Landscapes of Mobility in Metro Manila's Business Districts

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Abstract

Metro Manila has witnessed the blossoming of several business districts outside its historical core. Located mostly near the EDSA ring road and South Luzon Expressway, these business districts have become powerful attractors of office workers and shopping mall patrons, hence generating heavy commuter flows. Current urban dynamics reinforce the role of these districts as engines of growth for the whole country and define Manila as a multi-centered urban region. In addition to Ermita/Malate area, five major districts of Metro Manila are identified: Makati CBD, Bonifacio Global City, Ortigas, Alabang and the new Quezon City CBD (Vertis North) that is recently developed. These districts are not just office and shopping centers but they are also spaces of transit and transfer, whose residential component is growing with upper-end high-rise condominiums. There is indeed an expanding gap between higher-end "quality" vertical living that excludes the poor and their transport mode, and the horizontal city of the poor living in slum-like areas poorly served by many transport modes. Private developers appear to play a major role in the re-shaping of the metropolitan area, both by their new "townships" currently under development and with their influence in the design of future enhancements of the metropolitan rail system.

Keywords: Edge Cities, Metro Manila, Philippines, transitoriented development

I. Introduction

Since the 1960s, urban sprawl has greatly expanded the sizes of metropolitan areas around the world and led to the rise of suburban business clusters – a phenomenon well studied in the United States, with a rich vocabulary trying to describe it: "outer cities" (Muller, 1976), "new downtowns" (Baerwald, 1978), "suburban clusters" (Baerwald 1982), "suburban nucleations" (Erickson & Gentry, 1985), "technoburbs" (Fishman, 1987), "suburban minicities" (Muller, 1981; Spain, 1988), "suburban downtowns" (Hartshorn & Muller, 1989; Relph, 1991), and many other names. The catchiest appellation was coined in 1991 by *Washington Post's* reporter Joel Garreau, when he published his famous book "Edge City" (Garreau, 1991), describing islands of high-rise buildings in a sea of low-rise residential subdivisions. (Fujii, Yamashita & Itoh, 2006).

These urban regions or "city-regions" (Scott, 2001) consist in specific and somewhat independent "urban realms" (Vance, 1964; Hartshorn & Muller, 1989) linked by major transportation lanes, most often circumferential highways/freeways. These "galactic metropolises" (Lewis, 1983) are best represented by Los Angeles (Scott, 1988; Gottdiener & Klephart, 1991), up to the point that a "Los Angeles school" of urban thinking and theory has replaced the previously dominant "Chicago school" (Scott & Soja, 1996; Dear & Flusty, 1997; Abbott, 2002; Dear, 2002), even if some authors also recognize Atlanta (Wheeler, 1986; Fujii & Hartshorn, 1995), the Dallas Metroplex or Phoenix as good examples of polynucleated urban regions.

Multi-centered metropolitan structures have also been recognized in Australia, Europe and Japan (Davis & Perkins, 1992; Dieleman & Faludi, 1998; Lamboov, 1998; Kloosterman & Musterd, 2001). Tokyo, in fact, has been described as a good example of a polycentric metropolis, with many subcenters (Marunouchi, Ueno-Asakusa, Ikebukuro, Shinjuku, Shibuya, Shinagawa) located alongside the Yamanote Loop circumferential rail line: business, shopping and entertainment districts have risen around and above the train stations, both as a result of the strategies of private interests and the concerted planning effort of Tokyo's authorities (Sugawara, 1995; Lecroart, 2002; Saito & Thornley, 2003). In Hong Kong, the MTR has been a major stakeholder in the design and development of new towns, with a smooth integration of transportation, shopping and apartment housing in a pattern of intensive land use (Lau, Giridharan & Ganesan, 2005; Cervero & Murakami, 2008, 2009). The same patterns may be

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observed in Singapore (Sim, Malone-Lee & Chim, 2001). The rise in land and property values around transport nodes allows the transportation side to be adequately financed (Enoch, Potter & Ison, 2005) for quality commuting services.

