



# The Influence of Cultural Information Design and the Classification of Spiritual Guidance, Based on the Cases of Japanese Wabi-sabi

# Yixuan Du 1 and Song Joo 2,\*

- <sup>1</sup> Jeonju University; Ph.D Candidate; artgym2017@gmai.com
- <sup>2</sup> Jeonju University; Professor; sjoo25@gmail.com
- \* Correspondence

https://doi.org/10.5392/IJoC.2021.17.1.027

Manuscript Received 6 October 2020; Received 17 March 2021; Accepted 18 March 2021

Abstract: Information design is a new scientific subject, which was named in the 20th century. The design methods of information design and the display of information are continually evolving with the change in the world. While sorting out the background and concept of information design, this article aims to identify the issues of information design. One issue is that environmental information design is a vague concept. Thus, leading to this type of information design is without any comprehensive analysis. Second, the impact of culture has not received adequate attention. This article is based on the Japanese Wabi-sabi culture. It analyzes the impact of culture on information design. The article deeply explores the role of Wabi-sabi in information design through case studies, and it reflects the characteristics of design products by culture.

Keywords: Wabi-sabi; Information Design; Spiritual Guidance; Zen Thinking; Japanese culture

## 1. Introduction

This article describes the historical reasons for the information design and how it works to prove the current status of information design and the lack of attention to the spiritual part. It aims to use the case study of Karesansui in Japan to describe and show the results of cultural influence on information design. The definition, history, and classification of information design are analyzed using literature review and comparative analysis methods in the introduction section. It leads to an analysis of the following influences that are responsible for shaping information design. The first point, information design is human-centered. The second point, information design, is the process of making information more visual and accessible. The third point is that information design is divided into three major visual, sensory, and interactive categories. The literature shows that spirituality and culture are not included in the recent history of information design or the existing three categories of information design. Therefore, based on the case of Karesansui in Japan, this paper can confirm that spiritual culture in information design is also one of the important factors influencing information design.

# 1.1. The Definition of the Information Design

As shown by Jacobson, Wurman, and Cooley [1] in the book, there are three key elements to become the scientific subject, which is namely, predictability, repeatability, and mathematical quantifiability. On the other hand, it needs to exclude intuitive judgment, subjective judgment, tacit knowledge, imagination, dream, and personal purpose. According to Jacobson, Wurman, and Horn [2] in the article, they Identify the information design as preparing information science and art, and its purpose is to make people can easily obtain the information and use the right information. According to the using information range, the information design can be listed into three types. The first type is that indicates information integrate by quickly develop, easy understand, accurately retrievable, and execution. Second, it is pointed out the information design is that the human-being makes easily interaction and naturally mutual definition with computer and machine. It includes

the design concept of Human-Computer Interaction (HCI). Third, the design can prompt to humans simply find the correct orientation under the 3D spatial-visual effect, especially, the urban space (map and planning graph) and virtual space, making by human-being.

As mentioned in the book by Lisha [3], in 1976, member of the American Institute of Architects (AIA), Wurman firstly use the information design as the theme of the meeting, and the information designers are defined as three points in the meeting. Any employer met any requirement between three points, they belong to an information designer. First, people who can organize the data's pattern by following the data and explain its meaning. Second, people who can create the construction of information or graph to help people to find knowledge. Third, the position is to understand the needs of the world and the information science organization.

As shown by O'Grady, and O'Grady [1]. The research study of information design aims to service human-being. The three types of information design start point on people (users). Information design belongs to human-center design. The core design theory is user-center and 'human-center' is always in the first place in the design process. The theory of Human-center usually relates to human-computer interaction (HCI) and ergonomics. It applies to interactive design, printing media (newspaper, magazine), and three-dimensional works. So, usually, the key to information design is the audience objectives. It is very important that consider to the standard of information design, which is to research its need, behavior, and hopes. The process of the information design needs to repeatedly recurrent design until finding out the solution plan. Information design as the human-center design subject, people's (users) needs are carefully considered and the result of the consideration is the content of the information design.

