A Study to Reveal the Effects of Using Symbolic Meaning of Minhwa with People Having a Variety of Cultural Backgrounds

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Abstract

As the use of cultural elements to enhance design has become increasingly emphasized, fashion studies are focusing more on the cultural aspects of design. However, the diverse approaches of Minhwa (Korean folk painting) still need to be incorporated into fashion designs. Moreover, there is limited research on the awareness and thought of using a cultural design source of Minhwa based on people from different cultural backgrounds. This study aims to reveal an in-depth understanding of the use of Minhwa and its inner symbolic meaning by people from a diverse range of cultural backgrounds. A review of the literature on cultural design and Minhwa studies was conducted to establish a theoretical foundation. Focus group interviews were conducted with 26 participants, who were divided into five distinct cultural groups to ascertain their thoughts towards Minhwa and its inner symbolic meaning. The study's major findings were threefold. First, the outer appearance of Minhwa elements based on aesthetic preferences and familiarity affect their preference choices more than the influences of their cultural backgrounds. Second, knowing the knowledge of symbolic meaning makes a big difference in image preference. Third, avoiding the use of anachronisms is a significant consideration, as they can lead to negative judgments irrespective of cultural background.

Ⅰ. Introduction

Globalization has created a level of homogeneity among cultures through the impact of multinationals and mass media. Fashion reveals our anxieties to fit in, leading us to draw influence from others and follow trends as it is influenced by mass media and globalization. In response, opposing trends are emerging within a design, and these have led not only to the promotion of cultural identity but also to an emphasis on cultural values and traditions (Popovic, Hickling-Hudson, & Moalosi, 2007). And, now more than ever, as the role of culture in the field of design is becoming increasingly emphasized, the application of traditional cultural elements to product design has become increasingly widespread. Importantly, because associating products with cultural features enhances product value, designers are adopting the strategy of using cultural elements in their designs to create a product identity in the global market. The connection between culture and design has become significant in the competitive global market (Shin, Cassidy, & Moore, 2011).

As a result of the efforts of many researchers (Jang & Jang, 2013; Jun & Cho, 2010; Ko & Jang, 2013; Song, 2013), various Korean cultural elements have been analyzed to show the possibility of cultural designs. Minhwa is a unique art form that represents the lives of ordinary Korean people. A previous analysis of Minhwa revealed the diverse symbolic meanings associated with Korean culture and the potential applications of the art form in fashion design. However, when it comes to the use of Minhwa in fashion, approaches in academic and practical fields have been limited. And existing researches (Jang & Jang, 2013; Jun & Cho, 2010; Yum, 2016) have shown that current Korean cultural design, including Minhwa design, is often very simplistic and that cultural inner meaning is rarely embedded in product design. There is also a lack of research into international views on the use of Minhwa in design. Cheong (2015) states that Korean cultural products lack the depth and diversity to meet modern consumers' fast-changing needs. Thus, it is time to explore and discuss different attitudes regarding the use of Minhwa with inner meaning by the views of people of different cultural backgrounds.

This study aims to produce an understanding regarding the effects of using Minhwa with symbolic meaning in the eyes of people of different cultural backgrounds. Therefore, this study introduces the concept of cultural design in the context of the field of fashion. In particular, it focuses on a form of traditional Korean painting called Minhwa, and it reviews existing studies regarding cultural design using Minhwa. It also explores various cultural backgrounds people's preferences and thoughts associated with using Minhwa and its symbolic meaning, and thus it assists that Minhwa could be incorporated effectively into design in order to create Minhwa designs for the global fashion industries.

Ⅱ. Literature Review

1. Cultural design

Culture adds to the core value of products, thus inspiring new ways of thinking for design development, because culture is a source of value creation that can also create an emotional link and identity (Lin, 2007; Luo & Dong, 2017). The advantages of implementing cultural design are (1) distinctiveness in positioning and (2) brand value proposition with depth and authenticity for consumers. It is believed that a brand infused with cultural inspirations can attain marketing leverage, especially in global markets (Ko & Lee, 2011; Stewart-Allen, 2002). Cultural inspiration plays an important role in the design process as a definition of context, a trigger for idea generation, and an anchor for structuring designers' mental representations of designs (Eckert & Stacey 2000; Luo & Dong, 2017). A traditional cultural artifact is a carrier of local culture, and it can display the cultural elements very well. In this study, a special type of inspiration from the cultural artifact is discussed: cultural elements. A cultural element can be applied into cultural content-including mental and physical properties and patterns of culture-as a

cultural inspiration (Ko & Lee, 2011; Lim & Yoon, 2008). Design is also the motivation for promoting cultural development (Lin, 2007).

