

Building Typology of Kadato Kie from Tidore Sultanate

Suci Elvira^{1*}, Aristotulus Ernst Tungka², Cynthia Erlita Virgin Wuisang³

¹ Master of Architecture Study Program, Sam Ratulangi University, Indonesia,
sucielvira1112@student.unsrat.ac.id

² Master of Architecture Study Program, Sam Ratulangi University, Indonesia, aristungka@unsrat.ac.id

³ Master of Architecture Study Program, Sam Ratulangi University, Indonesia,
cynthia.wuisang@unstrat.ac.id

Received : 15-03-2021
Accepted : 28-05-2021
Available online : 30-05-2021

ABSTRACT

The arrival of foreign nations to the Indonesian archipelago, particularly Tidore Island, which is known for its Islamic empire, has impacted the social, cultural, and architectural developments in Tidore. Thus, acculturation of culture and architecture happened where the traditional ones had been assimilated with local culture, including some Arab and Chinese and colonial cultures. Some of these historical heritage buildings are still standing today, especially the Kedaton of the Tidore Sultanate. This study aimed to identify the building typology of the Kedaton (Kadato Kie) of the Tidore Sultanate and elaborate the influence of local and colonial architecture on architectural elements of the Kedaton (Kadato Kie) building of the Tidore Sultanate. This study used a qualitative method with a descriptive approach to reveal the findings through three stages: identification, analysis, and verification. This study focused on the Kedaton of the Tidore Sultanate or Kadato Kie or Kedaton Gunung, the Tidore Sultanate's palace. The Kedaton is located in Soasio Sub-district Tidore Kepulauan City, North Maluku Province, after undergoing reconstruction. Therefore, this is expected to provide theoretical and practical advantages in architecture by analyzing the type and characteristics of the building.

Keywords: kadato kie, tidore sultanate, building typology

ABSTRAK

Kedatangan bangsa asing ke Nusantara khususnya Pulau Tidore yang dikenal dengan kerajaan Islamnya memberikan pengaruh terhadap sosial, budaya dan arsitektur yang berkembang di Tidore. Sehingga terjadilah proses akulturasi budaya dan arsitekturnya, yaitu tradisional yang telah berasimilasi dengan budaya lokal dan beberapa dari budaya Arab dan Cina serta kolonial pada saat itu. Beberapa bangunan peninggalan bernilai sejarah tersebut masih berdiri hingga saat ini, terutama Kedaton Kesultanan Tidore. Penelitian ini bertujuan untuk mengidentifikasi tipologi bangunan Kedaton (Kadato Kie) Kesultanan Tidore dan menguraikan pengaruh arsitektur lokal dan kolonial pada elemen arsitektural bangunan Kedaton (Kadato Kie) Kesultanan Tidore. Penelitian ini menggunakan metode kualitatif dengan pendekatan deskriptif digunakan untuk mengungkap temuan melalui tiga tahap, yaitu: Identifikasi, menganalisis, dan mengverifikasi. Penelitian ini difokuskan pada objek Kedaton Kesultanan Tidore atau Kadato Kie atau Kedaton Gunung yang merupakan istana kesultanan Tidore yang berlokasi di Kelurahan Soasio, Kota Tidore Kepulauan, Provinsi Maluku Utara setelah mengalami rekonstruksi. sehingga diharapkan dapat memberikan manfaat secara teoritis maupun praktis dalam berarsitektur dengan mengetahui tipe dan karakteristik bangunan.

