



Continuity and Change of Yogyakarta's Authentic Urban Settlement Case Study of Panggung Krapyak Area

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Abstract : The Area of Panggung Krapyak illustrates Yogyakarta's authentic urban settlements. It lies in the southern part of the central city axis, representing a part of the philosophy that underlays Yogyakarta's urban spatial planning, namely Sangkan Paraning Dumadi. Although the development of the Area of Panggung Krapyak was not as dynamic as the areas in the center and the northern part of the main city axis, the pressure from urbanization and recent development had potentially degraded the authenticity value of the area. The article tries to reveal the authenticity value of the area as Yogyakarta's authentic urban settlements in its change and continuity. The research findings show that the area of Panggung Krapyak still shows its identity as Yogyakarta's authentic urban settlement amidst the pressure of change with various adaptations of new functions. Management of change is needed to be carried out carefully so that the value of authenticity can be maintained properly.

Keywords - authenticity, urban settlements, continuity, change, morphogenesis.

I. INTRODUCTION

The clearance of a banyan forest, which began in 1755 until a year later, became the beginning of the history of a new capital city called Yogyakarta. The city was built based on the evolution of the concept of the cities of the previous Islamic Mataram kingdom (Kotagede, Kerta, Pleret, Kartasura, and Surakarta). The concept is known as Catur Gatra Tunggal. Catur Gatra Tunggal characterizes the center of traditional Javanese cities, which is composed of elements that are almost similar to Kostof's (1992) theory that the development of cities in the past was based on the division of four aspects which consist of administrative centers, religious centers, business centers, and settlements (Ikaputra, 1995). Likewise with Yogyakarta has a unique socio-cultural character, including influences from foreign cultures that assimilated with Javanese culture. Hence, both the city center development and the surrounding settlements are always interesting to be studied because of their various dynamics.

In addition to the Catur Gatra Tunggal concept, the Yogyakarta city design utilizes two other concepts on a larger scale. The first concept took precedence from the previous Islamic Mataram capital for spatial planning on a larger scale. The concept is of Javanese spatial cosmology. The concept of spatial cosmology in Java and especially Yogyakarta aims to create prosperity and peace in the world through the composition of a replica of the universe as a macrocosm into a smaller form, particularly an inhabited area, as a microcosm (Priyono et al., 2015). In Javanese philosophy, the king is responsible for making relationships and creating harmony between the macrocosm and microcosm. The harmony is symbolized by positioning the king as the center of spatial cosmology. To achieve this goal, the king composed an imaginary concentric circle where his palace was placed in the center and conceived a spatial concept that determined the center and periphery (Lombard, 1996; Sumalyo, 2021). According to Behrend (as cited in Lombard, 1996), this conception of the concentric circle had rooted in the concentric circle of Hindunese-Java, which placed the king's palace as the imago mundi or image of the world. Every layer has a peculiar name in the imaginary concentric circle of Yogyakarta. Every layer has a peculiar name. The first outer circle beyond Kraton is Negara or Kuthagara, which defined the capital city boundary. Kuthagara was the early capital before extending beyond the natural boundaries, the two rivers in the west and east. Outside Negara, the circle name was Negara Agung. Negara Agung defined the main territory of the Sultan to have direct governance through his officials. The outmost circle was Manca Negara, which comprised territories with smaller governance intervention from the Sultan and depended on regent authorities to govern the area. In the last circle also lies the Pesisir area, the Javanese word for waterfront areas where shipping ports are located. Figure 1 illustrates Catur Gatra Tunggal and its evolution in Javanese cities, while Figure 2 illustrates Javanese imaginary concentric circle cosmology.

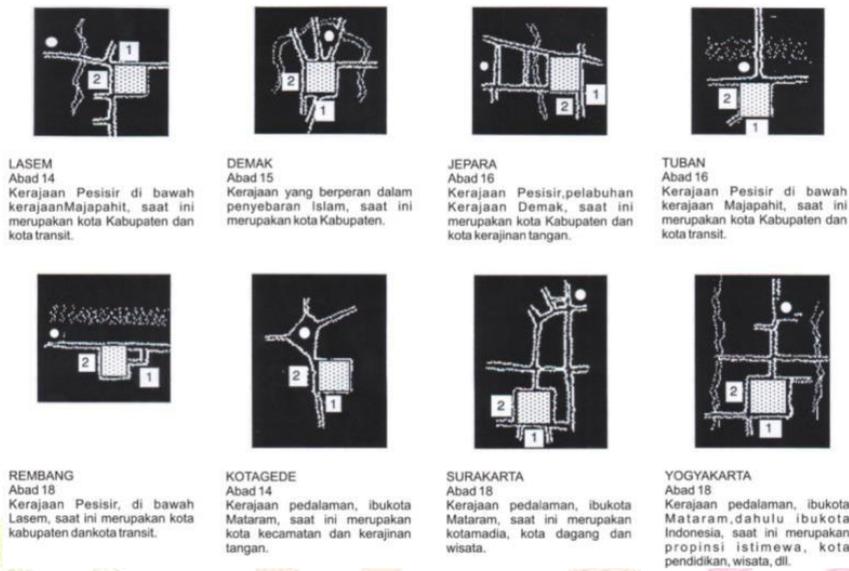


Figure 1. Catur Gatra Tunggal and its evolution in Javanese cities (Ikaputra, 1995)

