

Walkability in Metro Manila, Philippines

How urban design can make people happier



Sigurlín Rós Steinbergsdóttir

Iceland

1 Introduction

Enrique Peñalosa, former mayor of Bogotá, Colombia said once: “God made us walking animals-pedestrians. Fish needs to swim, a bird to fly, a deer to run, we need to walk, not in order to survive, but to be happy.” (Speck: 2012 p. 50) With his statement he strongly implies that humans, like every other creature on this planet have a significant way of moving through life which identifies who we are and separates us from other species, and to us that is walking. The ability to walk is a basic human nature and is therefore often taken for granted and as a result the pleasure of walking has largely been forgotten. Walkability should be treasured and nurtured to allow us to use our abilities for our advantage. Walkability should be one of the main headstones of urban design because: “City life is as much about moving through landscapes as it is about being in them. Not only does the city shape the way we move, but our movements shape the city in return.” (Montgomery: 2013 p. 181)

This essay tries to illuminate how unfair and outdated the current situation is in Metro Manila in regards to the majority of its inhabitants or the people who walk in their everyday life. The purpose of the essay is to show how building upon Metro Manila’s current qualities and investing the pedestrian environment could improve the lives of the majority of its citizens, making them feel more important, more equal and happier.

2 Literature Review

The Concept of Walkability

“Walkability is the extent to which the built environment supports and encourages walking by providing for pedestrian comfort and safety, connecting people with varied destinations within a reasonable amount of time and effort, and offering visual interest in the journey throughout the network.” (Southworth: 2005 p. 247 - 248) Walkability is more than just the ability to walk. The concept measures how friendly an area is to the pedestrian and how it encourages and invites people to walk or use other modes of transportation than the automobile to move around. “The General Theory of Walkability explains how, to be favoured, a walk has to satisfy four main conditions: it must be useful, safe, comfortable, and interesting.” (Speck: 2012 p. 11) The city needs to provide mixed-use areas, where residential areas are not segregated from places of business and work. Areas where most aspects of daily life are located in a walkable distance from one another and people could therefore walk with purpose. Streets need to be designed in such a way they give pedestrians a great feeling of security including freedom to travel at their own speed without the stressful effects from the automobile environment. Furthermore, the urban streetscape should be shaped into interesting, friendly and unique outdoor living spaces that can invite people to walk comfortably and enjoy themselves. “The pedestrian is an extremely fragile species, the canary in the coal mine of urban liability. Under the right conditions, this creature thrives and multiplies.” (Speck: 2012 p.10)

Walkability in Metro Manila

An official walkability draft strategy for cities in the Philippines states that: “Reserving and reclaiming space for pedestrian traffic is as important as providing lanes for cars. It identifies the promotion of effective accessibility and efficient mobility for all as a strategy toward achieving environment and people friendly infrastructure development. Also, it identifies the provision of pedestrian lanes and bike lanes as a strategy for social equity and gender perspective. It also promotes walking as a utilitarian mode.” (ADB: 2011 p. 30) It echoes through these statements and strategies that the city is aware of the problem and that the pedestrian’s needs are just as important as those who move by car and yet these issues are so neglected and the pedestrian’s needs are not being met. It is needless to say that when the majority of the population moves by foot or other modes of transport than

the private car that their needs should not only be equal to car users, they should be more important and given priority.

Metro Manila has traditionally been a city of walkers, where many of its urban dwellers rely on walking, cycling and public transport for their daily travel. (ADB: 2011) According to the survey *Assessment of Pedestrian Facilities in Major Cities of the Philippines*, made by the Asian Development Bank (ADB) 77,5% of the respondents surveyed in Metro Manila walk in their everyday regular travel; from home to work, or from home to school. Moreover the same survey states that 67% of trips made in Metro Manila take less than 15 minutes. (ADB: 2011) The best and the most reasonable explanation for the great number of pedestrians as well as the fairly short trips would be the mixed-use and high density character of the city. Even a more likely explanation for this is the fact that walking provides mobility to a large percentage of Metro Manila's inhabitants, especially the poor who often do not have other alternatives. (ADB: 2011) Some pedestrians of Metro Manila walk by choice even if they have the option to take alternative modes. Yet their number fades in comparison to how many look at themselves to be 'captive pedestrians' because they cannot afford or do not have access to other transport modes. (ADB: 2011) The sad truth is that about 33% of Philippines residents live below the poverty standard (MMP: 2013) and most of them are forced to walk to their destinations however far they are.

