

Planning by people

Participatory design as a tool to defeat poverty – case studies from Metro Manila



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1 Introduction

Cities drive human progress by attracting people, goods and ideas. By harnessing the forces of agglomeration and industrialization, billions of people have found a better future in the city (UN Habitat, 2016). But the growth of the world's cities brings problems like congestion, pollution and environmental degradation, just to mention a few. Another aspect tied to urbanisation is the lack of adequate shelter.

Housing shortage force people to live under extreme conditions in informal settlements, with lack of sanitation and other fundamental services. Inadequate shelter has been recognized as the major contributory factor to urban poverty. The reality for the urban poor is a complex situation regarding lack of physical means, but also implies social depravation and exclusion.

Authorities reaction on overcrowding and congestion is often physical eradication and provision of social housing in the periphery where land is cheaper. The displacement fuel urban sprawl and lead to social alienation and reduced opportunities to get livelihood. Instead of trying to understand the realities of the urban poor, authorities dealing with planning and provision of social housing continue to erect the same ubiquitous typology all over the world.

To be able to cope with the complexity of today's reality regarding urbanisation, we need to ask ourselves; for whom are we planning our cities? The ones who can

afford it or the ones who live in it? How do we defeat poverty and meet the demands of the urban poor regarding adequate shelter?

After visiting Metro Manila and encountering the urban poor, the answer of this huge question might be people themselves. Participation processes, like self-help housing, can be used to reduce costs while improving physical conditions (Rodríguez & Åstrand, 1996) but also have a positive impact on the more intangible urban resources dealing with networks, skills, capabilities, civic education and so on.

In this paper, I will go through different sites I visited in Manila, developments built by NHA but also private initiatives and co-operations with NGOs. I will try to emphasize the importance of participation processes when developing new housing in the context of Metro Manila and argue for an alternative professionalism within architecture practice.

2 Literature Review

The reality as an urban poor

By 2030 out of the 5 billion people that will be living in cities, 2 billion are going to be under the line of poverty (Elemental, 2018). People defined as urban poor lack access to basic survival needs such as shelter, clean water and health services. In addition to that, poverty also implies exclusion from means of improving economic productivity, low education and lack of political recognition (Arroyo, 2019).

The urban agglomeration challenges the way we plan and build our cities but also questioning the definition of adequate housing. Housing shortage force people to live under extreme conditions in informal settlements. Inadequate shelter has been recognized as the major contributory factor to urban poverty. Lack of legal security of tenure, affordability, location and cultural acceptability are some important aspects regarding adequacy (Arroyo, 2019).

To deal with such extreme scarcity of means the market tends to do two things; reduce and displace. Reduce the size of the dwellings, threatening the quality of life and health of its inhabitants. Displace them to unserved areas in the periphery of the city where land is cheaper, resulting in social alienation and reduced opportunities to get livelihood (Elemental, 2018).

Charles Correa expresses concerns in his book “*Housing and urbanisation*” (1987) about the dreading and de-humanising patterns of the urban poor and the fact that it is tolerated. He continues by writing “it is a brutal mismatch between the way our cities have been built and way people are compelled to use them”.

Planning for whom?

Cities bring people, goods and ideas together creating opportunities for people to get livelihood and access to education and health services. The city has been and still is an effective vehicle for lifting a huge number of people out of the countless generations of poverty (Burdett, 2011). These mechanisms relating to urbanization have been the driving force for billions of people seeking a brighter future in the city.

Historically most cities have grown in continuous and incremental stages (Correa, 1987) and the necessity to structure planning and housing has not been an issue since the influx of people have been steady. By the time of industrialization urban regions started to grow and the need for structural planning arise. Planning approaches in the developing countries were influenced by Western powers due to colonialization. Both old and new planning mechanism were developed – mostly unsuccessfully – in the rapidly urbanising world. The predominantly design based planning approach, with the master plan as a key tool was criticised due to its segregation of functions, rigidity in programming, ignorance of indigenous traditions as some aspects (Jenkins, Smith, Ping Wang, 2007).

