Philippine Sacred Architecture – Design of a Village Chapel

ausgeführt zum Zwecke der Erlangung des akademischen Grades
eines Diplom-Ingenieurs / Diplom-Ingenieurin
unter der Leitung

Ao.Univ.Prof. Dipl.-Ing. Dr.phil.
Andrea Rieger-Jandl

E251
Institut für Kunstgeschichte, Bauforschung und Denkmalpflege

ingereicht an der Technischen Universität Wien Fakultät für Architektur und Raumplanung von

Mark Aurel Evangelista

0925087

Wien, am 7.1.2021
Abstract

As a former Spanish colony, the Philippines is a country strongly influenced by Catholicism, even to this day.

In this nearly 500-year long history of Catholicism in the Philippines, design of sacred spaces made a great development.

Next to presenting the development of sacred space in this country, this master thesis deals with the question on how to design churches in the Philippines today, by specifically designing a chapel for the village of Talahib Payapa in Batangas, Luzon.
Sacred space still fascinate people to this day. This seems to be all the more true for architects, especially when they are given the opportunity to design one.

As an ongoing architect, I too am in captured by this task, also for religious reasons.

I look with gratitude for having been allowed to write this thesis and want to extend this to the following people:

- Moises and Laura Evangelista, and my sister Maureen Evangelista for their unending support, as well as all my relatives in the Philippines, who aided me during my stay for research.
- Ma Juna Felicen, my love, who went with me through the hills and valleys, in and outside this research.
- Romy Molina my godfather who introduced me to Rev. fr. Edgardo Alaurin, O.P., STD, Regent of Fine Arts and Design, providing access to crucial research material.
- Ao.Univ.Prof.Dipl.-Ing. Dr.Phil. Andrea Rieger-Jandl my adviser for her constructive feedback and patience
- Ass.Prof. Dipl.-Ing. Dr.techn. Michael Surböck who supported my scholarship and introduced me to Br. Bela Lanyi, SVD, M.Arch., M.A. and Robert Malayao, who gave me invaluable insight to architecture in the Philippines
- Doz. Mag. Martin Sindelar who helped me understand the liturgy better.

Finally, all glory and thanksgiving belongs to God, whom I believe is the source of all knowledge and truth, and I hope with this thesis have given due diligence to.
1 Introduction

1.1 Rationale
This thesis addresses the question on how to design a contemporary church in the Philippines today, while also bringing the history of Philippine church architecture to a European audience.

1.2 Modus operandi
This thesis consists of a theoretical and a practical part.
The theoretical part will sketch sacred architecture in the Philippines across history to give an overview on the morphology of sacred architecture.
In the practical part a contemporary village chapel in the village Talahib Payapa, Batangas in the Philippines, will be designed.

1.3 Scope and Limitations
This thesis will be limited to sacred space of the Catholic Church, though references to other Christian denominations or religions will be made if necessary.
The scope of a village chapel makes it ideal to address the vast issues in contemporary sacred architecture in the Philippines in a manageable scale.

2 Theoretical Part

2.1 Introduction to the Philippines
A basic overview based of the Philippines regarding its geography, climate and geology, culture and the catholic church, shall be given.
All information below is given by a frequently updated source on the Philippines.¹

2.1.1 Geography
The Philippines is an archipelago consisting of 7,107 islands, with an area of about 300,000 square kilometers and a coastline of approximately 36,000 kilometers.
In 2019, there are about 106.5 million inhabitants spread around 880 of the inhabited islands.
The archipelago is divided into three main island groups: Luzon in the North, Visayas in the Center, and Mindanao in the South. The capital, Manila, is found in Luzon.

2.1.2 Climate and Geology
The Philippines lies between the Eurasian and the Philippine continental plates making it prone to Earthquakes and volcanic eruptions.
The Philippines lies in the lower tropical latitude, this and the islands not being further than 200 kilometers away from the sea, making the median temperature about 31.4 degrees Celsius.
Most of the precipitation happen during May and November brought by the South-West-Monsoon. Generally speaking, there is greater precipitation in the East than the West due to the mountain range going from North to South.
Between June and December, the Archipelago is devastated by about twenty typhoons. One of the most devastating typhoons was Yolanda, which hit the Philippines in 2013 with gustiness of about 300 kilometers per hour killing at least over 6,000 people.
All in all, the Philippines is a very calamity prone region.

2.1.3 Culture

The Philippines is a melting pot of cultures. Filipinos were honed by the migration of the Negritos, Malays, Chinese, Japanese, and Arabic as well as colonial influences from Europe. The Americans left but continue to leave marks in the Philippine Culture. There are 170 different languages spoken, with Tagalog (Filipino) and Cebuano being the two most dominant. The country is also using the English language predominantly in education and the sciences.

Ninety percent of the population are Christians, from this about eighty are Roman Catholics. Of the remaining percentage, 5.6 are Muslims, 2.5 belong to the Iglesia Ni Cristo, and the remaining 2 belong to Buddhism, Taoism, Hinduism, and animistic religions.

2.2 Catholic church architecture across Filipino history

The periods in the history of church architecture that will be presented are:

1. Early temporal colonial
2. Spanish colonial
3. Filipino Premodern
4. Filipino Tropical Modernism
5. Filipino Tropical Regionalism
6. Current trends

The presentation of church architecture along these stages will provide a rough but useful overview on the developments of church architecture as cultural artefacts and the history of the Philippines.

2.2.1 Early temporary colonial - church architecture

Under Magellan, Europeans had first contact with the Islands and the native Filipino’s, which culminated in the celebration of the first mass in March 31, 1521 followed by the baptism of the first Filipino Christians. The Spaniards met with opposition, but their return in 1565 started colonization, Christianization, and the building of churches in the Archipelago.

The first real building erected by the Spaniards seemed to be a temporary Church, which was tied to the importance of religious considerations in the founding and naming of the first Spanish settlements and buildings (which was [...] an expression of the deep-seated Christian beliefs of the Western world at that time. To establish sacred places in unknown and unfamiliar territory was [...] “to establish an existential foothold” and to order the habitat through meaningful centers and paths.”

The only thing the missionaries could adopt from the native’s religious structures was the name “simbahan,” as they were not really public gathering places for ritual worship but rather a “makeshift shed,” or a “way side marker of ancestors’ grave.”

These first churches where no different from the native houses. This vernacular construction form is found across the Southeast Asian region, with adaptations, depending on the local conditions. In the Philippines this typology is often called “bahay kubo,” a volume raised on stilts and founded on a raised pile foundation, with a steep and cantilevering roof as the most prominent element, as it is the primary element of protection against the environment. It is made out of botanical construction material and provides a lightweight structure and space with maximum ventilation, shading and protection from the moist and often flooded ground. The raising of the floor also had sacred importance as it was the space for living and ritual offerings to the ancestors.

---

2.2.2 Spanish Colonial Church Architecture

Unlike other European colonial powers who had primarily economic interests, the colonization efforts by the Spaniards actively sought to transform the archipelago fundamentally. It was a consolidation of both Church and State, apparent from the patron of the Philippines, Holy Roman Emperor Philipp II of the House of Habsburg, under whom the colonization gained considerable track. Next to being public places of worship, Spanish colonial churches were built witnesses of the symbiotic relationship between the Spanish Crown and the Catholic orders and means of urbanization and representation.

2.2.2.1 Urbanization

Prior to the arrival of the Spaniards, the Philippines never developed a centralization of power and therefore has no urban centers, which were necessary for colonial control. The Philippines was therefore restructured and cities, such as the capital city of Manila, were created. The founding of a settlement was regulated by the "Ordinances" of King Philipp II. These demanded that plazas were at the center from which the track.

