

The Structure of Narrative Design
Case Study: The Interior Design Proposal of Thread of Life Gallery in Bali

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Abstract

In an exhibition designed with an object-oriented approach that merely focuses on conservation, display and object information, visitors often don't understand the object. The design function as a medium of visual communication failed. Ideally, the exhibition design should be user-centered. Its goals are communicating objects and their context to visitors, to make visitors understand, dive in the context and appreciate the objects. In a gallery exhibition, designing with storytelling approach may even increase the sale value. In narrative design, the gallery doesn't merely display objects, but spatially presents the object production context, as well as the object relation to people and place.

A narrative design structure consists of abstract, orientation, conflict, evaluation, resolution and coda that relate to one another. Narration developed in the design of Threads of Life Gallery is the history of struggle of traditional textile craft women. They lived from the downturn due to being less competitive compared to the modern textiles, into producing a valuable commodity. In this gallery, the textiles are produced manually using traditional instruments. While retaining their traditional pattern, the design also adapts modern clothes which maintain the eco-friendly process. By implementing the strategy of simulation as traditional textile makers, using interactive media and multi-sensory design, visitors are given the opportunity to experience the difficulties of manual production and actively involved in constructing the meaning of green textile usage. The process of interpretation and reflection becomes personal, lasts longer in visitors' memory and naturally be retold. Retelling is the power of narration approach.

Keywords: narrative design, structure, multisensory, coda, experience, green textile

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Introduction

Why we should discuss about narrative design? Now, public spaces which are visited most by people holds more than just its functional aspect. It is not merely follows the classic rule of design dogma, which says “form follow function”. On the contrary, it seems that as if the designs are following the new rule of postmodern culture that also influence modern culture design which says, "form follows fun". The Harry Potter’s Shop in London is one of the examples. It is designed as if we are not in the ordinary shop, but in the story world of Harry Potter whether it is in Diagon Alley or Howgwarts. Another example is The Edo Shitamachi Museum in Tokyo. There are many settings in the museum that bring us to the atmosphere of the past in the Edo culture period.

The design, in term of space with its elements and furnitures, is not enough to be seen. It must be experienced. Design is not about a product or an object, it is about a human who read it, understand it and use it. As it is about human, designers must create the relation between the space with the human who use it. We understand that the design is about a process of engagement; built relations between space, objects inside and its reader. Design is about an experience. To establish the relation between space, objects and people – to create an engagement – we can use a narrative strategy. A narration tells us a story about how people live in a space and change it into a place. In other words, people create the meaning in a place through narration. Architecture (including interior design) can be invested with narrative as a means to give it meaning based on user experience (Coates, 2012:014).

Designing with story-telling approach is about creating a design that enables visitors to experience design that consist of sequential space connected by a story. In this case, the design provides certain chronological settings that make us feel as if we were inside the storybook settings; as if the story is embodied into space. A narrative design is about using a narrative inquiry in a design process. As it intends to create spatial experience, its strategy is using multi-sensory design. According to Juhani Pallasmaa, the senses need to be stimulated in space is not just limited in five senses but seven. The seven senses are eyes, nose, ears, skin, tongue, skeleton and muscle (Pallasmaa, 2005). The integrated perception is come from the combination of seeing, smelling, hearing, tactility, tasting and feeling the space proportion by moving.

It is better to look briefly into the history of narrative inquiry. From the beginning of the 20th century, narrative inquiry has been known as part of qualitative research. Narrative inquiry was developed in science management, information or knowledge management as a method for sharing or communicating knowledge. Andy Clark, a philosophy professor from The Edinburg University, Scotland, found that the cognitive process - a mind process of gaining knowledge through thought, senses and experience - in processing memory is similar to the process in processing narration. That means, the narration is a powerful tool to share knowledge through emotional experience. The narratology theorist among others, is William Labov, an American socio-linguist, who formulated the theory of the basic elements of story or a story pattern. Those structures of narrative design were adapted in *The Structures of Design* by Brooke Godfrey and published in *An Interior Thinking* book by Joy Dohr and Margaret Portillo (2011).