Would these concepts have some relevance in the highdensity context (Barter, 1999) of Manila? The Philippines, most especially Manila, has an auto-oriented society (Rubite & Tiglao, 2004) like the United States, despite the huge gap in wealth between both nations. Even if Manila was the first city in Southeast Asia to implement urban rail, the heavy use of rail seen in Japan for intercity transportation is unknown in the Philippines. Many middle-class households are ready to travel longer distances to enjoy a suburban lifestyle, therefore adding to the growing flows of commuters saturating the road transport system of the National Capital Region (Rivera & Tiglao, 2005; Soehodho, 2005; Tiglao & Patdu, 2007).

This paper looks at the different business/office clusters of Manila under the angle of transportation in its automotive and urban rail forms, both of them currently marred by major problems of congestion and inefficiency, up to the point that many observers consider the transportation conditions in Manila to be detrimental to the Philippine economy in general. How are these activity clusters organized and built in relation to transport infrastructures (EDSA ring road, SLEX freeway, public rail transit, airport proximity) at the metropolitan and local scales? What places are given to local, not-so-informal (Cervero, 2007) transport modes such as jeepneys (Lim Chiu, 2008) and tricycles versus higher-end taxis and private cars? How do buses, a major transport mode in the Philippines for intraurban as well as inter-urban mobility, fit into the accessibility of the business districts? What is the link between transport and land use (Newman & Kenworthy, 1996; Polzin, 1999; Cervero, 2013) in the nation's capital region? Can Manila develop "transit villages" (Bernick & Cervero, 1997) to reduce its vehicular congestion and improve its air quality?

The current trend of development in Manila is the rise of private mixed-use enclaves near transport nodes, creating vertical islands of quality urban life in the middle of a horizontal sea of mediocre housing and automobile congestion. It raises the question on the respective roles of public government and private corporations in the management of city life.

II. Manila's Business Clusters

At the turn of the 20th century, commercial districts close to Downtown Manila (Intramuros) had emerged. These areas (Divisoria, Avenida Rizal, Escolta, Quiapo, and Binondo) saw the rise of hotels, multi-story buildings, hospitals, schools, and banks. Downtown Manila still was the capital's only business district until World War II. But over the next few decades, Manila's real estate industry started to look elsewhere for new land. The capital's increasing population and the Philippines' growing economy needed new business areas. The Araneta family began developing the eponymous Araneta Center, a 35-hectare commercial area in Cubao, Quezon City. Its centerpiece is the Araneta Coliseum (Arceo-Dumlao, 2015), which for a time was the world's largest domed indoor sports arena.

Then came Makati in the late 1960s, a project of the influential Zobel de Ayala family. Surrounded by subdivisions or gated communities, Ayala Avenue became home to the country's first true skyscrapers. By the 1970s, Makati City had become the Philippines' financial and business capital, a position reinforced in the post-Marcos years when the Ayala group also invested heavily in perimetropolitan business parks (Koike, 1993).

Then came Ortigas Center in the 1980s, Filinvest City (Alabang, Muntinlupa City) in the early 1990s, and Bonifacio Global City (BGC) in the late 1990s. Currently, Quezon City is building a new Central Business District (CBD) called Vertis Center, which will be a major transportation hub (three urban rail lines and the main bus terminal for all routes serving northern Luzon). All these massive urban projects are now fully-fledged business districts, each housing important institutions, numerous office towers, cavernous shopping malls, and headquarters of multinational and local corporations.

A growing number of master-planned townships and business districts – also known as mixed-use projects – are proposed and built all around the metropolitan area. This building boom further intensified when the government began privatizing idle prime lands.