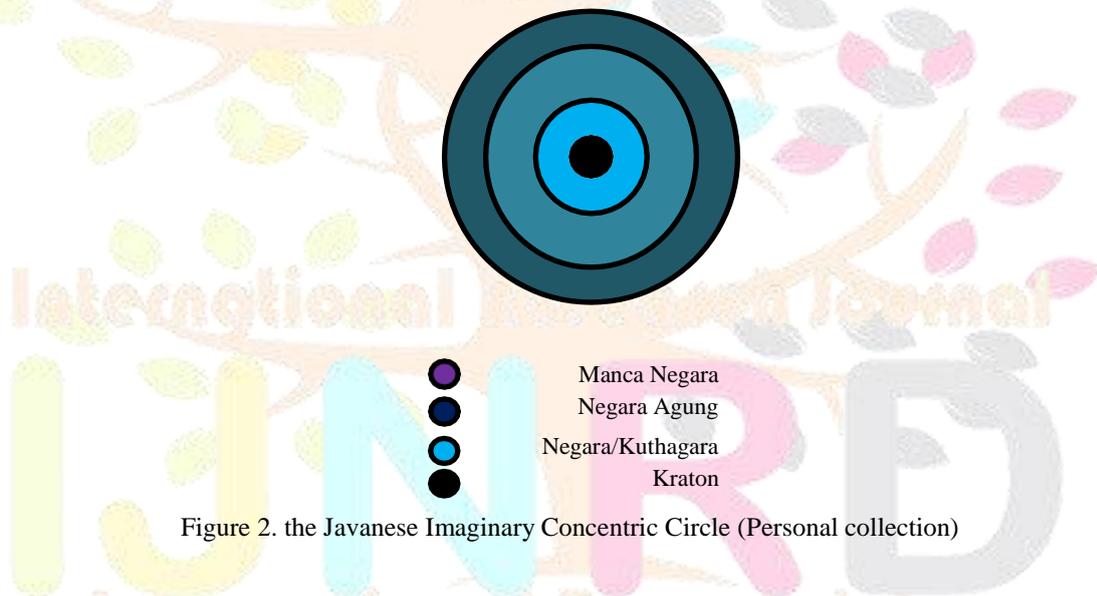


Figure 2. the Javanese Imaginary Concentric Circle (Personal collection)

The second concept is a concept that has just emerged in Yogyakarta as an evolution of the latest Javanese city on a city-wide scale that is slightly larger than Catur Gatra Tunggal. This new concept applied the philosophy of Javanese's perfect circle of life, namely Sangkan Paraning Dumadi. This philosophy describes the cycle of human life from birth to death follows the principles of Javanese highest values in accordance with Islamic doctrines. Sultan Hamengku Buwono I thoughtfully designed his royal capital to accommodate the philosophy through symbols assigned to the city elements, such as streets, buildings, and vegetation.

In physical form, the manifestation of the philosophy in Yogyakarta's spatial planning is divided into two major parts. The first part is the Sangkaning Dumadi segment which shows the early stages of life to adulthood. This segment started from Panggung Krapyak as the symbol of women who gave birth, connected by the city's main street axis to the Kraton complex via Nirbaya Gate, the entrance of Baluwerti fortress. Kraton Yogyakarta took the role as the center of destination of the philosophy for the two segments to describe the journey from south to north and from north to south to emphasize this pattern (Priyono et al., 2015; Suwito, 2019; Sumalyo, 2021). The Sangkaning Dumadi Segment endpoint is in the southern part of the palace, while the Paraning Dumadi Segment endpoint is in the northern part. The southern part of the Kraton describes a phase of someone reaching adulthood and making a marriage. When a couple had experienced this phase, they had to wander out of Kraton to find the Golog Gilig Monument. Tugu Golong Gilig symbolizes the ultimate consciousness of a Javanese man, especially as a leader, namely "Manunggaling Kawula Gusti". A ritual then follows the discovery of this consciousness to re-enter the Paraning Dumadi segment through the first path (Marga Utama), the mundane path (Maliyabhara), and the noble path (Marga Mulya) to re-enter the Kraton as the endpoint. The Figure 3 shows Yogyakarta's unique urban planning which based on the philosophy of Sangkan Paraning Dumadi.

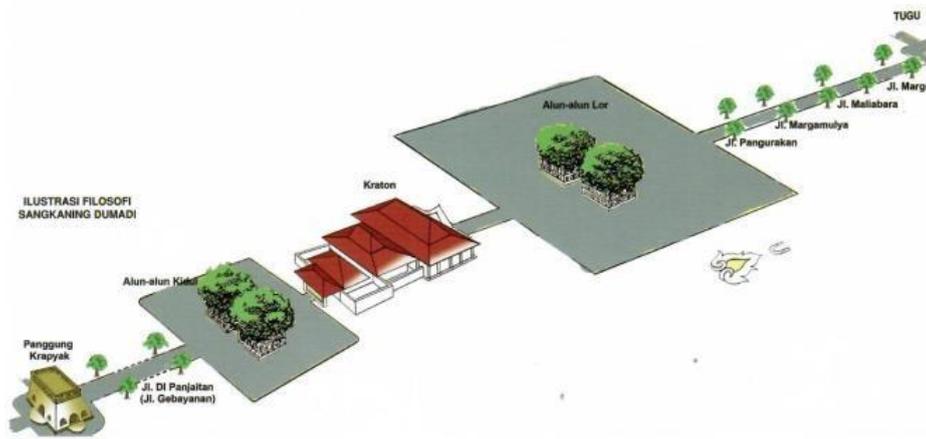
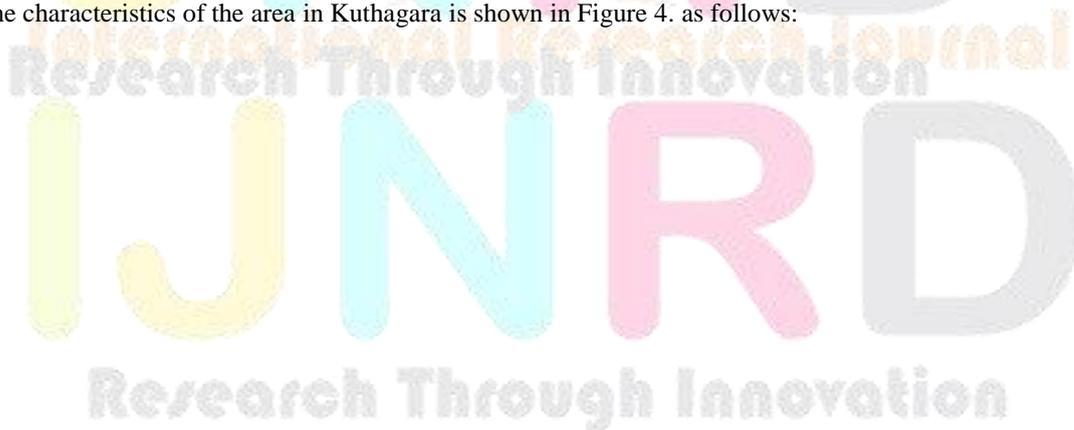


