An Assessment of the **Preservation of Calle Hidalgo** as a Cultural Heritage Site in **Quiapo District, Manila**

JOURNAL DOI https://doi.org/10.31944

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Abstract

Old districts in highly urbanized areas such as Manila, the capital of the Philippines during the Spanish colonial period, present challenges due to the neglect, abandonment, or demolition of colonial architecture remnants. These heritage sites are constantly threatened as cities modernize and develop. Using the Work-Folk-Place Framework, also known as the Geddian Trio framework, this article focuses on the promotion of heritage conservation and preservation through adaptive reuse in Manila's Quiapo district that served as a commercial hub for Filipinos, Chinese, Spanish, and other foreign nationals.

Four heritage residential and religious architecture significant in Manila's history are located in the dominant street of Calle Hidalgo which is currently known for its camera and photography suppliers. Through a case study of Calle Hidalgo's redevelopment, this article assesses the preservation measures that the government imposes on this type of cultural heritage. It has been observed that the enforcement of cultural heritage conservation is inadequate, resulting

in vandalism and permanent damage to Manila's old heritage. In the end, this article elaborates on a viable conceptualization for Quiapo's Calle Hidalgo in promoting the preservation and utilization of cultural heritage sites that can be maximized with government-community participation to achieve socio-economic sustainability.

Keywords

Cultural heritage; heritage preservation; Calle Hidalgo, Quiapo; placemaking; sustainable comment

Introduction

To execute proper planning in preserving and maintaining cultural heritage, one must know how the current situation of the heritage site is and assess it according to its function, building status, survivability of the architecture through the upcoming years, resiliencies to natural calamities, and rapid development or changes.

Through a case study, this research conducted for the article focuses on the promotion of heritage conservation and preservation through the adaptive reuse of the Folk-Work-Place Framework, also known as the Geddian Trio framework. The Geddian Trio represents Economy (Work)-Social (Folk)-Environment (Place), — the basic building blocks to achieve urban sustainability. The use of this framework will catalyze change in the city's ideas on and policies of urban development, therefore promoting Manila's culture through valuing heritage in sustainable practices from local tourism and cultural preservation to responsible business or commercial practices.

The Geddian Trio Framework (GTF)

The Framework (GTF) was adopted in the analysis leading to the redevelopment of the area along a street called Calle Hidalgo in the Quiapo district of Manila. This theory takes into consideration the number of and kinds of people, their need for work and necessities through the integration of "Folk, Work, and Place" (see fig. 1).

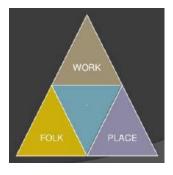


Fig. 1. The Geddian Trio Concept (Kitchen 1; Shivalkar 1)

Patrick Geddes' GTF lacks further clarification or translation of its three attributes on how to achieve an ideal town. For instance, 'Folk' could refer to either the physical community (the place) or the social community (the assembly of people). Similarly, 'Work' could represent the occupation of an individual or group, without specifying whether it pertains to livelihood, leisure, or residence. Lastly, 'Place' crudely translates to the tangible environment where users interact. Thus, a second framework, Barbier's Sustainability Framework (SF), is also employed to further explain Geddes' GTF concept in modern perspective (see fig. 2). This article correlates the two frameworks. The SF concept prioritizes balance among the three-pillars — Economy (also known in the GTF as Work), Social (also known in the GTF as Folk), and Environment (also known in the GTF as Place) (Basiago 145).



Fig. 2. Dimensions of sustainability considering architectural heritage preservation planning (Ranjbari et al. 1).

The study uses the GTF which narrows down the redevelopment strategies into conservation, restoration, and adaptive reuse for the heritage preservation of Calle Hidalgo as explained below.

Two Perspectives: Urban Planning and Conservation

To guide architects and planners in providing solutions that combine cultural and environmental elements with the physical and that impinge on urban design, two perspectives - one of urban planning and another of conservation (particularly of historical and cultural value or heritage) may be taken. These guiding concepts in urban design are differentiated as follows:

Urban Planning: The spatial scale of urban planning covers the larger area of a city as against a district of a particular city. Thus, by adopting and adhering to the principles of the GTF and SF techniques, urban master planning involves the development and redevelopment of areas through adaptive reuse, preserving and interweaving old architecture with significant historical contributions alongside newly constructed buildings. This approach is replicable to other areas or districts within a city and can extend to the contiguous built-up area. These can then be incorporated into the land use plan of a city or a planning area within a city.

Urban Redevelopment: The concept of urban redevelopment is "conceptually similar to land readjustment" where there is a reshuffling of zones (re-zoning) according to the density provided by the government (World Bank 1; Gotham 1). This concept is focused mostly on making an area more economically viable, tailored to an ever-changing environment and trends whether it is the natural environment or business/commercial in nature. Thus, this method's result may lead to less destruction of a cultural heritage (Roberts and Sykes 1; Fainstein and Fainstein 4; Tomeldan et al. 45).

