




Definition of Decorative Pediment Elements of the Building in Palladian Architecture in Thailand

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ABSTRACT

This article presents the development of symbolic interpretations that appear on the pediment in Palladian architecture in Thailand. Palladian architecture originated from an Italian architect, Andrea Palladio. The distinctive identity is that it has beautiful proportions that are harmoniously consistent, with the style unraveled from ancient Greco-Roman architecture. It emphasizes symmetry and incorporates classic building elements into the design, especially in pediment. Studies have shown that pediment is an important element. It is located on the top of the building. In the Greco-Roman period, pediment was used to decorate the temple for worshipping the gods. Andrea Palladio adapted pediment elements in residential buildings, adhering to the beauty of proportions rather than excessive decorations according to the humanist approach that was popular during the Renaissance. As a result, the pediments in Andrea Palladio's designs were interpreted as majestic. The Palladian style of architecture clearly reflects the essence of Western architecture. It has been popular in Thailand since the 19th century onwards. The study found that Western architects adapted the architectural style to be more oriental. The unique pediment elements of the Palladian architecture have been redefined. Sculptures decorated with stories of various gods were replaced by the symbols of the monarchy, royal emblems, coat of arms and Garuda. Such decorations often appear on the pediment of the palaces and various government buildings to indicate the status of the monarch as the builder of the buildings and reflect the center of power in the rule of the monarch under the absolute monarchy.

Keywords: Palladian Architecture; Pediment; Palladianism in Thailand; Andrea Palladio; Palladian Style.

INTRODUCTION

Palladian architecture originated from an Italian architect Andrea Palladio, who worked in architectural design during the Renaissance period, around 1508 – 1580 A.D. Andrea Palladio led the Greco-Roman architectural style to unfold until it became a unique design identity that important, with symmetry, perfect proportions, and classic building elements such as the pediment, arch and pilaster, which were arranged in an orderly manner, creating a dimensional shape (Watkin, 2005), especially the central porch and pediment, which Andrea Palladio adapted for a residential building finely. The luxury and classic of Palladian architecture have become a favorite and popular style in many areas of Europe and America, including Southeast Asia.

Andrea Palladio wrote *Four Books of Architecture* or “I quattro libri dell' architettura” in 1570. It contains his designs, line drawing illustrations, scale and proportions, decorative elements of the buildings, as well as the details of ancient Roman architecture he recorded. The information in this book is an important guide for architects who want to study classical architecture. Later architects used the information in this book as a model for their designs. Around the 17th century, British architects Inigo Jones and Lord Burlington adopted Andrea Palladio's designs in England, which later evolved into a Palladian architectural style that was widely popular. (Tavernor, 2005)

Around the 19th century, it was a time when Western powers began to gain more influence in Southeast Asia. The arrival of Westerners led to the development of many cities. The Palladian architectural style was used as a

model for the design of various types of buildings. The primary reason may be that the appearance of Palladian architecture clearly reflects the essence of Western architecture. An example was the works of George Drumgold Coleman, an Irish architect who worked for the British government in Singapore. He designed important buildings, such as the Old Parliament House in 1826, incorporating Palladian architecture with vernacular architecture, while optimally adjusting the composition and arrangement of living spaces to the climate. The building plan was arranged along the length for ventilation, for the wind to blow through easily. There was a design for a sun visor (Chungsiriarak, 2010), which architectural style influenced Thailand in later periods.

Western culture began to flow into Siam or Thailand from the reign of King Rama IV until the reign of King Chulalongkorn, Rama V. His wish was to develop the country to be modern and equal with civilized countries. He has traveled to various cities in the Kingdom and has traveled to Europe twice. It was an experience that was very beneficial to the development of the country. He let many of his children go to study abroad. Upon graduation, they returned to work in various ministries. Bowring Treaty allowed free trade. There were many foreigners working in Thailand, including Western architects who came to serve in governmental organizations. Many buildings with Western architectural styles were built. Western architects widely applied Western classical architectural styles to their building designs, especially Palladian architecture, as it was a unique architectural style that reflected Western classics, simply majestic, and easy to be applied to suit the terrain.

The pediment is an important building element. It is located at the top of the building. This is because the location of the pediment is usually in the center of the building in an easily visible area. This element has always been used to convey the meaning of architecture. Pediment has undergone many changes in meaning since the Greco-Roman period, when it was used as a sign of the exaltation of the gods, and has been changed to convey majesty and luxury in the Renaissance period. Palladio explained the reason for the importance of the building's pediment: "...such frontispieces mark the entrance of the house and are necessary for the grandeur and magnificence of the building which thus has a front part more outstanding than the other parts..." (Palladio, 1967, Chapter XVI). He therefore tried to emphasize the placement of the building's pediment over any other decorative elements.

When the influence of Palladian architecture played a role in the creation of architecture in Thailand, especially during the reign of King Rama V, the architectural style was modified to suit various factors in Thailand at that moment. The classic Western architectural style that appears in Thailand is therefore not the same as the original works in Italy and England. So is the interpretation of the pediment element. It is adapted to the needs of the building owners. This article aims to find the meaning of the changed pediment symbols, as well as the unraveling form of the pediment elements that are considered important characteristics of Palladian architecture in Thailand. It also aims to find in what ways it is different from the original work and includes studying the reasons, motivations, and factors that affect the adoption of Pediment elements in Palladian architecture until it has been popular until now.

Research Objective

The objective of this research is to investigate the architectural significance that has led to the adaptation of Palladian architecture in Thailand, exploring its characteristics, similarities, and differences from the original Palladian works, with a focus mainly on the pediment elements. Additionally, the study aims to examine the motivating factors and various influences that have contributed to the popularity and continued use of Palladian architecture in Thailand up to the present day.

