

ARCHITECTURAL TRANSFORMATION OF THE PALACE OF SULTAN MUHAMMAD KAHARUDDIN III IN THE PRESERVATION OF CULTURAL HERITAGE IN SUMBAWA REGENCY, INDONESIA

Syaifuddin Iskandar
Tri Satriawansyah
Lahmuddin Zuhri
Eni Nuraini
I Gusti Ayu Purnamawati

ABSTRACT

The Sultanate of Sumbawa is one of the three major Islamic kingdoms on the island of Sumbawa. Its existence was turned off in 1974-1958 with the center of government in the City of Sumbawa Besar. The transformation of traditional to modern architecture in colonial heritage buildings in Sumbawa Regency is marked by the existence of the Sumbawa Sultanate palace during the pre-independence Sumbawa Kingdom Era of the Government of Sultan Muhammad Kaharuddin III in 1931. The influence of modernization on building architecture and European patterns can also be seen in the building of the Palace of Sultan Muhammad Kaharuddin III. The palace began to be built in 1932 and was completed in 1934. The modernization of the Palace of Sultan Muhammad Kaharuddin III was included in period II (1930-1939). The development of modern architecture and Western patterns in the Palace building of Sultan Muhammad Kaharuddin III with the Indeche Empire Style architectural style can be seen in (1). Classic architectural style, (2). Floor pattern design, and (3). Building orientation. The technology (structure) of the Palace of Sultan Muhammad Kaharuddin III is a two-story building using a continuous river stone foundation type with a raised floor; the structural columns use reinforced concrete construction with a wall/wall pair of one and-a-half-brick pair on the first floor, while on the second floor, the structure uses wooden beams which are reinforced using angle iron at the bottom of the wooden beams topped with wooden planks. The Palace environment of Sultan Muhammad Kaharuddin III is bordered by a very sturdy fence made of exposed stone masonry with a thickness of approximately 50 cm with three gates, namely the main gate (Bale Jam), anosief gate (east), and anorawi gate (west). The function of this palace building was the center of government and the residence of the king and his family during the reign of Sultan Muhammad Kaharuddin III.

Keywords: Architectural Transformation, Palace of the Sultan of Sumbawa, Preservation of Cultural Heritage

INTRODUCTION

The transformation of traditional architecture to modern architecture in Sumbawa Regency is marked by the existence of colonial heritage buildings from Balanda, including the Dutch Controller building, which was built in 1905, the *Bala Batu Ode* Palace, which was the office building, library, and residence of Sultan Muhammad Kaharuddin III when he was young as the crown prince of the Sumbawa Sultanate (1927), the Palace of Sultan Muhammad Kaharuddin III built in 1932, and the *Bala' Kuning* Palace built in 1942, architecturally adopting European patterns in the Dutch colonial period with In style architecture. Deche empire Style or often called European buildings in the Tropics.

The initial plan for the construction of the Palace of Sultan Muhammad Kaharuddin III was in 1927 which was the result of an agreement between the Sumbawa Sultanate and the Controller under the supervision of the design of a palace, which became one of the conditions for the construction of the palace, namely by removing the old palace, so that with this condition the construction of the palace was suspended which then through negotiations with the Bima sultanate, the palace construction was transferred to the Bima Sultanate, known as *Asi Mbojo*. In 1932 negotiations took place with the condition that the old palace buildings were not removed so that a new palace could be constructed. The construction of the palace began in 1932, marked by the first stone laying by *Sultane van Soembawa* with M.A. *VanKempe-Valk-van Lith* dated 11-2-1932 based on the inscription of one of the palace pillars where construction was carried out from 1932-1934.

It was first used in 1934 with the "*nginring*" procession or the transfer of the 17th Sultan of the Kingdom of Sumbawa Sultan Muhammad Kaharuddin III from the *Dalam Loka* Palace to the *Bala Putih* Palace which is in the Karang Bawa/Keban Garanta area, an area not far from the *Dalam Loka Palace* which is now on Jalan Merdeka, Sumbawa Besar.

