

Passive Remote Sensing as a Tool for Pedestrianization in Urban Revitalization

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Abstract - Passive remote sensors in photography allow the documentation of information in areas that are difficult to reach or may present some hazards. Passive sensors detect natural radiation that is emitted or reflected by the object or surrounding area being observed.

Small urban parks in low-income residential areas like the Pugad Lawin Shrine, experience a number of environmental disturbances given their extreme edge setting. PLS is identified as one of the Philippine Historical Sites being part of the freedom trail. PLS is vulnerable to hydrocarbon and carbon monoxide emissions due to the passage of tricycles and vehicles that service the communities and the scarce presence of vegetation in the neighbourhood.

Pedestrianization as an essential tool to urban revitalization process engages human connections in creating a sense of place and moreover educating for public and ecological awareness.

Keywords: Urban Environment, Architecture and Cultural Heritage

1. INTRODUCTION

Policy, participation and information are the three most recognised main ingredients for successful natural resource and environmental management. Skidmore (2002) says the balance between these three components, and their influence on management, will depend on the management problem, as well as infrastructure and other social, economic and cultural traditions of the country.

Physical and Visual Resources Present Environs and Conditions Analysis is achieved through acquiring information by digital photography. Data captured through photos contain platforms for observation, monitoring and analysing the study area.

Economic Resources through an actual survey and mapping of existing establishments within the study area. This focuses on the immediate periphery of the Pugad Lawin Shrine, which is roughly about square meters and the access link from EDSA and Seminary Road, which is about eight hundred (800) meters in length.

Socio-cultural Resources acquired through literature search in historical data was acquired in various media of print, interviews and searches on the world-wide-web connection. Interviews were conducted with park-goers, civic/community organizations, public sector agencies and other stakeholders in the Pugad Lawin National Shrine.

Urban Revitalization by Holcomb and Beauregard (1981) refer to as implying growth, progress and infusion of new

economic activities into stagnant declining cities that are no longer attractive to investors or middle-class households.

Pedestrianization in Manalo (2006) states that pedestrianization is an urban renewal development approach that focuses on the movement of people rather than vehicles. It treats urban space as a conduit for the flow of people such that they re designed for pleasurable walkability.

2. THE PUGAD LAWIN SHRINE

The Pugad Lawin Shrine (PLS) is identified as one of the Philippine Historical Sites being part of the freedom trail where 1,000 Katipuneros tore their “cedula personal” to launch the Katipunan-led Revolution of 1896.

The park displays a multi-piece statuary by National Artist Napoleon Abueva depicting the tearing of cedulas. However despite the historic nostalgia, park administrators experience a number of pilfering of statuary appendages, metal back rests of park benches, lamppost luminarie-parts and other similar petty cases.

Some nearby residents profusely deposit their daily refuse in the park periphery. A number of public utility vehicles are parked around the vicinity amplifying the blighted image. The area is vulnerable to hydrocarbon and carbon monoxide emissions due to the passage of tricycles and other vehicles that service the outlying communities and the scarce presence of vegetation in the park and neighbourhood.



Figure 1

An overlay of the Partial Road Map and Aerial View of the Pugad Lawin Shrine Vicinity in Quezon City Retrieved from 2010 Google Image @ 2010 DigitalGlobe @ 2010 Europa Technologies on September 2010

There are deteriorated waiting shed along a sidewalk on Seminary Road on the way to the Pugad Lawin Shrine. The walls are uneven and vandalised. Garbage is dumped on the floor and the area sometimes serves as a segregation area for people who make a living out of selling junk. There are rusted galvanised iron sheet covering the walk along Seminary Road from EDSA to Quezon City General Hospital on the way to the Pugad Lawin Shrine.

Landscaping at the PLS is present but is rather scarce that needs to be improved and maintained. Layering of landscaping from groundcover, shrubs, short storeys and tall over-storeyed trees needs to be addressed. There are hardly any visitors during the mid-day because of the intense urban heat island effect. Figures 4-7 show the absence of transitional elements in both softscape and hardscape.

Number of People going to the park

Park goers prefer to go to the park in 2 times; early in the morning and in the afternoon. People come to the park as early as 6am to jog and to do some stretching, some parents who accompany their kids to school goes to the park as well to chat with other parents. The number of people coming inside the park increases significantly at 6:30-7:00 AM and decreases at 8:30-9:00 AM. In the afternoon, the pour of people inside the park starts at 4:00 AM. The number of people inside the park decreases at around 7:00 to 8:30 PM because of the poor lighting.

Types of Park-Goers and Stakeholders

Majority of the park-goers in the morning are in the late 20's to late 60's. Most of the park goers are parents of the students of the school nearby, morning joggers, senior citizens. On the other hand, majority of the park-goers in the afternoon are composed of people as young as 10- late teens. Most of the park goers are children from the school or from the nearby neighbourhoods and night joggers.