LITERATURE REVIEW

This study is part of the Meaning and Evolution of Palladian Architecture in Thailand research. The researcher has classified the topics of document review into 2 data sets:

Dataset 1 is a basic data set related to Andrea Palladio's design. It is divided into 3 groups of study topics: Group 1, History of Andrea Palladio, Group 2, Andrea Palladio's Works, Group 3, Overall Study of Western Architecture History. The dataset offers insights into Palladio's design philosophy and approaches. From the study of Andrea Palladio's design works, it can be summarized separately for each type of building as follows:

Rural Residential Buildings (Villas)

The design of this rural housing is the type of building that made Andrea Palladio very famous. He adopted classical architecture in its design. The building has a distinctive luxury until it becomes its own identity. Proportions, architectural elements, the use of space were arranged with mathematical principles in mind. Much of his work was located in Vicenza and Padua before Andrea Palladio moved to Venice in 1556. After that, the design portfolio became more extensive and has been popular to be built in more cities such as Treviso, Rovigo

and Venice.

Residential Buildings in Large Cities (Palazzo)

Palazzo was a type of building that was popular with wealthy people in those days. This type of building was popular to be built in the city, resembling a row of tenement buildings. Palazzo is adapted from an ancient Roman dwelling with a decoration. inspired by an ancient Roman stadium (Tavernor, 2005). Andrea Palladio designed several Palazzo buildings. Most of them are located mainly in Vicenza.

Religious Building Group (The Church/Cathedral)

During the Renaissance, those who were commissioned to design the cathedral were to be masters of every aspect. Andrea Palladio's early designs were only designs of elements of the churches that had been built before. Later, when he had more experience working in the field of design, he was given the opportunity to start designing religious buildings, particularly the decorative facades of the buildings. Most of the religious buildings Andrea Palladio designed are located in Venice. The design style reflects the concept of symmetry, proportion, decorative elements of the building, which reflect the uniqueness of Andrea Palladio.

An analysis of gaps in the study of dataset 1 revealed that the study did not cover or link to a detailed analysis of the decorative elements concept. In addition, the study of the dissemination of the influence of Palladian Architecture in various areas mainly focused on the influence in Europe and the Americas. There was still a lack of study of the influence that affects the style of Palladian architecture in Southeast Asia and Thailand. This point is considered a research gap that will lead to further studies.

Dataset 2 is a dataset related to Western architectural influences in Thailand from the reign of King Rama IV to the reign of King Rama V, especially in architecture. Past studies have found that there are scholars and researchers interested in studying architectural styles during this period. However most of the emphasis is on the study of architectural styles in each period. The study of factors affecting the architectural style was mostly analyzed as an overview. They haven't studied in depth to any specific architectural style.

From the analysis, there were gaps in the studies that the influence of Palladian architecture has come into play in the period since the reign of King Rama V, coming from Western architects and such building styles have been created continuously. However there is still a lack of study issues that go into the specifics of how decorative elements are applied to the environment, including beliefs in those days.

METHODOLOGY

The research study will be based on qualitative research, comparing architectural styles from case studies together with historical data which appear both as documental evidence and in evidence in connection with the architectures (Figure 1).

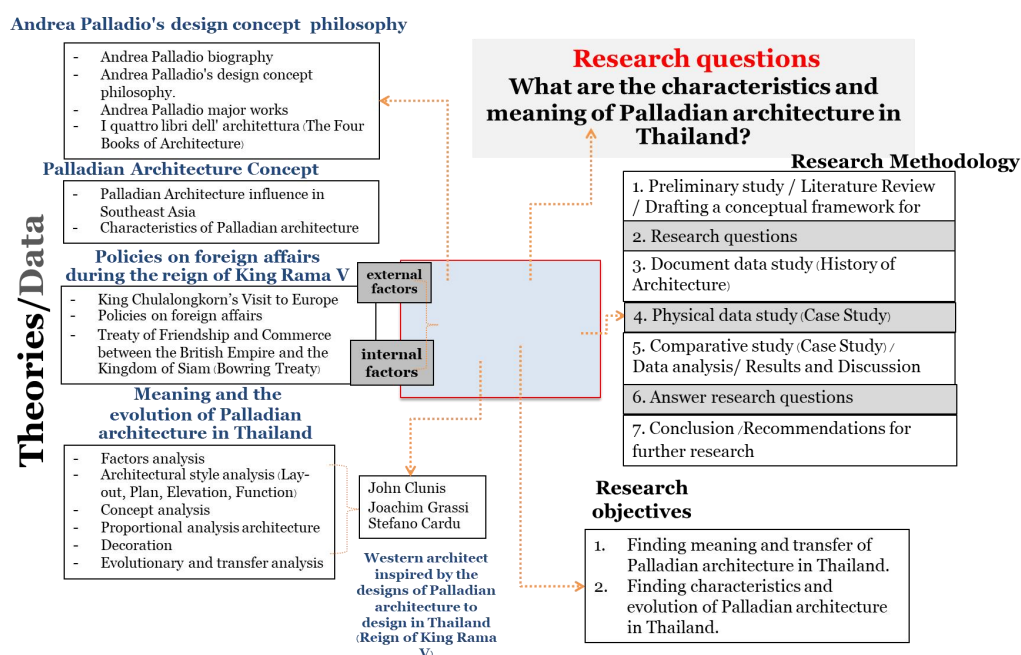


Figure 1. Conceptual Framework

The scope of data analysis is divided into two main parts:

Analysis of Design Semantics by Andrea Palladio

The researcher will analyze the data through case studies, works designed by Andrea Palladio, and data from the book *I quattro libri dell' architettura* to identify factors related to Andrea Palladio's designs to lead to semantic analysis and analysis of uniqueness in design.