Hirsch (1972) defines "cultural products" as nonmaterial goods directed at a public of consumers for whom they generally serve an aesthetic or expressive, rather than a clear utilitarian, function. Accordingly, Lampel, Lant, and Shamsie (2000) defines cultural products as nonmaterial goods that serve their utilitarian function less than their aesthetic or expressive functions. Hsu, Lin, and Lin (2011) defines cultural product design as a process of rethinking or reviewing cultural elements and then redefining them to design a new one to fit into society and to satisfy consumers through culture and aesthetics.

Traditional products are different in that the traditional industries' products are not consumed symbolically but, rather, materially and in that their usefulness does not depend on their meaning. In addition, cultural products are different from standard products because of their aesthetic and symbolic value (Scott, 2004; Wang & Gu, 2020). Some cultural products express symbolic meanings that endow them with cultural value or significance distinct from whatever commercial value they may possess (Aiello & Cacia, 2014). Cultural products can be seen as presentations of cultural value (Ravasi, Rindova, & Dalpiaz, 2012), and a combination of culturally specific meanings can be pleasant for consumers (Aiello & Cacia, 2014; Voon, 2011).

According to a more widespread definition, cultural products and designs are goods and services that include the arts (e.g. performing arts, visual arts, architecture), heritage conservation (e.g. museums, galleries, libraries), and the cultural industries (e.g. written media, broadcasting, film, recording). This study approaches cultural fashion design by interpreting it in a broad sense as an expression of cultural identity and symbolic meaning that includes both traditional and contemporary elements; this is in contrast to fashion products or souvenirs containing traditional images only.

2. Minhwa - Korean folk painting

Korean folk painting, called 'Minhwa', is one of Korea's cultural heritages. It reflects the mythology, religion and thinking of the Korean people. This type of painting portrays various subjects, such as animals, flowers, trees, birds, daily objects, and even office supplies (Figure. 1).

Folk painting is expressed in diverse forms, ranging from pottery to furniture and to the walls of rooms. Furthermore, folk paintings are woven into the fabric of products that are used in everyday life. Minhwa is used to decorate houses and celebrate family occasions, such as weddings and 60th birthdays (Yoon, 2003). As a style of painting embodying the common consciousness of the Korean nation, Minhwa openly expresses the people's

Hwajo-do
Symbol of couples' love

Dongmul-do /Ho-do
Symbol of driving away evil spirits

Chochung-do
Symbol of a bountiful life

Eohae-do
Symbol of congratulations of sixtieth birthday

Figure 1. Minhwa
(www.emuseum.go.kr)

general feelings in life. Accordingly, Minhwa could be defined as a form of painting that expresses people's ideas, ideologies, feelings, and aesthetic tastes without limitations in form or content. Unlike orthodox and formal paintings, folk paintings represent the artistic expression of ordinary people or unknown artisans in art history. For this reason, Yoon (2003) argues that the dates and artists of folk paintings remain mostly anonymous and have never been adequately studied. However, Minhwa is a valuable art form that represents the ordinary lives of the Korean people. It displays a unique perspective and uses painting techniques that fully reflect the artist's aesthetic sense and provide an unlimited source of artistic inspiration. For these reasons, the study of Minhwa is important. Most importantly, many objects have symbolic meanings, requiring an understanding of the symbolism and role of folk paintings in communicating emotions. Because symbolic expressions and stories in Minhwa convey the people's feelings in their day-to-day lives, they constitute an essential feature of Minhwa.

