



The Production of Space in The Context of Children's Behavior in A Neighborhood Public Space

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Abstract. According to Henri Lefebvre, urban space development cannot be equated to each space. Including the development of dissociated spaces. Dissociated spaces within a city mean spaces where they are located in inappropriate places. In this context, the research was carried out in a dissociated space, in a riverside area, and it was a high-density settlement. This uniqueness is an interest in research by reviewing space users, including children. This study aims to identify the production of space seen from the habits of children so that it can form public space which is the result of production. Qualitative analysis was applied in this study through interviews with children in the village. The results of this study indicate that space production from the lived space aspect shows that children create their own space for them to play because of the limited open space in the village and perceived space, they can play comfortably and are happy because they can adapt to that space.

Keywords: Children, Production of Space, Public Space.

1 Introduction

City development is inseparable from the need for public space [30]. Public space has an important role as a forum for social interaction [2,3]. Every space is the result of the social and physical construction of the environment [20]. Each space has a different character depending on the user and the environment [36]. Social Interaction is important for every individual in all types of cultures and throughout the human lifespan [27]. Human activity brings people together and the observation of passion is the motivation for public space activity [2]. The attractive urban public space is the most important goal of quality of life by seeing, hearing, and meeting other people. Being among others in a public space offers a rich sensational expression and experience that gives you an environment that has a special quality [2,4]. The attractiveness of a public neighborhood doesn't just depend on the building; it also depends on the presence of people and the human events that occur there [2].

The development of urban space cannot be equated from one space to another [36]. The development of space is adapted to the physical and social environments [14,20]. The realization of good public space includes good development, and diversity, en-

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A. Hidayat et al. (eds.), *Proceedings of the International Conference on Multidisciplinary Studies (ICoMSi 2023)*, Advances in Social Science, Education and Humanities Research 829,

https://doi.org/10.2991/978-2-38476-228-6_50

courages social involvement, and meaningful activities, free and balanced [6,7,25]. The implementation of good public space design leads to an inclusive space that is intended for all users [30,38]. Inclusive space cannot be excluded from the construction of spaces that are almost neglected, such as dissociated urban spaces [14,20,36]. Dissociated spaces can be exemplified such as spaces that are located in inappropriate places including riverside spaces, railroad tracks, under bridges, and so on [20,36].

This research is located in an area that is part of a dissociated urban space, it is a village on the riverside and as a thematic village. The space occurs unplanned and from the construction of the people who live around the river and in areas of high building density [19,37]. This space cannot be separated from urban development, including the development of urban public spaces [36]. Community building initiatives may adopt public space improvement as the key organizing element to strengthen social cohesion and social well-being [24]. Building a "city for all" means building a "public space for all" which entails the combination of both social policy reforms at the macro level, which provides equal access to social security and education opportunities, and urban physical planning at the micro level, which offers physical spaces for opportunities of inter-group social interactions [38]. The need to involve social construction so that it can be called space for all, including paying attention to the various types of users who occupy space. Children as part of the community component and space users also need to encourage to their rights [28,34].

Children are closely related to the period of child development that requires space to play[21]. Childhood is the most creative time, including when they create their own play-space [12,13]. In the theory of social production of space, it is divided into three aspects to produce space. The first is the aspect of lived space, where people form everyday life that creates their own meaning or symbols. The second aspect is perceived space, which means the sense of space. The third aspect is conceived space means space is produced by the conceptualization of the stakeholders, including communities, and non-profit organizations and it could be government [14,20]. Therefore, this study aims to further identify the spatial production that occurs in the village public space as one of the neighborhood public spaces so that it is not neglected to form dissociated space.

2 Literature Review

2.1 Social Production of Space

Space is formed not simply and physically, but from a complex social construction, based on the values of each person who forms it and the process of its own formation, in different time periods and the interactions between people around it. Lefebvre is able to describe the representation of space and imagination with a person's identity, and suggest how physical space shapes that dynamic process. Lefebvre, however, does not consider race and ethnicity in his argument [20]. Henri Lefebvre has an idea about the triadic concept of space production based on types of experience, which is as follows:

Perceived Space. Based on experience, this concept of space means that there is a perceptive nature of space, or that can be accepted by the human senses. This process is formed from human experience in carrying out activities that are formed in daily spatial practices. The process begins with the response of the five human senses to produce space.