The revelation of the Archipelago fundamentally. The Philippines was therefore restructured and cities, such as the capital city of Manila, were created. The founding of a settlement was regulated by the "Ordinances" of King Philipp II. These demanded that plazas were at the center from which the whole settlement develops, and was framed by key building, most prominently a church accompanied by a convent.

Outside of the city, the scattered rural villages (barangays) were also reorganized to ease colonization and Christianization. As it was impossible to resettle the natives (reduccion), a system called 'Cabacera-Visita' was initiated and in a similar form prevails to this day. The Cabacera was a compact village and the capital of a parish, which administered the communities outside of the village. These communities had their own chapel, which was visited by the parish priest regularly and would eventually evolve into their own parish. Churches were central to these rural areas as the population were literally "under the bells"—called to be woken up or catechized for example, by the ringing of the church bells.

2.2.2 Representation

"King Philipp II makes it perfectly clear that the edifice of the church must demand attention, if not enthralling astonishment." The churches around the plaza therefore were meant to dominate it by its scale and presence. As epitomes of architecture, colonial churches showcase the glory of the Spanish crown and their religion, a means to both solidify the colonial rule and evangelize the natives.

For these unseen feats of art and construction on these islands, the missionary friars were responsible, who brought with them the architectural and artistic know-how, but as they lacked the cultural resources from Spain and New Spain (Mexico) due to the distance, were limited and created a more functional and less monumental expression than that of the Motherland. Additionally, the local conditions, such as earthquakes, typhoons, fire and pirate raids required the architecture to adapt. With the locals contributing their artistic ideas in the construction, Spanish colonial churches represent the fusion of European Church design with the conditions in the Philippines.

Key features are:
- The replacement of botanical material with stone (i.e., adobe or volcanic tuff) or brick, depending on the local availability
- Structural adaptation, by being more massive and squat
- A fortress-like character of the church-convent complex, by its massive appearance, surrounding walls, and equipment of canons
- The use of local motifs, like local plants, fruits and animals, for sacred art and ornamentation

References:
7. Reed, quoted in Gerard Lico, Arkitekturang Filipino, 106.
8. Lico, Arkitekturang Filipino, 106.
10. Lico, Arkitekturang Filipino, 109, 133.
11. Ibid., 147.
12. Ibid., 147.
Among the European styles, Earthquake-Baroque, was most exemplary,\(^\text{17}\) as it represented the victory of Catholicism over Protestantism and was more appealing and instructive to the laity and illiterate—and therefore more applicable in regard to the colonization and Christianization of the islands.\(^\text{18}\) Most Spanish colonial churches share key features such as:

- Rectilinear form, or by adding transepts with side altars, cruciform in plan
- Big naves for the congregation crowned with a dome at the crossing
- Round apsis the focal points of the church, the main altar (altar mayor) and the tabernacle (sagrario), which were highlighted by the altar wall (retablo), all being richly ornamented
- Richly decorated frontal façade, whereas other surfaces, like the more functional buttressed side walls remained comparatively plain or were filled with paintings in tromp l’oeil style\(^\text{19}\)

At the threshold of the 19th to the 20th century church architecture was primarily Revivalist in nature. Modernism and Art Deco were also introduced to the Philippines, but the former was not yet able to establish itself, hence the term “pre-modern.”

Churches of these times reflect a shift in power, from the Spanish monarchy to a short-lived independent Filipino democracy, a democracy under American colonial rule.

### 2.2.3 Pre-modern church architecture

At the threshold of the 19th to the 20th century church architecture was primarily Revivalist in nature. Modernism and Art Deco were also introduced to the Philippines, but the former was not yet able to establish itself, hence the term “pre-modern.” Churches of these times reflect a shift in power, from the Spanish monarchy to a short-lived independent Filipino democracy, a democracy under American colonial rule.

#### 2.2.3.1 Spanish Revivalism

Two iconic buildings were constructed, which reflect the final attempt of demonstration of power of the declining Spanish monarchy in a Revivalist manner.

These final masterpieces of the Spanish were the Taal Basilica, a Neo-classist church, which is claimed to be the biggest church in Asia and the San Sebastian Cathedral, a Neogothic cathedral, pioneering churches made out of steel in this continent.\(^\text{20}\)

This romantic movement was a reaction to the Enlightenment,\(^\text{21}\) which devastated Catholicism and the European monarchies, and wreaked havoc in Spain’s final colony.\(^\text{22}\)

#### 2.2.3.2 American Revivalism

The ousting of the Spanish government and religious through the Philippine Revolution and the new colonial masters from the US, who occupied the Philippines to “spread democracy,”\(^\text{23}\) ended the era of the great Spanish colonial Churches.

Through the constitutional separation of church and state (secularization), Churches no longer were representative of the power relations, becoming one building typology among many, and so lost their leading role in architecture.\(^\text{24}\)

Churches built were still grand, like the Baguio Cathedral in Baguio City (dedicated 1936),\(^\text{25}\) but now lacked their former innovating spirit and remained predominantly Revivalist in nature, despite the rise of Modernism and Art Deco in the West.

\(^{\text{17}}\) Lico, Arkitekturang Filipino, 129.

\(^{\text{18}}\) Fides del Castillo, Christianization of the Philippines, 10-11.


\(^{\text{20}}\) Lico, Arkitekturang Filipino, 145-146.

\(^{\text{21}}\) Denis McNamara, Catholic Church Architecture and the Spirit of the Liturgy, 173-175.


\(^{\text{23}}\) Lico, Arkitekturang Filipino, 197, 200.

\(^{\text{24}}\) Ivica Brnić, Nahe Ferne, 87-91.

2.2.3 Filipino Art Deco

The introduction of religious freedom led to the rise of Protestant and schismatic Churches, perpetuated by a lack of local Catholic clergy. Catholic churches were not the only buildings of religion in the Philippines anymore, some Catholic churches were even claimed by schismatic churches for a time.  

The infant Filipino-led Church had to reorient and reestablish itself and did so slowly but surely.

Under the US, the Philippines was modernized, Manila gained world city status, and was granted a transition government as Philippine Commonwealth to eventually become an independent Republic again.

Against this, backdrop church architecture began to embrace new styles. Beginning with Art Deco, a “premodern” or “protomodern” style mediating between the ornamented Revivalism and the minimalist Modernism, through classical building principles and abstracted ornaments.

For instance, the Dominican order, which runs the oldest university in Asia, the pontifical and royal University of Santo Tomas (since 1611), and under whom now many of the future architects and political leaders were trained, initiated the construction of a central seminary building. It houses the university chapel, now the Santissimo Rosario Church, designed in the style of Art Deco by Fernando Ocampo.

In 1937, the Philippines hosted for the first time in Asia, the International Eucharistic Congress, for which the Filipino architect Juan Nakpil designed the Eucharistic Monument, a tall, slender structure, composed of three columns topped by a circular beam and a cupola, housing the Blessed Sacrament. The columns were decorated with stylized human figures in a gesture of prayer that served as capitals.

Other examples are the Sigma Church in Capiz (1940) or the Chapel of the Most Blessed Sacrament (completed in 1926, rebuilt 1939) in Manila.

29. ibid., 327-329.
32. Lico, Arkitekturang Filipino, 331.

2.2.4 Filipino Tropical Modernism

After the Second World War, Manila was, after Warsaw, the most devastated city.

Postwar requirements for reconstruction were met by Modernist design principles, as it is rational and minimalist, through the use of modern materials such as reinforced concrete, steel and glass in combination with mass production and prefabrication, its focus on the structure and by dismissal of ornamentation, allowing for cost and time efficiency.

Furthermore, it became the perfect means for the Republic of the Philippines, who finally claimed independence in 1946, to throw off the shackles of the former colonial masters, as Modernist architecture was known for its break with the past and tradition.

The evident irony that modernism is a product of the west, was tried to be overcome through its tropicalization (the use of sun breakers, deep overhangs and pierced screens, also known as Tropical Modernism).