METHOD

The method used in this study is to use the historical method or search of the history of the study of literature. This study aimed to determine the historical value related to the Architectural Transformation of the Palace Building of Sultan Muhammad Kaharuddin III in the Preservation of Cultural Heritage in Sumbawa Regency, Indonesia. The use of the historical method is considered the most relevant to studying historical science and information related to the architectural transformation of historic buildings. The historical tracing method in this study is theoretically interpreted as a set of systematic principles or rules designed to help effectively collect historical sources, then be assessed critically, and present a synthesis of the results achieved in written form. The object used in this study is the Palace Building of Sultan Muhammad Kaharuddin III. The stages used to explore and reconstruct it become a description in this paper. Namely, the author carries out historical methodology, which includes the stages of heuristics, source criticism, interpretation, and historiography in the form of collecting sources, and necessary historical traces, which then findings in field activities will be classified in the form of written sources, oral sources, and object sources, namely traces of the traditional architecture of the Palace of Sultan Muhammad Kaharuddin III, Sumbawa.

RESEARCH RESULTS AND DISCUSSION

History of Indonesian Architecture

Indonesian architecture consists of Classical-Traditional, Vernacular, and Contemporary new buildings. Classical-traditional architecture are buildings built in ancient times. Vernacular architecture is another form of traditional architecture, especially residential buildings, with some adaptations built over generations. New or Contemporary architecture uses more new materials and construction techniques and receives influences from the Dutch colonial period to the post-independence era of Indonesia in 1945. The introduction of cement, other modern materials, and construction with rapid growth have produced mixed results. Ten centuries ago, Hindu culture influenced Indonesian culture before Islam entered Indonesia. The legacy of classical (Hindu-Buddhist) architecture in Indonesia is very limited to a few dozen temples except for the island of Bali, which is still a lot due to the religious factors of the local population.

Traditional and Vernacular architecture in Indonesia comes from two sources. The first is from the great Hindu tradition brought to Indonesia from India via the island of Java. The second is original indigenous architecture. Vernacular houses, mostly found in rural areas, are built using natural materials such as thatched roofs, bamboo, woven bamboo, coconut wood, and stone. The building is a complete adjustment in harmony with the surroundings. Houses in the interior of Indonesia still use a lot of bamboo, but along with the modernization process, these bamboo buildings have been gradually replaced with permanent walls/walls. Indonesian Vernacular Architecture is also found in Sumbawa Regency, with its main characteristics being the use of raised floors, a high-sloped roof resembling a saddle and the use of materials from wood and other durable organic materials.

The influence of Islam in Indonesia began in 13 AD when the Islamic kingdom of Pasai appeared in northern Sumatra in 1292. Two and a half centuries later, together with Europeans, Islam came to Java. Islam is not spread in the Indonesian region by political forces like India or Turkey but through culture. Islamic culture in Indonesian architecture can be found in mosques, palaces, and tomb buildings. The Islamic kingdoms continued the old Majapahit culture, which they adopted in a genius "New Era," which later became important icons such as the mosques in Demak, Kudus, and Banten in the sixteenth century. Also, with the Imogiri tomb site and the Yogyakarta and Surakarta palaces in the eighteenth century. Historical facts show that Islam did not introduce new physical forms, and its teachings were taught more mystically by Sufis, or in other words, through syncretism. Unfortunately, this affects the "failure" of Islam as a new system that does not eradicate Hindu heritage (Prijetomo, 1988).

The gradual spread of Islam in the Indonesian region from the 12th century onwards introduced a series of important architectural influences. But the change from the old style to a new style that is more ideological and then technology. The arrival of Islam did not lead to the introduction of entirely new buildings but rather saw and adapted existing architectural forms, which were recreated or reinterpreted according to Islamic requirements. The Sultanate of Sumbawa/ Kingdom of Samawa was one of the three major Islamic kingdoms on the island of Sumbawa. Its existence began to be recorded by history in the period 1674-1958 with the form of government of the sultanate monarchy and the building of a center of government in the city of Sumbawa Besar; in carrying out its administration, building facilities were built (*Istana Dalam Loka* and Palace of Sultan Muhammad Kaharuddin III) as a place to run the wheels of government, all of which is now a historical heritage building in Sumbawa, the function of this building is still being used, and its authenticity is maintained as a landmark of the city of Sumbawa Besar which has been attached to the memory of the people. The historical importance of this building was visited by the President in 1950 and the vice president of the Republic of Indonesia in 1952.



