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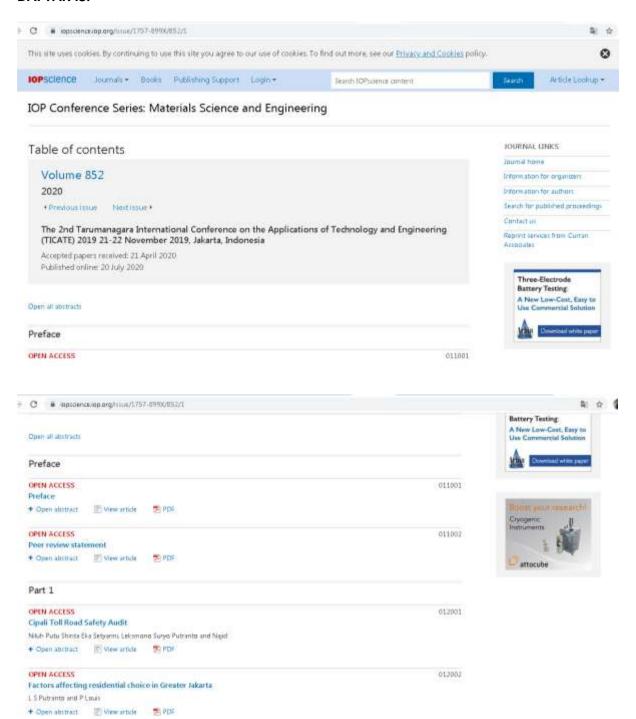
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To cite this article: Hartini et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 852 012145

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2nd TICATE 2019 IOP Publishing

IOP Conf. Series: Materials Science and Engineering 852 (2020) 012145 doi:10.1088/1757-899X/852/1/012145

Interior Design Of Postgraduate Library Based On Cyber Technology By Applying Javanese Cultural Ornaments And Eco-Friendly Materials

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Abstract. Developing a library interior fitting one of the goals is to facilitate visitors who are looking for books to be the more comfortable, more organized of space, to provide visitor infrastructure facilities and to preserve Javanese cultural ornaments through transformation into the interior. The interior library is designed to improve visitor quality, improve visitor interiors, build cultural architectural interiors, this paper supports the development of designs for sustainability (DfS) eco-friendly and fosters the empathic role of designers. Proposed design research methods on positive design. This article is based on data obtained using various qualitative research techniques, analysis of Javanese culture ornaments and interviews of Javanese cultural experts. This research presents an exploration of library interior design with Javanese art ornaments that have developed decoration design and interior design in Java. This

Javanese art ornaments that have developed decoration design and interior design in Java. This proves the tradition of dominant styles such as transforming forms, colors, and philosophies for aesthetic approval in the postgraduate library interior. The design process to create the space depicted - visual representation, reconciling the shape of the layout of images, the appearance of pieces and perspectives of space, based on cyber technology obtained through the incorporation of the philosophy of Javanese cultural ornaments, as a cultural storehouse. The article explains the interior design by applying the results of regional culture must continue to innovate in order to support and develop the community towards awareness of cultural preservation that has high artistic value.

Keywords: Interior design, cyber technology, Javanese ornaments, eco-friendly

1. Introduction

Library as a support for learning in a college and university, trying to create an inclusive design pedagogy, which can apply regional cultural ornaments containing traditional philosophies in Central Java. Lack of exposure to regional cultural aesthetics into architectural interiors results in a lack of recognition of the richness of cultural products. Young designers who continue the continuity of all the results of different cultures, need to be given understanding and awareness to preserve them through architectural works or interior design. Javanese cultural ornaments are one of the biggest cultural products in Indonesia. The application of Javanese decoration is often found in the form of architecture of houses along the island of Java. The form of Javanese ornaments is very easy to apply using various building materials, such as wood, ceramics, plastic, acrylic, stainless steel, rubber, etc.