3. Cultural design with Minhwa in fashion

Because the contemporary concept of a brand is identity-oriented (Heine, 2010), the use of cultural heritage can arouse a strong sense of cultural identity that is authentic, genuine, compelling, and credible. Concerning Korean cultural design products in fashion, the industry has experienced remarkable growth. In this context, a variety of attempts to find a way of using Minhwa for fashion design have been presented in previous studies of Korean cultural design. For instance, Song's (2013) development and design of digital textile printing facilitated the application of the Minhwa lotus flower to textiles, including women's spring–summer dress fabrics. Jang and Jang (2013) attempted to create fashion items on the basis of the analysis of Munja-do, an aspect of Minhwa. Ko and Jang's (2013) study analyzed the characteristics of the forms of Munja-do through a search of the literature and artifact analyses to design textile patterns with the handwriting characteristics

and then printed them. To present a highly valued Korean modern fashion design, Yum (2016) developed a textile design based on a theoretical exploration of Minhwa and an analysis of motifs and colors, with a particular focus on Hwajo-do, the flower-and-bird paintings. Jung (2019) participated in the modern trend of creating high value-added fashion products, such as scarves, based on designs inspired by the flower-and-bird paintings in the Minhwa of the Joseon dynasty period. The cultural symbolism in the fashion products developed by Kim (2019) is based on the iconological analysis of the imaginary animals in Korean folk painting.

In the Korean fashion industry, to introduce Korean culture into the fashion industry, various traditional Korean elements have been used. Korean fashion designers researched and developed traditional patterns and firmly built a Korean image in world fashion. The 2000s were considered the period when traditional patterns were developed and actively used in efforts to globalize the Korean image. Korean fashion designers have used several modes of expression to incorporate traditional Korean elements including Minhwa into their work as seen in the Figure 2. Since 2000, designers' expressions have included several techniques, such as beading, hand printing, gold and silver leaf, embroidery and digital printing.

However, the limitations in the use of these techniques to incorporate traditional patterns into contemporary fashion design remain (Eum, 2015; Hyun & Bae, 2007; Lee, 2016). Keeping to traditional designs or modifying traditional designs were insufficient to secure the popularity necessary for acceptance in the world market. That is to say, the fact that traditional clothing was simply transformed into a Western costume was the biggest limitation (Cheong, 2015). Therefore, Hyun and Bae (2007) suggest that original and unique cultural heritages should be developed in many ways. Shin (2011) also proposes that a variety of design development with various approaches and views should be used to avoid the limited expression of cultural elements. Based on findings from interviews with international and Korean

Sul Yun-hyoung **1994 Collection** (http://www.fashiongio.com)	**Lee Young Hee** **2012 Collection** (https://edition.cnn.com)	**HEILL F/W** **2018 Collection** (https://www.heillparis.com)

Figure 2. Fashion Designers' Usage of Minhwa

fashion professionals, Eum (2015) argues that the inner meanings of Korean cultural elements should be studied and applied to fashion design, as fashion designers' previous usage of Minhwa was just focused on the shapes of the Minhwa motif.

In addition, although there are already numerous theses regarding design with Korean cultural elements or traditional aesthetics, a lack of analysis concerning the thoughts of customers in the different cultural backgrounds for a Minhwa with inner meaning have been pointed out. In particular, Choi (2003) stated that there was no prior research or analysis concerning the preferences of customers in the different cultural backgrounds for Korean traditional culture. Lee (2014) and Choi (2003) proposed that because their studies were limited to subjective judgment, researchers in the future should analyze the perceptions and preferences of both Koreans and non-Koreans. So far, in the field of design, studies of Korean culture and its influence have been conducted more in the context of literature reviews and historical research to support product design and development. But empirical studies measuring the users' perceptions and opinions regarding Korean cultural design with Minhwa have been limited.

III. Focus group interview

This focus group interview aims to explore and discuss the use of the symbolic meaning of Minhwa by means of interviews with various cultural groups. Thus, this gives an in-depth understanding of international views on the use of Minhwa with symbolic meanings and the effectiveness of using symbolic meanings in design.

1. Data collection and analysis method

In this study, focus group interviews were conducted to explore the perspectives of people from different cultural backgrounds on the use of Minhwa with symbolic meanings in design. The focus group interview is a qualitative research technique used to obtain data about feelings and opinions of small groups of participants about a given problem, experience, or service (Basch, 1987). One of the distinct features of focus group interviews is the group dynamic. As a result, the type and range of data generated through the social interaction of the group is often deeper and richer than of that obtained from one-to-one interviews (Thomas, MacMillan, McColl, Hale, & Bond, 1995; Rabiee, 2004). Focus groups can provide information about a range of

ideas and feelings that individuals have about a certain subject as well as illuminate the differences in perspective between groups of individuals.