## 1.2 The History of Information Design

According to O'Grady [4], the most famous case of the earliest visual information cave is 'Altamira' in Spain and Lascaux and Chauvet in France. The sculpture the graphs, symbols on the surface of rocks. These rocks belong to the old Stone Age, which has 30,000 years history and its theme usually is hunting animals, such as cows, deer. This is the very first time that human has spiritual communion, life, and religious belief. Until 3000 BC, the hieroglyphic appeared in history. Humans in Mesopotamia Plain firstly use drawing as the communication tool. Mesopotamians created the hieroglyphic in 3000 BC, and it makes the dissemination of writing, the significance of recording history and exchanging information. As the times goes to agricultural society from hunting and gathering society, Ptolemy wrote the 'Gerographia' to record the geography of the 2nd century AD, and the land of occupied by the Romans And ports, coastlines, wind directions, and geographic hazards. It is one of the early information designs for mankind. (map)

As demonstrated by Lisha [3], it proposes that the concept of information design by the British Information Design Society in the 20th century. Before that, the different area had their special names for information design. Newspapers name the information design to information Graphics, business names it to presentation graphics or business graphics, science names it to scientific visualization, computer engineering names it to interface design, conference names it to graphic recording, and architect names it to signage or wayfinding. Graphic design names it to design.

As shown by O'Grady [5], Playfair published the book of 'the commercial and political atlas' and 'the statistical breviary' in 1786 and 1891, and the two of the books firstly used the visual graphics to present the information. Because of the books, people call him "the father of modern icons and curves." Jacobson [2] noticed that during the American Civil War, he used graphics and icons to explain questions in political and economic themes in his public policy report. This was also the first time he used information design to solve problems. According to research [5], in the 1940s, ISOTYPE (International System of Typographic Picture Education) organization created a language of systematic design picture, which contained more than 1,000 pictures. It invented and stipulated the colors, positioning, and the use of annotated text elements. Subsequently, the modernist master Ladislav Sutnar and his partner Kund Lonberg-Holm refined the specifications of information design, and visually analyze the information and developed to the use of brackets, braces, small pictures, pictures. The interactivity of information design has begun to be revealed in the historical stage with developing computers. Charles and Ray Eames designed the exhibition is called 'Mathematica: A World of Numbers and Beyond. The exhibition used an area of 3,000 square feet (278.7 square meters) to reflect abstract digital concepts through the display of pictures and interactive experiences. This reflects the power of interactivity in information design, and 'Muriel Cooper's, visual language studio gave an interactive digital environment.

www.kci.go.kr

As mentioned by Coates and Ellison [6], Henry Charles Beck created the London underground map in 1933, It was the first time that the length of the subway (useless information) was ignored for simplicity and practicality. He followed the definition of information design, which is succinctly helped people to find effective information on the map. According to the book [2], in the following fifth year, in 1938, Fukhousev summarized the early statistical historical graphics. In 1980, David Sibbet used graphics to record group dynamics, and in 1985, the cartoon 'Comic and Sequence Art' by Will Eisner marked the visual language. As shown by Coates and Ellison [6], in the computer engineering area, the graphical user interface (GUI) first replaced code with icons in 1981. ''Macintosh' by Jobs also launched a graphical user interface (GUI) in 1984, which is an operating system based on icons and desktops. In 1990, Windows company became the best standard of the graphical user interface (GUI). On the other hand, in 1965, EA Jonathan, who is a member of The Royal Rodar Embellishment in the UK invented touch-pad technology. It was the foundation for direct human-computer interaction (HCI), which is touch instead of a mouse. As mentioned earlier [2], these are the development and utilization of information design in different research areas and periods. Meanwhile, according to the author Robert Horn, there is no connection between the terms in these different information design, but they are all independent. Under the standard of information design, eventually, design companies and consulting companies will reintegrate into a huge and comprehensive information design by following the concept of information design.

According to Lisha in the book [3], Later on, in 1984, Richard Saul Wurman convened the first Ted (tech entertainment design) conference. The theme of the conference was around deeply exploring the relationship between science and understanding of information. This meeting confirmed the status of information design as an independent scientific subject. In 1999, the International Information Academic seminar convened that officially began to use the English name of information design: 'information design' at Tama Art University in Japan.

