

Study of the *Astana Gunung Jati* Heritage Tomb, Cirebon, Indonesia

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Abstract—The purpose of this paper is to describe the heritage buildings in the Astana Gunungjati area. The Astana Gunungjati area is in the form of a building placed on a hill that serves as the tomb of the king and descendants of the Cirebon palaces. Around the 14th century, the Astana Gunungjati area was established with buildings, elements of space, and ornaments like the buildings of the Cirebon palaces. The research method is carried out using a case study approach to explore the heritage values of the Astana Gunungjati area. The results of the study show that the cemetery building in the Astana Gunungjati area is a building that replicates the palace with the values of the nobility of life. The shape of the building and the ornaments of the building show the influence of Chinese, Javanese, and Arabic architectures. The heritage value of the building symbols characterizes the essence of human life. This concept can be an input for local governments and the Indonesian heritage community to carry out conservation efforts in the Astana Gunungjati area. The research limitation is under the authority of the palace.

Keywords—Astana Gunungjati area, heritage tomb building

I. INTRODUCTION

Indonesia is a country formed from several kingdoms in its past. As a result, many artifacts and cultures of the past have become Indonesian cultural heritage. One of them is Astana Gunungjati which is in Astana Village, Gunungjati District, Cirebon Regency, West Java Province. The United Nations Conference on sustainable development integrates culture as part of sustainable development that can facilitate the preservation of heritage values in the urbanization process [1]. The Astana Gunungjati Tomb Artifact is a cultural heritage of the Indonesian nation.

However the legacy of the past has knowledge that must be learned [2–6], Astana Gunungjati is an artifact in the form of a tomb originating from the Cirebon Sultanate. Astana Gunungjati's tomb building is an architectural masterpiece of the past. Works that show a form, style and building technology of the past. The visualization works are still tangible from the 14th century. This creation becomes the material for past knowledge related to the period of building the Astana Gunungjati cemetery. Thus, this paper describes the

past of the Astana Gunungjati Heritage Tomb. An effort to transform knowledge that can be learned in the present.

Research on the Astana Gunungjati burial complex has been widely carried out, especially related to its function as a pilgrimage tourist destination. Previously the research used a structuralism approach with the scope of Astana Village [7]. Now the research focuses on the architecture of the Astana Gunungjati cemetery. The Astana Gunungjati Cemetery has a treasure trove of past knowledge about the graveyard.

The Astana Gunungjati building is a complex cemetery that acts as a cultural heritage for the Cirebon Regency government. Inside the building there are tombs of a holy man named Sunan Gunungjati and his descendants. Sunan Gunungjati is believed as a saint because he is a walisanga group, which is the propagator of Islam on the island of Java. Sunan Gunungjati was also the king of the Cirebon Sultanate. His descendants are several kings of the palace in the city of Cirebon. The palaces still show their existence to this day. World heritage management is very important and knowledge of world heritage management is developing which must continue to be studied [2]. At present, a cemetery is usually a green open space, while the Astana Gunungjati is a cemetery with unique buildings equipped with fort walls and has 9 unique door names. The interior wall ornaments of the building are decorated with unique ceramics. The shape of the decoration is the same as the local ornaments typical of the Cirebon palaces. A well-articulated conservation plan requires the integration of the local case with all its grit [3]. A local aesthetic that has the values that prevailed at the time. This research contributes to the knowledge of the burial space in the past and contributes to the conservation activities of the Astana Gunungjati Cultural Heritage.

II. METHODS

A. Study Context

This research was conducted at Astana Gunungjati or the tombs of the kings of the Cirebon Sultanate. The location of the burial site is in Astana Village, Gunung Jati District, Cirebon Regency, West Java Province, Indonesia. It is in the northern

part of Cirebon City. The position of Cirebon City from the Capital of the State of Indonesia, Jakarta can be reached via the Toll Road. Travel time to this location is around 3 hours from the capital city of Jakarta.

The uniqueness of Astana Gunungjati is an ancient 14th century building that remain survives. The ancient buildings that have a history and function are for the graves of the guardians (Sunan Gunungjati is the king and guardian who spread Islam in West Java) and the kings of the descendants of the palaces in Cirebon. The interior of the building is richly decorated with ancient ceramics. Activities that are always crowded by pilgrims override the scary impression of a cemetery.

B. Data Collection Procedure

Data was collected by means of surveys and observations. The survey was conducted on March 24, 2021 – March 27, 2021, by members of the research team (3 people) assisted by 2 students. Data collection was carried out at 10.00-13.00 Western Indonesian Time (WIB). Data were collected through interview and observation techniques. Interview data were conducted to the *bekel* and *demit* astana (tomb guards) using snowballs. The interview data collected were the history of the building, the names of the building elements, the current function of the building. Building visualization data were collected by recording using a camera. The visual data recorded are elements of the Astana building, the interior of the Astana building.

