

Spatial Permeability in Kraton Yogyakarta, Indonesia during the HB IX-HB X Periods

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Abstract

Kraton Yogyakarta is the center of traditional Javanese culture in Yogyakarta, besides functioning as the residence of the royal family and the center of government. It was established in 1755 as a result of the decision of the Giyanti agreement, which was then led by the king with the title Sri Sultan Hamengku Buwono (HB). This hereditary leadership is still ongoing until today, which is currently led by Sri Sultan Hamengku Buwono X (HB X). The Kraton of Yogyakarta is a Javanese kingdom that still exists today. It, went through the colonial period and, the independence of the Republic of Indonesia followed by the joining of the Yogyakarta palace as part of Indonesia.

This study examines the level of permeability of the Yogyakarta palace during the reigns of HB IX and HB X. It employs case study method with a qualitative approach. This involves actors of activities as a source of interview data, in addition to historical studies through books, maps and pictures.

It reveals that the periods of both rulers, especially the HB IX period, have gone through a transitional period where the Yogyakarta palace was still under the colonialists who later joined the Republic of Indonesia. Kraton Yogyakarta as the residence of the royal family and the center of government, is officially closed and can only be accessed by people who have directly relate to the king.

According to the findings, the current conditions however are very different. People can easily access parts of the palace. The level of permeability in parts of the Kraton is different and has changed since the HB IX and currently HB X. The level of permeability is influenced by changes in the king's policy to maintain the role of the Yogyakarta palace to maintain its identity as the cultural center and residence of the royal family.

Keywords: Kraton, Culture, Permeable, Territory, Yogyakarta, Indonesia.

Introduction

The city of Yogyakarta is currently the provincial capital of the Daerah Istimewa Yogyakarta (DIY), which is located in the island of Java, one of the islands in Indonesia. The city of Yogyakarta is closely related to the city's history. According to Wihardyanto, et al. (2022), Yogyakarta was the last Islamic Mataram kingdom. Its center is a palace called Kraton

Yogyakarta which is also the forerunner of the current city of Yogyakarta (Muhamad& Ira,2020) It has been established in 1755, formed after the Giyanti or *Palih Nagari* agreement. The Giyanti Agreement is an agreement initiated by the VOC (*Vereenigde Oostindische Compagnie*) who ruled at that time to divide the two Islamic Mataram kingdoms into the Surakarta Sunanate and the Yogyakarta Sultanate. Prince Mangkubumi got half of the Islamic Mataram territory which then gave rise to a new kingdom called the Yogyakarta Sultanate or the Ngayogyakarta Hadiningrat Sultanate. Prince Mangkubumi since then has declared himself with the title of Sultan Hamengku Buwono I (HB I) (Setiawati, 2011). Since 1755, the reign of Sultan Hamengku Buwono, the designation for the king or sultan at the Kraton Yogyakarta, has been rolling. Until now, it is led by Sultan Hamengku Buwono X (HB X).

The Kraton Yogyakarta as an Islamic Mataram kingdom has a very strong identity, which still maintains the characteristics of a traditional Javanese city known as *Catur Gatra Tunggal* (Four Compartments). This means four forms of spaces that form a unity in an area Ikaputra (2014); these elements are the Kraton, the market, the square (alun-alun), and the mosque. Wihardyanto, et al. (2022) presents the position of the square as being in the city center where the mosque exists on the West. The palace is in the South and the market is located in the North of the square. *The Catur Gatra Tunggal* pattern is the center of the royal area and has been known since the Islamic Mataram kingdom which was founded in the 1500s, namely Kotagede. Prince Mangkubumi developed the *Catur Gatra Tunggal concept* by adding the *Krapyak Stage* which is located 2 km on the South side of the palace and the Pal Putih Monument which stands 1 km North of the Kraton. The two points between the white Pal monument and the Krapyak stage form an imaginary *axis* that crosses the center of the Yogyakarta city. This imaginary line makes a symbol that has a philosophical meaning (Pradnyawan, 2016).

For more than 260 years, the Kraton Yogyakarta existed through colonial and independence periods (Fig.1). Since its establishment in 1755, the Kraton of Yogyakarta was under VOC control until 1799, which was then transferred to the Dutch-French, British and lastly occupied by the Japanese for 3 years. After Japan surrendered, a moment later Indonesia announced its independence, followed by the Kraton of Yogyakarta joining the Republic of Indonesia (NKRI) on September 5, 1945.

The focus of the research is on the reigns of HB IX and HB X because, during these leadership periods, there was a transitional change from colonialism and the period after joining Indonesia to the present. HB IX was appointed King from 1939 to 1989. HB IX's power went through the Dutch and Japanese colonial periods and the period of independence in 1945. It was HB IX himself who had the Yogyakarta Kraton initiative to join the Republic of Indonesia until now. HB X was appointed as the King of Yogyakarta Kraton from 1989 until now.