Conceived Space. The production of space based on the experience of conceived space means that space cannot be produced without prior understanding. Space is the result of the mind's action in producing knowledge. The results of these human thoughts can then be created space in accordance with the concept of space production from a social aspect.

Live Space. The third dimension of the aspect of the experience of producing space is the experience of living in a space. Lefebvre argues that space is produced not only from theoretical aspects or human thought, but also from the results of the natural reality of life. The results of the reality of life then have a symbolic meaning which can philosophically produce social space.

Based on the theory of social space production by Henri Lefebvre, it can be applied to this study where it can be identified the process of forming play space based on the triadic concept of social space production and experience of social space production. A children's play-space in Jodipan Colorful Village, Malang City can be created based on children's spatial practices in playing in non-formal public spaces or based on children's thinking, or it can be based on children's interpretations in forming a playground.

2.2 Good Public Space

Public open space which is a space that is shared, a place where people can carry out functional and ritual activities in a community bond, both in daily life and in periodic celebrations that have been designated as something open, or where people carry out personal and group activities (Carr, 1912). Public space means space that can be accessed by anyone so that public space belongs to everyone without any time and activity restrictions [15]. There are types of public spaces based on the formation of these spaces. Public spaces created by the government are deliberately formed as parks or public spaces, including formal types of public spaces. Then for public spaces that are accidentally formed commercially and are usually created by the private sector, they are included in the type of informal public space [33]. Children's play-space can be categorized into public and private playrooms. Playrooms that are public in nature consist of three, namely formal playrooms that are carried out in schools, structured playrooms that are carried out in playgrounds or parks specifically designed as play areas, and informal playrooms, which are spaces formed by the children themselves. as a playground [10].

A good public space must pay attention to the needs of children's play as the main users. He said that children must be recognized as primary users of public spaces and

must have the right to influence their design and use. In this context, Carmona emphasizes the importance of providing facilities that allow children to play and interact in public spaces. He stated that "play" is a very important activity for children to explore and develop their social and cognitive skills. In this context, Carmona also highlighted the importance of paying attention to safety and comfort aspects when designing child-friendly public spaces. Factors such as layout, lighting, supervision, and separation between children's play areas and vehicle traffic areas must be properly considered so that public spaces are safe and comfortable for children [5].

3 Method

The study used the descriptive qualitative method, incorporating a variety of data collection techniques such as observation, in-depth interviews, and documentation. The research object focused on children aged 3-12 years old living in Kampung Warna-Warni Jodipan. The respondents were selected using purposive sampling, with a total of 37 children observed and 26 children between the ages of 6-12 interviewed. The analysis technique of this research used the descriptive qualitative analysis and behavior mapping analysis. In order to ensure the validity of the data, triangulation was used in this research. To further strengthen the credibility of the findings, triangulation was employed by cross-referencing the interviews of children with the perspectives of their parents and Kampung Warna-Warni Jodipan. This approach enabled the researchers to establish a more complete picture of the phenomenon being investigated and to arrive at well-substantiated conclusions that can inform future research and practice in this domain.

4 Result

4.1 Lived Space

Aspects of lived space can be identified from children's behavior which is realistic from life and has a different meaning or symbol from each individual. Based on children's daily activities, children's play patterns are divided into two patterns, that are play patterns on school days (weekdays) and on weekends/holidays. The pattern of children's play on school days (weekdays) shows that children have time to play in public spaces around the house during the day after school, after non-formal school, and at night. The pattern of children's play on weekends/holidays shows that children's play activities are carried out from morning, afternoon, evening, to night. The types of game activities carried out by children include free games such as chase, role playing, throwing sandals, then playing football, playing cooking, hide and seek, and playing kites. Children play by choosing a play-space that they tend to create for themselves, because in the Kampung area, there is no public space available, especially a formal play-space such as a playground. The children created the play space spontaneously (do-it-yourself) so that it is included in a form of tactical urbanism. Details of the pattern of children's play behavior are described as three categories

based on the range of age and time. The first is children's daily activity <3 years old on weekdays and weekends (Figure 1), second is children's daily activities 3-5 and 6-12 on weekdays (Figure 2), and last is children's daily activities 3-5 and 6-12 years old on weekends (Figure 3).

