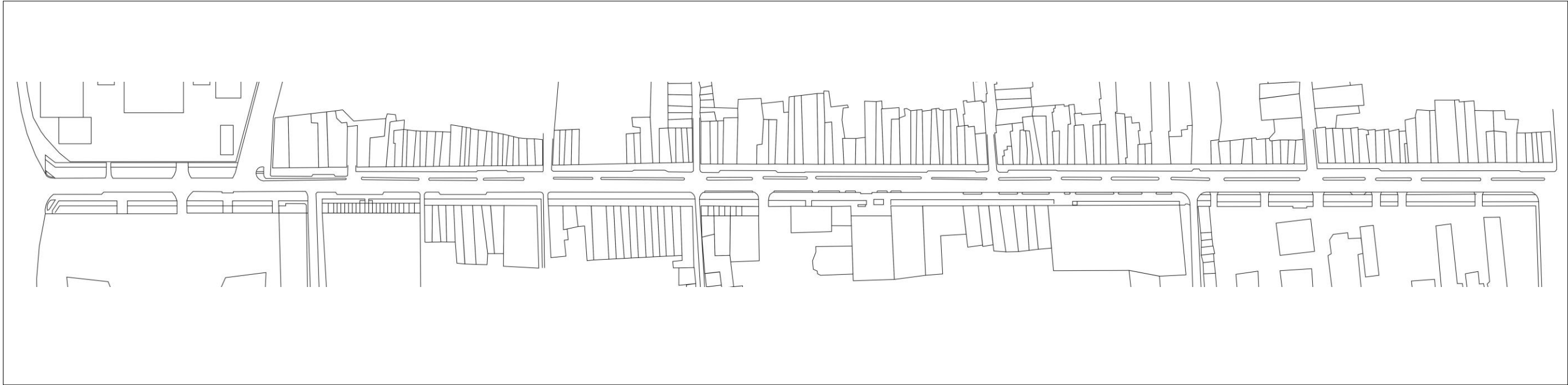
APPENDIX-3F: Behavioural Mapping Malioboro Street (Weekend Evening)
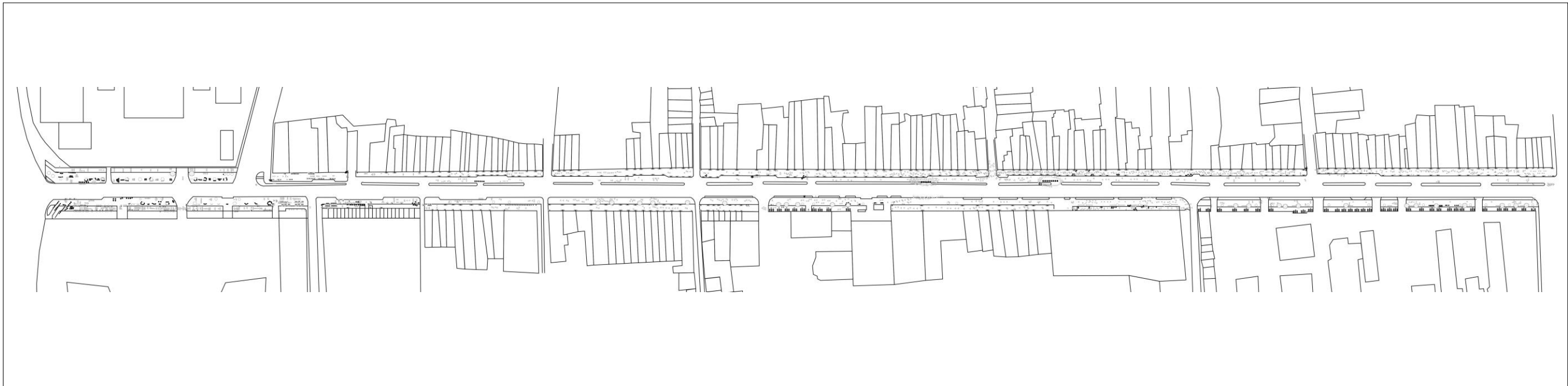
APPENDIX-4A: Pasar Baru Street's Serial View (West)

