Limitedness of space in coastal settlement area; how children create their playground

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Abstract. Coastal is one of the city boundaries of Jakarta. Tourism industry, transportation, settlements dominated to development in that zone. Several of the settlements built by developer, with land use planning standards-compliant, but partly of the settlement developed by the local community, which has potential to grow without proper planning, unavailability of zones for the playground is one of its indicators. Furthermore the limited space in urban coastal area is often the reason to the provision of children playground. Despite having limited space, qualitative-based research conducted in Blok Empang, Muara Angke Fishermen's Settlement discover the phenomenon that play can still be done by children. Playground in coastal area is dominated by land area, streets and parking areas often used by children to play compared to playing in the sea areas. Interview, drawing and tours are strategies to find out information from children and when they play in the street or parking area, they have a rational reason to understand.

1. Introduction
As human beings grow, every stage of human life has different developmental tasks, play is one of the tasks of development child growth. ‘For Child, play must be the whole of his or her life, Children learn, make friends and nurture their creativity through play’[1]. Based on various studies, the experts concluded that by playing a lot of things that can be obtained by a child. ‘It gives the child a chance to develop physically, emotionally, mentally, socially, and morally’[2], ‘vehicle for skill development’[3], ‘an intimate and integral part of childhood development’[4], ‘the importance of play in promoting healthy child development and maintaining strong parent-child bonds’[5].

Limitedness of space is a major problem in urban development, it also applies to cities with coastal boundaries. Frequently, in the priority scale of the development of urban facilities, playground are often overlooked priorities. Play environments must be created wherever cities and towns are planned, wherever clubs or hotels are built, wherever housing projects are developed [6]. If the playground is provided, one of the main problems for kids who have a particularly low economic level, access to children's playground. Low-income and mostly minority communities tend to have less access to playgrounds and parks, but renovating school playgrounds, maintaining parks and recreational spaces, and developing new resources for play are promising remedies. (The Potential of Safe, Secure and Accessible Playgrounds to Increase Children's Physical Activity, Active Living Research, A national program of the Robert Wood Johnson Foundation, with direction and technical assistance provided by San Diego State University).
Some of the obstacles often encountered by children are physical or psychological barriers, distance from the residence to the playground, due to the influence of land restrictions. This phenomena also seen in some of settlements, some of the main roads are frequently used by children as a playground. The existence of the road as a means of play informs urban playground. Urban streets in residential communities should be designed to provide a balance between the needs of children and the needs of motor vehicles. What is required is to organize residential streets so that all can use the available space effectively [9]. It concludes that planners and designers need to support the efforts of families to re-claim the street as an important area for urban liveability for children [10]. Currently, streets are being managed for vehicles instead of pedestrian and bicycles. Whereas, streets have potential issues as place, not just space, for children to learn and play [11].

In addition to use roads as playground, some of public facilities are often used by children to perform their play activities like parking lots and pedestrians, neighbourhood open spaces include parks, playgrounds, playing fields and sports grounds, school playgrounds, streets, city farms and incidental or ‘natural’ green spaces. Civic spaces are considered to include those open spaces relating to commercial, health, education, transport and recreational uses [6].

2. Method

This research was conducted at Blok Empang, Muang Angke Fishermen Village, Jakarta. Research purposes to understand of the space often used by children who living in the coastal area for playing. To understanding of the space obtained through 1. Identify the space used by children such as the playground. 2. Finding the elements that come out of their space use. 3. Explores the factors that affect children playing in space that are frequently used as playgrounds. According to the purpose of the research focusing on the space research data obtained by 10 children. The process of data analysis is done using the Multi Method Model method. The multi-method approach also allowed the display of images or mosaics. The various methods used were observations, mapping, interviews, and tours to the space [12].

3. Result and Discussion

Play is one of the tasks of child development, there is a different perspective of play between children and adults. Adults view, playing tends to just waste time but for children playing is to reduce the saturation of their academic activities. Can’t be denied, another obstacle for children to play is shorter playing time given by parents, most of the children time is used for academic activities.. From a number of interviews conducted, it is implied that the majority of informants have experience negative emotions such as boredom and loneliness in their daily lives so that their main reason to play are to "...refreshing otak (refreshing the brain) ..." (Fadil, boy, 10 years old) or “...nyegerin pikiran (refreshing mind) (Reza, boy,12 years old) [13]. Kornelija Mrnjaus (2014), Referring to the studies which indicate that the time children spend playing is getting shorter, she points out the problem of the "subtle" violation of children's rights as well as the direct consequences of shorter time for play on the child's intellectual, social, emotional and physical development [14].

