

EXHIBITION, MARKETPLACE, AND HANDICRAFT DEVELOPMENT BUILDING IN JEPARA REGENCY WITH NEO- VERNACULAR APPROACH

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Abstract.

Jepara is known as the city of woodcarving. This reputation is attributed to the success of Jepara's carved furniture products in entering the international and global markets. In addition to woodcarving crafts, Jepara also produces various other crafts. The types of crafts in Jepara are diverse, including pottery, calligraphy, furniture, metalwork, sculptures, rattan weaving, batik, and woven textiles. These various crafts are concentrated in different areas within Jepara Regency. However, in its development, the number of craft practitioners in Jepara has decreased due to the development of several industrial areas in the regency, leading people to prefer working as factory employees rather than craftsmen. Therefore, efforts need to be made to preserve the crafts in Jepara as cultural heritage and potential for improving the community's economy in the creative industry sector. In this regard, the proposed solution is to establish an Exhibition, Marketplace, and Handicraft Development Building to preserve the crafts in Jepara as cultural heritage and economic potential in the creative industry sector. The Exhibition, Marketplace, and Handicraft Development Building can serve as educational facilities and economic activities related to crafts in Jepara Regency.

Keyword : *Jepara's Craft, creative industry, cultural preservation*

INTRODUCTION

Indonesia is a country with diverse religious, ethnic, and cultural backgrounds. Each region has its own distinct characteristics or local wisdom that should be preserved as regional potential. Culture and regional potential play a significant role in the lives of communities in various regions of Indonesia, from social and community life to their economic well-being.

One of the potentials of this cultural diversity is the craftsmanship in various cultural forms, where each region has its own unique craft products. Many Indonesian craft products are in high demand both domestically and internationally, entering the global market. One of these craft products is the furniture and woodcarvings from Jepara Regency.

Jepara is known as the City of Woodcarving, renowned for its exquisite and high-quality woodcarvings that have gained international recognition since the 1960s. In addition, Jepara Regency achieved the MURI record and the world record for the largest joint wood carving in 2011, earning the title of "The World Carving Center" (Budiani, 2018). Jepara's woodcarving art is a national treasure of Indonesia, with its ornamental motifs serving as genuine Indonesian assets in the eyes of the world. To this day, Jepara's distinctive carving art continues to be recognized internationally. Furthermore, these products contribute to the country's economy as export goods, especially in Jepara Regency. "Jepara's woodcarving art serves as a pillar of the local economy and has managed to thrive until now. Not only that, with the continued growth of the carving industry, it positively impacts various sectors, including trade, hotels, and restaurants" (Hadi Priyanto, "Preserving Jepara's Woodcarving," *Suara Merdeka*, 24/5/2014).

In addition to furniture and woodcarvings, Jepara also produces various crafts made from different materials, such as clay, metal, rattan, and textiles. These crafts include pottery, metalwork, rattan weaving, batik, and woven textiles. These crafts are cultural assets that significantly contribute to the local economy in Jepara Regency.

However, with the passage of time, the number of craftsmen and craft entrepreneurs in Jepara has decreased. The interest of the community and younger generations in preserving this cultural heritage has declined, to the point that people are becoming unfamiliar with these craft works.

Therefore, efforts are needed to promote and develop local crafts in Jepara Regency, enabling them to thrive and compete globally in the creative industry. Moreover, these efforts can serve as means of education and socialization for the general public, introducing them to the local craft works that represent the cultural heritage of Jepara Regency. The facilities that can accommodate these activities include an Exhibition, Marketplace, and Handicraft Development Building.

MATERIAL AND METHODS

The method employed in this Final Project is descriptive research. This method involves presenting and elaborating on the design requirements and regulations for the planning and design of an Exhibition, Marketplace, and Handicraft Development Building in Jepara Regency, using a Neo- Vernacular design approach. The collected data will then be analyzed to draw conclusions regarding the design and limitations of the planning and design process for the mentioned facilities, using the Neo-Vernacular approach.

The conclusions derived from the analysis will form the fundamental concept for the planning and design of the Exhibition, Marketplace, and Handicraft Development Building, in accordance with applicable regulations and guidelines, employing the Neo-Vernacular approach.

The data used for the preparation of this Final Project include :

1. Primary Data
 - a. Field observation
Conducted through direct observations in the planning and design area.
 - b. Interview
Conducted by gathering information from the general public and relevant stakeholders involved in the planning and design process.

2. Secondary Data

Literature review conducted through written sources such as books and journals regarding the planning and design of the Exhibition, Marketplace, and Handicraft Development Building. Additionally, relevant regulations pertaining to case studies on the planning and design process were also examined.