Urban Renewal: Urban renewal is a concept that addresses the blight of the city or the deterioration of a city. In this method, areas that experience severe blight will undergo revitalization and reconstruction of communities where all cultural heritage sites will be retrofitted as part of conservation.

The main idea of urban renewal is not a one-go strategy or a comprehensive strategy. This method is more reactive rather than proactive. Therefore, it only addresses the city's present issues and problems at hand (Roberts and Sykes 1).

Urban Revitalization: Urban revitalization is a method that entails the physical rejuvenation of a particular urban landscape from its continuous urban decay. Through this process, various feasible and sustainable solutions are implemented to address the deterioration and blight prevalent in the area. Wherein most urban problems are provided with various solutions that are feasible and sustainable. Most urban problem solutions that are provided are long-term solutions with lasting improvement in different development sectors' conditions such as those that are economic, physical, cultural, and environmental. Such revitalization happens by preserving and conserving historical and cultural structures in terms of economic activities (Roberts and Sykes 1).

Conservation: Conservation is a technique used "to keep the existing state of a heritage resource from destruction or severe change" which includes "maintenance, repair, consolidation, and reinforcement" (Mata 28). Urban decay and urban blight have been the most common problems for the conservation of cultural heritage as urban development progresses very rapidly (Cruz 1). Thus, the current generation must help preserve cultural heritage sites and structures as invaluable treasures because cultural heritage is non-renewable. For physical, cultural heritage, particularly architectural heritage, the importance of their existence is not immediately understood by the general public. For reasons stated below, structures that can be considered part of architectural heritage have been demolished:

Lack of commercial reward (profit); lack of building capacity (under the capacity of the building to hold more people, rentals, profitable favors); and perceived outdated design and mismatch with culture of the present time. In response to these negative developments, owners, businessmen, heritage enthusiasts, planners, engineers, and architects have been pursuing adaptive reuse and restoration to preserve cultural heritage.

Adaptive reuse: This is a technique used to keep the existing state of heritage resources from destruction or severe change. However, its present use should be compatible with its history and its architectural integrity. Adaptive reuse is either classified as renovation or remodeling. These two terms simply imply total changes to the disruption of the original structure's integrity and spaces and go beyond pure renovation and reconstruction (Isberto 76).

Restoration: According to Articles 9 to 13 of the Venice Charter of 1964, the process of restoration is a "highly specialized operation" wherein thorough proper study of the heritage is prepared beforehand to minimize mistakes and to bring a near full authenticity of the heritage. New techniques in restoration such as replica techniques are welcome and can be utilized in the process, but these must be very close to or at par with the authentic piece. These new techniques can be used if traditional techniques are proved to be unconventional and inadequate. However, if any addition or subtraction upon heritage restoration occurs, a seal of approval from experts must be secured especially to the most featured part of the heritage. In this article, the focus is on reviving an old district through the cultural preservation and adaptive reuse.

Proposed Redevelopment and Placemaking

Research on the proposed redevelopment of the Calle Hidalgo site was undertaken through a literature review, observation during site visits, gathering of primary and secondary data, and review of reports and planning documents provided by the City Government of Manila and other government agencies. Most qualitative data gathered about the current situation and condition of Calle Hidalgo's environmental, economic, infrastructure, social, and land use contexts were assessed and validated during site visits. Individual and group physical site visitations were conducted in two phases: Phase 1 from late October 2017 to mid-November 2017 and Phase 2 from mid-January 2018 to February 2018. Other data were culled from the Comprehensive Land Use Plan (CLUP) of Manila. The researcher's observations of the site's environment were made during the site visits and were cross-checked with information found in the CLUP of Manila and other studies relevant to the redevelopment of the City of Manila.

Underlying this methodology is the application of placemaking (see fig. 3). The term "placemaking" is neither a foreign nor a newly invented word of description. Placemaking technique in urban planning and design had been used for some time but its definition was only established during the mid-1990s. Placemaking "refers to a collaborative process by which we can shape our public realm to maximize shared value. ("Placemaking" 1)" For instance, the shared value of places of meeting, or spaces free for all to converge, can be emphasized. A public park could be a place of meeting. A street could also be a place of meeting. Because of the advent of fast-paced motorized vehicles, this sense of openness to the public was limited to the view that roads are for vehicular transport only and that public streets are off-limits to the converging public.

Placemaking "pays close attention to the myriad ways" that makes inclusivity of everyone as the prime policy in planning a community, whether it is big or small, "in which the physical, social, ecological, cultural, and even spiritual qualities of a place are intimately intertwined" ("Placemaking" 1). which means each sector of development is given courtesy ("Placemaking" 1).



Fig. 3. Placemaking Design Paradigm (Prange 795; Cilliers and Goosen 793)

In the following case study, an overview of Calle Hidalgo, its history, characteristics, as well as environment and the challenges it faces are dealt with. Moreover, the preservation measures for the conservation of cultural heritage sites in the local and national context are analyzed and assessed.