Meaningful Analysis of Palladian Architecture Design in Thailand

The researcher will analyze the data through case studies of buildings influenced by Palladian architecture which were built during the reign of King Rama V, studying and analyzing architectural patterns and decorative elements to lead the process of comparative analysis with the prototypes to find various factors related to the unraveling of architectural styles and answer research questions correctly and appropriately.

RESULTS

Meaning of Pediment in Greco-Roman Architecture

The pediment was the spire of an ancient Greco-Roman temple located on the Entablature, or structural support. It looks like a low triangular shape where the angle has a degree of inclination, serving to cover the roof structure, and used to create the look of the building stable. The empty spaces within the pediment are decorated with sculptures that reflect stories of gods.

Greek temples were built to symbolize the city. They are usually located in important areas or in the middle of the city. Their purpose was to worship the various gods revered by the Greeks. The meaning of the temple can be compared to a large sculpture built in the middle of the natural space according to the Greek philosophy of worshipping the earth. The pediment in Greek architecture can be found in temple buildings such as the Parthenon on Akropolis, Athens, Greece. It was built to pay homage to the god Athena. The temple was made of white marble. It is a large temple where columns and beams were used for construction. Evidence has shown that the interior of the eastern pediment features sculptures depicting the birth of Athena, while inside the western pediment are sculptures depicting the rivalry between Athena and Poseidon as to which deity would be greater in defending the city of Athens (Roth, 2018).

In Roman times, the pediment continued to be important as a decorative element that obscured the roof structure. Although the Romans began to have more modern building construction technology, it was also influenced by the adaptation of Greek architecture, especially the building of the temple to worship the gods. In the beginning, the Romans continued to worship the gods in the Greek way. But the names have been modified to reflect the gods of the planet. Important Roman temples, such as the Temple of Mars Ultor, are located at The Forum of Augustus, Rome, Italy. Although today it appears that only the base and some columns remain, other supporting evidence suggest that the Entablature is inscribed with the name of Augustus Caesar, who built the temple. Inside the pediment was decorated with sculptures depicting the god Mars or Ares in Greek mythology who is the god of war. The sculptures within the pediment reflect the story of the war, with Mars located at the center point, flanked by the goddesses Fortuna and Venus which mean victory related to war.

As for the Pantheon in Rome, Italy, Roman craftsmen modified the entrance to the temple to look like a Portico, while the pediment still resembles that found in typical Roman architecture. But at present, there is no evidence of decoration or ornament inside the pediment. But there are also traces on the surface that are presumed to be decorated with sculptures of gods.

The meaning of pediment in Greco-Roman architecture is therefore used as a symbolic representation of the gods. The triangular shape was meant to simulate the mountain of the gods. This belief has been carried on since the Mesopotamian and Egyptian eras. Architectures in the Mesopotamian period were built to offer to the gods by bringing a triangle shape to determine the proportions in the design, such as the Ziggurat, which was a higher-stacked building, similar to the mountain of the gods. Even in the architecture of the Egyptian period, the triangle shape is still associated with the gods as well. The creation of the Step Pyramid or Pyramid at Giza was inspired by the triangle shape to convey the simulation of the mountains of all gods. The Greeks therefore used that influence to unfold in the construction of the temple of the gods. When considering the physical position of the mountain, it must be positioned at an elevated position relative to the pediment's position in the building structure. Greek craftsmen chose these elements to decorate the interior of the pediment to symbolize the representation of the mountain of the gods. The story of the sculptures inside was reflected in relation to the gods enshrined in the temple (Figure 2).

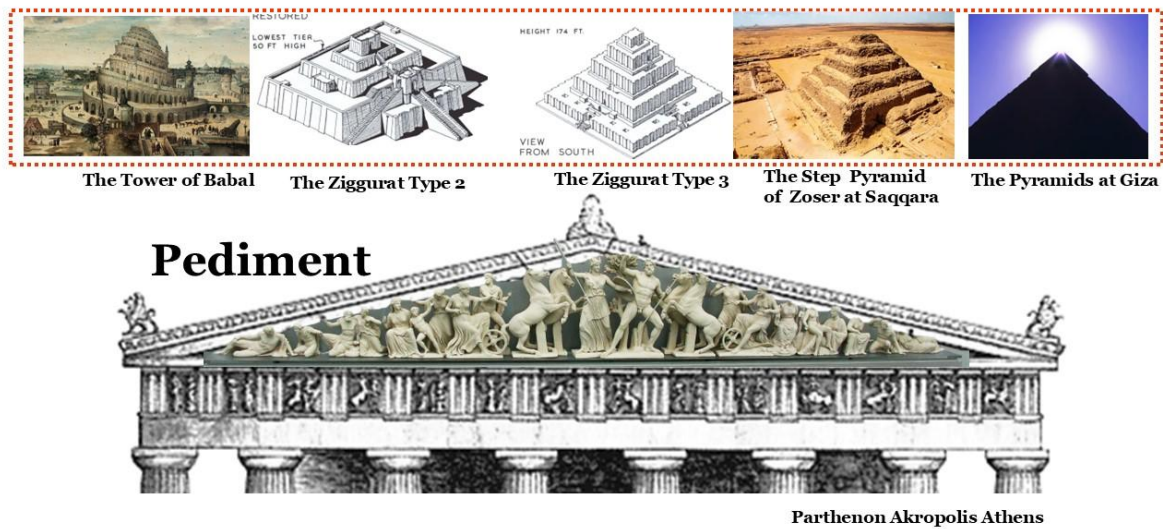





Figure 2. Interpretation of Symbols in the Design of the Pediment in the Greco-Roman Period