CONCEPT

Definition of Exhibition, Marketplace, and Handicraft Development Building in Jepara Regency with Neo-Vernacular Approach

The Exhibition, Marketplace, and Handicraft Development Building are facilities in the form of buildings that aim to promote and develop craft works, enabling them to thrive and compete globally in the creative industry sector. Moreover, these facilities serve as means of education and socialization for the general public, introducing them to local craft works that represent the cultural heritage of Jepara Regency.

Function of Exhibition, Marketplace, and Handicraft Development Building in Jepara Regency with Neo-Vernacular Approach

1. As an exhibition space to showcase craft works (Exhibition Space).
2. As a workshop area for creating craft works (Workshop Space).
3. To collect all the craft works.
4. To preserve the craft works.
5. To serve as a promotional and trading venue for craft works.
6. To function as an e-commerce office for online buying and selling operations.
7. To serve as a gathering place for artists or craft artisans.
8. As a means of educating the community.
9. As a means of enhancing the economic well-being of the community.

Space Requirements

The design of the Exhibition, Marketplace, and Handicraft Development Building in Jepara Regency will naturally encompass spaces that are utilized to fulfill primary functions, as well as supporting and service areas. The spaces that accommodate the main activities include exhibition galleries and workshops.

Gallery and Exhibition Space

According to Swastika Poppy Sari (2011), the most important component of a gallery is the exhibition space. In the process of designing an exhibition space, special attention is needed because it serves as the heart of the gallery/art gallery. Art galleries pay attention to the exhibition wall surfaces. Art exhibition spaces have different architectural typologies, lighting qualities, spatial relationships, finishes, and materials that can accommodate artworks of any nature and scale. The key to running an active exhibition program is to encourage change and enhance existing facilities. Art galleries can range from small room-like spaces to large halls or auditoriums.

a). Requirements of Exhibition Space

In designing an exhibition space, spatial planning refers to the organization of elements such as the audience, artworks, supporting art objects, and room accessories with the aim of creating a space that is easily accessible and comfortable for the interaction process. Exhibition spaces must meet several requirements, including ensuring that the displayed or exposed objects are fully protected from damage, theft, and fire. The following are principles of display space design :

- 1). Space Design and Visitor Circulation

According to technical concepts, space is divided into two categories: external and internal space, and each space requires special treatment, especially its interior. Art galleries/exhibition spaces should have a clean and organized environment. When handling the interior space, the room area, walls, ceilings, floors, doors, and windows should be considered. Generally, the minimum wall height in an art gallery/exhibition space is 3.7 meters, but due to the flexibility of art exhibitions, the required height may extend up to 6 meters to accommodate the ceiling. Some considerations to keep in mind when planning an exhibition space include : ✓ Aesthetic Placement.

- ✓ The relationship between artworks involves maintaining distance and seeking distinctive connections, such as in terms of artistic movements, styles, color compositions, and other conceptual elements.
- ✓ Text writing and label placement (labeling) involve providing information about the artwork, such as its size, title, artist, and other relevant detail.
- ✓ The intensity of awareness regarding the materials used in artworks.

In addition to those aspects, there are other methods that can be used in the arrangement of large-scale spaces, such as mapping or surveying. Mapping methods are based on features related to visitor circulation. The space also requires other facilities such as temporary panels or walls, so that there is no leftover space.

The determination of circulation is also influenced by the information intended to be conveyed within the space. In an art gallery, circulation should support the information being presented, allowing visitors to understand and appreciate the displayed artworks. Additionally, the relationship between space and its functions needs to be considered.

Exhibition circulation should be carefully planned to avoid confusion and visitor boredom. According to Gardner (1960), some forms of circulation in exhibition spaces include :

✓ **Controlled circulation**

Controlled circulation aims to ensure that every visitor can see and observe all the exhibited items in accordance with the concept of the exhibition space. Visitors are not given the freedom to determine their own direction of movement but instead follow the predetermined circulation path based on the arrangement of the displayed objects.

✓ **Uncontrolled circulation**

Uncontrollable circulation is circulation that gives visitors the option of movement. The main thing is to give freedom to walk around in the exhibition hall but still maintain an orderly pattern.

There are two kinds of display systems used, namely display systems for two-dimensional works :

- The hanging display system utilizes adjustable wire cables that can be positioned at different heights on the wall. The wires are attached to rails mounted on the wall, allowing for flexibility in adjusting their positions according to the specific needs of the artworks.
- Using easily movable panels is another option. The panels can be made of MDF (Medium-Density Fiberboard) or other suitable materials that meet modular requirements.
- Using axis adjustment for artworks is a method of adapting the artwork's dimensions to the mounting surface.

Here is the display system for three-dimensional artworks :

- The use of bases for three-dimensional artworks made from plywood or MDF (Medium-Density Fiberboard) allows for dynamic shaping and easy repositioning according to the specific requirements.
- For larger artworks, a psychological boundary such as a floor adhesive can be used to surround the three-dimensional artwork.
- For hanging artworks, lightweight steel hooks with a pulley system can be used, which are positioned at the corners of the exhibition space's ceiling.

