

Colonial and Post-Colonial Architecture

How did colonialism impact architecture in the Philippines?

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814811 | 2021

Word Count: 4615





Figure 1.

sketch of the vernacular hut

Note. From Luzon, 2020.

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“...architectural discourse demands that we view buildings as events and not simply as inert objects.”

- Arata Isozaki | Japan-ness in Architecture

Introduction

Architecture projects meaning and the ultimate meaning of any building is beyond its structure, its façade and it is beyond what can be seen. Architecture can be seen as a primary instrument in relating people with time and space, in particular, within a certain time in history. As Arata Isozaki puts it, one must “*view buildings as events and not simply as inert objects*” – it can be said that every building that stood and still stands in every country today, has its own story to tell and it is through the built public monuments and buildings, to dwellings across the region in the Philippines that serve as telling evidence of its colonial past. The architecture in the Philippines reflects its complex history as a colony and buildings such as churches, can be seen as symbols of colonialism and post-colonialism.

The impact of colonialism on the architecture in the Philippines will be explored through a visual and historical analysis of the materials, techniques and forms of churches in Manila, such as the San Agustin Church and the Church of the Holy Sacrifice, that had both changed the architectural landscape of the country during the two major periods of colonisation by the Spanish (1598 - 1898) and the Americans (1898 -1946) through to the post-colonial era. This will then lead to an exploration of whether there had been a lasting influence of the West on the architecture during post-colonialism, seen as both an era after colonialism and the process of decolonisation through modernism of architecture by Leandro Locsin.

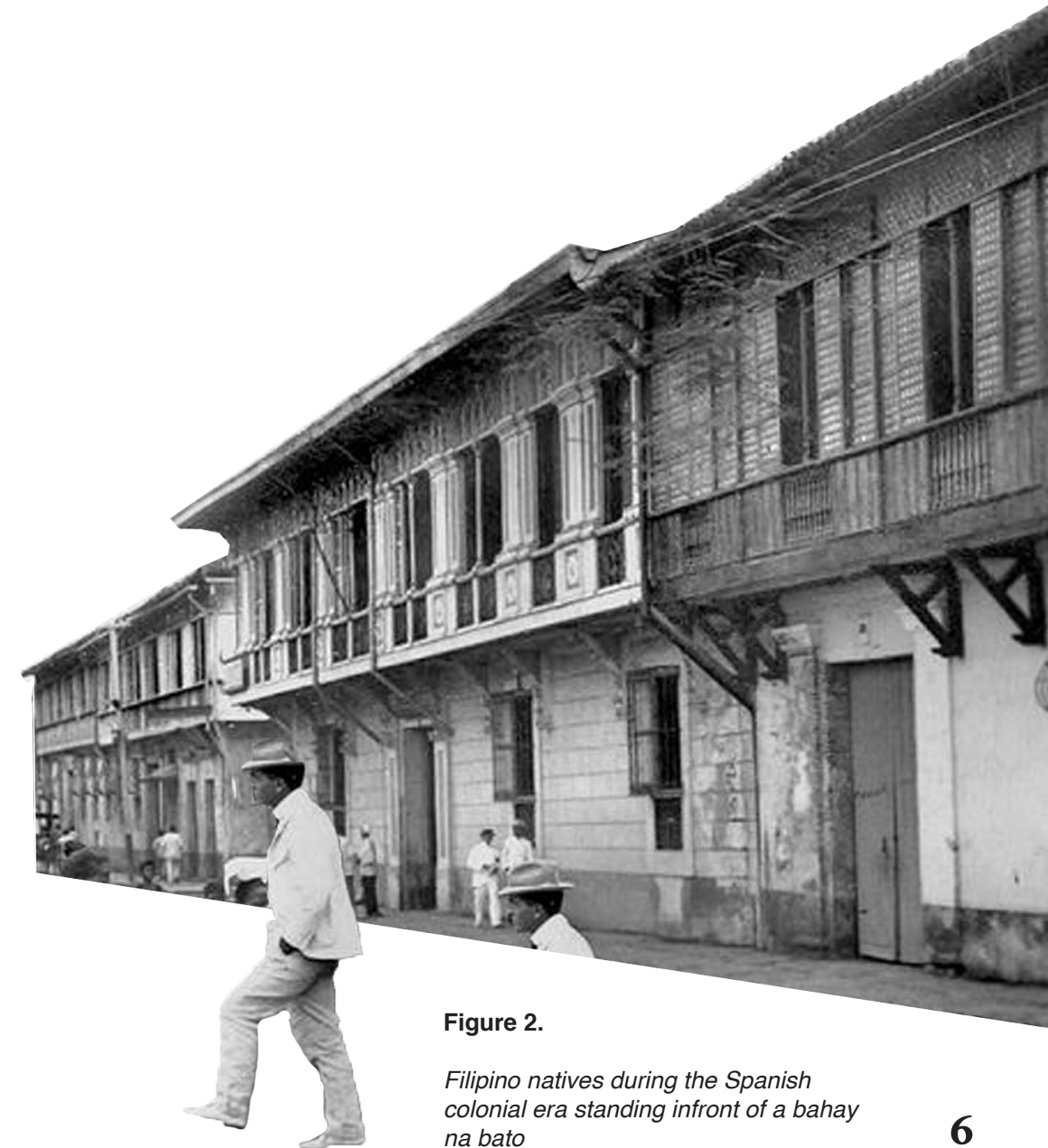


Figure 2.

Filipino natives during the Spanish colonial era standing in front of a bahay na bato

Note. From Tewell, 2011.

Figure 3.

*Spanish or American soldiers in front of
a Filipino native's bahay kubo*



Note. From Hitt, 1898.

Pre-Hispanic era

There is an importance in the elements of the vernacular architecture however, that can be considered in order to explore the impact of colonisation on the architecture in the Philippines. The pre-Hispanic dwellings in the Philippines can be identified with the nipa hut or the '*bahay kubo*' (a cube house), a four-walled structure that is prevalent in Southeast Asia. These structures were of light construction, simple in plan and built with the use of locally available materials – with wood, bamboo and palm thatch, a vernacular architecture created by native Filipinos with little to no architectural expertise or knowledge. The accessibility of such materials makes it easier to rebuild huts in the events of storms or earthquakes thus making these structures temporary as it is made from tensile and light materials. Also, partly due to its geographical attributes and perennial problem of flooding, the structure of the *bahay kubo* is built on stilts above the ground and one has to ascend on a bamboo ladder. This structure can be seen as the symbol of the pre-Hispanic era.

