

## *The Analysis of Centralized Layout on Traditional Batik Tulis Workshop in Central Java*

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The Asian Conference on Arts & Humanities 2018  
Official Conference Proceedings

### **Abstract**

Batik is a color crossing technique, using canting and hot wax originating from Indonesia and defined by Unesco became an intangible cultural heritage in 2009. Canting is a tool for transferring a hot wax on fabric so it can form a line or dot. The use of hot wax becomes an essential tool in the process of batik. The placement of the hot wax stove which surrounded by batik workers growing into a significant point in batik activities. This phenomenon appears in various traditional batik tulis workshops, especially on batik Oey Soe Tjoen in Kedungwuni, Go Tik Swan in Surakarta and Sekar Kencana in Lasem. Formerly, these three cities are well known as the producers of Batik Tiga Negeri with three colors that characterize each region; the blue from Pekalongan, the red from Lasem and brown from Surakarta. However, along with the development of advanced technology and information, modification of tools and differences in the characteristic of space in each workshop, produce a separate study on the workshop layout, especially in the placement of the stove. The research purpose is to support the preservation of batik process and the values of Javanese people contained therein. Therefore, this research used ethnographic method through observation, documentation and in-depth interviews in several batik workshops spread over Central Java within a specified period. Based on the anthropometric, ergonomic and behavior review, this research describes the layout analysis of the space and placement of hot wax stove as a center, and the application of centralized layout in various traditional batik tulis workshop nowadays. So it can be concluded through centralized layout, the values of traditional society, sharing and cooperating, maintained in the process of batik.

Keywords: batik tulis, centralized, ethnographic, layout, workshop

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## **Introduction**

Batik tulis is one of the high cultures of the famous Javanese society to foreign countries. Batik which was initially a result of high culture and has sacred value in Java society inland or palace, gradually switch function become goods with the economic value in coastal Java community (Asa, 2014). The development of his motives also varies according to the acculturation of culture that occurs in each region. The city of Pekalongan and Lasem is a famous Batik Peranakan producing region in Indonesia, even in the world. Batik Peranakan is batik produced by batik house owned by Chinese Javanese descent. However, in the production process, the batik still dominated by native Javanese descendants.

Until today there is still much debate about the origin of Batik Tiga Negeri. However, which became the belief of the people, especially the batik artisan on the north coast of Java, that Batik Tiga Negeri is the batik that the coloring process is done in three different areas that have a distinctive color in each respectively (Malagina, 2018). The blue color (indigo) is a distinctive color of the Pekalongan area, the red color of the Lasem area and the brown or sogan color of the Solo area, and all located in Central Java Province. History records that the Tjoa family of Solo was the first batik workshop that produces Batik Tiga Negeri, with the first red coloring stamps from the Lasem area (Malagina, 2018). The exchange color is because there is a kinship relation between the Tjoa family with batik artisan at Rembang area, north coast of Java. However, now batik house that produces Batik Tiga Negeri rarely found.

Batik Oey Soe Tjoen, Go Tik Swan, and Sekar Kencana is a batik workshop owned by Chinese Javanese descendants. Oey Soe Tjoen batik workshop located in Kedungwuni, Pekalongan, is now managed by Widianti Widjaja as the third generation of Oey Soe Tjoen. Batik Oey Soe Tjoen is famous for its unique, distinctive motifs and coloring of Peranakan batik making it known as the Indonesian Batik Peranakan Ambassador (Liong, 2014). Until now, this batik workshop still retains the motif and process of batik traditionally as batik Oey Soe Tjoen produced since the beginning. Go Tik Swan batik workshop located in the Surakarta or Solo area, is now managed by Mr. Suwarno. Go Tik Swan was commissioned by the first President of the Republic of Indonesia, Ir. Soekarno to make Batik Indonesia, which is included in the government propaganda at that time to create the Indonesian identity of Bhineka Tunggal Ika, or Unity in Diversity (Rustopo, 2008). Therefore, Batik Indonesia combines the motifs and colors of batik inland or palace with coastal batik. Until now, batik house Go Tik Swan is still producing Batik Indonesia with workshops that have been reorganized so that more efficient and productive. Sekar Kencana batik workshop located in Lasem area, Rembang district, owned and managed by Mr. Sigit Wicaksono who is a descendant of Javanese Tionghoa with the original name of Njoo Tjoen Hian. Batik workshop that produces Lasem motif combined with Chinese characters that have a specific meaning make this batik called as Batik Acculturation. Batik Sekar Kencana located in Babagan village occupies the house with colonial architecture with typical space layout of Peranakan society, as a residence as well as batik workshop for eight generations.