Approaching Manila's airport from the air, the alert traveler immediately perceives the archipelagic pattern of skyscrapers clusters of the metropolitan area, rising above a wide expanse of slum areas, industrial parks and lowrise buildings. When landing from the northeast with a right-window seat, it is easy to recognize Ortigas Center, then Bonifacio Global City with Makati City behind it, and at the distance the high-rise buildings of Metro Manila. What has developed is a Los Angeles-style extended metropolitan region with multiple cores, including in the central area where the CBDs of Makati City, Ortigas (Mandaluyong City/Pasig City) and Bonifacio Global City (Taguig City/Makati City) are edge cities that are larger than the business district of Manila City and dominated by an ethic of privatization of public space (Shatkin, 2011) in the quest for global city-ness (Shatkin, 2008; Hogan, 2012; Boquet, 2013a). In a classic dual-city contrast observed in many world cities, these areas, as in other Southeast Asian cities (Olds, 1995; Dick & Rimmer, 1998; Laquian, 2005, 2011; Shatkin, 2006), are islands of world connectedness and gentrification (Garrido, 2013; Roderos, 2013) in a sea of poverty and slums.



Figure 1. Aerial view of Bonifacio Global City (Taguig/Makati). SM Aura (left) and Market!Market! (right) can be seen at bottom, Bonifacio High Street at the center.



Figure 2. EDSA as a shopping mall attractor.

A look at the list of the tallest buildings in the Metropolitan Manila area confirms a dual pattern of concentration/dispersion of skyscrapers in several clusters (Boquet, 2016a). Of the 50 tallest buildings, 19 are located in the Makati CBD (Roxas/Ayala), nine in Ortigas (Mandaluyong City/Pasig City), six in Bonifacio Global City (Taguig City/Makati City), and only four in the City Manila (three in Ermita and of one in Binondo/Chinatown). There are seven others in different sections of Makati City, including the newest tallest building of the country, three in the Boni area of Mandaluyong City, one in San Juan City, and so far, none in Quezon City.

These clusters of high-rise buildings are mixing high-end residential condominium apartments and office towers, both for executive functions (headquarters of Filipino corporations and Philippine offices of international firms) and for business process outsourcing activities such as call centers (Kleibert, 2014, 2015). The rapid growth of the Business Process Outsourcing (BPO) industry in the Philippines, facilitated by the designation of many areas as Special Economic Zones by the Philippine government, has spurred demand for office space (McKay, 2006; Dumlao, 2013) and accelerated the rise of skyscrapers districts that are busy at all times of the day and night with the odd-hours shifts of personnel. At the same time, shopping facilities have also grown very fast (Rau & Corpuz, 2012).

Outsourcing companies have snapped up office space in many buildings, with a high attraction exerted by the Makati CBD, sites in Mandaluyong City (Shaw-Ortigas and Boni-Pioneer), Eastwood Libis (Quezon City), the UP Technohub in Quezon City (next to the campus of the University of the Philippines-Diliman) as well as the surroundings of Mall of Asia in Pasay City and the Alabang area in Muntinlupa City. The City of Manila itself is not a major center of the BPO industry.

Despite the fact that the Philippines is still a poor country with myriads of small-scale, house-based *sari-sari* stores, Metro Manila has emerged as one of the shopping mall capitals of the world in the last 20 years. In fact, just considering the largest malls (Sameen, 2018), Manila is the only city that hosts three of the 15 biggest retail centers in the world, all run by the SM Group: SM Megamall in Mandaluyong City/Ortigas, SM City North EDSA in Quezon City and SM Mall of Asia in Pasay City.

Located mostly near the Epifanio de los Santos Avenue (EDSA) ring road and South Luzon Expressway (SLEX), these business districts have become powerful attractors of office workers and shopping mall patrons, hence generating heavy commuter flows. High-rise condominium buildings come with parking garages (Orquina & Lidasan, 2003) enticing residents to use their cars, hence demultiplying the car trips in addition to the malls and businesses traffic generation. Current urban dynamics reinforce the role of these districts as engines of growth for the whole country and define Manila as a multi-centered urban region.