Redevelopment Context

The proposed redevelopment work plan for Quiapo District aligns closely with the City of Manila's comprehensive land use plan. Up to present time the district of Quiapo has Manila's heart of commerce by the Polytechnic University of the Philippines (PUP) in 2019. Quiapo has been a commercial and convergence hub of Manila for more than 400 years up to the present. It is a favorite place for commerce (Tremml 184; Mojares 1). The objectives of the plan called Redevelopment of Calle Hidalgo Site Development Plan, were:

- 1. to systematically assess the current situation, abstract and concrete characteristics and components, and the challenges the district is currently facing within the constraints of its environment;
- 2. to aid in the conceptualization of the Calle Hidalgo Redevelopment; and
- 3. to recommend redevelopment strategies for Calle Hidalgo visualized in an Illustrative Master Plan.

The Study Area

Manila is well-known for its diversified cultures stretching from local cultures to cultures of foreign influence, particularly the West. Western influence came through Spanish colonization as the Philippines is the only country in Asia that the Spaniards colonized more than 400 years ago (Kiprop 1). The prominence of Manila was established back in the Spanish colonial period as a Spanish trading post. Manila has many old architectural structures and sites from the Spanish colonial period and the pre-World War II and postwar periods.

Quiapo is one of many *pueblos* (towns) in Manila established by the Spanish during their colonial rule. It was declared an independent town in August of 1586 (Abdullah et al. 3). Quiapo served as a commercial hub

for Filipinos, Chinese, Spanish, and other foreign nationals. It is a high population density area that stands on relatively flat terrain, mostly hard clay drained by *esteros* (natural canals) that diminished in time.

Quiapo is known by several names including "state of mind," "crossroads of the country," "pulse of the nation," "heart of Manila," "hub of the city," and "Manila's downtown" (Brillantes-Silvestre 1). The neighborhood has developed into a thriving hub for everything including business, church, politics, folklore, popular culture, and music (Brillantes-Silvestre 1). The arrival of the Japanese in the region in the 1920s and 1930s, the Indians in the 1940s, and particularly the Muslims in the 1970s all made significant contributions (Brillantes-Silvestre 1; Abdullah et al. 3).

Felix R. Hidalgo Street or Calle Hidalgo, formerly named Calle San Sebastian, is an 800-meter-long street with a road span of 8 meters (sidewalk provisioned) in Quiapo in old downtown Manila. It stretches from east to west through the center of Quiapo. It links two famous landmarks within the district of Quiapo: (1) the Minor Basilica of the Black Nazarene (Quiapo Church) located in the west end, and (2) Minor Basilica of San Sebastian (San Sebastian Church) located in the east end. There is an *estero* traversing Calle Hidalgo at present. Back then, vegetation covered most of Manila's *esteros* wherein the plant "Nilad" (Scyphiphora hydrophylacea) could be found (Baumgartner 52).

Calle Hidalgo was called "the most beautiful street in Manila" by Brillantes-Silvestre and even referred to as the most beautiful in the country. This is likely due to the grandiose architecture of the residences of Manila's finest families in the area (1). In 1960, its status started to decline into one of Manila's dirtiest streets (Brillantes-Silvestre 1). Most of the mansions were destroyed in World War II during the Battle of Manila while some were renovated or transferred to other places in the country.

Calle Hidalgo was once a favorite location or relocation place of families belonging to the middle- to upper-classes from the late colonial era of Spain to the early post-World War II years. Presently, Calle Hidalgo has become home to families from the lower-class (Brillantes-Silvestre 1; Abdullah, et al. 3; Venida 55). A mix of vendors from retail shops and suppliers specifically

catering to photography professionals and enthusiasts alike (Abdullah, et al. 3) to informal sellers coexist along the street. Notwithstanding this development, at present it is known for its heritage sites.

Like other old streets of Manila, Calle Hidalgo has its micro-culture that blends foreign and local beliefs noticeable in daily life. Therefore, it can be said that Calle Hidalgo has become a home or a placemaking site for its residents, avid visitors, and customers throughout its 400 years of existence. The rich micro-culture introduced by the finest families who lived in the Spanish-influenced residential buildings during the Spanish era had spread to other Manila districts like Binondo and Santa Mesa.

In June 2019, the City Administration of Manila led by the former Mayor Francisco "Isko Moreno" Domagoso enthusiastically and boldly announced bringing back Manila's former glory and splendor. This government's support was an opportune time for the conservation and preservation of Calle Hidalgo. The succeeding sections of the article will deal with specific elements pertaining to the area.

Physical and Environmental Context

Owing to its location, Calle Hidalgo acts as a collector road connecting low-to-moderate-capacity roads which serve to move traffic from local streets to arterial roads. Located in Barangay 393, at least nine famous residential buildings along Calle Hidalgo are estimated to be at least 100 years old and owned by the finest families during the Spanish colonial era. Most of these residences are well-designed and are collectively a concrete reflection of Spanish influence in everyday life (Brillantes-Silvestre 1; Bakas Inc. 1: Renacimiento Manila 1).