Figure 1. Visit of the First President and Vice President of the Republic of Indonesia at the Sultan's Palace

Western influence began long before 1509 when Marco Polo from Venice crossed the archipelago in 1292 for trading activities. Since then, Europeans have attempted to seize control of the highly lucrative spice trade. The Portuguese and the Spanish, and later the Dutch, introduced their architecture by initially sticking with European architectural elements but later adapting to local architectural traditions. But this process was not just one way: the Dutch then adopted elements of indigenous architecture to create a unique form known as Dutch East Indies colonial architecture. The Dutch were also aware of adopting local architecture and culture into their new tropical architecture by applying traditional forms to modern ways, including building materials and construction techniques.

Colonial buildings in Indonesia, especially the very long Dutch period 1602-1945, are very interesting to explore how the cross-cultures between west and east in the form of buildings and how the Dutch developed the acclimatization of buildings in the tropics. According to Sumalyo (1993), Dutch colonial architecture in Indonesia is a unique cultural phenomenon that has never been found elsewhere or in their homeland. These buildings are the result of a mixture of colonial and Indonesian culture.

Western and Indonesian architectural concepts differ in the correlation between the building and its people. Western architecture is a totality of construction, while in the East, it is more subjective, choosing the outer appearance, especially the front façade. The natural conditions between the Dutch sub-tropics and Indonesia's wet tropics were also a major consideration for Dutch buildings in Indonesia. The Dutch did not immediately find the right building shape at the beginning of their development in Indonesia. During early European colonization in the early 18th century, the Dutch directly grafted the four seasons building type into Indonesia's tropical climate. The flat façade without a verandah, large windows, and roof with small ventilation, commonly seen in the oldest part of the Dutch walled city, was also used in old Batavia (Widodo & Wong 2002).

According to Sumintardja (1978), the VOC had chosen the island of Java as the center of their trading activities, and the first building was built in Batavia as the Batavia fortress. Inside the fort, colony houses were built, which had the same simple shape as the original houses but were later replaced by Western-style houses (for political reasons). The house's brick walls imported materials directly from the Netherlands and with tiled roofs and interior furniture. The houses that became the first tradition were houses without courtyards, with elongated shapes like in the Netherlands. These houses have two floors, narrow on the facade but wide inside. This type of house was later widely used by the Chinese after the Dutch switched to large houses with large yards. These houses are called Landhuizen or houses without verandahs in the early period. After being acclimatized to the local climate, these houses are equipped with a large front porch like the *pendapa* hall in the Javanese Vernacular building.

At first, these houses were built on two floors, after experiencing the earthquake and for efficiency purposes, then these houses were built in one story only. But after the land price increased, the house was rebuilt with two more floors. The determination of architectural designs became more formal and enhanced after the formation of the first Architect profession under the Public Works Service (BOW) in 1814-1930. Around the 1920s-1930s, the debate about the problem of Indonesian identity and tropical character was very intense among academics and in practice. Several Dutch architects, such as Thomas Karsten, Maclaine Pont, Thomas Nix, CP Wolf Schoemaker, and many others, were involved in very productive discourses in academics and practice. The most interesting part of the development of modern architecture in Indonesia was the period around the 1930s when several Dutch architects and academics developed a new discourse known as "*Indisch-Tropisch*," namely the Dutch-influenced style of architecture and urbanism in Indonesia.

Typology of Dutch Colonial architecture; almost a large building outside a corridor with the dual function of being an intermediate space and buffer from direct sunlight and a larger roof with a higher slope and sometimes constructed by two layers with a space used for hot air ventilation. Dutch architects have a good approach related to the nature in which the building is placed. Their awareness can be seen from the construction element, people who are very aware of nature.

