

An Experiment Process for Designing a Kinetic Wall Sculpture Through Implementation of Malay Identity in Mass Production

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Abstract

The study intends to sustain the essential element of Malay identity, which represented the cultural identity of Malays. Malay identity should be appreciated and preserved as it is part of Malay heritage. The development progress of Malaysia brought many benefits but behind the success of Malaysian development, it also gave an impact on Malay culture in the context of identity itself. In this area of research, the implementation of Malay identity is one of the important elements towards discovering the potentials home decoration to be used in modern living space which can be applied to it. The gathering insights of products will be through the pattern and needs. The integration will be happening in a conceptual process which is the study of Malay motif in wood carving, the technical process which is to categorize the types of the kinetic art form that are suitable for wall decoration and lastly develop design criteria based on usability, aesthetic and technically. Therefore, the best solution to preserve the Malay identity is through artwork for example kinetic wall sculpture.

Keywords - Malay identity; kinetic wall sculpture; contemporary design.

1. Introduction

Home living space is one of the places that everyone needed. It is including the home decorative item. In this study, the kinetic art form is one of the proposed ways to implement the Malay identity on wall sculpture. The kinetic art form can be defined in any other form that can make a kinetic movement whether using wind movement or manual movement. In the context of Malay identity, the researcher focuses on the Malay motif in wood carving. In ancient times, wood carving was mostly used in windows, doors, walls, rooftops and other decorations. The design process will be going through the conceptual, technical and also the practicality would be involved.

2. Literature Review

Malay designs are not merely objects of beauty but also serve as means of creating an environment of peace and tranquillity. The elements found in the traditional Malay design can be regarded as a factor of global players, which only have their own identity and cannot be found elsewhere (Anwar, 2016). Thus, the elements of traditional design can play a significant role in establishing a local identity for the global positioning of the nation (Vermol et al., 2017). Therefore, integrating these traditional design elements into contemporary design is seen as an approach towards sustaining the nation's heritage values as genius loci (Ab. Aziz, 2013; Anwar et

la., 2015)). Seeing that today sculpture as works of art has exhibited art symbols that are rather universal, or scarce in the defence of Malay culture as the national heritage, a new generation of artists should expand the efforts further made by local sculptors in continuing the national heritage for years to come (Liza Marziana, 2016). Traditional houses are the most essential architectural experience that is in harmony with the people's culture, beliefs, environment and lifestyles. The development of design values in contemporary architecture by tracking traditional design values in architecture paves the way for arguments concerning the implementation of authentic Malay traditional house design values in contemporary Malay houses. The research has highlighted the significance of traditional architectural design values towards innovative design as mentioned by Siran et al, (2020) in the architecture of contemporary Malay houses as a workable pattern for use in the design of contemporary architecture (Hosseini, 2016), Rapid changes in living conditions and contradictions between the global and Eastern world culture and local traditions have created new paradigms and changed culture-housing interactions in Malaysia. Housing designs in the country were and are influenced by foreign cultures (Anwar et al., 2015). The designs are to a certain extent not consistent with the way of life of the people. Most Malaysians in the urban areas rely on mass housing particularly terrace housings which dominate the housing supply in the urban areas. The Western-influenced housing designs are not based on the culture of the locals such as the Malays. At times, this contradiction indirectly affects some aspects of the Malay culture as shown by previous studies (Zaiton, 2018). The action of the Penang DAP Government to approve the luxury housing project in Balik Pulau is alleged to have killed the identity of the Malay traditional villages in the area. Balik Pulau Member of Parliament (MP) said the scenario occurred following the existence of luxury housing projects including bungalows and condominiums built for 'outsiders'. "The Barisan Nasional (BN) government has once promoted Balik Pulau as a tourism product for tourists who want to see how Malays live (Penang Online, 2017).

3. Data Collection

Specifically, the objectives of this study are to discover the types of Malay identity that suitable for use in wall decoration, to categorise the types of kinetic arts form that suitable for wall decoration and to develop design criteria's in designing kinetic wall sculpture for a home decorative item in the context of Malay identity.