As Girard (2020) claims however, the colonisers had 'left their mark on local cultures' and as colonialism was imposed all over Southeast Asia where countries share a colonial or a semi-colonial past, the intervention and external forces from the West had altered the cultural landscape of the Philippines which suggests that they inevitably influenced the country, from a social aspect to their architectural landscape. Thus, with the arrival and ruling of the Spanish in 1565 for 333 years, it was through the forceful fusion of the different cultures, adaptability and resources that breeds heterogeneity in the architecture during the colonial period. With the introduction of stone brought by the Spanish, the elements of the *bahay kubo* had altered and became the foundation for colonial architecture.



Figure 4.

A Western soldier standing with a native 'Negrito' Filipino tribe in front their bahay kubo.

Note. From Hitt, 1898



Figure 5.

Filipino people celebrating the history of San Agustin Church as it stands in today's modern society

Arrival of the Spaniards

As the early Filipinos were found in separated groups without polity, the Spanish, as Reed describes it, had considered it *"a right and a duty to colonise, to Catholicise, to civilise and to urbanise the Filipinos"* (Reed, 1978, p.15). With this in mind, it could be this vision of spreading Christianity and imposing religion of the people in this non-Western country, that expedited the process of colonisation and the rise of more permanent built structures, such as churches, across the country. According to Reed (1978), places of worship had existed during pre-Hispanic times but were not held in permanent structures. Instead, earlier churches were held in the privacy of one's home, that were built in the vernacular idiom and of light construction in the same materials that the Filipino natives had built their houses and floors were either raised or of compacted earth, defining a rectangular nave.

However, these were not considered 'proper dwellings for God' as friars were used to strong stone churches built to withstand for many years. As Rodell (2002) suggests, the friars and their religion played a crucial role in colonial architecture – the Spanish had a strong dedication, both individually and collectively, to Christianity proselytism. This could be the underlying reason as to why the church was one of the first permanent structures erected in the Philippines during the Spanish intervention. The structures built during the Spanish rule were built in either bricks or stones, reinforced with buttresses to ensure their strength during earthquakes. This led to a drastic change from the use of light local materials, creating the colonial architecture that changed the built landscape of the Philippines, from impermanent to more permanent structures.

Additionally, the Spaniards had created structures reminiscent of their homeland but they had to adapt to the climate and heat of the country by introducing European architecture to the Philippines. With the blend of characteristics and materials from the bahay kubo and European architecture, this resulted in the creation of *'bahay na bato'*, translating to 'house of stone' or *'bahay na mestiza'* that translates to a 'mixed house' as wood and stone are blended together. In order to withstand earthquakes and stormy seasons, the *bahay na bato* stands on stone as its foundation instead of bamboo stilts and the upper floor is made of wood or bamboo, similar to the of the *bahay kubo*. However, as Paredes-Santillan (2009) claims, the Spaniards had built fortifications and churches that were 'heavily copied from European models' which suggests that the blend of the vernacular architecture with Spanish architecture had only applied with dwellings and not with churches. Keeping in mind that although the earlier churches were built with vernacular materials, it was therefore the baroque-style churches that had flourished in the country with little to no vestiges of the characteristics of the vernacular architecture; an example being the San Agustin Church.



Figure 6.

San Agustin Church before American bombs destroyed one of the bell towers

Note. From Hitt, 1898

The Spanish and American colonial era

The San Agustin Church is one of the stone churches that still stands as built. Constructed in 1587 inside Intramuros (the Spanish-walled city) in Manila, the San Agustin Church is the oldest stone church that also still stands of its scale. Listed as a world heritage site by UNESCO under the title of Baroque Churches of the Philippines, it is considered as a 'reinterpretation of European Baroque' built by Chinese and Philippine craftsmen (UNESCO, 2013). It is of great contrast to the simple floor plan of the earlier churches during pre-Hispanic times, as these colonial churches followed that of the basilica-plan found in churches in European countries, with its interior that consists of two focal points and one of it being the main altar where the eucharist is celebrated. As Reed (1978) claims, introduction of stone to the country had strengthened the 'flimsy and flammable' collection of buildings, 'saving' the Filipino natives from rebuilding repeatedly after encountering constant fires and earthquakes common with the vernacular materiality of the bahay kubo. This could suggest that colonialism had impacted not only the architecture in the Philippines, but it could have also led the Filipino natives to develop a colonial mentality during the Spanish rule – this idea of a 'saviour' can be seen as a reflection of the Spaniards who had unified the once separated Filipino natives through religion and strengthened their built landscape with colonial architecture. Therefore, it is perhaps the introduction of religion and stone through colonialism that permanence in architecture had cultivated in the Philippines, with the church becoming a symbol of not only the colonial architecture but also the nation's colonial past.

The introduction of new materials did not end during the Spanish rule however, as when the Spanish colonisation ended in 1898, it was in the following year that the nation was under the colonial rule of another country – the United States, suddenly becoming a colonial power. The American military forces rebuilt the war-torn archipelago and sought to reshape the country. They had brought with them the modern techniques for large-scale structures with new materials such as reinforced steel, concrete and glass (Yamaguchi, 2006, p. 415). According to Cabalfin (2016), it was these materials and a new city plan for Manila that had ultimately transformed the Spanish colonial urban core into a 'regularised and ordered' city organisation which suggests that from baroque-style churches during the Spanish era, it was the large-scale neoclassical civic edifices built by the Americans that created a new colonial architectural idiom in the Philippines, defining the symbol of American colonial presence.

Figure 7.

Thin reinforced concrete redefining the structure of the church with Church of the Risen Lord

Note. From Cabalfin, 2016

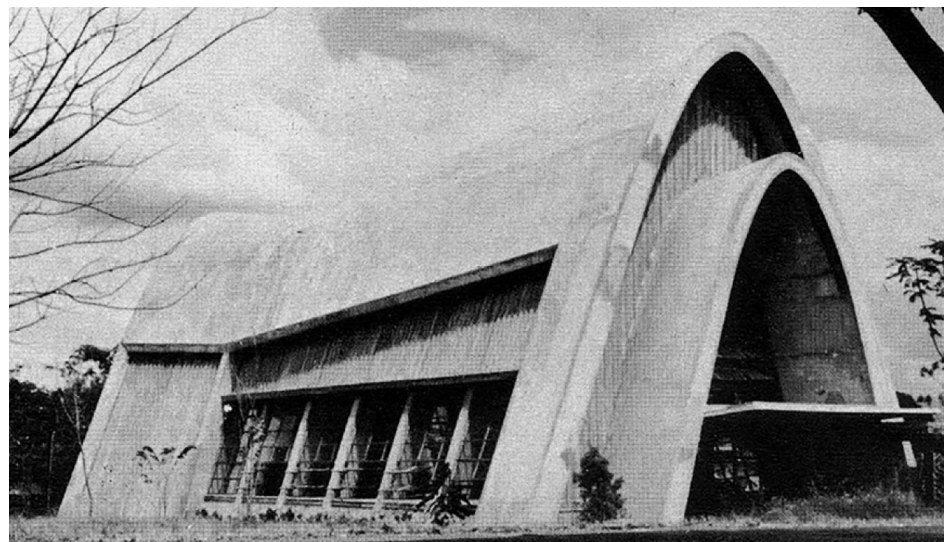


Figure 8.