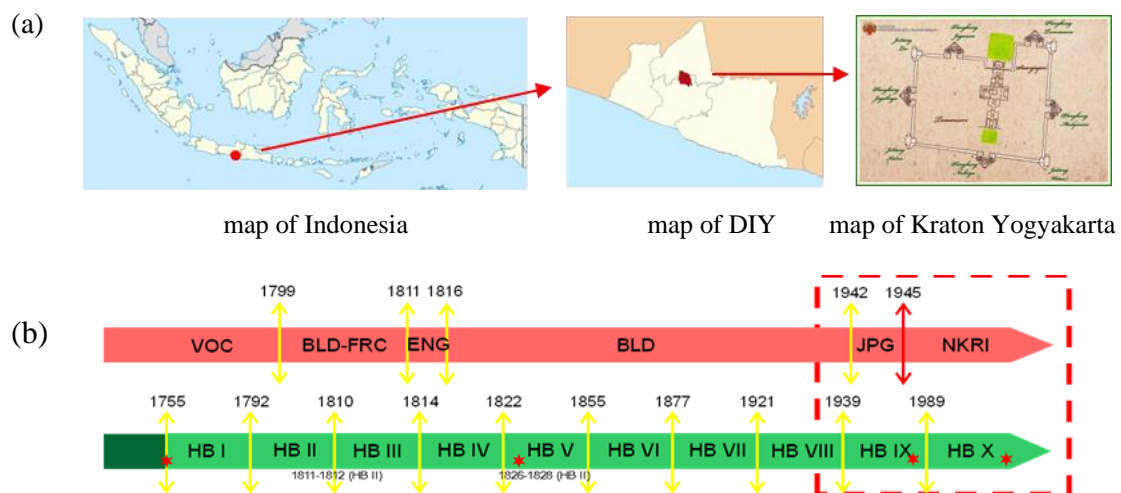


Fig. 1: Location and Timeline of the Yogyakarta Kraton Rulers

Source: (a) <https://id.wikipedia.org/>, <https://www.kratonjogja.id/> (2023)

(b) Suryanto (2015), modified by Author (2023)

Since its inception, Kraton Yogyakarta was led by a king with the title Sultan Hamengku Buwono (HB), which was initiated by HB I and currently HB X. During each reign, the King has the power to change and develop the Kraton Yogyakarta in terms of form, function and building symbols. At the beginning of the reign of HB I, according to Sektiadi (2017), the important buildings built were *Siti Hinggil*, *Bangsals Alus*, *Regol Danapratapa*, and *Gedong Prabayekso*. The HB II government changed *Bangsals Alus* which is currently called *Bangsals Kencana* and added *the Bangsals Kasatriyan*. HB VII repaired the Kraton building which was damaged during HB VI due to an earthquake. *Gedong Jene* was transformed into an Indische-style building where previously it had a traditional style. HB VII also built several new buildings such as *the Kedathon Wetan* and *Regol Manik Antaya*. The next Sultan, namely HB VIII, renovated and built new buildings such as the making of *Bangsals Mandalasanga*, the restoration of *Bangsals Witana*, and *Bangsals Manis*. In the HB IX period, construction was carried out around *Sitihinggil* and the construction of *Sitihinggil Kidul* as a meeting hall. Meanwhile, during the HB X era, the HB IX museum building was built and some of the functions of the building were changed.

As a result of changes in functions within the palace, some parts of the palace has been made accessible to the general public. However, there are still areas that are maintained to support the life of the current king, HB X. This study aims to determine how far the spatial permeability of the palace buildings is. Its objectives are: identify areas experiencing changes in function, find out areas where user activity has changed and carry out zoning related to changes in physical and visual access

Through this research, areas that are still sacred can be identified, so that the role of the palace, apart from being the residence of the royal family, also remains a center of Javanese culture that can be enjoyed by all people regardless of important values.

Theoretical Basis

According to Rossini, et al., (2018) permeability in general is the ability of a material that a liquid can pass through without changing its internal structure. Architectural knowledge disclosed according to Bently (1985) in Yavuz (2014) is that permeability is a state of an environment that allows people to choose their access from one place to another. According to Yavuz (2014), access selection can be done easily. Permeability is used as a quality determinant for urban spaces that are easily accessible, visible, and provide a variety of functions (Yavuz, 2014). The development of public spaces is a frequent need, especially in cities that are starting to get crowded. The expansion of this function can be achieved by designing pedestrian systems in urban spaces (Rossini, Roca & Harris, 2018) and having an impact on the surrounding space (Zhang, et al., 2023). The spaces that are created due to permeability give rise to interactions both visually and physically. According to Brown & Brown (2015), what is meant by visually, is that people on the street may or may not be able to see what is happening in the building and *vice versa*. According to Andrade et al. (2018), physically, people may or may not cross the boundary between public space and private space. Yavuz (2014) who studied accessibility, openness, relatedness, and visible characteristic values refers to the measure of the level of permeability. The measure of permeability is divided into two variables, namely visibility which allows people to see and accessibility allows people to pass through (Silavi et al., 2017) (Andrade et al., 2018).

