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Reimagining Hangeul Typography Through Munja-do for Contemporary Fashion

Jihye Park* and Eunsuk Hur^b

Department of Fashion Design, Dongduk Women's University, Seoul, Republic of Korea

School of Design, University of Leeds, Leeds, UK

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Abstract

Korea's dynamic popular culture has substantially influenced global creative industries. Interest in the Korean alphabet, Hangeul, has grown globally; however, its application in fashion design remains limited. This study uncovers fashion design applications of Hangeul-based Munja-do in global fashion, drawing on the perspectives of culturally diverse groups and Minhwa (Korean folk painting) specialists to guide adaptations. Two interview studies included focus groups with international participants and in-depth interviews with Minhwa artists to identify effective approaches and key considerations for adapting this tradition to contemporary contexts. Three findings emerged: (1) Hangeul effectively communicates a design's cultural origin; (2) Munja-do's symbolic meanings are essential to its adaptation; and (3) challenges such as anachronistic symbolism and homophones require careful consideration. This study supports establishing theoretical foundations for integrating Hangeul typography with Munja-do in fashion design and highlights Hangeul-based Munja-do's potential as a culturally meaningful design resource linking traditional heritage with contemporary fashion practices.

Keywords: Hangeul typography, Munjado, Hangeul fashion design, Cultural heritage

1. Introduction

One of the keyways of building brand strength is creating a distinct and unique brand identity (Probrand, 2003; Ko & Lee, 2011). Since the use of cultural heritage in creating brands can arouse a strong sense of cultural identity that is authentic, compelling, and credible (Heine, 2010), embodying cultural heritage in a brand may well be a tool for enabling the brand to form authentic values and strengthen its competitiveness (Urde, 2007). Cultural heritage branding can benefit fashion brands, considering that designs of great importance in a fashion brand's competitiveness can earn creativity and originality from cultural heritage (Ko & Lee, 2011). Cultural heritage can contribute originality to designs and thereby increase a fashion brand's commercial competitiveness (Stewart-Allen, 2002).

Hangeul also has unique and differentiated features that can be attributed to its geometric shapes and simplicity from a formative perspective (Lee, 2008). Despite its cultural potential, Hangeul has not been widely explored for creative yet practical applications (Sung & Kim, 2007). This lack of exploration highlights the need for developing unique images of Hangeul and actively utilizing its originality as a cultural value, thereby enhancing its cultural competitiveness in global contexts. Because Chinese characters were used in Munja-do and its style was passed down, there have been limited attempts at combining Munja-do and Hangeul, and there is a lack of deep and diverse studies to meet modern consumers' fast-changing needs (Cheong, 2015). Detailed academic studies into Munja-do and Hangeul to inform the commercial fashion market are needed. In addition, despite Hangeul typography being used in fashion design and Munja-do being developed by artists, there have been

limited attempts to incorporate Munja-do with Hangeul. Lee (2014) and Choi (2003) conducted studies emphasizing the relevance of traditional Korean design in contemporary fashion. Lee (2014) explored the potential to modernize knitwear design using Korean traditional patterns, highlighting their aesthetic and cultural value. Similarly, Choi (2003) revealed a high awareness of Hanbok and a strong preference for blending traditional and modern styles among foreign participants.

However, previous studies exhibit notable limitations that call for further investigation. Lee (2014) lacked consumer opinion data, which is crucial for understanding how these designs are perceived in practice. Choi (2003), while insightful, faced issues of sample representativeness, as 70% of the foreign participants were either acquainted with locals or residing in Korea, potentially biasing the results.

Building on these gaps, this research addresses the awareness and preferences of international consumers regarding the use of Hangeul, as well as experts' perspectives, to identify essential elements of traditional design. Additionally, this study examines the application of Korean Hangeul and its typography in fashion design, with reference to Munja-do images—a type of Korean folk painting called Minhwa—using characters. By analyzing how these elements can be effectively integrated into future designs, this study provides a more comprehensive understanding of the global applicability of Korean cultural aesthetics, thereby contributing to the field in a meaningful way.