Palace Design of Sultan Muhammad Kaharuddin III in Modern Architecture

The modernization of the Palace of Sultan Muhammad Kaharuddin III entered the second period (1930-1939) of the development of modern architecture; there are differences in climate, soil conditions, and traditional styles, which can affect the appreciation of forms. The development of spatial relationship methods, shapes, materials, and structures is no longer universal. New types of appearance color are the shape and appearance characteristics of the International Style or Universal Style by considering the use of local/local materials. In principle, architecture combines expertise, technological developments, industry, and art. regional understanding (human and environmental). The so-called sense of oneness, humanity, reason, and art of modern architecture. A study relevant to this discussion was carried out by Purno et al. (2017), stating that the character of modern colonial architecture (1015-1940) used concrete materials, glass materials, the dominant use of white color, and the use of glass on doors and windows. Other studies that support this discussion are relevant to those conducted by Adedokun (2014), Incorporating Traditional Architecture into Modern Architecture: A Case Study of The Yoruba Traditional Architecture. Another study by Dzwierzynska & Prokop (2022). Reconstructions of Historic Monuments-Dual Approach. Another study was also conducted by Snyder (2008) on the Role of the Heritage Conservation District in Achieving Community Improvement.



Figure 2. Palace of the Sultan of Sumbawa in the Empire Era

Western architecture and patterns in the Palace building of Sultan Muhammad Kaharuddin III can be seen in; (1) Its architectural style is classic yet adaptable to nature, characterized by open outer corridors on the west and east sides of the building, which have dual function as an intermediary space and buffer from direct sunlight, while the west side of the building apart from the corridor is added a large side veranda. (2) All floors have wide doors and windows between two columns, with each door and window above having ventilation. The room for each floor is very high; 5.25 meters on the first floor and 5 meters on the second floor. The higher the room, the windows and ventilation become a good system for air circulation on the roof; ventilation holes are in the upper wall (above the window). (3) The orientation of the building faces north, with a large verandah (front terrace) as the receiving room and a roof with a higher slope. Another supporting study that strengthens this discussion was conducted by Prasadha et al. (2018). Heritage Buildings and Architectural Transformation in Depok City Applying Local Knowledge for Livable Spaces.

Building layouts that were exotic in their day and unique today are classified as old and historic buildings, commonly called ancient buildings, influenced by the Dutch East Indies or the colonial period, called the Indische Empire Style with a sunshade roof and columns around the building, showing a combination of modernism and Indonesian style, shown by the beauty of a solid structure on the terrace of the building, looks clean with white building colors, and has good proportions, visible from the vertical and horizontal lines of the building.

The architecture of the building consists of two floors; the function of the first floor is the center of government for the Sultanate of Sumbawa, while the function of the second floor is the residence of the Sultan and his family with a gable roof model using wood shingle roof covering materials, on the first floor using wall/wall pairs of 1.5 bricks or 40 cm wall thickness measurements and the second floor using a wooden column structure with wall materials using bamboo halves assembled and

harmonica wire coated using plaster outside and inside walls so that the building construction is elastic resistant to earthquakes, the first floor materials use patterned and plain tiles while the second floor using wooden planks with vertical circulation/stairs made of wood materials/materials while the materials/materials used for the ceiling/ceiling use asbestos and exposed wood on asbestos joints that are installed diagonally and squarely. The supporting study in this discussion was carried out by Arenibafo (2017). The Transformation of Aesthetics in Architecture from Traditional to Modern Architecture.



Figure 3. Results of Restoration of the Palace of the Sultan of Sumbawa

Technology is more than a method; it's a world. As a method, technology is superior in almost every aspect. But we are only ourselves, as a big structure of machines. Then technology is transformed into a real nature. At times when technology reaches its true completion, it transforms into architecture. Architecture indeed depends on reality, but the fulfillment of activities is within meaningful limits. The influence of construction design in the form of technology is very strong as a design that will create architectural works. Technology is a witness to the development of modern architecture. Technology is always developing and has more value than technology in realizing architectural design. The value of technology goes far beyond that, technology according to what *Mies van der Rohe* emphasized; it has a world of its own; under certain conditions, when the technology (structure) meets the architectural requirements, the technology will form a new architecture due to the need for a structure which is influenced by certain factors to form a building. The strength of the value of technology (structure) will provide a separate identity for architectural design.