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III. Transportation Networks in Manila

For foreigners who are used to efficient public transport, wide roads and a general sense of order, Metro Manila's transportation system appears chaotic. With massive traffic jams, any trip becomes an exercise in patience and being on time for an appointment is a rare luxury for Metro Manila's 12 million residents. Meanwhile, frenetically driven jeepneys and buses, overflowing trash, and noisy, smoke-belching tricycles make the streets quite hazardous to pedestrians except in rare areas such as City of Makati's carefully planned CBD (Galingan, 2009). Sidewalks, when they exist, are usually narrow, poorly maintained, and often crammed with street vendors. The metropolitan area has basically ignored bicycle lanes and walking on its streets is exposing oneself to heavy pollution with health consequences such as asthma.

The general appearance of chaos belies the efforts at rationalizing the circulation within the metropolitan area. Authorities have developed a semi-radio concentric network of automobile thoroughfares and built an urban railway network, while trying to regulate and differentiate the use of the different road transport modes. The most important roads of Metro Manila are organized around a set of radial and circumferential roads.

The North-South Roxas Boulevard, first developed under the 1904 Burnham plan alongside the shores of Manila Bay, is the central element of Radial Road 1 (R1) that leads south to the province of Cavite. Parallel to it, slightly inland, Taft Avenue (R2) also links the old part of Manila to Pasay City, Las Piñas City and several Cavite localities. R3 (Sergio Osmeña Highway) starts from Manila leading to the south through Makati City then towards the provinces of Laguna and Batangas as a large modern toll road highway, SLEX, opened in 2006. R4 has not been completed. R5 leads from Mandaluyong City (Shaw Boulevard) to the eastern suburb of Antipolo City in Rizal province. R6, also known as Aurora Boulevard, is an eastbound road in Cubao, the southern district of Quezon City. Radial Road 7 (R7) starts from the neighborhood of Quiapo in Manila and leads towards the northeast, under the successive names of España Boulevard, Quezon Avenue, Commonwealth Avenue, and Quirino Highway. It was designed as the central axis of the new capital Quezon City in the 1940s (Boquet, 2016b). Built in the 1960s, its Commonwealth Avenue section beyond Quezon Memorial Circle serves as the largest urban artery in the whole Philippines, with up to nine lanes of traffic at each direction. Quezon City was then the capital of the Philippines, and embassies were to be put up on both sides of that stretch of highway. It is also the most accident-prone road in the country. Leading north of Manila, R8 becomes the North Luzon Expressway (NLEX) leading to Angeles City (Pampanga) through Bulacan province, while R9 (Rizal Avenue, McArthur Highway) runs parallel to it further west. The coast-hugging R10 has not been really developed.

The circumferential EDSA (Boquet, 2013b), first developed in the 1940s to provide access to the new Quezon City from the South (Makati City, Pasig City, and Mandaluyong City), has become the busiest highway in the metropolis. In the scheme of roads, this 24-kilometer stretch of highway running from McArthur Highway in the north (Caloocan City) to Roxas Boulevard in the south (Pasay City) is known as C4 (4th Circumferential Road) and cuts across Quezon City, Mandaluyong City and Makati City, while bounding Pasig City and San Juan City. When it was completed in 1954, it was approximately marking the limits of the built-up area. Its southwestern end, near the shoreline of Pasay City, is the site of the gigantic SM Mall of Asia. Other segments of roads within the EDSA perimeter have been designated as C1, C2 and C3, even if they serve more as local roads than beltways, a role assigned to an outer ring highway (C5) that also serves as a major link between the cities of Taguig, Pasig and Quezon City at the eastern to northern side of the metropolitan area up to Caloocan City further north. A C6 outer beltway is currently under construction. It will entirely bypass the Metropolitan Manila area for traffic between North and South Luzon.

