The Worship Building

The Pyramids of Egypt (25th century BC), Parthenon of Athens (447-432 BC), Hagia Sophia in Istanbul (532-537), Great Mosque of Mecca al-Masjid al-Haram (7th century), Saint Peter's Cathedral in the Vatican (1506-1526) and the Sheikh Zayed Grand Mosque in Abu Dhabi (1996-2007). These temples of all sizes and eras are some of the most recognisable, idolised and visited places all over the world, granting cities that house them a presence that they would have hardly obtained otherwise. Architecture's feature as a testament to address societies' and culture's needs of erecting relevant symbols with power of attraction to cluster population settlements is not comparable with any other social manifestation – the human being needs a physical place where body can stay and soul can return to.

In Catholicity, for example in Spain, the clustering of a community of faithful is called a 'parish church' (parroquia in Spanish), which belongs to a particular church under the spiritual direction of a priest who is designated as the 'parish priest' (párroco in Spanish). Therefore, the parroquia is a certain community of the faithful established around a particular church and its *párroco*. The church is a place where all the faithful can meet for the celebration of the Eucharist rite. Parishes are generally defined by a territory; hence, a community of faithful living within the territorial limits of the parish belongs to that particular parish. Originally, parishes were created by the Catholic Church and formed by a small territory, several towns or villages assigned to a priest. The priest was responsible for officiating sacraments and offering comfort to the inhabitants and parishioners, extending his services to all temples and chapels within the parish.

Throughout history, the word parroquia has derived a double meaning – parroquia as the building itself and parroquia as a synonym for the settlement of people whose lives revolve around the said building, where religious power of the said community lies. In fact, the latter meaning of parroquia is the predominant one, especially among the elderly in small villages of Spain. Extrapolated to a bigger picture, this explains the fact that most European cities are rooted in a population settlement clustered around a worship building, generally a temple, around which commercial activities emerge and daily life occurs, with religion as the catalyst for not only private but also public life.1

The importance of churches and mosques as landmarks, especially of their towers, becomes even more apparent when cities begin to spread all over the territory. Bell

towers and minarets, highlighted items in the city skyline, stand out more than ever as regulating and guiding elements - regulating based on their strength to determine not only the horizontal but the vertical growth of cities², and guiding due to their proven capacity of allowing pedestrians to figure out their location within the urban fabric in relation to the landmarks that the temples create.

The Contemporary **Worship Building**

A new category of worship buildings is playing the role that parish churches used to in the past, and thereby, in the construction and consolidation of contemporary cities. These new temples, with the same or even more clustering potential, are skyscrapers – the modern cathedrals.

From the Chrysler Building in Manhattan (1930) or the Empire State Building in New York (1931; tallest building in the world until 1972) to the recent Creek Harbour Tower (Dubai; more than 1km in height, to be completed for the Dubai 2020 World Expo) or the Kingdom Tower (Jeddah; also more than 1km in height), surpassing the Burj Al Arab (1999) and the Burj Khalifa (2010) in Dubai, they are iconic buildings constructed to emphasise the old and new powers in the world map. They open up opportunities to activate construction in certain parts of the world, or specific areas of the city, under the promise of exponentially increasing land

The Sagrada Familia vs Petronas **Twin Towers**

Looking at the conditions when both the Sagrada Familia in Barcelona (1882-present) and the Empire State Building of New York (1931) were built, it is possible to clearly identify the inflection point when a transition from traditional to modern society occurred. On one hand, the Sagrada Familia is a temple that was able to pinpoint a city in the world map as proof of traditional power (religion)³. On the other hand, the Empire State Building is a new typology of worship buildings, an allegory of the immense faith that Americans had on their economic development and the poweraddressing society from there on (money). The modern cathedral is not a religious building anymore; however, the balance of power between religion, money and society continues nowadays, reaching different peaks of importance in different societies

In the late 1980s, the Malaysian government decided to erect a skyscraper so ambitious that it aspired to surpass the height of any existing buildings in



FIGURE 3: Internal view of the Frontage of the Nativity (northeast facade) of the Sagrada Familia, before the



FIGURE 4: At a height of 60m, a bridge connects the two central pinnacles of the frontage of the Passion facade (southwest facade) of the Sagrada Família. Gaudi wanted to represent a triumphant Jesus ascending to Heaven

the world at the time. The Petronas Twin Towers (1996) is the worship building of Kuala Lumpur and the one that raised Malaysia in the world map from its colonial roots – an architectural marvel peaking at 452m in height (88 floors), and the tallest vertical structure built by man until 2003.