APPENDIX-5A: Pecinan Street's Serial View (West)

APPENDIX-5B: Pecinan Street's Serial View (East)

APPENDIX-6A: Malioboro

Street's Serial View (West)

APPENDIX-6A: Malioboro Street's Serial View (East)

APPENDIX-7: Field Work Cover Letter

The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Faculty of Engineering
Department of Architecture & Built Environment
University of Nottingham
University Park
Nottingham NG7 2RD
United Kingdom

Tel: 0044 115 951 4887
Email: tim.heath@nottingham.ac.uk

To whom it may concern

14th January 2014

Dear Sirs,

Re: Mrs Arif Budi Sholihah (ID 4183762) - PhD student at the University of Nottingham

I am writing to confirm that Miss Arif Budi Sholihah is a registered PhD student under my supervision at the University of Nottingham. She is in the second year of her PhD research and her research is on traditional Indonesian streets. She will be conducting case study research in Indonesia between January 2014 and May 2014 and I would be very pleased if you could provide some brief assistance with her work to enable her to successfully undertake her field work. Should you require any further information or have any questions then please do not hesitate to contact me.

Yours faithfully

Professor Tim Heath
Department of Architecture & Built Environment
Faculty of Engineering
University of Nottingham

APPENDIX-8: Ethical Approval

Faculty of Engineering: Process for approval of research study involving human participants

The University of Nottingham

Ethics Committee Reviewer Decision

This form must be completed by each reviewer. Each application will be reviewed by two members of the ethics committee. Reviews may be completed electronically and sent to the Faculty ethics administrator (Dina Martin) from a University of Nottingham email address, or may be completed in paper form and delivered to the Faculty of Engineering Research Office.

Applicant full name *ARIF BUDI SHOLIHAH* Application ID.................................

Reviewed by:

Name: *SARAH ATKINSON* Date ....

Signature (paper based only) *S. Atkinson* ....

☑ Approval awarded - no changes required

☐ Approval awarded - subject to required changes (see comments below)

☐ Approval pending - further information & resubmission required (see comments)

☐ Approval declined – reasons given below

Comments:

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Please note:
1. The approval only covers the participants and trials specified on the form and further approval must be requested for any repetition or extension to the investigation.
2. The approval covers the ethical requirements for the techniques and procedures described in the protocol but does not replace a safety or risk assessment.
3. Approval is not intended to convey any judgement on the quality of the research, experimental design or techniques.
4. Normally, all queries raised by reviewers should be addressed. In the case of conflicting or incomplete views, the ethics committee chair will review the comments and relay these to the applicant via email. All email correspondence related to the application must be copied to the Faculty research ethics administrator.

Any problems which arise during the course of the investigation must be reported to the Faculty Research Ethics Committee

The University of Nottingham

Ethics Committee Reviewer Decision

This form must be completed by each reviewer. Each application will be reviewed by two members of the ethics committee. Reviews may be completed electronically and sent to the Faculty ethics administrator (Dina Martin) from a University of Nottingham email address, or may be completed in paper form and delivered to the Faculty of Engineering Research Office.

Applicant full name ....Arif Budi Sholihah........................   Application ID..........2013/109 ....

Reviewed by:

Name: ....Jennifer Martin...Date ....23/8/13...

Signature (paper based only) ....