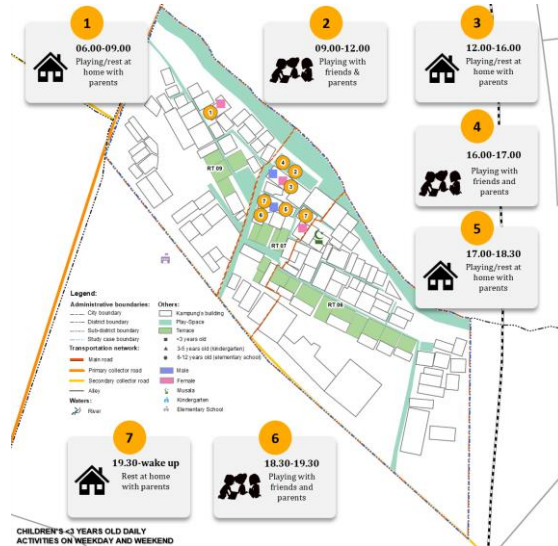


Fig. 1. Children’s <3 Years Old Daily Activities on Weekday and Weekend

Children under the age of 3, whether it's a weekday or a weekend, tend to have similar daily routines since they are not yet enrolled in school. Their daily activities begin at 6 am, supervised by their parents, with playtime or rest indoors or on the terrace. From 9 am to 12 pm, children play outside their homes, still under the supervision of their parents, and interact with friends. They then take a nap between 12 pm and 4 pm and resume playing with their friends and parents afterward until 5 pm. Between 5 pm and 6:20 pm, children take a bath or rest at home with their parents and start playing again from 6:30 pm until 7:30 pm. At 7:30 pm, the children go back home to rest for the night.

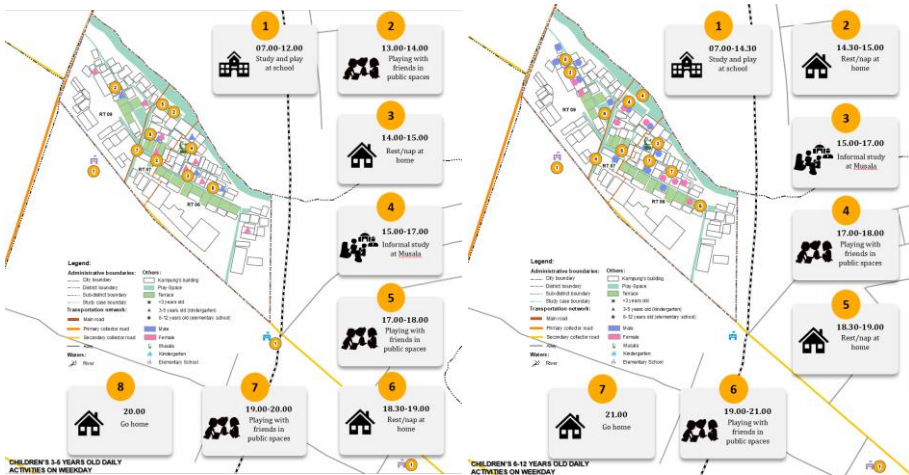


Fig. 2. Children’s 3-5 and 6-12 Years Old Daily Activities on Weekday

The daily routine for children aged 3-5 in kindergarten usually begins with learning activities from 7 am to 12 pm. After learning and playing at school, they go home for a break and have lunch. From 1 pm to 2 pm, they play with their friends at the public space such as in the alley and the riverbanks. Afterward, they take a rest or nap from 2 pm to 3 pm. Then, they engage in informal study at musala from 3 pm to 5 pm. While waiting for maghrib prayer, they play around musala from 5 pm to 6 pm. After maghrib prayer, they go home to rest or have dinner. From 7 pm to 8 pm, they play in the public space around their home such as at alley nodes or at terrace. At 8 pm, they return home to do their homework and go to sleep.

The daily routines of children aged between 3-5 and 6-12 years may seem similar at first, but there was some key differences emerge. One such difference is the time at which they return home. Children aged 6-12 years generally arrive home at 2:30 pm later than the 3-5 years old children, after which they take a break to have lunch and relax for around thirty minutes. From 3 pm to 5 pm, they attend a informal study session at the musala, where they learn and engage in religion studies. Following the study session, the children play games with their peers around the musala or riverbanks, waiting for the maghrib prayer. They return home for dinner with their families, where they share stories and experiences from their day. As the night sets in, some children may choose to play around their homes or at terrace from 7 pm to 9 pm, while others may rest or complete their homework. By 9 pm, the children wrap up their day, retire to bed, and prepare for another day of learning and growth. By implementing a structured routine, these children learn to balance work and play, which is essential for their development and growth.

