

Urban Form and Social Organization in Low Income Settlement

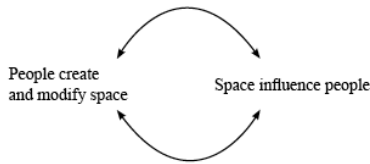
How to Regulate the Use of space by Design?



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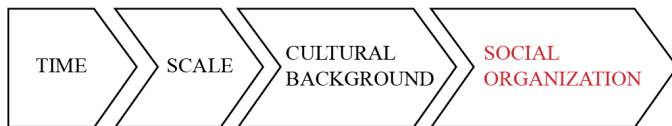
1 An Understanding of the Relationship between the Physical and the Social Dimension in Urban Design

Urban design and urban development can be defined by three dimensions: physical, time and social. There has always been a discussion regarding the importance of the physical dimension compared to the social dimension in the design field. The social aspect in a design project is unpredictable but it is at the same time the reason why we are designing: people. An interrelated process starts between people creating and modifying space, and space having an influence on people. The question is then, how much one influence the other and in which situation?



The city can be seen as a structure and as a social organization at the same time. The built environment could then be the medium and the outcome of social progress (Carmona, Heath, Oc, Tiesdell, 2010). Low (2009) explains that urban space is not an expression or the mirror of a society but it has its own intrinsic logic. In that sense, urban design is about giving a sense of place: Human being is situational that is why the context is so important (Dear, Wolch, 1989).

Giving a sense of place allows the formation of communities, and the configuration of particular forms and land-uses assist the formation of those communities. Then, within a community, the use of space is regulated by a set of rules, whether they are clearly expressed or not. The different variables influencing urban design and the social organization are depending on scale, time and cultural background. Taking Manila as a case study, we will try to understand its social organization regarding the three variables.



The Case of Manila

1.1 Time

In order to understand the actual social organization and segregation of Metro Manila, it is important to look back at the history of the city in a spatial way. Looking how the city has developed over time explains why it is segregated today and overcrowded.

The urban growth of Manila started in 1577 when the Spanish arrived in the Philippines and established the city of Intramuros, using Manila as a trading node in the South-East Asia. The city inherited a European structure (regular grid) from the Spanish time, which has been slightly modified in the 1900' by the Americans: creation of parks, views, and a symmetrical layout. (Tomeldan, 2013).



Manila, 1580 (Fig. .1)

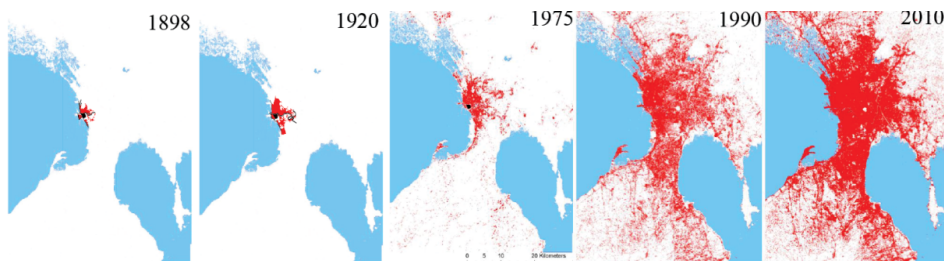


Manila, 1898 (Fig. .2)



Manila, 1920 (Fig. .3)

The demographic explosion of Manila started in the sixties after the city was rebuilt from the WWII destructions and the Philippines independence over the U.S in 1946. The migration from the rural areas to the city caused a rapid urbanization which caused sprawl, overpopulated areas and informal settlements. Manila continued to grow in a quite anarchical way until nowadays. It forms now the metropolis of Metro Manila made of sixteen cities.



Development of Metro Manila over Time (Fig 4).

The rapid urbanization of Manila caused a chaotic organization and segregated neighborhoods. The working class coming from the rural areas couldn't find affordable housing in a city where the cost of land became more and more expensive, due to the population growth; Manila entered in a vicious circle.

1.2 Scale

The city scale

If we look at the Metro Manila scale, we can observe a whole range of different communities, income types, activities ... We could guess that Manila is a mixed city. Or, Manila is a very segregated city, the gap between rich and poor people keeps on increasing and forms segregated neighborhoods and gated communities throughout the city. If the different neighborhoods are next to one another, they are not necessarily mixed. A wall usually separates one area from the other, like in Rosewood Pointe, Taguig City, Metro Manila.