In conclusion, information design goes through three major stages before it is successfully named. The first stage of information design was early life and mental communication tools, such as simple graphics and symbols. The second stage was the simplification of solid graphics to illustrate the source of information, such as the visual information book and the picture language of ISOTYPE. The third stage is the addition to interactive graphic design that is more simplistic than the second stage, such as GUI and HCI. So, the following conclusions are drawn based on the definition and history of information design. According to the idea of information design for human use, information design is directed from symbols to solid pictures to interact according to human needs. With the help of historical proof, it can be inferred that information design ignores the influence that culture brings to its due.

## 1.3 The type of Information Design

As mentioned earlier [5], according to the definition of information design and it naturally transfers its data to icons, information design can be divided into two elements by the content and function of information design. It is the information density and information receivers. There are many types of information design, different methods, and different design goals, but focusing on the quantity and accessibility of information can determine the means of communication (information design). According to the information recipients and information density, people divide information design into the following categories: calendars, events, and timetables; icons and graphs; diagrams and schematics; design exhibition and environment; External signs, road signs and advertising booths, icons, and symbols; icons and symbols; physical and digital user interfaces; maps; 3D models and computer simulations; storyboards and plot narratives; technical illustrations; instruction manuals and instructions; and web pages, animations, and interactive media.

Coates and Ellison notices in the book [6], Information design can be divided into three categories by expression of information, which is printing, interactive type (including touch-screen), and environmental type. Printing information design is a way of delivering the data with one single graphics of fixed pattern or a set of it, such as newspapers, magazines, icons, photography, etc. It is mainly based on static information mode, which does not have the behavior of the human information interaction. The advantage of this type of information design is that it can simplify and convey complex information. If used properly, this type of information design can change public behaviors. Interactive information design passes the information to users that are mainly based on dynamic information. Mainly using methods are by computers and the internet, and its main feature is that users have the right to actively choose information. This type of information design is focused on considering the choice of users to read the information and the information design itself gives the user the right

to actively choose. For example, cable TV, wireless TV, and so on. Such information designers call themselves user experience improvers (information interaction designers). Environmental information design includes wayfinding signage systems, design exhibitions, and large-scale installation art. In 1960, the installation art, named 'image of the city' used the space booting system, which included signage system, lighting, and three-dimensional objects. The function of this space booting system is to notice pedestrians of their current location, their destination, and route. Therefore, environmental information designers must show the limitations of the environment and take care of the needs of users. It usually analyzes the space environment at very first, and then make wise decisions based on users' actual requirements for space. among the design process, designers need to take special consideration into design visibility and design background.

People's needs have been changed as time changes and society progresses. As mentioned before, information design is very affected by the needs of users and the amount of information. Therefore, the needs of users for information design have been also changed. Specific groups of people pay attention to specific information, and information design tends to be specialized design and refined information. The classification and definition of information design are to complete the design and information integration defined on the surface of information design. Ignore the influence of local culture on its users (people-oriented), and more information design is done imperceptibly, which can be said to be a spiritual information design.

### 2. Materials and Methods

The history of information design chapters mentioned that many industries were doing the information design works before the definition of information design. But there did no named the information design itself. Consider this research and there should be another type of method that also belongs to the category of information design. It is the cultural spirit of information design. So, the main purpose of this article is the use of information design in Japanese Wabi-sabi culture and the way that the spirit guides information design.