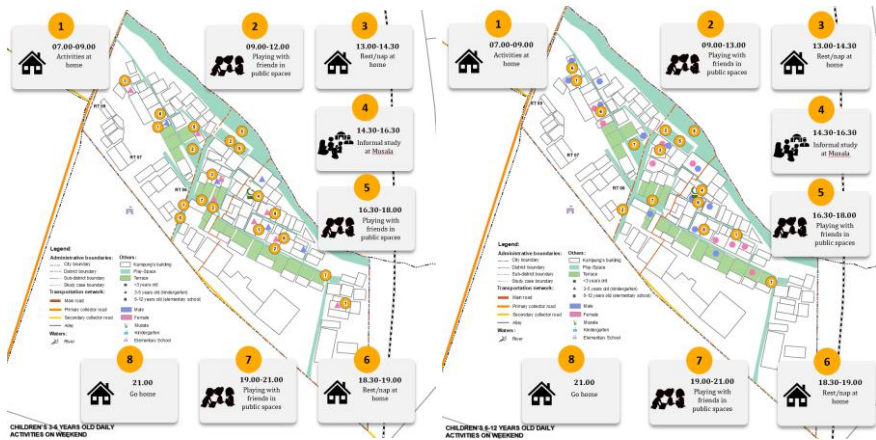


Fig. 3. Children’s 3-5 and 6-12 Years Old Daily Activities on Weekend

In Kampung Warna-Warni, during holidays and weekends, children engage in a variety of activities throughout the day. They usually start their day with domestic tasks like watching television or helping their parents, which they do individually until around 9 am. After that, they gather together to play outside. Boys generally prefer outdoor activities such as swimming, playing soccer, and flying kites by the river or in fields, while girls often choose games like cooking or running around in the alleys of the village. These activities continue until approximately 2 pm, when the children go back home for lunch and prepare for a group recitation of the Holy Qur'an at the musala from 2.30 pm until 4.30 pm. While waiting for the maghrib prayer, the children play around the musala from 4.30 pm until 6 pm. They then return home for dinner at 6.30 pm to 7 pm. From 7 pm to 9 pm, they socialize with their friends around their home or on the terrace. Finally, they return home at 9 pm.

Holidays and weekends in Kampung Warna-Warni also serve as a hub for tourists, leading to the utilization of public spaces for tourist activities. Despite these circumstances, children engage in spontaneous activities in limited spaces, which is referred to as tactical urbanism behavior. The holiday nights offer a more extended playtime, as children do not have to study at night, and often continue to engage in similar activities as those on school days. In summary, the children in Kampung Warna-Warni enjoy a diverse range of activities during their holidays and weekends, which offer a mix of domestic chores, outdoor play, communal religious activities, and tourist experiences [23].

4.2 Perceived Space

The identification of perceived space can be achieved by studying children's perceptions of the play space in public areas. Perceived space refers to the interpretation of what children experience through their five senses. The objective is to determine the kind of play space that children expect. This perception is identified by investigating three aspects of a good public space: comfort, safety, and ease of accessibility to the

play space. In this study, 26 children were interviewed as respondents. This analysis was conducted through in-depth interviews with children, and the collected data was processed as follows. The comfort of public space as a child-friendly play space is determined by several indicators, such as the availability of shade in the public space, the spaciousness of the play space, the presence of supporting facilities, and the accessibility of the play space. The results showed that the level of comfort in public spaces as child-friendly play spaces is mainly dominated by the accessibility of play spaces that are close to their homes. 34% of the children considered close access from home as the most crucial factor in realizing the comfort of public spaces as child-friendly play spaces. They felt comfortable because they could easily go back home and then come back to play with their friends.

The safety of public spaces as child-friendly play spaces can be evaluated based on six criteria. These include the level of safety from flooding, the level of lighting in the play-space, the level of safety from criminal acts, the level of safety from ease of parental supervision, the level of safety from traffic hazards, and the level of safety from the presence of visual barriers hindering parental supervision. Public spaces that are safe from congested traffic conditions tend to dominate the safety aspect of child-friendly play spaces. According to a survey conducted, 73% of child respondents reported that most of the children's play-spaces in Kampung Warna-Warni were quite safe. However, 19% of children expressed concerns about the safety of the playroom in the river area. This concern was mainly expressed by girls who could not swim in the river and had never played there before.

