Extending Kevin Lynch’s concept of imageability in third space reading; case study of Kampungs, Surabaya–Indonesia

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Abstract
The aim of this article is to extend Kevin Lynch’s theory in the ‘Image of the City’ (1960) by adding ‘meaning’ to the urban spaces observation because Lynch focused on the legibility factor only. The ‘meaning’ observation in this article is through the reading of space as ‘third space’ creation given by Lefebvre, Soja and Bhabha. The understanding of ‘third space’ (include the first-second spaces) gives a deeper understanding of the urban areas especially for urban areas that bear specific social condition of cultural hybridization. The understanding does not only read the physical layer, but also cultural and historical layers. This article is based on a study in kampungs (urban village) in Surabaya, Indonesia, with specific respondents of young adults aged 20-25 years old. This study shows that by adding ‘meaning’ to the urban elements identification of Lynch’s especially in the view of third space reading, the result shows that elements related to the social construction within the place is the most crucial elements rather than elements with strong in legibility.

Keywords
Imageability, Kampung, Place-meaning, Third space.
1. Introduction
The theory of Imageability from Kevin Lynch (1960) is still discussed and applied because it widened the scope of urban design and planning practice by considering qualities of main urban elements that are paths, nodes, edges, landmarks and districts. This article aims to extend Lynch’s theory of imageability that put emphasis on the component of ‘identity’ and ‘structure’ of the urban elements as two important factors in affecting environmental image, before ‘meaning’. Lynch put less emphasis on the factor of ‘meaning’ because it bears an un-fixed and relatively definitions based on the reader’s categorization in society and culture.

The ‘meaning’ observation in this article is through the reading of space as ‘third space’ creation. Third space is a symbolic space that represents a crisis in identity triggered by social discrimination issues. The case study of kampungs is affected by the issue of unjust situation of the social and physical stratification of the city. The main argument in highlighting ‘meaning’ is on the perspective that human’s social life in a place is the main factor of urban space quality that develops meaning of place and urban elements. It is especially for urban setting that experience dynamic changing in terms of space, time and society or is read as ‘third space’, and has low in legibility/visibility factor.

The article is based on a study in kampungs (urban village) in Surabaya, Indonesia, with specific respondents of young adults aged 20-25 years old. The study explores the urban elements that are perceived and conceived by the respondents through Lynch’s method and a supplementary approach of socio-anthropological views (to explore meaning). The applied techniques are: mental map making, interviews, and an archival study.

2. Kevin Lynch’s theory of imageability
Lynch’s theory of imageability is discussing the quality of cities according to the legibility factor of the elements that are perceived by the observers. The term ‘visible’, which he calls as ‘legible’, is a visual quality that can be understood through studying mental images as a result of people’s memories and meanings (Lynch 1960). The urban elements are read or analyzed into three categories: identity, structure, and meaning. His study focuses on the two most communicable dimension of the conversation of observer and environment, which are identity and structure. Identity means a distinction from other objects; structure means a relationship to larger pattern of other elements, and meaning means a practical and emotional value for the observer. It requires first the identification of the elements from others, second the relationship to others, and the last is its meaning. The first and second are the most legible/visible of the physical elements in cities, while the third is very relative in cultures.

Lynch highlights the five major elements in cities that enhance the imageability, which are paths, edges, districts, nodes, and landmarks (Lynch 1960). Paths; it is the most legible element in the city image. The observer walks along the linear form, such as streets, walkways, canals or railroads. Observers experience the city while moving through it. The path element creates a relation arrangement and relation among other elements. Edges; these create a boundary between two or more close regions or districts, linear breaks in continuity. It could be shores, railroad cuts, and walls. The element is not as strong as paths, but for observers it is an important character in organizing features. Districts are groups of urban landscapes that have a similar or common character, which observers could mentally experience ‘inside of’. The observer always identifies from the inside with exterior reference from the outside. Nodes are points; they can be an intersections or junctions between paths where observers can enter the points, for example an enclosed square. It is a break of movement transportation. Landmarks are points of reference that simply defined a physical object: signs, buildings, mountains, or shops. Some elements can be seen at a distance, but some are very simple objects that are familiar to the observers.