Gated communities in Manila:



Rosewood Pointe, middle/high income. Sofia Bellevue, wall between middle and low incomes. (Personal photographs)

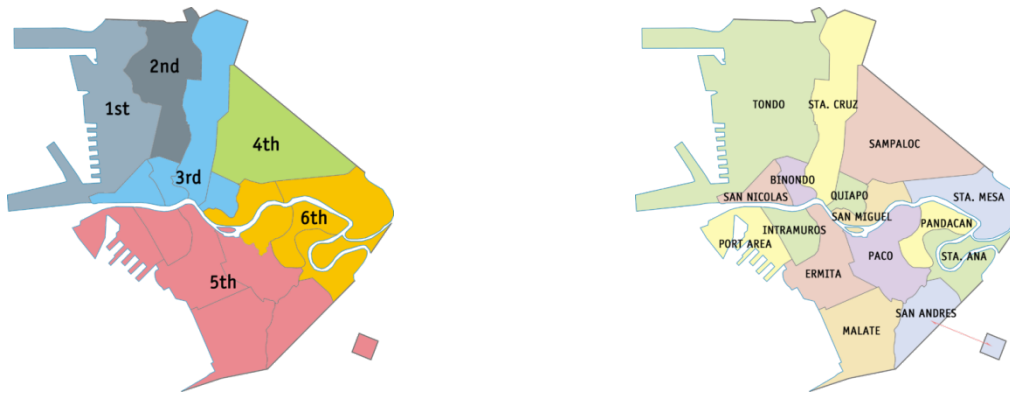


Rosewood Pointe Area: a segregated neighborhood. (Base map: googlemaps.com, 2013).

This analysis shows that if many different incomes and communities are living in the same neighborhood, they do not necessarily interact. Therefore, a mix at one scale does not always represent a mix at another scale. We then have to look at a closest scale in order to know how the social organization is held.

The community scale

The community scale is more difficult to define because it does not always follow a rational spatial organization. In the Manila case, the communities are easier to define spatially because they are traditionally organized in barangays. The city of Manila is divided into 6 legislative districts that are sub-divided in 16 administrative districts, but it counts 897 Barangays in total that are not defined by the administrative boundaries but by the communities physical delimitations. (Department of the Interior and Local Government, Republic of the Philippines, 2011.)



Manila City Legislative Districts Map and Manila City Administrative Map. (Balingit, R 2012).

We observe that the social organization is not distributed in the city according to administrative delimitations but people's belonging to a community. Nevertheless, within a community, different social interactions can happen depending on the physical setting.

Comparing two different low income neighborhoods in Manila will allow us to understand how the physical environment helps (or not) interactions between people and therefore building-up social capital.

Saint Hannibal Empowerment Center (SHEC) vs Smokey Mountain (NHA):

Saint Hannibal is relocation project situated in Pasay city, in Metro Manila. It is one the poorest areas in Manila, surrounded by informal settlements. The project began in 2006 and was led by a religious organization and helped in the construction by TAO Pilipinas and Habitat for Humanity.

Smokey Mountain used to be a garbage dump. The area was one of the poorest and most dangerous place in the city. The informal housings on site regularly

collapsed because of the unstable ground. NHA (National Housing Authority) has done a relocation project on site. The project started in 1997.

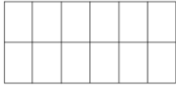



Saint Hannibals aerial map (googlemaps, 2013)



Smokey Mountain aerial map (googlemaps, 2013)

Table 1: Comparative Facts for the two projects

	Saint Hannibal	Smokey Mountain
Density	490 unit/ha	400 unit/ha
Population	294 families	2400 families
Area	6000 sqm	21,2 ha
Building size	12 x 25 m 	19 x 33 
Unit / Building	24	120
Unit Size	25 sqm	32 sqm (20 + 12 loft)

We can notice that if Saint Hanniblas and Smokey Mountain are two relocation projects for informal settlers in Metro Manila, they have been done in quite a different way. Saint Hannibals involved the community in the design and the construction of the buildings while the Smokey Mountain families have been allocated a unit directly. Also, even if the Saint Hannibals project is denser, it feels less oppressing than Smokey Mountain. The built environment has a different effect if the buildings have 2 or 5 storeys and depending on their general arrangement.

There is more public space in the NHA project but it is distributed with a big open space (and basketball court) and several in-between spaces, between the buildings. Those in-between spaces do not seem to be used that much. On the

contrary, Saint Hannibals has less open space but it is concentrated in one place, entering the neighborhood, with a basketball court, a shaded area and seating spaces, several outdoor shops.