Most transport investments in Manila have been done for the development of road transportation. Boulevards have been widened and have become highways. A major project currently underway is an urban freeway linking SLEX and NLEX through the center of Manila (Gamil & Camus, 2014; Esplanada, 2014). Pedestrian overpasses have been built, somewhat belatedly, to allow the crossing through these thoroughfares, often becoming eyesores cutting through the urban fabric. The clear choice of roadbased transport in the post-war Philippines, helped by the lack of trains and the abundance of buses and jeepneys, has led to heavy congestion and timid efforts to regulate traffic. Most jeepney routes avoid EDSA, except on its southwestern and northern ends, but make heavy use of the radials. Metropolitan and provincial bus companies are the top users of EDSA, which concentrate many private bus terminals especially in the Cubao sector of Quezon City. Tricycles and pedicab services, banned from the largest thoroughfares, are limited to specific sections of municipalities and serve mostly as feeders for other modes of transport from the narrow streets of neighborhoods where other vehicles have no physical access.

In comparison to other Southeast Asian countries' metropolises (Bangkok, Jakarta, Kuala Lumpur), Manila's motorization rate has remained modest (Senbil, Zhang & Fujiwara, 2007). Motorcycles, which have become a dominant mode of transport in countries such as Vietnam, are relatively few in the Philippines. There are in fact more for-hire tricycles than individual motorbikes.

Urban rail transit has been slow to develop. Only in 1980s did the authorities recognize the need for an alternative to road-based transportation. Three standard-gauge lines have been built so far, all alongside major thoroughfares.

Light Rail Transit (LRT) Line 1 is a fully elevated northsouth route that opened in December 1984 (7 kilometers) and June 1985 (8 kms). One of the first urban rail lines in Asia outside of Japan, anterior to Singapore's MRT or Taipei's Metro, it runs from North to South along Rizal and Taft Avenues (15 kms, 18 stations). The capacity of the line was increased in 1998. The line runs seven meters above the street on a concrete structure designed to withstand earthquakes. The average station distance is 825 meters. Stations are only accessible via stairs, with no elevators or escalators. Monumento (north terminal), Central, Gil Puyat, EDSA and Baclaran (south terminal) stations serve as main transfer nodes to buses and jeepneys. In 2010, the line was extended for five kilometers east of Monumento along EDSA between Caloocan City and Quezon City. There are plans to extend the line to the South.

LRT 2 runs from northern Manila (Santa Cruz area) in the west via Quezon City to Pasig City at the east. The line is elevated except for Katipunan station, which is located underground. Construction of this line started in 1998 and it runs along Recto Avenue, Magsaysay and Aurora Boulevards. Although called LRT, this line uses heavy rail metro vehicles. A footbridge linking the LRT 2-Recto station to the LRT 1-Doroteo Jose station opened in March 2005. LRT 2 is the less crowded segment of metropolitan rail network (196,000 passengers/day in 2013).

MRT 3 (Metro Rail Transit, officially called Metrostar) runs elevated along the EDSA ring road (except for the underground Buendia and Ayala stations). The central section opened on 16 December 1999 while the southern section, which connects to LRT 1, followed on 20 July 2000. The total length is now 16.9 kilometers. The MRT trains are air-conditioned... when it works! This line is over-used (up to 600,000 passengers every day), under-sized (trains, platforms, stations) and under-performing (speed, schedules) with an increasing frequency of incidents and insufficient maintenance in a wider context of corrupt management regularly covered by the Philippine press.

Rail transit in Manila is somewhat connected with roadside modes since most bus stops, as implemented by Metropolitan Manila Development Authority the (MMDA), are near the metro stations as can be seen alongside EDSA (MRT 3) and Taft Avenue (LRT 1), while jeepney routes often start near rail transit stations such as the jeepney terminals in the Guadalupe area of Makati City and at Quezon Avenue in Quezon City, to name a few. Tricycles serving smaller neighborhoods can also be found near the exit of the metro stations. A good example would be the Boni Avenue MRT stop in Mandaluyong City. However, a number of issues have been identified (Koh, 2000) that need to be addressed for a better travel experience. Passengers complain about increasing walking distances and access difficulties to transport terminals, leading to discomfort and danger when loading or unloading from buses, jeepneys and tricycles. Drivers of public utility vehicles regret the lack of waiting spaces, Uturns and loading/unloading facilities. Other road users are heavily impacted in the form of increased congestion on the roads, both by poorly parked vehicles and pedestrians walking on vehicular space.

