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# Local cultural identity representation at the Yogyakarta International Airport gate

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## ABSTRACT

Airports serve as a gateway for tourists as well as an introduction to local cultural opportunities, connecting regions, provinces, and countries. The application of local cultural aesthetic elements in airport public spaces is necessary due to conditions where the heavy influence of globalization can threaten the sustainability and the existence of local wisdom identity. This research aims to identify the potential of Javanese and Yogyakarta Cretan cultural elements, forming architectural designs and decorative elements at Yogyakarta International Airport's gates by the interior entrance access and the values contained therein. This research method uses qualitative methods with the ATUMICS theory approach to analyzing traditional elements (past culture) that can be integrated with modern features (present) in interpreting the existence of a form of local cultural identity. The results of this study suggest that the existence of local culture in the *gapura* and entrance gate in depicting micro symbols plays a significant influence. The Jogja palace feels present as it creates a feeling of place for its presence at Yogyakarta International Airport. The findings demonstrate that the object of research has an essential function in developing local identity as a symbol of archipelago architecture and as a possible magnet for introducing local culture so that it can be preserved by modernization.



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## 1. Introduction

In recent years, the Indonesian government has built several airports, including Yogyakarta International Airport (YIA) in the Special Region of Yogyakarta. Starting April 29, 2022, New Yogyakarta International Airport (YIA) in Kulon Progo regency will open international flights with the hope that it will increase community economic activities, especially nature tourism [1]. An airport is a public air transportation terminal connecting one region to another, both between provinces and countries, as a gateway for the entry of domestic and international tourists. Airports additionally serve to represent the local cultural image identity. Therefore, applying aesthetic elements that convey local culture is a potential identity for the airport's cultural image. For this reason, an identity is needed to give a strong impression of its architectural and interior character [2].

The identity in question is formed by the aesthetic elements of the local culture at YIA Kulon Progo Airport. The presence of a touch of local culture in an airport as a public space can provide a *sense of space* that represents the local cultural identity of the airport. Today's architectural and interior design advances in Indonesia show diversity, influenced by foreign architectural styles and adapted to suit the archipelago's cultural assets due to the phenomenon of fast globalization, which is to have the existence of local cultural identity. As Ivashko *et al.*, stated, if architecture is speaking with space and style, lines and planes, materials, and the atmosphere of a place, it is only natural for everyone to be architectural in a cultural way, with a conscience

and responsibility for utilizing good architectural language [3]. Here, there is an emphasis on the role of architects and spatial designers as actors in realizing their work, which must consider environmental factors and local socio-culture, which give their architectural work an identity.

Culture is the framework through which various identities, such as local identities, are formed. Each local community expresses its culture and its ability to survive through the unique way it interacts with its environment. Local wisdom is the ability to adapt, organize, and cultivate the influences of the natural world as well as other cultures, which is the driving force behind the transformation and creation of remarkable cultural diversity in Indonesia [4]. Local wisdom is closely related to tradition, which is flexible and continues to develop from generation to generation to harmonize with current life [5]. The architectural form of Indonesia reflects a strong and exceptional design tradition. The gate or *gapura* symbolizes the architectural tradition of Indonesia's Hindu-Buddhist kingdoms, and its existence is being preserved today [6]. *Gapura* has traditionally been used as a symbol of welcome or admittance into a specific area or location. As is the case with Yogyakarta International Airport. Furthermore, as a welcome symbol, it plays a vital role in giving a first impression to every guest who enters the area.

Aesthetic elements in architectural interior works are a unified form that cannot be separated and always follow current developments related to social and cultural transformation in society. Aesthetics in architectural interior design is based on design elements and principles that can be explained rationally. Historically, Aesthetics is known as a branch of philosophy. That puts forward the issue of beauty. Aesthetics in the design has an important goal to evoke feelings of pleasure and even imagination in an observer (spectator) through his visual experience of architectural work. Aesthetics encompass spectators assess many dimension related to design objects, designers and spectators. Formal aesthetics is interpreted through how the extraordinary character of the form of an architectural work or building results through the arrangement of various visual elements such as color, texture, shape and others [7].