For church design in the Philippines, the preconditions to embrace modernist design principles were made possible by the Liturgical Movement, the worldwide need of churches, and the establishment of the (local) Filipino Clergy.

The Liturgical Movement of the early 20th century in the West provided a theological foundation for Modern churches (without actually advocating for it). It sought to reform the liturgical rite, so that the laity can fully partake in the Liturgy, for which it gained support by the Pope XII in his encyclical “Mediator Dei” in 1947.

The worldwide need for new churches after the Second World War was answered through “the seemingly theologically sanctioned” modern church design, which swept over to the Philippines. The 20th century became “the age of church construction,” as never before have so many churches been constructed, despite the growing secularism.

Finally, the Filipino Catholic Church has by this time established itself with its own Filipino clergy and strong support from the government, and the overwhelmingly Catholic population.

The Church would again patronize new forms of architecture.

37. Lico, Arkitekturang Filipino, 375.
38. Ibid., 429.
40. Johann Hinrich Claussen, Gottes Häuder, 248-249.
Seemingly unbound to any tradition, the era of individualistic architecture design has entered into church architecture, creating a manifold of forms. Less concerned about decolonization, uprising Filipino architects continued to look to the West and now also to Latin America. Churches henceforth are difficult to categorize but common traits are identifiable. Modern churches of this age in the Philippines were mostly expressionistic either through ornamentation or through abstract sculptural forms enabled by this age’s main construction material of reinforced concrete (Soft Modernism).

The Victoria’s Chapel (1949) in Victoria City, Negros Occidental, by the Czech-American architect Antonin Raymond, a Follower of Frank Lloyd Wright, is considered to be the first modern Church in the Philippines. The surface is ornamented with expressionistic murals, relief and mosaics with, for that time, unconventional depiction of the subjects as locals.

In Santo Domingo Church (1954) in Quezon City, Zaragoza, the Hispanic Mission revivalist style was used in an abstract Modernist expression, but with, for a Modern church, richly ornamented interior, reminiscing or rather transitioning from Art Deco to Modernism.

---

42. Claussen, Gottes Häuder, 253; Brnić, Nahe Ferne, 121.
43. Lico, Arkitekturang Filipino, 423.
44. Ibid., 414.
45. Ibid., 423.
47. Lico, Arkitekturang Filipino, 423; Defeo Rubén and Ma Lourdes Banson, José María V. Zaragoza, 59.
In the Church of Our Lady of Perpetual Help in Baclaran, completed in 1958, Cesar Concio captures the complexity of Gothic architecture’s ribbed vaulting but translated in concrete. The façade is a modernist interpretation of the Neo-Romanesque, through its massive walls, use of arches and dwarf galleries.

The Church of the Holy Sacrifice in 1955 on the campus of UP Diliman, is reminiscent of the space age of that time and resembles a flying saucer with its 90m concrete shell and circular form. It was designed by an aspiring and future National Artist Leandro Locsin, who championed architecture in the Philippines. It was his first commission, the first concrete dome in the Philippines and the first church with an altar at the center, surrounded by the congregation.

2.2.5 Tropical Regionalism

Under the Marcos Regime (1965-1986) the Philippines made great strife, albeit at a high price as it led to declaration of martial law (1972) and his dictatorship. He promoted a confidence in the Filipino nation and sought for a recreation or rebirth of the Philippine identity through art and architecture and the reorientation to the vernacular. The president’s wife, Imelda Marcos, was responsible in its implementation. With this concentration of power, a multitude of buildings and monuments, inspired by the Filipino vernacular, were created, but at the cost of a great economic deficit, which the Filipino population, and later generations had to carry.

This redirection of modernist discourse towards vernacular tradition occurred across Southeast Asia, and early signs were visible in the Philippines already in the 1950s. It took the new socio-political situation and the energy crisis in the 1970s, which proved modern buildings unsuitable in a tropical condition, for vernacular design and construction principles to take off.

The Second Vatican Council (1962-1965) brought great reforms to the Church so “that the sacred deposit of Christian doctrine […] be guarded and taught more efficaciously.”

The active participation of the laity was promoted, and a greater engagement with the local culture, which lead to the most prominent change, the liturgical reform, that allowed for the Mass to be said in the local vernacular.

Thus the Catholic Church’s reform coincided with the nation’s promotion of the vernacular, providing a theological foundation for vernacular church design.

Churches manifested this era by shifting from the mere use of concrete in an abstract expressionistic way (Brutalism), to a more explicit reference to Filipino motifs and the use of other vernacular materials and construction principles.

---

49. Lico, Arkitekturang Filipino, 423.
52. Lico, Arkitekturang Filipino, 423.
55. Ibid., 476-477.
57. Lico, Arkitekturang Filipino, 445-448.
58. Lico, Cultural Stratigraphy, 11.
60. Ibid., 36-40.
Locsin (1968) organically shaped the Church of St. Andrew, whose basic structure derived metaphorically from the St. Andrew’s X-shaped cross from which a billowing roof and a butterfly shaped floor plan was fluidly generated.62

Prior to St. Andrew’s, Locsin already shifted in his design for the Immaculate Heart of Mary’s parish church in Quezon City (1967) to a church that is symbolically derived from a seashell or a traditional hat from the Philippines called "salakot."63 The architecture is still predominantly concrete, but the symbolic element is now mainly generated through the structure of the roofing in galvanized iron, marking a shift away from concrete to express architectural ideas.

Most prominent in the explicit use of vernacular design principles is the late National Artist Francis Mañosa. His main inspiration was the domestic vernacular “bahay kubo”, coinciding with the design of churches with domestic character going mainstream.64 In Mañosa’s design, however, the emphasis did not lie in making “bahay kubo” – churches, but to apply its vernacular principles to other typologies.65

Prime example being his most famous project after the Fall of Marcos – the Queen of Peace EDSA Shrine, Mary Immaculate Parish constructed in 1991. The initial design would have been a vernacular basilica, created by seven pitched roofs, clustered together, enfolding a statue of the Virgin and the utilization of native thatch, bamboo, coconut, and other indigenous materials.

The Church together with the Filipino people, were responsible for the downfall of Marcos, and this church was a monument of the victory of democracy and the Church. Therefore, this church can be considered as the most prominent example of the Philippine Republic to date, where Church, the state and the people (the site was donated) unify in creating a new joint monument since colonial times. The failure in pushing through with this design, however, by giving way to commercial and financial concerns (another reason given was the disagreement between a committee member who preferred a Spanish colonial design and Mañosa who denied the idea of a “A Spanish colonial church commemorating a Philippine revolution on Philippine soil”), paint a more sobering picture.

The final design that was constructed was a shrine creating a plaza with a hexagonal floor plan. The plaza itself is accessible from the street through twin cascading stairs with a built-in ramp for the disabled, which is interpreted as the famous rice terraces.

Plazas where traditionally centers where people gathered in peace and crisis, and this plaza was a reference of the people protesting on these streets in the EDSA-revolution against Marcos. Nearly twenty years later people will gather here again against another corrupt regime, fulfilling the idea of the shrine being a symbol for the spirit of peaceful, democratic, change in the country.66

62. Lico, Arkitekturang Filipino, 423.
65. Robert Powell, foreword to Designing Filipino, by von Eric Caruncho, 12.
67. Eric Caruncho, Designing Filipino, 106.
2.2.6 Contemporary churches where "anything goes"

At the threshold of the third Milennia, the Philippines returned back to democracy and embraced neoliberalism.70 Was it before church and state, it is now the state and private investors that are defining architecture and the urban landscape, with their shopping malls, skyscrapers and other real estate developments – intentionally or unintentionally reducing architecture to a consumer product.71

Postmodernism led the way by commercializing past historical styles and its rejection of abstract modernism and underlining the use of symbols, and the exploration of architecture’s potential to communicate meaning. The application though is undogmatic, eclectic, superficial and/or “irrational.”72 Neo-traditionalism provided a more faithful return and application of tradition in combination with modern design and construction.