One of the first public structures built by the Americans, University of the Philippines

Note. From Cabalfin, 2016

Furthermore, whereas the church can be seen as a symbol of Spanish colonial architecture, the Americans were not driven by religion as churches were not built during the American ruling – instead, they provided basic infrastructure and public facilities such as hospitals, schools and townhalls (Paredes-Santillan, 2009) designed by the American architect and urban planner David Burnham. As Rodell (2002) claims, there were no drastic changes with the design of churches during the American colonisation, not until the end of Second World War in the Pacific which could have been the result of the American bombs that had turned Manila into a war-torn city, forcing the nation to rebuild. With the end of war and American colonisation in 1946, the Philippines had gained a newly-found independence and became the Republic of the Philippines (Lico, 2017). It was also in the process of decolonisation that the church, which was once a symbol of Spanish colonisation, had been transformed into a representation of advancement and growth, a reflection of the nation divorcing itself from its colonial past.

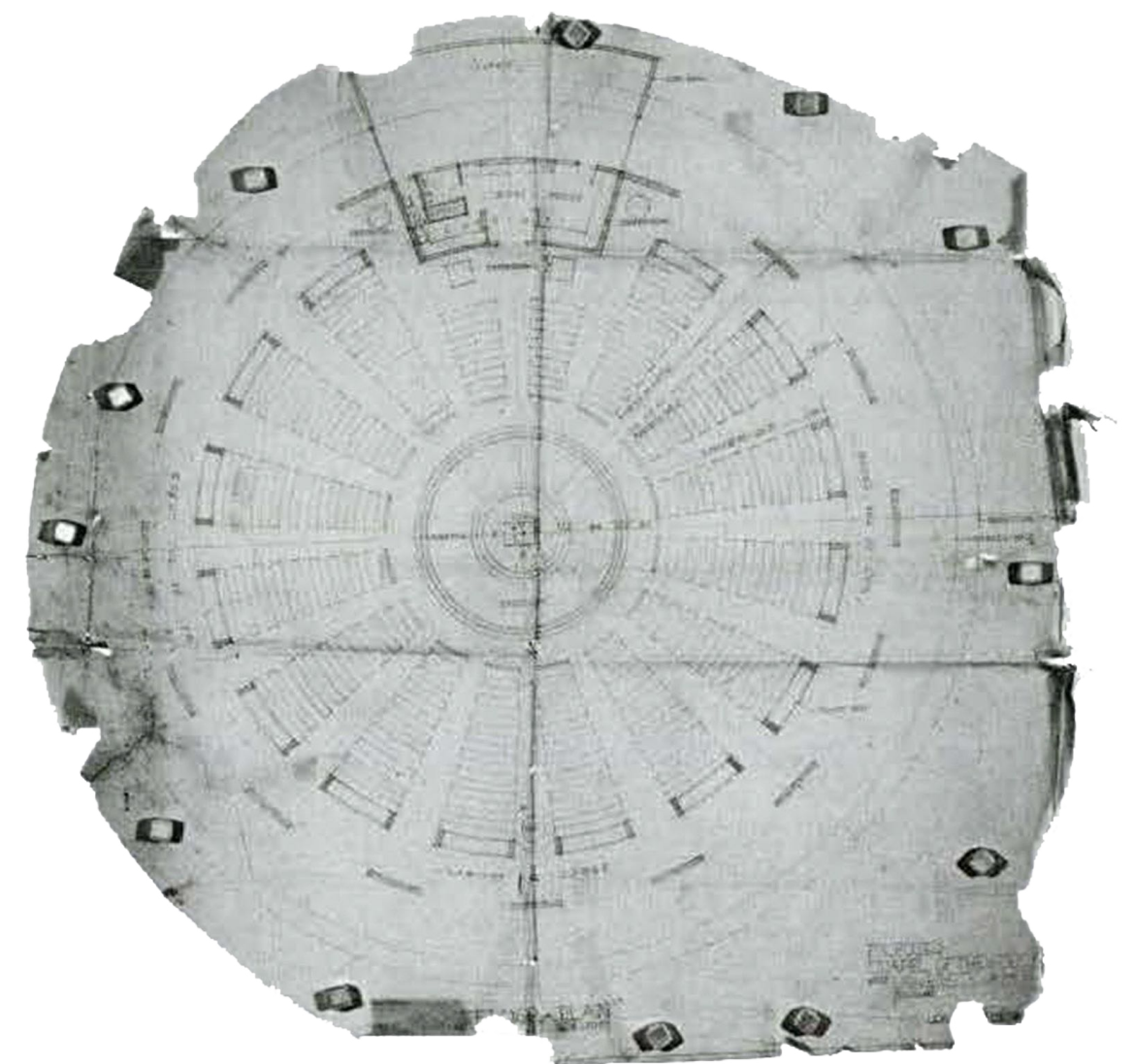


Figure 9

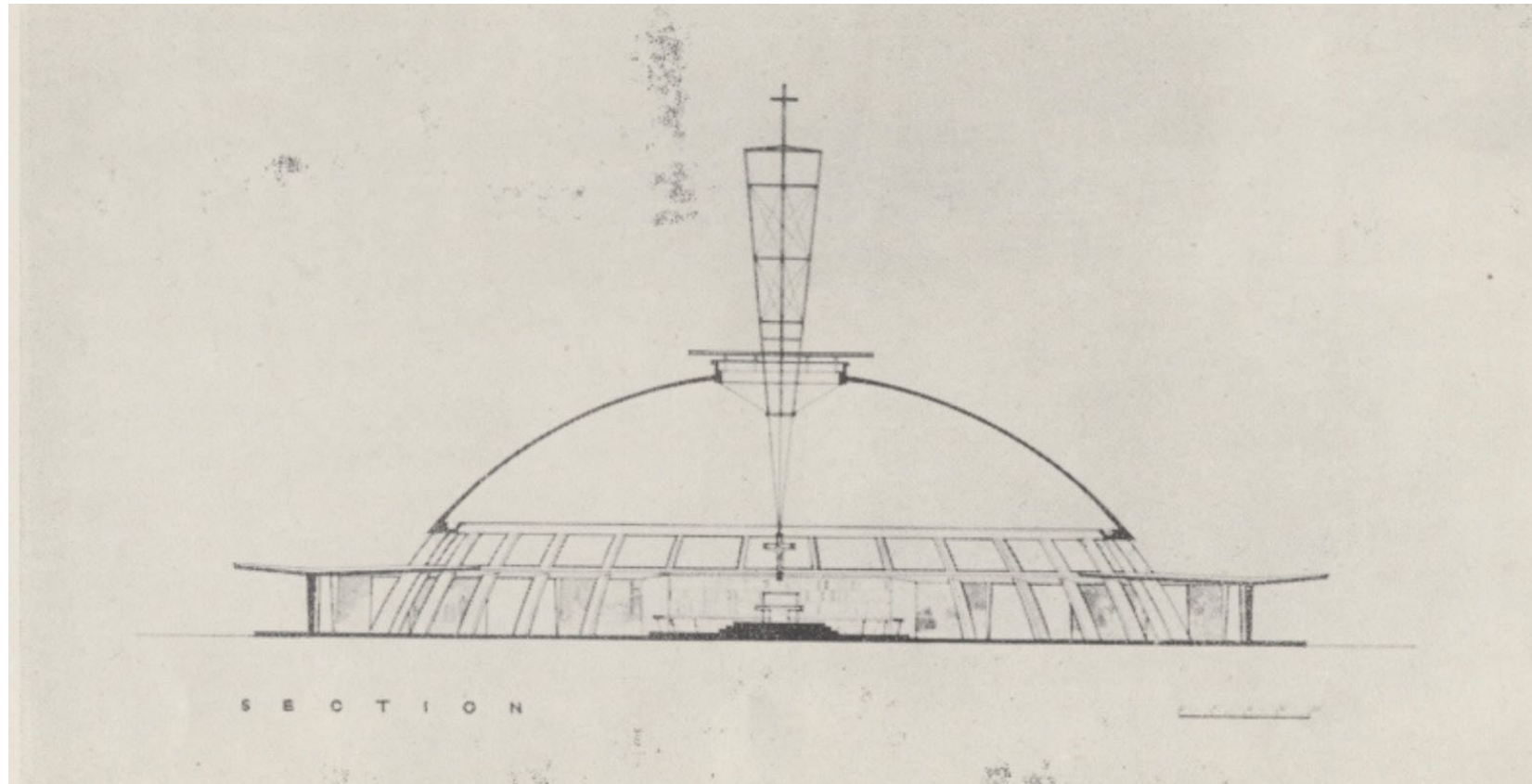
Original circular floor plan of the Church of the Holy Sacrifice

Note. From Girard, 2020

Moreover, As Lico (2017) suggests, it is through modernism that Filipino architects were able to ‘convey freedom from the colonial past’ and this is reflected through the new architecture landscape created during the process of post-colonisation and post-war recuperation. After the independence in 1946, proposals for religious structures arose as the last days of war saw the destruction of the built colonial landscape. The characteristics and materiality of colonial churches such as the San Agustin Church, is of great contrast with one of the modern churches that had been designed and erected during the era of post-war and post-colonialism – the Church of the Holy Sacrifice (1955) designed by the Filipino architect, Leandro Locsin along with engineers, Alfred Juinio and David Consunji. It was built at a time that coincided with the end of Second World War and at a time when Philippines had gained its independence from American colonialism. Modernism provided the means for a new nation to craft a kind of architecture that did not only represent progress but it also offered a decolonising procedure.

Figure 10.

A section of the Church of the Holy Sacrifice



Note. From De Ayala, 1957

The post-colonial era