Changes in the Meaning of Pediment in Andrea Palladio's Design (Table 1)

The 4th century Roman king Constantine proclaimed Christianity, causing a large number of churches to be built for ceremonies. The Romanesque Assembly Hall (Basilica) was used as a model for the construction of Christian churches (Roth, 2018). A longitudinal building with a gabled roof was used as the main structure in the modern church, with a pediment as a decorative element. The evolution of the pediment changed its status from the symbol of the gods to being converted to serve the Church instead. It was found that the pediment style of the church from the early to the Middle Ages was designed to be simple, without any decorations, in connection with the principles of Christianity of which the building of worshipped statues is not popular. In the Romanesque period, pediments such as in San Miniato al Monte, Florence, Italy were decorated more with alternating colored marble lining to create patterns such as arches and there appeared symbolic patterns related to religion to decorate the interior.

The Pediment at San Miniato al Monte influenced the creation of Renaissance works. Leon Battista Alberti, an architectural aesthetic theorist and master architect of the time, designed the Facade S. Maria Novella in Florence. The pediment of San Miniato al Monte and the Roman temple were modified using geometric and mathematical principles to determine appropriate proportions. Leon Battista Alberti's design approach paid homage to beauty and furnishings, giving the interior of the pediment beautiful decorations. The sun pattern is like a symbol of Christ or a saint (Ferguson, 2019). There is a baby's face in the center. In addition, the area around the Entablature is also inscribed with the name IOHANES. ORICELLARIUS. PAV.F.AN.SAL.MCCCCLXX. Translated as "Giovanni Rucellai. Son of Paolo. Year of Salvation". The renovation supporter Leon Battista Alberti inscribed Rucellai's name on the site, consistent with ancient Roman temple constructions that often engraved the names of the donors who donated money to build it in this area as well (Watkin, 2005).

Table 1. Evolution of Meaning Pediment in Western Architecture

Period	Style	Decoration	Meaning
Greek		God Sculpture	Mountain/Place of God
Roman		God Sculpture	Mountain/Place of God
Medival		Not decorated	-

Period	Style	Decoration	Meaning
Romanesque		Signs and Symbols in Christian	Bible Story
Renaissance (Leon Battista Alberti)		Sun/Signs and Symbols in Christian	Bible Story
Andrea Palladio (Type 1)		Not decorated	-
Andrea Palladio (Type 2)		Chalice/Holy grail	Believe in Christianity/Exuberance
Andrea Palladio (Type 3)		Family Heraldry/God of Fertility	Building owner/Exuberance
Andrea Palladio (Type 4)		Round window	-

Leon Battista Alberti's design approach influenced Andrea Palladio. He placed great emphasis on the design of the porch and pediment. Pediment marks the entrance to a house and is essential to the grandeur of the building. It makes the front end stand out from the rest (Marton, Wundram, & Pape, 2004). Andrea Palladio had a clear design approach. He was more strict in proportions than building ornaments, giving the pediments that appear in Palladio designs to be simple, with uncomplicated embellishment. From the analysis of the pediment style, the case study of Andrea Palladio's design work can identify the outstanding characteristics of the pediment decoration as follows.

Style 1—Pediment without Decorations

Pediment without decorations is the design standard of Andrea Palladio. It can be seen in both residential buildings and religious buildings. The interior of the pediment is flat without decorations. This style of pediment design is very popularly used in the designs by Andrea Palladio such as Villa Gazzotti, Villa Saraceno, Villa Pojana, Villa Chiericati, Villa Foscari, etc. There are also religious buildings that used this pediment style, such as the Church of Il Redentore (Figure 3).



Villa Gazzotti



Villa Saraceno



Villa Pojana



Villa Chiericati



Villa Foscari



Church of Il Redentore

Figure 3. Case Studies of the Buildings in which Palladio Designs Pediments without Decorations (Accessed: 18 April 2022, available from <https://en.wikipedia.org>)

Style 2—Pediment Decorated with Cup or Vase Sculptures

Pediment in this style has a stucco pattern that resembles a small cup or chalice decorated in the middle of the pediment. It may mean a symbol of Christian faith, salvation, or fertility (Ferguson, 2019) such as in Villa Forni-Cerato, Villa Pisani, Villa Badoer, etc (Figure 4).



Villa Forni-Cerato



Villa Pisani



Villa Porto



Villa Badoer

Figure 4. Case Studies of the Buildings where Palladio Designed the Pediments, Decorated with Cup or Vase Sculptures (Accessed: 18 April 2022, available from <https://en.wikipedia.org>)

Style 3—Pediment Decorated with Story Sculptures

Pediment interior decoration with story sculptures is rarely seen in Andrea Palladio's designs. These decorative sculptures were works by Venetian sculptor Alessandro Vittoria at Villa Barbaro. They are important case studies of this type of pediment. Inside the pediment is decorated with the Barbaro family crest. It is a two-headed eagle standing on a bull's head that represents a god of agriculture, a symbol of peace and an animal of sacrifice. It is also a memorial to the Sacrifice of Jesus. A garland beneath the ox's head represents fertility. The Entablature area has an inscription in Latin that mentions the names of the Barbaroes who patronized the children of the Bishop of Aquileia, reflecting the Barbaroes' service to the Church (Marton, Wundram, & Pape, 2004). The central pediment decoration at Villa Barbaro reflected abundance, nature, love for family and God. All of that could be a sign of the importance that the building's owners wanted to convey to the family's story through the sculptures that adorn the building. It clearly showed the change in the meaning of architectural elements within the pediment framework. Originally, the sculptures inside the Pediment were mainly reflecting the stories of the gods enshrined within the temple. But eventually, this evolved into the story of the building owner instead.