■ Approval awarded - no changes required

☐ Approval awarded - subject to required changes (see comments below)

☐ Approval pending - further information & resubmission required (see comments)

☐ Approval declined — reasons given below

Comments:

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Please note:
1. The approval only covers the participants and trials specified on the form and further approval must be requested for any repetition or extension to the investigation.
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Any problems which arise during the course of the investigation must be reported to the Faculty Research Ethics Committee

APPENDIX-9: Semi-Structured Interviews

In-depth Interview Sheet for Users (Shop Owner/Resident)

Type of User:	Form No.	:	
▪ Shop Owner/Resident	Date	:	
▪ Visitor	Time	:	
▪ Street Vendor	Location	:	

Respondent Identity

Gender	▪ Male	▪ Female
Age	▪ 21-30	▪ 31-40
	▪ 41 and above	
Occupation		
Place of Stay	▪ Within the street	▪ Around 1-5 km
	▪ Around 5-20 km	▪ Outside the city or the country

Building Inventory

Location/Address	:
Type of Building	:
Type of Merchandise(s)	:
Overall building condition	:

Semi structured questions

Quality of the Street: Physical Dimension

1. How long have you been here (living or running the shop)? …..years…..months
2. Do you and your family live in the same building as the shop? If yes, how you find it?
3. How do you see the existing physical quality of …Street? Is it considered as good quality or not, please describe?

The parameter of physical quality can be as follows:

Parameter	Sub-parameter
Physical Configuration: Street-spaces and Street-layer	Street scale and proportion
	Pavement quality (dimension, safety, accessibility, connectivity, facility, economy, identity)
Physical Configuration: Street-wall and Facade	Façade design
Physical and Environmental Comfort	Sitting spaces
	Five-foot way arcade
Natural Features Qualities	Green space and water areas
Visual Quality	Architectural Style
Legibility, imageability, and permeability of the street front	Active frontage
Street Amenities	Street furniture
	Lighting
Connectivity	Street Pattern
Variety of Uses	Land Use

4. Do you think physical quality of the street able to contribute to enhance its public life? If yes, in what form? How does it work?

5. What kind of public life which is the direct impact of the physical quality belongs to this street? Do you think it is important? Why?

Quality of the Street: Non-Physical Dimension

6. How do you see the existing non-physical quality of …Street? Is it considered as good quality or not, please describe?

The parameter of non-physical quality can be as follows:

Parameter	Sub-parameter
Sensory Qualities and Street Ambience	Sensory Qualities
	Street Ambience
Identity, Image, Meaning, and Symbol	Street Identity
	Street Image
	Meaning and Symbol
Activity and Liveability	Economic-based Informal Street Activities
	Social-based Informal Street Activities
	Cultural-based Informal Street Activities
	Pedestrian culture
Vibrancy and Vitality	Pedestrian Flows
Safety	

7. Do you think non-physical quality of the street able to contribute to enhance its public life? If yes, in what form? How does it work?

8. What kind of public life which is the direct impact of the non-physical quality belongs to this street? Do you think it is important? Why?

Street Image and Place Attachment

9. What first comes to your mind, what symbolises the word '…Street' for you? How would you broadly describe this street in a physical and non-physical sense?

10. Do you have any particular emotional feelings about the street? If yes, what are they, and what makes you feel that way?

11. Do you have any 'place attachment' to the some part of the street? If yes, why it happens?

12. Do you know the historical significance of this street in the context of the city? If yes, what is it? And Why?

13. Do you have opinions about the future of this street? What are your expectations regarding the quality of the streetscape?