Almost every trip starts and ends on foot and walking is thus an integral part of the whole transportation system. While walking is still the most dominant factor of people's daily travels within the city today, it is interesting to note that it is rapidly declining. The decline is a direct result of the city's determination to provide more incentives to private motorised modes of transport on the cost of shared mode of mobility. This, along with rapid urbanisation has resulted in inadequate pedestrian facilities and public transport systems in Metro Manila where people are being corralled into very narrow spaces to ensure vehicle flow is not affected. Poor infrastructure is therefore forcing people to abandon walking and cycling and 'investing' in private motorised vehicles which means pedestrians are quickly migrating to other modes of mobility. Sadly 81% of the respondents of the survey: *Assessment of Pedestrian Facilities in Major Cities of the Philippines*, conducted by the ADB indicated that they would shift to other transport modes if they could afford to. (ADB: 2011)

Growing motorisation in Metro Manila

It needs to be realised that “most of us live in systems that give us almost no choice in how to live or get around.” (Montgomery: 2013 p. 199) The more the urban system gets reconfigured to accommodate drivers, the more we chose to drive, and vice versa. It is an expensive and vicious cycle that has excluded pedestrians concerns and preferences.

Growing motorisation in Metro Manila has led to dramatic increase in the number of pedestrian fatalities and accidents as well as high levels of air pollution, particularly exposing pedestrians who walk to work or access public transport to reach their destinations. (ADB: 2011) *The Global status report on road safety* conducted by the World Health Organisation (WHO) in 2009 claims that roads in Asian cities, like Metro Manila for example, are particularly unsafe for pedestrians, cyclists and motorcyclists who, without the protective shell of a car around them, are more vulnerable. (WHO: 2009) Walkability, or the ability to walk is therefore gradually deteriorating due to the increase of motorised vehicles.

The Global status report on road safety demands more emphasis to the needs of the pedestrian: “These road users need to be given increased attention. Measures such as building sidewalks, raised crossing and separate lanes for two wheelers; reducing drink-driving and excessive speed; increasing the use of helmets and improving trauma care are some of the interventions that could save hundreds of lives every year. While progress has been made towards protecting people in cars, the needs of these vulnerable groups of road users are not being met.” (WHO: 2009) “A change in focus is required which will allow people, not vehicles, to reclaim the urban environment.” (ADB: 2011 p. 4)

Moving through the city by a private car

We need to try to understand the effect that the city has on happiness of its citizens by considering how it feels to move through it. Patricia Mokhtarian, transportation engineer from the University of California, Davis, insists that: “long or short, every commute is a ritual that can alter our very sense of who we are and what is our place in the world.” (Montgomery: 2013 p. 183)

Many people have admitted to her that much of the pleasure of driving derives simply from being seen in their fancy cars but those people further admitted that they dislike the commute they have to endure every day. The commute made them unhappy and what they

experienced was that the car failed to deliver the sense of freedom and speed they were advertised for, in fact, the urban system neutralises their power. Car ownership might offer their drivers the status bump they long for, but that feeling quickly fades when surrounded by other cars. “While many of us love driving, we hate commuting. Unsurprisingly, people with longer commutes report “lower satisfaction with life” than those who drive less.” (Speck: 2012 p. 48) Cars once promised us unparalleled freedom and convenience, but despite fantastic investments in roads and highways commuting hours have been getting steadily longer. (Montgomery: 2013) In addition the Harvard professor, Robert Putnam states that: “each ten additional minutes in daily commuting time cuts involvement in community affairs by ten percent - fewer meetings attended, fewer committees chaired, fewer petitions signed, fewer church services attended, and so on.” (Speck:2012 p. 49) These facts should make us realise that how we move largely determines the way we live.