Decorations of the pediments with story sculptures also appear in two other works of Andrea Palladio, which are Villa Emo, another building that decorates the pediment with depiction of two women. In the center is a vase-like motif that symbolizes the abundance of agriculture; and the Tempietto Barbaro, is adorned with a portrait of fertility. Both of the works are of the sculptor Alessandro Vittoria (Figure 5).



Villa Barbaro



Villa Emo



Tempietto Barbaro

Figure 5. Case Studies of the Buildings where Palladio Designed the Pediments Decorated with Story Sculptures (Accessed: 18 April 2022, available from <https://en.wikipedia.org>)

Style 4—Pediment Decorated with Round Openings

Pediment of this type is very rare. A circular opening is adorned in the center of the pediment, for example, the Church of San Giorgio Maggiore, while the Villa Rotonda pediment is characterized by incorporating a small sculpture with a circular opening. Two round openings are arranged on the sides. Instead, a smaller sculptor adorns the center of the Pediment, but still emphasizes the strict symmetry of Andrea Palladio's pattern (Figure 6).



Church of San Giorgio Maggiore



Villa Rotonda

Figure 6. Case Studies of the Buildings where Palladio Designed Pediments Decorated with Circular Openings
(Source: Photograph by the researcher)

An analysis of the pediment patterns in Andrea Palladio's designs revealed that Andrea Palladio pays close attention to the symmetrical arrangement of the pediments. Symmetry and perfect proportions empower the architecture to stand out. The philosophy of Andrea Palladio is based on the fact that classic architecture doesn't need a lot of embellishment. Just simplicity and elegance can also reflect the architecture that is classic as well.

DISCUSSION

Changes in the Meaning of Pediment of Palladian Architecture in Thailand

Factors Affecting the Changes in Architectural Styles in Thailand During the Reign of King Rama V

The influence of Western architectural styles came during the reign of King Rama V, 1868–1910 A.D., which meet the revival of classic architecture (Neo-Classic), in which there was popularity of the classic design pattern being widely used both in Europe and America. Around the middle of the 19th-early 20th Century, one of the most popular architectural styles in the Neoclassical period was Palladian architecture, with the unique composition of pediment, arch, and open as rhythm that makes the building stand out. The Palladian architecture represents Western culture very well. Also, Palladian architecture can be applied to the area of use to suit activities, lifestyles, as well as to match the terrain very effectively. One of the most important books is *I quattro libri dell' architettura* (The Four Books of Architecture), a work by Andrea Palladio written in 1570 that was later translated into English in 1738 by Issac Ware. This architecture textbook by Andrea Palladio has greatly influenced the design approach of Neo-Classic Architecture (Chungsiriarak, 2010).

Factors Affecting the Changes in Architecture Style in Thailand During the Reign of King Chulalongkorn or King Rama V

Foreign factors: During the reign of King Mongkut or King Rama IV, there were policies of balancing the powers of Western nations by signing the Bowring Treaty and similar treaties with other countries such as the United States, France and other European nations (Songnuy, 2002). It was necessary to open up free trade and give Westerners various rights to practice their career freely. The main foreign factor at that time was Western colonization. Many countries in Asia were colonized by Western nations. Foreign policy must therefore be comprehensive. It is necessary to maintain a balance between the interests of the superpowers. The presence of Westerners for government service and trade in Thailand was a counterbalance to Western nations to see Thailand's efforts to develop more international relations with Western nations. The national development policy was therefore inevitable in the situation of Western exploitation at that time.

In addition, King Chulalongkorn's visits to Europe twice were considered important royal events. As a result, Western nations know more about Thailand. Strengthening relations between Thailand and various royal courts in Europe, especially Russia caused changes in international policy. Bringing together the experiences seen in

European cities has resulted in the development of many things in the city.

Political and administrative factors: Governmental administration in the Ayutthaya period was based on a quadrature system consisting of Wiang, Wang, Klang, and Na. The civilian division was organized into four divisions, with the Chancellor being the head of the administration according to different sections. This kind of administration was outdated due to the former quadrature system not being suitable for a kingdom with a large area as well as having contacts with foreign countries. There were also problems of unclear boundary lines. As a result, the Western nations, both England and France, brought these issues as a reason to threaten the kingdom. Such incidents have caused Thailand to lose many territories (Songnuy, 2002). His Majesty King Chulalongkorn or King Rama 5, has requested a reform of the country's management system called governance system, establishing a clear system of governance in the districts, and adjusting it to be more modern. It was the foundation of directing power to the central authority the Ministry of Interior only. There was a bureaucratic system that consisted of government officials who were trusted by the monarch to manage the provinces in the positions of county commanders. As a result of the establishment of counties in the administrative region, there was a need to build more buildings to use for administrative business within that county. The architectural style created had to be of the same standard that met the utility, reflected majesty, accuracy in management and reflected the power of the monarch. The central power therefore chose to apply the Palladian architectural style in the design of the construction of the government buildings.