The research was carried out with a design process with methods focused on functions and positive designs. Environmentally friendly interior materials are developed on interior elements, especially on partition walls or room decorations. Javanese ornaments developed for interior elements made from used wood containers after finishing will give a beautiful natural impression, library visitors can enjoy the natural atmosphere created. Javanese Ornament Design in postgraduate library can introduce and preserve Javanese culture to the wider community. The meaning contained in

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2nd TICATE 2019 IOP Publishing

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Javanese decoration has a meaning that is closely related to the culture and customs of Javanese society. The application of Javanese ornaments needs to pay attention to the meaning and philosophy of its decoration

The need to innovate in the interior design of public facility buildings to introduce the wealth of Indonesian people to remain alive and sustainable. Environmentally friendly materials for sustainable design "green design" need to get the important attention of designers so that the environment is maintained. Current trends in the design process suggest access to computers, cyber technology, and cyber-capable resources that can be utilized to improve skills in interior design, to support design requirements, including data collection processes, design analysis, information management, creativity, problem solving, and design development. It uses technology, including a sketchbook, 2D or 3D programs.

2. Review of literature

One of the biggest tribes in Indonesia is the Javanese. Judging from its demography, this tribe inhabits the central and eastern regions of Java. As a large tribe, of course, the Javanese also have a large culture, have been used for generations, and are still found today. The results of Javanese culture are closely related to the philosophy of life, especially with what is taught by Sunan Kalijogo. In preaching activities, Sunan Kalijogo often uses the Javanese traditional approach. One of the beautiful and most famous cultural heritages of Indonesia is the variety of ornamental ornaments. The variety of ornaments as a legacy of the traditional archipelago comes with a wide variety of varieties. Each region can be said to have unique motifs and their respective meanings. Javanese cultural ornaments can be seen in table 1 below. [1], [2], [3].

Table 1: Javanese cultural ornaments and their philosophies

Javanese Ornament Ornament form Philosophical Meaning



Table	1: Javanese	cultural	ornamente	and t	hair nh	ilocophiac
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Javanese Ornament Ornament form Philosophical Meaning Gunungan The symbol of the universe and culminating in the symbol Ornamens of grandeur and oneness. Banaspati/ Kala/ Decorative shapes in the form of ghost or giant faces. Kemamang Usually placed at the front of the building Sido Mukti A symbol of hope that is beautiful and high, happiness, Omamens power, respect, no shortage, just and humane Sido Mulyo With prayer and diligent effort and patience and perseverance, all difficulties will be overcome and they will Ornamens remain or be (Sido) blessed with glory Sido Luhur Describe high position and throne, hope for high status and Ornamens rank, noble and respected by many people like a leader or Ornaments in the form of stems, fruits, leaves are rotated. Lung-Lungan Ornamens This ornamentation symbolizes fertility for life on earth Flora Surakarta Description of the nature and behavior of the people of Ornamens Solo who are gentle, compassionate and mutual cooperation 2nd TICATE 2019 IOP Publishing IOP Conf. Series: Materials Science and Engineering 852 (2020) 012145 doi:10.1088/1757-899X/852/1/012145 Kawung Ornamens It symbolizes the four cardinal directions as the axis of Moral teachings to guide humans towards nobleness Sekar Jagat Ornamens Mega Mendung The meaning of this motive is that every human being must Ornamens be able to reduce anger or emotions in any situation and condition The process of coloring this ornament uses natural dyes Sogan Ornamens taken from the trunk of a soga tree (Peltophorum pterocarpum). Identical to the Javanese court, Ngayogyakarta Hadiningrat (Yogya) and Surakarta Hadiningrat (Solo) Jepara Ornamens Symbolizes patience, strength and openness Putik Bunga Symbolizes fertility, ease and purity Ornamens Surya Wilwatikta Gives physical or magical strength, as well as victory Ornamens Bunga Cengkeh Tips for Many charity after getting a lot of profit Ornamens

Symbolizing the specificity of practicing religion will be

physically and spiritually strong and radiating light to the

Surva Wilwatikta 8

cinar Ornamano

Bunga Cengkeh Ornamens

Surya Wilwatikta 8 sinar Ornamens

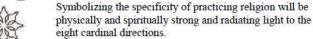


Garuda Ornamens

Parang Ornamens



Tips for Many charity after getting a lot of profit



Illustrates raindrops starting from the top edge or "tritis" that sparkles reflecting sunlight.