International standards on play equipment have also been promulgated and justified in terms of securing young people’s “safety,” most usually narrowly defined as injury reduction [15]. The extent of children’s independent mobility and the number of actualized affordances as criteria for child-friendly environments [16]. Apparently for children, the play space is not a rigid and standardized, they can play anywhere. Children often seen playing in the street, drainage and other public space. For children the play space is not limited by physical barriers, play space with qualitative-based metaphysical approach, where the child’s choice present in a space to play more because of factors
related to 'mind' such as a feeling of freedom, excitement and surprise who manifested by the space [13]

Blok Empang is one of the coastal areas in Muara Angke Fisherman Village, Jakarta. Muara Angke has an area of 67 hectares. Generally, the Muara Angke is divided into four areas: residential area, traditional fishery product processing zone, test pond area, and fishing port. Muara Angke has three regions (RW) of RW 01, RW 11, RW 20, and Muara Angke has three traditional fishing villages of Kampung Nias, Kampung Baru, Blok Empang. Most of the people living in this area are engaged in the process of breeding green mussels.

3.1. Every Day Life

The daily activities of children aged 6 to 12 years (primary school students) that inhabit the area Blok Empang, Muara Angke are mostly dominated by activities related to education. A similar phenomenon from the results of Hurlock’s studies, parents tend to instruct children (especially during school years) to learn and practice preparing for their own lives, play activities is limited [17]. Some of children as informant in this research record all their daily activities using the journal. And based on their journal, it appears that the main activity in children is education aspect, while other activities are not an important priority for their parents that is the phenomenon carried out by children every day. Have the same opinion with Rasmussen’s studies prove that the children everyday life, there are three settings in their activities, homes, schools and places of recreation. Settings produced by the adult human (as planners and designers) that provides a space for the child's activity, not just formal space but also non-formal spaces [18]. Based on the daily activities record, according to child's everyday activities, 10 children (informant, the selection is based on the similarity of children over the economic level of parents) obtained a description of their daily lives as follows:

| Time       | Activities                        |
|------------|-----------------------------------|
| 07.00 – 13.00 | At school                         |
| 13.00 - 16.00 | Les, ngaji, training of pencak silat, dll |
| 16.00 – 18.00 | Play                             |
| 18.00 – 19.00 | Bathing, Prayer                   |
| 19.00 – 20.30 | Play                             |

Referring to the table, daily activities dominated by academic activities, Children spend their time at school activities or other formal activities. Even if there is free play time, it tends to be done in the late evening even at night, where should the children is rested. Additionally, this identification is an attempt to understand quantitatively the amount of time spent by children to perform their daily activities. These facts show that the child's daily life, there are two main activities are always carried out by children, from morning (6:00 pm) until late at night (21:00 pm), learning and play activities.
While other activities appear only on certain days e.g., religious services and family visits are conducted only once a week.

3.2. Do Children Play...?

Arduous to understanding children thinking, interviews with Focus Group Discussion aims to understand what children needs, children feelings and children expectations, particularly related to playing time and space for play. Interviews were done in this research involving several children, among others are Gaca (Boy, 10 years), Cahaya (Girl, 11 years), Chandra (Boy, 11 years), Raihan (Boy, 9 years), Lubis (Boy, 6 years), Dinda (Girl, 9 years), Dila (Girl, 10 years), Eca (Girl, 10 years), Latief (Boy, 10 years).

What is felt by children in the Block Empang area when they playing, when these activities repeatedly, every day, even late at night it is certain that they are playing, something done repeatedly with happy indicating it was the play. Other than that, laughing is a very clear indicator that playing activities occur. When researchers gather information related to what they feel when playing it.

Gaca: “…happy, satisfied ... laughs.”
Raihan: “…happy…”
Cahaya: “…happy...meet friends….laugh together”

According to theory, Laughter is a psychological expression laughter results from a pleasant psychological shift [19]. In playing activities that are important and need to be there is a sense of pleasure marked by laughter [20]. There are a lot of laughter that comes when a child’s play, but on the whole it can be ensured that laughter showed positive reinforcement from play, a positive affirmation of the capacity of play [21]. Laughter is a means of communication between children, strengthening and showing happiness, laughter acts as a sign of Play [20], of the above sign ensured that children in the Blok Empang, Muara Karang was doing play activities.

3.3. When Children often to play...?

From the daily activities of children above, seen that playing time tended to do after the children complete their formal activities, they tend to play in the afternoon and evening.