Quantitative questions were used to quantify and compare participants' opinions, preferences, and evaluations and to determine the effect of understanding symbolic meanings. Semi-structured interviews were conducted concurrently to reveal the reasons for the choices and whether the choices were the results of cultural differences. Since results from qualitative study are said to enhance the sensitivity and accuracy of survey questions (Jones-Harris, 2010), qualitative methods are often included in mixed method studies to obtain a rich and comprehensive view of a research topic.

The software application used to analyze the quantitative data was Excel. In some parts of the quantitative analysis, SPSS was used to confirm whether the meaning of the data was sufficient. Qualitative data was analyzed to produce an in-depth understanding of the reasons behind peoples' thoughts and opinions. NVivo was the software program used for qualitative analysis. Bazeley (2009) notes that a range of software packages can be considered in mixed methods research. During the phase of data integration, a common set of categories was developed. The qualitative data helped to explain the quantitative results as data integration is the process that weaves what has been discovered into a coherent piece (Li, Marquart, & Zercher, 2000). In this study, the qualitative data enriched the survey results and provided a deeper understanding of participant selections.

2. Interview procedure and measures

Twenty-six participants were selected by means of a purposive sampling method. Purposive sampling can be used with both qualitative and quantitative research techniques (Tongco, 2007). Participants from five distinct cultural groups were interviewed. First, international participants were recruited. Then the participants were selected and organized by nationality to trace the cultural differences that were likely to have an impact on their

choices. Hofstede (2001) argues that people exhibit patterns of thinking, feeling, and potential action that are learned throughout their lifetimes. These patterns contain components that are expressed in distinct values among people from diverse countries. But, in this study, the main reason of dividing group with similar cultural background is to facilitate discuss interview questions. One of the distinct features of focus-group interviews is its group dynamic. As a result, the type and range of data generated through the social interaction of the group is often deeper and richer than those obtained from one-to-one interviews (Thomas et al., 1995; Rabiee, 2004).

The participants were then divided into five groups: the Chinese group (six participants); the European Union (EU) group made up of two Belgians, one Romanian, one German, and one British (five participants); the mixed group made up of one Mexican, one Motswana, one Malaysian, one Indian, and one Indonesian (five participants); the United Kingdom (UK) group (five participants); and the Korean group (five participants). Asian, Latin American and African were organized in Mixed groups because of the limited number of participants. Culture is always a collective phenomenon, but it can be connected to different collectives (Hofstede, 2011). The participants' demographic information is shown in Table 1. The focus group interview began with a thorough explanation of the format and purpose of the study, and participants' interview permission was obtained with the consent form. To maintain anonymity, each participant was assigned a P with a number in place of Table 1 Profiles of Participants their name.

As the participants had varying degrees of knowledge and experience of Korean culture, they could exchange points of view with others in their group in response to questions and opinions, which generated valuable responses. When asked to rate their familiarity with Korean culture (apart from the Korean group), their answers averaged 2.33 on a 5-point Likert scale that ranged from strongly agree (5) to strongly disagree (1). The Chinese group averaged 3.16, which was the highest rating among the international groups (except the Korean