Increasing environmental concerns make Tropical Regionalism more relevant than ever. Modern design principles were not abandoned and are as Neo-modernism73 still relevant in a high-tech digital age.74 Seemingly in contemporary architecture “anything goes.”

The Catholic church to this day is the biggest and most influential Christian denomination in the Philippines, though it is unclear how far reaching her influence still goes or how much it has declined.75

The faith and the construction of churches even to this day are relevant to and deeply embedded in Filipino culture as they are not just built by parishes and religious orders but are private initiatives of individuals and corporations for their staff and consumers at shopping malls.76

The reforms of the Second Vatican council, especially on the liturgy, and by extension liturgical architecture, are still being disputed within the Church to this day within the Church. The spectrum of this debate ranges from the abandonment of the reforms for the restoration of the “pre-conciliar church” to a call for more radical reforms as a “post-conciliar church.”77

The promulgation of Liturgical guidelines provides some remedy to aid in the creation of liturgical architecture. The Catholic Bishop Conference of the Philippines (CBCP) published their “Liturgical Guidelines” in 1999 but a later guideline called “Built of Living Stones” (2000) by the United States Conference of Catholic Bishops (USCCB), provides a more comprehensive document, also for the Philippines, as English is not only an accepted official language politically and economically (since US-Colonial rule) but also liturgically.

In this pluralism of contemporary architecture, the remaining commonalities in Filipino church design are:

- the liturgical orientation, which is predominantly longitudinal, even if the architectural form would suggest a central orientation
- the need for symbolism and expressiveness even if abstract

2.2.6.1 Postmodernist churches

The Most Holy Trinity Parish Church in Batangas City was donated by the shopping mall adjacent to it.78 Disregarding the structure, it takes up many classist design elements for decoration. In the renovation of St. Peter and St. Paul Cathedral in Sorsogon, a dome was inserted to reminisce the original in the Vatican79 and vernacular ornaments were added on the façade.80

---

72. Ibid., Nahe Ferme, 121; Lico, Arkitekturang Filipino, 495-497.
73. Lico, Arkitekturang Filipino, 526.
74. Ibid., 11.
75. Ibid., 12.
76. Ibid., 13.
77. Ibid., 14.
78. Ibid., 15.
79. Ibid., 16.
80. Ibid., 17.
2.2.6.2 Neo-traditionalist churches

Pope Benedict’s letter “Summorum Pontificum” clarified that Vatican II did not abolish the pre-conciliar Tridentine Mass and that it may be celebrated, leading to the reestablishment of the traditional Latin Mass and its celebration in the Philippines after over 30 years. The church of Mary Co-redemptrix (by Duncan Strok, 2007) incorporates design principles in harmony with the Tridentine mass (celebrating facing the East or ad orientem) and is also reminiscent of the Baroque churches, but in humbler and slender mass.  

2.2.6.3 Tropical Regionalist churches

Locsin’s last project was the Church in the monastery of Transfiguration (dedicated in 1996), where he mostly abandoned concrete to make use of wood and steel and to create a form inspired by the vernacular Ifugao houses.  

A more recent example is the Padre Pio Shrine in Batangas (dedicated in 2008), that uses bamboo trusses to its limits by free spanning a great dome. Despite suggesting a central form, the arrangement is processional.

---

84. Lico, Arkitekturang Filipino, 539.
2.2.6.4 Neomodernist churches

The Chapel of Pedro Calungsod, also known as “100 Walls Church” has many freestanding walls which create space for liturgy and personal and private devotion, and is an abstract take on the gothic structure and space and a metaphor for the many paths of the pilgrim Church on earth.\[85\]

Dominic Galicia design for Magellanes Church in Manila (2013) is a reconstruction and extension of Locsin’s church which burnt down. It consists of thirteen roof vaults (representing Jesus and the twelve Apostles), made of thin shell concrete, staggered in height to each other, providing much light to the interior.\[86\]

3 Practical part: design of a contemporary village chapel

3.1 Theoretical foundation

3.1.1 Thesis question

After examining the history of church architecture in the Philippines in preceding chapters, and concluding that nowadays seemingly “anything goes,” the question arises on how to design a contemporary church. According to Pope Benedict XVI and McNamara, the answer is first and foremost a theological one. Pope Benedict argues to “find the essence anew and express it in new ways.”\[87\] McNamara thinks that architecture is built ideas, church architecture is built form of theological ideas.\[88\]

In the following chapters this theological “essence” will be sought after, before moving onto the design.

3.1.2 On liturgical architecture

Before moving on, a definition of church architecture would provide useful information. Churches are buildings for divine worship\[89\] and divine worship is the liturgy.\[90\] This liturgy is the restored and eternal\[91\] communion of the God with the Church, together with all of creation.\[92\]

A specific and visible expression of this liturgy is found in the celebration of the liturgical rites, that can differ from local church to local church, but are in essence the one liturgy celebrated in heaven and on earth.\[93\]

The term liturgical architecture will be used henceforth as it bears the essence of church architecture, which is the liturgy. Also, as in theological documents “liturgy” and “the liturgical rites” are used interchangeably, it will be differentiated in this document from this point on.

---

\[87\] Benedict XVI, Geist der Liturgie, 55.
\[88\] McNamara, Catholic Church Architecture and the Spirit of the Liturgy, 5, 9.
\[89\] Catechism of the Catholic Church, 1180.
\[90\] Ibid., 1069.
\[91\] Ibid., 1069.
\[93\] Catechism of the Catholic Church, 1136.
### 3.1.3 On functional and sacramental aspects of liturgical architecture

According to the Catechism of the Catholic Church “[…] visible churches are not simply gathering places but signify and make visible the Church living in this place, the dwelling of God with men reconciled and united in Christ.”\(^9\)

Thus, liturgical architecture has essentially two aspects:

- Functional – being a gathering place for the liturgical rites
- Sacramental – make the Liturgy perceptible

The functional aspect is self-explanatory, the sacramental aspect needs some clarification.

The sacramental worldview Catholics hold on to, is the belief that the visible signs signify the invisible, the material expresses the spiritual; that all of creation (by extension manmade creation) point to the Creator, all of creation is a sacrament.\(^9\)

This is alluded to in the Catechism of the Catholic Church where it states:

> The world: starting from movement, becoming, contingency, and the world's order and beauty, one can come to a knowledge of God as the origin and the end of the universe.\(^9\)
>
> The world, and man, attest that they contain within themselves neither their first principle nor their final end, but rather that they participate in Being itself, which alone is without origin or end.
>
> Thus, in different ways, man can come to know that there exists a reality which is the first cause and final end of all things, a reality “that everyone calls God.”\(^9\)

From the vantage point of humanity however this is not always evident, and it differs from person to person, and culture to culture.

Looking to sacred art, which seems applicable to architecture, the Catholic Church qualifies sacramentality as something that inspires and enhances liturgical, devotional and contemplative prayer, as it states in the Catechism and in Built of Living Stones (a guide for church design by the United States Conference of Catholic Bishops):

> Artistic creations in the place of worship inspire contemplation and devotion. Sculpture, furnishings, art-glass, vesture, paintings, bells, organs, and other musical instruments as well as windows, doors, and every visible and tactile detail of architecture possess the potential to express the wholeness, harmony, and radiance of profound beauty.\(^9\)

Art is meant to bring the divine to the human world, to the level of the senses, from the spiritual insight gained through the senses and the stirring of the emotions, to raise the human world to God, to his inexpressible kingdom of mystery, beauty, and life.\(^9\)

Art chosen for the place of worship is not simply something pretty or well made, an addition to make the ordinary more pleasant. Nor is the place of worship a museum to house artistic masterpieces or artistic models. Rather, artworks truly belong in the church when they are worthy of the place of worship and when they enhance the liturgical, devotional, and contemplative prayer they are inspired to serve.\(^9\)

Summarizing, the essence of sacramentality in liturgical architecture is the ability to make better perceptible the one Liturgy, the communion between God and the Church.