Contrary to classic Transit-Oriented Development (TOD) theory, the land use impact of the LRT 1 seems to have been quite minimal since it was built in an already well-developed part of the metropolitan area (Pacheco-Raguz, 2010). However, there have been many more urban impacts alongside the EDSA/MRT 3 corridor.

IV. Townships in Manila: A Local Version of Transit-Oriented Development

The largest concentrations of skyscrapers usually dominate major commercial areas. The best examples are in the Makati CBD (no less than three major retail centers: SM Makati, Glorietta and Greenbelt) and Ortigas Center (SM Megamall, Robinsons Galleria and Shangri-la Plaza), among others. Bonifacio Global City is developing as a major business center while expanding its shopping mall facilities: first with the Market!Market!, then the high-end SM Aura. In secondary subcenters such as Alabang in Muntinlupa City, the pattern is similar: a large shopping mall surrounded by smaller retail facilities, office towers and residential high-rise condominiums.

Almost all major malls, except those in Downtown Manila, are located alongside the major freeways such as EDSA and SLEX. Their locations are typical of American-style freeway- or beltway-oriented edge cities and seemingly good implementation of the principles of TOD, with easy access to urban rail transport like when the MRT traveler walks directly into a shopping mall such as Shangri-La in Ortigas or Trinoma Mall at the northern end of the MRT 3 line in Quezon City. Major malls are easily accessible from public rail transit in Makati City. Most malls are served by Metrorail, and also include major jeepney and FX megataxi departure areas, as in SM City North EDSA (Quezon City) or SM Mall of Asia (Pasay City). Malls and public transit development have progressed together.

However, disputes over the location of public transit stations have arisen as exemplified by the case of the planned transfer station in Quezon City, where passengers could easily transfer from the LRT 1 to the MRT 3 and the future MRT Line 7. A long battle between developers Ayala (Trinoma) and SM (SM City North EDSA) almost led to a confusing split of the transfer station in two segments: LRT 1/MRT 3 and LRT 1/MRT 7, not to the advantage of the traveling public. Private developers seem to have taken control of the urban planning in Manila, to the best of their respective interests.

Major developers are now focusing on "township" projects. These "live-work-play-learn" master-planned, transit-oriented, mixed-use (Murakami, et.al., 2005), and self-contained "mini-cities" aim to offer urban dwellers everything they are supposed to need and want. Megaworld is building McKinley West and Uptown Bonifacio, SM is working on reclaiming more land off Manila Bay and expanding the SM Mall of Asia complex, while Ayala Group is developing the Arca South (Taguig City), Makati Circuit (Makati City), and Vertis North (Quezon City) townships. Federal Land and Vista Land have also started to build townships, with the former building Metropolitan Park (Pasay City) and Veritown Fort (BGC, Taguig City), and the latter developing Vista City (south of Manila).

the largest Philippine developers (Ayala, Today, Megaworld, Filinvest, SM) are using shopping malls as flagships and anchors for their "townships" according to this "Live-Work-Play-Learn" philosophy, which is the main source of their increasing wealth today (Cardenas 2014). Partly because of the BPO connection, Philippine malls tend to have a large number of restaurant and cafe offerings, which serve as lunch venues and as enticements to hang out at the mall outside work hours. In some cases, small green areas enhance the attractiveness of the mall areas (Gilles, 2013). The demands of the jobs and the availability of leisure areas nearby make the mall/office complexes a very attractive location to live, especially considering the horrendous traffic often encountered around Metro Manila. Real estate companies have seized the opportunity to develop these self-contained vertical cities (De la Fuente, 2012), aimed squarely at expatriates and the young adults working in BPO centers, and to diversify their portfolio of tenants. Demand for middleincome residential properties remains high, due to overseas Filipino workers investing in condominiums. Gains in the residential market used to be mostly in the luxury and high-end properties advertised by Filipino actors, but the growing demand and the shortage of residential units in this sector have led to a shift among developers, who are now catering more to the middleincome sector.