Researcher: when you often to play?
Gaca: “…after school hours, in the late evening…”

Involvement of parents in determining the child's play time is very real. Although the child's everyday life is full for academic activities, parents still provide an opportunity for children to play.

"... My daughter just went out to play after school ... she play close to our home ...”
(Saiin, as a fruiterer, who daily trade in the parking area of Kali Adem Port)

"... my son has just been able to play ... if everything is finished ... sometimes until night
(Era, as a haberdasher in side of Kali Adem Port Building)

"... Every evening they look here ...., generally they play football, bikes, hide and seek and kites ...”
(Era, as a haberdasher in side of Kali Adem Port Building)

3.4. Where do you play...?

Some theories suggest that there is a close relationship between age and play, the more mature: the more distant they are playing. The play phenomenon of children living in coastal areas has a different response, is possible because of different environmental stimuli. Cannot be denied that the majority of their area is coastal area, which space for movement is very limited. The understanding of parents
seeing children’s play activities is depicted when they see children who are playing together, running here and there, laughing.

Researcher : what activities are often carried out by children and who play in this area
Era : "... every evening they look here ...., generally they play football, bikes, hide and seek and kites ..."

Researcher : where was it usually...?
Chandra : "... Tamer ..." (Tamer is a term that shows children in the red Land. He is said before it was on developed, the land on the seashore is covered with red land)
Boys informant : “... at corridor...playing football with friends ...

Researcher : What are you playing...?
Boys informant : "... play foot ball, badminton, bicycle, kite ...

Other than Gaca, Cahaya (Girls, 11 years) and her friends (Girls informants) also conveyed almost the same information, Cahaya and her parents lived right on the left side of the Kali Adem Port building, the work of parents as sellers of bottled drinks and small snacks for visitors, forced they are to stay in buildings that are very simple along with stalls that are still on the front side of the building where they live.

Researcher : where are you play...?
Cahaya : "... behind the building ... cool and quiet ...

Researcher : What are you play...?
Cahaya : ”... cooking, hide and seek, cashiers and dolls.

Researcher : what causes you to often play in that place?
Girls informant : “...cool and quiet ...

Researcher : How many friends who often play together..?
Cahaya : "... 6 until 8 ...

From the interview above shows the phenomenon that male informant tend to use open space as their playground, it is possible for them to play on the physical movement. Unlike the male informants, female informants tend to play in a shady space, although some times found playing in the open space, that space election was also influenced by the type of game they often do.

"... behind the building ... shady and quiet ..."
Cahaya (Girls, 11 years)

when children faced with the question: whether the parents are involved in the selection of the play...?

“...there are no directives from parents, we choose by ourselves…”
(All Children)

From informants answer shows that the gender and the type of game will determine the space where they play. Male informant tend to play in out door while female informant tend to play in the indoor. The choice of place to play depends on the children, this is revealed from the results of interviews with parents. Having time and space to play gives children the opportunity to meet and socialise with their friends, keeps them physically active, and gives the freedom to choose what they want to do, includes playgrounds, recreational facilities and space designated for children; parents’
attitude towards children’s play; children’s opportunity to play; and children’s freedom of choosing what and how to play etc. [22].

The environmental conditions in which children live are in two different environments (water and land) did not make the kids choose both, almost all respondents answered that they have never played in the sea.

Researcher : Why not play on the ship or sea...?
All Children : "... fear drowned at the sea ... scolded Transportation Agency, same scolded the parents ... do not play over there...
"... no permitted parents, had ever drowned ..."
"... Dirty, polluted, deep ...
"

Researcher : no children were seen play in ship or sea?
Parents : "...sometimes, who played on the ship, not coming from the Blok Empang, they are children from outside…probably sea is saturated for children who living in Blok Empang...”.

4. Conclusion
A Canadian study concluded that behaviour believed to occur in a place is an important component of the place’s meaning. They showed twenty places to observer who were asked: 1. Why might one go there? 2. What might be done here? 3. What activities probably occur here? Sain who worked as a fruiterer, who daily trade in the area of Kali Adem Port, said that children are always seen playing at that location. Almost every day, Sain shows children playing in the parking lot or the corridors of the building. Most of the boys are seen playing football, kites and while girls are seen playing hide and seek in the corridor. All children presence in the area is caused by several factors:
1. The location of their houses close to each other which leaves a very small distance, so it does not provide space for children to play
2. Settlements are often affected by flooding Rob, so that if any open spaces tend to be inundated.

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