These elements must be patterned together as nets of paths, clusters of
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landmarks, or mosaics of districts with sometimes overlapped and interrelated elements. Each element is only a raw material of a city form. In the urban context, all elements operate together. Images may differ from time to time, season-to-season and day-to-day.

Lynch’s theory is based on his research in three cities in the USA: Boston, Jersey and Los Angeles, a central area of approximately 1.5 by 2.5 miles was studied in each case. He chose Boston because of its vivid form, Jersey because of its formlessness, and LA because of its relatively new city grid pattern. Lynch’s methods included cognitive mapping, in-depth oral interviews, travel maps, direct observations, field reconnaissance walks, random pedestrian interviews, aerial and ground-level photography and synthesis maps (Lynch 2007). From these diverse methods, Lynch succeeded in identifying internal consistency from a relatively small sample of interviewees (30 people for Boston, 15 for each Jersey and Los Angeles).

Instead of the robust character of his theory in imageability that is still discussed until today, Lynch on his later study and writings reflects his self-critique to his own theory particularly in meaning development that is culturally based. Generally, Lynch’s main focus of all his study and writings are to argue the importance of sense of place in people’s life; and to highlight that urban design is not just about physical arrangements to satisfy today’s needs, but also as a fundamental human values and rights such as justice, freedom, control, and creativity (Lynch 1990). He defines ‘meaning’ on his later books. Summary of Lynch’s works after the ‘Image of the City’ explains as follow, especially in defining meaning: meaning of place is related to time (history) and the observers’ background in terms of social class and spatial behavior (Lynch 1972); meaning is developed by people’s sense of legibility, experience and place; the development of meaning of place/urban elements is affected by factors that is embedded within them such as accessibility, diversity, adaptability and comfort (Lynch 1981); and the last one is that meaning is related to people’s psycho-logical feelings to their environment such as attachment, warmth, relaxation and interest (Lynch 1990).

3. Third space reading

3.1. The first-second-third spaces

The ‘meaning’ observation in this article is through the reading of space as ‘third space’ creation. The third space concept is adopted from the view of space as social production that was firstly introduced by Henri Lefebvre in his book “The Production of Space” (1974) and has been extended by Edward Soja especially in the social production of space. Parallel with these concepts, is a ‘Third Space’ concept by Homi K. Bhabha (1994), which emphasizes on the socio-cultural effects of the crisis in identity triggered by the multiple elements in society. Lefebvre’s, Soja’s and Bhabha’s theories are used in this research especially to explore spaces with lower in visibility quality than social quality such as in kampungs.

Lefebvre’s and Soja’s concepts extend the understanding of space instead of its physical characteristics, is by considering time and society. According to Lefebvre ‘space as fundamentally bound up with social reality, space does not exist in itself, it is produced’ (Schmid 2008, p.28). Soja introduced the ‘Trialectics of Space’ concept that observes spatiality through the investigation of three types of space: the first space (perceived space), the second space (conceived space), and the third space (lived space) (Soja 1996). The relationship of these three types of spaces is transformed into place meaning. The meaning is studied through quality of spaces, people’s activities, particular histories, and people’s perceptions/conceptions to their environment. Each type of space has a different weight of focus in developing meaning, but each of these spaces always connects to time and social factors in a network of space, power and knowledge.

Homi Bhabha highlights the idea of the cultural condition with a sense of crisis in identity (Bhabha 1994; Hernandez 2010). The interaction of society in spaces over time creates a new hybrid-culture or/and a combination culture of previous ones. Bhabha calls this condition as a process of ‘third
space’ creation (in urban spaces). ‘Third space’ is a term reflecting an intermediate condition or space, a state of in-between, neither one nor the other, neither here nor there (Bhabha 1994). Specifically, Bhabha highlights the difference of spaces in colonial and post-colonial cities in terms of hybridization in society and culture. He argues that because of colonization, there is an unequal distribution of power between the colonized and the colonizer, which is superior to other. This condition brings a hierarchical system to the meaning development of the specific places.