Table 1. Profiles of participants

	Group	Nationality	Age	Familiar with Korean culture	Experiences that provided familiarity with Korean culture		
P-1	China	CHINESE	25	2	TV Programs		
P-2		CHINESE	27	3	Food, Travel, TV Programs, Friends		
P-3		CHINESE	23	4	TV Programs		
P-4		CHINESE	27	3	Websites, Music, Food, Travel		
P-5		CHINESE	30	3	Fine art, Websites, Food		
P-6		CHINESE	34	4	Music, Food, TV programs		
P-7	EU	BELGIAN	24	3	Websites		
P-8		BELGIAN	24	1	Books		
P-9		GERMAN	34	3	Travel		
P-10		BRITISH-Chinese	32	4	Travel, Music, Food		
P-11		RUMANIAN	41	2	Design, Food		
P-12	Mixed	MEXICAN	33	1	Not mentioned		
P-13		MOTSWANA	42	1	Friends		
P-14		INDONESIAN	34	3	Food, TV programs		
P-15		INDIAN	30	2	Friends		
P-16		MALAYSIAN	44	1	Food		
P-17	UK	BRITISH	20	3	Music, Food, Friends		
P-18		BRITISH	21	2	Music, Food, Friends		
P-19		BRITISH	21	2	Music, News		
P-20		BRITISH	24	1	Websites		
P-21		BRITISH	22	1	Not mentioned		
					knowledge of Minhwa	Symbolic meaning	Minhwa design
P-22	Korea	KOREAN	34	5	4	Y	N
P-23		KOREAN	35	5	5	Y	Y
P-24		KOREAN	23	5	4	N	Y
P-25		KOREAN	33	5	4	Y	Y
P-26		KOREAN	33	5	4	Y	Y

group). This was followed by the EU, UK, and the mixed group in that order. The experience that contributed to their familiarity with Korean culture was divided as follows: food (ten times), music (six times), TV programs (six times), Korean friends (five times), travel (four times), websites (four times), visual arts including fine art and design (twice), and books (once). In the Korean group, as they obviously had direct experience of Korean culture, more specific and detailed questions about Minhwa were asked; such as Do you

think you know Minhwa? Do you know the symbolic meaning of Minhwa? and Have you ever seen or bought Minhwa design?

As shown in Table 2, these focus group interviews followed mixed methods employing a range of quantitative and qualitative measures. Quantitative questions were conducted simultaneously, with focus groups being asked the reasons for their choices and answers for each question. Since every question tented to find the effects of using the symbolic meaning of

Table 2. Focus Group Interview Procedure and Measures

Procedure	Time	Quantitative			Qualitative		Purpose	Equipment
Consent, introduction and demographics	5 mins	Age and nationality I am familiar with Korean culture?	Selection A 5-point Likert scale	Excel	What kind of Korean cultural experience do you have?	Interview	- Back ground - familiarity with Korean culture	Laptop, question paper, pen, voice recorder
Questions	40 mins	1. Please tick which images of design sources you like (Multiple choices) 2. Please tick which images of design sources you like (Multiple choices) 3. I think my opinion has been changed after knowing about symbolic meanings	1, 2 A multiple selection question / 3 A 5-point Likert scale	Excel SPSS	What's the reasons? which one has a negative or positive meaning in your country among the above images	N Vivo	- Preference for design sources of Minhwa - Effect of knowing symbolic meanings - Cultural differences	

Minhwa from participants' awareness and opinion, it did not involve more than minimal risk. The quantitative data included standardized outcome measures of preference for design sources of Minhwa and the effect of knowing symbolic meanings.

The focus group interview was conducted through various stimulus images divided into eight categories of subject matter. In the set of questions, interviewees selected multiple images. The choices before and after knowing the symbolic meanings were immediately compared. A 5-point Likert scale was used to determine how much the knowledge of the symbolic meaning influenced their choice. The qualitative questions then revealed the reasons why people changed their choices once they knew the symbolic meanings and whether there were any cultural differences.

The focus group interview process was flexible, encouraging open discussion of thoughts. Several
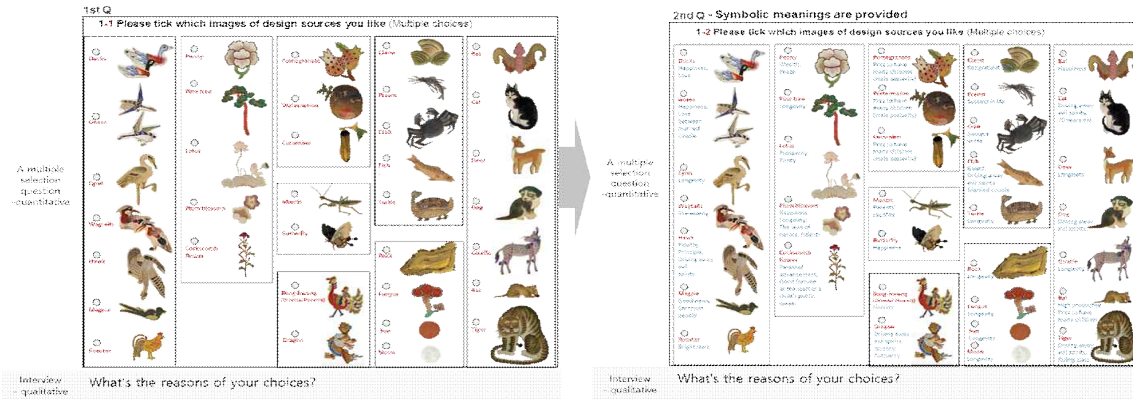
Figure 3. The Set of Questions
(taken by author)