It was observed during the site visits that only limited green patches (i.e., vegetation such as trees and rouged terrain with wild grasses) can be seen and gray structures (e.g., brick and mortar buildings) most occupies the district area. Also, there is no indication of wild mammals but there were numerous wild urban birds determined throughout the site inspection period examples of which include (1) Munia, or the original Maya bird (Lonchura atricapilla); (2) Domestic Pigeons (Columba livia domestica); (3) Eurasian Tree Sparrow, or the Common Maya bird (Passer montanus); (4) Yellow-Vented Bulbul (Pycnonotus goiavier); (5) Zebra Dove (Geopelia striata); (6) Golden-Bellied Flyeater (Gerygone sulphurea); and (7) Pacific Swallow (Hirundo tahitica) (Vallejo Jr., et al. 75).

The climate at the site is not different from the general climate in the Southern Tagalog Region's lowlands. As Manila is a bustling city, pollution, consistent heavy traffic, improper waste disposal practices, and significantly high human density are prime problems. Due to these, there is an increased risk of threats to health, security, and peace in the city. The estero that traverses Calle Hidalgo is severely polluted; land and water pollution in the form of improper disposal of solid waste was observed. The water quality of the river is like septic tank water with solid waste. The City of Manila can proactively formulate more innovative actions with the Manila Bay Task Force in cleaning the esteros of Manila and maintaining its cleanliness from pollution.

Manila has been the natural discharge point of floodwaters in the past 400 years because of the natural existence of esteros in its midst (PIDS 1). Manila remains at the lowest elevation with most of the esteros covered by gray structures or reclaimed. Therefore, flooding is a regular occurrence in the city. Due to heavy development and reclamation, the high risk of severe flooding in low-lying areas is another prime issue.

Economic Context

The district of Quiapo has long been considered as the heart of Manila due to three reasons: (1) its proximate distance to the residence of the Gobernador-General de las Filipinas (Intramuros); (2) its proximate distance to Chinatown (Binondo) where most businesses are conducted. and merchandise are sold; and (3) the presence of the river channel that serves as transportation for merchandise of businessmen. Since the Spanish colonial period, Quiapo has been a multicultural market where many people converged to exchange business, information, and cultural beliefs (Tremml 184; Mojares 1; Bakas Inc. 1; Renacimiento Manila 1).

In terms of commercial activities, as of 2018, Calle Hidalgo is also known as the "Photography Lane" where people come to buy, sell, exchange information, goods, and experience regarding photography. Additionally, it serves as a hub for experiencing various aspects of photography culture. It is a haven for professional photographers and photography enthusiasts.

Infrastructure Context

Calle Hidalgo has sidewalks. Streetlights are installed throughout the length of the street and provide adequate light making the street safe to walk in even at night. The site is highly accessible. Calle Hidalgo links two major routes: on the east, Circular Road 01 'C1' (Ayala Boulevard) going to Malacañang Palace and on the west, Quezon Boulevard going to Basilica Minore of the Black Nazarene. North of Ouezon Boulevard leads to North Luzon Expressway (NLEX) and South of it leads to Roxas Boulevard.

Many transportation modes including jeepneys, utility vehicles, and light rail trains lead to the most popular sites in the Quiapo district such as but not limited to the Quiapo Church, the Quiapo Market, the Golden Mosque, Plaza Miranda, and San Sebastian Church. Because Calle Hidalgo is within the University Belt, walking is the most common method of moving about the area.

Telecommunication services by various service providers at the site may be collectively rated from moderate to excellent quality service. Internet access via mobile data connection is not an issue.

There is a (+/-) 25-meter bridge length that connects the east and west sides of Calle Hidalgo. The bridge does not impose a threat to safety nor is it in a deteriorated state. However, there is an (+/-) 18-meter estero underneath the 25-meter bridge that may impose a serious health hazard to the local people of Quiapo due to stagnant waters during the dry season.

Social Context

The demography and population, population density, and age-sex distribution were taken into account, based on the Manila city government's local statistic records. Other data used in this study are from the National Census of 2015 which was conducted by the Philippine Statistics Authority (PSA).

As of 2015, the resident population density of Barangay 393 was at 41,579/sq.km. Sex distribution for males and females were at 876,687 and 903,461, respectively. Age distribution statistics for Bracket A (0-14 years), Bracket B (15-64 years), and for Bracket C (65+ years) were at 508,272, 1,200,381, and 71,495, respectively.

Upon assessing the population distribution by school, working, and dependent age groups, Bracket B, categorized as the working group, was deemed higher than the total population of the dependent age groups (Brackets A and C).

Land Use Context

Upon assessment of the site, most developments are categorized as highdensity commercial (C3) and mixed-used zone (MXD). Within the area of Calle Hidalgo are residential areas, institutional areas (church, retails, and schools), and few open spaces for recreation purposes.

Heritage Conservation Strategies for Sustainability

Marrying the Geddian Trio framework and Barbier's Sustainability Framework concepts as earlier discussed, table 1 summarizes the criteria that defines the three GTF elements of Work, Folk and Place.