It was in modernism during the era of post-colonialism, that the sense of freedom and independence disseminated not only across the city, but the whole country. This reflected in the modern edifices built after war that symbolised the freedom from their colonial past. For instance, the Church of Holy Sacrifice (1955) not only began Locsin's architectural career but it also accelerated the beginning of modern architecture in the Philippines. Whereas the Spaniards introduced stone, the Americans introduced building materials such as reinforced concrete, steel and glass. These building materials had enabled architects such as Locsin, to design buildings and create modern architecture that embraces new innovations and forms. As a result, the first venture into the thin-shell experiments had created the Church of the Holy Sacrifice (Lico, 2017) – such innovations became revolutionary, symbolising the post-colonial and modern architecture in the Philippines as the country saw further constructions in thin-shell experiments. Reinforced concrete structures and folded plate constructions led to the design and creation of other churches such as the Church of the Risen Lord, designed by Cesar Concio, in 1956 and the Church of St. Andrew which is also designed by Leandro Locsin in 1968.

The use of reinforced concrete, steel and glass, cubic form, geometric shapes, cartesian grids and the absence of applied decoration were the essential feature of the modern architecture which links to the statement put forward by Esroy et al. (2010) that views modernism as 'opposition to tradition'. This idea of modernism opposing tradition can be linked to Locsin's choice reinforced concrete as a building material. As Forty (2012) claims, "*Concrete is modern...it tells what it means to be modern*" suggesting that with Locsin's use of reinforced concrete, he is perhaps redefining the architectural landscape of the Philippines by embracing a building material that defines modernism, opposing the use of stone that can be seen as a prominent material that symbolises the Spanish colonial era. By using a construction material that had not been used before in order to design churches, it also encourages the idea of opposing the Spanish colonial era.

For instance, Forty (2012) further proposes that to 'concrete over' is to erase all traces of nature, which can be linked to the natural materials used for the vernacular and Spanish colonial architecture, materials that are abundant in nature – bamboo, wood, palm thatch and stone. As the architectural historian Jeffrey Cody points out, reinforced concrete is a man-made material that greatly juxtaposes with the natural materials as it does not exist prior to the arrival of the ingredients such as cement, sand, aggregate and steel. Thus, this idea could perhaps be a contributing factor in Locsin's use of reinforced concrete – a material that erases the traces of nature that once defined the vernacular and colonial architectural landscape of the Philippines. With the rejection of stone and applied decoration, the Church of the Holy Sacrifice can be seen as Locsin's way of defining post-colonial and modern architecture in the Philippines and a way to re-define the nation's identity through the process of decolonisation reflected in its architectural landscape.