The understanding of the third space should be in regards the other two types of spaces. The main point of differentiation within these three spaces relates to: space, power, and knowledge. Each type of space has a different weight of focus in the relationship of developing meaning, but each space always connects to time and social factors in a network of space, power and knowledge. It is important that these spaces are understood together and not in a rigid categorization, since they are interconnected, inseparable and interdependent (Soja 1996). According to Soja himself, each space could be collapsed entirely into other spaces, because this is the fundamental relationship between time and social factors, or historicality and sociality.

Soja regards the first space as perceived space, and what Lefebvre calls space practice. It is a human physical space, or space that could be understood through a human’s senses of seeing, hearing, smelling, tasting and touching (Schmid 2008). Perceived space has various names, such as physical space, natural space, and space practice. This type of space is a real space that relates to everyday life, for example workplace locations, routes and spatial sets. In contrast to this physical space, Soja regards the second space as conceived space, which is needed to conceptualize space. Conceived space is commonly known as mental space, which Lefebvre names it as representation of space. This space occurs in relation to the observers’ perceptions of their perceived space; hence it is also called a metaphor of space. It is also including spaces that are expressed by people with specific knowledge such as architects, planners, artists, urbanists, and geographers (Soja 1996).

The third space is lived space, which is a type of space that connects perceived space and/or conceived space. Lived space is a representational space as Lefebvre calls it. It is a symbolic space that can be understood through an exploration of interactions and networks resulting from politics, economic system and ideology, such as conditions of racism, patriarchy, and capitalism. The space is structured by an exploitative and discrimination of class and social relations, which are usually effected by issues of racism and unjust situations. Hence, this type of space creates a potentially insightful subjectivity, because it connects between the real space and imagined space. The view of lived space often leads to a discussion of crisis in identity. Specifically, Soja gives a special attention to lived space as space in the marginality in the discussion of the margins and those who are marginalized (Soja 1996).

An important aspect of a scientific journal is to publish good-quality technical manuscripts. Therefore, authors are encouraged to follow these guidelines conscientiously; in particular, unnecessary formatting of the manuscript or the files containing the articles should be avoided. The emphasis should be placed on the content; its packaging should not be distracting. Consequently, the best layout is nearly invisible because no formal formatting is used that would disrupt the reader’s ability to concentrate on the content presented in the text.

3.2. Third space understanding in meaning observation

In the ‘Image of the City’, Lynch was too early to say that legibility is the main factor in designing ideal cities; therefore the misconception of this theory has been grown. Lynch’s idea regarding the meaning development that is after the process of elements’ physical identification and connection to other elements in a broader scale (identity and structure) is arguable. The contra argument comes from cities or urban areas with low imageability because they are
lack of elements with high quality in legibility; does it mean that this type of areas have low meaning for the citizens as well as the legibility? The main argument in highlighting ‘meaning’ is on the perspective that human’s social life in a place is the main factor of urban space quality that develops meaning of place and urban elements. In this case, Lynch’s explanation about the legibility factors that leads to the people’s orientation and emotional security is debatable. People living in low imageability or low legibility places has his/her own ways to navigate themselves in the environments that is (perhaps) not driven by the legibility as the main factors in orientation and emotional security.

Through the third space understanding, the meaning observation of urban elements is a process to understand, analyze and evaluate urban spaces, which are through not only the navigational elements, but also people’s social experiences (activities and particular histories). People navigational ability does not represent their true environmental experiences in urban areas, which cover physical, cultural, and historical layer of space (Koseoglu and Onder 2011). The analysis of urban spaces should cover all of these layers. The observation of meaning through the third space is important especially for the future planning strategy. In third space understanding, the creation of meaningful cities is more important than that of beautiful cities.