Physical factors: The policy of developing the country to be as prosperous as the Western nations is considered a reform of the country to enter a new era that is more modern. The fact that the elites saw a prosperous state of the city resulted in the idea of organizing the physicality of the city to be beautiful, modern in every aspect. This resulted in the reform of public utilities in many fields such as railways, electricity, postal services, etc. The granting of land outside the city walls to the royal family was a factor causing the expansion of the city. There were road cuts and excavation of canals to connect the inner Bangkok area and the expanding urban area. Modern commercial buildings were built more orderly along the routes of the roads.

Physical development was not only about urban development, but also the development of various structures within the Grand Palace as well. Many palaces with classical Western architectural styles were designed and built, such as the Chakri Maha Prasat Throne Hall, The Boromphiman Throne Hall, etc., It could be seen that Western architectural styles were used to reflect the civilization and enhance the country to have a prosperous image that is on par with the major cities in Europe.

Belief factors: Mixing different cultures results in the promotion of the honor of the King and the nation. Architectural interpretation has been seen as a pattern for a long time in traditional Thai architecture. Beliefs in cosmology or Traiphum, and the influence of the motto of the holy king that resulted in the traditional Thai architecture changing the meaning of communication through Western classical architecture are symbols of civilization in the eyes of many countries. This is to honor the King on an equal level with the Western world (Prakitnonthakan, 2007). In addition, beautiful building elements according to the motto of noble simplicity of classical architecture (Inapanich and Panin, 2020) convey the prosperity of the kingdom and the royal power of the monarch that appears in the form of a symbolic representation of the coat of arms or the royal seal that adorns the building's pediment.

Construction factors: Western technicians came to serve in various departments, creating benefits for civil servants to learn construction technology in various fields. The use of construction materials imported from abroad, and the knowledge of construction engineering and architectural design enhances the construction experience of Thai craftsmen to be more modern.

Symbols within the Pediment and Meaning Changes (Table 2)

The ornaments of the pediment have been used to convey the dignity of Thai architecture since the past. Most of them appear in traditional Thai architectural works such as the Grand Palace and religious places, etc. The symbols decorated inside reflect religious beliefs related to the monarchy. The image of Narai Song Suban (Vishnu on the Garuda) is a symbol of the holy king motto that believes that the king is like an incarnation of Vishnu to subdue suffering in the human world according to the belief in Hinduism. (Also, there is the image of Indra on the Erawan elephant based on the belief that the king was like Indra, the lord of the heavens according to the belief in Buddhism. Both sculptures are often adorned within the pediments of buildings that the King has favored to build or restore. This is to promote the king as the royal emperor. The symbolic motto inside the pediment was modified during the reign of King Rama IV by bringing his royal seal to decorate it instead of representing the important person directly. This is to pay tribute to the builder or the person who consecrates or patronizes the building.

When Western architects came into office during the reign of King Rama V, the change in the symbolic

meaning of the pediment occurred again. This study will use case studies of public buildings that appear in the style of Palladian architecture in the analysis which consists of:

Case study 1—Phra Thinang Varobhas Bimarn, Bang Pa-In Royal Palace: it was designed by an Italian architect Joachim Grassi, built to serve as a royal residence and royal court. Joachim Grassi introduced the iconic Portico of Palladian architecture into the design of the building. Beyond the Portico is a perfectly proportioned pediment based on the Western architectural scheme. But the details have been simplified. The stucco lotus is protruding from the gable in a short that is decorated with a small decorative stucco to resemble an ancient temple, encouraging the building to look elegant. Joachim Grassi has changed the meaning of the new pediment by bringing the royal seal of King Rama V (Phra Kiao) and the three-headed elephant seal to decorate the building, mixed with a vine leaf pattern that is a decorative art in the Baroque period popular in Europe around the 17th century (Figure 7).

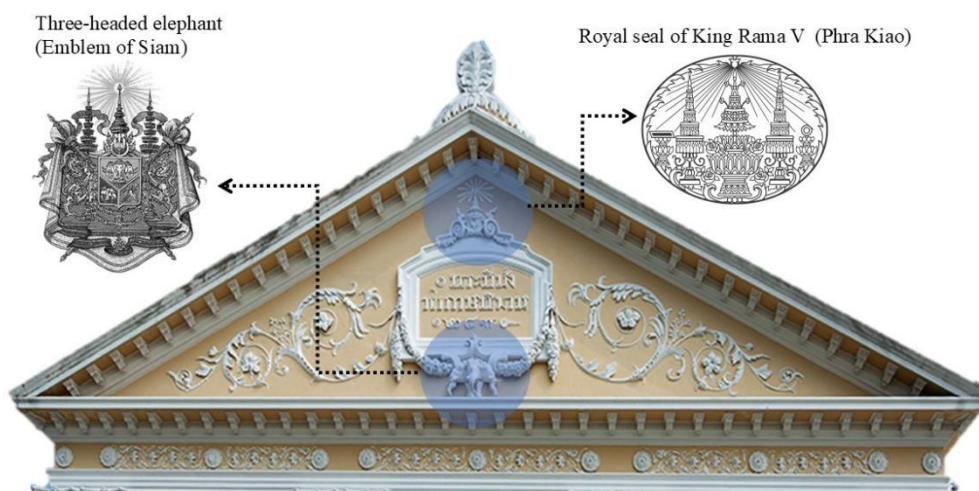


Figure 7. Pediment of Phra Thinang Varobhas Bimarn (Bang Pa-In Royal Palace)