A narrative design is used most in exhibition design like museums, galleries and retails as it provides an understanding not just about the objects, but also the context of life that produce them. The visitor's understanding, followed by the visitor's appreciation and eventually creates an engagement. For example, the gallery restaurant in Ciputra Mall Jakarta that represents the artwork and life story of past Hendra Gunawan, one of the famous Indonesian painters. Ciputra is the biggest collector of Hendra Gunawan art paintings. The sequential rooms in the gallery are named according to Gunawan's most influential teachers in the different era and decorated with old photos of his life journey. The interior is embodiment of Gunawan's art as if his painting is embodied into space (Hidayat, 2014).

Why choose The Threads of Life Gallery as a case study for illustrating the implementation of narrative structure in the design concept. The Threads of Life Gallery is a cultural organization initiated by William Ingram and Jean Howe. Both are Americans. When starting The Threads of Life in 1998, they were helped by two Balinese people. They were I Made Maduarta and I Made Lolet, the ethnobotanists. The visions of Threads of Life Foundation are empowering women that become the weavers of the traditional textile and sustaining the textile arts of Indonesia, especially the traditional ones that are produced manually in the remote area.

The traditional textiles have been used in traditional ceremonies as they have lots of meaning or symbol represents the relations between humans, god and nature. They have a value of tradition as a nation's heritage. Therefore, this traditional textile need to be conserved. The craft women or the weavers usually are very poor, so they need to be empowered. The Threads of Life has been working together with over 1,000 people from 11 islands like Bali, Flores, Adonara, Lembata, Sabu, Raijua, West Timor, West Sulawesi, West Borneo, East Java and Sumatera to resurrect the textile art of Indonesia.

The Threads of Life Gallery is potential to be redesigned using a narrative approach as it doesn't just sell the textile, but also gives information about the material, the process of weaving and woman weavers in the remote area who produces those textile; so it tells the life story behind the production to gain empathy and appreciation from the visitors. By doing so, hopefully, when visitors buy the product, they know that they are also involved in the social project of helping the weavers to overcome their poverty and join the cultural movement of sustaining the textile art. The existing gallery needs to be redesigned to communicate the organizations' mission to the visitors. By just displaying the objects to sell, the gallery design is still an object oriented one. There are many potentials to be elevated while giving additional information throughout an interactive display to build visitor engagement.

Method

As the method, we start the design project with the study of its contexts. They are the visitor context, the institutional context which is The Threads of Life Foundation, the collection context, its proposed site and architecture. These studies are needed to identify the design problems. Once the design problems are formulated, we make the study of its programming and design concept. The programming is used to solve the physical and quantitative problem when the space is needed to accommodate the physical activities. In the programming, we study the flow of activities, calculate the

minimum space requirement, study the relation between spaces, zoning concept that divides space into public, private or service zone and blocking or grouping concept that divides space into different rooms that accommodate different activities. When figuring out the design concept, the theory of narrative structure helps us to set the structure of narrative design. The narrative elements implemented to the concept of narrative design are abstract, orientation, conflict, evaluation, resolution and coda. The narrative structure is adapted from the classic work of William Labov (Dohr, 2011:31). The structure between those elements is chronological. In the process of narrative design, the narrative structure is adapted into the narrative concept of exhibition design and elaborated into image, form, color, material, lighting, vaporization and multi-sensory design concepts.