In discussing Indonesian cities, particularly the part of them that are kampungs, the consideration of third space creation is crucial. It is because the modernization process in the city has occurred in uneven situation. The process is concentrating only on areas with high economic value and accessibility. On contrast, most kampungs in Indonesia today are located in left over areas of the city and face a complicated social and political problem. Spatial and economics discrimination are triggered by urbanization and industrialization process within cities (Lefebvre 1996); while political changes and economics segregation of a city creates marginalization of kampungs (Kusno 2000). The focus of third space understanding is on the development of cultural hybridization through a process of discrimination and exploitation of class, gender and ethnicity. This is the process of third space creation in contemporary cities, especially for Indonesian cities. The meaning of place could be understood through the third space exploration.

4. The case study of Kampungs

The observation of meaning through the third space understanding is ex-
explored in the case study of kampungs in Surabaya in Keputran. The kampungs are: Keputran Pasar Kecil gang 1 to gang 4 (gang=aisle/alley), and kampung of Kedondong Kidul gang-1. The main access entering these kampungs is from Urip Sumohardjo Street, except for Kedondong Kidul gang 1 kampung. It is the main street of the city and creating a spine of the city street structure.

Keputran Pasar Kecil gang 1 is located directly in juxtaposition with the BRI Tower, and gang 4 is side by side with the Urip Flat. Between Pasar Kecil gang 3 and gang 4 is the location of the gutter/silted channel. The 4 meter-pedestrian of the main street is physically separated the kampungs' entrances with the main street. It also connects the kampungs with the shops and kampungs areas opposite them through the pedestrian-bridge over the main street. Shops, banks and other commercial facilities are grown along this pedestrian. Especially in the afternoon (after working hour), many food/beverages hawkers occupy the pavement. It is also functioned as parking areas for motorbikes and becaks (becak=pedicab) to ride and park.

The kampungs are placed side by side with a high rise building of BRI Tower with modern style and beautiful garden in the Basuki Rahmat area. The two are separated by a long permanent wall belongs to the modern building, and the spaces inside the wall are used as parking or service areas. Contrary, another side of the wall is a living space for kampungs’ dwellers, which is characterized by one-storey buildings, semi-permanent, and organic pattern of housing layout and street with organic infrastructure provision. The area inside the wall is for commercial use and was planned and designed professionally, while behind the wall is for human who live by surviving on a day to day basis.

5. The Kampungs reading
5.1. The first and second space
In order to understand the conceived space of the kampungs, the exploration of the individual mental maps and the map compilation show that the spatial and elemental preferences of the young adults are focused on the path structure, especially the main alley of his/her kampung and smaller alleys as its branches. The way they drew the paths is also the way he understood the path.

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**Figure 2.** The pedestrian way of the main street (pedestrian, becaks, motorbikes, hawkers, trees etc).

**Figure 3.** The commercial district and the kampungs.
They recognize the main street in terms of transportation and speed; there is no direct connection with houses/buildings that face the street. On the other hand, the alley has a strong connection with the houses/warungs, the alley comes after the houses development, and therefore, the path that is formed follows the space left after the houses development. In addition, the social connection between houses and the alley is strong; the houses are private space and the alley is the semi-private space.

The kampungs’ alleys are memorized in two conditions: the structure and the order dimension related to the alleys’ names (gang 1,2,3 etc). They imagined the kampungs’ structure in three degrees of importance: the most important is the alley where his/her house is located, alleys that connect their neighborhood to the main street, the types of connecting alleys, and the last is the dead-end alleys. In the individual maps, they know most all of the kampung details along his/her alley: the number of houses, colour of the benches, members of groups that hanging out in specific areas, any trees and greenery. The closer the elements to his/her kampungs’ alley and alleys connecting to the main street, clearer and more detail elements memorized by them. The focus of their mental map drawing is not on the location of individual houses (as commonly done), but on the alley of his/her kampung as the main location of social activities.