C. Data Analysis

Data analysis using the case study method. The case study approach is an empirical study derived from social studies, then used in the field of architecture for the main research questions "How" and "Why" [8,9]. In the case study analysis, describing according to the standard methodological approach used for architectural heritage, which is widely used in practice by providing information about its history, geometry, construction. Techniques and materials, past interventions, and visible signs of damage. Historical records come from bibliographical sources and from inscriptions engraved on the monument itself. The geometric survey was carried out using measuring instruments and following the triangulation and trilateration survey methods. Construction materials and techniques were surveyed with visible investigations, and the information obtained was supplemented by data derived from previous study references. The past intervention was reconstructed through the analysis of several historical photographs, signs of visible damage were surveyed at the site [10].

The stages of analysis carried out are (1) collecting theory from the cases studied, (2) selecting cases, namely the case of the Astana Gunungjati cemetery (3) entering all information into a list (4) classifying the information obtained (5) analyzing data with the same pattern (6) Make an explanation in a chronological or comparative way.

III. RESULTS AND DISCUSSION

A. Architecture Features of Astana Gunungjati Cemetery Building

The findings of the study show that the Astana Sunan Gunungjati cemetery is a building that stores the history of the spread of Islam in West Java. The cemetery building is located on hilly land. The area of the heritage grave building is 1.9 ha. The grave is in a closed building with tile and brick floors. The layout is equipped with springs or wells. The wells in the cemetery area become a source of water for performing ablution (purification) for pilgrims and their guards. Cultural heritage is represented by knowledge of history, changes, and factors that affect an object, all knowledge about the history of buildings is presented including identification of cultural and architectural history [4].

The cemetery building forms a graded space structure. The deeper you go, the higher you go. Inside the cemetery, there are blocks of rooms that have local names according to the names of people who have died. Between rooms are connected by doors. The doors have unique names and total of 9 doors. The shape of the door has its own character. *Gapura Wetan* has the influence of Javanese characteristics during the Hindu Kingdom. The names of these doors can be seen in Figure 1 below. The doors are arranged in layers (See Figure 1). The layout of the cemetery is equipped with spaces such as *Paseban*, *Siti Inggil* which are like buildings in the Cirebon palaces. The character of this grave shows the original character of the Cirebon palaces. The facade of the building has a special attraction, such as ornaments that give each historical building its own character [11]. Maintaining original character of monumental buildings, documenting architectural features is introducing cultural heritage [12]. One important approach to preserving historical buildings is documentation [13]. The results of the documentation show that the original character of the Astana Gunungjati cemetery is the role of morality contained in Islam.

The cemetery building is equipped with a service building, namely a kitchen. The kitchen room is a space for cooking food for the tomb guards. The tomb guards can be called *kraman*, *bekel* or *demit* [7]. There is also a mosque building. The mosque is in the eastern part of the cemetery area. It is the hallmark of the Cirebon Sultanate building and is equipped with ceramic decorations on the walls.

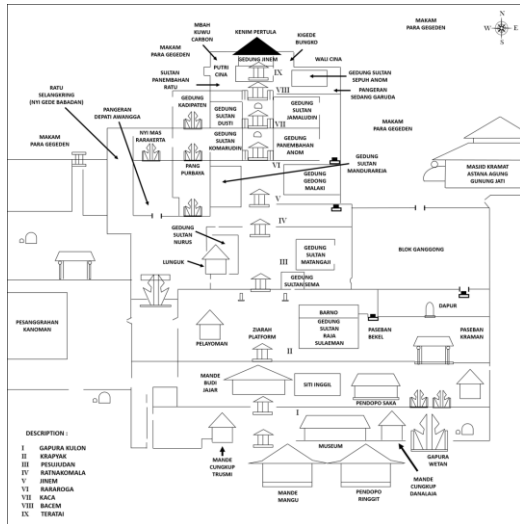


Fig. 1. The arrangement of spaces in Astana Gunung Jati (Source: Author’s document).



Fig. 2. The room inside the astana gunungjati Kramat Mosque (Source: Author’s document).



Fig. 3. Chinese ceramic jars (Source: Author’s document).

The interior of the building is decorated with various ceramics from various countries such as China, Arabic, and Europe. Ceramics with pictures of flowers, humans, and Arabic letters. In addition, the interior is equipped with various sizes and shapes of jars (see figure 1, 2 and 3). The jars are made of clay or ceramic. The placement of the jars is scattered in the front yard of the building. The jars come from China and Java. The interior building of the Astana Gunungjati Cemetery reinforces elements from China, Java, and Arabic.