2). Material

Material is the object (artwork) that is exhibited. Understanding the artwork is crucial for the knowledge of interior designers, especially the knowledge about the exhibited artworks, as artworks

can encompass ideas, documentation science, and color concepts. Therefore, interior designers must consider principles such as :

- ✓ Shape (dimension)
- ✓ Kind (fine art or applied art)
- ✓ Function (personal, social, and physical)
- ✓ Media (tools, materials, and techniques)
- ✓ Design (composition)
- ✓ Theme (contents)
- ✓ Style
- ✓ Flow
- ✓ Material size

The role of a curator becomes highly important in the selection and execution of technical concepts. When organizing the material of artworks, managing the distance between each artwork and the audience is a significant task, and it is necessary to consider the appropriate quantity of artworks, meaning neither too many nor too few. The arrangement of artworks is also closely tied to the grouping of presented pieces, which can be classified according to style, movement, theme, subject, color, or anything that creates a distinct ambiance.

3). Labeling

The preparations or markings in gallery exhibitions are as follows :

- ✓ Standardizing label.
- ✓ The price of each artwork is indicated on its label, and all prices are listed in the price list prepared by the Exhibition Organizer Committee.

4). Lighting

Light plays a significant role in galleries/exhibition halls. Captivating lighting of exhibited artworks adds value and enhances their attractiveness. The light captured by the human visual system falls within the wavelength range of 400-700 nanometers (nm), commonly known as visible light, while light with wavelengths below 400 nm is referred to as ultraviolet rays, and light above 700 nm is infrared light. Artwork damage is caused by three types of light: ultraviolet rays and visible light can induce chemical structural changes in a substance, while infrared light can increase temperatures and result in a burning effect.

The common types of light in galleries are ultraviolet rays and visible light from natural sources such as sunlight and artificial sources like neon lights, incandescent bulbs, or halogen lamps. Artificial lighting is used to illuminate the exhibitions, while sunlight does not directly hit the displayed artworks in the gallery. Damage caused by light is influenced by the following factors :

- ✓ The presence of a certain amount of ultraviolet (UV) light in light sources, often referred to as UV value, measured in microwatts per lumen (W/lumen). This value depends on the amount of light used. The highest UV value comes from sunlight and daylight. Among artificial lights, halogen and fluorescent lamps have moderate UV values, while incandescent bulbs have almost no UV content in their light. International recommendations for sensitive collections, such as paintings and dyes, suggest keeping the UV value below 75 microwatts/lumen.
- ✓ The value of light illumination intensity, which indicates the brightness of the light that reaches the collection. This value is expressed in lux (lumen/cm²). The higher the light intensity, the higher the lux value. As a comparison, 10 lux is equivalent to the light of one candle. Highly sensitive collections like textiles are recommended to be kept below 50 lux, while less sensitive collections like oil paintings and ivory are recommended to stay below 200 lux. Based on the sensitivity of the collections to light, there are three groups of collections :
 - Highly sensitive collections include textiles, paper, watercolor paintings, and color photographs. Their light sensitivity level is 50 lux for 3000 exhibition hours per year or 150 lux for 250 hours per year.

- Sensitive collections include oil paintings, black and white photographs, bones, and wood. Their light sensitivity level is 200 lux for 3000 exhibition hours per year.
- Less sensitive collections include stones, metals, glass, and ceramics. These types of collections are resistant to light.
- ✓ The cumulative duration of light exposure can accelerate the occurrence of damage to exhibited artworks. The more frequently a collection is exposed to light and the higher the intensity of light that reaches the collection, the faster the deterioration of the artwork can occur.

Extreme temperature changes require special attention, as in the case of exhibition galleries. The following factors need to be considered when arranging lighting in a room :

- ✓ Direct the light towards the objects, unless in specific cases where the light is focused on the floor or walls.
- ✓ Direct the light towards the objects, unless in specific cases where the light is focused on the floor or walls.
- ✓ If possible, achieve cross lighting from the left and right or from the front to create a sense of depth and enhance the three-dimensional form of the object.
- ✓ Adjust the lighting to avoid dazzling the viewers' eyes. In the exterior area, lighting and the space itself can be utilized to create dramatic effects and provide a grand impression in the gallery.

5). Temperature

A lower temperature is more suitable for exhibited artworks, around 20°C to 21°C. Some galleries/art galleries allow for slow transitional changes in temperature and humidity settings, tolerating temperature fluctuations more than air humidity fluctuations, thus requiring temperature adjustments more than relative humidity adjustments.

