The Relationship between People and Urban Screen in an Urban Space

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Abstract

New media urban screens are found in many city spaces. This public image today has replaced the former public spaces where social communication used to take place. This paper attempts to reveal the relationship between people and urban screen in an urban space. It is expected that this relationship can be used as a design criteria for urban design. Research has been done using observational methods with video cameras and interviews with selected respondents. The findings obtained from the study show that pedestrian respondents are strongly influenced by the urban screen displays for a variety of reasons.

1. Introduction

Urban screen is a new media art technology in the form of a large-scale screen usually present in urban spaces. In the early development of this technology, the media was present as a billboard featuring images of static commercials and positioned in an outdoor space in order to attract public attention. Along with the development of digital technologies and public activities that are oriented to speed, people are
required to capture action and space which are relatively faster and wider in coverage than ever before. The speed of thought and motion was responded to and reflected in the urban environment, including the presence of these urban screens. Urban screens that display moving images capture the activities and movements of people in public spaces by offering an expansion of space, a virtual space.

Since the early 20th century, technology has begun to spread urban screens in major cities around the world and these are always trying to find their identity in the places where they are located. Times Square in New York, and Shibuya in Tokyo, are making the most of vertical surface with moving images. This can be done because the new media grew and developed along with the formation of urban space. Shanghai, Manchester, Tokyo’s Ginza, are making the urban screen part of the structure of the building facade (embedded facade) which are oriented to the experimental platform for creating new social interactions in public spaces. Cities in Europe such as Manchester and Milan are trying hard to display screens in existing urban architectural spaces. Meanwhile, cities in Asia, such as Jakarta, Kuala Lumpur, Singapore, are making the urban screen into a form of digital new media that is inserted in an existing public space. The presence of different forms of urban screens in every city has created the character of urban space differently. Indirectly, the space character is formed by what and how the public interacts with the media shown on these screens.

This research is focused on the relationship between people and the urban screen and how that affects the movement patterns and activities in urban space.

2. Literature Review

Lynch (1960), underlined the extent to which we essentially visually perceive and categorize the world by the term ‘image-ability’ to describe the qualities of a city which make it understandable by underlining the effect of the visual form of the city on the perception and memory of physical space. Urban screen not only affects the visual landscape of urban space, but also influences one’s experiences in public spaces. An individual is always in a situation to engage with urban space. Through every space that is passed, every object that is seen, social interaction happens. All these are included in the structure of the human experience of space. Although it involves all human senses, the visual is more dominant. So the experience of space in the urban space is directly affected by what is seen and how to view it. It is a modification of that movement. Movement is a response to the existing physical setting. So vision and motion are interrelated and become important aspects of the interaction between urban space and urban screens.

The essence of the inter-relationship between vision and motion is a coming to terms across the boundaries between them. There are two forms of movement of an individual in the public space, ‘path’ (Lewin, 1966) and the ‘euclidean line’. Lewin talks about life space as a frame of reference for a human activity and its movement. Through his theory of hodological space which translates as ‘meaning way’, Lewin emphasizes ‘path’ is compared with the straight line through space. The path is a representation of a compromise, such as distance, safety, work efficiency, maximum experience, and the like. Hodological space is determined in relation to topographical conditions, a condition that are not related to distances, angles and areas, but based on relationships, such as proximity, separation, succession, closure-inside/outside, and continuity (Schulz: 1963, Piaget: 1960).

By the time an individual is in an urban space, the space is absorbed and consumed by his/her movement. In other words, the visual and spatial configuration can determine the motive for someone to perform the movement. This can be explained as follows: a combination of visual and spatial messages received by a person through a journey of emotions and perceptions can affect the imagination. Bruno (2001) in a study on the atlas of emotion emphasizes that emotions can be materialized as a topographical movement. When a person moves, a set of perspectives that move will be formed. This set of moves will
produce a new sensibility attachment to someone either physically or imagined which creates space mobilization. This is a visual attraction that has the power to form a cultural movement. Mobilized space then becomes an indicator attachment which an individual has for urban screens in urban spaces.

3. Methodology

The object of this research is to investigate the form of attachment an individual has for an urban screen in a public space that directly affects the pattern of the activity in that area. The relationship between people and the urban screen includes a variety of matters relating to the phenomenon of public space, namely attachment to the visualization space and attachment to place. Visualization space does not only involve visual processing or vision alone, but it also includes the socio-cultural context which is part of the individual’s experience. ‘Seeing’ in this study means being associated with a sense of appreciation for the environment. Attachment to place is one activity which is influenced by the places and other interests related to the existence of the place. Attachment to place not only means attachment to the location, but it includes the attachment to the mood (of the situation) and the events that are in them.