Kata Kunci: kadato kie, kesultanan tidore, tipologi bangunan

INTRODUCTION

Historical events and journeys in Indonesia have resulted in the enriched, developed, and diverse architectural values, types, and characteristics. One example is in the Tidore Sultanate, Tidore Kepulauan City, North Maluku Province. If ordered from the lineage of the kings of Ternate and Tidore, the Tidore Kingdom had existed since 1081 when Muhammad Naqil has crowned the first King of Tidore. Eventually, at the end of the 13th century, Islam was made the official religion of the Tidore Kingdom by the 11th King of Tidore, and reached its golden age in the 16th to 18th centuries AD and developed into the center of power of the Tidore Sultanate (Amal, 2002). Besides, several relics of the colonial era, such as colonial buildings, aristocratic houses, and colonial forts that spread on Tidore Island, are located in the city center close to Kedaton. This situation proves cultural acculturation at specific periods that produced architectural objects with their own features and characteristics.

Historically, there have been several times of changes in the location of the Kedaton of the Tidore Sultanate. The last transfer of the capital to Limau Timore started during the reign of Sultan Syaifuddin or Kaicil Golofino in 1657 AD after great chaos between Spain and Portugal and refusal of VOC control of the Tidore region, construction of a *kadaton* called Kadato Ijo, which was later known by local people as Fola Ijo in the local language of Tidore since the building was painted green (Amal, 2012). Based on a book written by Amin Faruk as the Prime Minister of the Tidore Sultanate, the Kedaton was built with a more robust and broader structure during the reign of Sultan Muttahiddin Muhammad in 1812 AD and continued until the reign of Sultan Ahmad Syaifuddin in 1856 AD which took 50 years. The name of Limau Timore was later changed to Soasio until today. However, due to the politics of the Dutch to bring others into conflict, the Kedaton was destroyed at the end of the reign of Sultan Syahjuan in 1912 AD. After a long vacuum of power, it began to be rebuilt in 2004 AD during Sultan H. Djafar Syah and was completed in 2010 AD and stood majestically today with the mosque and the Fola Ijo, which the descendants of the current sultan preserved till now.



Figure 1. Kadato Kie Building in 1811 (Left), Current year Kadato Kie Building (Right)

Source: Tidore Sultanate Museum

Based on a study conducted by Sherly Asriany (2016) entitled "The Tradition of Building Traditional Architecture of Folajiku Sorabi, Tidore Kepulauan," since the beginning of its construction, Kadato Kie became the main foundation of Tidore architecture, which is called "Lang Kie Jiko Sorabi," meaning "a building that always follows the (long) direction of the mountain by prioritizing the waiting room." The word "Lang Kie" means mountain base, while "Jiko Sorabi" means waiting room. This circumstance also affects the typology of most

buildings in Tidore, including mosques and houses. With its historical background, the interference from the Europeans also allows for the mixing of building styles.

The results of another study by Kapita et al (2015) entitled "Identification of Cosmological Effects on the Kedaton of the Ternate Sultanate" showed that the cosmological interpretation in the spatial layout of the Kedaton of the Ternate Sultanate was influenced by the understanding of sacred and profane spaces. The sacred space in the palace of the Ternate Sultanate is located in the praise room and the middle room, which shows the world above and the middle world, the profane room is found in the lower room, while the living room and palace balcony indicates a mixture of Islamic beliefs and animism and dynamism. This study has similarities in the function of the object, which is the *kedaton* of the sultanate, using qualitative research methods and the data analysis techniques used interpretation and analysis of architectural elements and facades.

Another study conducted by Endah Harisun and M. Amrin MS Conoras (2018) entitled "Characteristics of Dutch Colonial Architecture Typology of Fort Oranje Fortress Bastion House in Ternate" obtained these data:

1. The building uses a pyramid roof and a wall thickness of around 50 cm and is made of river stone, coral, brick, and limestone construction,
2. The entire building has a symmetrical floor plan and uses double doors/windows,
3. The entire building pays close attention to the influence of the tropical climate on the building by applying the concept of sun shading/luifel, and
4. The building's overall shape is still maintained; only based on field data have changed several things.