Figure 3. Philosophy Sangkan Paraning Dumadi in the urban spatial planning of Yogyakarta. (Priyono et al., 2015, p.59)

The existence of these two segments has influenced the dynamics of the development of the city of Yogyakarta. The city's development during the colonial governance was more focused on the Paraning Dumadi segment. Whether intentional or not, the development focus was suitable for the philosophy conception for the segment. Likewise, the Dutch Indies government tends to choose these areas as the place for their various activities. In contrast to the area of the Paraning Dumadi segment, the Sangkaning Dumadi segment did not witness dynamic development. It implied calmer conditions and experienced relatively slower developments. Based on the dynamics, physical and non-physical characteristics, and their role in the constellation of the city, the area in Kuthagara can be divided into five areas. The five areas are Mangkubumi, Margo Utomo, Malioboro, Njeron Benteng, and Panggung Krapyak. The detailed description for each area of Kuthagara starts from the core of the city of Yogyakarta, Njeron Benteng area. The area is the earliest part of the city to be built, representing the authentic character of the Javanese royal city core. The boundary of the core was marked by thick white brick walls known as Baluwerti fort. The king's palace was surrounded by settlements of royal workers and soldiers. At the north of the Baluwerti fort is the Malioboro area. The area has a hybrid character of Colonial/Indisch urban architecture and the traditional Javanese city structure. The area's development was the most dynamic and rapid among all areas in Kuthagara. The Malioboro area also has become the face and identity of Yogyakarta City until now. Margo Utomo area is located in the north of the Malioboro area and is characterized by the utilization of private Dutch companies for commercial services or offices. Most of the area was also used for railway stations and facilities emplacement. In the area also lies the De Witte Paal Monument, which replaced the ruined Golong Gilig Monument due to the 1867 massive earthquake. The Panggung Krapyak area, located in the southernmost part of Kuthagara, is less dynamic and less developed. The character of this area is an urban settlement with traditional Javanese architecture in the city structure. The lack of dynamism from the area can preserve the original form of Yogyakarta urban settlements. The last area is Mangkubumi, the latest area to develop and was originally outside of Kuthagara. However, after Sultan Hamengku Buwono VII gave land to the Dutch Indies government and Chinese ethnic groups at the end of the 19th century, the area became the first city expansion that retained the city's axis as the main but beyond the utilization of philosophy to create a new structure. The new structure was called the imaginary axis, connecting two major natural features, mount Merapi and the south sea. The illustration of the characteristics of the area in Kuthagara is shown in Figure 4. as follows:



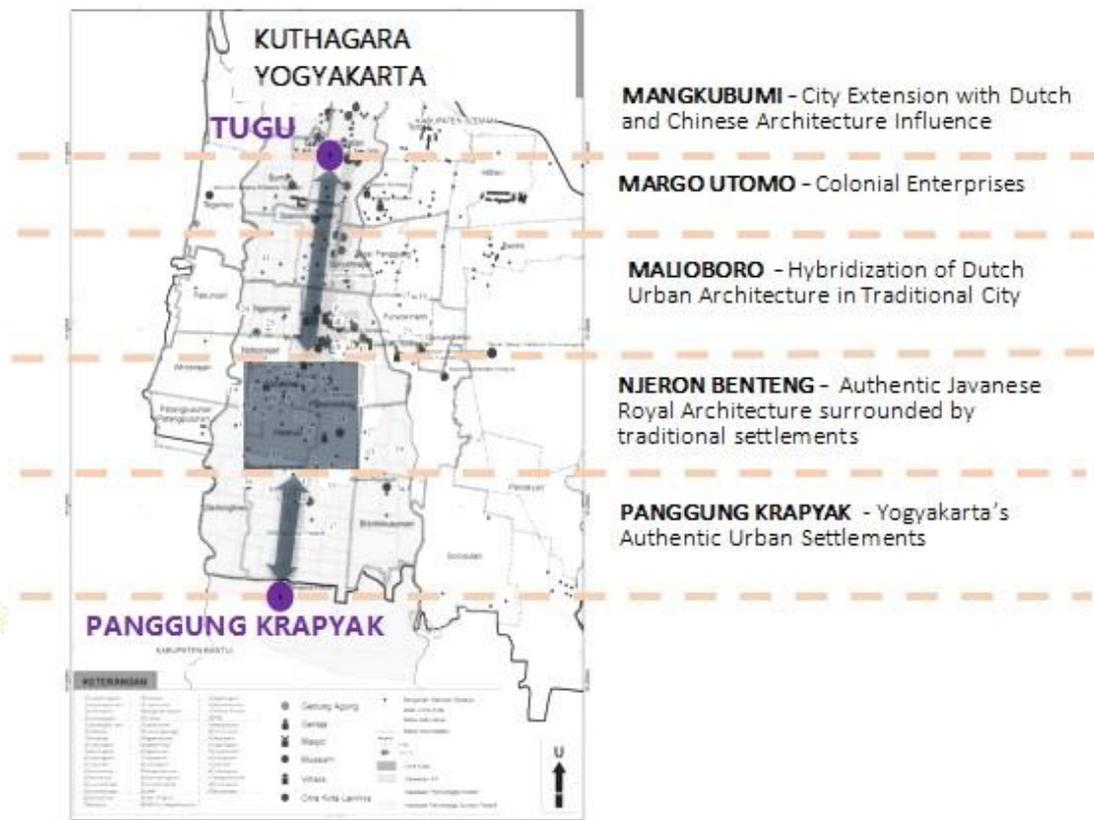


Figure 4. Characteristics and the role of each area in Kuthagara (Personal collection)