This study contains a review of the theoretical concepts required to achieve a profound grasp of the use of Hangeul and Munja-do and one of existing studies that describe the current prevalent use of Hangeul typography. Interviews were conducted with non-Koreans (internationals) with different backgrounds and Minhwa artists to assess the possibilities of combining Korean and Munja-do. The international participants were questioned to identify the possibility of creating Munja-do designs

using Hangeul typography. Based on their knowledge and experience, Minhwa artists were interviewed to investigate the essential elements of Munja-do and the potential effectiveness of combining Hangeul and Munja-do.

2. Background research

A brief history of the Korean language Hangeul

Hangeul, the Korean writing system, holds a unique place in linguistic history as one of the few scripts intentionally created by a group of scholars under royal patronage. It consists of 14 consonants and 10 vowels. Its structure is deeply rooted in scientific principles, with characters designed to represent the articulatory features of speech sounds. The consonants reflect the position and movement of speech organs, while the vowels are based on cosmological principles, symbolizing heaven (•), earth (—), and humans (|). This phonetic approach makes Hangeul highly adaptable for expressing diverse languages.

In 1443, King Sejong and his scholars in the Hall of Worthies (Jip hyeon jeon) developed Hangeul, originally named Hun min jeong eum ("The Correct Sounds for the Instruction of the People"). Officially promulgated in 1446, Hangeul was designed to be logical and accessible, addressing the literacy challenges posed by the complex Chinese characters (Hanja). Hangeul is fundamentally distinct from the Chinese writing system (Jee et al., 2020). Today, Hangeul is recognized as a vital part of Korea's cultural heritage and is registered under UNESCO's World Heritage.

Despite its accessibility, the commencement of Hangeul faced strong antipathy and resistance from the literate privileged elite. The upper classes feared losing the power they derived from their literacy and influence over the illiterate masses (Kim, 2014; Jee et al., 2020). As a result, Hangeul was initially embraced mainly by women, children, and the lower classes. It gained widespread acceptance and official recognition as Korea's

national script only in the late 19th and early 20th centuries, during efforts to modernize Korea and assert national identity under Japanese colonization.

Today, Hangeul is celebrated as one of the most efficient and scientific writing systems in the world. UNESCO recognizes its cultural and educational significance, awarding the King Sejong Literacy Prize to promote global literacy. Hangeul Day (Hangeulnal), observed annually on October 9th in South Korea, honors its creation and enduring legacy.

What is “Munja-do”?

Munja-do, which combines both the visual form and linguistic content of Chinese characters, is a type of Minhwa (Figure 1), a form of Korean folk painting that is part of Korea’s cultural heritage. 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 artists’ aesthetic sense and provide an unlimited source of artistic inspiration (Yoon, 2003). It also reflects the mythology, religion, and mindset of the Korean people. Minhwa offers abundant artistic inspiration related to Korean culture (Song, 2013; Jang & Jang, 2013; Ko & Jang, 2013; Yum, 2016; Jung, 2019), and Minhwa-related designs can provide new perspectives with commercial potential (Park, 2022). Munja-do emerged during the Joseon Dynasty and became particularly popular in the late 18th and early 19th centuries. Initially, Munja-do paintings were created for the upper classes as part of their interior decor, often depicted on folding screens that adorned their homes. The painted characters, predominantly Chinese, conveyed protective and auspicious messages through themes and motifs such as tigers, dragons, wealth, and good fortune. In addition to these symbolic motifs, ethical characters derived from Confucian philosophy, known as the eight ideographs or Samgang Oryun, were commonly used in Munja-do.

1. Hwajo-do: Paintings of flowers and birds



Gahoe Museum, *eMuseum*
(Korea Open Government License Type 4).

2. Chochung-do: Paintings of plants and insects



National Museum of Korea, *eMuseum*
(Korea Open Government License Type 1).

3. Eohae-do: Paintings of fish and crustaceans



National Museum of Korea, *eMuseum*
(Korea Open Government License Type 1).

4. Dongmul-do: Paintings of animals



Korean Minhwa Museum, *eMuseum*
(Korea Open Government License Type 4).

5. Chaekga-do: Paintings of scholar's artefacts



Gahoe Museum, *eMuseum*
(Korea Open Government License Type 4).

6. Munja-do: Paintings of characters



National Museum of World Writing Systems, *eMuseum*
(Korea Open Government License Type 1).