Despite the critique, master planning – or elements of it – continues to be the dominant approach in rapidly urbanising areas all over the world. The reason for that are partly due to strong architectural and civic design traditions within urban planning training which in turn are underpinned by political, social and cultural values of the western world (Jenkins, Smith, Ping Wang, 2007). Another aspect regarding housing for low-income families are the lack of trained professionals. The majority are likely to be trained for “high tech” solutions (Rodríguez and Åstrand, 1996) which lead to design implementations that do not respond to the local context and culture.

Looking for an alternative – inclusion of people

The demand for housing in the “global south” due to rapid urbanization made a frog leap in the 1950’s and 1960’s in relation to the economic development and related urban infrastructure and housing investment capacity. The gap resulted in exacerbating conditions for informal settlers and squatters.

The failure to supply housing and the misapplied resources contributed to alternative takes on housing for the urban poor. The Englishman John Turner made a number of publications from 1960’s and forward where he advocated for self-help housing and inclusion of people. His work influenced the 1976 United Nations Habitat conference in Vancouver (UN 1976) and later the World bank and other international agencies. He argued that informal settlements were not a form of social degradation instead he viewed them as efforts of ‘self-help’ which needed more dweller control and autonomy (Jenkins, Smith, Ping Wang, 2007).

“If enough is known about a process or an activity, such as housing, then the standards and measures of things produced and used can be more or less accurate indicators of their values to the people concerned. In the final analysis, though, it is only the people who experience the activity and its products who can evaluate them”.

John Turner. *Freedom to build*, 1972

To provide affordable and sustainable housing Turner argued to view the task in a wider perspective. Instead of defining problems of what people *ought* to have we need to consider what people *could* have (Turner, 1972). Instead of viewing the word “housing” as a *noun* it would be better to think of the word as a *verb*, a process rather than a product. Through his own work in Latin America concerning low-income housing he saw that when dwellers could contribute and control the design, construction and management of their housing it stimulated individual and social well-being (Turner, 1972).

By reducing government’s role, applying lower official standards and providing technical and financial assistance for people he argued for a progressive development letting people plan by themselves in order to meet their own needs.

A similar reaction came from the Dutch architect John Habraken in the 1960’s. He argued that the premises for mass production of housing is that the

residents' ability to be a part of the process is eliminated. According to him this top-down process fails to meet the most fundamental psychological needs regarding people's living situation; the ability to influence, contribute and develop (Ekholm, 1982). Habraken advocated in his book *"Supports, an Alternative to Masshousing"* (1972) for architectural variation through user involvement. Habraken's solution were structures he called "supports"; a building framework which allowed for a variation of dwellings regarding size and spatial configuration independent from each other.

His ideas regarding the "supports" were that these structures also should cater for common and public facilities, like shops, offices and common facilities. Through this mix of rigid and flexible systems this structure should cater for a capacity in which the dwellers could gain control and experience identification with the built environment.

View from within – understanding realities of the urban poor

The way policy makers and other authorities deal with overcrowding and congestion is often physical eradication and provision of 'adequate' housing. The perception of informal settlements is often related to prejudices based on stale assumptions on how people *should* live their lives. The dwellers are denounced as marginal and the mere existence of slums is seen as a social breakdown and threatening the mainstream social system (Jenkins, Smith, Ping Wang, 2007).

In 1976 Janice Perlman, a research scholar, author and speaker contested in her book *The Myth of Marginality* (1976), prevailing stereotypes about migrants and shantytowns and discredited the policies of eradication of informal settlements. Her critique was based on her surveys made in favelas in Rio de Janeiro 1968-9. She discovered strong communities with valuable networks and relations. Rather than drain on the urban economy she found a strong economic ethic supplying labour to the city. In terms of social and cultural integration, Perlman's conclusion was that the informal settlers were not marginal but 'integrated' on unfavourable terms and stigmatised by the rest of the society. Instead of viewing poverty as an individual characteristic of the urban poor she claimed that it is the condition of the society itself. (Perlman, 1976).