### 3.1.4 On inculturation and church architecture

As mentioned above, sacramentality differs from culture to culture.

The functionality of churches may differ in different places as well, as a church in the high North of Europe may not be as suitable to a tropical country prone to earthquakes and typhoons. Thus, adaptation is necessary, which is called inculturation, the third and final essence.

In general, inculturation is the adaptation of the adaptable parts in the liturgy to the culture in order to promote the “immutable” parts of it. The adaptable parts have to grow out of the Church’s heritage and the local culture and have to safeguard the immutable parts.\(^9\)

---

\(^9\) Catechism of the Catholic Church, 1180.
\(^9\) McNamara, Catholic Church Architecture and the Spirit of the Liturgy, 16-17.
\(^9\) Catechism of the Catholic Church, 32.
\(^9\) St. Thomas Aquinas, Summa Theologiae, 1-3, quoted in Catechism of the Catholic Church, 32.
Inculturation applied to liturgical architecture, means that church design may introduce locally inspired elements in conjunction with the church’s heritage and if the essentials – functionality and sacramentality are safeguarded and promoted.

3.2 Thesis and practical application

The essence of liturgical architecture can be identified as:

1. Liturgical architecture provides space for communion between God and the local Church.
2. To be such a space liturgical architecture requires:
   - Functionality – being a gathering place fit for the liturgical rites
   - Sacramentality – make perceptible the (invisible) liturgy, the communion between God, the Church with all of creation
   - Inculturation – Adapting the adaptable forms from the Church’s heritage and the local church to support functionality and sacramentality.

The thesis on the essence of liturgical architecture will be tested in the design of a village chapel in the Philippines, in the province of Batangas.

The design approach will be an iterative and organic process between the

1. Start with the functional as it is the most accessible aspect
2. Extrapolate the sacramental meaning from the functional
3. Compliment with inculturation by grounding functionality and sacramentality in culturally relevant examples from the Church’s heritage and the local culture
4. Summarize the design decision through visuals

These 4 steps will be applied to the following aspects

- Local context
- Ritual
- Space
- Materiality
- Surroundings

---

3.2.1 Local context

3.2.1.1 Functional aspect of the local context

Talahib Payapa is a rural village in the mountains of Batangas City. "Payapa" means peaceful, a fitting name for the town is far away from the polluted and overcrowded city.

Like the rest of the Philippines, many of the descendants of this village live now in the urban regions or are "Oversea Filipino Workers" (OFW), going abroad to help finance the family.

Many of the descendants return to the village, especially during the fiesta on December 26, Feast of St. Stephen the Martyr. This fiesta prompted one clan to donate their lot and build a chapel to celebrate mass on that feast day. Unfortunately, the chapel’s foundation is damaged and the clan decided to build a new chapel one a different lot, supported by the villagers.

The faithful there are being visited a few times by the parish priest of the parish of St. Michael the archangel in the town of Ilijan.

Liturgical activities are therefore few, but the chapel is used for other religious activities such as seminars.

The whole area belongs to the clan but the actual provided lot is uphill and not afar from the old chapel and measures around 10x12m.

It is accessible via the one street, running through the whole village (mainly by foot, due to the condition of the street (vehicles are mainly used for transportation in and out of the village).

3.2.1.2 Sacramental aspect of the local context

The Christian faithful are on an earthly journey towards their heavenly home.

This pilgrimage to heaven – the final dwelling of the faithful in Heaven, where perfect communion will be, is signified in the liturgical rites by orientation towards the East, an expression of the coming together of cosmos and history, of all creation, and generation, past, present and future.

Leaving their families to go abroad to provide for them, but staying rooted, eventually returning home in gratitude and donating a new chapel, reflects this pilgrimage.

---

166. Catechism of the Catholic Church, 2691.
3.2.1.3 Inculturation aspect of the local context

The fate of OFWs, even called “Filipino Diaspora”, and the toll it takes on families, are very concerning and have been addressed even in Filipino arts. It also showcases the hope for many of Filipinos to get out of poverty. Rootedness in family and tradition is a value prior to the colonization by the Spaniards, best summarized by a proverb attributed to the national hero Jose Rizal: “Ang hinde marunong lumingkon sa pinagalingan, ay hinde makakarating sa paroroonan” (If you do not know where you have come from, you do not know where you are going or if you are not rooted in the past and tradition, you cannot progress).

An example of this culture lived out can be found in the neighboring village of Pandayan. A former villager, who has made a name for herself after leaving the village, never forgot her roots and in gratitude built a new chapel for the village. It is inspired by a popular wedding church in Calaruega, making it relatively grand and monumental compared to the chapels of the neighboring villages.

3.2.1.4 Design decision for the context

Given the situation of a derelict chapel and the great desire for a new chapel of the villagers, the new chapel shall differentiate itself from its modest beginnings and similar to the Chapel in Pandayan shall be more representative and culturally embedded in built examples. This would express the local Church better, as many of the villagers have achieved financial freedom through their work outside of the village, but remain true to their roots and in gratitude want to build a new house of God.
3.2.2 Ritual

3.2.2.1 Functional aspect of the ritual

Rite
The Latin rite is celebrated in the Philippines, predominantly the ordinary form (Novus Ordo) in the vernacular and the priest faces the faithful (versus populum), but also in the extraordinary form, the traditional Latin mass, where the priest with the faithful face East (ad orientem).

Orientation
The orientation which is foundational for the next steps in the design. The simplest orientation for the approximately rectangular site would be a Southeastern orientation.

Liturgical Elements
A proper arrangement of the liturgical space and element for the Latin rite requires the following
- the Sanctuary, "the space where the altar and the ambo stand, and where the priest, deacon and other ministers exercise their offices, [...] which must be spacious enough to accommodate the full celebration of the various rituals of word and Eucharist with their accompanying movement, as well as those of the other sacraments celebrated there."108
- the Altar, the natural focal point of the church109
- the Ambo, where the Word of God is proclaimed110
- the chair of the Priest, presiding over the mass and directing the prayer 111
- the Tabernacle for the Reservation of the Eucharist112
- the Nave, the area of the faithful113
- the Baptistry, the place where the faithful are initiated into the Christian faith through water114
- the Sacristy, a functional place used for vesting, storage, etc.115

3.2.3 Sacramental aspect of the ritual

Rite
The liturgical rite is the visible form of the one liturgy (worship and communion with God, in heaven and on earth). This visibility extends to the liturgical elements and space, thus also to their design and arrangement, and are crucial for the faithful’s “full, active and conscious participation” (active participation)116 in this one liturgy. The design of the ritual space has to foster active participation which is mainly expressed in the way how the liturgy is celebrated, versus populum or ad orientem, to which Pope Benedict XVI and Louis Bouyer gives invaluable insights.