participants of similar cultural background were organized in each group so that the interviewees would be comfortable expressing their opinions and thus more likely to provide in-depth information. Since the uniqueness of a focus group lies in its ability to generate data based on the synergy of the group interaction (Green et al., 2003), Rabiee (2004) mentions that the members of the group should feel comfortable with each other in order to engage in discussion.

The data collection method was the use of audio recordings. With the permission of the interviewees, a recording was started at the beginning of the interview, and notes were taken. Each interview lasted approximately one hour, and the author listened to each recording several times to fully understand each answer. The quantitative data was sorted, and all the interviews were transcribed.

3. Findings

The purpose of the main questions was to explain how knowledge of symbolic meaning affects preferences and choices by obtaining personal opinions and thoughts. In this set of questions, a multiple selection question in which interviewees selected multiple images at once (see Figure 3).

And a 5-point Likert scale were used to determine the extent to which knowledge of symbolic meaning influenced participants. Quantified results can express supplementary explanations for vague interview answers. Then interviewees were asked the reasons for their choices.

As shown in Table 3, when interviewees were asked whether their opinions had changed after they were informed of the symbolic meanings, their answers averaged 3.27 on a 5-point Likert scale that ranged from very much changed (5) to not at all changed (1), with 3.0 indicating "unsure." The average was thus closer to "unsure" than to "changed."

However, the survey results of the first question revealed that when interviewees were asked which images of design sources they liked, 31%, which is an average rate of 10.69 of 35 possible selections, were selected (see Table 4). The interview also investigated the reasons for selections in each question. In the first question, all five nationality groups most frequently mentioned outer appearance categories, such as design, image, feature, color, and drawing technique. Also, personal preference, familiarity, and feeling were mentioned in that order. The singularity of the Chinese group was that even before an explanation of symbolic meaning, several participants already considered the meanings of images. Only two participants mentioned that the meanings of images influenced their selections.

Table 3. Likert Scale Figures of the Change Choices

P-1	1
P-2	2
P-3	4
P-4	2
P-5	4
P-6	2
P-7	5
P-8	4
P-9	4
P-10	2
P-11	4
P-12	4
P-13	1
P-14	2
P-15	2
P-16	4
P-17	4
P-18	4
P-19	4
P-20	4
P-21	4
P-22	3
P-23	4
P-24	3
P-25	4
P-26	4
Average	3.27

After informing participants about the symbolic meanings of images, the survey result for the second question revealed that an average of 12.35 images was chosen from 35 selections as an image preference, marking a 4-percentage point increase from 31% to 35%.

This result indicates that the selections slightly changed between the first question and the second question. Paired sample t-test using SPSS 25 was conducted to compare the first and second question scores of the same participants (see Figure 4). Since the p-value is 0.046, which is smaller than 0.05, this means the null hypothesis can be rejected. Therefore, there is a big difference in image preference after knowing the symbolic meanings.

To further identify the effect of knowing symbolic meanings and to ascertain whether or not cultural differences affected the changes, 35 choices were classified into eight categories for analysis: birds, plants, fruits and vegetables, insects, virtual animals, marine lives, animals, and others. After knowing symbolic meanings, all categories reflected both positive and negative changes, as seen in Table 5. The category of insects showed the most distinct changes of selection among the categories. The percentage of selections in the categories of birds, plants, marine lives, animals, and other images also increased after the symbolic meanings were explained. On the other hand, the categories of fruits and vegetables and virtual animals were selected less often after the explanation. The category of plants was the most preferred image regardless of whether the meaning was explained.