The author and activist Jane Jacobs made a similar experience when visiting North End, a densely built district in Boston, in 1959. North End was characterized by its old houses, a fine grain of city streets and diversity among the

inhabitants. The area was a recurrent subject for architecture and urban planning students by MIT and Harvard. The area was perceived as a slum, optimal for implementation of *modern values*.

She describes in her book *The Death and Life of Great American Cities* (1961) the prosperous and friendly atmosphere; children playing in the streets people walking and talking. The old typology with residential clusters mixed with commercial units gave a vivid and pleasant expression.

During her visit she talked with a friend of her who was an urban planner in Boston. He told her facts and statistics and it was nothing distinctive negative with the area. He even used to visit the area because of its pleasant atmosphere. But nevertheless, he was thought that these kinds of environments were to be perceived as unhealthy and bad for people. Everything that made him an expert told him that North End was a bad place. This peculiar history fuelled Jacobs' critique towards modernisation development strategies, strategies she witnessed drained the social core in our cities.

3 Case studies

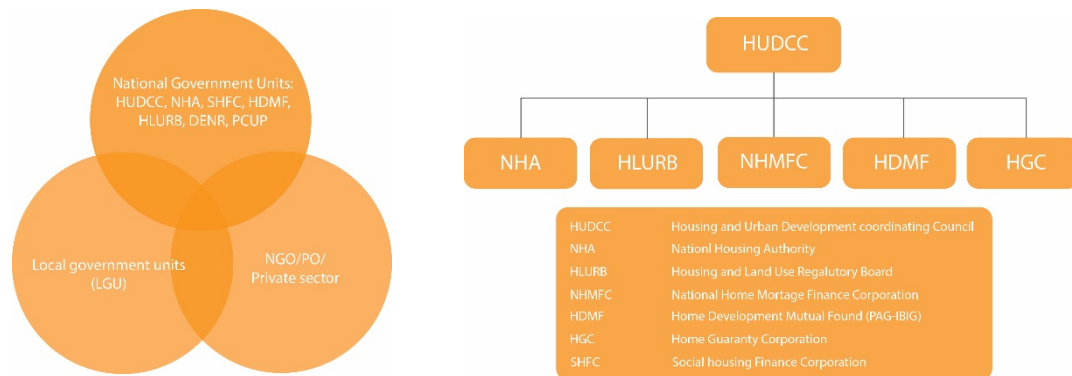
Context of Metro Manila

Metro Manila, situated on the Luzon island, is the capital of Philippines. With its 12,9 million inhabitants it is the most densely populated city in the world. The metropolis is divided into 4 districts with 12 cities and 5 municipalities (Ragragio, 2003). The cities, municipalities and barangays are governed by their respective local government units (LGU). The LGUs are required to prepare their own comprehensive plan (Åstrand, 2019). The division and dissimilar governance contribute to segregation which makes it hard to coordinate and plan the overall city in a holistic way.

Due to the ongoing rapid urbanisation, the city face challenges regarding congestion, environmental degradation and poverty. There is also a growing gap between the rich and the poor. The economical inequality and exclusion leads to an uneven distribution of people resulting in increasing inadequate housing and appearance of informal settlements (Åstrand 2019).

Actors in shelter delivery and their roles

The housing policy is undertaken by several groups. The governmental sector group headed by the Housing and Urban Development Coordinating Council (HUDCC) is the highest policy making and coordinating office on shelter. It is an umbrella organisation and the agency that deals with housing for the urban poor is National Housing Authority (NHA). Other actors in housing delivery are local government units and NGOs and private sector. (Åstrand, 2019).