Crown symbol, power, virility, mighty, have a position

Crown symbol, power, virility, mighty, have a position

In accordance with the demands of the times, the need for Green Interior is increasing. This happens because through the Green Interior a healthy environment will be created which will have an impact on productivity and creativity for the occupants of the building. With the development of environmentally friendly technologies and innovations, designers will be required to complete and use environmentally friendly products. The concept of environmentally friendly materials has the following criteria: (1). non-toxic, (2). does not produce substances that are harmful to the environment. (3). can be obtained easily and close (does not require costs or a difficult process, save fuel energy, (4). can be decomposed easily naturally, (5). contains the principle of Renewable, Reuse, Recycle, & Reduce. [4], [5].

Design thinking is a paradigm for solving problems; especially open engineering problems [6]. [7] The design process is a process for creating something new. Cyber technology helps designers in improving solving design challenges and building knowledge, improving design solutions and improving design skills.

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3. Method

This multi-method research method is a qualitative method through the design process [8], [9] and refers to positive design. The design process by analyzing the application of motifs Javanese cultural ornaments is described in a positive design [10]. Post-graduate library interior design that is useful for personal satisfaction at this time, for the satisfaction of the general public, in the long run, a design that invites others to be virtuous by introducing or preserving Javanese culture, as well as designs that care about the environment.

4. Result and discussion

The results of post-graduate library interior design by utilizing cyber technology can improve design skills, this allows results to be completed more quickly, more precisely in the measurement of spatial dimensions and more accurately implemented. Environmentally friendly or 'eco friendly' material in the form of used wood from Belanda Teak containers after going through the finishing process can be utilized. Belanda teak wood with characteristics; smooth texture, attractive fiber motif, clean wood color, strong wood character. Eco-friendly and the use of materials that are not used need to be continuously recommended to designers. High-value regional cultural products are developed for the application of social interiors in order to continue to be preserved and introduced to the wider community so they are not extinct.

4.1. The results of the post-graduate library lobby interior design

The results of the post-graduate library lobby interior design based on cyber media technology that applies Javanese cultural ornaments. The programmatic concept formed the theme of eco-friendly and authentic design space with the transformation of Javanese culture. Javanese cultural ornaments are implemented for decorative elements while eco-friendly materials include the use of rattan and used wood containers. Eco-friendly is a design that uses environmentally friendly materials such as used wood, rattan, bamboo, and natural stones. In the lobby seating area uses eco-friendly material partitions, which are a combination of rattan and used wood containers. Programmatic concepts or

wood containers. Eco-friendly is a design that uses environmentally friendly materials such as used wood, rattan, bamboo, and natural stones. In the lobby seating area uses eco-friendly material partitions, which are a combination of rattan and used wood containers. Programmatic concepts or design guidelines can be seen in figure 1 below.





Figure 1: Interior design guidelines for post-graduate library lobby space

The Furniture layout design was developed with a dynamic atmosphere, the application of curvature in the layout reflects the dynamism. Adequate circulation distance makes library visitors feel comfortable. Media design using cyber technology with 2D programs and sketchbook, this makes the design results become faster, more precise and accurate. Data collection and data storage also uses cyber media technology so that the design process is faster, more accurate and easily distributed in solving design problems. Furniture layout design and the appearance of postgraduate library lobby building can be seen in Figure 2 below. The concept of material used with used wood containers and some combined with rattan. The concept of material wood from a long box or called a wooden pallet and belongs to the type of Belanda teak wood. The used wood container material has great use after it is no longer used as a container and its initial needs. The concept of sustainability or eco-friendly is applied in this design.

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IOP Conf. Series: Materials Science and Engineering 852 (2020) 012145 doi:10.1088/1757-899X/852/1/012145





Figure 2: Lobby plan and a cut in the post-graduate library with 2D cyber media and sketchbook

The perspective of the post-graduate library lobby room is an attempt to provide communication to other parties in presenting a picture of the results of the design. Javanese cultural ornaments apply the Sidoluhur, and Kawung motifs. Sidoluhur ornaments are applied to the partition in the library lobby sitting area. The combination of Sidoluhur and Kawung ornament motifs was also applied to the lobby receptionist backdrop. The application of Javanese Sidoluhur cultural ornament is intended that the function of the library can make visitors who come get high glory, with the increasing amount of knowledge learned.







