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CROSSROADS

ASIAN STREETS IN THE DYNAMICS OF CHANGE

Symposium proceedings

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CROSSROADS: ASIAN STREETS IN THE DYNAMICS OF CHANGE
GASS2016 GREAT ASIAN STREETS SYMPOSIUM

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CROSSROADS:
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Witnessing the unprecedented urban agglomerations in human history, most Asian cities are undergoing rapid and tremendous changes. On the positive side, urbanisation as the key engine of growth has provided hundreds of millions of people with higher quality resources, infrastructure, services and a better living environment. But nevertheless, unlike the Western cities that urbanised much earlier and over a long period of time, the massive rural-urban migration in Asia is taking place only within a few decades and in general at remarkably high environmental and social costs. This leaves many cities with a number of acute problems and challenges to be addressed on the one hand and inadequate capacities to cope with them in such a short period on the other.

Street as both urban form and institution of human movement, economic transaction, social intercourse and political contestation arguably stands at the core of urbanisation in Asia. It offers a stage and provides a backdrop for the workings of the city in this process, and as an outcome of an increasingly complex urban pluralism also registers and embodies in its changing architecture many conflicts and compromises. At the same time, street is an essential constituent to urban transformation and with its incremental adjustments or wholesale renewal can be a catalyst for continuing cultural identity, fostering social and political progress, improving wellbeing and liveability, enhancing urban governance, etc. Therefore, what roles that street could and should play to cope with the pressing challenges in the rapid and intense urbanisation process is imperative for achieving a sustainable urban future in Asia.

Asian streets are therefore at a crossroads. The ways in which we perceive and use, plan and build our streets need to be re-visited, re-considered and re-developed. Established norms, conceptions and systems need to be questioned and reflected. And new visions of streets in future urbanism also need to be contemplated and developed. Lying at the crossroads of many disciplines, streets is arguably a field of application rather than a discipline in its own right. Hence, to tackle the above-mentioned challenges for street requires investigations from multiple perspectives and it will also benefit from inter- and transdisciplinary collaborations. The following questions can provide a fruitful and inspiring starting point:

1. In the context of accelerating societal transformation in Asian cities, how can we empower civic participation and stakeholdership in the building of streets and the making of more diversified and inclusive cities to achieve sustainable communities and social sustainability?

2. What are the ethical dimensions of spatial conflicts and contestations centred on the street as a spatial and political form? In which ways can ethics and moral values contribute to envisioning street as the centrepiece of an alternative urban future?

3. What are the roles and potentials of streets in achieving overall physical, mental and social well-being in the context of increasingly ageing urban population, and actively promoting healthy, ageing-friendly and socially inclusive urban living?

4. How can we manipulate existing and/or create new built form of streets that contributes to the making of convivial urban spaces and achieving enhanced liveability and urbanity in the city?

5. How can we create a "middle platform" where community participation can be strategically aligned with the public policies, e.g. urban planning, and private investments for a more holistic, realistic and inclusive urban conservation?

6. How to manage "authenticity" of significant tangible and intangible heritages in our changing city and society?

Taking places in Singapore, a crossroad itself between the West and East, this international conference aims to respond to the challenges by bringing together academics, practitioners and students to share and discuss their views and visions. We encourage participants to explore the above questions and/or contribute with their own perspectives in the quest for unlocking the potentials of streets for a sustainable urban future in Asia.

STREET AND COMMUNITY

Community, Empowerment, Participation, Process, Social sustainability

Many cities in Asia are at a critical crossroads of societal transformation. There is an awakened desire for a new paradigm in society based on an alternative and more sustainable lifestyle, which contributed to the increased interest in local communities and social sustainability in recent years. Social sustainability is closely related to the concept of social capital which emphasizes the importance of strengthening civic participation and localized empowerment. Participatory planning is widely considered as a key means for developing social capital in cities and supporting long term social sustainability, which can enrich sense of belonging and sense of community with direct benefits for societal well-being. However approaching community in the context of a more diversified and politically contested urban setting is challenging, with the difficulty of ensuring inclusivity and the danger of relying on the nostalgic image of a community, which blunts its progressive potential for social change.