Actors in shelter delivery.

Key agencies shelter agencies within national government units.

Sites in Manila

In this section I will go through four different projects which all deal with housing for low-income families but with different developers and processes. In the figure below I have listed the different projects and some key aspects to compare. Worth to mention is that the density per hectare is the same in every project except for Manggahan which is the densest. What sets them apart is the number of households per building and overall scale of the project (units in total). Interviews were carried out in every site with the residents regarding their living situation.

Visited projects	Developer	Units in total	Persons/hectare	Households/building	Relocated residents	Community participation
Camarin Residences 1	NHA	600	2200	100	Yes, faraway	No
Manggahan Residences	NHA	900	2800	60	Yes, nearby	Yes
Ernestville	Private, NGOs	212	2120	17	Yes, nearby	Yes
St. Hannibal	Private, NGOs	300	2000	12	Yes, nearby	Yes

Figure 1.

Camarin residences 1



The urban layout of Camarin Residences

Camarin residences 1 is a gated social housing project developed by NHA in 2013. The residential units were relocated from informal settlements far away due to hazard-prone areas where they lived before.

The layout of the project consists of 10 slab buildings, 5-storey each on a total of 2,7 hectare. The buildings were programmed towards housing, but commercial activity existed in many

buildings, mainly on the ground floor and towards the streets. The outdoor environment felt spacious but was not programmed towards any specific activity, except for a half basketball court. No shading devices were present, except for some few trees. Children were playing outdoors and they used the streets and the space in between the buildings as playscapes.



Poor outdoor area in Camarin



Residential unit extended for commercial activity.

The buildings have 20 units per floor with a size of 24 square meters each. Marks and holes in the structure and scrap indicated poor maintenance. The average family size consisted of more than 6 persons per family. The apartments were optimized to meet different needs depending on activity. The residents were able to build interior walls based on their own wishes.

The answers from the interviews we carried out regarding their living situation witnessed about social exclusion and dissatisfaction. Many lost their livelihood due to relocation and the monthly cost for the units did not meet the affordability of the community resulting in unpaid bills. Bad preparation of the

community resulted in struggle to coordinate maintenance and common obligations.

Manggahan Residences



Urban layout of Manggahan Residences

Manggahan residences is, like Camarin, a gated social housing project developed by NHA. The project is under construction, but the majority is finished. It consists of 15 buildings, 5-storey each with 12 units on each floor in an area of total 1,9 hectare. The residential were relocated from the riverbanks nearby where they lived before. The outdoor environment was programmed to a

higher extent than Camarin. Observable spaces were urban farms, basketball court, dedicated spaces for parking, flexible open outdoor spaces where work outs, like Zumba, took place. No space was designated for commercial activity.

The interior of the buildings consisted of a common spacious corridor on each floor that allowed for natural ventilation. A schedule on the wall with activities witnessed about common activities for the community. The interiors of the apartment were flexible and allowed for own implementations.



Greater care for the design in terms of color and materiality



Gardening outside the buildings

The interview object told us about the preparation of the community which started around seven years before moving to the new area. The community were trained in maintenance and other activities regarding livelihood. Our interview object was able to keep source of livelihood. What differed the most in Manggahan compared to Camarin was the preparation of the community.

Ernestville



Urban layout of Ernestville

Ernestville is on the contrary to Camarin and Manggahan a private small-scale project brought by several initiatives. The project came to live because there was an immediate need for relocation of 212 families living in flood prone areas close to the riverbeds. These 212 families organized themselves to form Ernestville Home Owners Association Inc. As a community they accessed funds for both

land acquisition and construction. Different organizations, like FDUP (Foundation for the development of the urban poor Inc.) helped them to access technical, legal and financial support from the World Bank.



Proud member of the community, Ernestville HOA, telling his story behind the project.