Long commutes affects our bodies in ways we cannot imagine. Researches show that “Driving in traffic is harrowing for both brain and body. The blood of people who drive in cities is a high-test stew of stress hormones. The worse the traffic, the more your system is flooded with adrenaline and cortisol, the fight or flight juices that in the short term get your heart pumping faster, dilate your air passages and help sharpen your alertness, but in the long term can make you ill. It can take as much as an hour to recover the ability to concentrate after a long urban commute. If you bathe in these hormones for too long, they can be toxic. Your immune system will be compromised, your blood vessels and bones will weaken, and your brain cells will begin to die off from the stress.” (Montgomery: 2013 p. 185)

When I think about this sad reality and how long commutes can affect our body and our general wellbeing and happiness I think about all the welcoming smiling faces I came across in my journey to Metro Manila. I cannot understand how the city is not trying everything it can to counteract current trends by focusing on investments in the traditional mobility of the city’s inhabitants and keep those smiles alive as they are so refreshing and so iconic for the Philippines.

Moving through the city by foot or by bicycle

“One group of commuters reports enjoying themselves more than everyone else. Their route to happy mobility is simple. These are people who travel on their own steam. They

walk. They run. They ride bicycles. Despite the obvious effort involved, self-propelled commuters report feeling that their trips are easier than trips of people who sit still for most of the journey. They are the likeliest to say their trip was fun.” (Montgomery: 2013 p. 186) These are sentiments from people who live in American and Canadian cities, which tend to be designed in ways that make walking and cycling both unpleasant and dangerous, much like in Metro Manila. “Why would travelling more slowly and using more effort offer more satisfaction than driving? Part of the answer exists in basic human physiology. We were born to move - not merely to be transported, but to use our bodies to propel us across the landscape.” (Montgomery: 2013 p. 187) Interestingly, but not surprisingly, people who walk more tend to feel more energetic and upbeat, they even have higher self-esteem and are happier. (Montgomery: 2013)

Shaping our urban systems to maximise utility for everyone

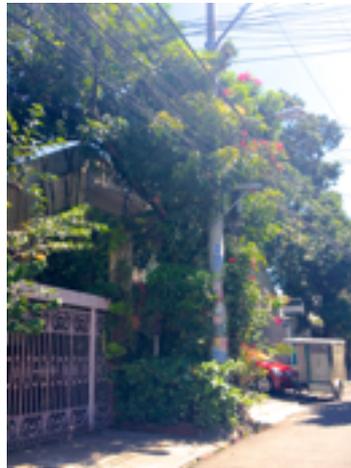
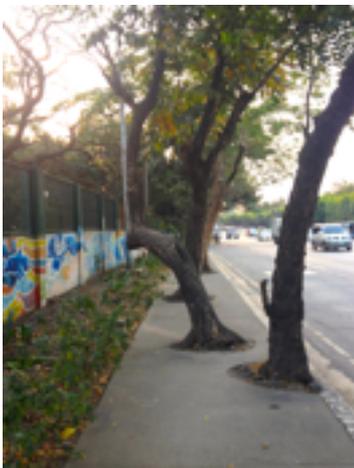
“Urban spaces and systems do not merely reflect altruistic attempts to solve the complex problem of people living close together, and they are more than an embodiment of the creative tension between competing ideas. They are shaped by struggles between competing ideas. They are shaped by struggles between competing groups of people. They apportion the benefits of urban life. They express who has power and who does not. In so doing, they shape the mind and the soul of the city.” (Montgomery: 2013 p. 233) “The question of mobility is not merely a matter of technology or economics, but of culture and psychology, and of the vast variation in our preferences.” (Montgomery: 2013 p. 202)

In cities there will always be chaos, there is no simple solution rather multiple answers to multiple situations. Cities should embrace complexity, not only in transportation-systems that have to co-exist and respect each other but also in human experience. There should be hierarchy between different means of transport where the walkable and the cycle-able environment along with public transport should always be prioritised before the private automotive environment. People’s right to choose different transport modes should be important as each of us has a unique sets of abilities, weaknesses and desires.

