# Outdoor environments for children

Designing for children in densely populated housing areas

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## I.    Introduction

When urbanization is happening worldwide, and cities have to cope with larger populations there is less open space left for children´s play, especially in low-income areas. During a study trip in February this year to Manila, when we visited formal housing areas for low-income groups, I was touched by the reality so many people face every day, and also by the power people have trying to create better lives through building better homes for low-income families. What I noticed and reflected upon was the outside environments where the children played. Around the buildings was mostly hard surfaces left as the only open space, roads, local streets and alleys designed for car traffic. Apart from multi-purpose halls, this was the only space where children could run around and play. A very commonly occurring game was basketball. This got me thinking about the process of when people move from their informal settlements into formal housing, it is all about getting a chance to a better life. Proper shelter, safety and a chance to build a new way for them and their children. In order to make a change for this group of vulnerable people, I wanted to look into what could be done and what is important for children, their education and learning. What could be provided so that the children growing up in these areas will have different opportunities and possibilities than their parents had growing up.Could a little more care be given to spaces for children to nurture their learning, exploring, health and development? The aim of this paper is to discuss the positive impact designing environments for children could have in places such as low-income housing areas in Manila.

Picture 1, Bistekville 4, Barangay Culiat, Quezon City, Manila.

Picture 2, Bistekville 2, Barangay Kaligayahan, Quezon City, Manila.

Picture 3 and 4, Barangay Commonwealth, Quezon City, Manila.

(Photographs by the author)

## II.    Literature Review

### Urbanization trends

The world population is growing and urbanization of cities has happened and is still happening all around the world at a fast pace. We also see trends in how populations are changing. In more developed countries the trend is in general that the population is ageing, but the opposite is true for less developed countries where the population is very young. This is also true for Manila, where over 30% of the population is under the age of 15 (CIA, 2019). Meaning that Manila is a city where youth populations are greater than most cities in the world.
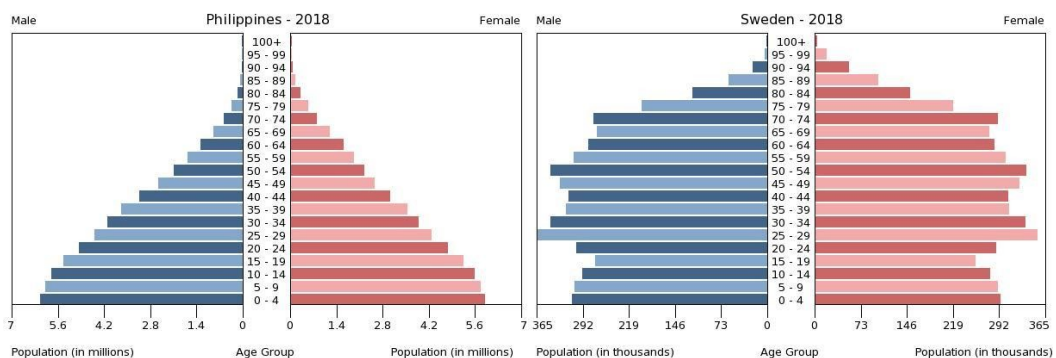


Population pyramids of Philippines and Sweden (CIA, 2019).

Urban plans should reflect the populations they serve, something that is challenging when populations are constantly changing of course. Different people have different perspectives and expectations for their lives and shared communities, but even though this is important urban planning has often given insufficient attention to the needs of women and youths as well as space connected with family care (UN-Habitat, 2016).

## Children in an urban context

In a document from the Committee on Children´s Outdoor Environment (1970), design of environments in densely populated areas with concern for children´s outdoor play is investigated from a child perspective. What is important to mention is that densely populated areas in Stockholm are at a much lower number than in Manila. Stockholm has a population density of 4,800 people per square kilometre, as supposed to Manila with 42,857 people per square kilometre (Worldpopulationreview, 2019).