This area covers 182.13 hectares or 16.59% of Kuthagara, which consist of the administrative area of Suryodiningratan and Mantrijeron sub-district in Mantrijeron District and Panggung Harjo sub-district in Sewon District, Bantul Regency. At present, the principal function in the area is settlements. However, due to the existence of Al Munawwir Madrasa as a center of Islamic education in Yogyakarta and Kampung Prawirotaman as good foreign tourist accommodation spots, some the dynamic influences are apparent. The COVID-19 pandemic has stopped the dynamics of tourism from abroad, but it did not necessarily eliminate the potential for domestic and local tourism. Similar to Malioboro, the tourism sector dynamics also threaten the area's authenticity. However, the condition of the Panggung Krapyak Area today cannot ignore the processes of managing changes that have occurred in previous times. This paper tries to answer the following questions: how are the changes and continuity in the Panggung Krapyak Area a representation of authentic urban settlements in the Yogyakarta Heritage City? How can the morphological transformation of the Krapyak Stage Area as a case study contribute to the development of HUL implementation?

II. METHODOLOGY

The heritage city as a dynamic entity has undergone an incremental transformation process, mainly influenced by the cultural patterns attached. These cultural patterns are depicted in the physical forms of the city's morphology, consisting of layers, networks, and components, as well as intangible cultures. The overall shape and form of the city and the distinctive features of each component, such as architectural style have been significant in explaining the transformation. This fact shows the importance of morphology and typology studies as a basic analysis to understand the meaning and significance of heritage cities (Jokilehto, 2015).

The changes that have occurred in heritage cities are part of heritage conservation itself, so how the changes are managed is very important. It is reflected in the recommendations of various international institutions such as UNESCO, ICOMOS, and ICCROM for heritage conservation efforts, especially in the context of cities, urban areas, settlements, and cultural landscapes, which prioritize the management of change. Araoz indicated that despite in general the core of heritage preservation is to maintain the originality of monuments and their environment, ICOMOS, since 2010, has explored various issues concerning continuity and change (as cited in Bardarin and Van Oers, 2012)

The concept of continuity and change has become a key concept of the recommendations, including ICCROM's Living Heritage and UNESCO's HUL. According to Wijesuriya (2015), Living Heritage believes that residents or communities are the key, as they are tied to the original function of the heritage. Wijesuriya (2015) emphasized that the continuity of original function is the ultimate factor, besides the three other elements, which consist of 1) continuity of community relations; 2) continuity of cultural expression (tangible and intangible); and 3) continuity of heritage's care and maintenance (through traditional or established methods).

The evolution and transformation process of urban morphology shows the management efforts existence in the form of maintaining or changing its elements so that the dynamics of the city are being maintained, whether carried out by individuals or groups. The individuals and groups involvement by Whitehand (as cited in Bardarin and Van Oers, 2012)) is referred as the "spirit of society," which shows the roots of individuals and groups in the area and is objectively observed in the historico-geographical character of the urban landscape. The historico-geographical process, which can also be referred as the morphogenesis process, is a representation of a continuous process in which the shape of buildings and open spaces is observed from the time they appear and changes over time (Djokic, 2009). Instead of its physical realm, Bianca (2015) emphasized the importance of morphological studies in a heritage city because of the incremental nature of the city's transformation process and attachment to its cultural patterns. Shaoxu and Kai (2019)

added that spatial groupings of various form elements associated with morphological periodization provide the basis for character recognition and urban landscape typology.

The typology of the Yogyakarta urban landscape needs to be analyzed further to describe its authenticity. The characteristics of the study area in the Kuthagara constellation are authentic Javanese urban settlements. The condition of a traditional Javanese city, in general, can be described as different from a metropolis like today's cities. As an illustration, the city of Surakarta as the royal capital, according to Roy (as cited in Lombard, 1996) based on the records of a French officer's visit in the mid-19th century, is described as a mere collection of villages in the form of clusters of houses surrounded by gardens, in which there are palaces and residences of officials in the form of square plans surrounded by high walls. So based on this description, the palace or residence of officials, often referred to as Ndalem, is a differentiator from settlements in rural areas. It is in line with the theory of Ikaputra (1995), which states that Ndalem acts as the main urban unit (primary urban unit). As a primary urban unit, Ndalem also widens the urban boundaries to fill a group of existing villages with a city character. Later in its development, urban settlements are often referred to as "kampung" around Ndalem, where workers and providers of necessities then reside. Ndalem is also a differentiator from the settlements of abdi dalem or palace workers with certain skills or positions who tend to be described as a group of villages, as described above.

Morphological analysis was carried out following Djokic's strategy (2009), which is based on three principles, namely: 1) classification of elements; 2) principle of identity; and 3) morphogenesis process. Morphological analysis was carried out on the areas as an embedded unit of analysis within the research's area. Classification of elements is based on certain measurements such as shape, position, size, material, or other structural characteristics. The principles of identity are defined as every physical form created is an emphasis of history and represents the culture in a certain period. At the same time, morphogenesis is a continuous process representation in which the buildings and open spaces shape is observed from their appearance to their changes over time. In the case of the Panggung Krapyak area, the structural character is seen from the position of Ndalem as urban development. Then the identity principle is seen from the toponym continuity and the functions and events that occur in the elements of the area.