Table 1. The paradigm of sustainable development

Element	Criterion
Economic Sustainability (Work)	Growth Development Productivity Trickle Down
Social Sustainability (Folk)	Equity Empowerment Accessibility Participation Sharing Cultural Identity Institutional Stability
Environmental Sustainability (Place)	Eco-System Integrity Carrying Capacity Biodiversity

Source: Basiago, Andrew. D., "Economic, social, and environmental sustainability in development theory and urban planning practice." The Environmentalist, vol. 19, pp. 145-161, 1999, www.amherst.edu/system/files/media/0972/fulltext.pdf.

To achieve true sustainability, there must be a balance of economy, social, and environmental sustainability factors in equal harmony (Purvis, et al. 681). These may be defined as:

- Economy (Work). In order to function in a sustainable way and constantly generate an operating profit, a firm or nation must use its resources ethically and efficiently. Without an operational profit, a business cannot sustain its activities.
- Social (Folk). The capacity of a society or other social system to consistently achieve a high level of social well-being is known as social sustainability. The long-term maintenance of a nation, an

- organization, or a community's social well-being is ensured by achieving social sustainability.
- 3. Environmental (Place). Living sustainably requires considering the limitations of our natural resources. To truly sustain the ecosystem, we must make sure that we are using up all of the planet's natural resources while keeping in mind their limited supply and delicate nature. True sustainability, which also requires balancing economic and social issues, should not be mistaken for environmental sustainability.

Taking these three pillars of sustainability further, if we only achieve two out of three pillars then we end up with: (1) Economic + Environmental Sustainability = Viable; (2) Social + Economic Sustainability = Equitable; and (3) Social + Environmental Sustainability = Endurable.

Situational Analysis of Characteristics and Components

According to Ebbe, rapid urban development and urban expansion due to development or sprawl pose a significant risk to irreplaceable cultural heritage and natural resources (1). Based on observations during field visits, an inventory of the heritage sites in Calle Hidalgo can be made.

Among the nine residential buildings considered as heritage sites, there are four major or well-known buildings at the site and four lesser-known buildings. These buildings are characterized in table 2.

Table 2. Heritage sites along Calle Hidalgo, Quiapo District

Heritage	Туре	Location	Current Situation	Image
Basilica Minore de San Sebastian [1]	Catholic Church	Eastern side of Calle Hidalgo	Still in use, but under rehabilitation	
Basilica Minore of the Black Nazarene [2]	Catholic Church and Primary- Secondary School	Western side of Calle Hidalgo	Active Church	
Ocampo Pagoda Mansion [3]	Residence	Bilibid Viejo Street	Abandoned and deteriorated	
Nakpil- Bautista House [4]	Residence	Ariston Bautista Street	Museum, maintained (Adaptive Reuse)	
Boix House [5]	Residence	Ariston Bautista Street	Apartment and Dormitory; Fully deteriorated	
Paterno House [6]	Residence	Hidalgo Street	Dormitory; Slightly maintained (Adaptive Reuse)	

Enriquez Mansion [7]	Residence	Hidalgo Street	Transferred to Bagac, Bataan	
Zaragoza clan house [8]	Residence	Hidalgo Street	Abandoned and slightly deteriorated	
Zamora House [9]	Residence	Hidalgo Street	Dormitory; deteriorated (Adaptive reuse)	
Padilla House [10]	Residence	Hidalgo Street	Fully restored; Art Gallery (Adaptive Reuse)	
Don Jose Sulpicios Orpilla Mansion	Residence	Hidalgo Street	Abandoned and deteriorated	(No Photo Available)

Source: Aguilar, Karl. Photo number 8, 2014, www.theurbanroamer.com/a-walk-around-quiapo/. Agarpao, Jeraldine; Photo number 6, 2019. Del Rosario, Marc; Architectural photos number 1-2, 4-5, and 10, 15 February 2017, www.marc7travels.com/marc7-travels-blog-entries/explore-manila-the-romance-of-quiapo. Dimalanta, Rene Francis; Photo number of 9, January 2020. Pulumbarit, Veronica; Photo number 7, 4 January 2014, www.gmanetwork.com/news/lifestyle/travel/342418/tales-of-love-lust-and-murder-at-las-casas-filipinas/story/. Snoeck, Sidney; Photo number 3, 12 October 2007, www.my_sarisari_store.typepad.com/my_sarisari_store/2007/10/the-pagoda-of-q.html.

To provide purpose to these abandoned and deteriorating historical heritage architecture, one thus needs to not only convert and rehabilitate one building but rather repurposing these architecture and districts collectively. There are many hidden economic values and benefits that any individual, group, community, and the government can acquire from preserving heritage architecture and an urban district (Brillantes-Silvestre 1; Greffe 1).

For Individual view, the values and its benefits ranges, these includes (1) Artistic and aesthetic values encompassing painting, sculpture, literature, architecture, theater, film, and music; (2) Educational values comprising history, culture, engineering, and science; as well as access to (3) Information, archival resources, research services, and (4) Housing and real estate services (Greffe 1). For the collective view, there are (1) Heritage, (2) Urban planning, and (3) Economy (Greffe 1). As you can see, many people, corporations, and some in government lack deeper understanding of how architectural and urban heritage preservation is key to economic, social, and environmental sustainability.