In more densely populated environments the open space becomes limited, less flexible and the concentration of children greater. Whereas children need open spaces for their physical development. Especially outdoor play is important for children's development and to satisfy the child's movement need. (Kommunikationsdepartementet, 1970). When children play they re-create and elaborate from their own experiences, by moving around, exploring, testing, observing and so on the child attains familiarity and knowledge with the world and gain confidence in his or her own ability. A child with a varied environment, meaning access to open space as well as green space and more intimate space, and both planned playgrounds and loose material, will learn that the world is changeable and that he or she can also be a part in changing it (Kommunikationsdepartementet, 1970). But the investigation showed that a lot of environments where lacking in design. Deficiencies involve absence of traffic differentiations, shortage of suitable spaces, materials and equipment for outdoor play, and also insufficient help, supervision and stimulation from adults during play. The Committee on Children´s Outdoor Environment (1970) also states that:

" Children move about within the area that is accessible to them and in the manner they find natural from the viewpoint of the actual play, regardless of whether the accessible area is planned for play or not."

## Lacking outdoor environments

Consequences of an unilaterally planned outdoor environment is described by Pia Björklid (1980) she concludes that child development happens when children are active participants in the environment, the social as well as the physical, therefor it becomes important to promote that children keep playing to stimulate further learning about the world (Björklid, 1980). This is not the reality in densely populated residential areas today, it has limits when it comes to experiences of how the world works. She sees a lot of asphalt, sand and small spaces here and there instead of the preferred trees, rocks and lush greenery to run around in. Consequences due to lacking environments are that children stay inside a lot, especially children under the age of four, and that their play repertory becomes limited. Children in highly dense areas show more aggressive and submissive behaviour because of the environment; children playing outside have to deal with a lot of tension and conflicts when they have to share equipment, materials and small spaces. If there are too many that want to play for instance basketball, the most unfitting will be neglected. For small children interruption of their play due to conflict over toys, will cause insecurity and over time make them loose their excitement for it, which could eventually lead to a lost interest in play altogether (Björklid, 1980). It is also a problem that parents don't bring their children outside, to join them in their play and interact with them, creating further learning opportunities. One reason might be because it is often nothing for the parents to do outside in these dense residential areas either.

Laval (2015) discuss how environments for children should be planned, but notices how such space is often neglected due to other priorities. Environments for children's play should be planned so they have enough space and vicinity to adults to satisfy both the need for movement and exploration as well as a sense of safety and communication to learn about the surroundings. These two, space and vicinity, has to be taken into account if we want to create children friendly cities and communities (de Laval, 2015).

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## Planning and safety

Density of cities has led to planning that does not leave any space for playgrounds, and as a result children use the streets for different kinds of play. It can stimulate children's creativity, imagination, knowledge and even behaviour as well as any other place but then good quality of the street must be provided (Aliah Ekawati, 2015). To make streets a potential urban space that can be used as children´s playgrounds Aliah Ekawati (2015) describes negative aspects that have to be considered. The street have to be defined, as to make it a place with eyes on it. Traffic might have to be calmed, and the space shaded. It is also important to have good quality of equipment around because children play with anything, and good sanitary conditions because children play anywhere. (Aliah Ekawati, 2015)

## Children and education

In an initiative, called Learning Landscapes from the United States, play and learning is stimulated in under-privileged communities. By addressing how play experiences can have a learning outcome the hope is to give the children the same opportunities when they start school. In under-resourced communities, community spaces are often underutilized and opportunities for play overlooked. Research show that children from these areas are lagging behind when they start school. In language development, reading readiness, spatial skills and early numeracy studies show that they are lagging behind their piers (Hassinger-Das, et al., 2018). The Learning Landscapes projects assume that children learn best through play, and they learn more effectively when learning is meaningfully connected to their lives or related to something they already know. One project called "Supermarket Speak" targeted child and caregiver interactions to promote language development. In supermarkets, a place where children would go with their caregiver, signs with pictures or questions was put up to promote more conversation. It was proven successful. Another project "Urban Thinkscape" marries architectural design with science about learning. In public spaces different equipment was placed, such as a puzzle bench, a wall with stories, jumping feet footprints and hidden figures from a design creating different shadows during the day, these small interventions stimulated play among the children, and also more interactions between child and caregiver as well as between young children and older children (Hassinger-Das, et al., 2018).