6). Standard Humidity Levels

Art materials are specially formed and sensitive to changes in humidity, so stable air humidity is needed in exhibition spaces. The recommended air humidity for stability is 50% RH (relative humidity) annually. 50% is a high standard, and it requires maintenance to reduce or avoid excessive air volume leakage.

7). HVAC System Arrangement

Flexibility is highly recommended when designing exhibition galleries, considering the possibility of future expansions and facility additions. The spaces and locations requiring HVAC systems should be considered before the design process. The location of the air conditioning also influences the design. The air supply should be far from the loading/unloading areas, roads, restaurant exhausts, building exhausts, equipment and chemical exhausts, as well as construction pipe exhausts. The HVAC system should have backup power capacity to operate in case of power failure.

8). Exterior Coating

Building materials, walls, and roofs should be heat-resistant. The exterior walls, roof, and floor should be protected from moisture. Windows and skylights should be able to block ultraviolet and infrared rays and have poor photoelectric barriers, so the sunlight entering each exhibition gallery space is good natural light. Operable windows should be used, and areas without exhibited artworks should have ample natural light.

Definition of Neo-Vernacular Architecture

A. Definition of Neo-Vernacular Architecture

Arsitektur Neo Vernakular adalah arsitektur dengan konsep yang diadaptasi dari arsitektur vernakular menjadi konsep baru yang dipengaruhi kehidupan masyarakat setempat, ketersediaan material lokal, perkembangan zaman, dan perkembangan teknologi industri.

B. Application of Neo-Vernacular Architecture

1. Building Facade

The building facade should be recognizable to the community as a structure that embraces the local architectural identity while presenting a modernized form of traditional architecture. In this regard, the fundamental roof shape of a "joglo" is chosen for this building as it is a familiar feature to the community, representing the local architectural identity.

2. Space Circulation

In the circulation of exhibition spaces, the application of flexible carved motifs creates a relaxed and continuous flow throughout.

3. Mass Proportion

The composition of the building's masses draws inspiration from the proportions of a temple, consisting of a head, body, and base.

4. Local Material

The use of local materials includes brick cladding for the building walls and synthetic rattan weaving as sun shading elements for the structure.

PLANNING LOCATION



FIGURE 1. Site Location

The location of Site 3 is situated at Jl. Ratu Kalinyamat, Krapyak Village, Tahunan District, Jepara Regency, Central Java. The provided data is as follows :

1) Existing Site Conditions

Site Area	: 1.6404 hectares
Building Coverage Ratio (KDB)	: 80%
Floor Area Ratio (KLB)	: 3.2
Building Setback Line (GSB)	: 30 meters from the road axis
Road Width	: 8 meters

2) Site Boundaries

- North : Commercial and Residential Buildings
East : Furniture Store
South : Empty Land
West : Empty Land

PLANNING APPROACH

Functional Approach

The Planning of the Exhibition Building, Marketplace, and Craft Development in Jepara Regency has several objectives, including :

- Showcasing and marketing craft products to the general public.
- Providing educational and training facilities for the general public, especially students, as a platform to learn about the local crafts from Jepara Regency.
- Serving as an online buying and selling platform by providing a marketplace facility.

Contextual Approach

The site condition is characterized by undulating terrain. In response to this condition, the building design aims to achieve the following :

- The building mass will be shaped and positioned to adapt to the contours of the site in order to achieve an ideal functional and structural building mass.
- Vehicle circulation will be organized along the existing contour lines to ensure comfortable movement for users.

Architecture Approach

- The form and facade of the craft building, marketplace, and craft development center draw inspiration from the local vernacular architecture, particularly the saddle-shaped roof design found in surrounding buildings.
- The building orientation is directed towards the main road, taking into consideration the contextual environment and responding to the existing site conditions.
- The materials used align with the neo-vernacular concept, which involves utilizing local materials combined with new materials to represent updated vernacular values or local identity.

DESIGN RESULT

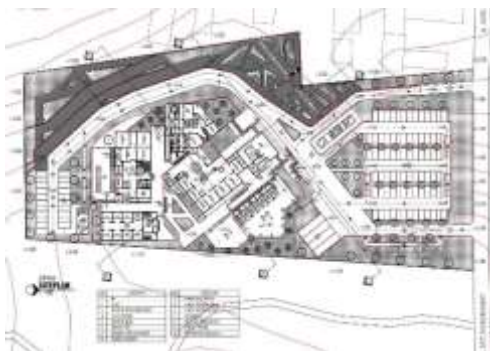


FIGURE 2. Site Plan



FIGURE 3. Top View



FIGURE 4. *Section*



FIGURE 5. *Building View*



FIGURE 6. *Park Area*



FIGURE 7. *Facade*



FIGURE 8. *Pool*



FIGURE 9. *Foodcourt*



FIGURE 10. *Exhibition Room*



FIGURE 11. *Workshop Room*

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