We can say that for the same type of population (low income), the social organization varies depending on the spatial organization, especially through building typologies and arrangement, public space distribution and functions.

Greenbelt (Makati City) vs Walls (Intramuros Manila City):

If public space can be a way to promote social interaction, it can also be a place of segregation, depending on the type of users and the way it is addressed to the public. We will compare two public spaces in Manila : the Greenbelt in Makati City, high income area and public space related to a shopping mall; and the walls in intramuros, old fortifications re-appropriated by the people as a promenade.



Greenbelt aerial map (googlemaps, 2013)



Walls aerial map (googlemaps, 2013).



Greenbelt park (Senor Enriaue via fotothing.com, 2013)



Walls (personal photography, 2013).

We can see that even if both places are public, the Greenbelt is taking place in a high income area context, while the Walls are situated in a more diverse area. The general context around the public has therefore an important role to play. Also, we see that the building footprint framing the Greenbelt encloses the public space and does not allow many connections to the outside. The Walls on the contrary are very much open to the surroundings, on both sides, physically and visually. The Greenbelt propose a variety of activities within the public space while the Walls have very few activities. However, the Walls are more used than the Greenbelt. The design of the Greenbelt is addressed to a certain type of people (high income), creating an atmosphere that excludes other population groups. The Walls have been reclaimed spontaneously by the people, allowing a natural mix on site. We can say that even if it is easier to encourage meeting and mixing in the public space, it depends on the urban form around and on the public space design itself. Exclusion is here used to reinforce a social status.

We have seen that the problem in the urban fabric and public space is that the neighborhoods are too often segregated and do not allow interactions between the people. How can we influence the people's behaviour to encourage them to interact?

We need to achieve a mix, considering different scales and different time perspectives. Time is about how to make places that will last over the years and still allow changes, but it is also the different seasons (wet and dry in the Manila case), the days of the week (a plaza can be very active on a farmers market day, or for occasional events but empty the rest of the week), the time of the day.

2 Design Principles and Initiatives

How to achieve a mix and build-up social capital?

The "mixed city" is a term that has been more and more used in the past few years. It promotes social and spatial diversity within the city in order to avoid segregation and creates a lively and sustainable city development over time. How

can we achieve this mix and integrate it in the design process? We can ask ourselves if a housing mix will necessary create a social mix and will the social mix create social opportunities? (Fainstein, 2005).

Creating a mix is not about proposing a ‘shopping list’ ready made for every city, but about seeing what is needed in the city (or neighborhood) specifically (Ramo, 2011). Adapting the functions to the scale and place is the main challenge in order to achieve this mix, creating a sense of place (non-standardized design) and design for the people: at “the human scale” (Gehl, 2010).

Different design strategies explore this field, most of them are trying to implement short term actions (that enable having fast feedback to see whether they work or not), aiming for a long term change (Lydon, 2012). In that sense, giving priority to quality over quantity. The actions act as a catalyst for the city change. The designer doesn’t plan a rigid and final structure anymore, but a system allowing change: a starting point leading in one direction. The small scale improvements, that can be made by local people or decision makers, have the advantage of testing the project and then decide, to go forward with more permanent investments, or change the design if it does not work (because small investments do not use all the budget). Lydon (2012) finds five arguments promoting the “Tactical Urbanism” : a phased approach, local ideas and planning challenges, short-term commitment, low risk and increasing social capital between citizens. Time forms an important part in the process as well as the small scale aspect. The actions are usually carried out by the citizens, who aim for a new dialogue with the institutions (public or private), therefore forcing a participatory planning. The design process is then reversed, from top-down to bottom-up. Also, we know that the design process always takes a long time to be implemented, the Tactical Urbanism can become a way to activate the design process, show the people that things are moving forward. In this era of limited resources, change can still happen (Kaye, 2010). Initiatives of that kind are not a new thing, already in the XVIe century, pop-up shops selling books (Bouquinistes) were created along the Seine river in Paris. They slowly became permanent (illegally) and were finally legalized in the XIX century. Today, they are part of the UNESCO World Heritage and a part of Paris identity.