1. List of Civic and Community Organizations
 - 1.1 Pugad Lawin Philippines Incorporated
 - 1.2 Iglesia ni Cristo Pugad Lawin Philippines
2. List of Public Transport
 - 2.1 Greater SRVSC TODA
 - 2.2 Bahay Toro Seminary Road SRFSM TODA
3. List of Public Sector Agencies
 - 3.1 Barangay Bahay Toro
 - 3.2 Pugad Lawin high School
 - 3.3 Headquarters Central Police District Precint No. 3 Police Department and Station 9603 Road 15 Bahay Toro
 - 3.4 Quezon City General Hospital
 - 3.5 Quezon City Cultural Tourism Affairs Office
 - 3.6 Quezon City Parks and Development Office
 - 3.7 Quezon City Planning and Development Office
 - 3.8 District 1 Councillors
 - Hon. Francisco A. Calalay, Jr.
 - Hon. Anthony Peter D. Crisolologo
 - Hon. Dorothy A. Delarmente
 - Hon. Alexis R. Herrera
 - Hon. Joseph Emile P. Juico
 - Hon. Ricardo T. Belmonte, Jr.

4. Number of Small Scale-Business Establishments along Seminary Road
 - 4.1 Sari-sari stores and Carinderias - 17
 - 4.2 Drug stores - 6
 - 4.3 Retail shops (Water refilling stations, etc) – 9
 - 4.4 Residences - 105

Stakeholders Suggested Solution

Majority of the nearby residents have agreed to make necessary improvements in their facades to contribute to a redevelopment of the entire site. One of the store owners even claims she had her store fixed to make their area pleasing to the eyes. Some agreed to plant more plants in their facades to somehow mask their houses and to add more greenery to the site. A huge percent of the total respondents are also willing to give their time in improving the shrine and the entire site. Although few are not aware of the historical importance of the park, the number of residents and business owners who know about the history of the place is significantly bigger. Through proper endorsement and education, people who don't know about the history of the park will realize the significance and the potential of the park.

Attitude of Stakeholders regarding urban renewal

The community plays an important role on a redevelopment of the park or any landmark. The involvement of the community in maintaining and enhancing such a significant landmark will make the park and the entire community work well. The survey and interviews conducted opened stakeholder's perception on harnessing the potentials of the site.

3. RECOMMENDATIONS AND FURTHER STUDIES

The geographical clusters offer a better visual reconnaissance given that the travel to the shrine is crucial in bringing in more visitors and making more people aware of its existence.

Quezon City Iconic Monuments Tourism Circuit

Activities in small parks such as the Pugad Lawin Shrine are limited given its area of around half a hectare. It would be more significant if tourists would come in a planned tour coordinated to see the different historical icons and monuments in Quezon City.

Reviving Pride of Place in the Pugad Lawin Shrine

Forsyth and Musacchio (2005) say that small parks like the Shrine, has many benefits, the least of which is providing nearby nature for residents and habitat for some animal species deep within a metropolitan area.

1. The proposed improvement of landscape will add species of large canopy trees adding shade for pedestrians and park-goers.
2. The proposed aviary will introduce urban wildlife. This would be a delightful addition and will bring back the "Lawin" in Bahay Toro's Pugad Lawin, where large birds used to rest on trees.

The Pugad Lawin Shrine can play a unique role in the urban landscape as a tool for increasing public awareness about the effects of urbanization on nature within their neighborhood.

- Sensory experience can be improved with the proposed improvement of walking paths, colour and variety in landscaping, smooth ground covers, creative design of proposed building renovations and expansion.
- Friends of the park can help in basic maintenance such as litter collection and tree planting.

The ecological and historical value of the park increases if they are part of a well connected open space system.

- The proposed revitalization can help connect the QC Parks and Historical sites in promoting a historical tour in the City.
- The proposed urban ecological network of tree-lined pedestrian walks, historical murals support social interactions in the shrine and neighbourhood.
- Visual cues and signs draws a connection of the shrine to a wider environment

Skidmore (2002) says that local policy and leadership in the vicinity of small parks like the PLS, may be asserted through diverse mechanisms including legislation, policy documents, imposing sanctions, introducing incentives (reduced tax, subsidies, etc.), motivation to contribute to development and so on. Policy tools are necessary to define protection areas. Sustainable land requires the participation by, and benefits to, local people. If the local people benefit directly (through an improved standard of living, better environment, gender equality, etc.) then they will contribute positively to the policy settings. In addition, an active non-governmental organization network is often effective in maintaining accountability.



Figure 2
Existing Site Development Map of PLS
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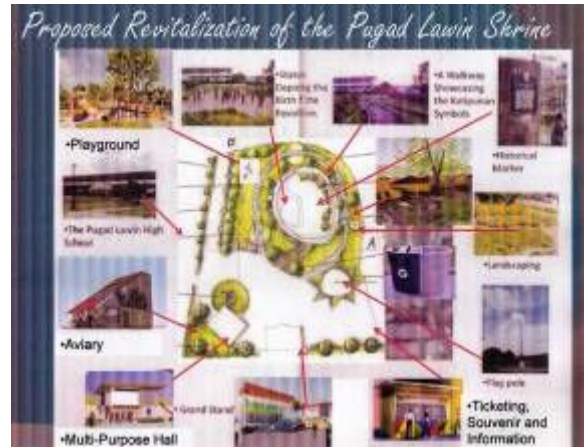


Figure 3
Planning 1 Case Study: Pugad Lawin Shrine
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