The time difference allows for different levels of permeability. This can also occur during the reign of HB IX and HB X having different levels of permeability. One of these differences was influenced by the political conditions that occurred at that time. The change in permeability of the two periods of the sultan's reign was due to differences in the scope of the territorial hierarchy within the palace. The difference in the hierarchy adjusts to the leadership style of each king. Some areas are easily accessible and inaccessible due to the nature of these areas being sacred or private, and thus they cannot be penetrated flexibly (Xiaoting & Liang, 2019).

The difference in permeability levels is related to the authority of the area or building owner to limit it. It is closely related to the territory of an area. An area can be considered more

permeable if the authority role of the owner limiting the area is relatively low. Limits or territories according to Altman (1975) in McCartney & Rosenvasser (2022) have a hierarchy. The territory hierarchy according to Altman (1975) in McCartney & Rosenvasse (2022) consists of 3 levels.

Zubaidi (2019) has developed this into 4 levels, namely *Primary territory*, *Secondary Territory*, *Public territory*, and *Free territory*. An explanation of territorial levels was disclosed by McCartney & Rosenvasser (2022) while dealing with the Privacy Territories. *The primary territory* has high ownership and regulations are controlled by some or a group of people that can be felt by other people, if there is a violation of the territorial boundaries, it is considered a threat. *Secondary territory* areas can be entered by others, and space control is periodically controlled. *In public territory* areas with low ownership, other people can see and use but cannot be controlled because there are rules that are still obeyed. *Free territories* are areas of low ownership and are not owned by residents or permanent users.

All of these statements can be used to study changes in permeability physically, by observing how far the general public could access the palace during HB IX and HB X. Based on the theory above, it is also possible to examine areas that have maintained their sacredness within the palace environment, due to changes in permeability. This can be seen from the level of permeability in the Kraton. The higher the permeability, the area of the palace has a low level of territorial privacy (public).

Review of Literature

Many authors have discussed research related to the Yogyakarta Palace. This cannot be denied, because the Kraton is full of meaning, culture and customs that are never ending to be studied. The field of architecture itself has spent more than 10 years researching the entire palace and examining the use of building colors. Table 1 shows the distribution of research that has been carried out regarding the field of architecture in the Kraton area.

Table 1: Previous research related to the field of architecture in the Kraton

LOCUS : KRATON													
No	Year	Author	Mapping/ Identification	Interpretation	Culture Value	Area	Building	open space/ pedestrian	construction	light	interior	Time	
												periodic	present
1	2015	Tohar,I, et al											
2	2016	Suryono, A.											
3	2017	Widyawati,L											
4	2018	Soma,C,J, & et.al											
5	2019	Rully											
6	2019	Suhardijanto & Gumilang											
7	2019	Wijyant.A & Damanik.J											
8	2020	Suryono, A.											
9	2021	Permono, A.											
10	2021	Tohar,I. & Istijanto, S.											
11	2022	Arfianti, A.											
12	2022	Hakim, B.R., et.al											
13	2023	Supriyatna, E. & et.al											
14	2023	Widyakusum, A. & Arief,R.											
15	2023	Adianti,I & et.al											

Identify and interpret the results of findings carried out in previous research. The focus that is most researched is buildings either by mass or by a group of buildings selected by the researcher. The buildings selected based on existing research are *Bangsas Kencono* (Widyakusum, & Arief, 2023), *Bangsas Srimanganti* (Soma et al., 2018), *Sitihinggil* (Suryono, A., 2016; Supriyatna, E. & et.al, 2023) and *Bangsas Ponconiti* (Suryono, A., 2020). Meanwhile, research (Rully,2019; Wijyant & Damanik, 2019; Permono,2021; Arfianti, A.,2022) examine the entire Kraton area and then relate it to the interpretation of meaning or cultural values. Other things that are the focus of research at Kraton are related to lighting in the Alun-alun (Hakim, B.R., et al., 2022), building construction (Suryono, 2020), and interiors (style and color) of buildings (Tohar, et al., 2015; Suhardijanto & Gumilang, 2019). Existing research studies are

not influenced by differences in the king's reign or certain periods. Almost all of them conducted research at the same time or contemporaneously.