The elements of permanence in the area were observed according to its classification, referring to Ndalem's position and delineation of settlements and non-settlements blocks. Since layers of significance are one of the main focuses of HUL, the morphogenesis of the area was analyzed from its historical timeline. For the case study of the Panggung Krapyak Area, the timeline used is based on the development timeline of the development of Yogyakarta City. The development timeline for the City of Yogyakarta is as follows:

- 1st Period (1755 - 1812) was the period that started with the beginning construction of the royal palace complex as the process of early urbanism until the completion of all royal urban symbols;
- 2nd Period (1812 - 1855) was a period marked by chaotic conditions due to changes in the governance of the Dutch Indies, followed by the British invasion, then the Java War between 1825-1830, until the end of the reign of Sultan Hamengku Buwono V, which all events lead to the stagnation of development in Yogyakarta;
- 3rd Period (1855 - 1908) was a period of governance consolidation and reformation carried out by both the Dutch East Indies Government and the Sultanate of Yogyakarta, which brought the early phase of urban modernization;
- 4th Period (1908 - 1945) was a period marked by the peak phase of modern colonial urban development and implementation of ethical politics by the Dutch Indies government, interrupted by the takeover by Japan and ended by the declaration of Indonesian independence;
- 5th Period (1945-2012) was a development period in the independence era, beginning with the kingdom unification to the Republic until the special authority stipulation of Keistimewaan in 2012;
- 6th Period (2012-now) began with the special authority granted by the Government of the Republic of Indonesia, marked by mainstreaming of cultural values of Yogyakarta Sultanate and Grand Duchy of Pakualaman as the right of origin of Yogyakarta Special Province.

The analysis of morphology and typology was amplified by the grounded theory method to obtain data inductively, and according to the strategy developed by Strauss and Corbin (1990), it was addressed to get a more systematic approach to the qualitative data. The qualitative data obtained were tabulated into a table containing the arrangement of events, places, memories, and history of objects or elements of permanence in the Panggung Krapyak Area. In this case, the cultural toponym of settlement blocks is included as the element's origin of a place's permanence and signifier. The table would tell the things that contribute to and shape the area's authenticity.

III. RESULTS AND DISCUSSION

3.1. Typology of Architecture

The architecture in the area comprises heritage buildings and non-heritage buildings that contribute to the area's character. Being analogous to living things, the taxonomy is determined by the characteristics that are inherent to their identity. Ngah (2019) stated that heritage buildings have the same quality as human beings. This means that all human features could be analogous to the characteristic of identity for buildings, whether its skin tones as the building colors, the face shapes similar to building facades, and also the human bones as the building structures. The specific characters would define one individual to another, similar to buildings.

Basically, Kuthagara Yogyakarta was built with traditional Javanese architecture. However, as a city that passed through the developmental timeline during the colonial era, Kuthagara was also influenced by Dutch architecture. Handinoto (2012) divided the architectural style into three, namely the indische empire, transitional architecture, and modern colonial architecture. Instead of these three categorizations, it is common to be denoted as colonial/indische architecture only in many local building codes throughout Indonesia. The colonial/indische architecture is a form of adaptation of Dutch architecture in the tropics as a result of an adjustment process that has taken place since the 18th century.

In general, the urban architecture in Kuthagara comprises seven types, which are classified into four main types: commercial buildings, public facilities, noble houses or ndalem Pangeran, and kampung. However, several types are only found in the Margo Utomo, Malioboro, and Mangkubumi areas. These architectural types are found in areas where the Dutch Indies Government predominantly developed and denoted as type-1, type-2, and type-3. Type-1 is commercial buildings with the configuration of a row mass, built in small lots and indische or Chinese architectural style. Type-2 is commercial buildings with the configuration of an

independent and bigger mass, built in large lots and only using the indische architectural styles. Type-3 is public facilities buildings with the configuration of individual mass or in clusters, built in large lots and only using Indisch architectural styles.

Meanwhile, these three types are not found in Njeron Benteng and Panggung Krpyak areas. The absence of these types indicates that no substantial interventions of the Dutch Indies Government were found in both areas. Furthermore, it will be a good benchmark for illustrating how the authentic urban settlements of Yogyakarta.

The fourth and fifth types of urban architecture in Kuthagara are unique and would only be found in the city of Yogyakarta and Surakarta. Type-4 is Ndalem or house of noble families, while type-5 is kampung or Javanese urban settlements. Type-5 is divided into two sub-types. The first was the settlement of palace clerks or workers with specific tasks and expertise. This type has individual mass or compound, surrounded by a courtyard, wide road access, built in a fairly bigger land lot, and traditional Javanese architecture. The second sub-type was urban settlements built surrounding Ndalem, with higher intensity of building mass with or without courtyard and mostly built in the smaller lots and traditional Javanese architecture. One of this type's distinctive features was the existence of the cepuri wall as a spatial barrier between Ndalem and the settlements. The wall also made road access more limited.

Other urban architectural typologies, type-6 and type-7, was begun to emerge in the post-independence period. The two types were built with modern and contemporary influences. These types are not evolved in the main city axis corridor but only on the east and west sides of the area. Nonetheless, development along the main city axis corridor has been protected by specific building codes, so there would be a finite change in the corridor. Type-6 is commercial buildings, mostly shops, with row or individual mass or compound configuration, higher intensity, built in relatively small to moderate size of land lots with high intensity and contemporary architecture. Type-7 is commercial buildings with an independent mass or cluster of moderate intensity, built in a larger land lot and with contemporary architecture. The last type is mostly hotels. Figure 5 below illustrates typologies of urban architecture in Kuthagara.



Figure 5. Typology of urban architecture in Kuthagara

3.2. Morphogenesis

Before the establishment of the Sultanate of Yogyakarta, the Panggung Krpyak area had several relics from the Islamic Mataram kingdom. The area was a hunting park of the king of Mataram, namely Krpyak Beringan. Panembahan Hanyakrawati, who ruled between 1601 and 1613, built it in addition to the capital city, Kotagede, which is located about five kilometers in the east. The area was also known as the location where Panembahan Hanyakrawati died while hunting in this park. However, after the death of Hanyakrawati in 1613, Sultan Agung, as the next king, moved the capital to a new place, Kerta, and this facility's role was significantly reduced. The history and morphology of the Panggung Krpyak area in each period are described below.