The three batik workshops are located in different areas with different types of buildings, reminiscent of the vernacular architecture. Although the workshop of batik work is the same as a residence as well as a place of business, some differences are

influenced by behavior and geographical conditions in coastal areas and inland areas. In the world of vernacular architecture, climate influences habits, customs, and human needs, so that the shape of the building becomes the result of acclimatization to the climate itself (Idham, 2016). Similarities and differences in shape and arrangement are also evident in the layout of the space and the layout of the furniture.

Although these three batik workshops lie in different geographical and climatic conditions with different types of buildings, there are similarities in layout patterns on workstation canting. The centralized layout has long been encountered in a group of batik artisan with the canting process area. This centralized pattern is composed of batik artisans that surround the stove, thus forming a specific working area. The stove as a midpoint plays a vital role in the canting process. However, research that attempts to reveal the relationship between the centralized layout and the values that exist in a society, especially a batik, is insufficient. Therefore, this study aims to analyze the factors that affect the layout of workspace and batik equipment in the workstation of canting in the traditional batik workshop, and how it relates to the values of the community.

## **Methods**

This research uses ethnographic approach through direct observation on batik workshops located in Central Java. This observation includes observation of behavior, observation of space and observation of batik process in the workshop. Interviews with batik homeowners and batik makers were also made to obtain in-depth information. These observations and interviews are then documented in visual, audio and audio-visual form. Observation space presented in the form of drawings workshop space which is then combined with observations of batik behavior.

The object of research in this case study is the batik involved in the canting process. Observations on the canting process done in a workstation include how the interaction of the batik with each other and the relationship between batik with space and tools used in this process.

- **Data Collecting**

This research begins by collecting data from batik workshop as follows:

- 1. Batik Oey Soe Tjoen Workshop**

Data collection at Oey Soe Tjoen batik workshop is done in several stages. Oey Soe Tjoen batik workshop located in Kedungwuni subdistrict south of Pekalongan city. This building has three functions, namely residential, retail and batik workshop. Batik workshop occupies a space located in the rear area of the main building. The building has vernacular architecture, grow and change according to the needs of its inhabitants.

Interview conducted by Widiанти Widjaja as the owner of Peranakan batik workshop as well as to three batik artisans who works every day in this batik workshop, both in canting process and immersion process. Observation of space and behavior of batik artisans is done directly and

through micro-motion study. Three cameras are placed at three different points with three different functions. The first camera is a camera that detects gesture changes in detail, resulting in a visual recording (photo). The second camera is a camera that works to detect motion and changes in batik artisan and her response to the tools used in the workstation. The third camera is a camera that captures all activities in a workshop with 360 degrees point of view with time elapse mode. With micro-motion study, the method is expected researchers in paying attention to the object of research with more detail.

The canting workstation located at the rear of the building occupies a closed space with wide openings on the wall, either windows or doors. Supported by a high enough ceiling, making the air circulation is good enough to avoid the heat of space. This workstation is flexible, where the equipment used can be quickly moved to suit the needs. In a workstation, usually it can accommodate up to three batik artisans, but at the last time of data retrieval, the workstation is only used by one batik artisan with a long table that used for correcting and re-checking the fabric before it proceeds to the immersion process.



Figure 1. The collecting process of visual and audio visual data on canting workstation at batik Oey Soe Tjoen workshop.

## 2. Batik Go Tik Swan Workshop

3.

Data collection at batik Go Tik Swan is done in a short period. Based on consideration of data retrieval from previous batik workshop then got a sufficient time to collect data from a case study object. Batik Go Tik Swan workshop is located in the middle of Surakarta city and is still included in Surakarta Keraton area. Go Tik Swan who is a descendant of Peranakan Java Tionghoa had received the assignment from the first President of the Republic of Indonesia, Soekarno, to make Batik Indonesia. Batik Indonesia designed by Go Tik Swan combines Batik Keraton style with Batik Pesisiran to be a style of batik that reflects Indonesia.