The relation of people to urban screen will be seen in two ways, namely seeing the pattern and the pattern of movement through space during impact. Influenced space is an urban space in front of a screen that allows a person to see clearly the structure and message. View can be measured based on the duration and the pattern of looking at urban screen, while the pattern of movement is measured based on the path at the time someone sees an urban screen. The research method is field observation and interviews at three locations. Methods of observation carried out include using video recordings to identify patterns of movement and trends of respondents’ seeing patterns, and interaction activity between respondents and the urban screen in behaviour setting. The interview was conducted after the events recorded, to reconfirm what have been recorded on video and to find out the motive behind the activities during that time at that location. The study was conducted at three locations in Bandung with a relatively high density level of buildings and public interactions are diverse.

The research area is, based on the character of static space. The static space is a space that allowed people to stand still or walk slowly, like a pedestrian way, plaza, terrace and garden. These three locations of research areas have relatively the same character of space associated with the static space. Most of the urban structure and the screen are facing dynamic corridor such as roads, so that the opportunity to be seen by the public at static space is not large enough. This study is intended to produce the relationship between a person with an urban screen that affects movement patterns. Thus, the behaviour setting for
every location is static space formed by the boundaries of architectural and physical space in front of an urban screen.

3.1. Alun Alun (City square)

This area historically was the centre of the city of Bandung. However, in its development, the function of space has been changed and has declined. Most of the public activities which happen in this area are related to commercial activities and spirituality, due to the presence of the Great Mosque. The urban screen is located as part of the sky-bridge that connects the Central Post Office building and the Great Mosque that is adjacent to Alun Alun. This area is very busy from early in the morning until late midnight. Actually, the location of the screen is not related to urban activities in the square, rather it draws attention to the activity around it.

Fig. 2. The location and appearance of urban screens in the main corridor of Alun Alun. The radius in front of the screen shows the area that is influenced by the urban screen. Source: author

3.2. Bandung Indah Plaza (BIP)

BIP is located in the northern part of Bandung. BIP is one of the biggest malls in Bandung. This area can be described as a corridor which is surrounded by commercial buildings, with BIP as the main building in this area. The urban screen is located as part of the sky-bridge structure connecting the East and the West side. By their strategic locations, the urban screens have become part of the commercial environment, thus directly impacting on the visual experience of people in those areas. The BIP area is dominated by young people who spend their time on leisure activities, especially from the afternoon until midnight.

Fig. 3. Location and appearance of the urban screen at BIP. Source: author
3.3. Cikapayang Park

Cikapayang Park is located on the north side of Bandung, adjacent to Dago Street, the remarkable street of Bandung. This area is situated at the crossroads, so the character of the public space is created by the road corridor rather than by buildings. The visual environment is not limited by the buildings as at Alun Alun, or by public activities as at BIP, but by vehicles that are passing by. People who come to this area are more diverse and the majority of them consider this area as their destination. There are no functions or important buildings that encourage people to come to this place, except for the parks and to appreciate the public art. Urban screen can be enjoyed from an urban park located across the street. The character of space is very pleasant and more static compared to the two other locations; thus, there is a greater opportunity to see the urban screen.

![Location and appearance of the urban screen in Cikapayang Park. Source: author](image)

4. Results and Discussions

Bandung as a contemporary city in fact, with its exposure to electronic media can be considered as an augmented city, if ‘augmented space is the physical space overlaid by dynamically changing information’ (Berruti, 2008).

Focusing the experience and movement of people in urban space; therefore, an augmented city is the city in which people can experience spaces and dynamic data at the same time, because information is added as part of the content to enrich the experience of physical space.

Further discussion of this research where the phenomenal environment is independent and human behaviour is the dependent variable. The relation between the urban and urban space screen can be viewed through the unity between them.

The cognitive mapping approach is used for analyzing activity choice. In the cognitive mapping paradigm, an individual’s travel pattern, within the notion of activity space, provides considerable insight into the way people develop cognitive images of their environment (Golledge, 1997). Attraction is not only determined by the impressions of urban screens, but also by the patterns seen, marked by the movement and activities of people in the urban space. Straight lines indicate the direction of circulation, while the points indicate temporary spaces where someone sees an urban screen.
Fig. 5. Movement Pattern at Research Locations

In the figure, the red color shows the pattern of activity during the day and blue, the activities at night in a public space.