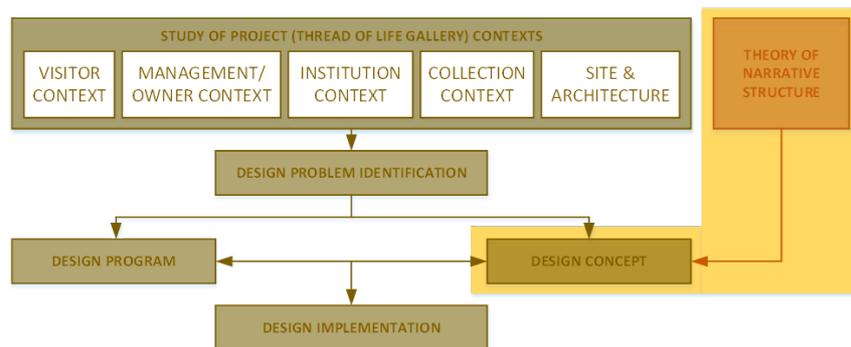


Figure 1: The Scheme of Design Method

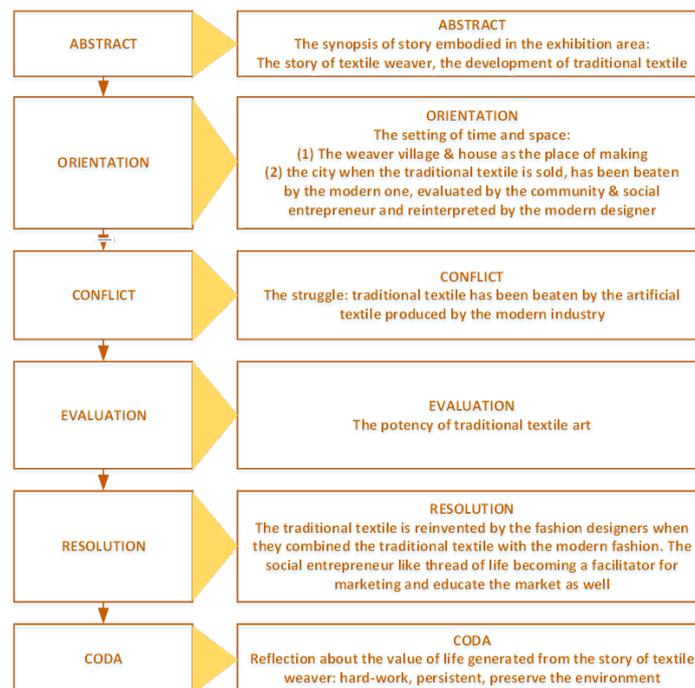


Figure 2: The Implementation of Narrative Structure in the Concept of Narrative Design

The abstract is the story synopsis embodied in the exhibition area. It is the story from the textile weaver's perspective, describing the development of traditional textile. The story is constructed by making a relation between the individual context, which is the weaver, with the social-culture contexts of her society. The relationship between

narration and memory lies at the point of intersection between the individual and the social-cultural memory (Erll, 2009). The second element is orientation. It is the setting of time and space. There are two main settings, which are the weaver village and houses as the place of making the textile, and the city, when the traditional textile is sold, beaten by the modern textile, evaluated by the community and social entrepreneur and re-interpreted by the designers. The third element is the conflict. It contains the struggle that makes the story interesting. The exposed conflict is the time when the traditional textile has been beaten by the artificial textile produced by the modern industry. The next element is evaluation. This is part of the story when the potency of traditional textile is founded and explored by the community and social entrepreneur. They have learned the strategy to bring the traditional textile back to the modern market. The fifth element is resolution that discusses the resolution of traditional textile problems. They find their way to get back into the market when the traditional textile is reinvented by the modern designers by combining with the modern fashion one. The social entrepreneur, like in the case of Threads of Life Foundation becomes a facilitator for marketing and educating the market as well, especially to the young generation and the foreigners. At the end of the story, a coda chapter is needed. Coda is essentially a reflection about several values of life generated from the story of textile weaver about hard work, persistent or perseverance and preserve the environment.