## 2.1. Materials- Japanese Culture, 'Wabi-sabi'.

According to Graham [7], the concepts of Wabi-sabi and '茶の湯' (sado) first appeared in the reign of Murata Jukō (1421?-1502). The tea set used a simple and casual Japanese tea set rather than a finely processed tea set from China, and this form of tea set was named "诧び数須" in Japanese. In the 17th century, Takeno Jōō (1502-1555) and Sen no Rikyū (1522-1591) developed and disseminated their tea ceremony aesthetics. Sabi (寂) first appeared in the collection of poems 'Man'yōshū' in the 8th century. Sabi was meant to express the sadness of exquisite things passing away with the passing of time. Later, in the 11th century, there appeared the emotional word'物衰', which is a specific word to the definition it. Yoshida Kenkō (1283?-1350?) continued to use Sabi's grieving feelings in 'Essays in Idleness' (14th-century work), and it had a great influence on the early tea ceremony and those after teaism. Therefore, the Sabi contains the meaning of simple beauty and understanding of the natural imperfections, and it is also a feeling of being simple, ease, and humble. And the Wabi originally meant rust, loneliness, and depression. Aesthetically, there is a sigh of the fragility of life. The word Wabi-sabi was originally used in the book "The Book of Tea" by Okakura Tenshin. It used the Zen to describe this aesthetic consciousness. Later, Daisetsu Teitaro Suzuki (1870-1966) defined the Wabi-sabi in his book, "Zen and Japanese Culture". Wabi-Sabi is simple and unadorned, antiquated with broken, incomplete, simply casual, and non-interference with full of the quality of the aged. Wabi was defined as lacking worship. Later, Yanagi Sōetsu defined the Wabi-sabi as the imperfect beauty with a sense of unevenness, and linked it to the beauty of shyness, in the Japanese word '涉'. Because of the influence of Yanagi Sōetsu, Elizabeth Gordon published an article in "House Beautiful". It specifically explained that the hidden principle of ""涉" is the Wabi-sabi. In 1994, Leonard Koren published the book 'Wabi-sabi: for Artists, Designers, Poets, and Philosophers'. The concept of wabi-sabi has been widely spread all over the world. At the same time, it also contrasts the Western aesthetic differences in the book.

In summary, the wabi-sabi represents the Zen spirit of plainness and simplicity. It is an explanation that exalts imperfection, and this aesthetic concept is applied to the information design of Japan's native culture. In the next chapter of this article, it will explain how the Wabi-sabi in spirit and culture to guide the results of information design. It will use case studies and impacts. It shows that cultural aesthetics should be included in the important factors that information designers and information designers need to consider.

According to Guan [8] in the article, Tai-an (待庵) in Myokian Temple, made by Sen no Rikyū's, is a typical case spiritual guide to information design, and it is deeply influenced by the characteristics of Japanese spiritual culture (wabi-sabi) in its information design. The spiritual guidance of Myokian Temple can be mainly reflected in the design of the tea house entrance, light, and materials. The Wabi-sabi, as the spiritual theme of Myokian Temple, guides people (users) step by step to experience the sad beauty of the wabi-sabi, so that users can feel their own insights and exchanges during tea time. This is the purpose of the information design of Myokian Temple, and it is also a unique way for Tai-an(待庵) to guide users through the tea house with environmental information design way. Generally, the area of the Japanese tea room is four and a half tatami mats as the main model, and Sen no Rikyū mostly built the tea room by one and a half tatami area. As shown by Graham [7], The area of a Japanese tea house is calculated by using tatami mats. A tatami is about 0.9 meters wide and 1.8 meters long, so the four-folded area is about 7.29 square meters. Zhao mentions in the research [9], The information design of Tai-an is guided users when they first step to enter the tea house. The designed entrance (knee-line entrance) original guided samurais to put down their sabers (samurais wore Katana sword in those days), and then bent down to drill into the entrance. The reason for its design is to allow all kinds of people to enter the tea room with the same identities and classes, and with equal hearts. Sen no Rikyū replaced the luxurious tea sets (refer to the exquisite Chinese tea set) with simple and plain ornaments, usually leaving only a decorative painting and the necessary tea set. As demonstrated Zhang et al [10], Wattle and daub (土壁, つちかべ) the basic builds material of the tea house. After a great deal of improvement, the Wattle and daub is thinner than ordinary ones. This kind of Wattle and daub barely appear to soil, dust, hay, so as to exude a sense of simplicity and nature, which is also the embodiment of the Sabi culture.

Such a succinct information design, its source can enable the host and guests to concentrate on researching tea art and conversation without being affected by the tea room environment. This is the core of Tai-an Tea House and the guiding information design of spiritual culture. So, the process of spiritual guidance is as shown in the table 1.