3 Argument, Critique or Discussion

My personal experience of walking and taking a Jeepney in Metro Manila

From my walking experience in Metro Manila, I quickly learned that it was not easy to move around on foot within the city. The automobile had the right of way everywhere and their travel was more important than mine. This was easy to see from the lack of pavements, obstructions from parked cars or street vendors or even big trees in the middle of the pavement when there actually was one to begin with. More often than not I was forced to walk on the road. Pavements were often unlevelled and not easy to move along. I stumbled upon a disability access signs on the pavement a few times, where the curb was slightly lower than normally. I could not imagine how a person in a wheelchair could access the pavement here rather than anywhere else without help, nor why they would even bother, because their trip would be cut short soon anyways because of inadequate and inconvenient surroundings. When I came to a crossing the car drivers would not stop when they saw I needed to pass. It was not unless I actually started moving over the street when they hit the break slightly just to show me that their intention was not to stop but only to slow down, so I'd better hurry over the road. The two times I tried to cross a major road, consisting of five car lanes or more I had to go out of my way to find an access to an underpass or a raised bridge. The crossing made me realise that as a pedestrian I needed to put in more time and effort to reach my destination than of those who drove a car. It was easy to understand that I as a pedestrian was less important than the car driver within the urban environment of Metro Manila. I soon learned that even for the shortest distances it was much easier to go by tricycle, Jeepney or a taxi because it felt much safer and more enjoyable.



Few examples of the hindrances I came across in the walking environment in Metro Manila.

Reflection on walkability in Metro Manila based on the literature review and my personal experience

When I look at the statistics from the literature review, I see that Metro Manila possesses many of the qualities that a walkable city needs. Already most people walk on a daily basis and most trips take less than 15 minutes. Furthermore along with walking, cycling and public transport serves majority of all destinations within the city. It sounds like Metro Manila has everything going for it. However, when you have seen the people drift along dirty, congested, polluted highways, with no shoes on, with dirty feet and dirty clothes, in uncomfortable, hot, humid air, walking past people who you can tell live in these circumstances. You witness people who go to all these lengths to get to work if they are even fortunate enough to have one and you understand that these people neither enjoy the walk nor do they prefer to walk. You understand that their walking environment is not only unhealthy but it is extremely dangerous. You see that they don't walk with dignity, nor are they treated as equals to those who drive their fancy cars to work every morning. They are cast aside as priority is given to those who live the automotive lifestyle. In a world where the car is introduced as the hallmark of wealth, speed and convenience it's no wonder that people are gradually investing in private cars. The environment is thus affecting people and shaping their travel behaviour. Metro Manila needs to realise how prioritising the needs of private vehicles can only result in an increased car ownership and motorisation and how badly that will affect the city and its citizens.

It is safe to say that Metro Manila does not possess the environment which encourages people to move by foot, but in my opinion it should. I would like to see a shift in priority, Metro Manila should learn from the mistakes which the developed countries have made already and are facing the consequence of today. Most of them are western mega-cities, who in the past, have formed their infrastructure around the private car. Most of them are today taking extreme measures to shift to more efficient and sustainable way for people to move throughout their cities, as well as trying to motivate people to walk and cycle in their everyday travels. The world is facing oil shortage in the near future, climate change is a real threat, pollution and greenhouse gas emissions rise every year as well as depression, obesity, diabetes and other health issues directly related to the immobility derived from our car depended lifestyles. It is about time we make a change to better our living environments. Transforming Metro Manila to a sustainable walkable city is a futuristic

approach to improve the quality of life of its inhabitants, giving them a greater feeling of equality and happiness. I believe that doing so would give the city an advantage on a global perspective.