The decorative ceramics provide pictures of flowers, leaves, birds, humans, and Arabic letters showing the universe and Islam. The doors numbered 9 and separated between spaces in stages, characterizing the symbol of the Sufi level in the flow of Sufism according to Islam. The names of the doors indicate the stages of life leading to the peak which is symbolized by the highest peak called the flower, namely the lotus flower. The lotus is a beautiful flower but can live even in dirty water. The symbol gives articulation of meaning to the Astana Gunungjati space. The symbol gives the architectural characteristics of Astana Gunungjati. Spatial articulation with its own architectural and functional identity, but bound in a spatial zone [14]. The architectural identity of Astana Gunungjati characterizes the tomb building that was built in the past with symbols of human life to achieve the level of holiness itself. This finding confirms that there are values from past human thought in the form of building space and these values are related to historical timelines [15]. Unesco establishes an instrument to concretize the Recommendations of the World Heritage Convention through the Burra Charter, namely protecting the cultural conservation of a site, because of its aesthetic, historical, scientific or social value [15]. The uniqueness of Astana Gunungjati is ceramic ornaments in the tomb building from various countries and in the form of a palace.

B. Astana Gunungjati Conservation Problem

The Astana Gunungjati Graveyard was built with clay and stone construction. This construction is susceptible to various damages, experts point out the acute sensitivity of the masonry construction system to earthquakes [16]. Indonesia is a region with a high level of seismicity.

In addition to buildings, the ornaments of the Astana Gunungjati cemetery have been damaged. Especially the surface of the building. In the area of Architectural Heritage, surface treatments can bring about a significant increase in conservation, as degradation starts from the outer layers of historic surfaces [17]. Likewise, the Astana Gunungjati cemetery Building was damaged on the surface of the building.

Many heritage sites have been destroyed by human activities [18]. The function of the Astana Gunungjati building is to become a pilgrimage tourist destination with high tourist visits, the more likely it is to damage the site. Some ceramic ornaments, door bank jars have been damaged. Damage that will eliminate traces of the history of the building. Conservation of architectural heritage must always take into

account the complexity and specificity of conservation activities [14].

The complexity for conservation activities for the Astana Gunungjati Cemetery must be overcome for conservation success. Risk management is a conservation alternative for the Astana Gunungjati Building. Risk management can be defined as the process of identifying, assessing and analyzing possible damage or establishing strategies to reduce damage to cultural heritage [19].

The construction of the Astana Gunungjati Cemetery requires sustainable and sustainable conservation efforts. The conservation of a building and its durability over time is related to the components that make up the building and the sensitivity to events that give rise to one or more consequences, vulnerability [20]. Conservation involves various stakeholders because the historical value it contains is very valuable for the progress of the Indonesian nation. Heritage policies and conventions require analysis and proposed interventions to be carried out [4].

Documentation of the Astana Gunungjati Cemetery building must be carried out continuously and sustainably. Documentation of cultural heritage is recognized as a fundamental instrument for ensuring the preservation and promotion of monuments, and for educating the public towards this goal [21]. Documentation has been recognized as a fundamental requirement for cultural heritage (Cultural Heritage / CH) to be known, preserved, and promoted, because the initial document emerged from the awareness of the importance of CH for humanity (from the Athens Charter, in 1931, so on) [21].

The Astana Gunungjati Cemetery is a heritage building that must continue to be preserved because the United Nations as a world nation organization has stated to "strengthen efforts to protect and safeguard the world's cultural and natural heritage" [1]. The role of cultural heritage as "a powerful driving force of inclusive local and regional development" as well as a potential resource in the development and rehabilitation of sustainable areas [1]. Due to the important role of cultural heritage in sustainable development, there are various considerations for heritage protection in development-related policies and conventions [1].

IV. CONCLUSION

In accordance with the purpose of this study is to describe the heritage building of the Astana Gunungjati area, the results of the study have found that the Astana Gunungjati cemetery has a building made of clay and stone that resembles the palace of the Cirebon Sultanate. The building and its naming are like the Sultan's Palace. The Astana Gunungjati Cemetery building is a replica of the Cirebon Sultanate Palace building. The mosque building characterizes the palace space, and the mosque building is also manifested in the Astana Gunungjati cemetery. The form of a building is multistorey with a separation of 9 doors, and each door is given a name. Giving

value to the nature of human life according to Islam towards the path of holiness.

The findings carry out an implication for sustainable conservation. Conservation that involves state-holders and considers risk management and is continuously documented to document the historical knowledge it contains.