Design Methods	Moral Guidance	Result
Teahouse entrance	tragic	Concentrate on the art of tea
Ambient Lighting	nature	Focus on the conversation
release the Katana	plain and simple	Calm mood down
Simple decorations	unaffected	Forget the class status
Plain Tea Set		
Dirt, dust, hay		

Table 1. analyzing process of the Sen no Rikyū's Tai-an

As demonstrated in [11], Japanese artist Kengo Kuma is the author of the Floating Tea House. Floating Tea House is a design product of contemporary Japanese wabi-sabi culture. It inherits the spiritual communication in the Wabi-sabi culture. It's mainly a huge helium balloon with freely drifting. It is covered with a very light hard yarn, and make the tea house space with a translucent wall. This fibrous material called 'super-light chiffon' weighs only 11 grams per square kilometer so that this information design is a design that focuses on virtual culture. According to Garner and Deana Mcdonagh-Philp [12], Under the culture of the Wabisabi, the designers basically followed by the nature codes. They create an environment that can make people have more spiritual sustenance. In the design process, there is a step that is called the mood board. The mood board is used to solve design problems, usually by marking the information of the project (or product), and then putting forward new requirements and measuring changes. Through this understanding of these two cases, the use of information in the Wabi-sabi culture reduces the meaning of the information itself but leaves the interaction between people. In other words, the use of people (users) to feel Wabi-sabi (Floating tea house, Taian tea house) is far more than the meaning of the information itself, and it focuses on the spiritual guidance of information design. Gao notices in research [13] that Japanese Karesansui (The Japanese rock garden) is one of the typical Wabi-sabi cases. Its main feature is to replace natural materials with other elements, but its form still shows the beauty of the landscape. It uses natural elements to create an unadorned feeling. This plain beauty of Kushanshui is a cultural case of Wabi-sabi. Contemporary Kushanshui also augments advanced foam technology to replace traditional material. It increases the sense of decoration and mystery of the dry landscape by adding the sprayers, bubble machines, and effect light. However as shown by Zhao [14], the main materials

. [

of the Kushanshui generally consist of stones which representing mountains, white sand represents river water, moss and lawns represent woods and flowers, and natural materials such as bamboo, sand, and rocks. In a limited space (Kushanshui), it creates a sense of sacred awe of nature and guide people to reflect on life, and explore their inner self.

Table 2. analyzing process of the floating tea house

Design Methods	Moral Guidance	Result
Virtual	Self	meditation state
Floating balloon	Quiet	self-examination on your environment
Translucent gauze curtain Minimal information	Solitude	No interference of information

#### 2.2 The Kushanshui

The Kushanshui in the Hojo Garden of Ryoanji temple is one of the classics of Wabi-sabi's case. As shown by Fang and Wu [15], the four important materials are white sands, stone groups, plants, viewpoints. The texture and shape created by the white sands, which are used to convey the spiritual meaning. The whirlpool-shaped white sand represents the "big universe" of Zen thinking. The stone is Zen masters (users) represent small islands in the sea (white sands), which represents the pursuit of Zen masters (users) for their spiritual practice. The sparse plants are the expression of life in the Kushanshui, and the vicissitudes of life are guided by the depleted beauty of the Sabi. Because Kushanshui is not allowed people to enter for viewing. This represents the vision of human beings towards the spiritual world, like perceiving the true meaning of the universe and view life through a window. The Kushanshuiin the Hojo Garden of Ryoanji temple consists of 15 rocks to make 5 groups of rocks. In this whole Kushanshui, the addition of any two groups of stones will give an odd number of 5 or 7.

No matter from any angle, it is impossible to see all the rocks. The artists of this Kushanshui used this method of information design to show the incomplete beauty of human life, that is, the beauty of the wabi-sabi. These information designs are all examples of Kushanshui's materials. The using of these materials to guide users to experience its spiritual culture (Wabi-sabi).