3.2.1. History and Morphology of Panggung Krpyak Area in the 1st Period (1755-1812)

At the beginning of the sultanate, the Panggung Krpyak area became one of the main settlements for courtiers and royal soldiers. Some cultural toponyms are indicators of the existence of several Kampung in the early days of the Sultanate. The Kampung are Minggiran, Mijen, Keparakan Kiwa, Jageran, Gebayanan and Maosan. Kampung Jageran was the settlements of Jager soldiers, who were responsible for guarding the king, especially when hunting in Krpyak (Dinas Pariwisata, Seni dan Budaya Kota Yogyakarta, 2007). Jager was the only soldier positioned outside the fort due to their duties. Kampung Minggiran is denoted as the settlement of courtiers serving in the Girl's ward (Dinas Pariwisata, Seni dan Budaya Kota Yogyakarta, 2007). Sumintarsih (as cited in Suryo and Uddin, 2019) found that this kampung today are compilation of three kampung in the past, which were Mijen, Kradenan and Keparakan Kiwa. Mijen was the settlement of Miji courtiers, responsible for the internal affairs of Royal's Girl Ward (Dinas Pariwisata, Seni dan Budaya Kota Yogyakarta, 2007). That is why Minggiran and Mijen location was adjacent. Keparak Kiwa was the courtier responsible for supplying any effective weapons for royal soldiers. They were also responsible for teaching how to fight in wars, disciplined soldiers, doing intelligence work, and supervising suspicious individuals or groups that could harm the kingdom's defense. Gebayanan showed the location of Bayan or Kanayakan courtiers' settlements. Unfortunately, during the Japanese imperialization, this location was altered to be a sporting court known today as the Minggiran football field (Dinas Pariwisata, Seni dan Budaya Kota Yogyakarta, 2007; Priyono et al., 2015). Bayan was an administrative position inside the royal Palace, which is similar to the head of a village today (Priyono et al., 2015). Maosan was the courtier was responsible for taking taxes. Despite the well

preserved oral culture, the physical delineation of these kampungs is difficult to justify today. These kampungs have already become a common settlement since the establishment of the Indonesian Republic due to the new local authorities taking over all their duties.

3.2.2. History and Morphology of Panggung Krapyak Area in the 2nd Period (1812-1855)

The defeat of Yogyakarta caused by the British's major military campaign on 20 June 1812 had many impacts on the city. The first impact was the forced handover of power from Sultan Hamengku Buwono II to his son as his successor. Sultan Hamengku Buwono III's ascension to the throne on August 1st, 1813, followed by an agreement with the British authority that was represented and signed by Thomas Stamford Raffles. The agreement stated that the royal military soldiers had to be altered from the army to only guard Kraton and Sultan's security (Dinas Pariwisata dan Kebudayaan Kota Yogyakarta, 2009; Carrey, 2017). This change in roles had a significant impact on the city. During Sultan Hamengkubuwono, who ruled from 1814 - 1820, one of the direct consequences of the agreement was the relocation of soldier's settlements inside the fort to outside, spreading the four corners of Yogyakarta city (Dinas Pariwisata dan Kebudayaan Kota Yogyakarta, 2009). Several units that relocated to Panggung Krapyak Area included Jagakarya, Mantrijero and Prawiratama. Not only moving their homes to new locations but also the reduction in the number of soldiers made some of them change professions to a new ones. Until today, this limited number of military unit member descendants are still serving Sultan for ceremonial purposes in royal commemorations and celebrations of Islamic holidays.

Besides the relocation, the area had not experienced significant development during this period. Likewise, because of the Java war between 1825-1830, the population number in the entire Yogyakarta was reduced to about half (Surjomihardjo, 2008). A significant development showed bigger intervention by the Dutch Indies Government in the Malioboro area during the second period. Some of the development were Residenhaus, the residence of the Dutch leader in charge of Yogyakarta's territory, and the Loji Ketjil, the first Dutch settlement outside the Rustenburg fort. The fort was renamed as Vrederburg after massive earthquake in 1867.

3.2.3. History and Morphology of Panggung Krapyak Area in the 3rd Period (1855 – 1908)

The van den Bosch doctrine, Cultuur Stelsel, which was issued in 1830, successfully made Dutch Indies a significant agricultural producer (Goh, 2022). On the other hand, the policy had emerged famines and epidemics in Central Java due to the obligation to grow cash crops such as indigo and sugar instead of rice. (Schendel, 2022). The success of Cultuur Stelsel for the Dutch Indies Government was followed by many reformations, including economic and education. The reformation also had an important impact on Yogyakarta because the kingdom was a special authority region of the Dutch Indies. Different from other areas, Yogyakarta and Surakarta have special rights to govern their territories, especially regarding land ownership and utilization. The Dutch Indies government had to deal with the crowned prince of both kingdoms before he ascended to the throne. Due to the agreement, Sultan Hamengku Buwono VI enjoyed many benefits of economic reform of the Dutch Indies Government. The better welfare made it for the reigning Sultan easy to build his sons or daughters' houses in the Kuthagara region. It also made the city expand traditionally.

The erection of Ndalem or houses of the noble families in Panggung Krapyak area began with house of GBPH Puger, son of Sultan Hamengku Buwono VI. In this period the other Ndalem was built during the reign of Sultan Hamengku Buwono VII. These were the houses of Sultan Hamengku Buwono VII's sons and daughters's included Ndalem Kumendaman, Mangkukusuman, Suryodiningratan, Mangkuyudan, Ngadinegaran, Danunegaran, and Brongtokusuman. There is also a house of Sultan Hamengku Buwono VI been built, namely Ndalem Mangundipuran.