They did not indicate all public facilities in those kampungs; only some that were related to his activity; such as the Mushalla, the Church, security booths, public toilets, the cyber café, the warung, and the barbershop. They are relatively small facilities, but significant. Empty spaces in the kampungs areas are also memorized, such as the Mushalla ground, Banteng ground, and a vacant land nears the bamboo trees. Since greenery is lacking in these kampungs, the availability of big trees is also noticed as an important element based on interviews and kampung’s map identification. There are four big belimbing trees (belimbing = star fruit) located inside the front yard of someone’s house. Additionally, the graves near the entrance of Keputran Pasar Kecil gang-3 are also an important landmark. The kampungs’ dwellers (mostly from Keputran Pasar Kecil gang-1 to 4, and Kedondong gang-1) believe that these graves belong to their ancestor. Although the grave is inaccessible for the public (only open for the kampung leaders), the young adults respect this grave because of its historic sacredness.

The young adults have strong preferences along the main alley especially spots for social meeting or hanging
out for kampungs’ dwellers. A specific group occupies a specific spot at a specific time in a day. In the day-time, groups of children and women occupy spaces near the open space (the Bull’s ground), while at night-time men from the kampung and outside do their social activity at this spot. Every group has their specific territory at a particular time in the alleys and open spaces. This explicit agreement is understood and agreed by the kampungs dwellers, they never occupy any other groups.

The kampung’s territory is seen by the young adults within the boundary of BRI Tower, parking area of BRI, the main street (and the pavement), Keputran Market, Urip Flat, the gutter, and also other kampungs. Other kampungs that are attached to the two kampungs, namely kampung Kejambon, Panjunan and Among Siswa; are also strong elements to bound their territory. These kampungs border their kampungs, and they said that these kampungs are unsafe, ugly and too quiet. The gutter is an important element of navigation; despite its poor visibility being covered by dense houses on both sides. Keputran Market is memorized by them in terms of the working place for most kampungs’ dwellers and for the feeling of danger because people from the market like to get drunk and have brawls in the kampungs.

In conceptualized their kampungs through maps, the focus of their map is not on the location of their houses, but on the alley of his/her kampung as the main location of social activities. In memorizing the alley, it differs based on the social spots: closer to the spot, more detail the elements been memorized. Empty spaces, greenery, and public facilities elements are also related to the social activity in the alleys, besides its factor of visibility and vitality. In terms of sacredness, the elements of the ancestor's graves are important; this is the only element that is absent from the young adults’ experiences factor. Elements that are also absent from the social activity relationship and/or related to negative social meaning are elements that bordered the kampungs’ territory, such as the gutter, the flat, the market, and the tower. These observations are based on a qualitative approach; however quantitatively, the two most mentioned are the cyber café and the areas around the warung of pak Tris.

5.2. The third space

In exploring the third space of the kampungs, this research observes the historical background of Keputran Kampungs before and after Independence in order to understand the current physical condition and social characters of the dwellers that are inherited from the past; and the exploration of the daily the rhythm of the kampungs’ daily life.

The kampungs of Keputran is older than the city itself or the same old with the Soerabaja Kingdom. Based on the map of 1678, the name of kampung Keputran had been appeared. Before the Independence, the kampung has significant role especially in protecting the city (or the nation) from the British troops. The kampungs’ dwellers are commonly known as their ‘arek’ spirit in defending the city with traditional weapons of bamboo runcing (bamboo runcing = sharp bamboo.
branch). The spirit or personal character of ‘arek’ is embedded with the Surabayan young people especially from kampungs until today.

After the Independence, all kampungs in the city are the place for immigrants from outside the city who occupy provided permanent houses or built non-permanent houses (slumming). Under the Kampung Improvement Programmes (KIP), the physical condition of kampungs in Surabaya was improved especially in providing concrete slabs for the alleys, public toilets, water supply and drainage. Instead of better living condition of kampung, the kampungs’ dwellers have been offered compensation from an office rental management to sell their land for the project of the extension of the business district. It was only some of the dwellers agreed with the compensation, but mostly not. Therefore, the negotiation between the management and the dwellers are continued until today.

