Visual Forms and Its Perception in Cultural Influences: Focus on Korea

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Artifacts themselves are not considered cultural data; however, artifacts are often considered a form of human action and cultural process. Countries may share a similar religion, philosophical background, and similar geographical location; yet, visual forms of cultural artifacts are often significantly different. This study aims to answer questions: will people recognize the cultural artifacts from their country?; will familiar patterns influence preference, feelings of trustworthiness, or comfort?; will recognition of a pattern as a cultural artifact be influenced by familiarity?; and will recognition of a pattern as a cultural artifact be seen as boring or interesting? As a research method, interviews were conducted in Korea.

Keywords: cultural artifacts, preference, recognition, familiarity, trustworthiness, comfort, Korea

INTRODUCTION

Artifacts refer to human-made objects such a house, a painting, or customs that can express culture unconsciously, consciously, directly, or indirectly (Prown 1982). Artifacts themselves are not considered cultural data; however, artifacts are often considered a form of human action and a cultural process (Ford 1937). Living goods, including clothing, furniture, and architectural structures impact on lifestyles and carry through generations as cultural heritage. The forms of cultural artifacts have been modified, improved, or maintained over time. However, artifacts can express culture unconsciously (Prown 1982).

Geographic location plays an important role in sharing cultures. Korea is located in East Asia and shares a border with China. Japan is located across the sea from Korea. Buddhism, Taoism, and Chinese characters had a significant influence on the culture of Korea, China, and Japan. Even though they share influences, these three countries show different visual forms in various artifacts, including architecture, customs, and living goods.

Korean Airlines uses the shape of YinYang in the logo. Also, the Korean government uses YinYang as a logo. Asiana Airlines used an image of a Korean dress as their previous logo. Thus, some artifacts carry cultural value and recognition and have been used in various ways in modern life.

This study started with a question of whether native artifacts from the living environment or culturally inherited artifacts bring feelings of comfort, trustworthiness, attractiveness, or are appealing due to familiarity. These questions create a dilemma for the graphic designer when traditional images are applied in branding and logo design. This leads to the other question of whether people recognize the cultural artifacts from their own country because there are cultural similarities and differences between Korea,

Japan, and China. To answer the research questions stated above, a set of artifacts were selected from Korea, Japan, and China, and they were modified into abstract forms in black and white. This study shares the research process and the initial data collected from a randomly selected sample of interviews from a group of one hundred face to face interviews conducted in Korea.

The following section shows how the artifacts were selected for this study and the research processes and methods.

RESEARCH PROCESS

This study started with an empirical observation of visual forms from Korea, China, and Japan. Visual forms that the author is familiar with in Korea are natural lines. Visual forms in Japan are more likely straight lines, and in China, they are decorative lines. This observation is supported by Ynhui Park's Korean aesthetic identity explanation as; "1) Korean simplicity may be different from both Chinese opulence and Japanese finesse; 2) Korean naturalness may be distinguished from Chinese ornamental quality and Japanese artificiality; 3) Korean simplicity is separated from both Chinese explicitness and clarity, and Japanese transparency and perfection; [and] 4)The Korean tendency to adapt to contextual contingent situation is contrasted with Japanese tendency to, and capacity for, appropriation, as well as with Chinese impulse towards exaggeration and grandeur "(Park 2010, 69). For this study, visual forms from the selected cultural artifacts were explored based on empirical observation and Park's description on Korean aesthetics.

Study of Visual Forms

A *Hanbok* is a Korean traditional dress. Korean dresses show well-balanced straight lines and soft curves. Also, traditional socks show soft curves that match with the Korean dress. *Bojagi* is a Korean wrapping cloth and *Jogakbo* is a kind of *Bojagi* made using fabric pieces of various shapes and colors. The handmade *Jogakbo* shows natural lines that are created from sewing and connections. A *Hanok* is a traditional Korean house. Along with the *Hanok*, Korean Palaces such as *Gyeongbokgung* and temples such as *Bulguksa* show natural lines in eaves. All of these examples are evidence of natural curves that can be found in the artifacts of Korea. For this study, I chose the *Jogakbo* and abstracted the form which mimics the natural lines.

The *Kimono* is a traditional Japanese dress and the basic shapes of the *Kimono* are based on straight lines. The *geta,* which are traditional Japanese shoes, are also based on the straight lines. The shapes of Japanese houses, temples, and palaces show more straight lines compared to the Korean style. Notable examples are *Heijo* Place in Nara and *Ninna-ji* Temple in Kyoto. A *Tatami* is a typical flooring mat in Japanese houses. It made from rice straw and sometimes it used a unit of measurement in architecture. The shapes from *Tatami, Kimono, and palaces and temples* show simple and straight lines as a design element.