In the face of these challenges, what are the possibilities that urban streets can provide as a locus of sustainable communities and as a catalyst for social progress? Designing and planning streets is as much about the process as it is about the end result. It is not merely the ultimate spatial form, but also the social processes involved in its production that are equally important. This is in line with approaching community and social sustainability as a dynamic, process-oriented concept. This view is relevant because it shifts the focus from any 'immediate result' or ideal 'image' of a community to the process of building social capital for long term social sustainability.

Approaching community-building and social sustainability as an evolving process, this panel welcomes contributions that draw attention to the possibilities and challenges that Asian cities face in the context of accelerating social change, seeking to implement mechanisms of empowerment for a more participatory process with regards to building streets and cities. Innovative approaches, principles, methods of community-based participation and design, and comparative analysis of different contexts, drivers and various forms of public involvement in building urban streets as consequences of different socio-political conditions are of particular interest of this panel.

SPATIAL BEHAVIOR IN RIPARIAN SETTLEMENT OF MUSI RIVER (COMPARATIVE BEHAVIOR AT OLD KAMPOONG, COLONIAL SETTLEMENTS AND MODERN HOUSING)

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Abstract

The development of Palembang can not be separated from Musi River as the main infrastructure in the past time. Therefore, many settlements in the past located at riparian of Musi River. In colonial era, any settlements were also built in river bank. Today, some modern housing were also built in riparian. The similarity of settlements location of which is become research question. Is there any difference in spatial behavior in the past settlements (old kampoong and colonial settlements) with modern housing? What are the factors that affect spatial behavior in that open space at those settlements?

This research using mix method. In quantitative approach using axial map analysis. In qualitative approach using observation behavioral in open space. The mix method goal is to obtain comprehensive picture about what people do in open space at their settlements.

The research result is that 'streets' become an active space in the settlements area. Square open plan can not become active open space, because of people's behavior inside of that square. This situation can not be read in simulation methods, but only in observation behavioral of people. Spatial behavior at 'streets' allegedly due to climate factors of Palembang. Spatial behavior of people at settlements occurred between houses because of the shade.

Introduction

Palembang is also known as a waterfront city because Musi River divides Palembang into two parts: Ilir (North part) and Ulu (South part). This geographic situation makes many settlements built in riparian[1] of Musi River.

Annotation	
Old Kampoong	
	Kampung 3-4 Ulu
	Kampung Arab 10 Ulu
Colonial	
	Komperta Bagus Kuning
	Komperta Plaju
Modern Housing	
	OPI
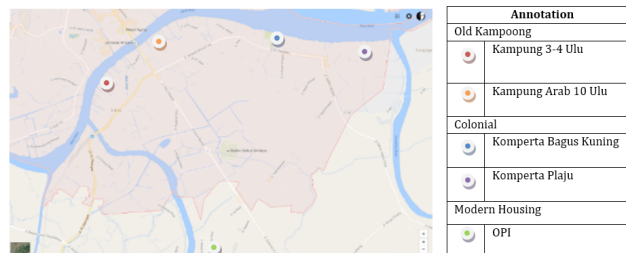
Figure 1. Research Area

This research compares 3 different characteristic settlements: old kampoongs, colonial settlements and modern housing. All those settlements located in riparian of Musi rivers.

The background knowledge of this research based on Van de Wal studies in Surabaya. He said that there were the differences between the concepts of open space in Asian and European concepts. Wal said that Asian concepts of open space is a pasive space, which means that an open space is as a result of mass formation (space between building) and the European concepts is an active space, because space as a goal of mass formation. (Zahnd, 1999, p. 75). If Wal's goal is to obtain the differences of concepts of open space in Asian or European perspective, this research goal is to obtain the similarity of spatial behavior at open space.

This research using mix method based on the Hayley Hung workshop (Hung, Odobez, & Gavrila, 2011). Hung looks that in past time open space analysis focused on traditional computer vision problems to detect and tracking object, research on human behavior recognition have tended to work on predefined simple activities (Hung, Odobez, & Gavrila, 2011). Based on Hung perspective, this research performing the simulation with software computer and spatial behavior observation.

2. Research Theory, Methods and Case Studies

2.1. Open Space and Human Behavioral

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1. Riparian: relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater <riparian trees> (source: http://www.merriam-webster.com/dictionary/riparian).