The unique shape of architectural authenticity can represent the values of an ethnic group's identity regarding its cultural-historical background. Additionally, the building's exterior shows a typological style with the appearance of a special characteristic shape that can be seen from the architecture that accentuates the identity symbols of an ethnic group. Therefore, it is necessary to study the typology of the Kedaton of the Sultanate to obtain architectural characteristics that become the identity of the Tidore Sultanate buildings. This study aimed to identify the building typology of the Kedaton (Kadato Kie) of the Tidore Sultanate and elaborate the influence of local and colonial architecture on architectural elements of the Kedaton (Kadato Kie) building of the Tidore Sultanate.

RESEARCH METHODS

This study used a qualitative method with a descriptive approach. The data collection techniques were divided into two, including primary data through interviews, surveys, and photo documentation. Second, the secondary data were collected by conducting literature studies. Descriptive data analysis techniques were used to reveal findings through three stages: identification, analysis, and verification. This study focused on the Kedaton of the Tidore Sultanate or Kadato Kie or Kedaton Gunung, the Tidore Sultanate palace, located in Soasio Sub-district Tidore Kepulauan City, North Maluku Province after undergoing reconstruction.

RESULTS AND DISCUSSION

Analysis of the Influence of Style on Facade Elements

Based on a review of architectural elements consisting of the structure, openings, roof, walls, and ornaments in the Kadato Kie building, there are colonial and local architectural influences.

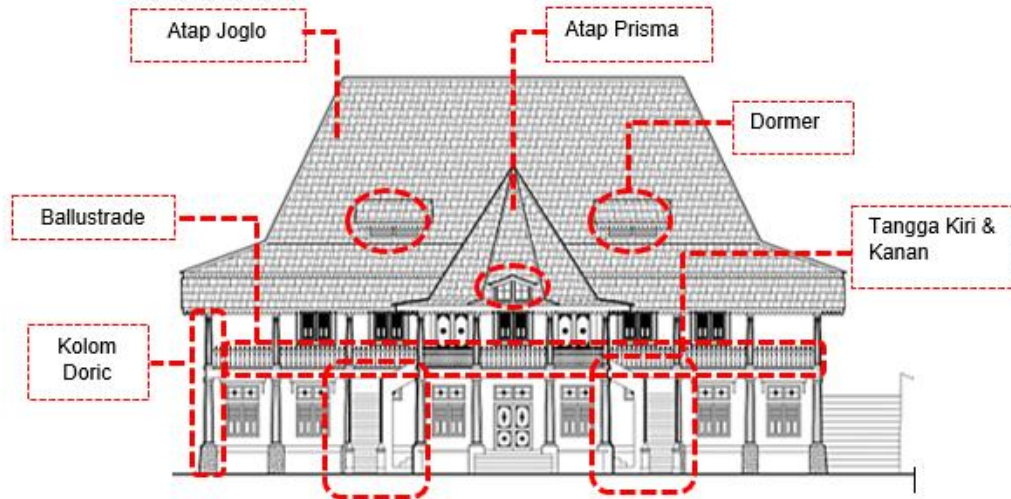


Figure 2. Kadato Kie Building Facade

Local Architecture

The influence of local architecture on the building can be found in:

1. Floor Plan

The pattern of space organization/space placement on the floor plan is placed based on the belief of the Tidore people, which is the philosophy of the body's organs, which means that the main room (praise room) is the center of religious activities which must be on the left, which symbolizes the heart or center of the building, followed by other rooms which are complementary. In addition, reviewing the theoretical understanding of Rapoport (1990), the Kadato Kie building includes the Traditional Vernacular building, which is a building made by the community with craftsmen as a form of cultural reflection with a mutually agreed model and relatively high cooperation.