Figure 1. Minhwa - classification based on subject matter

These ideographs include: 효 (孝, Hyo, Filial Piety), 제 (悌, Che, Brotherly Love), 충 (忠, Chung, Loyalty), 신 (信, Shin, Trust), 예 (禮, Yae, Propriety), 의 (義, Ui, Righteousness or Justice), 염 (廉, Yom, A Sense of Honor), 지 (智, Chi, Sensitivity or Wisdom). These ideographs emphasized moral values and were utilized as educational tools to instill ethical virtues in society.

During the 19th century, Munja-do transitioned from being exclusively enjoyed by the upper classes to becoming accessible to ordinary people. This shift highlights the evolving cultural landscape of Joseon society, where the dissemination of Confucian values through Munja-do transcended class boundaries. The popularity of Munja-do among commoners further solidified its role as a unifying cultural and moral symbol.

The cultural importance of Munja-do lies in its ability to merge aesthetic artistry with practical moral instruction. Unlike other forms of Minhwa, Munja-do uniquely combines the visual beauty of motifs with the philosophical depth of Confucian ethics. This dual purpose allowed Munja-do to serve not only as decorative art but also as a medium for cultural education and moral guidance. Furthermore, its enduring appeal reflects the cultural adaptability and inclusivity of Korean folk art traditions, bridging the elite and popular cultures of the Joseon Dynasty.

King Sejong's creation of the Korean alphabet, Hangeul, in the 15th century marked a significant cultural turning point, offering an alternative to Chinese characters for the general population. However, even after the invention of Hangeul, the upper classes, wishing to maintain their distinction from commoners, continued to favor Munja-do, perpetuating the use of Chinese characters in this art form. Over time,

Munja-do's cultural significance extended beyond its initial class-based roots, becoming a cherished artistic and educational tradition for all Koreans.

By combining historical relevance, artistic ingenuity, and philosophical depth, Munja-do represents a unique facet of Korea's cultural heritage. Its legacy continues to inspire modern interpretations and applications in Korean art and design, emphasizing its enduring cultural importance.

Current use of typography

Today, typography is considered an art and is defined as visual and functional arrangements that enable writing to be legible (Yadav et al., 2014). In various fields of fashion, typography has been applied and developed in the form of pattern designs. The fashion designs utilizing typography contain linguistic and formative functions. The typography used in fashion design can be an efficient means of communicating feelings and emotions directly to the public (Kim, 2011). Therefore, fashion typography possesses the linguistic function of conveying diverse statements, from points of view on social and political ideas to elements of entertainment (Dahmoos, 2018).

The linguistic function of fashion typography has been used in numerous fashion collections. Kim (2009) asserted that typography is used in modern fashion through direct sentences or phrases addressing political and social ideologies, economic gaps, environmental issues, and anti-war protests. The distortion and transformation of the characters and the use of childish designs and words provide satirizing humor. As its formative function, typography is used to explain brand logos and corporate identities or simply for decorative and artistic purposes. Typography is used for commercial purposes, such as brand-image transfer and separation from other brands through the use of logos and customization. Typography is also used to express fashion's aesthetic and artistic

values when used in experimental visual components such as images, motifs, and patterns, which are all elements of fashion design.

Comparative Analysis of Hangeul, Japanese, and Chinese Typographies in Fashion Design

Hangeul, Japanese, and Chinese typography are uniquely applied in fashion design, reflecting their cultural origins and structural characteristics. The typographies of Korea, China, and Japan, while originating from the shared cultural heritage of East Asia, each exhibit distinctive cultural and structural characteristics, reflecting their unique historical and linguistic development.

Japanese typography combines kanji, hiragana, and katakana, offering a variety of visual expressions. The curved forms of hiragana and katakana make them especially suitable for soft and emotional designs (Limantoro, 2024). For example, world-renowned designer Issey Miyake explored the aesthetic potential of Japanese typography by integrating hiragana and kanji patterns. His designs embody a fusion of simplicity from traditional Japanese scripts with modern design elements, resulting in distinctive fashion pieces. This approach maintains Japanese cultural identity while creating a globally communicative design language (Miyake, 2022).

Chinese characters, with their intricate strokes and structural diversity, deliver a strong visual impact. Their symbolic nature allows for profound cultural expression in fashion. The Chinese brand Shanghai Tang modernized traditional Chinese character patterns by simplifying their visual complexity (Heine & Phan, 2013). This reinterpretation was applied to contemporary clothing and accessories, achieving a balance between tradition and modernity (Phan, 2020).