Proponents of celebrating versus populum point to the Eucharist as communal meal, and where active participation suggests facing one another. Benedict, referring to Bouyer,117 explains that an ancient meal, like the Last Supper, was “communal”, if all sat at the same side – facing the same direction, and not each other.
Celebrating versus populum, to symbolize Christ within the community’s midst,118 actually put an emphasis on the priest, as he became the main protagonist of the mass, everything became dependent on him, “his creativity carries the liturgy”, which is the exact opposite of the Liturgical Movement’s and the Second Vatican Council’s intent, reducing the laity to an observer.119

As the community is less participatory and more of an observer, from this then followed to create “new” roles to make the mass more engaging and “actively participating.” However, the actual understanding of “active participation”, is that it is first and foremost about the action of God, to whom the faithful – including the priest, unite themselves fully and consciously to.120

It is therefore not about looking at the priest, but about joining him in a procession, with the whole of cosmos, to the One who is to come, Who is traditionally believed to come from the East, where the sun rises, a sacramental sign of God’s Son who is meeting them halfway.121

---

109 Ibid., §57.
110 Ibid., §61.
111 Ibid., §64.
112 Ibid., §72.
113 Ibid., §115.
114 Ibid., §66.
115 Ibid., §234.
117 Bouyer, Liturgie und Architektur, 54.
118 Matt. 18:20 The New American Bible Revised Edition
119 Benedict XVI, Geist der Liturgie, 70.
120 Ibid., 149.
121 Bouyer, Liturgie und Architektur, 56; Benedict XVI, Geist der Liturgie, 70.
Orientation
The orientation evokes the faithful’s earthly journey towards their heavenly home.122
This pilgrimage to heaven – the final dwelling of the faithful in Heaven, where perfect communion will be, is signified in the liturgical rite by orientation towards the East,123 where the sun rises, a sacramental sign of God’s Son who on the day of Judgement is believed to come from there and is meeting the pilgrims halfway.124

Sanctuary and Nave
The sanctuary is the place where the faithful in the nave, are led by the priest to partake in the one Liturgy. Sacramentally it ought to “convey the unique quality of the actions that take place in this area while at the same time expressing the organic relationship between those actions and the prayer and actions of the entire liturgical assembly” through its “design, furnishing [and/or] it’s elevation.”125

Altar
The altar is “the center of thanksgiving that the Eucharist accomplishes,”126 the point around which the other rites are in some manner arrayed,127 and where “the liturgical assembly celebrates the ritual sacrificial meal that recalls and makes present Christ’s life, death, and resurrection, proclaiming “the death of the Lord until he comes.”128

Tabernacle
The reservation of the Eucharist was originally intended for the communion of the sick, for those unable to attend the Sunday celebration, and as viaticum for the dying. As the appreciation of Christ’s presence in the eucharistic species became more developed, Christians desired through prayer to show reverence for Christ’s continuing presence in their midst.129 The place of reservation should be a space that is dedicated to Christ present in the Eucharist and that is designed so that the attention of one praying there is drawn to the tabernacle that houses the presence of the God,130 (indicated by the perpetual light, a special oil lamp).131 The eucharistic presence makes it a true dwelling place of God (dormus Dei), through the liturgical celebration132 and outside of it through the reservation of the eucharist in the tabernacle.133

Baptistry
“Initiation into the Church is entrance into a eucharistic community united in Jesus Christ. Because the rites of initiation of the Church begin with baptism and are completed by the reception of the Eucharist, the baptismal font and its location reflect the Christian’s journey through the waters of baptism to the altar.”134

Anbo
At the ambo the Christian community encounters the living Lord in the word of God and prepares itself for the “breaking of the bread” and the mission to live the word that will be proclaimed.129

Chair of the priest
The chair of the priest celebrant stands “as a symbol of his office of presiding over the assembly and of directing prayer.”126

122 Catechism of the Catholic Church, 2691.
123 Benedict XVI, Geist der Liturgie, 60-67
124 Louis Bouyer, Liturgie und Architektur, 56; Benedict XVI, Geist der Liturgie, 70.
129 Ibid., §72.
130 Ibid., 78.
131 Ibid., 79.
132 Benedict XVI, Geist der Liturgie, 78.
133 Ibid., 79.
The dunking into or sprinkling of water marks the death to the world, and also the rebirth in water and Spirit.\textsuperscript{137} It is tied to the great commission of every Christian to” [...] [g]o into the whole world and proclaim the gospel to every creature\textsuperscript{138} and ”[... to make disciples of all nations, baptizing them in the name of the Father, and of the Son, and of the holy Spirit, [...]”\textsuperscript{139}

3.2.3.3 Design decision for the ritual

In line with the pilgrim character the orientation towards the East will be taken up and the sanctuary will be moved to the Eastern end of the lot. This can be done in good faith as:

- Versus populum seems to be mandated, but in fact it was not even promoted but only allowed. What was promoted was to move the altar away so that the priest can walk around the altar.\textsuperscript{141}
- The novus ordo can and is being celebrated ad orientem

While being least functional, the traditional Eastern orientation will be taken up as it is more “sacramental” and culturally relevant. It represents best the communion of all of creation, past, present and to come and because it relates best to the culture, the daily experience of the Filipino pilgrim, who returns home, paralleling the final return home in heaven, which is celebrated at every mass.

The baptismal font will be placed in conjunction with the Ambo, reminiscing the commission of every Christian to proclaim the Gospel and baptize every person.

\textsuperscript{137} Catechism of the Catholic Church, 1214-126.
\textsuperscript{138} Mark 16:15 NABRE
\textsuperscript{139} Matt. 28:19 NABRE
3.2.4 Space

3.2.4.1 Functional aspect of the space

The concrete spatial form for the liturgy, will be a special challenge as to date 575 villagers are registered to live here. Moreover, many relatives and former villagers return to this place which have to be accommodated as well. Generally, the liturgical space is an interior, however for greater masses outdoor is possible as well, where the liturgical elements are protected by a canopy.

3.2.4.2 Sacramental aspect of the space

As already alluded above longitudinal plans reminisce the pilgrimage to heaven by organizing the plan to take up the Eastern orientation and emphasizing the way to the altar, whereas central plans evoke Christ in the midst of the celebrating community.

3.2.4.3 Inculturation aspect of the space

The Church of Gesù, in the Ateneo de Manila University campus has a triangular structure abstractly symbolizing the Holy Trinity, the three-fold mission and vision of the school, the outstretched arms of the Sacred Heart, and the traditional Filipino “bahay kubo.”

The papal altar for the World Youth Day in 1995 provided space for a Mass with over 4 million participants.

3.2.4.4 Design decision for the space

With the orientation and rite being defined, the site allows for a triangular base form. A gabled roof form is the simplest way to create three-dimensional space and will shelter the future liturgical activities. In its arrangement it can function as a canopy for outdoor masses, to enable more people to participate in the liturgy. The equilateral triangular form in elevation and plan symbolizes the trinitarian God the community worships and is now present in. The converging walls underline the orientation towards the East. The outer corners provide servant spaces as sacrality.

---

143 Lico, Arkitekturang Filipino, 539.
3.2.5 Surroundings

3.2.5.1 Functional aspect of the surroundings

Functionally of importance is the access and the design of the natural surroundings, and the place of gathering before the chapel. Access to the new chapel is granted by the road at the north. The courtyard before the chapel has to be reorganized to provide access and place for the gathering outside.

3.2.5.2 Sacramental aspect of the surroundings

The etymological root of sacred space is that of being set apart, a separation between the sacred interior, the place where the divine is present (tabernacle) and the profane exterior. The interior represented the order of the paradise before the fall of mankind, and is expressed by vegetive ornamentation, but not as found in their natural “disorder”, but perfectly geometrically arranged to symbolize a restored perfect order and harmony.

The threshold between the interior and exterior underlined the sacred and the profane, it separated but also gathered, and has manifested itself in different forms from multiple courtyards, narthex or stepped portals.

3.2.5.3 Institutional aspect of the surroundings

The restoration of order in the Garden of Eden, is very much realized in the famously acclaimed Calaruega Retreat Center, with their motto: “Closer to nature, closer to God” and proven by awarding it’s architect Yolanda D. Reyes for the “graceful blending of manmade structure with natural curves through careful architectural handling and biotecture planning[ ...].”