Visible from almost anywhere in the city, the Petronas Twin Towers is a must-see for millions of tourists visiting Kuala Lumpur every year. As with Gaudi's Sagrada Familia in Barcelona, architects and non-architects from all over the world know and admire the stunning beauty of both buildings. They are two of the most recognisable architecture icons in the world, unprecedented designs of their time and international symbols of power in their respective countries.

Similar to the Sagrada Familia, the Petronas Twin Towers has witnessed

THE MODERN CATHEDRAL: THE SAGRADA FAMILIA VS PETRONAS TWIN TOWERS

[SUMMARY] THE BASILICA AND EXPIATORY TEMPLE OF THE HOLY FAMILY, OR BETTER KNOWN AS SAGRADA FAMILIA (BARCELONA, 1882-PRESENT), BY ANTONI GAUDÍ AND THE PETRONAS TWIN TOWERS (KUALA LUMPUR, 1992-1998) BY CÉSAR PELLI ARE TWO OF THE MOST RECOGNISABLE ARCHITECTURAL ICONS OF ALL TIME. THEY ARE SOME OF THE MOST VISITED AND PHOTOGRAPHED BUILDINGS IN THE WORLD. AND ARE SYMBOLS OF THEIR RESPECTIVE CITIES AND EVEN NATIONS. THEIR SYMBOLISM LIVES NOT ONLY IN THEIR ABILITY TO DEFINE TERRITORIAL LANDMARKS OF THE DIFFERENT CONTEXTS AND TIMES THEY WERE ENVISAGED: BUT SURPRISINGLY. THEIR BACKLIT VIEWS REVEAL THE ASTONISHING RESEMBLANCE OF THEIR POWERFUL SILHOUETTES DEFINING THE SKYLINE OF THEIR CITIES. TWO MODERN CATHEDRALS. TWO TEMPLES OF THEIR TIME



FIGURE 1: The Sagrada Familia has three main access frontages, with different designs. All of them culminate in four bell towers linked by bridges. Pictured is the Frontage of the Nativity (northeast fa<u>cade</u>)



FIGURE 2: Petronas Twin Towers under a whimsical reddish sky

ARCHITECTURE MALAYSIA VOLUME 29 ISSUE 4 2017 ARCHITECTURE MALAYSIA VOLUME 29 ISSUE 4 2017 the emergence of the city around it. The Sagrada Familia, which began construction in 1882, colonises a new sector away from the historical city centre of Barcelona as part of the masterplan for the extension of the city envisaged in 1854. Likewise, since the construction of Petronas Twin Towers, its vicinity has seen the mushrooming of skyscrapers in a short time span of less than three decades. At the same time, Petronas Twin Towers was not located in the centre of the city but it became the neuralgic centre of the city – an unprecedented architectural and urban motion with no referents in the world.

The geometric design of its tower floor plan – two intertwined squares that gradually decrease in size towards the upper sector of the towers – is based on the traditional Islamic motif of a 12-point star, including a semicircle at each intersection. This motif has a distant resemblance to the floor plan of the apse in Sagrada Familia.