Table 3. analyzing process of the floating tea house Kushanshui

Design Elements	Moral Guidance	Result
Foam Technology		
White sand	River	
Mosses	Flowers and plants	Human weakness
Lawn	Woods	The reincarnation and depletion of life
Little Stone	Mountain	Monk
Swirling sand patterns	Universe	Universe
No access to the interior		Zen Thought (Mahayana)
The odd number of stones	Visual incompleteness	Sense of the Unknown

# 2.3 Muji Company

The design of the Japanese retail brand, Muji company follows the aesthetic concept of Wabi-sabi from the Sori Yanagi era (Japanese industrial era). According to Huppatz [16], Muji's information design is mainly reflected in the meaning of the information itself and the user's experience, which is the core of human-oriented information design. Mr. Kazuko Koike opened the first Muji independent store in Tokyo in 1983. that the moment is the era of excessive consumption in Japan. Kazuko Koike had his unique understanding of design, which is the non-iconic products and the judging effect of signature designers. Zhang notices in the research [17], that continued to use the concept of the Japanese culture of Wabi-sabi. This turns consumers' attention back to the product itself, by using the concise design and unaffected furniture made of natural materials. The graphic designer of MUJI, Mr.Ikko Tanaka's works appear to the charm of the Wabi-sabi that takes complexity to the simplicity, that the abstract lines clear graphic information, and left unlimited imagination to the viewers (users).

Whether these natural furniture materials or plain design methods, it is the meaning of the inheritor of the Wabi-sabi. (For details, see the previous chapter) Color is one of the other important ways to guide information design. Either in the minimalist art of the West or the wabi-sabi culture of Japan (East), most colors use a single color, such as black and white. Mr. Kenya Hara is the artistic director of MUJI. In his book [18], he specifically notices that the perspective and usage of white. White is an abstract concept. White does not belong to a color. It represents light, space, and difference. It is a constant color, it is the superposition of all colors, and it is also the elimination of all colors. This idea also mentions a Zen concept: emptiness (室). The idea mentioned to the blank information in this case, and so this type of 'white' brings the effect of the design is philosophical information concept, which is Mr. Takuya Hara wants to pass to people in Muji products.

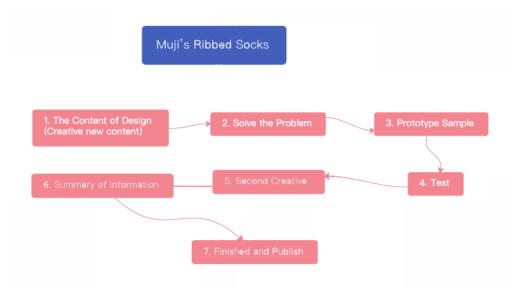


Figure 1. Map of Muji's Ribbed Socks

Therefore, the use of Wabi-sabi culture in information design is not simply "no-do" too much information, but it is an aesthetic concept passed down through this philosophy and culture. This kind of culture does not mean that such information design is closed and old-fashioned, it focused on human-computer interaction (HCI).

According to the official website of Muji company [19], the design of the Muji's ribbed socks (Figure 1) is a modified plan based on part of the user experience and questionnaires. Just as this case on the Muji's official website, what Muji does is the interactive process. So, the meaning of this information is for the re-creation of culture by using the interactive design function of information design. It can smoothly screen users and get the correct information to complete design projects and design ideas. Therefore, the process of human-computer interaction is part of information design under the Wabi-sabi. The culture of information design guides the range of choices and fixed recipients of information designers. In other words, the spirituality of information design not only occurs among information designers but also affects the recipients.

Design Methods	Moral Guidance	Result
Simple Lines	Differences	"No Design"
Single color (black and white)	Space	Simple
"No-Do"	The Zen Science of 'Emptiness'	plain and simple
Combined with user experience (interactive)	•	

Table 3. analyzing process of the Muji product

# 3. Results

According to the definition of information design, the core concept 'people-oriented' is summarized or embodied by the information designer or team. The designer discovered the problem and made the best design choice. But under the aesthetics of the Wabi-sabi, the theory is to allow people to simply accept the shortcomings of things themselves and reflect the natural beauty of things. In the chapter, the Wabi-sabi shows

it by examples of Myokian Temple, floating tea house, and Japanese rock garden, and Muji company. Although Wabi-sabi aesthetics advocates the simple display, the most needed and concise information. If we analyze the influence of Wabi-sabi on the information design area, it has a completely different direction and understanding by its choice of material for information design, and the guidance of information culture. In this paper, the analysis of the above case studies for the Tai-an, floating teahouse, Kushanshui, and Muji products is as follows.