At Alun Alun and BIP, the space character is very clearly defined by a city corridor, so there is little chance for anyone to create a temporary space. Unlike at Cikapayang Park, where the space is adjacent to the city corridor that creates temporary space, this allows a person to feel comfortable and safe when enjoying the urban screen.

The figure above shows the pattern marked by the movement and activities of an individual in the urban space. Figure 5.a shows the pattern of movement is more dominant compared to static activity at Alun Alun. Most urban screen interaction with people form the pattern seen with high enough intensity. This is different from other sites, Figures 5.b and 4.c, show a balance situation between pattern of movement and static activity. Temporary space is formed in front of urban screens and is often used as a waiting place.

Based on observations in the field, it is found that the attachment between the urban and urban screen space does not yield any significant relationships that create movement and changes in people's behaviour. It is characterized by circulation patterns which are straight lines with no tendency to make temporary space where one can enjoy the impressions shown on urban screens. The essence of the interrelationship between two entities is a coming to terms across the boundaries between them. The primary mediating process in this coming to terms is behaviour (Porteous, 1977). One of the concepts of how environment influences behaviour is environmental possibilism, which regards the environment as a medium by which man is presented with opportunities. These opportunities may be realized or they may not. People react not only to phenomenal objects, but also to imagination and other drives. In architectural terms and in the context of city structures, the physical phenomenal environment may be measured and quantified according to what are regarded as the objective standard that is unmodified by perceptual experience.

For any given behaviour patterns or activities, there are settings that are supportive of them (Rapoport, 1990). This sensible engagement happens and is more prominent at night. At night, the spaces formed are markedly more than temporary movement patterns. Attractions are more visual impressions as they are dominated by the intensity of urban screens compared to the surrounding buildings. Urban screens provide the foreground for the visual experience. Thus the visual space (visual spatio) is formed. In other words, the urban screen forms visual spatial configurations which affect the pattern of movement and activity in an urban space. However, a distinctive feature of a cognitive paradigm is the structuring of behaviour, not by observable, spatial, or topological properties but by inferred motives and intents. Hodological space occurs in the presence of urban screens, movement patterns of interaction in the form of 'path' happen to someone who do not make the urban screen part of their everyday experience. Those
who pass the location and make that location their destination show a diverse pattern of behaviour which indicates a certain lack of concern for and interest in the urban screen.

5. Conclusion

Research yields potential indicators that show the relationship between urban screen and people in the public space in the formation of urban space.

- **Urban screen functions as the attraction for the creation of activity in urban space.** Urban screen display is the dominance of the visual. Interaction with people will occur when the urban screens give pleasure to the observers. In the case of Indonesia, the displays are still the focus of advertisements with little public information, so the communication which occurs is limited. Urban screen presence has not been part of the life of urban space that can affect travel decisions.

- **Urban screen helps to shape the movement in urban space.** Movement of people in urban space is not only formed by the composition of physical space (buildings, streets, plazas, pedestrian ways, parks) but is also influenced by the visual experience of those who are after it. Although it can be concluded from the pattern of movement that the effects of the presence of urban screen as a component of urban space is limited, the urban screen is still an added component. It may not yet be an integral part of urban space. Nevertheless, the urban screen, as a physical structure of the moving image display, offers a visual choice. The placement and location of the urban screen is very influential in determining the direction of movement of people. Based on the research, it can be said that as for urban screens in Indonesia, the visual choices are temporary and limited. This means that there is little time taken to perform the movement of people and interacting with a relatively rapid urban screen. Thus the role of temporary spaces in producing a form of urban space is not significant. The presence of urban screen mainly affects the waiting pattern of people enjoying the urban space, which does not directly influence the pattern of people movement.

- **Urban screen is a medium that has a share in the formation of urban space.** Forms of urban space directly affect the forms of public activity, and vice versa, the movement and public activities in turn affect the growth process of the urban space. The interaction between people and the new media does not directly influence the way a person views space or performs his activities in that space. In Indonesia, the impact of urban screens on the formation of urban space has not yet been felt. Nevertheless, there are indications of the emergence of a tendency to view patterns and movements of an individual in urban space as embryos of the shifting function of public space. If this occurs continuously, it will influence the formation of urban space. Urban screen as a new media should be able to improve the quality of urban space in terms of attraction, media information, and the formation of a conducive, livable architectural space.

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