Case study 2—Front Soldier Barracks: After Joachim Grassi completed the design of the Phra Thinang Varobhas Bimarn, his designs were greatly appreciated by royalty and noble dynasties, causing him to have continuous construction design works. In 1884, he was commissioned to design the Front Soldier Barracks. The purpose of the building was to be a residence for soldiers, military training sites and military control areas to bring order to the city (Fine Arts Department, 2010). Joachim Grassi blended the Palazzo's floor plan with the unique Palladian architecture's facade by building it out to create a striking perspective and symmetrical layout, bringing in a large floating pole with a support to strengthen and stabilize the building. This also reflected the strength of the Siamese army through the architecture, to strengthen the soldiers' morale. The six columns were arranged to support the architrave or epistyle to connect the walls on the second floor, which was made up of 5 arches, corresponding to the columns. The beams above were used as spaces to decorate the letters that indicate the building's name. This entrance porch was therefore used to create a symbolic meaning of stability, and convey the meaning of the strength of the army that has stepped into the modern era, reflecting the royal military power as the head of the Kingdom's army.

For the interior decoration of the pediment, Joachim Grassi has adapted the pediment style of the Phra Thinang Varobhas Bimarn, with stucco lotuses protruding from the gable in a short that is decorated with small decorative stucco sockets, resemble ancient Roman temple. Inside the pediment is decorated with a symbol of the Phrah Kiao (King Rama V's emblem) enshrined over the rowel surrounding a three-headed elephant, which is a symbol of King Chulalongkorn, or King Rama V of the Chakri dynasty. On the left and right there are lion and Kochasri holding tiers, a symbol of the devotion of the stewards and civil servants of both the Chancellor and Military authorities protecting the Chakri Dynasty (Fine Arts Department, 2010), and an inscription that means "...May the King with his troops full of victory bringing prosperity for the land..." (Chungsiriarak, 2010) (Figure 8).

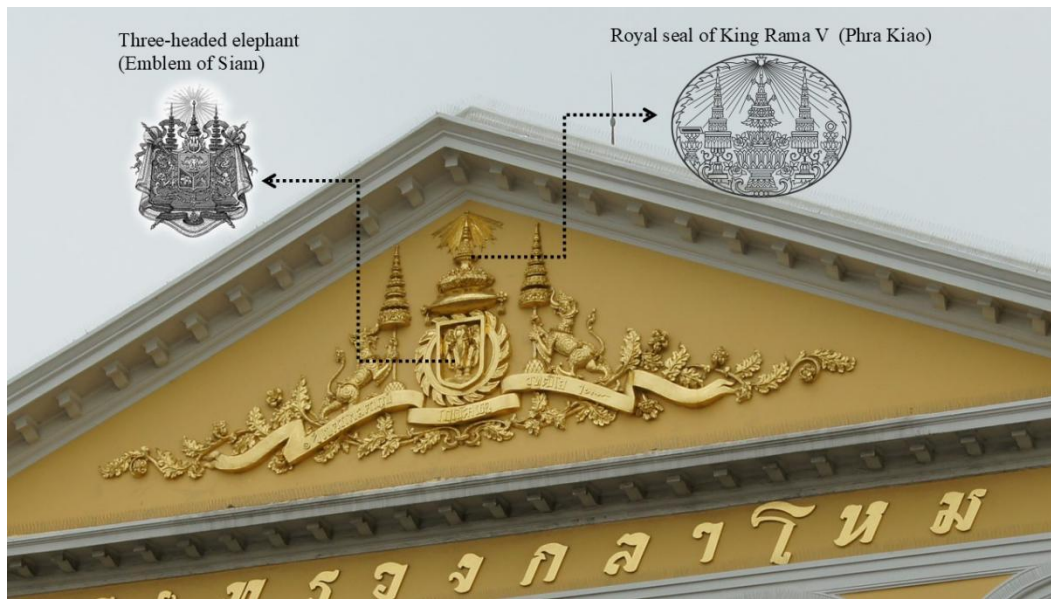


Figure 8. Pediment of Front Soldier Barracks

Case study 3—The Old Custom House: it was built in 1888 to serve as the office of the tax authorities, collecting taxes and various tariffs. Cargo ships traveling on the Chao Phraya River had to stop for inspection and tax. Joachim Grassi designed this building by using the layouts of Andrea Palladio's Villa Farm such as Villa Piovene, Villa Saraceno, Villa Barbaro as a model, to be appropriated according to the purpose of use. The building was positioned facing the river according to Andrea Palladio's design scheme which tends to face the building towards the main thoroughfare.

Joachim Grassi designed the front porch protruding slightly from the wall, to be used to designate an entrance and create a distinctive feature for the building. This porch was different from the other buildings he had designed because it is a porch that is covered with a solid wall to the top floor. While the other porches tend to be atriums with floating columns. The interior of the pediment is simply decorated. The center is decorated with a large round clock. The frame of the pediment is decorated with dimensional lines. At the top of the pediment is a sculpture depicting the coat of arms. On the left and right there is a sculpture of a lion and a Kochasri holding tiers (Figure 9).



Figure 9. Pediment of The Old Custom House

Case Study 4—Saran Rom Palace: It was built in 1881 and designed by the Italian architect Stefano Cardu. He

adopted the layout and decorations of the Palazzo. Stefano Cardu's central porch gable has a segmental arch to decorate the top instead of the pediment commonly used in Palladian architecture. But inside the circular crescent arch is still decorated with the royal emblem of King Rama V and the three-headed elephant seal, a traditional decoration on the top of the western buildings built in this period (Figure 10). But in the two wings of the building, a triangular gable porch was used on the above, with the inside decorated with the royal seal of King Rama V.