Quiapo is a chaotic, weakened version of what it once was. Numerous social and environmental problems plague it including poverty, a lack of prospects for employment, poor housing conditions, environmental degradation, and hostility among people who are Christians and Muslims (Abdullah et al. 3; Venida 55; Bakas Inc. 1). However, despite this decline, its rich history and feeling of place remain intact. The Quiapo of today still has a strong sense of the Quiapo of the past (Bakas Inc. 1). But perhaps not for much longer as Quiapo is in danger of being destroyed by neglect and new development (Bakas Inc. 1; Renacimiento Manila 1). Nonetheless, most of the collective heritage architecture in the district of Quiapo most especially the residential homes of the former elites in Calle Hidalgo are rapidly deteriorating and being threatened externally with demolition for new real estate development, majority are focused on commercial activities.

Threats to Calle Hidalgo

Land Use Conversion and Resources Exploitation

Land conversion and land resource exploitation have been the biggest threats to heritage conservation (UNESCO 1), especially to tangible entity, cultural heritage since the rapid urbanization of the 21st century. The City Planning Office of Manila categorizes Calle Hidalgo as C3 and MXD. Typical low-rise architecture are erected within the area of Calle Hidalgo.

Through land-use conversion at a location of physical, cultural heritage, private developers potentially introduce an alien culture that may slowly destroy the existing culture, character, and natural or nostalgic feeling of that area. Without a concrete master plan, city governments do not have the reliable authority to enforce regulation against rapid urbanization brought about by land-use conversion.

In 2018, a high-rise residential architecture development was going to be erected just behind the famous all-steel Gothic Church of San Sebastian located at the east end of Calle Hidalgo (Miranda 1; Fernandez 1; Legaspi 1; Kasingsing 1). A development such as this is a threat to the area's physical, cultural heritage and this kind of development can potentially start a trend of similar developments in the area which will ultimately destroy the heritage culture of Calle Hidalgo (Bakas Inc. 1; Renacimiento Manila 1).

Climate Change

Climate change is another threat to physical, cultural heritage (UNESCO 1). If global warming continues, the threats of typhoons and floods will become more severe in the coming years (UNESCO 1). Flooding risks brought about by heavy rains during the typhoon season exacerbated by climate change will be further worsened by land and water pollution that clog the drains leading to Manila Bay. Aside from the rains, such typhoons with strong winds can also wreak havoc to the heritage architecture and properties.

Cultural Heritage Preservation

Cultural Heritage Policies

According to Cruz, urban decay and urban blight have been the most common problems for the conservation of cultural heritage as urban development progresses very rapidly (1). Thus, the current generation must help preserve cultural heritage buildings as invaluable treasures because cultural heritage is non-renewable. For physical cultural heritage, particularly architectural heritage, the importance of their existence is not immediately understood by the general public. Often, architectural heritage buildings are demolished for the following reasons:

- 1. Lack of commercial reward (profit);
- 2. Lack of building capacity (under the capacity of the building to hold more people, rentals, profitable favors); and
- 3. Perceived outdated design and mismatch with culture of the present time.

Republic Act No. 10066 (RA 10066), otherwise known as the National Cultural Heritage Act of 2009, is meant to establish cultural heritage parameters on conservation and preservation, and deal with concerns mentioned above. The law is based on the parameters and bylaws of the United Nations Educational, Scientific and Cultural Organization (UNESCO). It legislates cultural heritage considerations one of which refers to the totality of cultural property preserved and developed through time and passed on to posterity (Art II, Section 3). Therefore, all cultural properties are products of human creativity by which a group of people or a community and a nation reveal and reflect their identity.

Cultural heritage is not only limited to physical architecture or superstructures. The scope of heritage also includes the living traditions and expressions that are often shared, learned, and are symbolic and that can be inherited from ancestors and passed on to the next generation (Balco 1; Radzuan and Ahmad 2916; UNESCO 1).

Cultural heritage can also be classified either as tangible or intangible; UNESCO further classified tangible cultural heritage into three categories: (1) underwater, (2) movable, and (3) immovable (1). Underwater heritage includes shipwrecks, ancient cities, and structures presumed to be submerged underwater. Movable heritage includes paintings, sculptures, coins, manuscripts, historical records, and documents. Immovable heritage is considered as built heritage.

Only a few laws legislated regulate and facilitate the protection, conservation, or preservation and management of cultural heritage in the Philippines. The impacts of these legislations are greatly dependent on their iron-hand implementation. The enforcement of all legislations is one of the biggest challenges in managing heritage (Isberto 76). Legislators, policymakers, and enforcers need significant improvement in considering serious implications of the law to enforce stricter policies. Overall, these laws' successes are greatly dependent on the implementation capacity of the government from national to local, and the active participation of local communities.

Formulating the Calle Hidalgo Revival Plan

The research conducted for this article has considered most of the possible design and planning stakeholders and strategies to achieve community sustainability to Calle Hidalgo's revival plan as listed in table 3 to satisfy the requirements of the GTF.