Interview conducted by Mr. and Mrs. Suwarno as heir as well as manager of batik Go Tik Swan today, as well as to a group of batik artisan in a canting workstation. Workstation canting A is one of two workstation

canting founded in this batik workshop. In workstation canting A there are five batik artisans whom each have different work. The more detail the work, the smaller the size of canting used. All batik in this workstation using gawangan, dinklik and canting in doing his job. Observation of space and behavior of batik artisans is done directly and through micro-motion study method. Data collection uses three cameras placed on three different points. The first camera is a camera used to capture the activities of batik closely in the workstation. The second camera is a 360 degrees camera that was visually recording with time elapse mode workstation atmosphere, circulation and batik behavior. The third camera is a camera that records audio-visual within the workstation and its relation to other workspaces. Through this third camera can also be taken data about the movement of sunlight, falling shadows and weather changes around the workstation.

Batik workshop area located at the rear building that serves as a residential, workshop and retail batik, workshop and museums of keris and other antique collections. The canting workstation is in the front area of the batik workshop. The workstation is divided into two semi-open pendopo building with walls on the right and left. The data were taken on the first workstation canting, located on the front area, adjacent to batik workshop with joglo as entertainment space.



Figure 2. The collecting process of visual and audio visual data on canting workstation at batik Go Tik Swan workshop.

#### 4. Batik Sekar Kencana workshop

Observations on batik artisan behavior and spatial data retrieval at Sekar Kencana batik house were done in sufficient time. Sekar Kencana batik workshop occupies a cultural heritage colonial-style building that has been occupied for nine generations. Mr. Sigit Wicaksana is the eighth generation of Sekar Kencana batik. As in general Dutch colonial buildings, this batik workshop has a clear space organization. The building that serves as a dwelling and batik workshop area surrounds the center space with a living room that serves as an altar for worship the ancestors.

Interviews and observations were made to Mr. Sigit Wicaksono as owner and manager of batik Sekar Kencana and to batik artisans who are in the

canting workstation. The batik workshop area is on the right and rear of the building, while the dwelling is on the left side of the building. The living room in the middle serves to connect these two different functions.

The canting workstation which located to the right of the building is a semi-open space area and supported by grid-shaped columns. This wide canting area can accommodate several groups of batik artisan and directly adjacent to the immersion process. Of the three batik workshops used as research objects, Sekar Kencana batik which has the most number of batik artisans, and positively affects the workspace both in workstation canting and its relationship with other batik process area. The more workers involved in a workstation canting, the more space it needs.



Figure 3. The collecting process of visual data on canting workstation at batik Sekar Kencana workshop.

- **Limit and object of Research**

For further details, it is necessary to limit and scope the object in the study, as illustrated below:

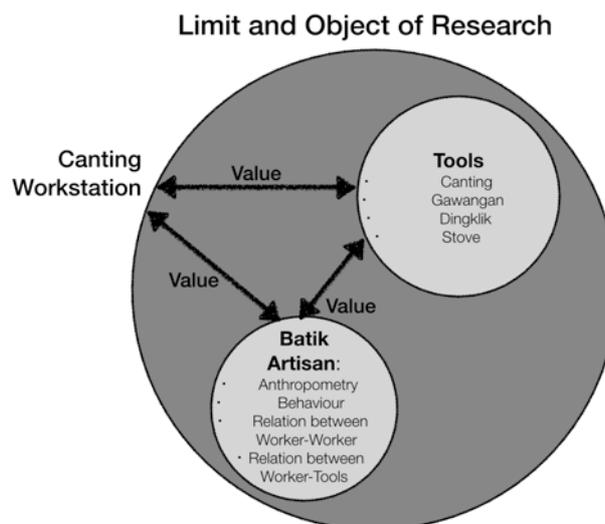


Figure 4. Limit and object of research

- **Data Analysis**

The visual and audio-visual data has been collected and then exposed in the form of photo and plot drawing as well as the layout canting workstation canting area in the three batik workshop that became the object of research. The layout drawing then used to mapped data observation of batik behavior in spatial. The results of this spatial and behavioral mapping relationships are then analyzed.