- 1. The Tai-an teahouse is designed with decorative elements, link elements (storage of peyote), and material elements. Combining these elements can lead people into a natural, unpretentious environment for chatting, cultivating, and drinking tea. It is the design outcome that wabi-sabi wants to achieve. It is also an environmental type of information design that can be used to change human behavior spiritually.
- 2. Floating teahouse uses floating balloons and loose gauze curtains to minimize environmental information. The comprehensive environment with no information that can be seen visually, the wabi-sabi leads people into a meditative environment—using the environment to reduce the distracting information and establish this reflective environment. In the same way as entry 1, it is also a case of information design in the environment category in which the spiritual dimension affects human use.
- 3. The information of Kushanshui comes from natural elements, such as sand, stone, moss. Nevertheless, it is also a camouflaged natural environment. The whole place of information design makes these natural elements. Kushanshui uses these elements to guide people to reflect on life and practice Zen thinking about the universe. Kushanshui also uses the imperfections in the wabi-sabi to create a reflection process guided by the odd number of stones. Unlike a tea house, Kushanshui uses information design to reshape the environment in the spirit. It is a case where spirituality and culture can directly influence information design thinking.
- 4. The understanding of Muji's products is based on the wabi-sabi concept of a single color, minimalist line design, and "no design." Muji is different from other cases. It is a modernity product and is an example of how spirituality and culture still have a role to play in contemporary society.

In the four wabi-sabi cases above, wabi-sabi can guide people's spirit into the desired effect by design messages. The wabi-sabi case study also confirms that culture and spirituality have an influential role in information design.

## 4. Discussion

Information design has firstly appeared in Mesopotamians. Following the progress of human society, information design in different periods has its role. For example, the graphics of the murals allow people to communicate with the language and exchange culture, the first nautical chart, the first designed map of London, and so on. Until the later information design became an independent subject, people referred to different 'information design' collectively named information design, that allows practitioners and learners to easily research the key points of the information design. There are two points that researchers should focus on, which is the definition of human-oriented design, and the classification of information design, that is according to static, dynamic, environment, and cultural impact. But most research data did not lay emphasis on the cultural impact one, and it does not seem like the culture is part of components in information design. This article uses Japanese culture, 'Wabi-sabi' as a case to introduce how culture reflects in information design. Among them, the Tea House of Tai-ain is an architecturally environmental design that guides the formation of spiritual culture. The Kushanshui uses its unique material to prove the role of materials in information design. There are also design company, 'Muji' reflects the use of lines and colors.

Information design is an independent subject, and information design researchers mostly dig in the type of static and dynamic information design. The purpose mainly is for information dissemination. There is relatively little attention to environmental design and exhibition type information design. At the same time, the various cross definitions of information design and art are also blurred. Therefore, if there are more information design articles about environmental types, it should be of great help to the limitations of this article. So, the main assignment of this article is to analyze the influence of culture on information design. The role of the guiding culture in this article on information design is to help inform design practitioners or learners in the process of learning or using information design, and pay attention to the influence of various cultures in the information design. In particular, design products may show completely different results (outcome) because of the local culture.

www.kci.go.kr

#### 5. Conclusion

The historical development of information design has shown that modern information design has become interactive information design with a strong emphasis on human beings. The four cases of Wabi-sabi explain the role of spirituality and culture in information design as follows.

- 1. The historical progression and direction of information design are sorted out. From the historical perspective of time in information design, it is the transformation from a solid graphic information approach to a dynamic information design with interactivity.
- 2. The core of information design in serving people ignores the influence of spirit and culture on information design.
- 3. This paper analyzes wabi-sabi aesthetics from the perspective of information design. Tai-an, floating teahouse, Kushanshui, and Muji company use different elements to reflect the wabi-sabi aesthetic core.
- 4. The wabi-sabi's defective, simple philosophical ideas are confirmed by the cases. The design of information can produce a change in human use of information. In other words, this paper affirms that spirituality and culture can guide the design of information to become capable of changing people's behavior as subjects.
- 5. The case of the Wabi-sabi design proves that information design can do more than serve people. It can also lead people to do things. The wabi-sabi cases illustrate that information design ignores culture and spirit. It is a functional part of information design.

Therefore, information design should add the definition of culture and spirit to the classification so that later scholars can make a more comprehensive and accurate analysis and innovation. So, it is also for future researchers to study the psychology and connotation of information design to make a more comprehensive and accurate analysis and innovation.