Chinese traditional dresses have different styles depending the historical period. The eave of the Dragon Pavilion in Kaifeng City shows a dramatic curve toward the sky and this extreme curve can be found in other buildings including temples and traditional houses. One interesting pattern in the Chinese garden and house is a decoration using a collection of triangle shapes. This shape can be found in exterior walls, windows, and gardens. The most notable example can be seen at the Classical Gardens of Suzhou which is a UNESCO world heritage site.

From the cultural artifacts study, three artifacts, *Jogakbo, Tatami*, and *Garden Decoration* forms which are respectively from Korea, Japan, and China were selected and translated to a 2-dimensional abstract pattern for this study (Figure 1).

FIGURE 1
ABSTRACT PATTERN OF THE STUDY

| Jogakbo | Tatami | Garden Decoration |
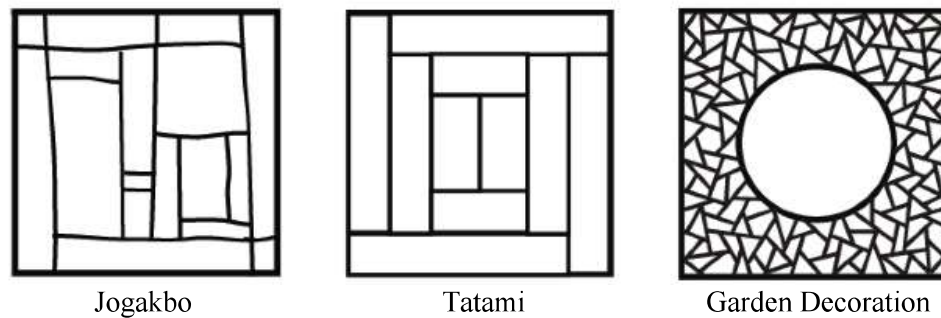
The *Jogakbo* reflects naturalness, the *Tatami* is an excellent example of finesses and perfection, and the *Garden decoration* forms shows ornamental quality. The survey questions were developed with an awareness that people may see the patterns as artifacts from their environment and from their experiences.

Survey Questions and Hypotheses

Seven questions were created to seek answers to the research questions and hypotheses. The first question was to determine which image was more familiar to the participants. Familiarity comes from what we see in everyday life and that which we take for granted (Guy, 2019). The second question was whether familiarity would increase preference (liking) or decrease it; the third question was to find out which pattern was more trustworthy. The fourth question was to determine which pattern represents Korea as a cultural image. The fifth to the seventh questions were to determine which pattern was more boring, interesting, or comfortable. The survey questions were created to see the relationships between each research question.

With these questions, this research will answer the following hypotheses.

H1: Familiar patterns will influence preference, feelings of trustworthiness, or feelings of comfort.

H2: Recognition of a pattern as a cultural artifact will be influenced by its familiarity.

H3: Recognition of a pattern as a cultural artifact will influence the viewer's perception of the pattern as boring or interesting.

IRB and Participant Recruitment

The study was approved by Iowa State University's Internal Review Board (IRB), and participants were recruited using the word of mouth method. Three images were shown to each participant and they were asked to answer the questions to rank the pattern for each question. After participants selected the forms, a short interview was conducted to learn the participants' thoughts and reasons for their selections. The order of images was switched to prevent the influence of the order of presentation. After the interview, participants filled out demographic information.

SURVEY ANALYSIS

Total 101 participants were interviewed. Seventy-seven percent of the participants were 18 to 34 years old. Sixty-two were percent female, and thirty-eight percent were male. Also, the participants' travel experience in China and Japan was collected. Thirty-seven percent of participants answered that they visited China and fifty-three percent of participants visited Japan.

The data was analyzed in SPSS using the Pearson chi square test to see an association between two categorical questions. In SPSS, the Chi-Square Test of Independence is an option within the Crosstabs

procedure. The Crosstabs procedure creates a *contingency table* or *two-way table*, which summarizes the distribution of two categorical variables. *Pearson's chi-squared* test is a statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. A chi-square (χ^2) statistic is a test that measures how expectations compare to actual observed data (or model results). The null hypothesis of the Chi-Square test is that no relationship exists on the categorical variables in the population; they are independent. If the p-value is greater than the chosen significance level ($\alpha = 0.05$) we conclude that there is not enough evidence to suggest an association between two variables.