Figure 11, 12

A juxtaposition between the details of the interior of the colonial and post-colonial church

Note. From Lascar, 2014



Despite this, the use of reinforced concrete can also be viewed as 'simple' and whether this material can be considered 'modern' is doubtful – whilst Forty (2012) claims that reinforced concrete defines modernism, he also presents a contrasting view whereby he argues that although making concrete uses advanced technology, it involves a process that is executed by people around the world with no 'theoretical knowledge whatsoever' and a material that is connected to 'mankind's earliest constructions'. This could suggest that the use of reinforced concrete to create 'modern' architecture in the Philippines therefore, can be considered a crude process that gives people with the most limited skills the most power to build any structures, rejecting the idea that the Church of the Holy Sacrifice can be considered a symbol of modernism and advancement from its colonial past. This is supported by Le Corbusier's view on the material that by the 1950's, around the time that the Church of Holy Sacrifice was erected, he started to see concrete as a material of the 'same rank as stone, wood or terra cotta' suggesting the lack of innovation and elements of modernism through the use of this material.

However, it can perhaps be with *how* Locsin uses this material to design and create forms of his architecture that makes it modern and the extent to which it can be considered a symbol of post-colonialism. The Church of the Holy Sacrifice redefines the use of the church for religion through its design, from its exterior and form, to its interior and floor plan that greatly contrasts with pre-Hispanic and colonial architecture. From the use of stone and a basilica floor plan of the Spanish colonial architecture, to no churches being built during the American colonization, the use of reinforced concrete to design and build a church during the post-war and post-colonial era, is unprecedented and therefore can be considered a breakthrough to define the post-colonial and modern architecture in the Philippines.

Furthermore, Paredes-Santillan (2009) argues that the modern architecture in the country 'was simply copied from the West' which can be valid considering that the government constituted a group of architects and engineers to acquire education from the United States as early as 1947 including Leandro Locsin. However, as Forty (2012) claims, in the US it is steel rather than reinforced concrete that always 'retains the image of modernity' which therefore contrasts with Locsin's choice of material which is reinforced concrete. Therefore, although the US did bring new innovations of materials such as glass, steel and concrete, the image of modernity that is captured by the Church of the Holy Sacrifice is different to that of the steel structures that symbolise modernity in the West.

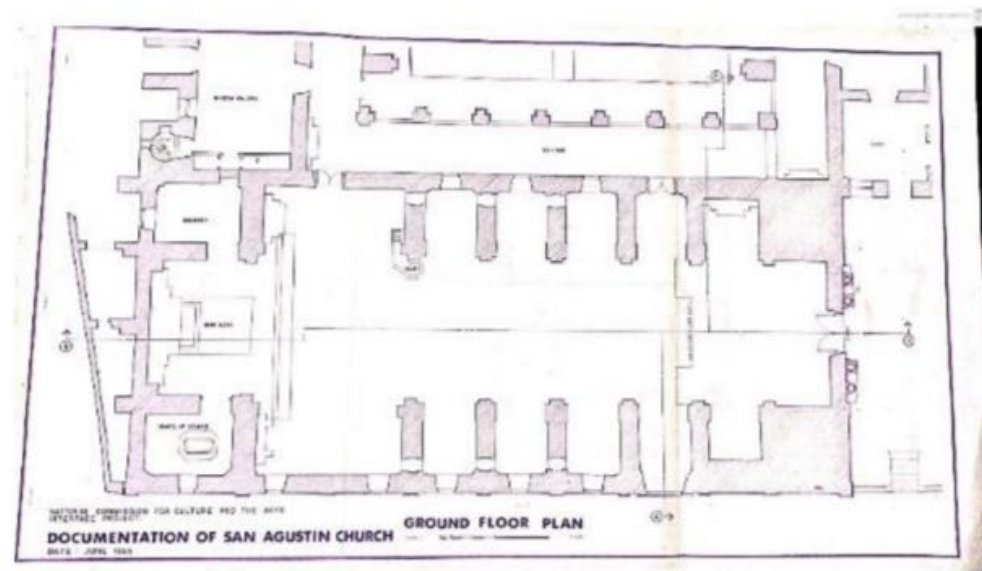
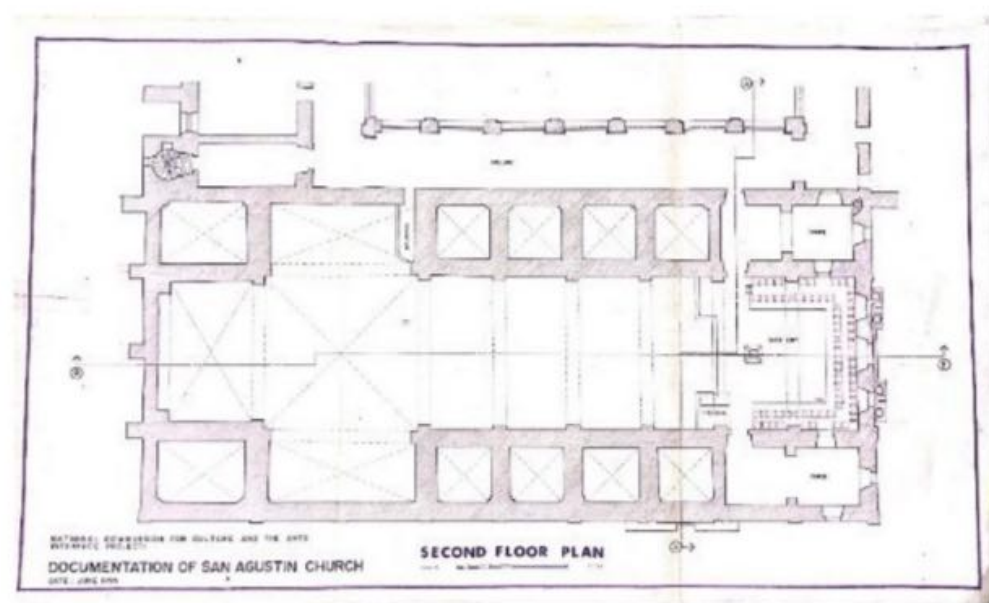
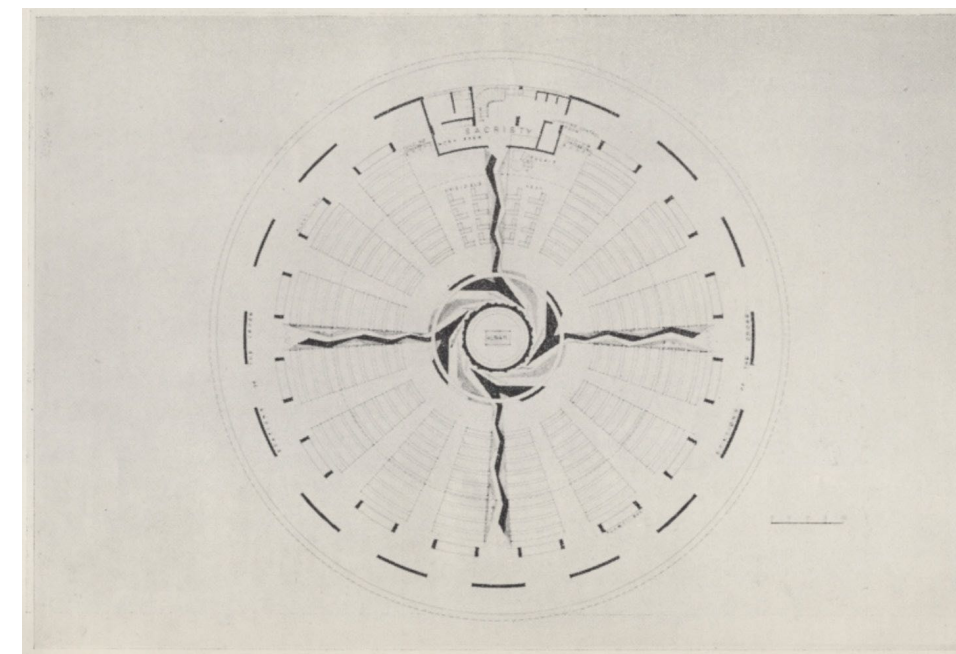