3.1 Conceptual process

In the conceptual process as mentioned by Siran & Anwar (2020), the researcher needs to discover the types of Malay identity that are suitable to apply in wall decoration. The integration will happen between the Malay sculptor, Mad Anuar Ismail, people who making sculptures, wall sculptures that use Malay elements in his work. As stated by Pakhrudin Sulaiman (2017), "my affinity for the Mad artworks is nothing but not in the manifestations and clear application of it to the motif and the aesthetic form of Malays who are rooted here and thus representing Malaysia's". The types of method that the researcher will use are qualitative data which is interviewing Mad Anuar Ismail. From this data collection, the researcher needs to identify what kind of Malay identity's element and principle that suitable for use in wall decoration.

3.2 Technical and practical process

Besides that, the technical and practical processes also are the main study in this research. It is because, from this data collection, the researcher can categorize the types of kinetic art forms that suitable for wall decoration and also can develop design criteria's in designing kinetic wall sculptures for home decorative items in the context of Malay identity. The qualitative data will use as a method to collect data in this study. To identify the types of a kinetic art forms and develop design criteria, the integration happens with two people who are related in this process which is the Malay architecture and also known as one of Malaysia's leading contemporary sculptors, Muthalib Musa and also Prof. Ramlan Abdullah, a metal sculptor. By interviewing these two people, it may be helpful in terms of the product development process and it must take into consideration in this field of study. The design process is based on the result of interviewing session with these three respondents. From those particulars, the researcher gets the input about the element and principal of Malay identity and kinetic movement which can influence the product itself. This kinetic wall sculpture also comes with other functions. It has a compartment inside to keep the keys, put bills and so on. It is just not as a wall sculpture, but, in other views, it can be something that they can keep the small thing but very important in their daily life.

3.3 Phase of producing a prototype for experimental process

Figure 1 shows the phase that needs to be passed throughout the process of producing a prototype. There are six process need to be done which should be started by identifying the Malay identity based on data collection from early research. And lastly, it will end up with the manufacturing process which is producing a prototype.

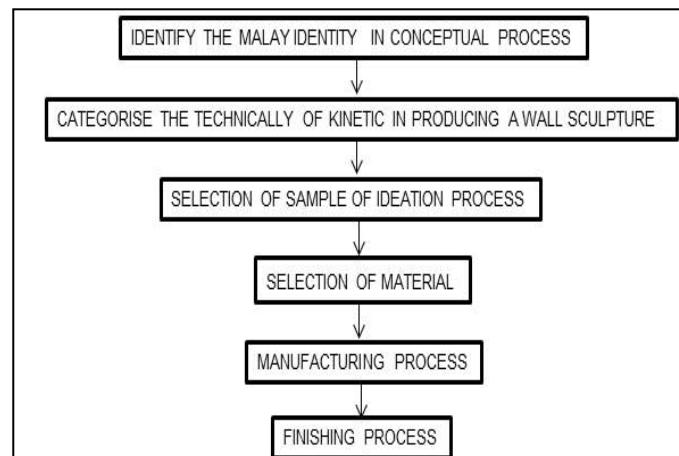


Figure 1. A flowchart phase for producing a prototype

3.4 Experimenting process

The wall sculpture has used a form of the Bunga Tanjung that comes with a woodcarving motif which is ‘Awan Lariat bermotifkan Bunga Tanjung.’ The researcher tries to relate the home decorations in ancient times then adapt them to wall sculpture. The form of design is based on Bunga Tanjung because generally, the woodcarving in ancient times had much use on doors, wall, roof, rooftop and grilles. Figure 2 shows a sample of the ideation process on wall sculpture that using the overall form of Bunga Tanjung. It has two layers in wall sculpture. The application of motif on that used in every part of the petals. In figure 3 shows, the researcher develops half of the Bunga Tanjung petals on the first layer and another half of the petals on the second layer. So when these two layers move, it will look like a full image of the Bunga Tanjung itself. The application of the motif is on the four parts on the first and second layers of wall sculpture. Lastly, as shown by figure 4, the researcher develops a design by bend the metals on the first layer by using the form of the Bunga Tanjung and use the outline of this flower as a structure on the second layer of the wall sculpture. In the final design, as shown by Figure 5, the combination between two designs which is a basic form of Bunga Tanjung and the sample of ideation from figure 4 has been taken. The use of wood as a base for wall sculpture can stabilize the product itself. It is using a copper rod as a stand for each layer of the form of wall sculpture.