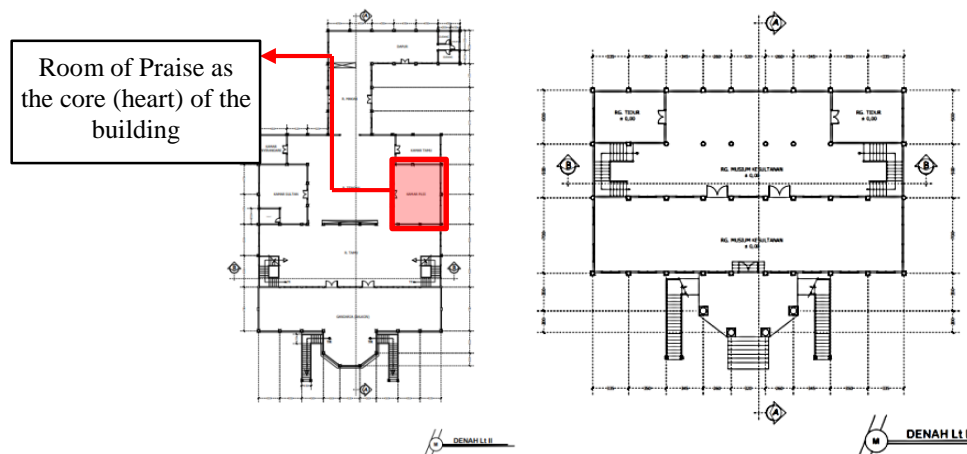


Figure 3. Kie Kadato Room Organization

2. Structure

There is no significant local architectural influence on the structural elements because the foundation, column, and beam use a more modern construction, reinforced concrete construction with cement and sand materials.

3. Aperture

There is an influence of local architectural styles in openings, including doors, windows, and ventilation. The influence appeared in the adjustments to the tropics in the placement of openings to direct the wind from the sea to the mountains and from the mountains to the sea. Moreover, it also uses much ventilation, including cross-ventilation from openings in walls and openings in the roof to get enough wind and air circulation to provide thermal comfort inside the building.

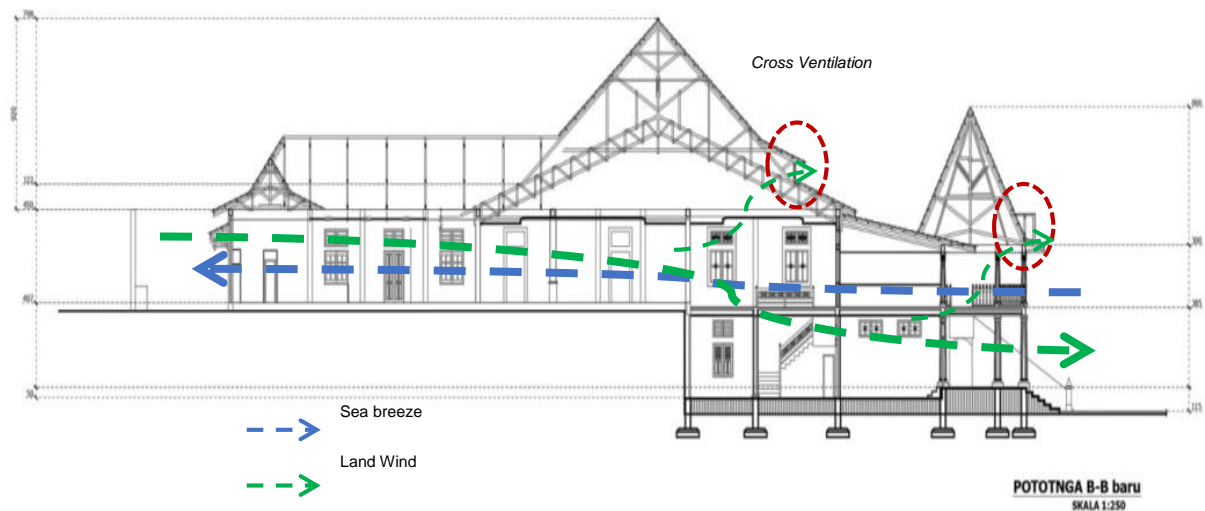


Figure 3. Kadato Kie Building Aperture that adapts to Tropical Conditions

4. Roof

The influence of local architecture on the roof in the shape of the roof uses a combination of a pyramid roof and a traditional roof from Java named the joglo roof. Although the shape is not originated from Tidore architecture, the shape of this roof is one of the characteristics of aristocratic buildings in Indonesia (Ismunandar, 1993).