The existence of Ndalems in the Panggung Krapyak area changed the area's landscape. At first, it was dominated by kampung or royal workers' settlements surrounded by agricultural land, but after Ndalem was built, the area's landscape gradually transformed into urban areas. Profession brought by new inhabitants caused this were more specialized and responding to urban needs and demand. Otherwise, it seems there was a zoning agreement regarding where the settlement location for foreigners. The Dutch and other European people only built their houses in Malioboro, Margo Utomo, and Mangkubumi areas. It was also built outside Kuthagara, especially in Nieuw Wijk, Bintaran, and Balapan.

3.2.4. Morphology of Panggung Krapyak Area in the 4th Period (1908 – 1945)

The fourth period was known as the period of urban modernization, ethical politics, and the national movement. It did not significantly impact the development of the Panggung Krapyak area because the focus of the Dutch Indies Government remained on the northern part of Yogyakarta. Moreover, the opening of new areas known as the Mangkubumi Area and Nieuw Wijk are now called Kotabaru Area in the east of the Code River. Ndalem-ndalem in the Panggung Area is still inhabited by the sons and daughters of the Sultan and his relatives. However, there are still new Ndalem developments, namely Ndalem Purboseputran and some utilization transfers of Ndalems. In addition, in 1911, the Al Munawwir Madrasa, or Islamic Boarding School, was built, and its development significantly changed the area's landscape around the Panggung Krapyak location. The construction of the Gereja Hati Kudus often referred to as the Pugeran Church, in 1934, perhaps is the only Dutch influence in the area. This period also strengthens the character of urban settlements in the area due to the higher role of Ndalems. Otherwise, the agricultural land became less in total area coverage.

3.2.5. Morphology of Panggung Krapyak Area in the 5th Period (1945 – 2012)

After the Indonesian declaration of independence in 1945, there were plenty of changes in the Panggung Krapyak area. In the early post-independence time, influenced by the temporary relocation of the Indonesian capital to Yogyakarta in 1946, many Ndalem converted function into public facilities. Sultan Hamengku Buwono IX contributed to providing Ndalems as the supporting functions for the temporary capital. Two Ndalems in the area converted into health facilities. They are Ndalem Pugeran and Ndalem Mangkuyudan. Besides serving the public, both of them were also part of Universitas Gadjah Mada education hospital before fusing into Sardjito in 1982. After the fusion, the abandoned Ndalem Pugeran was converted into a state senior high school, while Ndalem Mangkuyudan was converted into State Health Polytechnic.

When the capital was back in Jakarta in 1950, Yogyakarta City still had its role as the capital of Yogyakarta Special Province. It meant that the old city had to provide many public facilities which matched newer standards. It is also a triggering factor for further Ndalems conversions. To respond to the situation, Ndalem Suryodinindran was converted into a private senior high school, Stella Duce 2. Ndalem Purboseputran became the Indonesian Art Institute campus of the Post Graduate Program. Ndalem Ngadinegaran today is utilized as state health laboratorium of Yogyakarta. Ndalem Mangundipuran was demolished, and its lot was built as a Hotel.

Although the original buildings no longer exist, the spatial configuration of the entrance point, known as “gledegan,” remains the same.

Another dynamic in the area was the development of the Kampung Prawirotaman block. Until today, Kampung Prawirotaman is famous for its provision of affordable hotels and has served as the alternative location for foreign tourist accommodation centers since the 1970s. The block is located in the east of the Panggung Krapyak area, and due to its adjacency, some tourism amenities flourished in the nearby blocks. Tirtodipuran block is well known for some batik workshops and art and craft shops, and recently many cafes and fine dining restaurants are flourished here. While the development of Prawirotaman and its surrounding blocks began to peak in the 2000s, the COVID-19 pandemic paused all tourist activities until 2021. At present, tourism activities started to revive in early 2022.

3.2.6. Morphology of Panggung Krapyak Area in the 6th Period (2012 – now)

The 6th Period is marked by greater attention from the Indonesian government to Yogyakarta’s cultural heritage, spatial planning, and royal land ownership. The three affairs are included in the special authorities given by the Indonesian Central Government, which began in 2012. Regarding these special authorities, until 2021, many regulations were issued to tackle many issues. One of the significant issues was the high demand for investment as the impact of the tourism boom until 2019. The massive investment is seen in the increasing number of new hotel constructions. It is not limited to the Prawirotaman area, but it has recently reached an area close to the main city axis. This area has developed into a significant investment destination. The local government also paid special attention to traditional market revitalization to increase tourism amenities’ quality. However, in physical form, until 2022, there was no significant change in the city’s morphology. The Government of Yogyakarta Special Province had already designed some improvements for the area, but it is still not realized today.

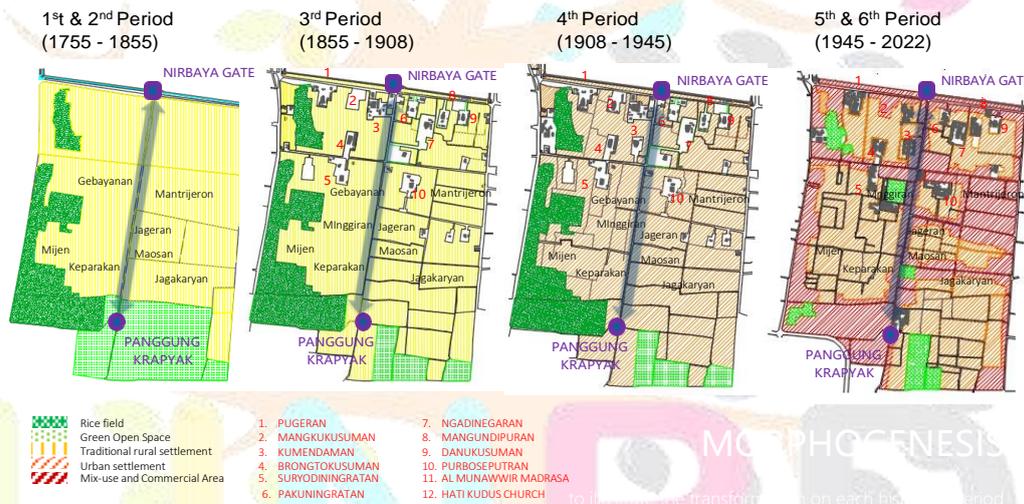


Figure 6. Morphogenesis of Panggung Krapyak Area

Figure 3 illustrates morphogenesis based on timeline analysis. The process of morphogenesis shows that the area had been gradually transformed from rural-type settlements in the early period to urban settlements in the fifth period. The urbanization process was not only triggered by the presence of Ndalem but also because commercial buildings flourished along the corridor surrounding the area. One of the corridors, Parangtritis road, is an important link to the Prawirotaman block in the east.