Table 1 shows the most selected forms among the three forms. The *Jogakbo pattern* was the most selected pattern as a familiar form over the *Tatami pattern* and the *Garden Decoration* pattern. However, the *Tatami* pattern was more often perceived as an image representing Korea over the *Jogakbo* pattern. Also the *tatami* pattern was perceived as more trustworthy than the *Garden Decoration* pattern and the *Jogakbo* pattern. At the same time the *Tatami* pattern was selected as the most boring yet comfortable followed by the *Jogakbo* pattern and the *Garden Decoration* pattern. Participants selected the *Garden Decoration* pattern as their preferred and most interesting pattern followed by the *Jogakbo* pattern and the *Tatami* pattern.

TABLE 1
SURVEY RESULTS FOR THE FIRST SELECTED PATTERN

	Jogakbo		Tatami		Garden Decoration	
Questions	Frequency	%	Frequency	%	Frequency	%
Q1. Familiar	45	44.6	37	36.6	19	18.8
Q2. Prefer	26	25.7	19	18.8	56	55.4
Q.3 Trustworthy	12	11.9	73	72.3	16	15.8
Q4.Representing Korea	39	38.6	52	51.5	10	9.9
Q5.Boring/Dull	17	16.8	72	71.3	12	11.9
Q6.Interesting	39	38.7	6	5.9	56	55.4
Q7.Comfortable	24	23.5	55	54.5	22	21.8

n=101

Jogakbo Pattern and Its Perception

As shown in Table 1, the *Jogakbo* pattern was elected as the most familiar pattern, but only nine (20%) out of 45 participants recognized it as the *Jogakbo* or *Bojaki*. Six participants (13%) mentioned that they see the pattern from their surroundings, such as furniture, floors, windows, or doors. Fourteen (31%) participants recognized it as Mondrian painting, and seven (16%) participants perceived it as an artwork or seen at a museum. Interestingly, two participants mentioned that they saw it as *Jogakbo* and at the same time Mondrian painting. Five (11%) participants recognized the pattern because they saw it from a book or the internet.

Thirty-nine (38%) participants recognized the *Jogakbo* pattern as 'Representing Korea.' Fifteen (38%) out of 39 participants saw it as a *Jogakbo* or *Bojaki*; 13 (33%) participants recognized it as an architectural form such as a door frame or a traditional pattern, and 10 (26%) participants mentioned they selected it because of its unconventional, soft and natural lines.

Thirty-nine (38%) participants perceived it as 'Interesting' because of the natural lines, 14 (36%) 13 (33%), and 4 (10%) participants mentioned the following reasons respectively: free lines, orderly yet asymmetrical balance, and familiarity. Twenty-four (24%) participants perceived it as 'Comfortable,' and most of them mentioned that natural and soft lines or familiarity as their reason, 11 (46%) and 7 (29%) of participants respectively.

A pair of two questions were compared to find correlations; for example, Question 1 was compared to Q 2, Q3, Q4, Q5, Q6, and Q7 using the Pearson chi-square test. The data showed that 'Familiarity' and 'Prefer' are significantly corelated (p=.000, Pearson's r values = .527 significant at 0.000 level); 'Familiarity' and 'Trustworthy' are also strongly corelated (p=.025, Pearson's r values = .261 significant at 0.008 level). Also, Familiarity of *Jogakbo* pattern is corelated to representing Korea (p=.011, Pearson's r values = .229 significant at .021 level); 'Familiarity' is corelated to 'Comfortable' (p=.020, Pearson's r values = .324 significant at 0.001 level). Familiarity of *Jogakbo* pattern does not relate to 'Interesting' or 'Boring/Dull' with p=.065 and p=.240 respectively. When participants recognized the *Jogakbo* pattern as an image representing Korea, it significantly corelated to 'Boring/Dull' with a negative relationship (p=.014, Pearson's r values = -.395 significant at .000 level). The recognition of the pattern as an image of Korea is significantly corelated to 'Interesting' (p=.014, Pearson's r values = .295 significant at .002 level) and 'Comfortable' (p=.000, Pearson's r values = .474 significant at .000 level).