Hangeul, with its unique phonetic system and square structure, enables innovative and experimental approaches in fashion design. The modular nature of Hangeul allows

for flexible transformations, making it highly adaptable to modern fashion trends (Kim & Lee, 2017). Its design facilitates creativity while maintaining clarity and balance. For instance, renowned designer Lee Sang-bong incorporated Hangeul into garments showcased during a 2006 fashion show commemorating the 120th anniversary of Korea-France diplomatic relations. By blending consonants and vowels into intricate patterns, he created a harmonious fusion of tradition and modernity (Lie, 2013). Hangeul's balance of curves and straight lines proved effective in textile designs, earning global recognition.

Hangeul's versatility and modularity give it a unique edge over Japanese and Chinese typography. Unlike the dense visuals of Chinese characters or the mixed usage of Japanese scripts, Hangeul's uniform system offers clarity and balance. This adaptability makes it ideal for both minimalist and bold contemporary fashion designs.

Typography in fashion design transcends visual aesthetics, serving as a medium for cultural storytelling. This transformative use of typography has become a key differentiator in the global fashion market.

Current use of Hangeul typography

Hangeul is well-known for the unique features of its characters. Its calligraphy and typography express the implied meaning of Korean text and display beautiful shapes that draw the viewer's attention. Today, Korean is used in commercial fields such as architecture, arts and crafts, fine arts, and fashion, thus exceeding its functionality as a language (Song et al., 2017) and fulfilling a wide range of functions.

Various designs that involve the application of Hangeul aesthetics are being produced. When Hangeul is applied to a pattern design, the typography can prominently demonstrate its visual aesthetics. Korean designers are inspired by their life experiences and their cultural backgrounds. They strive to emphasize Korean styles

such as traditional Hangeul patterns or Hangeul in their international and domestic collections.

In the early stages of incorporating typography motifs into Korean fashion collections, designer Sul Yun-hyoung showcased Munja-do designs in her 1995 collection. This collection emphasized traditional elements such as symbolic patterns, traditional handicraft techniques, and layering—a defining characteristic of Hanbok design. Notably, Chinese character patterns, often symbolic, were combined with other motifs to convey wishes for good fortune. Similarly, Oh Eun-hwan presented various designs inspired by the original form of Munja-do in the 1996 Seoul fashion collection. Later, in the 2010 F/W Seoul collection, designer Han Song also incorporated Munja-do motifs.

Although these introduced the use of Munja-do as a new source of inspiration for fashion design, they were limited by a one-dimensional approach that did not provide room for different interpretations (Hyun & Bae, 2007). Printed patterns, including Munja-do, that are used in their original forms need to include more innovation in order to show new types of design. In fine art and graphic design, many artists have been trying to reinvent traditional Munja-do using English or Hangeul.

Designer Lie Sang-bong introduced Korean fashion with Hangeul typography printed on the fabric for the first time in a fashion show held in Paris in February 2006. He received permission from two artists to use their Hangeul typography to design patterns for the collection. In an interview, he stated, “The fashion show unexpectedly received positive responses from the media. As I acquired a favorable reputation in the overseas markets, domestic companies and Koreans began to develop an interest in Hangeul fashion” (Jung, 2015). Although the Lie Sang-bong collection did not show fruitful results of using Munja-do with Hangeul, the possibility of using Hangeul in

fashion design was showcased.

A multitude of designers' efforts allowed diversification and creativity that crossed various borders because of their constant efforts to depart from a particular style while retaining a unique identity amidst continuous changes. The 2019 International Fashion Art Exhibition was conducted with the theme of "Connecting Borders: Hangeul x Fashion Art" at a historic fashion museum in Milan, Italy (LATEST, 2021). In this exhibition, 73 fashion artists from academia and the industry presented fashion items that reinterpreted the spirit, meaning, and formative characteristics of Hangeul.

Despite recent experimentation with Hangeul in fashion design, a combination of Hangeul and Munja-do is yet to be explored. Shin et al. (2011) discovered that although online shopping malls need to provide a range of products for customers, most products involving cultural designs are limited in terms of materials and patterns. Thus, substantive design experiments and studies of perceptions, concerns, and requirements regarding the combination of Hangeul and Munja-do in fashion are needed.