5. Walls and Ornaments

The building walls used more advanced materials, which is concrete brick, and no longer use traditional materials. This structure includes limestone and coral, so there is no local architectural influence on the walls. Meanwhile, the influence of local architecture is quite dominant in the ornaments because there is a transformation and a combination of shapes from typical plants of North Maluku, particularly Tidore, including nutmeg and cloves and the symbol of the Tidore Sultanate.



Figure 5. Symbol Shapes used in Ornaments

Colonial Architecture

The influence of the colonial architecture on the building can be found in:

1. Floor Plan

The Kadato Kie building plan is rectangular. Handinoto (2012) stated that the Indische Empire Style architectural style is also found in the Kadato Kie building, an utterly symmetrical plan, with a "central room" in the middle of the main bedroom and other bedrooms. The "central room" is directly connected to the front porch and back porch (Voor galerij and achter galerij).

2. Structure

The shape of the central column is in the shape of a tall cylinder which functions as a support for the main structure, and a square and elongated practical column. According to Handinoto (1996), this structure is categorized as one of the Indische Empire Style building characteristics.

3. Aperture

The aperture using wood materials and glass (especially on windows) is still minimal, and there is ventilation on the roof, which is one of the characteristics of transitional architecture (Handinoto, 2006).

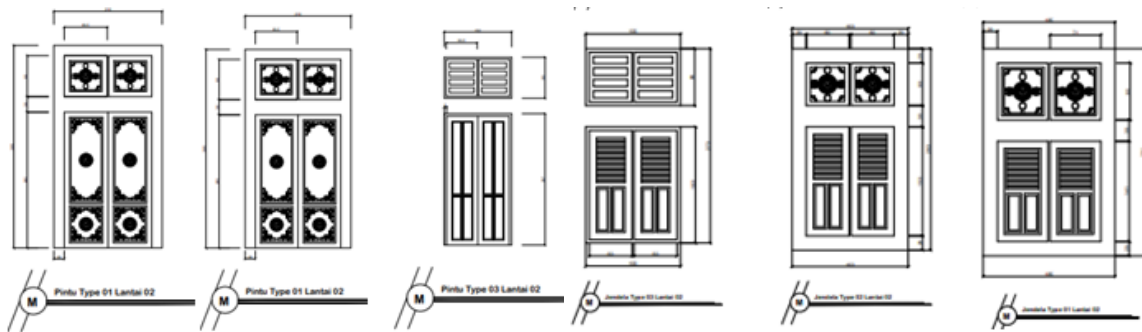


Figure 7. Kadota Kie's Door and Window Aperture Models

4. Roof

The influence of colonial architecture on the roof of the building is that there are three dormers so that it is in line with the opinion of Handinoto (2006), in which the character of the transitional colonial architecture has a gable and pyramid construction, the use of ventilation on the roof (dormer), and the shape of a high roof with a significant slope.

5. Walls and Ornaments

The building walls have been renovated to no longer use local materials or adhere to solid colonial characteristics. Meanwhile, in the ornaments, a balustrade or fence surrounds the terrace/balcony, which is one of the characteristics of colonial architecture (Handinoto, 1996).