Figure 3: Lobbying perspective in the post-graduate library with cyber media sketchbook program
(a) Javanese cultural ornaments Sidoluhur motifs (b) and (c) ornaments

Javanese culture of Kawung motifs

4.2. Interior design results for reading post-graduate libraries

The results of the interior design of the reading room and the collection of post-graduate library books by using cyber media technology that applies Javanese cultural ornaments. The programmatic concept formed the theme of eco-friendly and authentic design space with the transformation of Javanese culture. Javanese cultural ornaments are implemented for the partition element while eco-friendly materials include the use of rattan and used wood containers. The reading room and book collection use eco-friendly material partitions, which are a combination of rattan and used wood containers. The programmatic concept can be seen in figure 4 below. The aesthetic concept by applying Javanese Parang ornaments and Kawung ornaments.

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Figure 4 : Interior design guidelines for library reading rooms and book collections

Post-graduate library

Reading room furniture layout designs and book collections were developed with a dynamic atmosphere forming a quarter circle, the application of curvature in the layout reflects the dynamism. Sufficient circulation distance makes visitors comfortable reading the library. Media design using cyber technology with 2D programs and sketchbook, this makes the design results become faster, more precise and accurate. Data collection and data storage also uses cyber media technology so that the design process is faster, precise, accurate and easy to distribute in solving design problems. The furniture layout design and the visible pieces of the reading room building and postgraduate library book collection can be seen in figure 5 below. The concept of materials with used wood containers and some combined with rattan. The concept of used Belanda teak wood material is quite strong, solid, needs to be shaved finishing so that the wood motif appears. The used wood container material has great use after it is no longer used as a container and its initial needs. The concept of sustainability or eco-friendly is applied in this design.







Figure 5: Library reading room and book collection, visible pieces in the post-graduate library with 2D cyber media and sketchbook

The perspective of the reading room and the post-graduate library collection room is an effort to provide communication and present the results of creativity, problem solving in conveying the picture of the design results. Javanese cultural ornaments apply the Parang and Kawung motifs. Machete ornament is applied to the wall in the library book collection area. The combination of Parang and Kawung ornament motifs is also applied to the reading area and book collection. The application of Javanese Parang culture is meant that humans should never stop learning to seek knowledge, such as waves in the ocean that never tire of moving. Kawung's ornaments in the reading area and collection of books carry the philosophical meaning that seeking knowledge can be from anywhere and at any time of his life. The perspective design of the reading room and collection of postgraduate library books can be seen in figure 6 below.

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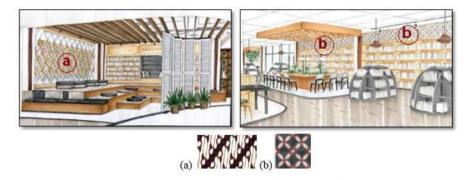


Figure 6: Reading area and book collection perspective in the post graduate library with cyber media sketchbook program applying Javanese culture on the wall (a) Ornaments Javanese culture of Parang motifs, (b) Javanese culture ornament of Kawung motifs

5. Conclusion

The Postgraduate Library Interior Design is an attempt to improve functionality, value and solve design problems as a reading facility for users. Cyber technology in the design process improves the designer's skills because designs are completed faster, design drawings are more precise and accurate. The positive design produces work that is useful for individual users, the wider community, both now and in the long run. Positive design by displaying regional cultural ornaments also preserves the wealth of a nation. Interior design by utilizing used wood material 'eco-friendly' will create an informal or relaxed atmosphere, and young. The result of the design analysis is that the use of used materials needs the finishing process 'reuse', more practical, Renewable, Reuse, Recycle

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Acknowledgments

The researcher would like to thank the director of research and community service at Tarumanagara University in Jakarta and UNJ for contributing to this research.

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Tarumanagara International Conference on the Applications of Technology and Engineering 2019



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No. : 160-TIM/7440/UNTAR/IX/2019

FULL PAPER ACCEPTANCE NOTIFICATION

Reference Number : TICATE-102

Title : Interior Design Of Postgraduate Library Based On Cyber Technology By

Applying Javanese Cultural Ornaments And Eco-Friendly Materials

Authors : Hartini Laswandi, Basuki Wibawa, Robinson Situmorang and Stephanie

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