14. What need to be improved in this street environment to make it more attractive and sociable to you?

APPENDIX-9: Interviewee List

No.	Interviewee	Group	Date/Time	Location
1	Monika	Visitor	2/2/2014/2-3pm	Malioboro Street
2	David	Visitor	26/3/2014/8-9pm	Malioboro Street
3	Florence	Visitor	26/3/2014/7-8pm	Malioboro Street
4	Bambang	Visitor	4/4/7-9 pm	Malioboro Street
5	Freeline Community	Visitor	4/10/8-10 am	Malioboro Street
6	Ismudiyanto	Owner of Terang Bulan Shop	5/4/2014/9-11am and 19/3/2014/1-3pm	Malioboro Street
7	Ayu (Yogya Sketcher Community)	Visitor	25/4/2014/10-11am	Malioboro Street
8	Mila	Street Vendor	24/3/2014/5-7pm	Malioboro Street
9	Rahayu	Street Vendor	19/5/2014/10-11am	Malioboro Street
10	Punto	Bappeda Prov DIY	11/3/2014/7-8pm	Malioboro Street
11	Nanik	Local Government (UPT Malioboro)	21/3/2014/10-12am	UPT Malioboro Office
12	N/A	Bappeda Prov DIY	1/4/2014/12am	Bappeda
13	Icha	Bappeda Prov DIY	1/4/2014/1pm	Bappeda
16	Woro Isti Palupi	Local government	20/3/2014/12-1pm	Pecinan Street
17	Lina	Visitor		Pecinan Street
18	Vina	Visitor		Pecinan Street
19	Arofah	Visitor		Pecinan Street
20	Farah	Visitor		Pecinan Street
21	Nana	Visitor		Pecinan Street
22	N/A	Shop Owner of Sanitair Shop		Pecinan Street
23	N/A	Street Vendor		Pecinan Street
24	N/A	Street Vendor		Pecinan Street
25	Wahyu Utami	Visitor	11/3/2014/1-3pm	Pecinan Street
26	Rocky	Local Government (Bappeda Magelang)		Karet
27	Marie	Shop owner		
28	Bagus Priyatna	Local government		Pecinan Street
29	N/A	Street Vendor		Pecinan Street
30	Ciptaning	Local government		Pecinan Street
31	Titin	Visitor	12/4/2014/12-1pm	Pasar Baru Street

32	Vita	Local government	12/4/2014/1-2pm	Pasar Baru Street
33	Tina	Local government	14/3/2014/5-6pm	Pasar Baru Street
34	Sandra	Local government	11/4/2014/2-3pm	Planning Office Jakarta Province
35	Merry	Local government	11/4/2014/1-2pm	Planning Office Jakarta Province
36	Desi	Local government	11/4/2014/3-4pm	Planning Office Jakarta Province
37	Sarah	Visitor	11/4/2014/4-4.30pm	Pasar Baru Street
38	N/A	Visitor	11/4/2014/4.30-5pm	Pasar Baru Street
39	Cliff	Shop owner of Saung Bambu Restaurant	13/4/2014/10-11am	Pasar Baru Street
40	Sandra	Hotel Manager	12/4/2014/2-3pm	Pasar Baru Street
41	Tante	Shop Owner	14/3/2014/11-12am	Pasar Baru Street
42	Pengurus Klenteng	Temple Manager	13/4/2014/7-8am	Pasar Baru Street
43	N/A	Street Vendor (watch)	14/3/2014/12-1pm	Pasar Baru Street
44	N/A	Street Vendor (glasses)	12/4/2014/7-8pm	Pasar Baru Street
45	N/A	Street Vendor (clothing)	12/4/2014/6-7pm	Pasar Baru Street

APPENDIX-11: Press Records in Relevance to the Study

Kota Yogyakarta

Sayembara Penataan Malioboro Capai 205 Pendaftar

Ivan Aditya | Selasa, 29 April 2014 | 20:54 WIB | Dibaca: 869 | Komentar: 0

Ilustrasi. (Foto : Dok)

10

Tweet

👍 0
Like

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in Share

YOGYA (KRjogja.com) - Sejak dibuka Kamis (27/03/2014) lalu hingga Selasa (29/04/2014), tercatat 205 pendaftar yang ikut serta dalam lomba penataan kawasan Malioboro sebagai salah satu ikon utama DIY. Rata-rata setiap hari terdapat 7 hingga 10 orang pendaftar masuk melalui situs www.sayembaramalioboro.com.