Discussion

The Study of Project Contexts for Identifying Design Problem

This study consists of observation of visitor, management, institution, collection, site and architecture. The main visitors of Threads of Life Gallery in Ubud are foreigners (96%). Most of them come from Australia, French, Italy, Germany and America. Their main occupations are textile lovers, curators and collectors with main interest is the Indonesian textile art. The visions of its foundation are sustaining traditional textile art of Indonesia, exposing the beauty and value of Indonesian textile art to the global craft market. The missions are revitalizing tradition, conserving the environment and woman empowerment. The existing Threads of Life Gallery has selling area, exhibition area, office and storage. The existing selling area is put at the front while the exhibition area at the rear part. In contrary, the narrative approach will propose the other way, because the existing plan caused a problem. When the selling area is put before the exhibition, the visitor will meet the object without understanding it. When facing its expensive price, people tend to go out from the shop without exploring the further exhibition area at the back part. So, the idea is to arrange the flow activity that makes the visitor experience the exhibition first before entering the selling area to give them the experience of textile making. Through this way, the visitor can understand the process and empathize the textile before making decision to buy. The exhibited materials are raw materials for clothing and dying, tools, processes, textile products from 11 islands such as Lamalera, Bajawa, Rende, Mauliru, Toraja and Sideman. The displayed information includes the symbolic meaning behind the textile pattern. The existing gallery is located on Kajang street which is a very small street in Ubud. The office building is separated from the gallery because of the limitation of existing space. To improve the visitor's experience that will increase the selling value, to support the gallery with other facilities and unify the office with the shop in one same complex, the gallery needs more space. To expose it,

the gallery needs to move to the main street. So, the proposal is to move the gallery to a larger building, also located in Ubud.

When the exhibition design displays not merely objects, but also offers the experience of life context that produced such objects, within one limited space, the problem occurs. The gallery needs a larger space to accommodate the settings of each scene. There is not enough space in the existing gallery for the implementation of narrative design. The larger architecture space allows not only the implementation of narrative design to increase the commercial and participation value, but also allows the procurement of public supports area for visitor's convenience like restaurant, small accommodations for weavers or guests. The most important changing in the new plan proposal of the gallery is that the position of the exhibition area is put before the selling area, so the visitor will experience the exhibition first before entering the selling area.

The Concept of Story Line and Narrative Structure

We start the design concept with the abstract about the story implemented in the exhibition area, about the journey of traditional textile production and its development. The simulation is made from the textile weavers' perspective. The story begins with the setting of the traditional village, where the textile weavers lived. The visitor is introduced to the poor life and struggle of the weavers and how one piece of textile is made manually through a long production process. The story continues with the setting of conflict when the traditional textile is unable to compete with the modern one that is much cheaper and variegated motifs. The life of the traditional textile weavers had been getting worse. The younger generation doesn't acknowledge and appreciate the traditional textile whereas it has cultural value, as it is used in traditional ceremonies and has symbolic meaning. The process of textile making is friendly to the environment. The materials of dyes used do not harm the environment and safe for the skin. Through the efforts of people who care to preserve the cultural heritage and environmental sustainability, the home-made traditional textile is being resurrected through the strategy of hybridity. The value of traditional textile was introduced to the global community and the designers tried to revitalize it by combining it with modern fashion style. In the end, the textiles have their own market position, received international acknowledgment and appreciation for their indigenusness and eco-friendly production system.

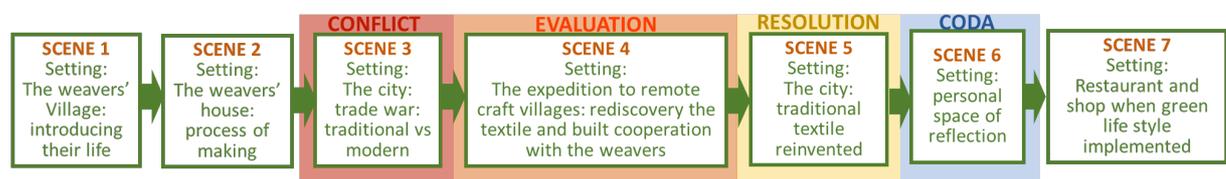


Figure 3: The Story Line and Narrative Structure

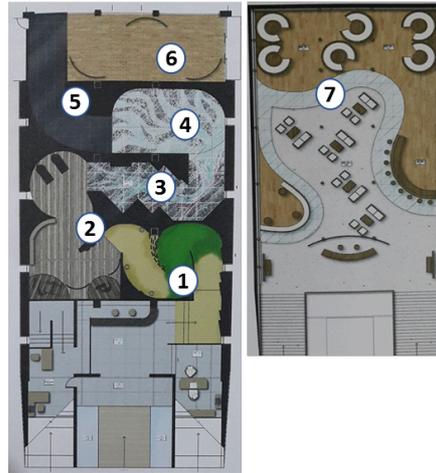


Figure 4: The Layout of Exhibition and Restaurant Area

The numbers indicate the chronology of the scenes. Picture Source: Houdioni, 2016