Child-friendly play spaces in public areas can be identified by their accessibility aspect. This includes the ease of reaching the play space, the ease of parental supervision while children play, the distance or proximity of the play space from the house, and the condition of pathways for people with disabilities. According to a survey, 29% of respondents found public spaces easily accessible, while the same percentage of respondents believed that playrooms can be easily accessed, making it easier for parents to supervise their children while playing. In Kampung Warna-Warni, the public play space is easily accessible, as children can reach the playroom by walking just 5 to 100 meters. Parents also find it convenient to reach the play space as they don't have to take their children to play with friends.

4.3 Conceived Space

Conceived space is a fascinating philosophical concept that delves into the intricate design needs of a space, as determined by the collective human thought. It's a concept that is shaped and molded by the society that inhabits it, including the children. The process of designing a children's playroom involves collaboration among all stakeholders who have a vested interest in creating a safe, fun, and engaging environment for the children. These stakeholders could be the children themselves, their parents, tourist village managers, and planners who can facilitate the process. Children's needs and preferences should be taken into account while designing the playroom, as children feel most comfortable and secure in an environment they can perceive as safe and engaging. Providing designated areas for children to play is essential in public

spaces, as it ensures that children can play freely without any restrictions. These designated play spaces should be equipped with nearby playrooms, a vast number of playmates, and a wide variety of play options to keep the children engaged for long hours. The importance of providing a designated play space for children is supported by the philosophy of perceived space or perception, which asserts that children thrive in an environment that is tailored to their needs and preferences. Therefore, it is imperative that public spaces are child-friendly and offer designated areas for children to play.

5 Conclusion

Constructing a public space in a playroom is an endeavor that requires the involvement of the children who inhabit it. Childhood is a phase characterized by high activity and creativity. In Kampung Warna-Warni Jodipan, the children leverage their unique perspectives and experiences to construct a space that is not only lived and perceived but also imagined and conceived. Through their interactions with the physical environment, the children are able to mold their surroundings to meet their needs and desires. This collaborative process of building not only instills a sense of ownership and belonging in the children but also promotes their social and emotional development. Ultimately, the children are able to realize a space that is tailored to their specific wants and needs, and that fosters their growth and development in a safe and nurturing environment.

The play space is part of the public space in the village which has limited dimensions, but can form its own spatial locality due to daily activities, which is the meaning of the production of space theory. [22,36]. The concept of creating a good play space for children refers to the concept of an inclusive space, [5,17,26,31,39], the public space with its social value [16,26], the public space that has safety criteria [11,18], the sense of public space [22]. The realization of a good play space is not only seen from the physical design of the public space, but also pays attention to the participation of the users of the space itself, including the community and children. [1,29,35].

This research illustrates the triad social production of public space. The behavior of children serves as a representation of the lived space. Children have their own routine activities, which includes utilizing the neighborhood public space. They have a unique perception of this space and areas where they feel comfortable and safe. This personal perspective of space is known as the perceived space. Additionally, children can participate and initiate the fulfillment of their needs in public spaces, which is called the conceived space. The role of conceived space holds significant importance as it can impact both lived space and perceived space. On the other hand, lived space can contribute to the formation of conceived space through daily practices, while perceived space allows individuals to express their desires in occupying a given space. In conclusion, organizing existing space based on conceptual space tends to allocate it for specific functions, which may limit opportunities for creativity and personalization of space according to individual needs and preferences [8]. Lived

space are influenced by what has been planned in the representation of space, but these practices can also change or even challenge the concept of space or conceived space [8]. A prime example of this is how studies have revealed that children may engage in hazardous behavior while playing near riverbanks. Nevertheless, it is an established fact that children derive comfort and pleasure from engaging in such activities.

The research highlights the importance of neighborhood public spaces and how they can be used to improve the quality of life of the local communities. By involving children in activities and sharing knowledge, we can create a more sustainable urban environment that is in line with the people's own ways. This approach is in accordance with Lefebvre's and Harvey's (1991) concept of a space that promotes non-commodified relations between social groups and their surroundings. It also emphasizes the need for civil society to claim public space as a means of communication and representation of space itself [32].

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