The technology (structure) of the Palace building of Sultan Muhammad Kaharuddin III uses a continuous river stone foundation type with a raised floor and structural columns using reinforced concrete construction with one-and-a-half brick masonry walls/walls on the first floor. While the second floor uses wooden beams which are reinforced using angle iron at the bottom corner of the wooden beams, which are topped with wooden plank floors, the second-floor structure uses wooden columns with wall pairing technology using partially assembled bamboo halves and harmonic wire as a binder with wooden columns which are then plastered outside and inside so that the elastic building construction is resistant to earthquakes. Construction of a roof with a high slope resembling a saddle and the use of shingle roof covering material. Soewarno & Duhita (2018) support this study, which examines the transformation of Heritage Buildings as Tourist Attractions: Adaptive Re-use of Colonial Buildings at Bandung Conservation Area. Samalavicius & Traskinaite (20210). Traditional Vernacular Buildings, Architecture Heritage, and Sustainability. Another in-depth study in the book Alsayyad (2001). Consuming Tradition/Manufacturing Heritage: Global Norms and Urban Forms in the Age of Tourism.



Figure 4. The Palace of the Sultan of the Era of Independence

The palace environment of Sultan Muhammad Kaharuddin III is vast, bordered by a very sturdy fence made of exposed stone masonry with a thickness of approximately 50 cm. With three gates, including the main gate, there is a tall building with the name *Rumah Jam/Bale Jam* in the shape of an octagon which is a passageway for the Sultan and palace officials and guests who will visit the Sultan; on the second and third floors of this gated building is the place for special officers "*Tau Jam*" who is in charge of ringing the clock bells as a time marker for the people in the capital of the Sumbawa Sultanate, two other gates are on the west and east sides of the main gate as the Anosiyep Gate and the Anorawi Gate. To the west of the Bala Putih Palace building is a small building called Bala Irong, with an octagonal building that functions as a waiting room and a place to receive guests when people visit. As a complement to the greatness of the palace, a field was built known as the Hero's Field. To strengthen the theoretical studies that support this study is supported by the study of Ching, Francis 1979. Architecture, From Space and Order, Van Nostrand Reinhold Company, New York. Another study that supports this discussion was conducted by Maskey Muhammad (2020). Preservation of The History City of Bandung Through the Building of Culture Heritage Group A. Study by Darmawan & Murtini (2017). The Problem Change Function of Hiratege Building at The Old Cities in Central Java. Architecture Department, Engineering Faculty, Diponegoro University.



Figure 5. Main Gate of the Sultan of Sumbawa Palace

CONCLUSION AND SUGGESTION

The transformation of traditional architecture in Sumbawa is a series of architectural transformations from traditional to modern. This is marked by two palaces representing building styles, namely the Palace in a Place (traditional architecture) of Sultan Muhammad Djalaruddin III and the Palace of Sultan Kaharuddin III (Modern Architecture). Modern architecture has a visual character of the Dutch colonial heritage building in the palace building of Sultan Muhammad Kaharuddin III, modern architecture with a building pattern influenced by Indische Empire style architecture.

Based on the development of spatial relations methods, shapes, materials, and structures are no longer universal. Then the shape and appearance characteristics have an international style or Universal Style colored by a new type of appearance by considering the use of local/local materials, including the architectural style; all floors are placed with wide doors and windows between two columns with each door and window above it is having ventilation. The room is higher, windows and ventilation are a good system to allow air circulation on the roof, there are ventilation holes in the upper wall (above the window), the orientation of the building faces north with a large veranda (front terrace) as a receiving room, a roof model with a higher slope. The restoration of the palace of Sultan Muhammad Kaharuddin III is a cultural heritage building that has important historical value as an effort to preserve cultural heritage in Sumbawa, Indonesia.