Table 1. The Geometry or Kadato Kie Architecture

	Floor Plan	Structure	Aperture	Roof	Wall
Form (Basic Form)	Square	Square & Circle	Square & Circle	Square & Triangle	Square & Circle
Dimensions	49.5 meters x 29 meters	<ul style="list-style-type: none"> • Practical Column 15 cm x 15 cm • Cylindrical Column 35 cm x 35 cm 	<ul style="list-style-type: none"> • Window • 2.63 mx 1.63 m • Door • 3.73 mx 1.58 m <p>(Largest dimension as the main element)</p>	6.7 meters high, about 30 degrees inclination	Wall height of 4 meters
Color	White, gray, light brown, dark brown	White, green, gray	Green, yellow, red	Red	White
Texture	Flat and rough	Smooth on the column and rough on the foundation	Slippery	Slick and shiny	Smooth
Position	At a slope of 20 degrees, opposite the main road	Follow the building plan at the load fulcrum	Around the building and inside the building as a connecting room	It is on the top floor of the building	Around the building and inside the building as a room divider
Orientation	Facing to the southeast, the building has an orientation towards the sea and turns towards the mountains.	Follow the building plan at the load fulcrum	Orientation around the building.	Orientation to the sea and back to the mountains.	Orientation around the building.

Effect of Style on the Facade

The facade of the Kadato Kie building has columns that line the terraces and balconies. This adaption is in accordance with Handinoto's (1996) description of one characteristic of an Indische Empire Style building with a characteristic that the terrace is usually extensive and there are rows of columns in the Greek style (Doric, Ionic, Corinthian) at the end.

All of the doors use two doors, while the windows use latticed windows. Besides, the materials for windows, doors, and ventilation use wooden materials so that it is in line with the explanation of Handinoto (2006), in which one of the characteristics of transitional architecture is that the primary building material uses brick and wood, and glass use (especially in windows) is still minimal. In addition, in the use of color, there is an influence of Chinese architectural style on the openings. Overall, the roof shape consists of a pyramid roof that resembles the shape of the joglo roof in the main building, which is the roof shape of a

noble house in Javanese architecture, and there are three dormers. According to Handinoto (2006), the character of the transitional architecture has a gable and pyramid construction, a roof tile covering, the use of ventilation on the roof (dormer), a high roof shape with a significant slope, so it can be concluded that the shape of the roof marks the transitional architectural style (1890-1915) which is a combination of traditional architectural styles and colonial architecture that adapt to the local conditions that developed at that time. Furthermore, reviewing the theoretical understanding of Rapoport (1990), the Kadato Kie building is included in one of the buildings with local architecture that has retained (permanent) shape and meaning.

The overall walls of the building have been renovated from a thickness of 1 meter to the present of 11 cm thick and use brick material and are painted white and decorated with ornaments on several room dividers. This is in accordance with Handinoto's (2006) opinion regarding modern colonial architecture (1915-1940), in which the building wall only functions as a cover and the dominant use of white. Besides, the use of color in the ornament refers to Chinese architecture with its meaning and philosophy.

Table 2. Classification of Facade Element Style

No	Facade Elements	Classification of Force Influences	
		Colonial Architecture	Local Architecture
1	Column	<i>Indische Empire Style</i>	Understanding of religion and cosmology
2	Aperture	Transition Architecture	Wood material with the addition of ornaments
3	Roof	Transition Architecture	Incorporation of traditional roof forms
4	Stairs	<i>Indische Empire Style</i>	The philosophical analogy of form

Effect of Style on Buildings

Furthermore, in terms of the geometrical influence, the Kadato Kie building architectural style is as follows.

1. Floor Plan

The Kadato Kie building plan is rectangular. Handinoto (2012) stated that the *Indische Empire Style* architectural style is also found in the Kadato Kie building, an utterly symmetrical plan, with a "central room" in the middle of the main bedroom and other bedrooms. The "central room" is directly connected to the front porch and back porch (Voor galerij and achter galerij). In addition, reviewing the theoretical understanding of Rapoport (1990), the Kadato Kie building includes the Traditional Vernacular building, which is a building made by the community with craftsmen as a form of cultural reflection with a mutually agreed model and relatively high cooperation.

2. Structure

The shape of the central column is in the form of a tall cylinder which functions as a support for the main structure, and a square and elongated practical column. According to Handinoto (1996) is categorized as one of the characteristics of the *Indische Empire Style* building.