Open space is any open piece of land that is undeveloped (has no buildings or other built structures) and is accessible to the public. Open space can include: (a)Green space (land that is partly or completely covered with grass, trees, shrubs, or other vegetation). Green space includes parks, community gardens, and cemeteries; (b)Schoolyards; (c)Playgrounds; (d) Public seating areas; (e)Public plazas; (f)Vacant lots[2]. Another definition called 'void space'. Lee said that void structures can be divided into three categories: void structure in nature, void structure in human settlements, and the movement pattern of people. These undefined formal relationships between the void structures - the void created by the topography, human settlements, movement pattern of people and architectural elements - are the major consideration in defining architectural configuration. By relating these voids, both of physical and psychological boundaries are eliminated, and the architecture becomes the connector between nature and people. (Lee, 2002). There are many studied of human interaction in open space. People's relationship with the open space is different, based on same factors such as socio-economic, gender, type of activities and park facilities. (Omar, Ibrahim , & Nik Mohammad , 2015). Understanding of the space user's needs and interests, the social system and the cultural context, as well as the values and symbolism of the public open spaces of the residential building blocks are taken as the starting points for the transformation of space. (Vujadinovic, Vol.14, No.1, 2016)

The 'open/void space' has physical aspects and human aspects. This research has purpose to understand that 'space' based on that both aspects and also the relationship between physically of space and human behavior at that space. What is the element that influence human behavior at that space?

2.2. Mix Method

The purpose of this research is to looking for the understanding of open space with two aspects: physic and human behavior, it causes the required mix method to analyze. Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems that either approach alone. (Creswell & Clark, 2007, p. 5).

2.2.1. Space Syntax Analysis (Quantitative Approach)
Quantitative research is suitable to explain some phenomena (Sukamolson, 2010). A quantitative approach is one in which the investigator primarily uses postpositivist claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories), employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data (Cresswell, 2013, p. 18).

In this research using space syntax methods. The theory of space syntax deals with the relationship between structure and society in terms of urban and architectural production of space. The understanding of this theory made it possible to determine the basic analytical research apparatus of the study on neighbourhood public spaces use in the form of key related concepts: spatial practice, everyday life, routinization, meanings, co-presence, interaction, configuration and space appropriation. The theory deals with the relationship between primarily pedestrian movement and configuration of urban space. (Vujadinovic, Vol.14, No.1, 2016).
For analysing, this research use 2 of 4 technics of space syntax analysis. First, the axial map is a graphical representation of the possible movement directions through a public open space using the straight lines that indicate the direct accessibility and visibility. The primary value measured by the space syntax technique of axial maps is the depth of configuration and an integrative value of any unit space or system. Second, the convex map presents the spatial forms defined by the built structure, constructed so that the imaginary straight line could be drawn from any point to any other point in the space without going outside the boundary of the space. While the axial lines let the strangers in the spatial system, convex spaces are organized as the belonging to the residents of those parts of the urban system (Vujadinovic, Vol.14, No.1, 2016).

2.2.2. Behavioral Observation (Qualitative Approach)
Second approach use behavioral observation, which that method is qualitative approach. Participant observation is a qualitative method with roots in traditional ethnographic research, whose objective is to help researchers learn the perspectives held by study populations. As qualitative researchers, we presume that there will be multiple perspectives within any given community. We are interested both in knowing what those diverse perspectives are and in understanding the interplay among them[3]. Qualitative research is a form of inquiry that analyzes information conveyed through language and behavior in natural settings. It is used to capture expressive information not conveyed in quantitative data about beliefs, values, feelings, and motivations that underlie behaviors. (Berkwits & Inui, 1998).

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2. https://www3.epa.gov/region1/eco/uep/openspace.html

3. https://assessment.trinity.duke.edu/documents/ParticipantObservationField-Guide.pdf

This observation has correlation with environment condition. Jan Gehl said that there are relation between design and activities. Gehl agrees that with certain regional, climatic and societal restrictions, the urban design may influence the number of public space users, the activities types and their duration in particular space. (Vujadinovic, Vol.14, No.1, 2016)

2.3. Case Studies

Palembang is one of the oldest city in Indonesia and located in Musi riverbank. Darjosanto said that rapid city development has changed urban facade especially at the riverbank area. History noted that people had chosen to live near the riverbank in order to fulfil their daily needs in water supply, transportation, and working. As described by Norberg-Schulz (1996), the riverbank area plays important role as urban infrastructure and also a meeting place among people. Riverbank study always becomes an interesting topic of research since there is a rich phenomenon from the physical and non-physical aspect (related to social-culture). Lots of people utilize riverbank as social space. This space manifests in a transition space which means space between building and the river. Riverbank in suburb area is facing problems related to the river maintenance, flood preventing, and unorganized transition space along the river. (Darjosanjoto & Nugroho, Vol. 3 No. 4 April 2015).