In this case, It was mentioned that YIA airport in its research applied the principle of the concept of metabolic architecture, which allows growing according to user needs and allows changes in space and building forms based on function. Lopez *et al.*, stated that its research applies the principles of the metabolic architecture concept, which allows for development depending on user demands and changes in the area and shape of the structure dependent on its use [8]. The notion of metabolic architecture emerged quickly in Japan around the turn of the twentieth century. It combines nature and technology while keeping native Japanese knowledge in mind [9]. Likewise according to Isozaki metabolism movement in Japan, "Metabolist" ideas suggested that cellular biological growth provided a model for architecture [10]. This is also developed in the YIA airport architectural concept, which combines nature and technology where Yogyakarta's local cultural identity is applied.

According to Muktiono on his research, the gate is not only assign of the boundaries of the palace territory, but the gate has cultural messages, behavior, strata levels and in the form of the gate itself it is loaded with messages of meaning is a communication of the king's policies with his people. The gate of the palace is a representation of the existence of the power and authority of the king who ruled the kingdom at that time. The palace gate is part that is easily found by the public without having to pass through the palace's authority area and does not require permission from courtiers [11]. Pradana, in Local Wisdom in Yogyakarta, in his research, airports can become landmarks for the region because they represent life and cultural values contained in society. The Special Region of Yogyakarta, also nicknamed the city of culture, has a variety of local wisdom that can show cultural identity at an airport. From his research, results, and discussions, he can perceive that; (1) the airport is one of the media that can show the values of local wisdom of a region or area [12]; and (2) local wisdom is formed by ideologies contained in society and values of historical culture [13].

This research analyzes the application of local wisdom elements that form the architecture at airport entrance access gates and decorative elements that form Yogyakarta International Airport. By analyzing through the ATUMICS method, a work can be descriptively identified in terms of its function, form, and aesthetic value. The focus of this study is to identify the local

cultural elements that form the architecture at the airport entrance gate and the decorative elements at Yogyakarta International Airport, as well as the values inherent in those elements. This journal was established to produce enhanced ways for comprehending reading meanings and signs that form architectural designs and interior aspects in the Yogyakarta International Airport building plan, with changing objects, architectural features, and decorative theme elements that comprise the spatial environment of Yogyakarta International Airport, and analyzing the signs and meaning values associated with the airport's identity.

## 2. Method

Based on the research objectives, the research method used is qualitative with a descriptive approach. The qualitative descriptive research method is research used to examine research objects in natural conditions by collecting data by observing objects in the field, formulating, analyzing, and compiling reports based on scientific facts and symptoms [14]. The data was primarily through interviews and drawing document data obtained from PT Virama Karya BPK. Sumadiono Oong. Secondary data was obtained from the results of literature studies in books, journals, scientific proceedings, professional seminars about YIA airport, and previous research related to theory and data about YIA airport. The presentation of the analysis results in this research uses formal and informal methods. The informal method is presented in sentences and paragraphs, while the formal method uses tables [15].

This study uses the ATUMICS method approach, which comes from the abbreviation Artefact, Technique, Utility, Material, Icon, Concept, and Shape [16]. The basic principle of ATUMICS lies in its method, which aims to adapt, combine, compose, and organize a mixture of essential elements of newness and tradition. Transforming Tradition Theory is a theory developed by Adhi Nugraha to maintain traditions applied in a design context. The main principle of the ATUMICS method is about the arrangement, combination, integration, or mixture of essential elements of tradition with modernity [17].

- Artefact (A): refers to an object which is the center of this research
- Technique (T): The technique explains all types of technical knowledge, such as production techniques, and how artifacts are formed through processes, history, or other things. Which influences it. Engineering means technology, which refers to all facilities and infrastructure in realizing the use of existing potential.
- Utility (U): Utility is a functional tool for an object. Looking at the semantics, utility or function has two meanings: in the context of use and the context of products/objects. For example, in woven Purun fiber, in the context of products/objects, Purun fiber functions as a material for making traditional crafts. In the context of other uses, Purun fiber made using weaving techniques will show the item's use value level.
- Material (M): the term material refers to any physical form of things that can be made. In architecture and interiors, the definition is usually emphasized on the final result of an object/product or building (chairs, tables, doors, carvings, walls, floors, etc.).
- In this research, icon (I): icons refer to symbolic forms from nature (flora and fauna), geography, ornaments, decorations, colors, myths, people, and artifacts. The role of the icon element is to provide an iconic sign and symbolic meaning to an object.
- Concept (C): Understanding the concept refers to the factors behind the formation of an object. Concepts such as habits, norms, beliefs, characteristics, feelings, emotions, spirituality, values, ideology, and culture can be measured qualitatively.
- Shape (S): refers to an object's shape, performance, and visual and physical properties, including analyzing size and proportion.