Tatami Pattern and Its Perception

The *Tatami* pattern was elected as the most 'Trustworthy.' Seventy-three (72%) participants selected 'Trustworthy' for the *Tatami* pattern over the *Jogakbo* and *Garden Decoration* pattern. The reasons given for the feelings of trust with the *Tatami* pattern are that it looks stable, clean, and orderly. Only six (8%) out of 74 participants mentioned familiarity is the reason to trust it.

Also, the *Tatami* pattern was perceived as the most boring compared to the other patterns. Only six (8%) out of 72 participants mentioned that it looks boring due to familiarity. Sixty-seven (93%) perceived the *Tatami* pattern as boring because it was simple looking, symmetrical, stable, or had no variations.

Fifty-five (54%) participants selected the *Tatami* pattern as 'Comfortable' over the *Jogakbo* and the *Garden Decoration* pattern; 28 (51%) participants mentioned the regular and orderly shapes as the reason for feeling comfortable; 17 (31%) participants answered that the stable shapes made them feel comfortable; 3 (6%) participants mentioned its familiarity as the reason.

Interestingly, fifty-two (52%) participants perceived the *Tatami* pattern as an image representing Korea; 21 (40%) out of 52 participants answered saw it as a traditional window or an entry door and nine (17%) for the participants perceived it as a Korean traditional pattern. The rest of the participants' answers were varied from a brick, to a clean or static image, to architecture or to a house, etc. However, none of participants saw it as the *Tatami*.

Correlations between 'Familiar' and 'Prefer' are significant (p=.030, Pearson's r values = .254 significant at 0.010 level), while 'Familiar' feeling does show some correlation with 'Trustworthy' (p=.056, Pearson's r values = .247 significant at 0.013 level) but it was not significant. Also, familiarity of the *Tatami* pattern does not show correlation between 'Representing Korea' (p=.129, Pearson's r values = .0.076 significant at 0.451 level); 'Boring/Dull' (p=.926, Pearson's r values = .033 significant at 0.746 level); 'Interesting' (p=.393, Pearson's r values = .014 significant at 0.889 level); or 'Comfortable' (p=.465, Pearson's r values = .063 significant at 0.530 level). When participants recognized the *Tatami* pattern as representing Korea, it does no show a correlation to 'Boring/Dull' (p=.812, Pearson's r values = -.105 significant at .298 level) or 'Interesting' (p=.973, Pearson's r values = .005 significant at .960 level). However, participant's perception of 'Comfortable' was significant when they recognized the Tatami pattern as an image representing Korea (p=023, Pearson's r values = .223 significant at .025 level).

Garden Decoration Pattern and Its Perception

As shown in Table 1, the *Garden Decoration* pattern was selected as the most preferred image among the others; sixteen (40%) Participants preferred this pattern because the various shapes was appealing to them; and 15 (38%) participants preferred this pattern because the circle in the middle created a stable feeling.

Fifty-six (55%) participants selected this pattern as the most 'Interesting'. The reasons for perceiving it as interesting were varied. Fifteen (27%) out of 56 participants mentioned the pattern was new to them; 10 (18%) participants said that the diverse shapes made it interesting; and other answers were noted the

circle (13%), looking good (14%), luxurious (7%), curious (3%), and others (16%) such as active, looking free, no reasons, etc.

Twenty-two (22%) participants saw this pattern as 'Comfortable' and 15 (68%) participants mentioned that the circle made them feel comfortable, and 4 (18%) participants answered that the pattern was peaceful, stable, or simple.

Only 10 (10%) participants perceived the *Garden Decoration* pattern as an image representing Korea. Five (50%) out of 10 participants observed the circle as a part of the Korean national flag or the circle itself as the form representing Korea, and four (40%) participants perceived is as an architectural form such as a window, especially they saw in a movie or drama.

The data showed that 'Familiarity' and 'Preferences' are strongly corelated (p=.000, Pearson's r values = .384 significant at .000 level); 'Familiarity' and 'Trustworthy' are also strongly corelated (p=.002, Pearson's r values = .384 significant at .000 level). Also, Familiarity of *Garden Decoration* pattern is corelated to representing Korea (p=.035). Also, 'Familiarity' is corelated to 'Comfortable' feeling (p=.021, Pearson's r values =.287 significant at .004 level). 'Familiarity' of *Garden Decoration* pattern does not relate to 'Interesting' or 'Boring/Dull' with the *Garden Decoration* Pattern (p=.801 Pearson's r values = .077 significant at .445 level and p=.061, Pearson's r values = .126 significant at .211 level respectively).