4 Urban Shelter Design

Attitude change

In my opinion the urban design in developing countries like the Philippines at this stage should focus more on changing the attitude towards the subject of walkability rather than looking into design principles as those can be developed along the way. Urban walkability design should aim for freedom of movement for everyone and therefore it should carefully consider how people feel about moving through a certain place. But how do we build systems that allow people to feel free within their cities? “Sometimes it takes a radical shift in the urban imagination to point the way.” (Montgomery: 2013 p. 200)

“The story of Bogotá” - which Metro Manila can learn from and be inspired by

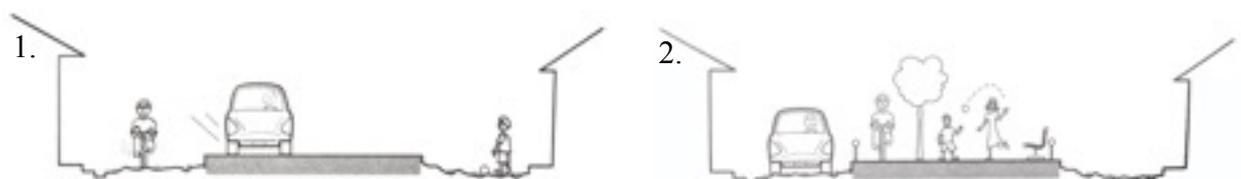
Enrique Peñalosa, former mayor of Bogotá, Colombia used his position to make radical innovative changes that truly came to life during his term which transformed the city of Bogotá and the life of its inhabitants. He thought it was necessary to teach people a new citizenship of respect and he thought it was equally important that the city would manifest the philosophy of its forms, systems and services. He said: “Only a city that respects human beings can expect citizens to respect the city in return.” (Montgomery: 2013 p. 239)

Before Peñalosa’s election the city was unfair, the biggest green spaces of the city were within a private country club, pavements had largely disappeared under parked cars so walking was a huge inconvenience and downtown plazas were completely taken over by street vendors. The real unjustness could be seen in the way that Bogotá apportioned the right to get around. Much like in Metro Manila, Bogotá’s infrastructure strongly favoured the private car use over public transport and pedestrian facilities, even when only one in five families owned a car. At that time Bogotá was receiving planning advice from the Japanese International Cooperation Agency (JICA) to help ease the congestion problem. The plan which infuriated the new mayor consisted of a vast network of elevated freeways. Not only was this a 5 billion dollar plan tailored to benefit Japan’s auto industry but it was highly admired by Bogotá’s elite or in other words, Bogotá’s private car owners. Peñalosa

complained: “We think it is totally normal in developing-country cities that we spend billion of dollars building elevated highways while people don’t have schools, they don’t have sewers, they don’t have parks. And we think this is progress, and we show this with great pride, these elevated highways!” (Montgomery: 2013 p. 241) Peñalosa shut this plan down and these highways were not built. Instead: “He poured revenues into an aggressive agenda that put public space, transportation and architecture to the task of improving the urban experience for everyone.” (Montgomery: 2013 p. 241) For example, he provided affordable housing with good services, parks and greenways, dozens of new schools, hundreds of daycares and a few libraries in the poor end of town. His agenda was to use urban design to make people happier. He thought public facilities such as parks and other beautiful places should be accessible and shared by all and he thought everyone deserved the privilege of easy mobility.

He improved the public transportation system of the city by introducing the TransMilenio rapid public bus system. The TransMilenio appropriated the best space on the city’s great highways, leaving car drivers, taxis and minibuses fighting for the scraps. This system “aggressively favours those who share space, discourages those who try to grab more than their share, and saves taxpayers from having to fork out for expensive subway lines or new freeways. For a small fraction of the construction cost the system moves more people per hour than many urban rail-transit systems.” (Montgomery: 2013 p. 234 - 235)

Peñalosa further implemented a radical change in the road system of Bogotá. Unlike most cities of limited resources, where roads are first paved for the few who drive cars while the majority who does not have one, must negotiate the mud and rubble on the shoulder (first diagram). Peñalosa introduced a new system that strongly favoured pedestrians. A new main road was made, a paved promenade, completely reserved for pedestrians and cyclists, while cars were relegated to the edge of the road (second diagram). (Montgomery: 2013 p. 236 237)



These small but very efficient changes to the urban environment allowed people to travel on foot, bicycle or with public transport more easily and with pride throughout their city in their daily life.