### 3. Results and Discussion

Architecture in the form of an Entrance Gate or *gapura* in Indonesia as a historical artifact has existed since the days of the Hindu-Buddhist kingdoms. The form of gate buildings as artifacts today is temporary, semi-permanent, and permanent. A gate is a building structure that is an area's entrance or gate. Hence, the gate is often interpreted as a symbol of a gate to an area with a bright, prosperous future, fond of reaping, and success for the people who live in it. The gate can also be interpreted as a symbol of honor for visiting guests. In Arabic, the gate is called *ghafar*, which means to forgive or cover. People who enter through the gate have received security and protection from the authorities. The gate also has a philosophical meaning in Indonesian architecture. According to Leisch, the gate can become the identity of the Indonesian nation in global architecture [18]. Yogyakarta International Airport has been identified as having several entrance and exit gates that represent *Kraton* culture, namely (1) *Tandha Cihna Sasmitawalya*; (2) *Lawang Papat*; (3) *Pengkung Gading Taman Sari Gerbang Keraton*; (4) *Hastabrata*. Aesthetic Elements The adoption of elements of Yogyakarta palace culture is represented at YIA Airport through symbols of archipelago architecture as a form of communication as a hidden message with a functional meaning as a social guide and a tool for carrying out cultural hegemony. In Javanese culture, symbols are applied in movement, writing, and buildings to reflect reality. *Keraton*, the Javanese cultural features applied at YIA Airport, signify human identity by expressing who they are and what they aim to achieve.

#### 3.1. *Tandha Cihna Sasmitawalya*

The presence of native wisdom symbols becomes evident when entering the region where a YIA position marker is prominently displayed on the Rana stone wall building. This sign bears the name "Yogyakarta International Airport" in both Latin and Javanese scripts, known as *Tandha Cihna Sasmitawalya*, see Fig. 1; (1) The Rana stone building in typical Yogyakarta architecture contains the meaning of warding off danger and a fortress from bad things; (2) *Sasmitawalya* means something that brings signs of goodness and harmony.



**Fig. 1.** *Tandha Cihna Sasmitawalya* Gate (Source: Researcher Documentation 2022)

The *Tandha Cihna Sasmitawalya* Gate is a symbolic fortress that serves as a barrier between two regions [19]. The *Tandha Cihna Sasmitawalya* gate is considered to depict the splendor of Yogyakarta International Airport as a gate marking that welcomes the territorial limit of the region, with the roof resembling the Joglo Semar Tinandhu gate. However, this same gate is also familiar to us in *Ndalem Prince*, who uses the form of *Semar Tinandu* architecture. The Joglo Semar Tinandhu house is a culture that originated in the traditional Javanese region [20]. They are utilized for *regol* or royal and palace gates, such as the palace gate in Yogyakarta. Meanwhile, a *regol* carriage, according to Rianingrum, is a place to escape or enter a confined region surrounded by a fence or wall. *Regol* is a high wall with a symbolic gate that serves as a guard with physical and spiritual strength. In Javanese culture, the gate has a symbolic value because it represents the levels of the Javanese cosmology system and a guardian with physical and spiritual powers.



In this respect, the gate has a function to control the flow of people going in or out of an area [21]. As a result, the *Tandha Cihna Sasmitawalya* Gate demonstrates the identity of the Yogyakarta Palace as a sign identifying institutions and territorial boundaries in the airport area, which has a symbolic connotation, operating as a guard with physical and spiritual strength. The description explains the shape of the *Tandha Cihna Sasmitawalya* Gate. This description explains the shape of the *Tandha Cihna Sasmitawalya* Gate. Table 1 is the Transformation theory.