The narrative design in the exhibition area consists of 7 scenes. The setting of the 1st scene is in the weavers' village to introduce the weavers' life context. The 2nd setting is in the weaver's house, an introduction to the visitor about the process of making the textile. The 3rd scene is the conflict. The setting is in the city, when the trade war happened between the traditional textile and the modern one. The 4th scene is the evaluation part. The setting describes the expedition conducted in the remote area of textile craft woman's villages by Threads of Life Foundation. The audience is invited to experience how then the rediscovery happened because of the expedition, the cooperation built between the foundation and the weavers until the textile is re-born. The 5th scene of the story is the resolution phase. This brought in the setting of the city once again, but this time, the traditional textile is reinvented and adapted to the modern lifestyle. The 6th scene is coda that contains the personal space of reflection. The last chapter or scene is set in the restaurant and shop when the green lifestyle is implemented. Therefore, in the new proposal, the restaurant and the shop are parts of the story line.

The Design Concept of 1st Scene: The Introduction: The Life in the Weaver's Village

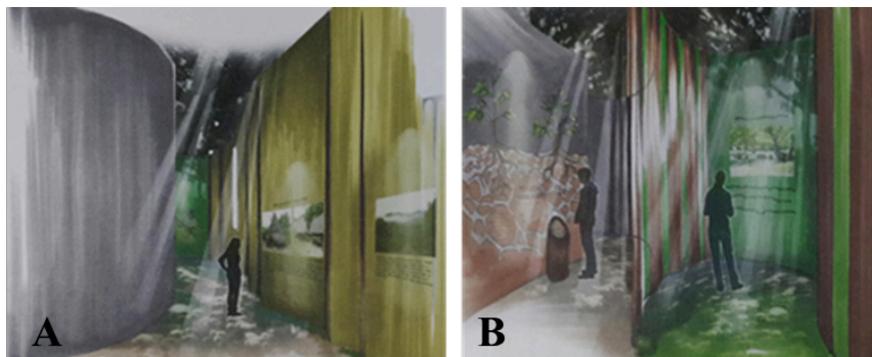


Figure 5A, 5B: The Implementation Study of Design Concept of 1st Scene
Picture source: Houdioni, 2016

The image concept in the 1st scene is natural and rural atmosphere. It is generated into form, material, color, lighting, air and multi-sensory design concepts. The form is

the combination of geometric display form with organic form of the surrounding woods. The combination creates contrast between the display and its spatial background. To create a rural village atmosphere, the color used is the natural color scheme like green, brown and shades of grey that reminds people with plants, soil and stones. The material used is a processed wood like plywood in rustic – doff – natural finish. The resilient flooring is used to reduce noise impact in the exhibition area. To create the natural element of woods that surround the village, an indirect concealed lighting is provided. It creates light, as if the light emerges from the leaves on the trees. To provide a stable temperature and moisture level, the exhibition area uses a central air conditioning system. As the narrative design goal is to create experiences and to offer a comprehensive perception, the multi-sensory design is a must. To stimulate the visual senses, the video or moving image is used. For the audio senses, an ethnic instrumental music is played. To stimulate the sense of smell of visitor, in line with the natural wood atmosphere, the woody, grass, and raw material fragrance is sprayed. The tactility is created through the existence of textured wall and raw material texture. The motion sense is stimulated through the existence of touch screen display. The interactive display concept is choosing and collecting raw materials from the natural environment for weaving textile in the next scene, as the experience concept is creating simulation for the visitor as a weaver.