Do It Yourself (DIY), Urban Acupuncture (relieves stress in the environment (Parson 2010)), Guerrilla Urbanism, Guerrilla Gardening, Pop-up urbanism, City Repair (...) are different names given to those short-term actions. All those theories consist on the same principle, they only differ on the initiator type (communities, designers, developers or politicians) and on the scales of the actions. Here are examples showing actions that have been carried through : chair bombing (introducing chairs in an underused public space), plant bombing (for more biodiversity and greenery in the city), pop-up retails (temporary shops taking place in unused shop windows), park-ing day (transforming a parking place into a temporary park), depave (depave an unused space to grow plants), build a better block (temporary activities in a street front), parking to plaza (transforming a traffic island in a plaza), temporary events (summer beach in Paris, Roller race every first sunday of the month in the Seine quays road).



Chair Bombing in Praha
(organised by ReSite, 2012).
(Source : <http://img.radiocz.fr/festivaly/resite3.jpg>)



Park-ing day in Munich, 2009
(Source : <http://parkingday.org>)



Traffic to plaza, in Time Square (NYC).
Gehl Architects temporary project 2009.
(<http://www.gehlarchitects.com/#/378166/>)



Paris Plage (2009).
Organised by the municipality
(Alexandre Rosa via TravelPics.org)

If taking care of the public space first allows a fastest change that can be seen by everybody, the next step would be to make some improvements for the housing conditions. New tactics are emerging, proposing alternative governance and innovative tenure arrangements. Public rental housing (renting out from a publicly owned building, allows a cheaper rent than from a private sector), shared ownership for the land and/or the building (a deal is made between the land owner and the settlers to stay on the land ; several families buy land and pay the building construction together to reduce the costs), rent-to-own (payment distributed over a certain amount of time, with the possibility to buy at any time of the agreement), usufruct (allow a holder to derive benefits from a shared-owned property of the other person), long-term lease (rental agreement on a certain amount of time) (Magno-Bellasteros, 2000).

Those design principles and initiatives are mostly focusing on public space and in-between spaces because they are the easiest to begin with. Indeed, public space is usually more flexible than the built environment and it belongs to everybody. Nevertheless, we have to be careful that public space does not become a place of fragmentation if it is intensively used by a specific group, excluding others (as seen in the case of Manila's Greenbelt).

Public space is the place where change can happen, where opportunities can be given in a short time but will influence the entire neighborhood or even the city scale. One example is the case of Medellin in Colombia. The city was one of the poorest and most dangerous in the country with a lot of violence, crimes and drug dealing problems. The transformation started in 2000 in the mayor initiative, with the strategy to use architecture as a way to transform the city and a tool for social development: social urbanism (Drissen, 2012). The idea was to combine physical, functional and social changes at the same time in order to make the inhabitants proud of their city again. The plan acts on mobility, governance and education (depending on the places of actions chosen), through high quality architecture. The project deals with different scales, from global (Integral Urban Project, Land Use Plan) to local actions made in specific areas where the problems are catalyzed (metrocable and library project, botanic garden project).



Medellin electrical staircase
(Source : Medellin municipality)



Medellin Botanical Garden
(Source : Medellin Municipality)

We have seen that many different actions can be carried out by citizens or local communities as well as by politicians and investors. The design process always goes back and forth between different actors, especially when it comes to public space initiatives. What role do we play in the process as a designer?

3 The Role of Architects: Allowing Opportunities to Happen

The designer sits in between the decision maker and the user; it is the role of the designer to give tools to the people, allowing them to be active in the process. People have an active role in space and they choose between the different opportunities available to them. The designer is here to influence the patterns of human activities and thus social life (Health, 2010). The designer then creates a potential environment, while the user creates an effective environment (Ford, 2000). Being a designer is about creating choice.

If we look at the examples given in the Philippines, the design process is made the other way around: the role of the designer is to provide safety by forbidding things to happen. One example is the design of benches in public spaces in Manila: they only consist on one metal beam so nobody can sleep on it. Urban design is then considered as a way to be safe, building-up segregation (gated communities). Designing public space is playing and balancing between the collective and the individual interests of people, between freedom and control. Control can take different forms, passive or active. Exclusion by design is a passive form of exclusion, it does not imply an active implementation by a person or group of people. Passive exclusion can be implemented by different forms of access in the public space, whether it is physical (inviting or not), visual (available) or symbolic (exterior perception answering to social codes). Social dimension involves challenging questions for the urban designers, even ethical issues in that case.

How can we regulate the use of space by design, but still allowing opportunities to happen?