Table 1. ATUMICS Analysis

Element	Analysis results
Artefact (A)	<i>Gapura</i> comes from the Sanskrit word <i>Gopuram</i> , which means the gate to the city. In Arabic, it is called <i>ghafara</i> , which means to forgive or cover <i>Gapura Selamat Datang</i> is also called <i>Joglo Semar Tinandu</i>
Technique (T)	The execution of the handicraft technique necessitates the utilization of specialized equipment and the acquisition of corresponding skills to facilitate its successful implementation.
Utility (U)	The function is as a boundary marker for entering an area that functions as a welcome gate.
Material (M)	Materials are made from brick, concrete, and tile paint. Using local Indonesian materials.
Icon (I)	The icon is the Welcome Gate at YIA Airport, which gives an impression of grandeur.
Concept (C)	<i>Joglo Semar Tinandu</i> contains a combination of local cultural characteristics of Kulon Progo, Yogyakarta, and the Keraton Ngayogyakarta.
Shape	The shape of the gate is either curved or square. The resemblance of the roof to the <i>Semar Tinandhu</i> gate, the typical Keraton Yogyakarta gate roof design, conveys an air of grandeur. YIA also carries the connotation of nobility. The architectural form is supported by a symbol approximating the shape of a palanquin so that the shape of this element reinforces the identity image of local wisdom nuances in contemporary packaging.

3.2. Lawang Papat & Plengkung Gading Taman Sari Gate Palace

*Lawang Papat* is the *Kori Agung* or Main Gate entering Yogyakarta. *Lawang Papat* was inspired by the *Baluwarti* fort of the Keraton Yogyakarta with its four corner elements known as 'beteng corners' see Fig 2. In addition, the *plengkung*-shaped gates (*Plengkung Wijilan* and *Plengkung Gading*) have been Yogyakarta landmarks forever. In addition, *Plengkung* and *Baluwarti* serve as filters for *Kuthagara* (the capital) and *Kedaton*, the center or axis of Yogyakarta's life. *Lawang papat* is wrapped in a *kawung* motif, which has a graduated shape, as a symbol of growth and unity to attain a comfortable life. On the section marked *Surya Sengkala* (marker of the Gregorian year), the year Yogyakarta International Airport (YIA) was inaugurated as a reminder of the momentum of the year number, which is considered historic and must be remembered by future generations [12].

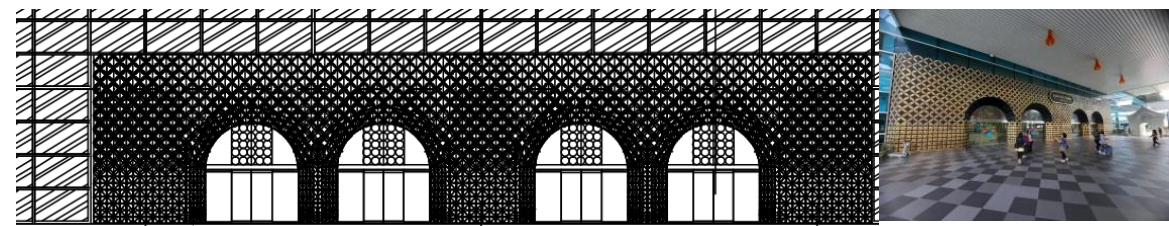


Fig. 2. Lawang Papat (Source: Viramakarya 2021 and Researcher Documentation 2022)

The *Lawang Papat* representation is implemented in the four main entrance access gates of Yogyakarta International Airport as a symbol of the entrance gate to the Yogyakarta Special Region, which consists of the city of Yogyakarta, and the four districts of Bantul, Kulon Progo, Gunung Kidul, Sleman. The existence of *Plelung Gading*, which is located on the passenger arrival terrace of Yogyakarta International Airport in Fig. 3 which functions as the entrance gate for airport passenger arrivals, shows an identity symbol such as *Plengkungan Gading*, which functions as a gate in and out of the Beteng Kraton Yogyakarta area which has a curved shape.