As has been decreed by the Spanish Crown, Filipino Churches used to be situated along great plazas, a public place of gathering and center of the urban life. Some churches have (semi-) private gardens and courtyards for outdoor activities such as the way of the Cross. Filipino’s have great devotion to the Way of the Cross, especially during the Holy Week where they visit many churches to pray this prayer. Like in the St. Joseph the Patriarch Church in San Jose.

3.2.5.4 Design decision for the surroundings

The triangular form represents the perfect order of nature, which will extend into the surrounding, by creating a plaza. The vernacular design principle of raising the floor will be adopted pointing to a scene in the book of Exodus where God tells Moses: “Remove your sandals from your feet, for the place where you stand is holy ground.”

This will allow for better ventilation and view. In the spirit of the pilgrim the newfound plaza will allow for the popular Catholic devotion, the Way of the Cross.

---

144. Bmčić, Nahe Ferne, 27-29
146. Bmčić, Nahe Ferne, P.31-32.
149. Exod. 3:5 NABRE
3.2.6 Materiality

3.2.6.1 Functional aspect of the materiality

The Philippines is a calamity prone region, hit often by typhoons, earthquakes, and volcanic eruption. The corrosive air due to high humidity and the surrounding sea water provides another challenge. Additionally, there are ever growing concerns for the environment and scarcity of resources.

Durable and sustainable materials are necessary and also called explicitly for by the Catholic Church. 150

Bamboo

Bamboo's has excellent mechanical properties.151

Treated properly (through immersion in immunization products like boric acid, the application of paints and fire retardants)152 it can also resist the calamitous environment. It also fulfills the environmental demands, by being a locally available,153 rapid growing plant154 with a lower primary energy than wood.155

High concentration of silicic acid within the bamboo walls counters the danger of rapid burning, designating it flammable but fire resistant.156 Its high versatility makes it also applicable for the walls, floor and roof.

Capiz

Capiz are processed seashells, found across the Philippine shores (abundantly in the city of Capiz) which provide an affordable glass substitute. They were used during the Spanish colonial times for windows because of its translucency, but today it found its application mainly in jewelry and decorative items.

Restocking through aquacultures and sustainable harvesting can make it a feasible alternative to glass, while promoting the local workers.157

3.2.6.2 Sacramental aspect of the materiality

Sacramentally the materials and their application have to express the "pilgrim church on earth; [...] proclaim the heavenly Jerusalem, [and] the mystery of the communion between man and God." 158

An attempt of describing the heavenly Jerusalem is given by the Revelation of John in the Bible159 and has been the source of inspiration in church design across church architecture history, as it is the time and place where God will dwell among mankind and where between both will be full communion.160

Regarding the materiality the Revelation of John conveys:
- Permanence and preciousness
- The transcendence of light, as God is its source, illuminating not only the city but also the whole world

3.2.7 Inculturation aspect of the materiality

Permanence

Across history permanence is conveyed mainly through massive building materials like stone and later concrete. With the rise of new technologies and the vernacular, a return to local, light, and organic building materials became viable, like in the Padre Pio Shrine which uses engineered joints for its trusses.

Bamboo is known locally as a poor man's material, 161 but also for its resilience. The calamity struck nation, can very much identify with resilience, as it outlasted one colonizing power after the other, and therefore try to be as "plant like the bamboo." 162

152 Minke, Building with Bamboo, 19-20.
154 Minke, Building with Bamboo, 11-12.
156 Minke, Building with Bamboo, 26.
159 Rev. 4:6 NABRE
160 McNamara, Catholic Church Architecture and the Spirit of the Liturgy, 77.
161 Caruncho, Designing Filipinos, 114.
Preciousness

Ornamentation conveys preciousness as it exceeds the merely functional and pragmatic.\(^{163}\)

Traditional weaving techniques are a vernacular way of ornamentation\(^{164}\)

In the chapel of St. Scholastica, Northern Samar, bamboo interwoven fibers ("sawali" or "amakan") are used, \(^{165}\) with a traditional weaving technique that can adapt to different ornamental patterns.

Capiz can convey preciousness by being used as jewelry and "natural luxury." \(^{166}\)

Transcendence

Sunlight as an inaccessible source of light, making it experienceable through its interplay between light and shadow to manifest the ineffable, has been an important element in the design of sacred space up until the Gothic era.\(^{167}\)

It plays all the more a crucial part in this tropical region, where control and dosage of sunlight, for thermal comfort are of importance.

Stained glass windows symbolize the precious stones in Revelation 21 and the transcendence and divinity of the light through its kaleidoscopic illumination.\(^{168}\)

Very much similar to the "parol", a geometric ornamental lantern for Christmas, which can be made out of capiz that symbolizes the star of Bethlehem and illuminates the nights in that time of the year as used in the Baclaran Church.

---

\(^{163}\) Brnić, Nahe Ferne, 36-37.

\(^{164}\) Oliver Paul Ed, Encyclopedia of Vernacular Architecture of the World 2, 1192.


\(^{167}\) Brnić, Nahe Ferne, 212-213.

\(^{168}\) McNamara, Catholic Church Architecture and the Spirit of the Liturgy, 52.
3.2.7.1 Design decision for the materiality

Bamboo and capiz will be the material of choice as both can achieve the goals of representation, permanence, preciousness, transcendence, sustainability.

Both are traditional building materials and can therefore present the local church and its culture and thus convey rootedness to the past of the villagers, but through the use of contemporary and innovative construction techniques represent the growth and development of the community.

By using mostly these materials, could be ecologically viable as both are natural and renewable materials, of course provided they are harvested responsibly and sustainably.

**Bamboo**

The dematerialization of the structure in Gothic Cathedrals through the skeleton structure soaring up to the heavens, happens naturally through the use of bamboo canes. Mechanical joints, create a modular structure resting on a reinforced concrete foundation.

The versatility of bamboo allows it to be used for multiple things in conjunction with timber such as the skin of the chapel (façade, folding doors, roof) as sawali mats, strips for the floor. The spacing in between the strips allows the ventilation to be felt in the interior. This versatility can reduce waste.

**Capiz windows**

Preciousness and transcendence are conveyed through capiz as material for the windows and the altar. Colored capiz windows with their geometrical, fractal patterns refer to the parol and the rose windows by illuminating the interior at day, and the exterior at night.

Light slits along the bamboo structure will allow dazed light into the room, alluding to the transcendence of light and its ineffable source.
4 Planimetrics