REFERENCES

- Adedokun. (2014) Incorporating Traditional Architecture into Modern Architecture: A Case Study of The Yoruba Traditional Architecture, *British Journal of Humanities and Social Science* 1(2), 30-45.
- Alsayyad N. (2001). Consuming Tradition/Manufacturing Heritage: Global Norms and Urban Forms in the Age of Tourism. New York: Routledge.
- Arenibafo. (2017). The Transformation of Aesthetics in Architecture from Traditional to Modern Architecture. A Case Study of The Yoruba (southwestern) region of Nigeria. *Contemporary Urban Affairs* 1(1), 35-44.
- Arsip. (2017). *Menghimpun yang terserak esai-esai sejarah lokal Sumbawa*.
- Stepanova, E. A. (2022). Values Under the Influence of Various Contexts: Cross-Cultural Reflections. *Changing Societies & Personalities*. 6(3), 483-487.
- Soewarno & Duhita. (2018) yang mengkaji tentang the transformation of Heritage Buildings as Tourist Attraction: Adaptive Re-use of Colonial Buildings at Bandung Conservation Area.
- Samalavicius & Traskinaite. (2021). Traditional Vernacular Buildings, Architecture Heritage, and Sustainability. *Journal of Architecture Design and Urbanism*. 3(2), 49-58.
- Ching, F. (1979). *Architecture, From Space and Order*, Van Nostrand Reinhold Company, New York.
- Darmawan & Murtini. (2017). The Problem Change Function of Heritage Building at The Old Cities in Central Java. Architecture Departement, Engineering Faculty, Diponegoro University. *European Journal of Interdisciplinary Studies*. 3(4), 142-152.
- Dzwierzynska & Prokop. (2022). Reconstructions of Historic Monuments-Dual Approach. *Sustainability*, 14, 14651. <https://doi.org/10.3390/su142114651>.
- Lembaga Adat Tanah Samawa (LATS). (2017). *Informasi dan Data Kesejarahan Kesultanan Sumbawa*
- Prasidha, Martokusumo, Lubis. (2018). Heritage Buildings and Architectural Transformation in Depok City. Applying Local Knowledge for Livable Space.
- Prijotomo, J. (2008). *Pasang Surut Arsitektur Indonesia*, Surabaya: Wastu Lanas Grafika.
- Purno H, Waani & Wuisang (2017). Gaya dan Karakter Visual Arsitektur Kolonial Belanda di Kawasan Benten Oranje Ternate. *Media Matrasain*, 4(1), 23-33.
- Manca, L. (1984). *Sumbawa Pada Masa Lalu*, Rinta: Surabaya.
- Martokusumo, W. (2010). Bangunan-Bangunan Tua yang Hilang di Bandung: Sebuah Refleksi Kegiatan Pelestarian Indonesia. In: Arus silang Bandung: SAPPK Institute Teknologi Bandung.
- Muhammad, M. (2020). Preservation of The History City of Bandung Through the Building of Culture Heritage Group A. *Best: Journal of Built Environment Studies*, 37-44
- Noordyn, J. (2008), *Sejarah Sumbawa*, Jakarta: Bumi Pusaran.
- Snyder. (2008). The Role of Heritage Conservation District in Achieving Community Improvement. *Thesis Presented to the University Waterloo Master of Art in Planning Canada*.
- Soeroto, M. (2003). *Dari Arsitektur Tradisional Menuju Arsitektur Indonesia*, Jakarta: Ghalia Indonesia.
- Sumalyo, Y. (1997). *Arsitektur Modern Akhir Abad XIX dan Abad XX*. Yogyakarta: Gajah Mada University Press.

Syaifuddin Iskandar
Universitas Samawa, Sumbawa Besar, Indonesia

Tri Satriawansyah
Universitas Samawa, Sumbawa Besar, Indonesia

Lahmuddin Zuhri
Universitas Samawa, Sumbawa Besar, Indonesia

Eni Nuraini
Universitas Samawa, Sumbawa Besar, Indonesia

I Gusti Ayu Purnamawati
Faculty of Economics, Universitas Pendidikan Ganesha, Singaraja, Indonesia
Email: ayu.purnamawati@undiksha.ac.id