Figure 13, 14, 15

The contrasting floor plans and positions of altars between colonial and post-colonial church



Note. From Baylon et al, 2020



Note. From De Ayala, 1957



Note. From De Ayala, 1957

It is also worth considering the situation at the time the Church of the Holy Sacrifice was built – the rummage caused by the Second World War turned Philippines into the most devastated colony in Southeast Asia which led to a demand in reconstruction of public buildings and housings. Consequently, amongst the three major materials that the Americans had introduced to the country, reinforced concrete is the only material that can be produced locally and according to Ogura et al (2002), reinforced concrete structure is cheaper than steel construction as this must be imported from abroad and demands a well-trained labor force. As Lico (2017) suggests, the housing shortage and infrastructure deficit had led to abandonment of motifs and ornamentation of styles of the pre-war and colonial era to reduce construction cost and complete structures in the most shortest possible time. In the state of poverty in which most of the Filipino population had lived through and experienced, reinforced concrete also offered new and inexpensive architecture, that is unprecedented in the country. Therefore, the proliferation of concrete structures could not only be used by Locsin as a way of following Western and modernism principles but in order to reduce the overall cost of reconstruction that also adapted to the modernist design aesthetic.

It is not just the use of reinforced concrete but also Locsin's design and consideration for the spatial aspects of the Church of the Holy Sacrifice, that can symbolise the architect's representation of freedom from the vestiges of colonisation. He re-defines the use of the church with its interior – for instance, the floor plan is circular with the altar in the centre and its dome is supported by a ring beam and reinforced columns. The layout of the church seem to welcome an assembly of the faithful from all sides as there is not a designated single entrance and instead, it consists of multiple openings which are evenly distributed along the circumference of the church. These characteristics are of great contrast to the layout of the colonial church which is of the basilica floor plan, rectangular in its basic form, that contained interior colonnades that divide the space, creating aisles on one or both sides with the altar flush against one end of the nave. Therefore, the stark contrast in form and materiality of the churches from the colonial era and the post-colonial era, suggests that colonialism perhaps had impacted architects such as Locsin, to re-define the church that was once the symbol of colonial architecture. By re-defining the use of the church, it highlights the idea of advancing from the nation's colonial past, through decolonisation and modernism.



Figure 16

The flying saucer

Note. From De Ayala, 1957

Furthermore, religion was greatly implemented through the Spanish colonial era over 333 years, converting most if not all the Filipino population to Christianity, also converting architects such as Locsin who Girard (2020) views as a pious man, as his first production being the Church of the Holy Sacrifice (1955) and his last project, being the Monastery of Transfiguration (1994). Religion may have influenced Locsin to choose to interpret religious culture and the church in modern ways. For instance, the Church of the Holy Sacrifice being seen as a symbol of advancement from the nation's colonial past, is supported by Locsin's view on the contemporary church, in his text 'Directions for the building of a church', where he writes: *"The church of today is intended for the people of our times. Hence, it must be fashioned in such a way that the people of our times may recognize and feel that it is addressed to them. The most significant and the most worthy needs of modern mankind must here find their fulfillment...the wish to advance from what is peripheral to what is central and essential..."* (Girard, 2020). This could perhaps suggest that Locsin's design for the Church of the Holy Sacrifice, the use of reinforced concrete, as well as his consideration for the interior layout redefines the use of the church and presents an architectural image that symbolizes decolonization, growth and progress, reflecting the independence from any colonial power.

However, although the differences in Locsin's use of material and design of form for a post-colonial church, appear to symbolise advancement from its colonial past, the process of decolonisation could have also impacted Locsin to construct his designs not to search for a new Philippine identity but rather, designing in order to connect the Philippine nation back to its identity of the past, towards the elements of the vernacular architecture during the pre-Hispanic era. There are characteristics of the Church of the Holy Sacrifice that seem to be reminiscent to that of the *bahay kubo*. For instance, in regards to his designs, he speaks of being obsessed with 'forms that were massive and yet light' reflected in the main structure of the church which is a reinforced concrete construction shell that appears to float above the ground; as Paredes-Santillan (2009) claims, the Church of the Holy Sacrifice is referred to as a 'flying saucer' which can be considered a testament to its lightness in form, a composition that seemed to defy gravity. Such characteristics can therefore be compared to the structure of the *bahay kubo* of the vernacular architecture, with its mass on stilts.

Not only is the form of the Church of the Holy Sacrifice reminiscent to the form of the *bahay kubo*, Paredes-Santillan (2009) further suggests that this also applies to Locsin's concept of space for the church. In the Church of the Holy Sacrifice, one would have to enter under the ring beam that supports the dome which then guides the movement into the dome – a large airy space with a much higher ceiling height. This creates a zone between the two spaces that Paredes-Santillan (2009) claims to 'serve as a rite of passage that separates exterior and interior spaces', describing a threshold that creates a juxtaposition between the two spaces, marking a change of place. The contrast of heights between two spaces can be seen in the way that one would enter a *bahay kubo*; Filipino natives would ascend on a ladder, into the entrance that is covered with low extended eaves which would then lead into the dwelling itself, an open floor plan with a high ceiling caused by the pitched roof of the structure. Therefore, the similarities between the spatial aspects of the *bahay kubo* and Locsin's Church of the Holy Sacrifice, proposes the idea that colonialism has affected the architecture in the Philippines in a way that Filipino architects such as Locsin, had been influenced to search for the nation's identity that had existed during the pre-Hispanic era. This could redefine post-colonial and modern architecture found in the Philippines, that has not only been influenced by Western architectural principles but also possesses the characteristics of the vernacular architecture.