Table 2 shows research related to permeability. Research that has been carried out is identifying (Moertiningsih et al., 2020; Alabi & Abubakar, 2023) or measuring the level of permeability (Andrade et al., 2018; Dai et al.) in an area. All research examines movement outside buildings, including pedestrians and roads.

Table 2: Previous research related to Permeability

FOCUS : PERMEABILITY											
No	Year	Author	Mapping/ Identification	Interpretation	Measure	City Area/Area	Settlement	open space/ path	building	Time	
										periodic	present
1	2018	Andrade et al									
2	2020	Moertiningsih et.al									
3	2023	Dai et.al.									
4	2023	Alabi M.O & Abubakar E.O									

Based on these two tables, research related to movement in the outer space of buildings in the Kraton area has never been carried out. The research that will be carried out will not only observe movements in the same period, but compare it with other periods. So we can know changes in permeability in the Yogyakarta Palace

Research Methodology

This research uses case study methods with qualitative approach. case study based on three questions: what kind of changes in permeability, how does permeability occur, and what factors influence permeability, with a focus on the Yogyakarta Palace. Qualitative research according to Dayaratne, (2018) observes real situations and inductively breaks down problems to get findings based on observations and experiences. Data collection is divided into two groups. Past data was obtained using references to historical literature, photographs, maps, and interviews with experts. Current data is obtained by direct visits to locations, interviews, and taking image documentation through photographs.

Historical literature is an officially published historical record. It is the author's main source for obtaining data which is then visualized graphically with the help of base maps. Another support for data research is archival records in the form of maps and photos. Maps and photos are very necessary, especially to identify past activities. The selection of archival records is adjusted to the years included in the periodization. Archive recordings are obtained digitally on official sites such as libraries, travel websites that discuss the Palace. Through interviews, data was obtained on changes in the function of the Palace building, so that this data can be used to identify the perpetrators of activities based on the changed function of the space. Informants are people who work in the Palace environment. The author also made direct observations inside the Palace and participated as a tourist. According to Rossini, Roca & Harris, (2018), permeability can be observed easily through a *figure-ground map*. The results of the data obtained are outlined in the form of a map which is then used to map functions and activity access.

In Examining the permeability during HB IX and HB X, the researchers grouped them into 3 periods. Period 1, namely during the HB IX period which was still in the colonial era, period 2 is when the Yogyakarta palace joined the Republic of Indonesia, namely during the HB IX and HB X periods. The period 3 is the current condition during the HB X period. The third group apart from being based on differences in the power of the king, was also influenced by political conditions.

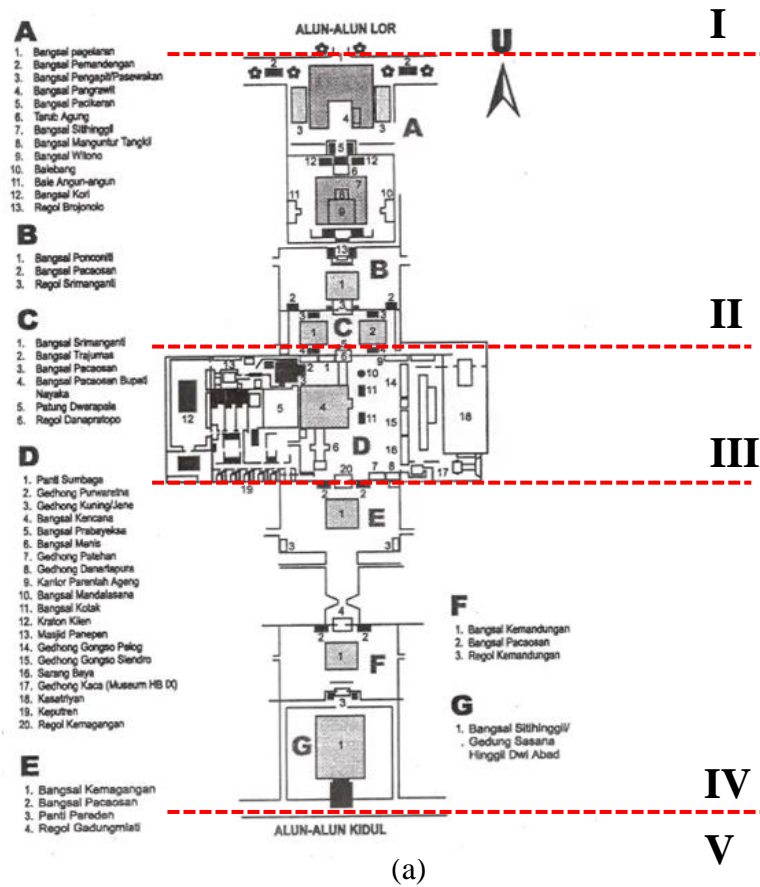
The grouping of these periods enables making maps in identifying findings. *The figure-ground map created to help mapping the changes in function* was made from the colonial period (period 1 of HB IX), the independence period (period 2 of HB IX-HB X), and current conditions (period 3 of HB X). The mapping is used to assess the permeability of the Yogyakarta palace which is then used to obtain permeability levels. The level of permeability is closely related to

the territory of an area so that it can be seen which areas have maintained their permeability or changed during the reign of HB IX - HB X.