Table 1. Events, Histories, Memories, and Its Influences in Every Historical Period

No	Elements on the Observation Units	Events	Influences	Current Function
A. 1st Period (1755-1812)				
1.	Jalan Gebayanan	Development and Utilization	P,E,SC	City’s Main Road
2.	Panggung Krapyak	Hunting Facilities for Sultan	P,SC	Landmark
3.	Kampung Jageran	Military post outside Baluwerti fortress	SC	common settlement
4.	Kampung Mijen	Settlement of Royal Palace’s Clerk, assigned in the Girl’s Ward	SC	common settlement
5.	Kampung Maosan	Settlement of Royal Palace’s Clerk which task is to collect tax	SC	common settlement
6.	Kampung Gebayanan	Settlement of Royal Palace’s Clerk, which task is the secretary of Kanayakan	SC	common settlement
B. 2nd Period (1812-1855)				
7.	Kampung Mantrijeron	Relocation of Soldier’s settlement from inside Baluwerti fortress to outside	SC	common settlement

8.	Kampung Jagakaryan	Relocation of Soldier's settlement from inside Baluwerti fortress to outside	SC	common settlement
C.	3 rd Period (1855-1908)			
9.	Ndalem Pugeran + Kampung	GPH Puger's Residence, 20th son of Sultan HB VI	P, E, SC	SMA Negeri 7
10.	Ndalem Mangkukusuman	GPH Mangkukusuma's Residence, 17th son of Sultan HB VII	P, SC	SMK PIRI dan Kantor PT. Telkom STO Pugeran
11.	Ndalem Kumen-daman + Kampung	KPH Purwodiningrat's Residence, husband of GKR Kedhaton, 12th daughter of Sultan HB VII	P, E, SC	GBPH Condroidi-ningrat Residence, 14th son of Sultan HB IX
12.	Ndalem Suryodiningratan + Kampung	BPH Suryodiningrat's Residence, 24th son of Sultan HB VII	P, E, SC	SMA Stella Duce II
13.	Ndalem Brongtodiningratan	BRAY. Brongtodiningrat's Residence, 47th daughter of Sultan HB VII	P, SC	Hotel Brongto
14.	Ndalem Ngadinengaran	BPH Hadinegoro I's Residence, 13th son of Sultan HB VII	P, SC	Balai Laboratorium Kesehatan DIY
15.	Ndalem Danunegaran + Kampung	BPH Danunegoro Residence, 4th son of HB VII	P, E, SC	BPH Danunegoro's family residence
16.	Ndalem Mangundipuran	RM. Mangunpura's Residence, grandson of Sultan HB VI	P, SC	Hotel Awana / Neo +
17.	Ndalem Mangkuyudan + Kampung	KRT. Mangkuyudo's Residence, husband of BRAY. Mangkuyudo, 9th daughter of Sultan HB VII	P, E, SC	Politeknik Kesehatan
C	4 th Period (1908-1945)			
18.	Ndalem Purboseputran	KRT Purboseputro's residence, husband of BRAY. Purboseputro, 18th daughter of Sultan HB VIII	P, SC	Graduate School of ISI Yogyakarta
19.	Al Munawwir Madrasa	Development of Al Munawwir Madrasa (1911)	E,SC	Al Munawwir Madrasa
20.	Church of Hati Kudus Yesus Pugeran	Development of the Church (1934)	P, SC	Church
D.	5 th Period (1945-2012)			
21.	Gading Traditional Market	Development and utilization	E	Traditional market
22.	Prawirotan Traditional Market	Development and utilization	E	Traditional market

P= Political, E= Economy, SC= Socio Cultural

IV. CONCLUSION

Morphological transformation in the Panggung Krapyak area shows that the change process is inevitable but does not necessarily eliminate its character. Furthermore, The Panggung Krapyak area today still implies the authentic urban settlement character of the Yogyakarta Heritage City. The Panggung Krapyak transformation area showed a change from the characteristics of rural to urban settlements to adapt to the development of the sultanate during the third, and fourth periods. It was getting faster after Indonesian Independence and recently tended to disrupt the authentic character when shifting closer to the main city axis. In general, the area shows a good level of authenticity, particularly when viewed from the morphological structure of the area. The structure and the vegetation along the main city axis follow the roles of Sangkan Paraning Dumadi philosophy. The character is still well maintained even though the function has altered and the building mass's intensity has increased. The house of the nobles or Ndalem shows a physical continuity in spatial configuration, although there are various changes in its function and form. It is also still culturally sustainable as a marker of the block's toponym. The other block toponyms, apart from Ndalem, had also been used both as a cultural marker and administration boundary. Economic pressures are evident in the present time and pose challenges and threats to authenticity. Following the 2011 UNESCO recommendations, there are four important tools in the implementation of HUL, which include: 1) community participation tools; 2) knowledge and planning tools; 3) regulatory system; and 4) funding tools (Bardarin and van Oers, 2012). To anticipate the pressures, It can be managed for conservation through good HUL implementation tools, such as better regulatory tools, more thorough education and participation tools, and more flexible funding tools.

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