The Design Concept of 2nd Scene: The Introduction: The Process of Making in the Weaver's House

The image concept in the 2nd scene, as the theme is the weavers' village, is rustic and warm homelike atmosphere. The form concept is creating the traditional house façade on the wall as display background and house terrace as a display area of weaving process using weaving tools. The video that explains about the process of making is integrated into the façade background; it is stored in the window of the house façade. Brown as a woody color is used as the color concept. The color emerged from the textile being weaved performs as accent colors in the middle of a brown color scheme. The material concept is using recycled solid wood and plywood in rustic – doff – natural finish and resilient flooring in the circulation area. The lighting used is a warm-indirect lighting with spotlight in the display area of weaving tools. All the exhibition area will use a central air conditioning system. For multi-sensory design, it is planned to use visual display from a video, sounding the weaving tools sound in the process of making, spray the raw materials fragrance and creating the textured wall and raw materials texture. To stimulate motion senses, as the simulation created is the experience as the weaver, in the 2nd scene, the visitor can try to use the replica of weaving tools.



Figure 6: The Implementation Study of Design Concept of 2nd Scene
 Picture source: Houdioni, 2016

The Design Concept of 3rd Scene: The Conflict: The Traditional Textile Trade is Dropped; Uncompetitive Condition – “Being Beaten” by the Modern One

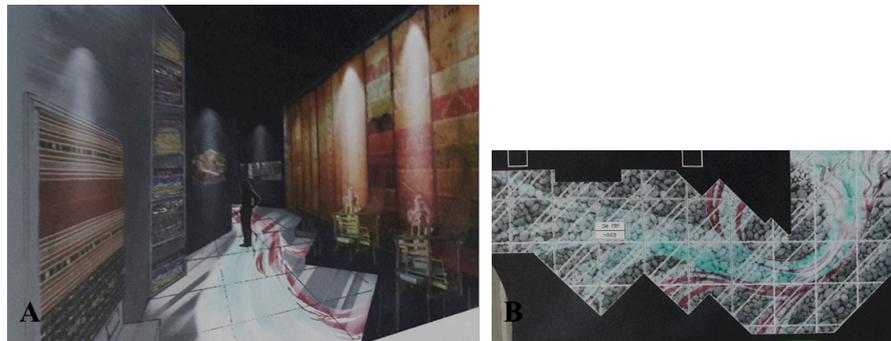


Figure 7: The Implementation Study of Design Concept of 3rd Scene in
 Perspective Drawing (A) and Layout Plan (B)
 Picture source: Houdioni, 2016

The 3rd scene is the conflict chapter. It is planned to create the image of stressed, tortured, tense and uncomfortable atmosphere caused by the polluted environment and incompetent situation. The form concept is creating narrower and winding road by creating an irregular wall form. The interior uses the dark color scheme that is shades of gray with the variegated colors of artificial textile as if we were trapped in the artificial colors dominancy. The material concept of flooring is creating an image of polluted river to symbolize the artificial dye pollution made from resilient and translucent material like resin. The lighting will be dimmed in the upper part, but the light for circulation will come from the floor and local wall lighting. The air conditioning system is kept central in the whole exhibition area. The multi-sensory design concept is using a visual product display, dynamic soft instrumental music, chemical ingredients and slippery wall surface represents artificialism for tactility. No motion display prepared in this winding space to avoid stacking and slowing down of visitor circulation.

The Design Concept of 4th Scene: The Evaluation: Rediscovery the Beauty and the Symbolic Value of Traditional Textile Art