Findings

a. Spatial Planning of the Yogyakarta Palace

Kraton Yogyakarta is the name for the Yogyakarta Sultanate palace. Currently, besides being used as the residence of the King HB X, it also functions as the center of government and culture. Hierarchically, the Kraton is composed from North to South with buildings for official, ceremonial, and state activities, while the East-West are buildings intended for the wives, sons and daughters of the king. *Gedong Proboyekso* is a meeting center for the North-South and East-West directions. The Kraton area itself is limited by the *Cepuri fort*. *Cepuri* is a fortress that separates the main building of the Kraton from the Kraton complex (Alifah, 2009).



(b)
Fig. 2: The layout and situation of the Kraton Yogyakarta
 Source: (a) Widyakusuma, and Arief (2023) modified by Author (2023)

(b) <https://www.kratonjogja.id/> (2023)

Radial concentricity is formed from the sacred hierarchical layout of the Kraton buildings. The Hindu tradition recognizes the *Purana* universe centered on the continent of *Jambudwipa* which is surrounded by seven layers of land and ocean in a linear concentric form adopted in the Kraton layout. *Gedong Prabayekso* as the core of the Kraton is a replica of Mount Mahameru where the gods reside. *Gedong Probayekso* itself is the most sacred place as well as a place to put heirlooms. The closer to the center the position of a building is, the higher its sacred level will be. *The Kedathon* as the core area of the Kraton where *Gedong Prabayekso* building is located which in Figure 2 is shown by segment III, must pass through a multi-layered doors and courtyards. The arrangement of the Kraton courtyard (Fig.2) from North-South is as follows:

- (1) North Alun-Alun,
- (2) North *Sitihinggil*,
- (3) *North Kamandhungan*,
- (4) *Srimanganti*,
- (5) *Kedhaton*,
- (6) *Kemagangan*,
- (7) *Kamandhungan Selatan*,
- (8) *Sitihinggil Selatan*, and
- (9) Alun-alun Selatan.

Each courtyard is bounded by gates, namely: (1) Pangurakan, (2) Tarub Agung, (3) Brajanala, (4) Srimanganti, (5) Danapratapa, (6) Kematangan, (7) Gadhung Mlati, (8) Kamandhungan, and (9) South Square.

The palace, which initially functioned as a residence and center of power for the king, turned into a center for the development of art, culture and tourism. The designation of the Kraton as part of UNESCO's cultural heritage in mid-September 2023, increases the attractiveness of the Kraton itself. More and more, especially tourists, are learning about the palace. Likewise, the palace will increasingly offer cultural and artistic activities to the community. Opportunities for activities that are needed and of interest to the community should not reduce the existence of the palace as a cultural center and residence of the king. The main areas of the palace that are considered sacred must still be maintained but can still provide useful information for the public. So the need for policies to maintain the spaces within the Kraton can be beneficial for the community but does not reduce its sacredness.

b. Permeable Kraton Yogyakarta

The palace's openness to the general public has had an impact on changes in the function of the buildings within the palace (Fig.3). During the colonial period or in period 1, the palace building served only as the residence of the Royal family, and the center of government where the King reigned. The residence of the Royal family is located in the middle of the palace which is called the *Kedathon area* (segment III). Formally related activities where a King runs the wheels of government, are located in the areas of *Sitihinggil-Madungan Lor-Srimanganti* (segment II) and *Kemandungan-Magangan Kidul* (segment IV). North Alun-alun (segment I) and South Alun-alun (segment V) as open spaces functioned to support activities related to the palace, although certain people can access them.

After the independence period (period 2) and Kraton Yogyakarta joining the Republic of Indonesia (period 3), several areas of the palace have changed their functions as art exhibition spaces, art performance spaces, and public open spaces. The areas that have changed the function the most were North Alun-Alun (segment I) and South (part V); *Siti hinggil - Kemadung Lor - Srimanganti* (part II) where the spaces are used to place art items and demonstrate traditional arts. The *Kedathon area* (part III) has not changed its function, because there is still a residential area for the royal family (*Kraton Kilen* and *Keputren*). Segment IV can be used by the general public, especially people who live close to the walls of the palace

for activities. As a whole, in the post-independence period, the only part that remained functional was the residential area of the Royal family and the building where the King was enthroned. The transition lasted quite a long time, but the current condition is that several areas are returned according to their function, namely the residence of the King's son (*Kasatriyan*) and North Alun-alun. This makes the two areas no longer accessible to the general public.