The Planning Framework to Achieving Sustainability

According to Geddes, to achieve a good and well-functioning town, a town must have three (3) pillars, though the priority is focused on work, then a balance of folk and place (1). This is reflected in the current situation in the district of Quiapo, most certainly in Calle Hidalgo. The economy is the sole driving factor of modern cities, although too much focus on economic activity degrades the folk and place.

Table 3. Areas for consideration according to pillars of Geddian Trio Framework and Sustainability Framework

Pillar		Diamina anni Janatiana	
GTF	SF	Planning considerations	
Work	Economy	Commerce Market Business Career	
Folk	Social	Community Family or Household Group People Clan Culture or Customs Psychology Ideology	
Place	Environment	Built Natural Flora (wild or domesticated) Fauna (wild or domesticated)	

Source: Basiago, Andrew D., "Economic, social, and environmental sustainability in development theory and urban planning practice." The Environmentalist, vol. 19, pp. 145-161. 1999.www.amherst.edu/system/files/media/0972/fulltext.pdf; Geddes, Patrick. "Cities in evolution: An introduction to the town planning movement and to the study of civics." London, Williams, 1915.

Potential Opportunities

Work (Economy) and Folk (Social)

The economic significance of Quiapo will continue because of the strong presence of a free market wherein goods and services are practically bought and sold freely. Locals have known Quiapo as the "Wide-range Marketplace" where one can find all kinds of merchandise at the cheapest price. In the case of Calle Hidalgo, the photography shops located on the west side of the street, the flea market, and the bazaar market will remain uninterrupted as the area's resilience has already been tested by time and calamity.

To further improve the economic status of Calle Hidalgo, all the heritage architecture within Quiapo must be renovated and repurposed most especially the antique houses along Hidalgo Street. Using adaptive reuse, all "Old" (this includes heritage) architecture under the renovation and rebuilding program shall be reused as commercial stalls. There are cases of revival elsewhere, e.g., Kampong Gelam in Singapore, that can serve as a model for Calle Hidalgo. Note the changes in Kampong Gelam (compare fig. 4 and fig. 5).

Kampong Gelam is a district that functioned as wharves and ferry bay back in old Singapore. Two-storey houses were built to cater to seafarers, seamen, and tradesmen. During the economic spurs of Singapore back in the late 1980s, massive development occurred in the country because of its friendly business policies. However, during the development, the area of Kampong Gelam was left behind, thus, many of the two-storey houses of former owners were abandoned and quickly deteriorated. In 1993, the government of Singapore bought all the property in the Kampong Gelam district which then underwent reconstruction. The Singaporean government planned to conserve all the historic houses in the district by leasing the houses for new businesses for a short duration. With this strategy, the Singaporean government's plan had profitably encouraged cultural and heritage preservation. In modern times, the district of Kampong Gelam has been an area of culture, heritage, history, early business, and traditional business.

Learning from the experience of Singapore, the government of Manila can adopt the strategy used by the Singaporean government. The revival of Calle Hidalgo and repurposing Calle Hidalgo's deteriorating assets can improve the economic status of Manila, Quiapo, and most especially Calle Hidalgo. Cultural preservation, conservation, and revenue can be gained through tourism, small and medium enterprises (SMEs), and the rental of heritage architecture to early businesses.

Local Case: Vigan City



Fig. 4. Vigan, Philippines 1940 from Maryann Galeno; Photo of Vigan, Calle Crisologo in 1940; 2015, www.pinterest.ph/pin/377387643748996829/.



Present Calle Crisologo Vigan, 2019 from the Local Government of Vigan Fig. 5. City; Photo of Calle Crisologo, the main street in the Historic Town of Vigan of present date, 2019, whc.unesco.org/en/documents/120022.

International Case: Singapore

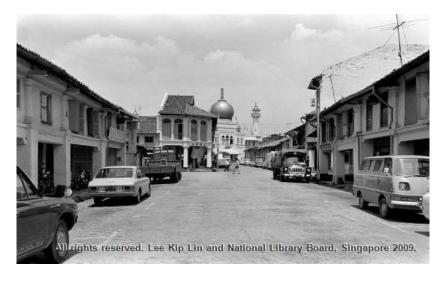


Fig. 6. Kampong Gelam in late 1980 (from Lee Kip Lin and National Library Board of Singapore; "Photo of Old Kampong Gelam"; 2009, thoughtmoments. files.wordpress.com/2014/10/road-to-sultan-mosque.jpg.



Kampong Gelam in 2022 from Singapore Tourism Board; "Visiting Singapore"; Photo of modern Kampong Galem, 2022, www.visitsingapore.com/seedo-singapore/places-to-see/kampong-gelam/_jcr_content/par-carousel/ carousel_detailpage/carousel/item_2.thumbnail.carousel-img.740.416.jpg.

Natural Environment

Based on the first site visit and inspection, Calle Hidalgo is almost a hundred percent built, gray structures dominating the whole street environment. Green areas can only be seen along the esteros. At present, there are two (2) esteros near Calle Hidalgo, both severely contaminated and polluted due to improper solid and wastewater management (DENR 1).