Peñalosa did all of this to service a philosophy of radical fairness because he believed: “One of the requirements for happiness is equality.” He furthermore explained: “Maybe not in equality of income, but equality of life and, more than that, an environment where people don’t feel inferior, where people don’t feel excluded. (Montgomery: 2013 p. 241)

Metro Manila and Bogotá share many similarities, both cities have high population density as well as limited resources where the majority of their citizens cannot afford to live the private automotive lifestyle. Therefore Metro Manila could inspire to and learn from the innovative and radical changes Enrique Peñalosa enforced during his term. The lesson that Metro Manila can draw from the story of Bogotá is that small affordable changes can make a huge difference in improving the urban experience for its citizens

5 The Role of Architects

Pedestrians are often victims of policy neglect. “A recent study conducted by the World Health Organisation (WHO) on global road safety concluded that 68% of countries in the world don’t have national or local level of policies that promote walking and cycling. (WHO: 2009) The absence of such policies will contribute to the continued decline of pedestrian trips, and to shifts to private modes.” (Montgomery: 2013 p. 7) “Considering that there are a significant number of pedestrians and public transport commuters who rely in walking as a main mode of transport in their daily commute, it is important that civil society advocates for pedestrian improvements as well as public transportation system. More importantly, poor people are mostly pedestrians and public transport users, and the quality of the urban transport system greatly impacts their quality of life and dictates how much time and money they spend traveling every day.” (Montgomery: 2013 p. 29)

There is a great lack of dedicated institutions with legal and financial resources that support pedestrian needs in Metro Manila as well as many other cities of Asia. Most city planning agencies include improvements of pedestrian facilities in their field of work, however there are usually no separate plans for improving walkability. Their main focus is to improve vehicle flow and make sure that pedestrians are out of the way.

There is a huge lack of relevant policies, dedicated institutions and political support that cater to the pedestrians needs in Metro Manila. Furthermore there is a need for institutional ownership of responsibility to implement radical change to the pedestrian environment. Clearly there is a need for comprehensive approach in pedestrian planning in the city. It is ultimately up to us, not only as architects or urban planners, but as responsible people, individuals and urban citizens to shape our landscape and how we choose to live in it. It should be our concern to educate and motivate others to care for and change our everyday environment for the better. We need to use our knowledge to help people understand the benefits both our and future generations can gain by putting these efforts to practise. Urban design along with education and motivation are the tools to be used to allow people to take a stand and improve their urban environment.

Bibliography

Leather, J., Fabian, H., Gota, S., Mejia, A., 2011. *Assessment of Pedestrian Facilities in Major Cities of the Philippines*. ADB Sustainable Development Working Paper Series. <http://www.adb.org/sites/default/files/publication/28679/adb-wp17-walkability-pedestrian-facilities-asian-cities.pdf>. Accessed: 2015.03.18.

Leather, J., Fabian, H., Gota, S., Mejia, A., 2011. *Walkability and Pedestrian Facilities in Asian Cities: State and Issues*. ADB Sustainable Development Working Paper Series. <http://www.adb.org/sites/default/files/publication/28679/adb-wp17-walkability-pedestrian-facilities-asian-cities.pdf>. Accessed: 2015.03.18.

Mission Ministries Philippines. 2013. *A Poverty Profile of Metro Manila*. <http://www.mmphilippines.org/about-us/a-poverty-profile-of-metro-manila>. Accessed: 2015.04.28.

Montgomery, C., 2013. *Happy City; Transforming our lives through urban design*. First edition. England. Penguin books.

Pallasmaa, J., 2012. *The eyes of the skin; architecture and the senses*. Third Edition. United Kingdom. Wiley.

Southworth, M., 2005. *Designing the walkable city*. Journal of Urban Planning and Development. ASCE. 246-257.

Speck, J., 2012. *Walkable City; How downtown can save America, one step at a time*. First Edition. New York. Farrar, Straus and Giroux.

World Health Organisation. 2009. *Global status report on road safety*. http://whqlibdoc.who.int/publications/2009/9789241563840_eng.pdf. Accessed: 2015.04.02.