"Dari keseluruhan pendaftar tersebut sayangnya belum menyertakan unduhan proposal mereka yang masih kami tunggu hungga batas akhir pendaftaran pada 16 Mei 2014 mendatang," tutur Kepala Seksi Sarana Prasarana Cipta Karya Dinas Pekerjaan Umum, Perumahan dan ESDM (PUP-ESDM) DIY, Arief Azazie Zain kepada KRjogja.com.

Adapun rangkaian acara sayembara adalah pendaftaran dan pemasukan karya melalui website www.sayembaramalioboro.com pada 27 Maret - 16 Mei 2014, penjurian seleksi proposal karya mulai 17 Mei - 24 Mei 2014. Kemudian pengumuman tahap I dilakukan pada 26 Mei 2014 dan presentasi 5 peserta terbaik di Gedung Dinas Pariwisata pada sekaligus penetapan pemenang pada 31 Mei 2014. "Saat presentasi 5 karya terbaik masyarakat juga dilibatkan dan diundang sehingga publik bisa ikut menentukan yang terbaik nantinya," imbuh Arief.

Hasil sayembara ini nantinya diharapkan dapat mengakomodir berbagai aspek komprehensif diantaranya aspek sosial, aspek ekonomi, aspek budaya dan juga aspek keindahan Sebagai hadiah, panitia menyiapkan uang tunai total senilai Rp 270 juta yang akan diberikan bagi juara I (Rp 100 juta), II (Rp 70 juta) dan III (Rp 50 juta) serta Juara Harapan I (Rp 30 juta) dan II (Rp 20 juta). **(*-24)**

Dalem Kaum dan Cikapundung Timur Asyik untuk Nongkrong

| f Share | 🐦 Tweet | 📌 Pin it | g+ +1 |

👤 Ade Indra Cuparman, CikalNews | 🕐 Jumat, 24 April 2015 | 09:05:00 WIB

Pedistrian Dalem Kaum padah oleh warga yang menikmati suasana jelang puncak HUT KAA. (Foto : ADE/CikalNews)

Bandung – Pelaksanaan HUT KAA ke 60, Pemkot Bandung menyulap kawasan Jl. Dalem Kaum menjadi sebuah pedestrian yang enak untuk nongkrong dan berkumpulnya masyarakat. Selain di Jl. Dalem Kaum, pedistrian juga ada di Jl. Cikapundung Timur, di sana bahkan dilengkapi dengan air mancur.

Saat menjelang HUT KAA ke 60 yang jatuh Jumat (24/4/2015), pedestrian Dalem Kaum selain menjadi tempat nongkrong atau kongkow masyarakat kini menjadi tempat parkir kendaraan taktis TNI dan Polri. Adanya mobil unik yang jarang dilihat oleh masyarakat dimanfaatkan oleh mereka untuk berfoto selfie.

Pengakuan Dewi, warga Cibeureum, Bandung, nongkrong di kawasan Jl. Dalem Kaum saat ini lebih nyaman dan enak, apalagi kawasan ini sekarang lebih tertib dan bersih.

"Berbeda dengan Jl. Dalem Kaum dulu yang terlihat kumuh, kotor, dan penuh PKL. Sekarang lebih nyaman," akunya saat dijumpai di Jl. Dalem Kaum, Kota Bandung, Kamis (23/04/2015).

Setelah melihat ada deretan mobil Panser TNI dan kendaraan taktis polisi, para warga langsung mengabadikan momen tersebut dengan berfoto ria.

"Asyik aja buat foto-foto, soalnya di hari-hari biasa belum tentu bisa lihat mobil seperti ini," cetus Dewi.

Semenjak menjadi kawasan pedestrian rencananya Jl. Dalem Kaum dan Jl. Cikapundung Timur akan dikhususkan untuk para pejalan kaki. Jalan ini akan di tutup untuk kendaraan motor atau mobil. Kawasan pedestrian ini semakin indah saat PJU model klasik menghiasi jalan, begitu juga dengan kursi klasik bergaya Eropa dulu ikut melengkapi.(Ode)