In the next phase of the interview, the internationals and the Minhwa artists were invited to consider Hangeul and Munja-do's efficacy and the requirements for using Munja-do before developing design motifs. The discussions raised effects of Munja-do with Hangeul typography, concerns and essential points to be considered before using Munja-do.

3. Research methods (Two studies – explanation of two studies)

Study-1 method: Group interviews with Internationals

1) Method

In this study, focus group interviews were conducted to explore the perspectives of people from different cultural backgrounds on the use of Munja-do with Hangeul. The purpose of the interviews is to explore the possibilities and efficacy of Munja-do employing the use of Hangeul typography. Focus groups could 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. Semi-structured interviews were conducted concurrently to obtain qualitative data to reveal the reason for individual choices and to determine whether the choices were the result of cultural differences. Twenty-one participants were selected by means of a purposive sampling method. Etikan et al. (2016) assert that in purposive sampling the subjects are selected based on the study's purpose with the expectation that each participant will provide rich, unique information.

2) Data collection

-Participants

The 21 participants were then divided into four groups: the Chinese group (six participants); the European Union (EU) group comprising two Belgians, one Romanian, one German, and one British individual (five participants); the mixed group composed of one Mexican, one Motswana person, one Malaysian, one Indian, and one Indonesian person (five participants); and the United Kingdom (UK) group (five participants).

Since this study was intended to explore the possibility of using Hangeul in Minhwa by means of participants' perceptions and examine whether non-Koreans would be able to identify the cultural origins of images, only non-Korean participants were interviewed. The interviewees' demographic information is shown in Table 1. To maintain anonymity each participant was assigned a P with a number in place of their name.

Table 1. Interviewees' profiles

	Group	Nationality	Gender	Age	Occupation	Familiar with Korean culture	Experiences that provided familiarity with Korean culture
P-1	China	CHINESE	Male	25-34	Student - Design	2	TV Programmes
P-2		CHINESE	Female	25-34	Student - Design	3	Food, Travel, TV Programmes, Friends
P-3		CHINESE	Male	15-24	Student - Design	4	TV Programmes
P-4		CHINESE	Female	25-34	Student - Design	3	Websites, Music, Food, Travel
P-5		CHINESE	Male	25-34	Student - Design	3	Fine art, Websites, Food
P-6		CHINESE	Female	25-34	Student - Non Design	4	Music, Food, TV programmes
P-7	EU	BELGIAN	Female	15-24	Student - Non Design	3	Websites
P-8		BELGIAN	Female	15-24	Student - Non Design	1	Books
P-9		GERMAN	Female	25-34	Student - Non Design	3	Travel
P-10		BRITISH-Chinese	Female	25-34	Garment Decorator (Pattern design)	4	Travel, Music, Food
P-11		RUMANIAN	Female	35-44	Student - Non Design	2	Design, Food
P-12	Mixed	MEXICAN	Female	25-34	Student - Design	1	.
P-13		MOTSWANA	Female	35-44	Student - Design	1	Friends
P-14		INDONESIAN	Female	25-34	Student - Design	3	Food, TV programmes
P-15		INDIAN	Female	25-34	Student - Design	2	Friends
P-16		MALAYSIAN	Female	35-44	Student - Non Design	1	Food
P-17	UK	BRITISH	Female	15-24	Student - Design	3	Music, Food, Friends
P-18		BRITISH	Female	15-24	Student - Design	2	Music, Food, Friends
P-19		BRITISH	Female	15-24	Student - Design	2	Music, News
P-20		BRITISH	Female	15-24	Student - Design	1	Websites
P-21		BRITISH	Female	15-24	Student - Design	1	.

To ensure the ethical integrity of this study, Institutional Review Board (IRB) approval was obtained prior to conducting the interviews. The approval number for this study is LTDESN-080. Participants were fully informed of the study's purpose, procedure, and their rights before the interviews began. Written consent was obtained from all participants, ensuring their understanding and voluntary participation. Measures were also taken to maintain anonymity and confidentiality, with identifiers such as "P" followed by a number used in place of names. All data collected were securely stored and used solely for research purposes.