Intimate passage

The total land is 0,4 hectare and the project consist of 2-storey buildings with loftable units. The project was completed in 2015. The outdoor environment was limited due to the small plot size, but the layout of the buildings and the design of the units made it possible for the dwellings to extend their activities both

on the backside and in the frontside. The narrow building crop allowed for natural ventilation. Seating and shading devices were put up to be able to use the outdoor space. The interior of the units allowed for an incremental growth, with the possibility to build a loft and other interventions such as walls.

Interviews were carried out with the residents and many of them agreed that it was a pleasant and safe area. The inclusion of the community regarding training in self-management, construction and financial aspects resulted in a resilient community with a sense of pride over their home.

St. Hannibal housing, phase 2



Urban layout in St. Hannibal

St. Hannibal housing phase 2, is a project developed by the religious organisation SHEC (St. Hannibal Empowerment Center Inc.) in partnership with Habitat for Humanity, a non-profit housing organisation. Similar to Ernestville, there was an urge to relocate families living along the riverbeds nearby. SHEC dealt with the

preparation of the community providing different programs regarding livelihood and education. Habitat for Humanity acted as facilitating organisation, ensuring quality in construction at low cost and expeditious completion.

The total land is 1,9 hectare and the projects consist of 11 residential buildings and a parcel of land is dedicated for a community building awaiting funding. The project consists of 2-storey buildings with loftable units and the handover was between 2007 and 2009.

Though high density and limited outdoor space the design of the buildings creates niches in front of the buildings which result in personalization of the space. The dwellers often placed plants in varied sizes and catered some of the domestic activities outdoors. The units, like Ernestville, were handed over with

minimal finishing to increase affordability but allowed for incremental transformation.



Intimate and green environment in St Hannibal.



Open space for common activities.

In the interviews we got similar answers like the ones in Ernestville. The community through its homeowner's association operated with minimal supervision and guidance. Every residential had a responsibility towards the community regarding peace and order. There were consequences if you misbehaved. Overall St. Hannibal gave a prosperous impression and the scale of the project felt familiar.

4 Discussion

During our field trip in Metro Manila we encountered several low-income housing projects conducted by NHA and private developers. During the visits it struck me how different they were in character and atmosphere. Many developments made by NHA were large scale projects with highly standardized units focusing on quantity rather than quality. Many of the processes did not include people's participation (or not enough) which often resulted in decline of the physical environment and decomposition of the community. On the other hand, developments where communities were included and socially prepared did manage to get on better without help from the outside.

When the community is involved in the process of building a home rather than a house (Turner, 1972) like in Ernestville and St Hannibal, the result demonstrates a successful dynamic between the physical and the social. The spatial configurations accommodate and support the different needs and provide the dwellers with a sense of place and identity.

In the example of Camarin the approach resulted in *reduce and displace* (Elemental, 2018). The units were of minimal size with no opportunity for incremental growth. In one case there lived up to eleven family members on 25 sqm. They were relocated far from where they lived before which resulted in loss of livelihood or they had to commute long distances to work. The new living situation resulted in safer physical environment regarding storm resilience but loss of intangible resources like networks and social context.

In the case of Manggahan the preparation of the community was more successful. The common obligations like maintenance of the buildings were accomplished through members of the community. Urban gardening was not part of the settlement plan but despite that the residentials had taken the opportunity to grow vegetables and other plants in vacant plots.

To be able to reduce poverty and upgrade housing for the urban poor, community preparation and engagement is a crucial aspect. As an urban poor your reality rely on intricate networks closely related to spatial configurations. The question of adequate housing must include other aspect like affordability, legal security of tenure and cultural acceptability (Ivette, 2019) when providing shelter for the urban poor. If not, those involved risk to go back to slum-like conditions again.

The current planning paradigm in the urbanising age rely on old values from the modernistic era, resulting in top-down processes and spatial implementations that fails to target the end user. Instead of importing generic models, planners and architects, other authorities should use their knowledge and get inspired from what is already existing: site specific solutions that adapt to cycles of economic and social change and cater for human life.