- **Data Verification**

The data have been analyzed and then verified by interviewing the batik artisan and business owners about the canting process and the space used in the process in each workshop. The results of the analysis are also processed by using the theories of Javanese culture, Peranakan and spatial theory of traditional and vernacular.

## Results

After going through the stage of data analysis and verification, the research results are described in the following stages:

- **Batik Oey Soe Tjoen workshop**

Batik Oey Soe Tjoen workshop has several batik making areas covering the whole process of batik from start to finish. Workstation canting is located at the rear of the building, right next to exit and entrance access from the building to the outside of the house. Workstation canting is flexible, can change the layout depends on the number of batik artisans that work therein. The centralized layout is evident when the three-to-four batik artisans do the canting process by encircling the stove as its center. With this layout arrangement, the batik artisan indirectly creates a grouping arrangement by sharing the hot wax used for the canting process, working together to keep the canting process running correctly.



Figure 5. The Oey Soe Tjoen workshop situation in canting and drying process. The batik artisan works in group, making the spesific layout with stove as a center.

The work of canting in the Oey Soe Tjoen workshop is also not too time-bound. Most of the workers are batik artisan who has worked for dozens of

years. Close kinship relationship is also reflected from the communication created both verbally and non verbally in workstation canting, with the distance between the batik artisan is close enough, resulting in them to exchange information more quickly. Of course, the distance created depends on the number of batik artisans involved in a workstation, the width of the gawangan and fabric and also the space batik artisan used to reach to the stove for hot wax as an essential tool in the canting process.

- **Batik Go Tik Swan workshop**

Batik Go Tik Swan workshop is a well-designed batik workshop with specific space restrictions. Batik workshop is located in the rear area of the building. It consists of several separate buildings by the function and process of batik Go Tik Swan. This workshop has rearrangement process several times. Inspired by Balinese architecture, the owners adapted the traditional Balinese buildings in this workshop. The result is some semi-open buildings with different functions. Workstation canting is located in front of workshop area. By using a free-standing wall on the east and west side, it is expected to control the air flow and natural lighting on this workstation.



Figure 6. The Go Tik Swan workshop situation in canting and drying process. The patio in dwelling area was designed by Soekarno, as a gift to Go Tik Swan.

The batik artisan makes sitting arrangement around the stove that contains the hot wax. In this canting workstation, there are five batik artisans aged variation from the thirties to fifties. They are already working from a young age. Although there are differences in age, the kinship is still felt here. They even had lunch breaks in their seats, talking and joking. The arrangement of gawangan and stool or small seat in such a way, making the distance created between the batik artisans close enough so that the working atmosphere was warm and full of kinship.

- **Batik Sekar Kencana workshop**

Batik Sekar Kencana workshop entered in the category of the small part of traditional batik workshop that occupies the historic building and still well maintained. This colonial with Peranakan taste building puts the central space as the living room as well as the altar room. Batik workshop is on the right and back of the building. Workstation canting is located in a vast semi-open area, to accommodate two or more canting groups. In each group, there are three to

six batik artisans who sit in a centralized layout around the stove that contains hot wax.

Each canting workstation consists of different types of work. One group did the detail work using a small canting, while the other group used medium-sized canting for outline work. The group of batik artisan depends on the type of work. Extensive workshops also allow for the circulation and direct link between canting process and coloring process that are adjacent to each other. Same with other workshops, workstation canting in this workshop was also able to help improve the sense of sharing and cooperation through the arrangement of the seating layout.



Figure 7. The Sekar Kencana workshop situation in the canting area. The altar as a centre space, connecting the dwelling and the workshop area.

## Conclusion

The existence of traditional batik tulis is threatened by several factors, among others is a long process of making. Regeneration of batik artisan and the new technology of batik printing also worsen this situation. The canting process included in the core process of batik. The process of placing the hot wax on fabric by using canting, in fact not only be part of a production process alone. From the centered seating arrangement, with the stove as its core, it can be concluded that the centralized layout in the workstation canting can strengthen and preserve the traditional values of Javanese people, especially Javanese Peranakan that is sharing and cooperating to the present.

Therefore, the traditional batik tulis process needs to be preserved, because it is clear from a piece of batik reflects the tolerance and acculturation of high culture. So preserving batik means also preserving the values of good traditional culture for generations to come, such as sharing and cooperating.

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