In the second question, all the groups mentioned meanings, outer appearances (such as images), and design in order of frequency. After knowing symbolic meanings, in general, most participants considered meanings, and that brought about both positive and negative changes. For example, opposite meaning with one's previous thinking, meaningful symbol inspiring ideas, meanings of happiness or love, and interesting meanings were mentioned. With respect to the negative changes, "Meaning is out of step with the times" was expressed by most of the groups. Notably, all groups mentioned that the meaning of the wish to have many children and to ensure the continuation of the male posterity decreases interest and preference, and as a result, the category of fruits and vegetables was selected less frequently after the meaning was explained. The reason for fewer selections of virtual animals was that participants in the EU group did not favour fantasy images, which were the same for the selection before and after the explanation. Regarding unfamiliar meaning, the meaning of driving away evil spirits was mentioned as a negative in the EU group, whereas the UK group considered the meaning of driving away evil spirits to be interesting and looks on the bright side. The reason for unchanged selection is found in factors of outer appearance. With regards to the second factor (outer appearances of images), the UK and Korean groups suggested that people only consider pretty patterns and images. Similarly, images and designs were considered to a greater extent than meanings.

Table 4. The Number of Image Choices
- Please tick which images of design sources you like (Multiple choices)

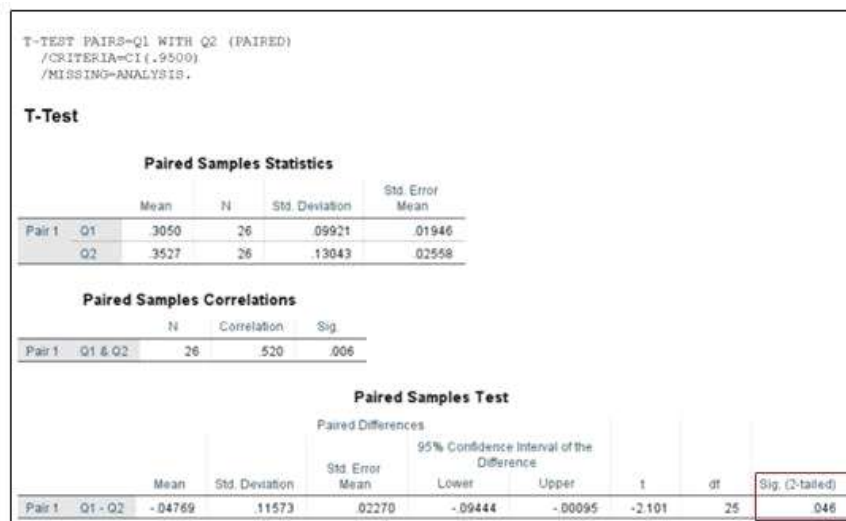|	1st Q			2nd Q		
P-1	7	20%		12	34%	▲
P-2	12	34%		11	31%	▼
P-3	15	43%		14	40%	▼
P-4	8	23%		9	26%	▲
P-5	8	23%		8	23%	▬
P-6	8	23%		8	23%	▬
P-7	8	23%		6	17%	▼
P-8	11	31%		12	34%	▲
P-9	11	31%		7	20%	▼
P-10	18	51%		15	43%	▼
P-11	11	31%		9	26%	▼
P-12	9	26%	Knowing	11	31%	▲
P-13	12	34%	symbolic	13	37%	▲
P-14	13	37%	meaning	14	40%	▲
P-15	6	17%	▶	11	31%	▲
P-16	6	17%		8	23%	▲
P-17	16	46%		15	43%	▼
P-18	11	31%		15	43%	▲
P-19	6	17%		9	26%	▲
P-20	10	29%		8	23%	▼
P-21	14	40%		19	54%	▲
P-22	10	29%		10	29%	▬
P-23	17	49%		22	63%	▲
P-24	12	34%		12	34%	▬
P-25	13	37%		22	63%	▲
P-26	6	17%		21	60%	▲
Average	10.69	31%		12.35	35%	

Figure 4. Paired Samples t-test Outcome

(taken by author)