# III. Discussion

In the urbanizing cities sufficient outdoor environments seem to be hard to find, which is also the case in Manila. These valuable spaces become very small, just leftover space and neglected design wise. There is a need to try and make sure that measures will be taken so that children will have access to a good outdoor environment to a satisfactory extent. Since children are marvellous in the way that they can do so much with so little, it is possible to imagine how much that could be gained from investing some thought into children friendly environments. Children will find places to play no matter the circumstances, then it becomes a task for planners to create space that is suitable in terms of safety, traffic separation, good quality of streets and eyes on the streets. Good quality of streets as well as more planned public space would not only benefit the children but the whole community. One step further would be to try and provide learning possibilities for the children in the public space, if these design elements where given some thought they could even liven up the space, spark conversation between child and caregiver and lure more people outside.

Children do not yet have an obvious voice when cities are planned, so their perspective and needs are often overlooked completely. Improving knowledge about the value in designing and planning for children's outdoor environments might help in planning better. This literature review also shows how improving environments for children will create better environments for everyone, not just for children. Environments that encourage play can be a combination of social space for everyone, and equipment for children. For instance green open space has value to anyone in the community. Planning for children is definitely a part in planning sustainable communities for the future.

From what we saw during our study trip, the lack of outdoor space also seem to create loud levels of noise inside the buildings, because that's where the children found interesting, and shaded, places for play. A problem that could be solved by creating more environments for play outside. It would create more variety of spaces if buildings could have more calm and intimate spaces, and the outdoor environment could host more active spaces where children would run around and

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play because it was more interesting and had more opportunities than the inside environment. And if playgrounds had more interesting and varying design more children would use them, and different play equipment could promote interaction and conversation between young children, older children, adults and elderly. This would mean more eyes watching over the children as well. For instance, placing a shaded bench next to a long jump path. An adult using the bench might ask the child how far the jump was, the child would learn numbers by hearing this. Such small conversations could play a big part in bringing a community closer together. Teaching a community about the importance of interacting with young children by conversations or lend a helping hand might cause it to occur more often, and could strengthen the community over time.

Safety should be considered a priority in neighbourhoods, especially where space for children's play other than streets does not exist. Clean and well organized streets is at least better as a play area than streets lined with garbage and a lots of heavy traffic. Since children lack an understanding of traffic and how to keep safe in traffic, this should also be considered during planning. For instance placement of playgrounds and areas where fast games occur should not be placed along the main roads, and could even be fenced off, to minimize accidents and promote play.

## IV.  Urban Shelter Design

There is so much that can be done with so little to promote play among children, there is play equipment, play materials, green space, open space, public space, space for a lot of movement and space for a little less movement, and also smaller space for more quiet play. Actually there are as many variants of spaces as there are variants of play. As a general starting point play area and play equipment should first of all provide for the most frequent types of play. But it is also important to try and provide a variety such as spaces and equipment for play involving movement, material for constructive and creative play, suitable spaces for team games as well as corners and seats for more quiet play for the smallest children and their parents. When planning all of these different spaces, one thing to always consider is the climate. Because it can get very hot and humid, providing shade and ventilation becomes very important. If this comfort is not provided the spaces would not be used no matter how well designed it was.

We now know that children can get very creative, so it is up to planners, architects and designers to use this knowledge to effect decision makers into making wiser choices with concern for children. Good planning, compared to poor planning does not have to cost more, and in the long term it will generate more sustainable communities.

## V.    The Role of Architects

The role of the architect is to connect the dots and promote change through design. A lot of weighing pros and cons, taking a stand against short term solutions. Improve and spread knowledge (Correa, 1987).

Correa describes how architects are often involved in a number of different assignments at the same time, which can be an advantage because it makes one see connections between issues, ranging from the smallest to the largest, from the practical to the metaphysical. (Correa, 1987) This I see as important, since a lot of other parts involved in planning and building just focus on their problem, the architects role involves connecting and sometimes solve more than one problem with one action, and I would also say that it is the architects job to promote and spread knowledge about things like green spaces, small details bringing joy, design that gives a sense of belonging, and a sense that someone cared about the space. Such values that cannot be measured easily, but often makes all the difference. By spreading knowledge of this and guide decision makers better communities could be built. An architects role is also to sometime understand just what is malfunctioning and then set it right. One such issue is how architects will begin to understand and communicate with children, to involve them more so that their needs and wishes can become an obvious part in city planning.

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