**Acknowledgments:** The author thanks for professor Joo Song or the professional suggestions and emotional supports, and thanks to associate professor Hailan Ma for helping me to analyze data. Professor Dongsoong Han helps me to guide the research and engaging me to publish the research, especially understanding my difficulty of studying abroad.

**Conflicts of Interest:** As the author, I make the statement to confirm this article that there are no relevant financial or non-financial competing interests to report.

# References

- [1] R. E. Jacobson, R. S. Wurman, and M. Cooley, "Human-Centered Design," in Information design, R. E. Jacobson Ed. Cambridge, Mass.: MIT Press, 1999.
- [2] R. E. Horn, "Emergence of a New Profession," in Information design, R. E. Jacobson Ed. Cambridge, Mass.: MIT Press, 1999.
- [3] O. Lisha, The information design of the information age, Wuhan: Center China Normal University Press (in Chinese), 2012.
- [4] R. E. Jacobson, Information design, Cambridge, Mass.: MIT Press (in English), 1999.
- [5] J. Visocky O'Grady, K. Visocky O'Grady, and B. How, The information design handbook, Cincinnati, Ohio: How Books (in English), 2008.
- [6] K. Coates and A. Ellison, An introduction to information design, Laurence King Publishing, 2015.
- [7] P. Graham, Japanese design, Beijing: SDX Joint Publishing Company, 2017.
- [8] X. Guan, "The Inheritance of the Image of Traditional Soanfu Teahouse in Japanese Modern Architecture," Master, Tongji University, 2007.
- [9] Y. Zhao, "Study on the space of Dai and Ru tea room," Art Panorama, vol. 373, no. 01, pp. 132-133, 2019, doi: doi:10.3969/j.issn.1002-2953.2019.01.042.
- [10] D. Zhang, Y. Chen, X. Yu, and Q. Guo, "The Enlightenment of Sen Rikyu's Wabi-Sabi Aesthetis to the Design of Modern Mini-Tearoom," Furniture & Interior Design, no. 08, pp. 124-126, 2019, doi: doi.org/10.16771/j.cn43-1247/ts.2019.08.030.
- [11] K. Kuma and H. Zhang, "FLOATING SPACE," Urban Environment Design, no. 07, pp. 130-133, 2009, doi: CNKI:SUN:MEIC.0.2020-01-034.

- [12] S. Garner and D. McDonagh-Philp, "Problem interpretation and resolution via visual stimuli: the use of 'mood boards' in design education," Journal of Art & Design Education, vol. 20, no. 1, pp. 57-64, 2001, doi: doi.org/10.1111/1468-5949.00250.
- [13] Y. Gao, "The development and application of the art of Karesansui landscape gardening in modern landscape design," Beauty & Times, 2020, doi: CNKI:SUN:MEIC.0.2020-01-034.
- [14] L. Zhao, "On the beauty of wabi-sabi in Japanese landscape," Designs, 2016, doi: doi.org/10.16129/j.cnki.mysds.2016.12.005.
- [15] H. Fang and D. Wu, "Zen and Karesansui An example of the Abbot's garden at Longan Temple," Art Education Research, vol. 000, no. 008, pp. 74-75, 2019, doi: 10.3969/j.issn.1674-9286.2019.08.038.
- [16] D. Huppatz, "MUJI, by Kazuko Koike, Naoto Fukasawa, Kenya Hara, and Takashi Sugimoto," ed: Taylor & Francis, 2011.
- [17] B. Zhang, "A RESEARCH OF MUJI'S DESIGN AESTHETICS BASED ON CONCEPTS OF JAPANESE ZEN PAINTING," Design, 2016, doi: 10.3969/j.issn.1003-0069.2016.23.006.
- [18] K. Hara, J. Rhee, and P. Lars Müller, White, Zurich: Lars Müller Publishers, 2017.
- [19] M. Comapy, "Map of Muji's Ribbed Socks," https://lab.muji.com/jp/ideapark/197/#step07 (accessed 15/03/2021, 2020).



© 2021 by the authors. Copyrights of all published papers are owned by the IJOC. They also follow the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.