In today daily rhythm, the use of the kampungs’s space is varied based on the dimension of time, social activity and group of people. In the morning, mothers, children, and workers make use of the spaces especially the alley for their way of circulation to school and work place. In the afternoon, mothers, the hawkers and the money lenders are occupying the space in terms of transaction of things, money, news and gossip. At night until early morning,
the space is for young men and men to hang out, and sometimes got drunk, play gamble, and have brawls. The locational preferences of them are relatively similar, such as near warungs, gates, public facilities, or in alleys’ junction/intersection; the availability of furniture is also important. Specifically, the daily activities of the young adults are focus on their kamughts - work places, and their social space in the alley – home in a smaller scale.

The observation of lived space as above shows that in historical perspective, the character of ‘arek’ that is now being represented by the ‘Bonek’ character is embedded with their personal character of being free. ‘Bonek’ is a name for the fanatic fans of Surabaya football club. In current condition, ‘Bonek’ is known through its reluctance character when there is a football match. The issue of eviction is giving them an uncertainty feeling of living in the kamughts. Instead of the KIP programmes, the dwellers feel ignorance from the local government, because the continuation of slumming process and the changing use of domestic to commercial uses. In terms of space usage, the alley is a meeting point of the community according to time, social activity and social group. It offers a multifunction usage and social structure that is merged and overlapped between private and public, and business and leisure needs.

6. Discussion of the theory extension

Through the exploration of the first-second space and the third space as above, it could be summarized that in understanding urban spaces, meaning is more important than legibility of urban elements. Kevin Lynch’s theory put emphasis on the legibility as the most important factor in evaluating and designing high quality urban spaces. In urban areas such as the kamughts when the physical and social conditions are in contrast with the city around them (identity crisis), the social life observation is more beneficial than legibility observation especially for the purpose of planning/design strategy. It is because the kamught is naturally built by the original people of the city for their life survival, which with less consideration from the local government at each stage of development.

The understanding through the third space observation (include the first-second space) of the kamughts, gives a deeper understanding of this specific urban areas. The understanding is not only read the physical layer, but also cultural and historical layers. The first and second space exploration is inseparable, since the comparison of the real space (perceived or the first space) and conceptual space (conceived or the second space) is to study the observers’ physical and cultural layers of urban areas. The mental maps and interviews show not only the observers’ navigational ability in spatial knowledge, but also the elements’ meanings. The spatial/elements preferences in their mental maps are developed through the meaning of each element related to their social life rather than only its physical characteristics. The third space observation explores the cultural layers through the daily rhythm observation, and also historical layers of the kamughts.

The three types of spaces observations identify the most important urban elements according to the observers, which is the spots for their social activities. The spots are important for them, which are located along the main alley and represent their group identity. These spots are areas to do their favourite activities triggered by the contrast modernization. These activities are expressing their life as a result of cultural hybridization of modern and traditional way of life. The activity of ‘cukrik’ party, Bonek gathering, gambling, gaming, and hanging out at night belong to them only; represent their identity of living in the kamughts. The areas around the warung and the cyber café have been mentioned in each techniques of data gathering used in this research. These two elements represent the group’ identity of specific young adults in the kamughts.

In extending Lynch’ theory especially in terms of adding meaning, a combination of Lefebvre’s, Soja’s and Bhabha’s theories are used in order to highlight the view of space as social production through the third space creation. Lefebvre’s and Soja’s theories
are applied because of their approach in exploring space as social production in three different types of spaces. The theory of Trialectics of Spaces from Soja is applied to observe meaning in empirical level of this research by studying the perceived, conceived and lived spaces. Bhabha’s theory is applied in terms of his view in third space creation in cultural hybridization terms. The Lynch’s theory in evaluating and studying urban elements through their quality in legibility should be followed by an exploration of meaning. The legibility quality is studied through the first and second space exploration. The meaning exploration is studied by the third space exploration. The application of this extension is specifically for urban areas that bear specific social condition of cultural hybridization.

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