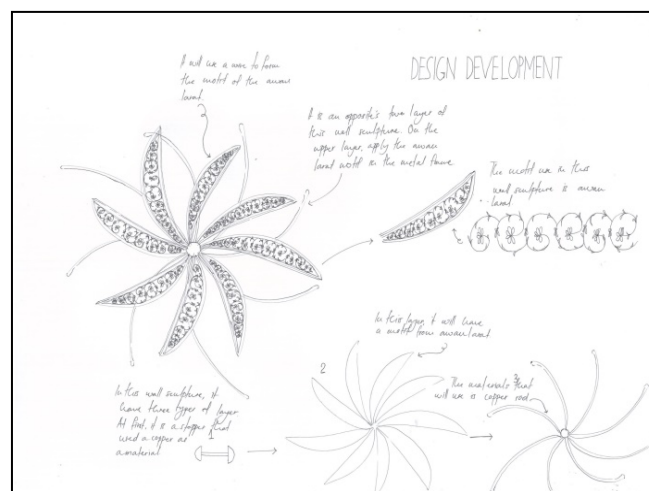


Figure 2. Sample of ideation process

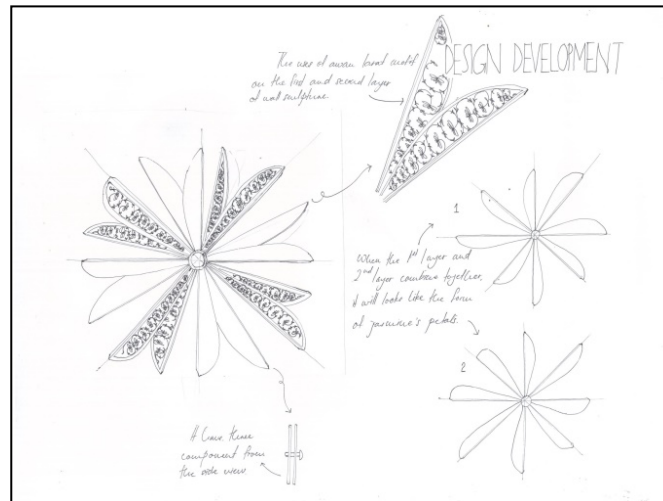


Figure 3. Sample of ideation process

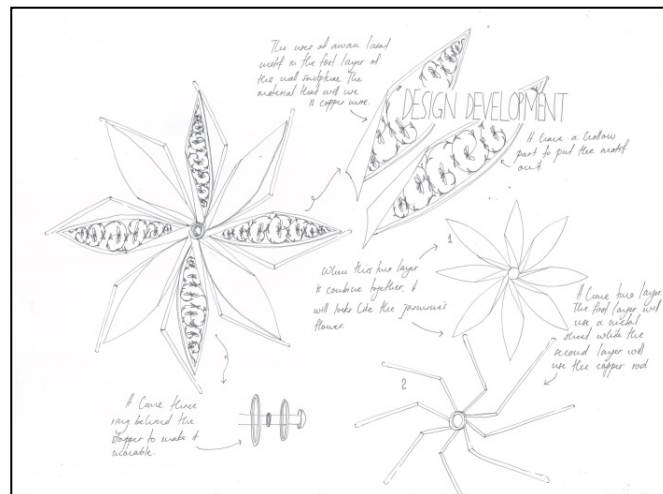


Figure 4. Sample of ideation process

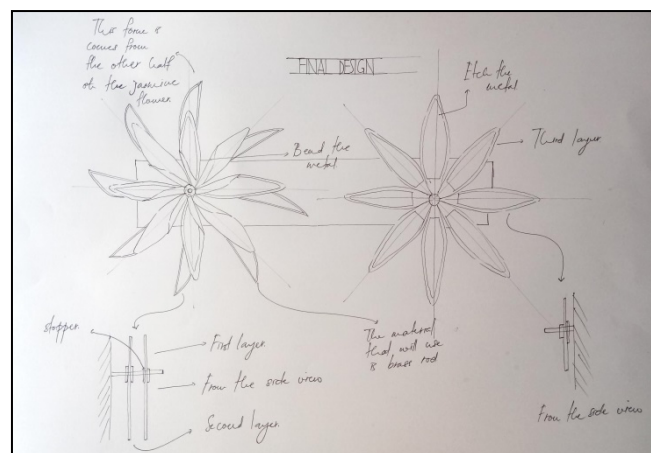


Figure 5. Final design of experimental process

3.5 Material

The selection of the material is one of the important significant (Vermol et al., 2015) concerns in this study. The materials that are usually used are copper such as copper wire, copper rod, copper sheet, and brass and wood. Once the selected design is done, the researcher will continue to form a metal-based on selected design.