2.3.1. Old Kampoong

This research using two old Kampoongs as case studies. These Kampoongs are located in riparian of Musi River. One Kampoong is called as Kampung 3-4 Ulu because located in kelurahan 3-4 Ulu. Another old Kampoong is called as Kampung Arab 10 Ulu because most citizens of 10 Ulu are descendants of Arab (Yaman).

Table 1 Old Kampoong Location

3 – 4 Ulu	10 Ulu
Location and Surrounding	Location and Surrounding
Detail Location	Detail Location

2.3.2. Colonial Settlements

In this research, Colonial settlements are cluster areas of Pertamina. The first cluster is called as Komperta Bagus Kuning. The differences between Komperta Plaju and Komperta Bagus Kuning are that Komperta Bagus Kuning has residential only while Komperta Plaju beside residential, it also has oil. The other cluster is called as refinery Komperta (kompleks perumahan) Plaju. This cluster was built by Shell company in 1830[4].

2.3.3. Modern Housing

The housing have been developed since 1997. This housing is equipped with artificial lake, waterboom and modern shopping center.

Table 2. Colonial Settlement Location
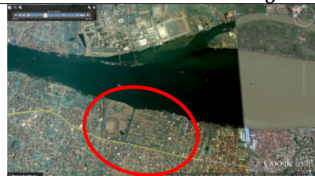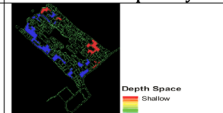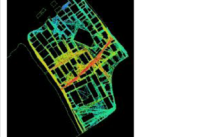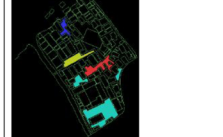
Komperta Bagus Kuning	Komperta Plaju
Location and Surrounding	Location and Surrounding
Detail Location	Detail Location

Table 3. Modern Housing Location

Location and Surronding	Detail Location

3. Analysis

3.1. Space Syntax Analysis

Location	Axial Map Analysis	Convex Map Analysis
3-4 ulu		
10 Ulu		

The movement at Kampoong is at narrow street between buildings. (see: axial map) Open space at Kampong is 'slim space' and dominated by deep space (see: convex map analysis).

4. http://www.palembang-tourism.com/destinasi-346-kompleks-pertamina-ko-ta-palembang.html).

Komperta Plaju		
Komperta Bagus Kuning		
Grid patterns at Colonial settlements make these settlements have strong connectivity between space. Open space in this settlement is larger than at Kampoong. Especially at Komperta Bagus Kuning which has connectivity and integration between 'inner' open space and riparian area.		
OPI		
This settlement has a largest open space compare with the other settlements, but that open space located in periphery of those settlements. In inner settlement has a narrow streets. These settlements have a grid pattern.		

From quantitative approach with space syntax method above, we can find three configuration in three different areas:

1. At Kampoong, we can find narrow streets as open space.

2. At colonial settlements with grid pattern we can find a larger open space and strong connection between each other. At Komperta Bagus Kuning, inner open space (in settlements) has a strong connection with riparian area. These settlements are a good example for riparian settlements, which have a good relationship between housing – open space and riverbank.

3. We can find a largest open space at modern housing, but located in periphery of complex. In inner settlements we can see narrow streets and grid patterns of housing.

This charateristic of spatial configuration also can be read as the differences of three type of riparian settlements in Palembang. It's about physical aspect. How about human who dwell at that settlements?

3.2. Behavior Observation Analysis

In this analysis, observation performed in 4 different days: 2 days on weekday and 2 days on weekend. Each day performed observation in three different times: morning, daylight, and afternoon. The table below is a recap of all observation.

Table 5. Recap of Behavior Observation

10 Ulu	
Human behavior in Kampoong dominant located at the streets. If there were any activities at open space, it would be carried on under the shadow of the building. Open space in Kampoong will be used during the afternoon.	
Komperta Plaju	
Komperta Bagus Kuning	
In colonial settlements where have a lot of large open space, the human activities performed in morning and in afternoon. In daytime, activities performed under the trees or under the shadow of the building.	
OPI	
This modern housing has open space with artificial lake. Activities on the bank of that lake occured in afternoon. At inner of housing, the activies in daytime occured under the shadow of trees or buildings. We also have activities in the middle of the street used a tent and blocked the street. This is for a wedding reception, and occured on the weekend.	