To further revive Calle Hidalgo, the preservation and conservation programs should not be limited to the built environment such as the antique architecture present in the street. The natural environment must also take into consideration that a clean environment brings healthy communities (UNEP 1).

Environmental reclamation is added in the plan, wherein a strip of land along the estero banks will be reclaimed and transformed into esplanade or a promenade. The esplanade or promenade will serve as a go-to hang-out or a place to unwind for tourists and locals, serving also as a buffer between the estero and the real-estate properties as stated under the water code of the Philippines. The development of the promenade or esplanade will consist of 70% to 85% pervious area (plants and vegetation area) and 15% to 30% pervious area (pathways, way finders, immobile furnishings, and others).

Built Environment

The Philippines as a developing country is currently economically dependent on developed countries. Developing countries generally lack infrastructure (Asian Development Bank 9). Therefore, most old architecture are demolished to give way to new development which brings economic benefit rather than cultural conservation and preservation.

Following the practice of the Singaporean government in the redevelopment of Kampong Gelam, most structures present in Calle Hidalgo must undergo total renovation and remodeling for these antique architecture to be an asset to the people of Quiapo. The researcher recommends the strategy of Adaptive Reuse in the preservation, conservation, and repurposing of all architecture with significant contributions to the history of Manila, Quiapo, and Calle Hidalgo. Since the Quiapo district is considered a go-to place to buy goods and to do business, it is a good move that the government of Manila follows what the government of Singapore has done. Instead of buying the properties in Calle Hidalgo, the government can redevelop the area, remodel, and renovate most of the antique architecture in Calle Hidalgo and lease them to its people. Some of the architecture in Calle Hidalgo can be converted into housing units for the less fortunate citizens of Manila while other spaces can be for leased for informal and early businesses. With this strategy, the government of Manila can achieve many goals like cultural and heritage preservation and conservation, revenue from taxes from businesses energized by tourism (cultural, historical, business, food, and religious), and a vibrant and ordered marketplace.

Proposed Redevelopment Plan

The layout of existing infrastructure (see fig. 8) and the Site Development Plan for the Revival Plan of Calle Hidalgo (see fig. 9) are illustrated through images to show the contrasts of the current situation and proposed improvement.



Fig. 8. Current situation of Calle Hidalgo, Quiapo ("Manila, Google Maps")



Proposed Urban Redevelopment Plan of Calle Hidalgo, Quiapo ("Manila, Google Maps")

The Revival of Calle Hidalgo

As a result of this discussion and assessment, this article proposes a viable conceptualization for the revival of Calle Hidalgo in promoting the preservation, conservation, and utilization of cultural heritage which can be maximized with government-community participation in achieving urban development sustainability through urban preservation and conservation.

Under the administration of former Manila City Mayor Francisco Moreno Domagoso, efforts were made towards the revival of the City of Manila back to its former splendor and glory. Through various initiatives and projects, the city aimed to reclaim its historical and cultural significance, rejuvenating its urban landscape and enhancing the quality of environment and life for its residents. Numerous cultural heritage restoration projects have been successfully implemented and many more are to follow. Most of the restored heritage sites had attracted many people from the locals of the city of Manila, from within Metro Manila, and from other provinces. This is an indicator that historical redevelopment can bring revenue to the city and its citizens. Reviving and redeveloping Calle Hidalgo will be a daunting task that requires a lot of resources from the city government of Manila.

Nonetheless, many famous cities have seen the potential of cultural and heritage preservation — from tangible to intangible heritage. The Geddian framework of work (economic), folk (social), and place (environmental) and Barbier's SF benefit any city and municipality. Hence, the work or economy pillar will still be the lead driver of cities, municipalities, and communities, followed by folk (social), and place (environmental), ensuring proactive, balanced, and sustainable urban development.

The elaboration of a viable conceptualization to promote the preservation and utilization of cultural heritage in Quiapo's Calle Hidalgo may lead to certain recommendations for complementing in the formulation of the revitalization and rehabilitation of Calle Hidalgo:

- An iron-hand implementation of RA 10066 on cultural heritage from the National Commission for Culture and the Arts, in cooperation with the City Government of Manila is necessary for the redevelopment project to happen. The fact that the street has been well-known for hundreds of years is a strength of the site;
- 2. A reconsideration in using adaptive reuse in the preservation and conversation strategy for all architectural and urban heritage sites will give a renewed purpose of the architecture thereby bringing many benefits to the city of Manila and to its local citizens;
- The possibility of government failure in acting on these heritage architecture sitting along Calle Hidalgo may lead to many of these architecture being doomed to perish either through demolition for new development, man-made disasters such as fire, and natural disasters such as earthquake; and
- The participation of the citizen in the preservation and conservation initiative of the local government of Manila must be encouraged as they are the immediate beneficiaries of such heritage architecture. Active participation of the community and private sector will ensure sustainability and thus help in the achievement of a vision of a good community and town that merges Geddes' and Barbier's frameworks.

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