The Church of the Holy Sacrifice can therefore be seen as a post-colonial architecture that possesses both characteristics of Western modernism principles and elements of the *bahay kubo*, that can be identified through a visual analysis. The church as the symbol of post-colonial architecture therefore, cannot simply be defined as a structure that has been influenced by either the Filipino or Western culture through colonialism or modernism. As Cabalfin (2016) proposes, the post-colonial and modern architecture can be seen its own modernity and should not be considered just as 'copies' of European-American models. It should be seen as a 'hybrid modernity' that defines that architecture *found* in the Philippines, rather than an attempt to define the *Filipino architecture*. This suggests that although modern architecture – the international style – can be considered as functional designs constructed in the industrial building materials such as reinforced concrete, the years of colonisation and external influence experienced by the country creates a hybrid and complex definition of how colonialism has impacted architecture in the Philippines.

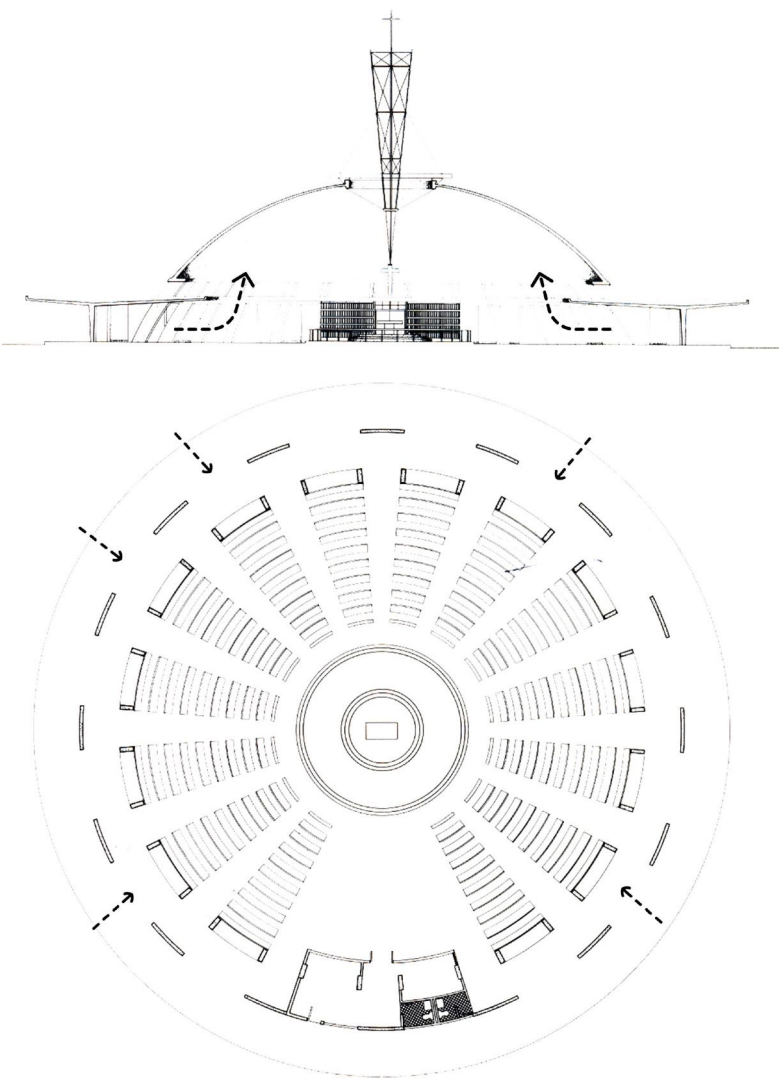


Figure 17
Movements from the exterior into the interior of the church, similar to the bahay kubo
Note. From Arkitektura, 2014

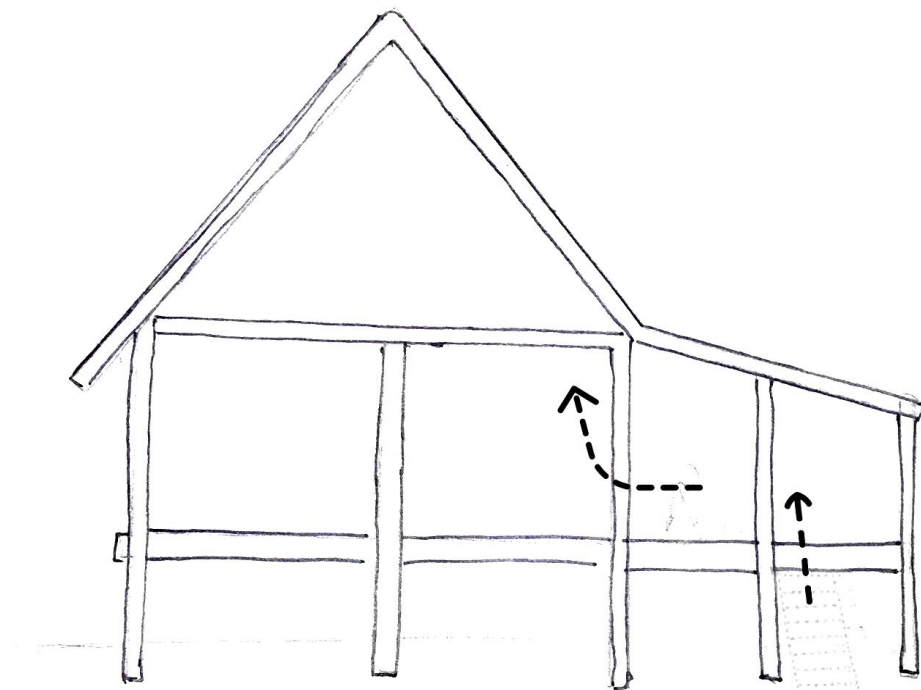


Figure 18
Sketch of the basic form of the bahay kubo and the movement from different heights
Note. Primary source

Figure 19

The Church of the Holy Sacrifice as it is in the 21st century

Note. From AD Classics, 2016



Conclusion

From the pre-Hispanic era through to the post-colonial era, colonialism has impacted architecture in the Philippines in various ways that is reflected in its built landscape. Through a visual analysis, studying the historical and architectural progress of the church from the vernacular to colonial then post-colonial era, presents the complexities and diversity of each architectural culture of the Philippines, Spain and America through colonialism – the different cultures breed heterogeneity in the colonial and post-colonial architecture found in the country. Whether Locsin was influenced by Western principles, influenced by his faith or simply on the quest to implement pre-Hispanic elements with modernism, he managed to express and propose an architectural landscape and built environment that is unique to the Philippines. As Locsin states, “[The Philippines is] a hybrid culture. This is both our weakness and our strength” (Paredes-Santillan, 2009). Whether or not the design of a building is influenced from the West or designed in search for a nation’s identity, it is accepting that the architecture found in the Philippines differs from Filipino architecture, which cannot be defined simply considering the impact of colonialism on the country. The realisation of such hybrid culture, can be perhaps be used as a tool to further develop the architecture in the Philippines.