Table 5. The Ratio of Interviewees' Choices in Each Category, and Changes

	Birds (7 images)		Plants (5)		Fruits & Veges (3)		Insects (2)		virtual animals (2)		maine lifes (5)		Animals (7)		Others (4)	
	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q	1st Q	2nd Q
Total	41	62	70	75	18	11	17	25	17	16	21	29	72	76	22	27
Average	1.58	2.38	2.69	2.88	0.69	0.42	0.65	0.96	0.65	0.62	0.81	1.12	2.77	2.92	0.85	1.04
The ratio	23%	34%	54%	58%	23%	14%	33%	48%	33%	31%	16%	22%	40%	42%	21%	26%
		Positive		Positive		Negative		Positive		Negative		Positive		Positive		Positive

Table 6. The Specific Reasons for Participants' Choices in the First Set of Questions

The reason for the 1st answer		Knowing symbolic meaning ▶	The reason for the 2nd answer	
Outer appearance	• Design • Outer image • Features • Colour combination, rich colour. And Drawing techniqu	- Meaning	Positive▲ • Opposite meaning with one's previous thinking - cat, mantis. • Meaningful things • Certain meanings influenced • Meanings give ideas • Meaning of happiness or love Meaning allows to have more attention	Negative▼ • Meaning is out of step with the times - meaning of the wish for having many children containing male posterity makes lose interest and preference. (all groups mentioned it) Meaning is not equivalent to their culture - mantis
Own preference	• Interest in nature - flowers, butterflies, animals • Personal taste • Something new Realistic things		• Unfamiliar meaning - Driving away evil spirits	
Familiarity	• Familiar with images or behind meanings • Remind of childhood • Remind of country Common things	- Outer appearance	Unchanged - **Equal**	
			• Dislike images - fantasy images (dragon), negative images (rat, black cat) • Looking pretty • Pretty images Not consider meanings- for instance, when we wear clothing or scarf, we don't find out the meaning and wear that after thinking "okay today I'm going to drive the evil spirit".	
Feeling	• Feel cute & Pretty Just one's feeling			

Additionally, when asked about cultural reasons for negative images, all groups assigned a negative meaning to the images of black cat and rat. Interviewees, however, agreed that this is not due to cultural differences but rather to a mere rumor spread by word of mouth and to an image that reminds us of poor hygiene. Table 6 summarizes the findings.

Ⅳ. Conclusion

In the competitive global fashion market, cultural design has become increasingly emphasized. In this context, the way of using Minhwa for fashion design was explored as a unique cultural element related to Korean cultural design. While, there were limited studies giving an understanding of international views about the use of Minhwa. In this study, focus group interviews were conducted with 26 participants divided into five groups: the China group, the EU group, the mixed group, the UK group, and the Korea group. All groups discussed and shared their perspectives in each question through surveys and interviews. The focus group interviews provided considerations and suggestions through the participants' views, which could be useful in deciding ways to use Minhwa considering global fashion market.

The key finding from the set of questions was related to the design source of Minhwa. In terms of the acquisition of knowledge of symbolic meaning, even though people considered outer appearances (design, feature, color, etc.) based on their aesthetic preferences and familiarity with feeling, the knowledge of the meaning still affected their choices. Participants of all focus groups thought there were no significant differences in their choices after being told the symbolic meaning. However, the results of their choices were statistically significant. Where the change was positive, the meaning inspired ideas and allowed the participants to give more attention to the design. Positive meanings such as happiness and love influenced decisions. Regardless of cultural differences, several images, such as the black cat and the rat, had a negative meaning for all the groups. But there were cases in which meaning opposite to their exist thinking changed their choices both positively and negatively. Most notably, if the meaning was anachronistic, the views were negative regardless of nationality. Significantly, the meaning of the desire to have many children to ensure the continuation of the male line decreased interest and preference.

As a result, designers should consider the following when using Minhwa with symbolic meanings. Outer appearances such as shapes, colors, and drawing techniques and personal taste have a greater effect on choices than cultural background because the impact of multinationals and mass media has created a level of homogeneity among cultures. Even though people are influenced by the outer appearance of cultural elements based on their preferences and familiarity, the acquisition of knowledge of symbolic meanings makes a difference to the choices they make. Furthermore, avoiding the use of anachronisms is also a significant consideration, as these can lead to negative judgments. In future studies, additional research with a larger number of participants is needed since a limitation of this study is the inability to generalize due to the number of participants.

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