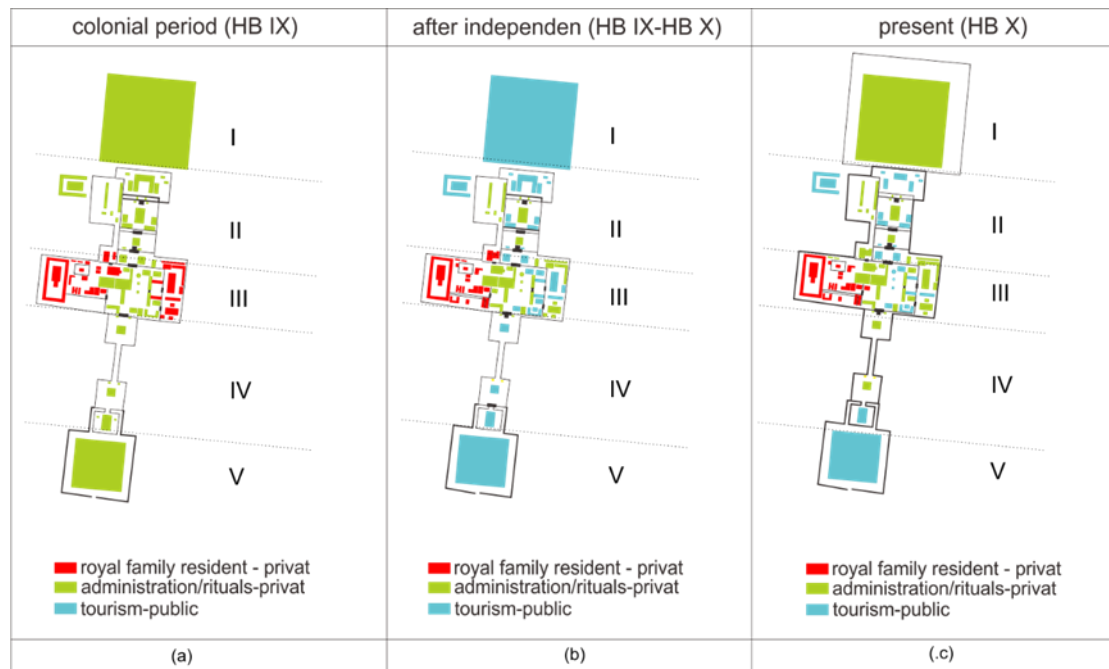


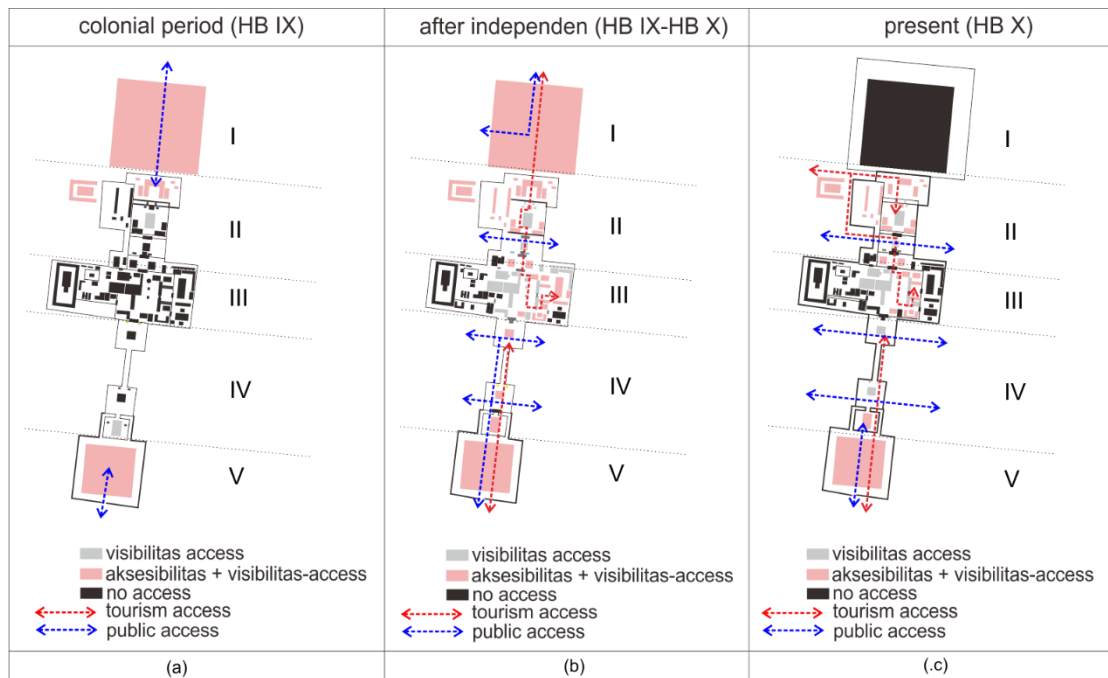
Fig. 3: Functions of the Kraton Yogyakarta building
Source: author, 2023

Changes in Functions Related to Access for the General Public and the Tourists.