For me it is obvious that community involvement can act as a tool to empower people and reduce poverty from within.

4 Urban Shelter Design

In the discrepancy between industrialized mass housing and people's right to involvement and personalisation regarding their dwelling situation, lies an opportunity to develop systems that support the human needs and at the same time, provide a safe and resilient structure.

From visiting sites in Manila and interviewing the residentials, I have experienced a huge need for affordable housing. The living situation in Manila

implies families and relatives living together which result in overcrowding and congestion. The opportunity to use the outdoor space as a part of your domestic routines, is not always taken into consideration. The affordability of the families is low which demands incremental growth.

Design principles: support and in-fill

In the context of Metro Manila, I see an opportunity to develop a system based on John Habraken's idea around "support" and "in-fill". The main concept is that the "support"; a building framework that cater for the collective domain; and the "in-fill"; elements creating functional spaces; cater for the private domain. Below are some important criterias regarding the design and process.

Design criteria for "Support structure";

- Design and layout of the structure should include community involvement through technical assistance
- Loadbearing structure and layout should respond to the local context in terms of climate, topography and materiality (storm resilience) etcetera
- Production regarding elements is preferably mass-produced in order to reduce costs but can also be conducted on site
- Materials should, to the extent it is available, be locally produced and long-term sustainable
- Commercial and common facilities should be included in the ground floor
- Semi-outdoor spaces, in between the private and public, should be taken into consideration to relieve the indoor space

Design criteria for "in-fills";

- Design of the interior should involve the end user provided with technical assistance to ensure good indoor climate and space efficient floor plan.
- Materials used can be cheap and be on site built or pre-made.
- Self-help-initiatives can be conducted to reduce cost

5 The Role of Architects

TAO Pilipinas is a woman-led technical service non-governmental organisation based in Metro Manila, advocating for community development. Through their self-initiated core program, *Human Settlements and Environment*, they provide

direct technical assistance to community-based organisations and NGOs (TAO-Pilipinas, 2019).

In their book *Battling Waves; Lessons in Humanitarian Shelter Response in the Small Islands of Manicani and Homonhon, Eastern Samar and Geographically Isolated and Disadvantaged Areas in Northern Samar* (2019) they describe the participatory approach and the role of the facilitating organisations. According to them the technical professional must become an enabler instead of being the creator or provider of inputs. The design process should cater for mechanisms to extract creativity or other design input from the community and then translate them into a feasible outcome. Further they call for patience when communicating technical knowledge to non-technical together with perseverance and empathy towards the community (TAO Pilipinas, 2019).

It is easy to fall into idealism by romanticising people's participation. Members of organisations dealing with participation processes, told us that community participation is difficult to manage and is a time-consuming activity. On the other hand, they were determined that it was worth the effort because it empowered the participants and enriches the architectural practice.

In my own context, many architects act as providers. The process is clear and linear, it employs architectural and planning standards that we must follow. Standards are good to ensure equal quality and act as guides when designing but can also represent, as Turner puts it; the objector's own notion of what the project *ought* to be instead of something that can be achieved.

“The moral is simple and old enough to be forgotten by most of us most the time. As the traditional words put it: Do unto others as you would have them do unto you. It is a chock to think that this might apply to all of us all of the time, even when we are acting as officially certified experts on other people's problem.”

John Turner. *Housing by people*, 1976

As an architect dealing with participation process the role is more of a facilitator. The basic knowledge the provider-architect and the facilitator-architect require is similar but the way we employ the knowledge and solve the problem is different. Instead of acting as an imposing expert the facilitator use the expertise as a tool to extract ideas that will benefit the collective.

The goal with our profession is to create better built environments for humans. Participation processes are an opportunity to gain a deeper understanding of people's needs which makes our profession more effective, sensitive and awarding.

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