Megaworld started its commercial and retail businesses when Eastwood City, in Bagumbayan, Quezon City, was established in 1999. Recognized as the Philippines' first urban township and cyberpark, it is now home to almost 25,000 condominium residents, around 70,000 BPO and office workers, and houses more than 500 commercial and retail partners. The "live-work-play-learn" model pioneered in Eastwood City is expanding around Metro Manila and across the country. The Megaworld Group, which includes its subsidiaries Suntrust Properties, Inc., Empire East Land Holdings, Inc. and Global-Estate Resorts, Inc., has integrated urban township developments in Metro Manila, Cavite, Laguna, Batangas, Cebu, Iloilo and Davao. Megaworld-built townships are already home to about 250,000 residents and 150,000 BPO and office workers. According to its website, the goal of the company is to reach 600,000 residents and 400,000 workers by 2020. Its malls and commercial centers in Metro Manila are Eastwood Mall, Citywalk 1 and 2, and Cyber & Fashion Mall in Eastwood City, Newport Mall in Newport City (located next to Ninoy Aquino International Airport Terminal 3 and Villamor Air Base in Pasay City), Venice Piazza and Tuscany in McKinley Hill (Bonifacio Global City) and Lucky Chinatown in Binondo, City of Manila (Megaworld Group, 2010).

The township concept also provides a way for developers to be part of the solution to the congestion in Metro Manila. Condominium residents need not go far to buy groceries and gifts, or watch movies. BPO workers need not take public transportation just to buy food or eat in restaurants. Within these communities, everything is just within reach, and there is no need to confront the harsh realities of life of the rest of Manila: traffic, poverty, and crime.



Figure 3. Entrance to Market!Market! in Bonifacio Global City (Taguig/Makati). In the distance, behind the Serendra residences, high-rise buildings for condos and offices.



Figure 4. Trinoma's FX terminal in Quezon City. SM North shopping mall and office buildings in the background.



Figure 5. Eton Centris (Quezon City). Efforts towards quality urban space.

These upper-end enclaves within the wild and poor metropolis are indeed sold with attractive images of quaint European settings, as exemplified by the elite "The Florence" complex in Bonifacio Global City: "Imagine waking up each day to the aromatic scents of lush gardens, bathing under the gentle touch of the sun, relaxing in a homey café, and taking a stroll around a secluded community reminiscent of a quaint Tuscan region of Italy, inside the concrete jungle of a central business district". This integrated urban township is a place "where everything is inspired by the lights, sounds, and tastes of Italy" (BusinessMirror, 2015). It includes McKinley Hill Stadium, a competition-ready football field, and a "Venice Piazza" as the anchor of the Grand Canal Mall, with Italian gondolas, as is already done in the "Venetian" mall-casinos of Las Vegas and Macau.

In the case of Eton Centris (Martin, 2013), superbly located at the intersection of EDSA and Quezon Avenue in Quezon City, the developer is keen on developing a transportation hub for clean vehicles such as electric jeepneys, while reducing the need for long-distance travel by proposing work-live-and-play facilities next to the Quezon Avenue-MRT 3 station. Another example, the 204-hectare "Aseana City" (Reyes, 2014) complex straddling the Pasay/Parañaque border not far from Manila's airport, has attracted services firms, banks, finance houses and manpower recruitment. A major locator in this emerging-business district bounded by Roxas Boulevard on one side and Manila Bay on the other, next to the SM Mall of Asia Complex, is London-based V. Ships, a global maritime-service provider with crewing offices all over the world for filling 25,000 onboard positions a month. With Filipino seafarers experiencing the highest demand in the global market, the company established its second-largest office in Manila, complete with training rooms, engine room simulators and a culinary school to prepare Filipino sailors.