During the colonial era, only authorized people could access the palace, with certain orders and regulations according to their rank and role in the palace (Fig.4). The general public could only access the North Alun-alun (segment I) and the South Alun-alun (segment V). People with special interests related to the running of the government and the life of the royal family could access segments II-IV. When led by HB IX after independence, several areas could be accessed by the general public for specific purposes, such as tourist visits or as an alternative route considering that the palace is right in the middle of the area. This is because, during the leadership of HB IX, he started to embrace the notion of modernization which accepts changes in the society. From its establishment, until HB IX was in power, the Kraton was very closed. HB IX's policy emerged to make the palace for the people by opening the palace in the form of a tourist destination and allowing residents to build houses around the palace-fortress (Moedjanto, 1994). This strengthens the palace as a reflection of the throne for the people as well as a central form of cultural heritage. Before opening up to tourism, it also functioned as a place for higher education in 1946 (Moedjanto, 1994). The thoughts and policies of HB IX were continued by his successor, namely HB X.

During the HB X period, the palace, apart from being the residence of the royal family, was also used as a place for cultural performances, tourism, and education related to Yogyakarta's traditional culture. The public could access almost all the buildings in the palace after the Republic of Indonesia's independence period. Tourists could enter and look into the palace area (segment IV), only in parts of the *Kedathon* (segment III) the royal family residence (*Kraton kilen* and *princess palace*) which are not accessible to tourists and the

general public. The area designated for the reigning King is only visually accessible (*Gedong*



Proboyekso, Bangsal Kencono, Gedhong Jene).

Fig. 4: Mapping Accessibility and Visibility of the Yogyakarta Palace
Source: Author, 2023

The North and South Alun-alun have changed their functions to become public open spaces so that the general public can move freely throughout the day. Even some of the paths inside the palace can be accessed by the community, to shorten access between the areas. Beginning in 2020, during HB X's reign, there were changes again in the palace area to limit the public and tourist access. North Alun-alun (segment I), which was previously used as a public open space, could not be used freely by the residents. Residents could only access it visually, and the square was opened when there were ritual activities that were routinely held by the palace. The *Kesatriyan* residential area located in *the Kedhaton* (segment III) was also closed to tourists. The area is used only for internal palace purposes. Segments II, IV, and V are still accessible to the general public or tourists.



Fig. 5: The atmosphere of the Yogyakarta Palace Period 1 (a) and Period 3 (b)
Source: (a) <https://sulsel.idntimes.com> (2023); (b) <https://travel.kompas.com> (2023)

Changes in permeability in the Yogyakarta palace, during the leadership of HB IX and HB X can be seen in the Fig. 6. Segment I is currently no longer permeable because it can only

be accessed physically by the internal parties of the palace. Residents are only able to access it visually. Segment I, namely the North Alun-alun during the colonial period and after the independence period can be used by the general public for activities throughout the day.

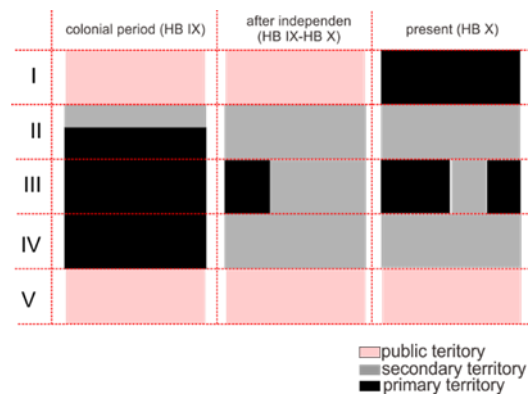


Fig. 6: Kraton Yogyakarta permeability conditions
Source: Author, 2023

Segment II *Sitihinggi-Kemandungan-Srimanganti*, during the leadership of HB IX, could be accessed by the community, especially the Sitihinggil area. Gradually, because the HB IX policy was initiated, the entire segment II could be accessed by the public. Only in the area where the king is enthroned, namely *Bangsals Witono*, the public could only access it visually. During HB X, more and more activities were carried out in this section, dance performances, and exhibitions related to historical objects belonging to the palace.