4. Discussion

This part wants to compare and analysed the result of both of approach and discussion. In quantitative approach we can see the three characteristics of spatial configuration. We can have a street as open space at Kampoong and inner modern housing. At colonial settlements, we find a large open space as a park. However, in observation method, we can see that human activities performed at under the trees or under

the shadow of the building. Why is open space as park not acknowledged as active open space for residents of colonial settlement? Why did in modern housing (OPI kompleks) still use a street as active open space?

These questions has been answered by Katzchner. He said that people's behavior is very much dependent on the thermal outside conditions, but is influence from the expectation of weather and the activities why open spaces are used (Katzschner, 2006). Setyowati and friends (Setyowati, Harani, & Falah, 2013), who did research in Semarang – Indonesia, also said that:

• Street pedestrian and other pedestrians which are unsheltered kinds usually take uncomfort conditions because of the unfriendly weather. They exposure not only to the high radiation but also to the very hot temperature.

• A comfortable pedestrian's design should be able to anticipate the negative impacts of local climate, such as heat, humidity, rainfall and wind speed.

Another side, park as open space at Kampoong still be needed for a social relationship, but we need sheltering for that park for con.

Figure 2. Sheltering At Open Space at Kampoong

Park is also needed at kampoong for economic reason or daily activities. There are a lot of economic activities happen at open space, although only narrow open space.

Figure 3. Economic And Daily Activities At Kampoong

In this research also found that dominant activities occured at a street, same things occurred at modern settlements or colonial settlements.

Figure 4. Marriage Ceremony Activities at Street in Modern Housing (left) and Colonial Settlement (right)

5. Conclusion

The results of this research are as follows:

1. There are spatial configuration defferences between kampoong, colonial and modern housing. There are three characteristics spatial configuration.
   a. Streets become an active open space at Kampoong.
   b. Grid pattern is used at colonial settlement. Open space has a strong connectivity between each open space.
   c. Large open space located at periphery side in modern housing. At inner housing, streets still become active open space.

2. The main factor which affected spatial behavior in open space is tropical climate. Most activities in open space occured under the shadow (trees or buildings). Activities in the large open space (like parks) only happen in the afternoon. In Kampoong, open spaces become an economic spaces.

The other result can take is in Palembang cases, streets are acknowledged as active open space, although the people no longer reside in the kampoong or the neighborhood that have a large open space.

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GREAT ASIAN STREETS SYMPOSIUM

The Great Asian Street Symposium (GASS) was initiated in 2001 at the Department of Architecture, School of Design and Environment, National University of Singapore (NUS), in response to the long-standing lack of truly Asian perspectives in the literature and research on Asian cities. GASS aimed to establish an Asian-rooted center of excellence to foster exchange and communication of ideas and studies within this field.

Over the past 15 years, GASS has successfully shared and integrated cutting-edge debates and discussions on many problems and challenges confronting Asian cities, such as traffic congestion, air pollution, social segregation, environmental degradation, and slum proliferation. On this basis, the GASS community has also created a significant knowledge base with exemplary policies and design practices that effectively addressed the above-mentioned issues and played an important role as a catalyst for constructive and creative thinking about Asian cities in the 21st century.

The first symposium, held on 18 and 19 January 2001, provided an engaging discussion platform for urban researchers and professionals committing to the study of streets and public spaces in Asia. In the following year, the 2nd GASS brought together a greater number of participants with high-quality papers and cutting-edge discussion. By then, the Great Asian Streets Symposium had become popular as a veritable public space and forum for studies of Asian cities. Selected papers from the first and second symposiums were published as an edited volume.

The 3rd GASS took place in December 2004 with an expanded theme. In this third gathering, the GASS hosted more than 100 participants from all over of the world, including both academics and practitioners, to share and exchange their works and ideas. Together with the 4th, 5th and 6th GASS that were held in 2006, 2008 and 2014 respectively, all these gatherings tackled a broad range of issues on Asian streets and public spaces and explored extensively the future visions, design ideas, and planning strategies for Asian cities in a new era.

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