3.6 Manufacturing

The next step after the selection of design and material is the manufacturing process. As shown by figure 6, the first process is to clean metal from any scratch using emery paper. As shown by figure 6 (b), after that, put a sticker that has been laser on the metal carefully. In figure 6 (a), before going to etching, spray the bottom surface of the metal to avoid the metal corrosive by acid. Etching the metal for one hour. It is one of the techniques to apply the motif on the copper sheet. The required item is a sticker. It's an important item before do an etching process.

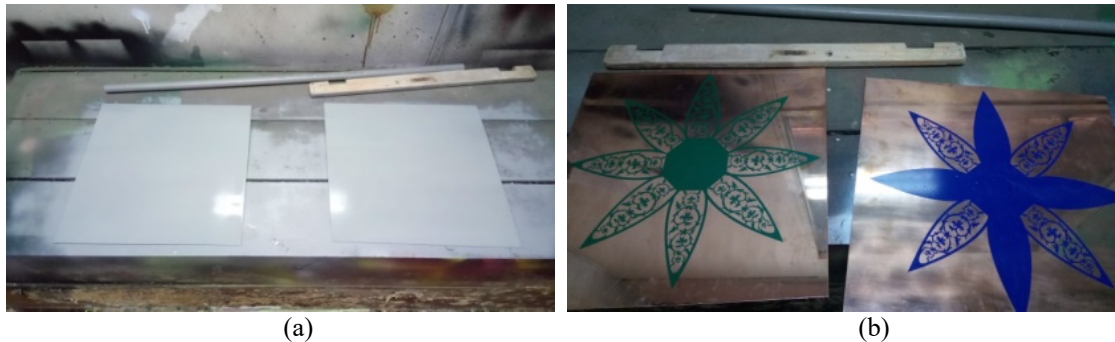


Figure 6(a). Etching process; (b). Etching process

In the next part of the manufacturing process, after etching, wash the metal using water and use a thinner to remove the spray effect. In figure 7, before bending the metal, anneal it first to make the metal easy to bend. Use a mallet and bend carefully on the anvil. Repeat the step in figure 7 until all the petals was completely bend. Then, after bending the metal, solders all parts such as a stopper, a copper rod which is used as a stand for the etching metal and the other layer which uses a structure of the flower by using a brass rod by using a copper solder to form a wall sculpture as shown by figure 8.



Figure 7. Bend a metal after etching process



Figure 8. Anneal and solder all parts

4. Result And Conclusion

Figure 9 and 10 shows the prototype of an experimental product that could make it in mass production which is consist of the conceptual, technical and practical process. The product is a combination of three materials which is copper, brass and wood. The function of wood is to hold the product and stabilize it when it hangs on the wall. On the base of the metal, it has a rod or sticks as a holder for the layer of the metal. Each layer has a stopper to make it a base for another layer. The material used for the structure on the second layer is a brass rod. The design results that have been proposed are based on Figures 9 and 10. On the left side, it has two layers. The first layer was half petal's structure of the Bunga Tanjung. In the second layer, the development process happens on the petals by applying the Awan lariat motif Bunga Tanjung. By putting a stopper behind the second layer and on the top side of the first layer, it will move together when it keeps spinning. On the right side, the development process happens in the application of awan larat motif in every part of the petals. Lastly, to stabilize the wall sculpture, put it on the wood. Drill the wood and make it fit with the size of a nut. Use a hinge to hang it on the wall. As for future studies, more development processes involving the principle of Malay identity that is connected with the behaviour among the Malays should be explored. It is one opportunity for researcher to make more studies that represented the Malays.



Figure 9. From the top view



Figure 10. From the side view

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