Fig. 3. Plengkungan Gading YIA (Source: Researcher Documentation 2022)

### 3.3. Hastabrata

*Hastabrata* talks about the principles of Javanese leadership. The word "Hastabrata" comes from the Hindu Sanskrit book, *Manawa Dharma Sastra*, which means that royal leaders act according to the character of the gods who are represented in the eight natural elements, namely earth, sun, sky, ocean, fire, wind, moon, and stars. According to Javanese (Hindu) cultural teachings, *Astagina's* teachings have color symbolism similar to the symbolism of Javanese cosmogony, namely "*Keblat papat Lima Pancer*." The colors are adjusted to the main cardinal directions, namely east, south, west, and north, producing the directions between the main winds: southeast, southwest, northwest, and northeast [22]. The concept of *kiblat papat lima pancer* and *kiblat wolu sangan pancer* are symbols of the Universe [23]. *Hastabrata* can be said to be the gate entrance to the security checkpoint at YIA Airport, which has the character of a story about Javanese leadership stories that is full of Javanese philosophy, see Fig. 4.



Fig. 4. Hastabrata [24]

The *Hastabrata* Gate in Fig. 4 represents the transformation of the characteristics of the symbol god of the *Hastabrata* teachings. These are the eight promises (*brata*) of a true leader who has eight symbols of the universe (sky, sun, wind, stars, water, fire, earth, and moon) as their harmony (*Pangestu*) [12]. Leadership in the Ngayogyakarta palace is symbolized by objects that are the palace's heirlooms called *Regalia*. *Regalia*, also called *KK Upocoro*, consists of various objects that have their own meanings, including (1) *Wujud angsa* symbolizing straightness, honesty, preparedness, and sharpness; (2) The *dhalang* in the form of a deer symbolizing intelligence and dexterity; (3) *Sawung* in the form of a rooster is a symbol of virility and a sense of responsibility; (4) *Galing* in the form of a male peacock is a symbol of glory, majesty, and beauty; (5) *Hardawalika* in the form of a snake king, a symbol of strength; (6) *Kutuk* in the form of a money box, a symbol of generosity; (7) *Kacu Mas*, a pyramid in the form of a gold handkerchief, a symbol of purity and purity; (8) *Kandhi* in the form of a *Minyak* lantern, a symbol of enlightenment; (9) *Cepuri* is a betel nut tray, *Wadhah Ses* is a cigarette box and *Kecohan* is a place to spit betel nut, a symbol of the process of making state policy decisions [25]. In this research, we try to explain the Atomics theory in Table 2 as follows.

**Table 2.** ATUMICS Analysis

Element	Analysis results
Artefact (A)	<i>Gapura</i> comes from the Sanskrit word <i>Gopuram</i> , which means the gate to the city. In Arabic, it is called <i>ghafara</i> which means to forgive or cover. <i>Lawang Papat</i> is a miniature artifact of the <i>Baluwarti Kraton</i> Yogyakarta fort. <i>Pleungkungan Gading (Regol)</i> is a miniature <i>Pleungkungan Gading</i> located south of the Jogja Palace
Technique (T)	The workmanship technique requires technological equipment and finishing touches by experts who have implementation skills that support the creation of the work.
Utility (U)	The function is to mark the boundaries of entry and exit of an area, which functions as a welcome gate, entry to areas with different zones and spatial functions. <i>Lawang Papat</i> and <i>Pleungkungan Gading</i> are the gate entrances to enter the check-in area at YIA Airport. <i>Hastabrata</i> is the Boarding Gate leading to the Security Check Point area at YIA Airport.
Material (M)	Materials are made from brick, concrete, and tile paint. Using local Indonesian materials.
Icon (I)	Icon as a Welcome Gate when entering the check-in area at YIA Airport, which gives an impression of grandeur; the icon is the presence of a representation of the <i>Keraton</i> . <i>Hastabrata</i> as an icon, a story about Javanese leadership
Concept (C)	<i>Lawang Papat</i> and <i>Pleungkungan Gading</i> conceptually present a cultural representation of the Yogyakarta palace at YIA airport. <i>Hastabrata</i> is Conceptually inspired by the story of Javanese leadership in the kingdom based on stories from the Hindu Sanskrit book.
Shape	The shape of <i>Lawang Papat</i> is a miniature of <i>Kori Agung</i> or the Main Gate entering <i>Keraton</i> Yogyakarta, which is presented at YIA <i>Lawang Papat</i> airport, inspired by the <i>Baluwarti Keraton</i> Yogyakarta fort with its four corner elements known as 'beteng corners' in modern packaging. The shape of <i>Pleungkungan Gading</i> is a miniature <i>Pleungkungan Gading</i> to the south of the <i>Keraton</i> Yogyakarta.