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REFERENCES

- [1] B. Ashrafi, M. Kloos, and C. Neugebauer, "Heritage Impact Assessment, beyond an Assessment Tool: A comparative analysis of urban development impact on visual integrity in four UNESCO World Heritage Properties," *J. Cult. Herit.*, vol. 47, pp. 199–207, 2021.
- [2] L. Petrić, M. Hell, and J. van der Borg, "Process orientation of the world heritage city management system," *J. Cult. Herit.*, vol. 46, pp. 259–267, 2020.
- [3] S. Mubaideen and N. Al Kurdi, "Heritage conservation and urban development: A supporting management model for the effective incorporation of archaeological sites in the planning process," *J. Cult. Herit.*, vol. 28, pp. 117–128, 2017.
- [4] M. Ganobjak, S. Brunner, and J. Wernery, "Aerogel materials for heritage buildings: Materials, properties and case studies," *J. Cult. Herit.*, vol. 42, pp. 81–98, 2020.
- [5] K. Ghasemi, M. Hamzenejad, and A. Meshkini, "The livability of Iranian and Islamic cities considering the nature of traditional land uses in the city and the rules of their settlement," *Habitat Int.*, vol. 90, no. June, p. 102006, 2019.
- [6] G. Ruggiero, M. Parlavecchia, and P. Dal Sasso, "Typological characterisation and territorial distribution of traditional rural buildings in the Apulian territory (Italy)," *J. Cult. Herit.*, vol. 39, pp. 278–287, 2019.
- [7] I.H. Agustina and A. M. Ekasari, "Study of cultural heritage in Astana Village Cirebon District," in *Proceeding The 8 Rural Research And Planning Group International Conference: Innovations of Rural Development For Implementing Sustainable Goals*, Yogyakarta: UGM Press, 2018, p. 264.
- [8] R.K. Yin, *Studi Kasus Desain & Metode*. Jakarta: PT RajaGrafindo Persada, 2009.
- [9] R.D. Nur'aini, "Penerapan Metode Studi Kasus Yin Dalam Penelitian Arsitektur Dan Perilaku," *INERSIA INformasi dan Ekspose Has. Ris. Tek. Sipil dan Arsit.*, vol. 16, no. 1, pp. 92–104, 2020.
- [10] D. Giaccione, P. Fanelli, and U. Santamaria, "Influence of the geometric model on the structural analysis of architectural heritage," *J. Cult. Herit.*, vol. 43, pp. 144–152, 2020.
- [11] A. Baik, "From point cloud to Jeddah Heritage BIM Nasif Historical House – case study," *Digit. Appl. Archaeol. Cult. Herit.*, vol. 4, no. February, pp. 1–18, 2017.
- [12] N. Dalkılıç and A. Nabikoğlu, "Documentation and analysis of structural elements of traditional houses for conservation of cultural heritage in Siverek (Şanlıurfa, Turkey)," *Front. Archit. Res.*, vol. 9, no. 2, pp. 385–402, 2020.
- [13] W. Yan, A. Behera, and P. Rajan, "Recording and documenting the chromatic information of architectural heritage," *J. Cult. Herit.*, vol. 11, no. 4, pp. 438–451, 2010.

- [14] M. Acierno, S. Cursi, D. Simeone, and D. Fiorani, "Architectural heritage knowledge modelling: An ontology-based framework for conservation process," *J. Cult. Herit.*, vol. 24, pp. 124–133, 2017.
- [15] M. Vecco, "A definition of cultural heritage: From the tangible to the intangible," *J. Cult. Herit.*, vol. 11, no. 3, pp. 321–324, 2010.
- [16] M.A. Souami, M.S. Zerouala, and Y. Ait-Meziane, "The impact of building proportions in the preservation of Algiers architectural heritage against the seismic hazards," *J. Cult. Herit.*, vol. 20, pp. 686–693, 2016.
- [17] E. Quagliarini, F. Bondioli, G. B. Goffredo, A. Licciulli, and P. Munafò, "Self-cleaning materials on Architectural Heritage: Compatibility of photo-induced hydrophilicity of TiO₂ coatings on stone surfaces," *J. Cult. Herit.*, vol. 14, no. 1, pp. 1–7, 2013.
- [18] M. Nebbia, F. Cilio, and B. Bobomulloev, "Spatial risk assessment and the protection of cultural heritage in southern Tajikistan," *J. Cult. Herit.*, vol. 49, no. xxxx, pp. 183–196, 2021.
- [19] J. Lee, J. Kim, J. Ahn, and W. Woo, "Context-aware risk management for architectural heritage using historic building information modeling and virtual reality," *J. Cult. Herit.*, vol. 38, pp. 242–252, 2019.
- [20] A.J. Prieto Ibáñez, J.M. Macías Bernal, M.J. Chávez de Diego, and F. J. Alejandro Sánchez, "Expert system for predicting buildings service life under ISO 31000 standard. Application in architectural heritage," *J. Cult. Herit.*, vol. 18, pp. 209–218, 2016.
- [21] F. Noardo, "Architectural heritage semantic 3D documentation in multi-scale standard maps," *J. Cult. Herit.*, vol. 32, no. 2017, pp. 156–165, 2018.