It appears that suburban Manila's many centers share some characteristics with US edge cities, among them Washington DC edge cities. In 2013, the consulting group Jones Lang Lasalle (Salazar, 2013) has identified three major "Central Business Districts" (CBD) - Makati, Ortigas and Bonifacio Global City - for the Metropolitan Manila area and no less than 26 Emerging Urban Districts (EUD). These EUDs are located in Quezon City (UP Technohub, Eton Cyberpod Centris, Eastwood City, Araneta Cyberpark, Vertis North, Fairview Terraces), San Juan City (Greenhills Redevelopment), Pasig City (Rockwell BPO Complex), Makati City (Rockwell Center, Century City, Circuit Makati), Mandaluyong City (EDSA Central, Robinsons Cyberpark, Greenfield City), Taguig City (McKinley Hill, Arca South), Pasay City (SM Mall of Asia Complex, Newport City, Metropolitan Business Park),

Muntinlupa City/Alabang (Madrigal Business Park, Filinvest Corporate City), Parañaque City (Aseana IT Business Park, Asiaworld City), and further south in Cabuyao, Laguna (Eton City) and Calamba, Laguna (Nuvali Canlubang).

The majority of Metro Manila's clusters/townships are located alongside a few major thoroughfares: Commonwealth Avenue in Quezon City in the northeast, South Luzon Expressway in the southern part of the metropolitan area, and most of all EDSA, the semicircumferential highway doubled by the MRT 3 mass transit line. Most of the real-estate boom so far has occurred in the eastern and southern parts of the metropolitan area, as Ninoy Aquino International Airport is located at the border of the cities of Pasay and Parañaque on the southern side.

The North side developments have been few: cities of Caloocan, Malabon, Navotas, and Valenzuela seem to be on the "wrong side" of the metropolitan area. This may be changing with the announcement of "The Cloverleaf" (Andolong, 2015; Austria, 2015; Ermitanio, 2015) in Balintawak, Quezon City at the junction of EDSA and North Luzon Expressway near the Caloocan City border. Thirty four percent of the 11-hectare mixed-use development, which used to be a textile mill property, will be assigned for residences (two towers totaling 2600 units), while 62 percent will be for retail and office space, including a 40,000-square meter shopping mall. The Ayala-developed project will also include a hospital and a landscaped pedestrian promenade. The whole project is set to be realized in just five years.

These townships represent oases of urban quality at the local scale. However, their proliferation indicates that metropolitan planning in Manila may be no more than an addition of separate "pockets of development" run by the private sector, rather than a well-designed panmetropolitan master plan. Developers are able to revitalize locally some derelict neighborhoods and provide quality middle/upper class-friendly accommodations. However, their for-profit concern does not deal adequately with the plight of the millions of poor who live in slums (Lucas, 2005) amidst the stench of garbage-covered waterways. The real estate industry and the public planning authorities have not yet been able to work together on a common development platform for Greater Manila and its inhabitants (McLang, 2014).

V. Conclusion: Sustainable Urban Development in Manila?

Manila is a heavily polluted city suffering from many ills (Boquet, 2014a): frequent flooding, inadequate housing, traffic congestion, urban sprawl accompanied by a growing fragmentation of social space (Connell, 1999; Choi, 2016), excessive trash in the streets and rivers, dirty water, high levels of poverty symbolized by squatter settlements and widespread street begging. By many aspects the metropolitan area fails on the traditional indicators of sustainable development. Population continues to grow, the number of vehicles continues to rise, and the expansion of the urbanized area continues to widen. If we can clearly find some logic at work in the structure of the urban fabric and of its transport network amidst the chaos, there are many domains where to improve to make Manila a city that is enjoyable to live in. Not enough green spaces (a major exception being the University of the Philippines campus), almost no space for bicycles, and highly pedestrian-unfriendly streets with high levels of accidents are impacting pedestrians (Leather, et.al., 2011). The management and governance of the metropolitan area under the umbrella of MMDA (Boquet, 2014b) appears insufficient in view of a rampant corruption of many in all domains of life, and of the entrenched interests of powerful mayors in their respective cities. The forces for better quality urban spaces appear to be at this time private developers who create oases of quality urban space while the rest of the metropolitan area remains mired in difficulties observed in other developing countries.

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