Fig. 4.1 Siteplan 1:1000

Fig. 4.2 Floorplan 1:100
Fig. 4.5 Elevation East 1:100

Fig. 4.6 Elevation South 1:100
Fig. 4.7 Elevation North 1:100

Fig. 4.8 Elevation West 1:100
Fig. 4.9 Section of the structure

Fig. 4.10 Details scale 1:10


### Tables of Figures

| Fig. 2.2.: | How first churches could have looked like - Missionary Church in Mindanao from the 19th century. Lico, Gerard. Arkitekturang Filipino, Diliman, Quezon City: University of the Philippines Press, 2008: 130. |
| Fig. 2.3.: | Spanish Colonial Manila – Intramuros. Map of Old Manila in 1851. From the collection of University of Texas in Austin Library. Repaired by User: Briarfallen. [Link](http://www.lib.utexas.edu/maps/historical/manila_1851.jpg). |
| Fig. 2.4.: | Miagao Church facade. Wikipedia. Accessed January 1, 2021. [Link](https://en.wikipedia.org/wiki/File:Miagao_Church_facade.png). |
| Fig. 2.5.: | Miagao Church also known as the Sto. Tomas de Villanueva Parish Church. Wikimedia Commons. Accessed January 1, 2021. [Link](https://upload.wikimedia.org/wikipedia/commons/thumb/5/59/Miagao_Church.jpg/1200px-Miagao_Church.jpg). |
| Fig. 2.6.: | Typical cruciform plan of Spanish colonial Churches. Lico, Gerard. Arkitekturang Filipino, Diliman, Quezon City: University of the Philippines Press, 2008: 132. |
| Fig. 2.8.: | Taal Basilica. Photograph by Author. April 16, 2019. |
| Fig. 2.10.: | UST seminary building. Photograph by Author. March 16, 2019. |
| Fig. 2.11.: | Santissimo Rosario Church within the seminary. Photograph by Author. March 16, 2019. |
| Fig. 2.17.: | Church of the Holy Sacrifice. Velasquez, Ramón F. “ File:UPChapel9392_03.JPG.” Wikimedia Commons, the free media repository. March 10, 2013. Accessed June 27, 2020. [Link](https://commons.wikimedia.org/wiki/index.php?title=File:UPChapel9392_03.JPG&fbclid=IwAR334T9NGd1PhXJvZkC1G1v8oZ6K0OYqQ-94vNvP9wmzW9g6MaBE20r7vLk). |
| Fig. 2.18.: | St. Andrew the Apostle Church, Makati. April 10, 2019. Accessed June 29, 2020. [Link](https://www.theurbanroamer.com/st-andrew-the-apostle-church-makati/). |
| Fig. 2.19.: | Immaculate Heart of Mary Parish Church. Accessed June 29, 2020. [Link](https://nocr.gov.ph/2019/08/15/immaculate-heart-of-mary-parish-in-quezon-city-declared-as-important-cultural-property/). |
| Fig. 2.20.: | Aerial view of the seashell inspired form. Accessed June 29, 2020. [Link](https://pinimg.com/originals/ea/ab/14/eaab14b41792ec166ae76a50a.jpg). |
| Fig. 2.21.: | Salakot hat. Tagalog lang. Accessed June 29, 2020. [Link](https://www.tagaloglang.com/salakot/). |
| Fig. 2.22.: | Initial design of the EDSA Shrine. Blueprint. Facebook. [Link](https://www.facebook.com/blueprintmag/photos/a.476139936264100154780533016265/?type=3&theater). |
| Fig. 2.24.: | St. Peter and St. Paul Cathedral, Sorsogon. [Link](http://sorsogoncity.gov.ph/?attachment_id=1120). |
| Fig. 2.25.: | Holy Trinity Parish Church. Junsjazz Images & Inspiration. [Link](https://junsjazzimages.wordpress.com/tag/batangas/). |
| Fig. 2.26.: | Church of Mary Co-redemptrix. Bishop Gabriel Reyes & Archt. Francisco Mañosa. “EDSA Shrine today.” Accessed June 30, 2020. [Link](https://www.facebook.com/bluprintmag/photos/a.1352806419720012081590454592939182/). |
| Fig. 2.27.: | Monastery of the Transfiguration. Junsjazz Images & Inspiration. [Link](https://junsjazzimages.wordpress.com/category/architecture/). |

*Note: The image links are no longer accessible. The original source is unavailable.*
Fig. 2.28.: Figueroa House. https://www.univie.ac.at/ksa/apsis/asia/eng/figueroa/figueroa5g.jpg.

Fig. 2.29.: Padre Pio Shrine, bamboo structure and altar wall. Accessed July 03, 2020. https://i.pinimg.com/origin/89/4c/03/89fc0322d912ad9701b48ee3d8cb39dfd.jpg.


Fig. 3.2.: Talahib Payapa, Batangas City. Accessed from https://www.google.at/maps/place/Talahib+Payapa,+Batangas,+Philippines/@13.6711991,121.1168647,15z/data=!3m1!4b1!4m5!3m4!1s0x33bd1c629be527b5:0x358d5809e6a2a05e!8m2!3d13.670701!4d121.1223488.

Fig. 3.3.: Sitio Pansol, Talahib Payapa. Accessed from https://www.google.at/maps/place/Talahib+Payapa,+Batangas,+Philippines/@13.6711991,121.1168647,15z/data=!3m1!4b1!4m5!3m4!1s0x33bd1c629be527b5:0x358d5809e6a2a05e!8m2!3d13.670701!4d121.1223488.

Fig. 3.4.: Church militant and pilgrim church. Accessed December 12, 2020. https://aleteia.org/2017/10/22/the-visible-church-on-earth-is-only-one-part-of-a-much-larger-reality/

Fig. 3.5.: Chapel on the Wayside of the Street in the Village of De la Pas Proper, Batangas. Evangelista. Mark Aurel. February 4, 2020.

Fig. 3.6.: Pandayan Chapel. Evangelista. Mark Aurel. February 19, 2019.

Fig. 3.7.: Calaruega Church. Accessed December 30, 2020. https://4.bp.blogspot.com/-lV5dEgWw6iV/HEYdFOztlAAAAAAAAMiC/3BdJUDKrc/s1600/Calaruega%2BChaapel.JPG

Fig. 3.8.: Site Plan. Evangelista. Mark Aurel.

Fig. 3.9.: The old and derelict chapel. Evangelista. Mark Aurel. February 27, 2019.

Fig. 3.10.: The Old Chapel at the Former Courtyard. Evangelista. Mark Aurel. February 27, 2019.

Fig. 3.11.: The New Site of the Chapel. Evangelista. Mark Aurel. February 27, 2019.


Fig. 3.16.: Church of Mary Co-redemptrix, High Altar. Accessed January 2, 2021. https://www.facebook.com/marycoredemptrix/photos/701745136870346

Fig. 3.17.: Taking Up the Orientation to the East. Evangelista. Mark Aurel.

Fig. 3.18.: Arrangement of the altar, Ambo and Baptistry and the seat of the Priest along the Eastern Orientation. Evangelista. Mark Aurel.


Fig. 3.20.: Ideal Church Diagrams

Fig. 3.21.: Diagram explaining God the Trinity, known as “shield of the Trinity.”

Fig. 3.22.: Church of Gesù, Manila

Fig. 3.23.: Papal altar for World Youth Day 1995
https://www.facebook.com/111131982293260/photos/a.462686620471126/805406469532471/?type=3&theater

Fig. 3.24.: Resulting triangular Form in Plan. Evangelista. Mark Aurel.

Fig. 3.25.: Verticality Towards the Sanctuary. Evangelista. Mark Aurel.

Fig. 3.26.: Triangular roof. Evangelista. Mark Aurel.

Fig. 3.27.: Cataruega

Fig. 3.28.: St. Joseph Prayer Garden. Evangelista. Mark Aurel. April 03, 2019.

Fig. 3.29.: Elevation of the sacred space. Evangelista. Mark Aurel.

Fig. 3.30.: Access to the Chapel. Evangelista. Mark Aurel.

Fig. 3.31.: Extension of the interior to the exterior. Evangelista. Mark Aurel.

Fig. 3.32.: Bamboo Canes
design/238103?ad_source=neufert&ad_medium=gallery&ad_name=open-gallery.

Fig. 3.33.: Capiz Shell
https://upload.wikimedia.org/wikipedia/commons/a/a3/Capizshell.jpg

Fig. 3.34.: Engineered bamboo Structure at the Padre Pio Shrine
https://pinimg.com/originals/89/c6/03/89c60322912ad901b4dee3d4cb39fcd.jpg.

Fig. 3.35.: St. Scholastica Chapel, Northern Samar - Amakan Bamboo weaved roof

Fig. 3.36.: Church of Seashells, Bacolod City - altarpiece and windows made of capiz
sang-barangay-chapel-silay-city/.

Fig. 3.37.: Baclaran Church with „parols“ during the Christmas time

Baclaran Rose Window with its Fractal Pattern

Fig. 3.38.: https://baclaranphenomenon.wordpress.com/category/architecture/

Fig. 3.39.: Foundation including encased steel tubes for the bamboo cones.
Evangelista. Mark Aurel