The application of local wisdom elements can enrich the value of history and aesthetics and become a supporter of the growth of local cultural values, a creation of human works which is a cultural artifact of the results of human civilization [26]. The results of the analysis of Table 1 and Table 2 show that the ATUMICS method can describe the aesthetic elements that form the cultural identity of the Yogyakarta palace, which are found in the YIA airport entrance gate, showing the representation of the noble cultural life of the Yogyakarta Hadiningrat palace and the Yogyakarta community environment as the airport's image identity. The identity image of an international airport is implemented from aesthetic elements that form architectural and interior spaces with local wisdom aspects inherent in both physical and non-physical forms. According to the results of the ATUMICS analysis, the entrance gates in the Yogyakarta International Airport area are classified as markers of the presence of a miniature representation of the *Pleungkungan Gading* gate, a historical heritage as the entrance to the Jeron Fort of the Keraton Yogyakarta, which is located south of the South Jogja square, see Fig. 5. The presence of the miniature Keraton Yogya, which represents the nuances of the Keraton Yogyakarta, is enhanced by the presence of the miniature *Gapura*, which has been transformed into the Gate Check-in entrance room at Yogyakarta International Airport



**Fig. 5.** *Pleungkungan Gading* (Source: Researcher Documentation 2022)

#### 4. Conclusion

The application of elements of local wisdom in the New Yogyakarta International Airport (NYIA) building represents the noble cultural life of the Yogyakarta Hadiningrat palace and the Yogyakarta community environment as the airport's image identity. The identity image of an international airport is implemented from aesthetic elements that form architectural and interior spaces with local content aspects inherent in both physical and non-physical forms. The application of aesthetic elements that contain powerful elements of local content can be felt by the iconic image of identity. The local wisdom image is represented from the moment you enter the gate of the YIA area (outside the building); the building entrance and inside the building space show the local wisdom values characteristic of the area where it is located and the space inside the airport Body Textort tells about nature, culture, materials, identity, an image of the life of the community that surrounds it according to local civilization to the history of cultural development in the era of modernity. In other words, local wisdom is formed from the ideology found in society and the cultural values of its historical development. The potential for cultural richness of local wisdom can continue to be explored and developed as inspiration for interior design and architecture practitioners to become more familiar with the potential of the local area so that the potential identity of the local cultural image becomes a symbol of the identity of the cultural richness of the airport where it is located. the existence of local culture in the *gapura* and entrance gate in depicting micro symbols plays a significant influence. Based on the above exposure, it can be concluded that the research of the city *gapura* studies using the method ATUMICS (Artefact, Technique, Utility, Material, Icon, Concept, Shape) can describe in detail and detail about an object in this case is *Gapura* at Yogyakarta International Airport, Kulon progo. From the understanding of the concept of ATUMICS that has been discussed, it can be understood the value of function, aesthetics, and the purpose of the *gapura*. The benefits of the analysis carried out is increased knowledge of *gapura* so as to be a reference for the people who arrive and enter the territory of the airport Yogyakarta International airport will find the existence of some iconic *gapura*, and aesthetic expression representing the culture of Java, Yogyakarta keraton present in the public space of airport. The Jogja palace feels present as it creates a feeling of place for its presence at Yogyakarta International Airport. The findings demonstrate that the object of research has an essential function in developing local identity as a symbol of archipelago architecture and as a possible magnet for introducing local culture so that it can be preserved by modernization.

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- Author contribution** : RC: research idea, analyzed the data, and wrote the article  
SM, YN: contribution and analyzed the data.
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