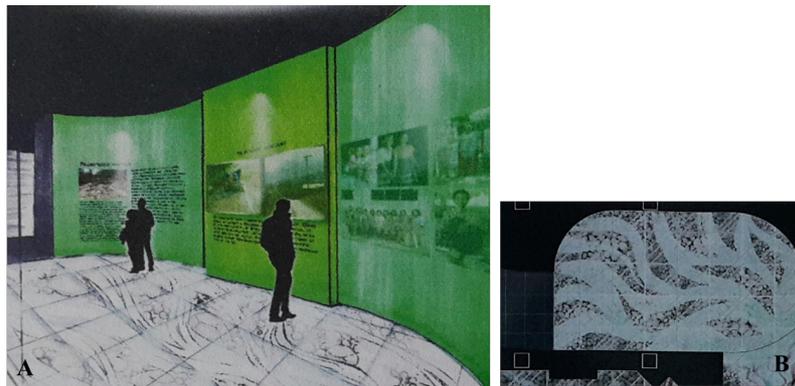


Figure 8: The Implementation Study of Design Concept of 4th Scene
in Perspective Drawing (A) and Layout Plan (B)

Picture source: Houdioni, 2016

The 4th scene is the evaluation chapter. The theme is a rediscovery of the beauty and symbolic value of traditional textile art. As this is the scene after the conflict, the set image is a calm down atmosphere indicates the beginning situation of recovery process. The form concept is a simple curving wall form. The color concept is a natural color scheme that signs the expedition to the weavers' village in the remote area to find the traditional textile and to meet the weavers. The floor material concept is the continuity or related to the previous conflict scene that is creating images of the clearer river to symbolize the unraveling of polluted river made from resilient and translucent material like resin. The lighting here is stronger than in the conflict scene. It came from display wall and floor, using color LED lights. This scene uses a central air conditioning system. For multi-sensory design, to create the atmosphere of calming down, the soft instrumental music will be sounded and natural ingredients fragrance will be sprayed, except for the visual display. The tactile is using semi-textured wall background indicates the in-between process or phase. The motion stimulation or interactive display is using moving image or touch screen display.

The Design Concept of 5th Scene: The Resolution: The Reinventing of Traditional Textile Art

The 5th scene is the resolution chapter when the traditional art is reinvented. The traditional textile transforms from the ceremonial cloth into a modern fashion while The Threads of Life Foundation become its facilitator in education, marketing and empowering. The image concept of this scene is festive atmosphere that indicates excitement of creativity in combining traditional and modern codes. The form is simple. The modern display form will create contrast with colorful textile displayed. The color is shades of black to compliment and create contrast with the various colors of fashion design. The material concept is using a processed wood like plywood in semi lacquer finish with smooth texture to indicate modern style. Resilient flooring is used in entire exhibition areas to reduce noise impact. General lighting is used in the circulation area. Local display lighting as a focal point is the landmark image's back-light. This scene uses a central air conditioning system. For the multi-sensory design,

the visual stimulation is created through product display and wall image. For the audio stimulation, the ethnic-modern instrumental music will be sounded. The smell of natural fragrance will remind people to the smell of grass and wood. The motion senses is stimulated through the existence of touch screen for changing displayed information.



Figure 9: The Implementation Study of Design Concept of 5th Scene
Picture source: Houdioni, 2016

The Design Concept of 6th Scene: The Coda: The Reflection of Value in Preserving the Environment and Tradition



Figure 10: The Implementation Study of Design Concept of 6th Scene
Picture source: Houdioni, 2016

The last scene in the exhibition area is coda. As this is the place of personal reflection after experiencing the exhibition, the concept of image is clean and serene atmosphere for reflection. The form concept is simple – geometric modern form. The color concept is modern and natural color scheme. The material concept is using plywood in semi lacquer finish to create modern ambience, matte glass to avoid glare and resilient flooring to reduce noise impact. It will use general lighting in the circulation area and local display lighting that is spotlight and central air conditioning system. The multi-sensory design in this scene is about using the visual product display, soft instrumental, smell of woody, grass and raw material fragrance and smooth texture for tactility. For motion stimulation, the visitor can share their thought and opinion about the exhibition, recorded, selected and shared. The coda area is important as it performs as the closing section. In this area, the value obtained from the exhibition material is related to the current modern life. To be remembered, the learning values taken from the traditional culture must be felt and relevant to the present context.

They are the value of hard-working, persistent, preserving natural heritage and natural environment. In this section, the visitors can actively be involved in sharing their opinions. The opinion will be recorded and selected, then published in the video so the coda room will also perform as a shared room for constructing the meaning.