Figure 10. Pediment of Saran Rom Palace

Case Study 5—Saran Rom Cadet School: This is another important building design work by Stefano Cardu, built on the site of the former Saran Rom Palace. It was built to serve as a Cadet School. It is a two-storey building, designed in a five-section E-shape, emphasizing three sections, with a symmetrical layout. Stefano Cardu incorporated many elements of the buildings of Western architecture until it became a unique style that was rarely seen. The central porch was made of an arched opening. The 4 pillars support the loggia on the second floor. The loggia is not very wide. Above the loggia is decorated with a pediment, of which the center of the interior is a rowel and three crosses, a symbol of the Chakri dynasty. This badge is not very large and is surrounded by symmetrical leaf motifs. The pediment is a stucco cornice protruding from the pediment in a short and is adorned with a decorative stucco of a small size, like an ancient temple. On the third floor, at the top of the central porch, Stefano Cardu chose a segmental arch to decorate the top in order to relate to the nearby Saran Rom Palace. The center of the circle around the keystone has been modified by decorating the coat of arms sculpture (Figure 11).









Figure 11. Pediment of Saran Rom Cadet School



The wing porches on both sides have the same style. They are only 2 storeys high. The ground floor consists of

4 floating columns supporting the loggia, similar in appearance to the central porch. Meanwhile, for the summit, Stefano Cardu brought in the facade of the Renaissance and Baroque Christian churches. Leon Battista Alberti's design identity was adapted, especially the side elements that use S-Scrolls to make the building more delicate. The corners are decorated with a sculpture of Pot of Abundance. The central area of the facade was used as a pediment, with interior decoration of code of arm (area in the porch of the building's wings on both sides) and the royal seal (area on both sides of the secondary porches).

The design approaches of Joachim Grassi and Stefano Cardu illustrate the application of classical Western architecture in their own style rather than following the traditional stereotypes that have been passed on. This may be due to the need for usefulness or the needs of different building owners. However, despite the application of architectural styles, the appearance of the buildings still clearly reflects the classic Western architecture. Andrea Palladio's design approach is therefore just one of the Western architects' approaches that has been applied in his work. What can be seen from the analysis of all the case studies makes us know that the architects brought the decorative elements of a variety of buildings into the decoration of one building, causing the complexity of the decoration. The overall view of the building cannot determine what era the architecture was inspired by.

Table 2. Evolution of Meaning Pediment in Thai Architecture (Until the reign of King Chulalongkorn Rama)

Period	Style	Decoration	Meaning
Early Rattanakosin		Vishnu riding Garuda	King of Deities/Believe in Hinduism
King Mongkut (King Rama IV)		King Mongkut Symbol	Building owner/Buddhism Propagation
	 <p data-bbox="379 1496 756 1527">Phra Thinang Varobhas Bimarn</p>	King Chulalongkorn Symbol (Phra Kieo)/Building Name	Building owner/Civilization
King Chulalongkorn (King Rama V)	 <p data-bbox="432 1686 703 1718">Front Soldier Barracks</p>	King Chulalongkorn Symbol (Phra Kieo)/Royal Symbol	Building owner/The power of the king/Civilization
	 <p data-bbox="427 1877 707 1908">The Old Custom House</p>	Round window/Emblem of Siam	The power of the king/Civilization
		King Chulalongkorn Symbol (Phra Kieo)	Building owner/Civilization

Period	Style	Decoration	Meaning
	Saran Rom Palace		
		Emblem of Siam/Royal Symbol	The power of the king/Civilization
	Saran Rom Cadet School		
		Garuda (Emblem of Thailand)	The power of the king/Civilization/Government
	The Old Chachoengsao City Hall		

CONCLUSION

The interpretation of the pediment element in Andrea Palladio's designs shifts the interpretation from the Mountain of God to promoting the Creator's dignity instead of telling stories of mythological gods that appeared in the early pediments that encouraged people to have faith in their gods. When the worship of gods was replaced by religious beliefs, the temples of the gods were gradually reduced to roles. Some elements of the cathedral have been adapted to Christian church buildings, which retain the status of sacred architecture. The pediments during this time were devoid of ornamentation to reflect religious beliefs about the imagelessness of God. Later on, religious emblems began to be adorned. The pediment was then considered the centerpiece of the building more than any other element.

Andrea Palladio therefore incorporated the pediment as an important element in the design. However, Andrea Palladio has cooperated elements only used for religious buildings such as porches and pediments, into the residences of noble people perfectly. The meaning of the pediment has been changed to make it more accessible to the general public. He likened the pediment to the functional façade element to represent the building's main entrance. But in concept, it conveys luxury, majesty, elegance and enhances the auspiciousness associated with agriculture and fertility, resulting in showing the status of the building owner, which is a creation of new meaning for pediment. The design of the pediment in Palladian architecture therefore became an important model that has influenced the design of various buildings in many areas.

Palladian architecture first entered Thailand in 1859 during the reign of King Chulalongkorn (Rama V). Western architects who came to work in Thailand adapted pediments to reflect the building's dignity, enhancing the prosperity of the country to be equal to the Western nations. The royal power of the monarch appears in the form of a symbolic representation of the coat of arms or royal seal that adorns the building's gables. All of these are essential standards. It is a symbolic representation of the monarch in the form of government that transmits centralized power to different areas through the decorations in the architecture. Later, the emblem of the state was changed to a Garuda which represents the symbol of the government agency. In addition, the decoration of the pediment reflects the luxury, majesty, and modernity suitable for the reform of the bureaucracy at that time. This ideological stereotype is still practiced today.

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ETHICAL DECLARATION

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