Implementing inclusive design requires a change of mindset. Public space is not only a recreational space, we do not want it to become an other in-between space only allowing people to go from one place to the other, especially in the Philippines where people spend much time outside because of the few private space they have. Public space is also about interactions, creating communication,

livelihood and a sense of belonging. Involving communities is therefore a key action to implement in order to achieve a sense of belonging in public space and then, design a place that answer real needs. Placing the people at the heart of the design process, and acknowledging diversity and difference is a requirement in order to achieve a well functioning and attractive public space, but it is not sufficient. Public space can not only be solved only by involving the people, designers would become useless in that case. Design is here to translate the people's needs into space, it is then as important to listen to the people than to listen to the site.

Planning for activities from the beginning is important in order to define space in the people's mind: if this space is designed as a playground, it will not relate as something else in their mind. Programming allow activities to happen but will limit excesses. One exemple is to provide graffiti walls, giving the possibility for people to express themselves in a given space, instead of anywhere else where you do not want them to draw. Also, if planning translates the people's need in space, I believe it is as much important to design according to the place.

Designing a playground, for exemple, can be done in many ways. Too often, activities are planned in a good intention but are realised according to a standart, a catalogue. Creating public places is not about picking in a catalogue, but about creating an atmosphere that relates, or contrasts, to the site.

There is no ready-made solutions to urban design and if we can be inspired by other designs and plan according to functions, climate, ... it will not create a place in itself, only the people's appropriation will transform a space in a place, if the design allows and invites it.

REFERENCES

- Bouw Matthijs
2006 *DIY: Do It Yourself*, Monu 4 Magazine on Urbanism.
- Cox, W. www.newgeography.com/content/002198-the-evolving-urban-form-manila
04.24.2011 *The Evolving Urban Form: Manila*.
- Dear, M & Wolch, J
1989 *The Power of Geography : How Territory Shapes Social Life*, Unwin Hyman, Boston
- Drissen, John
21.08. *The Urban Transformation of Medellin, Colombia*, Architecture in Development
- Fainstein, Susan
2005 *Cities Diversity, Should we want it? Should we Plan for it?*, Sage Publications, Columbia University, NYC.
- Ford, L
2000 *The Spaces Between Buildings*, The John Hopkins University Press, London
- Health Tim. Oc,T. Tiesdell, S.
2010 *Public Places Urban Spaces, the Dimensions of Urban Design*, Routledge.
- Gehl, Jan
2010 *Cities for People*, Island Press
- Jacobs, Jane
1961 *The Death and Life of Great American Cities : The Failiure of Modern Town Planning*, Peregrine Books, London
- Kaye, Leon
21.07.2010 *Could Cities Problems Be Solved by Urban Acupuncture?*, The Guardian.
- Lawson, B
2001 *The Language of Space*, Architectural Press, London
- Low, M
2009 *The Intrinsic Logic of Cities*, Proceeding of the 7th International Space Syntax Symposium, Stockholm
- Lydon, Mike
2012 *Tactical Urbanism 2, Short Term Actions Long Term Change*. The Street Plans Collaborative

- Madanipour, Ali
1998 *Social Exclusion and Space in : Social Exclusion in European Cities*, Jessica Kingsley Publishers Ltd.
- Magno-Bellasteros, Magnife
June 2000 *Land Use Planning in Metro Manila and the Urban Fringe: Implications on the Land and Real Estate Market*, Philippines Institute for Development Studies.
- Noussa, A. and Lyons, M
2009 *Inhabiting Space of Liminality: Migrants in Omonia, Athens*, Journal of Ethnic and Migration Studies
- Parsons, Adam
2010 *Urban Acupuncture : Marco Casagrande*, University of Portsmouth.
- Porteus, L
1977 *Environment and Behaviour*, Addison-Wesley, London.
- Ramo, Beatriz.
2011 July, Urban Shopping List for Cities in : *The Re-Creation of the European City*, Monu 7 Magazine on Urbanism.
- Schelzig, K
2005 *Poverty in the Philippines, Income, Assets and Access*, Asian Development Bank
- Tomeldan, Michael
25.02.2013 Lecture on: *Urban Development of Metro Manila*, College of Architecture University of the Philippines Diliman
- Urhahn, Gert.
2010 *The Spontaneous City*, Lecture in Porto Alegre, Brazil

FIGURES :

Fig 1: http://www.helmink.com/Antique_Map_Valentijn_Manila/

Fig 2: <http://www.maps.nfo.ph/manila-map-1898/>

Fig 3: <http://www.flickr.com/photos/johntewell/page2/>

Fig 4: DLR-DFD via <http://www.earthzine.org/2011/07/20/remote-sensing---an-effective-data-source-for-urban-monitoring/>, and personal additions.