When participants recognized the *Garden Decoration* as representing Korea, it did not show strong correlations with 'Boring/Dull' (p=.195, Pearson's r values = .005 significant at .963 level) or 'Interesting' (p=.712, Pearson's r values = .123 significant at .220 level). However, participants perceived of 'Comfortable' was significant when they recognized the *Garden Decoration* pattern as an image representing Korea (p=008, Pearson's r values = .336 significant at .001 level).

FINDINGS AND DISCUSSION

The first question of this study was to explore whether participants recognized the *Jogakbo* pattern as relating to the naturalness described by Park (2010) because they saw it as an image representing Korea. About 25 % of the total participants who selected it recognized the *Jogakbo* pattern or mentioned its unconventional, soft, and natural lines as the reason it represented an image of Korea. Fifty-two percent of the total participants chose the *Tatami* pattern as representing an image of Korea, and about 30% of total participants perceived it was related to architectural forms or traditional patterns. "Aesthetics is about ways of perceiving the world that are really rewarding and special" (Nanay 2016, 1). Thus, visual experiences from surroundings can impact the aesthetic taste of the people who live in a similar geographic location and share a similar culture. As Park stated, naturalness is known representing Korean aesthetics. This study found, that to a degree, the *Jogakbo* pattern can be seen as a form representing Korea because of naturalness, but the Tatami pattern was also seen as a form representing Korea.

Hypothesis 1: familiar patterns will influence preference, feelings of trustworthiness, or feelings of comfort is valid with the *Jogakbo* pattern and *Garden Decoration* pattern. However, the familiarity of the *Tatami* pattern does not influence the 'Trustworthy' nor 'Comfortable' feeling but it does influence 'Prefer.' With the interviews, this study found that participants were influenced by the straight, regular, and symmetrical elements instead of a familiarity with the *Tatami* pattern. Relationships between familiarity and liking (Sluckin, Hargreaves, and Colman, 1982), familiarity and trust (Gefen, 2000) have been explored in various contexts but not with visual forms. The finding of the relationships for 'Familiar' and 'Prefer" in this study are supported by Sluckin, Hargreaves, and Colman's research. The relationships between 'Familiar' and 'Trustworthy' and 'Familiar' and 'Comfortable' need further investigation even though the *Jogakbo* pattern and *Garden Decoration* pattern show a strong correlation.

Hypothesis 2: recognition of a pattern as a cultural artifact will be influenced by familiarity is valid with the *Jogakbo* pattern and *Garden Decoration* pattern, and the correlation was significant. The correlation of the *Tatami* pattern is not strong. However, the p-value was .056, and it still considered some correlation between familiarity and recognition of a pattern as a cultural artifact. This study found that artifacts that are familiar with people's everyday life can be recognized as artifacts representing their culture.

Hypothesis 3: recognizing a pattern as a cultural artifact will influence boring or interesting feelings. Correlation between familiarity and recognition of the pattern as an image representing Korea was investigated to answer this question. As the result, there are no correlations in the relationships between 'Familiar' and 'Boring/Dull,' or 'Familiar,' and 'Interesting.' Also, no association found between the recognition of the pattern as an image that represents Korea and 'Boring/Dull' or 'Interesting.' Therefore, this study found that this hypothesis is not valid. Noticeably the p-value of the *Jogakbo* pattern and the 'Boring/Dull' feeling was significant with a weak negative linear relationship, which means participants recognizing the *Jogakbo* pattern as representing Korea more likely perceived the pattern as less boring. This study found that a familiar artifact image that can be perceived as representing their own culture does not make it feel boring or interesting.

CONCLUSION

There is not much research on the relationships in cultural artifacts and their perception. As a graphic designer, understanding forms and their cultural relationship has been a curious subject in various applications such as branding, creating visual images, etc. This study shows that familiar forms can give a comfortable and trustworthy feeling and be seen favorably. Also, familiar forms surrounding our everyday life can be acceptable, not dull nor interesting. About 40 percent of participants recognized the *Jogakbo* pattern as the form representing Korea's image, and the participants' description shows promise for further investigation. A study on the recognition of cultural artifacts in a culture will need further research with various forms of artifacts.

The majority of the participants in this study were relatively young with an age range of 18-34 and will need a broader demographic in the participants to make the data more reliable.

This study leads to several research questions as to whether the Japanese or Chinese can identify the *Tatami* or the *Garden Decoration* pattern as a cultural artifact that represents their country. Also, relationships with each question will be exciting to research and compare with the data from this study.

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