The Design Concept of 7th Scene: The Restaurant and Shop which are One Story Line with the Exhibition Area

The restaurant and the shop are in one storyline with the exhibition area. In this area, the visitor is persuaded to get involved in joining the green lifestyle by eating the natural food and wearing cloth made manually from natural fabric and natural color. The proposed image is bringing the visitor back to the weavers' village, by creating the atmosphere of the weavers' village in the restaurant through the representation of natural, warm and rural atmosphere. The pattern found in many locations of the weavers' villages is that their village is always located near the river. The form concept is the combination of geometric furniture form with organic spatial form. The color concept is brown color scheme that reminds people of the natural soil and wood colors or earthy colors. The material concept is the combination of wood parquet flooring that represents the soil, thick glass tile flooring that represents the river and floor hardener that represents the weaver's house. As the proposed new restaurant is using the traditional Balinese architecture of open building called *wantilan*, it uses natural lighting in the morning and afternoon. The general lighting is provided with dimmer. The indirect lighting in warm color is used to create cozy atmosphere while dining in the evening. It uses natural air for air ventilation as the restaurant is in the open building. For the multi-sensory design concept, it is proposed to use natural scenery to stimulate the visual senses, the Balinese gamelan, which is the traditional instrumental music to stimulate the audio senses, the smell of natural plants as it is an open-air restaurant, the textured floor and wall for tactility, the movement of fish and water under the glass flooring that represents the river to stimulate the motion senses.



Figure 11: The Implementation Study of Design Concept of 7th Scene in Restaurant Layout Plan. Picture source: Houdioni, 2016

Conclusions

In this study, the interior design proposal of The Threads of Life Gallery is only the illustration of the narrative structure theory. The structure has six elements that are

abstract, orientation, conflict, evaluation, resolution and coda. In the narrative design, the abstract performs as an exhibition synopsis that tells the visitor about the main contents and storyline so the visitor can predict the time needed to experience the whole exhibition scenes. The conflict is needed as a point of interest to develop the visitor's emotion and gain empathy. The coda section is very important. It is the place when the visitor is persuaded to make a reflection after actively involved in creating the meaning along the exhibition. Only by then, the visitor will remember the exhibition and tell his or her own story about it to another person. Retelling is the power of narrative design as it will make the place become the topic of conversations and the other person will naturally consider going to the promoted place.

In a narrative exhibition, a museum does not merely display conserved object, but also spatially presents its production context, its relation to people and place. Reading its context through the narrative spatial experience helps visitors to understand and appreciate the objects. In the process of exhibition reading, with the help of interactive media and multi-sensory space, visitors are given the opportunity to be actively involved and give their own interpretation. It means that the meaning is invented by the visitor himself through the process of dialogue between displayed information and visitor's knowledge or memory background.

References

Coates, Nigel (2012). *Narrative Architecture*. Chichester, West Sussex: John Wiley & Sons Ltd., pp. 9–32.

Dohr, Joy & Margaret Portillo (2011). *Design Thinking for Interiors*. Hoboken, New Jersey: John Wiley & Sons Inc., 27-55, 249-267.

Erl, Astrid (2009). Narratology and Cultural Memory Studies in Heinen, Sandra & Roy Sommer (Editor), *Narratology in the Age of Cross-Disciplinary Narrative Research*. Berlin/New York: de Gruyter, 212-227.

Hidayat, July (Editor) (2014). *Desain Naratif*. Tangerang, Banten: School of Design, University of Pelita Harapan.

Houdioni, Nadia (2016). *Perancangan Interior Galeri Thread of Life di Bali dengan Pendekatan Narasi dan Green Design*. Tangerang, Banten: Interior Design Department, School of Design, University of Pelita Harapan.

Pallasmaa, Juhani (2005). *The Eyes of the Skin: Architecture of the Senses*, 2nd Edition. Chichester, West Sussex: John Wiley & Sons, Ltd.