On another note, both the Sagrada Familia and Petronas Twin Towers are the most recognisable silhouettes in the skyline of their respective cities. The analysis of their backlit forms reveals an even more surprising fact – the uncanny resemblance between two buildings envisaged at times and places so disparate, yet sharing many intrinsic values. Both buildings are crowned with towers that sharpen and point to the sky, like escaping from the ground and from themselves, as if that pointed symbolism had been born from the common intuition of both architects, Gaudí and Pelli, while creating the architectural icons that came to be. The Sagrada Familia reveals Gaudí's creative universe in the conception of forms with a rich and whimsical decorative display, and a design as crafted and unique as the process of construction itself. On the contrary, the Petronas Twin Towers hypnotises with its majestic beauty, a modular jewel that finds its exquisiteness in the thousands of nuances and reflections in the sky.

A last note is merited by the bridges, also present in both buildings. The almost 60mlong sky bridge of Petronas Twin Towers connects both towers at levels 41 and 42 for three functions – symbolic, representing Malaysia's new gate to the world; structural, helping the overall stability of the duo of towers; and safety, ensuring an alternative escape in the event of evacuation of any of the towers. Similarly, towers at each frontage of the Sagrada Familia are connected at different levels with functional bridges.

The Modern Cathedral

The Sagrada Familia in Barcelona and Petronas Twin Towers in Kuala Lumpur are two cathedrals of their time. Their timeless beauty seduces our eyes and accelerates our heartbeats, their materiality excites our fingertips, the hustle of Kuala Lumpur's busy streets stimulates our ears like the echo within the walls of the Barcelona temple, and eventually, the pride of their mastery humbles our soul.

If temples are places primarily conceived for social recollection and soul rejoicing, then the Sagrada Familia and Petronas Twin Towers are two temples of their time, two modern cathedrals. 36

Dr Miguel A. Robles-Cardona is a vocational architect, an experienced researcher and a passionate lecturer. Hailing from Spain, he received his Degree of Architecture in Seville, and his Master and PhD in Barcelona. After professional experiences in Germany and Italy, he moved to Malaysia and joined the VERITAS Design Group in 2015. He believes that architecture is one of the few truly vocational professions that you never retire from. Untiringly curious, avid traveller and obsessively meticulous, he arises have also proved to the received with a received his Degree of Architecture in Seville, and his Master and PhD in Barcelona. After professional experiences in the received his Degree of Architecture in Seville, and his Master and PhD in Barcelona. After professional experiences in Seville, and his Master and PhD in Barcelona. After professional experiences in Seville, and his Master and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona. After professional experiences in Seville and PhD in Barcelona experiences in Seville and PhD

Tony Liew Voon Fun assisted with the proofreading of this article

Footnotes

[1] Aside to most European cities and towns of all sizes, there is another very interesting example of contemporary population settlements erected around their churches. They are the Spanish Labour Universities – a set of 22 'university campuses' build during the Franco dictatorship (1946-1978), on which the author's doctoral research was conducted. Each one is based on a different model of the ideal city, and they are among the first designs that proved the importance of the temple as the centre or students' life. From the mid-1996s, once religion no longer played such a crucial role in the Spanish Society, conference halls took over the protagonist role in these complexes, as evidence that democratic power does not rely on religion but people. In program of the fundamental aspects is addressed in the author's PhD thesis at www.miguel-angethors. If 2 Even today, most European cities and towns maintain strict urban regulations stat prevent buildings of any kin form rising above the towers of their most important temples, though not in the entire city, at least within a regulations are applied for other contemporary, non-religions emblematic buildings in cities all over the world. [3] No many people know that Gaudi was commissioned in 1908 by an American businessman (right after finishing another of his iconic buildings, the Casa Mila in Barcelona) to design a gigantic hotel in New York. The project, a tower of about 360m in height did not go beyond a few concept drawinss. However, it has a ereat formal parallelism with the Sagrada Familia and surprisingly, an astonishing resemblance to the Buri planting.



FIGURE 5: Concept drawing by Gaudi for a gigantic hotel in New York in 1908. Commissioned by an American businessman, the project, a tower of about 360m in height, did not go beyond the concept drawing



FIGURE 6: Petronas Twin Towers skybridge connects both towers with three functions –symbolism, structural soundness and safety



FIGURE 7: Montage of Kuala Lumpur and Barcelona skylines side by side (not to real scale)