Although colonialism occurs when one nation defeats another by conquering its population, exploitation and the force of language and cultural values upon its people, it is through colonialism that strengthened the architectural landscape of the country. From the use of reinforced concrete, through to the spatial concepts of the church that still exists and is further developing until today. To not reject but rather, to understand and accept the colonial past of the nation, celebrates the complexities and diversity of each architectural culture, serving as a reminder that through colonialism, architecture is a dynamic process rather than as a static object.

Bibliography:

- A dark secret lies in San Agustin church's crypt. (n.d.). TripSavvy. <https://www.tripsavvy.com/san-agustin-church-intramuros-philippines-1629723>
- AD classics: Parish of the holy sacrifice / Leandro v. Locsin. (2016, June 30). ArchDaily. <https://www.archdaily.com/790290>
- Baylon M., Jambalos A., Santos K., Trillana R., (2020) *Ground and Second Floor Plan of SAC* (image). Manila, Philippines. <https://doi.org/10.13140/RG.2.2.14177.53602>
- Bonao, C., (n.d) *Church of St. Andrews*. <https://www.pinterest.co.uk/pin/156218680795170828/>
- Boyer, R. H. (2010). *Sundays in Manila*. UP Press
- Cabalfin, E. (2016). *"Conquest and Resistance: Intersections of Colonialism and Modernity in Twentieth Century Philippine Architectures"*. Journal of Southeast Asian Architecture, 13. <https://www.academia.edu/28874244>
- De Ayala, F.Z., (1957) *The Chapel of the Holy Sacrifice at the University of the Philippine. Philippine studies Vol. 5, No.2 (1957) pp. 1-8*. <https://www.jstor.org/stable/42720363>
- Forty, A. (2012) *Concrete and Culture: A material history*. Proquest Ebook Central <https://ebookcentral.proquest.com>
- Isozaki, A. (2011). *Japan-Ness in architecture*. Mit Press.
- Girard, J.-C. (2020). *Religious Tropical Architecture: the churches of Leandro V. Locsin in the Philippines. Docomomo Journal, 63*, 76–79.
- Hitt, P. (1898) *Three men standing in front of a house*. (Online image). Philippine Photographs Digital Archive. <https://quod.lib.umich.edu/s/sciphilimg/x-940/phlb010>
- Hitt, P. (1898) *A group of soldiers in the front of a hut*. (Online image). Philippine Photographs Digital Archive. <http://quod.lib.umich.edu/s/sciphilimg/x-943/phlb013a>
- Hitt, P. (1898) *Parker Hitt with a group of people standing in front of a house*. (Online image). Philippine Photographs Digital Archive. <http://quod.lib.umich.edu/s/sciphilimg/x-941/phlb011>
- Lascar, J. (2014) *San Agustin Church* (Photograph). <https://www.flickr.com/photos/jlascar/17267953506>
- Lico, G. (2017). Rising from the Ashes: Post-war Philippines Architecture. *Docomomo Journal, 57*, 46.55).
- Lozana, L.A., Montero, I.V., Orbon G.T., (2015) Heritage Cities in the Tropics: An Analysis on the Urban Fabric and Tropical Design Considerations of Intramuros and Vigan, Philippines.

Bibliography:

- Luzon, D. (2020) *The Lonely Hut* (Sketch) <https://www.deviantart.com/danteluzon/art/THE-LONELY-HUT-856852987>
- Ogura, N., Yap, D. L., & Tanoue, K. (2002). Modern architecture in the Philippines and the quest for Filipino style. Journal of Asian Architecture and Building Engineering, 1(2), 233-238. https://doi.org/10.3130/jaabe.1.2_233
- Parish of the holy sacrifice. (2014, September 29). ARKITEKTURA. <https://arkitekturaph.wordpress.com/portfolio/parish-of-the-holy-sacrifice/>
- Paredes-Santillan, C. (2009, May). *A study on bipolarity in the architecture of Leandro v.Locsin. Journal of Asian Architecture and Building Engineering*, 8(1), 1-8. <https://doi.org/10.3130/jaabe.8.1>
- Paredes-Santillan, C. (2009, July). *Approaching the Sacred: A study of the Spatial Manifestations of Liminality in the Churches of Leandro V. Locsin* <https://www.researchgate.net/publication/331523271>
- Paredes-Santillan, C. (2009). *Decoding Architectural Heritage: A formal study of the Architecture of Leandro V. Locsin*. <https://www.academia.edu/1887435>
- Reed, R.R. (1978). *Colonial Manila: The context of Hispanic Urbanism and process of morphogenesis*. University of California Press
- Rodell, P. A. (2002). *Culture and customs of the Philippines*. Greenwood Publishing Group
- Rudofsky, B. (1964). *Architecture without architects: A short introduction to non-pedigreed architecture*. Museum of Modern Art.
- Tewell, J. (2010) War damaged San Agustin Church and convent, Intramuros, Manila, Philippines, 1945. (Online image) <https://www.flickr.com/photos/johntewell/4680879151/>
- Tewell, J. (2011) A prominent street in Intramuros, Manila, Philippines, late 19th century or early 20th century (Online image). <https://www.flickr.com/photos/johntewell/6215853521/>
- Tewell, J. (2016) San Agustin Church, Intramuros, Manila, Philippines, early 1880 or before (Online image). <https://www.flickr.com/photos/johntewell/24092092730/in/album-72157623744996096/>
- UNESCO World Heritage Centre. (n.d.). Baroque churches of the Philippines. <https://whc.unesco.org/en/list/677/>
- Yamaguchi, K. (2006). The New "American" Houses in the Colonial Philippines and the Rise of the Urban Filipino Elite. Philippine Studies, 54(3), 412-451.
- Ogura, N., Yap, D. L., & Tanoue, K. (2002). Modern architecture in the Philippines and the quest for Filipino style. Journal of Asian Architecture and Building Engineering, 1(2), 233-238. https://doi.org/10.3130/jaabe.1.2_233