Kedathon area (segment III), which is the core center of the palace, has not been accessible to the public since the beginning, even though at this time, it is physically accessible only to a building that has changed its function as an exhibition space or a museum. The area of the kesatriyan where the princes lived, after the independence period was physically accessible to the tourists. In its current condition, the area is not accessible, it is only used for internal palace activities. The core areas and places where the king enthroned or received guests, such as *Gedong Probayekso*, *Bangsals Kencono*, *Gedong Jene*, and *Bangsals Manis*, can only be accessed visually by the public: especially tourists.

Segment IV during the colonial period was closed. After independence, together with HB IX's policy of allowing people to live outside the palace forts, this area can be accessed physically for activities or just to pass through as a shortcut. People who pass through this area as a shortcut, of course, follow local norms by not riding a vehicle or in other words *nuntun* (carrying a bicycle by pushing from the side) the vehicle.

Segment V of the South square can be freely used by the community since the reign of HB IX until the current reign of HB X. Currently, the south Alun-alun is a public open space, where people can do activities all the time.

Discussion

The Kraton Yogyakarta has experienced a change in permeability. Permeability can be assessed either in terms of visibility or accessibility. This study is also related to personal territory. In this case, the King is the owner of the Kraton's territory. The King gives freedom to the community to carry out activities such as in the South Alun-alun (segment V), making the area public and highly permeable. In contrast to the residential areas (segment III- *Kastriyan area*), during HB X, the role was returned so that it could not be accessed easily by the public, especially tourists.

The authority of the sultan who was in power as the owner of the palace, affected changes in permeability. Areas designated for the general public are called areas with a *public territory level* synonymous with high permeability because they can be accessed at all times. Unlike the area that can only be accessed by the owner (the King and his family) is an area with

the *primary territory level* or not permeable. *Secondary territory* is in areas that are physically and visually accessible or only visually accessible at certain times. The Kraton does not have an area with a *free territory level*, because the Yogyakarta Palace as a whole is owned by the King.

Changes in permeability that occurred in the palace were related to changes in political views and social influence. During the early days of HB IX's leadership, the Kraton still inherited the aristocratic mindset. The pattern where a palace is a place that is only used by the Royal family and is accessed by people who have an interest in the King with certain manners. This changed when the Yogyakarta palace joined the Republic of Indonesia. This change was motivated by the perspective of HB IX which was far ahead in addition to political and socio-cultural calculations for the nation and the state (Roem et.al, 2011). It was written in a book entitled "Takhta untuk Rakyat", that HB IX was willing to lend some parts of the palace for educational purposes apart from cultural, artistic and social interests. This point of view is also being inherited by his successor: HB X.

Kraton can continue to keep abreast of the times. Through the "Takhta untuk Rakyat", the Sultan conveyed especially since HB IX was able to adjust without leaving his footing. It is this principle of persistence that causes manners inside and outside the palace to reach a balance. The current condition of the palace which is permeable in several areas allows people to learn firsthand about traditional Javanese culture. The flexibility of changes in permeability certainly needs to be regulated, to maintain the main role and function of the Yogyakarta palace as the center of Javanese culture and the residence of the Royal family. It is the authority of the King who reigns as the owner as well as the holder of the territory to manage the Yogyakarta palace, to be more open while maintaining its identity.

Conclusions

The Kraton Yogyakarta has changed permeability, during the HB IX period during the colonial period the highly permeable areas were only the North and South Alun-alun and *Sithinggil*. After independence and the Kraton of Yogyakarta joined the Republic of Indonesia, the palace began to open up. Physical and visual permeability is almost complete in the Kraton area. Remaining in the residential area of the Royal family (*Kraton kilen-Keputren*) is inaccessible and also the area where the King is enthroned is only visually accessible. In the current conditions during the reign of HB X, several areas of the Kraton are again limited to their permeability levels. North Alun-alun, which was permeable since the HB IX period, is currently in a non-permeable condition. People are able only to access it visually. *Kasatriyan*, which in the early days of independence was accessible to tourists, currently can only be used by internal palaces.

During the leadership of HB IX and HB X, the area that was not permeable was the residential area of the Royal family. The areas associated with the inner seat of the enthroned are permeable only visually. The limitation of these areas is due to the initial function of the palace which is generally the center of Yogyakarta traditional culture, apart from specifically being the residence of the Royal family and the center of government. Based on this, HB IX, who from the beginning of his leadership has understood openness, has a policy of allowing the public to access the palace only in certain areas. The HB X period emphasized that sacred and residential areas are inaccessible or impermeable, to maintain the identity of the Yogyakarta palace.

Being able to compare three periods is an advantage of this research, and clearly shows the periodization time. This makes this research more accurate regarding changes in spatial permeability. This research has shortcomings in that it has not specifically mapped the movements of perpetrators' activities based on positions such as kings, courtiers, royal guests and even tourists. This opportunity can be used as further research to add depth to the level of permeability changes or for the topic of activity movement.

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