3. Aperture

The windows are symmetrical in shape, consisting of two latticed windows, while the door is rectangular with two openings, and there is an addition of carved ornament shapes on the doors and windows. In addition, it also uses much ventilation, including cross ventilation of

openings in walls and openings in roofs. According to Handinoto (2006), one of the characteristics of transitional architecture is the use of wood materials, and the use of glass (especially on windows) is still minimal, and there is ventilation on the roof.

4. Roof

Overall, the shape of the roof consists of a pyramid roof with a roof slope of about 38 degrees to 58 degrees on the roof of the main building. There are three dormers so that it is in line with the opinion of Handinoto (2006), in which the character of the transitional colonial architecture has a gable and pyramid construction, the use of ventilation on the roof (dormer), and the shape of a high roof with a significant slope.

Based on the analysis of building architectural elements and the influence of style on the building typology of Kadato Kie, it can be concluded that the level of style influence on the building is as follows.

Table 3. The Dominant Levels of the Influence of Architectural Style on Kadato Kie

No	Architectural Elements	Dominant Degree of Style Influence (Low / Medium / High)	
		Local Architecture	Colonial Architecture
1	Floor plan	Moderate	High
2	Structure	Low	High
3	Aperture	High	Moderate
4	Roof	High	High
5	Walls and Ornaments	High	Low

CONCLUSION

Based on the results of the identification of architectural elements in the Kadato Kie building in geometry and appearance, it can be concluded that there is a mixture of architectural styles which becomes the typology or character of the Kadato Kie building, including:

1. The geometrical typology of the Kadato Kie building is that it has a basic shape consisting of squares, triangles, and circles, and
2. The influence of style on the architectural elements of the Kadato Kie building is Indische Empire Style architecture on the floor plan form and appearance of the building structure as well as the mixing between the transitional colonial architecture and traditional architecture on the shape and appearance of the roof as well as the shape and appearance of the openings.

REFERENCES

- Amal, M. A. (2002). *Maluku Utara: Perjalanan Sejarah 1250-1800 (Jilid I)*. Ternate: Universitas Khairun Ternate.
- Amal, M. A. (2010). *Kepulauan Rempah-Rempah (Perjalanan Sejarah Maluku Utara 1250-1950*. KPG (Kepustakaan Populer Gramedia) bekerjasama dengan Pemerintah Provinsi Maluku Utara.
- Ching, F. D. K. (2007). *Architecture Form, Space, and Order 3rd ed*. New Jersey: John Wiley & Sons, Inc.
- Handinoto. (1993). Arsitek G.C. Citroen dan Perkembangan Arsitektur Kolonial Belanda di Surabaya (1915-1940). *Jurnal Dimensi Teknik Arsitektur*, 19.
- Handinoto. (2012). *Arsitektur dan Kota-Kota di Jawa pada masa Kolonial*. Yogyakarta: Graha Ilmu.
- Handoko, W & Mansyur, S. (2018). *Kesultanan Tidore : Bukti Arkeologi Sebagai Pusat Kekuasaan Islam dan Pengaruhnya di Wilayah Periferi*. Balai Arkeologi Maluku & Balai Arkeologi Sulawesi Selatan. 17-38.

- Kapita, H., Wulandari, L. D., & Ernawati, J. (2015). Identifikasi Pengaruh Kosmologi pada Kedaton Kesultanan Ternate. *Jurnal Perspektif Arsitektur*, 10(01), 69-79.
- Ismunandar. (1993). *Joglo: Arsitektur Rumah Tradisional Jawa*. Semarang : Dhara Prize.
- Rapoport, A. (1969). *House Form and Culture*. Prentice Hall. New Jersey. Englewood Clifft.
- Sherly, A. (2016). Tradisi Membangun Arsitektur Tradisional Folajiku Sorabi, Tidore Kepulauan. In *Prosiding Temu Ilmiah IPLBI*, 151-156.