Among the participants, there were three males and 18 females, aged between 15 and 44 years. Most were students. When asked to rate their familiarity with Korean culture on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), the average response was 2.33. The participants' varying degrees of knowledge and experience with

Korean culture allowed for diverse exchanges of viewpoints, fostering valuable discussions within the groups..

-Interview procedure and measures

The purpose of the quantitative and qualitative questions was to identify the possibility of visual expression, thus, to assess the possibilities and efficacy of Munjado employing the use of Hangeul typography. These questions were divided into two parts: Non-Koreans’ recognition of Hangeul and the delivery effect of cultural origin through Munjado using Hangeul typography.

The first section explored the possibility of using Hangeul through language recognition. The participants were asked to select the country to which images of a new Munjado with Hangeul and those with the traditional Munjado belong (Figure 2). An objective of this question was to examine whether those for whom Korean is not the first language could distinguish between languages and recognize Hangeul. The interview was conducted using two mediums: a new prototype image (motif A) and the traditional Munjado (motif B). The Munjado motif A was created based on modifications of Korean typography, showcasing brush strokes and illustrations with visual expressions of meaning, following traditional conventions for drawing Munjado. The Munjado motif B was adopted from the E-museum site, which consolidates cultural heritage information held by museums and art galleries across the country.

	China	Japan	Korea	Philippines	Thailand	Vietnam
A 	☐	☐	☐	☐	☐	☐
B 	☐	☐	☐	☐	☐	☐

Figure 2. The first questions with stimulus images

The second section focused on understanding the effect of Munjado patterns using Hangeul typography in conveying cultural origins. The participants conducted assessments of transitions in Munjado designs compared to existing designs. After providing two image categories, interviewees were asked which category of images delivers Korean cultural identity more effectively and the reasons behind their choices. The objective of this question was to determine whether using Hangeul could effectively deliver the origins of a cultural image to non-Koreans. Regarding the existing patterns in category-1, the question involved imported images provided by the K-Heritage Mall, managed by the Korea Cultural Heritage Foundation, which promotes traditional Korean culture. For a stimulus prototype in category-2, modified Munjado patterns using Korean typography were created (Figure 3). **The Munja-do motif A and the modified category-2 patterns were created by the author using Adobe Illustrator 2024 and Photoshop 2024 (version 25; Adobe Inc., San Jose, CA).**

To ensure the validity and reliability of the research, the interview process was carefully designed and conducted following rigorous protocols. Detailed procedures for the interview process and questions were developed and strictly followed to minimize interviewer bias and enhance the credibility of the findings (Creswell & Miller, 2000). The interviewer-maintained neutrality throughout by using a predefined set of open-ended questions and avoiding leading comments or expressions. With the consent of the

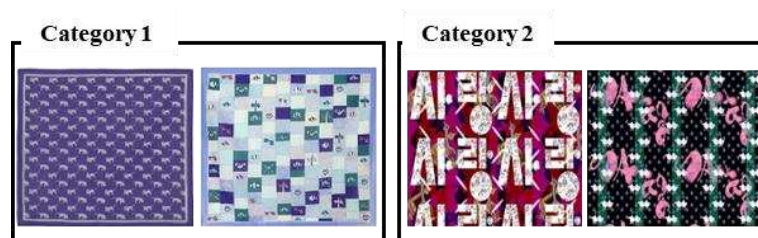


Figure 3. Stimulus images of the second question

interviewees, all interviews were recorded, and detailed notes were taken. The authors reviewed each recording multiple times to ensure a full understanding and accurate

interpretation of the responses. Quantitative data were systematically organized, and all interviews were transcribed to facilitate a comprehensive thematic analysis (Braun & Clarke, 2006).

To further ensure the reliability of the findings, two authors independently conducted a thematic analysis of the transcribed data (Braun & Clarke, 2006). This collaborative approach allowed for cross-validation of the identified themes, ensuring accuracy and consistency (Creswell & Miller, 2000). The combination of open coding and thematic analysis, facilitated by tools like NVivo 12 Plus, helped identify nodes, themes, and word frequencies. Additionally, sentiment analysis was conducted alongside thematic analysis to examine positive, neutral, and negative emotions. This multi-layered analysis ensured a robust understanding of the data and minimized potential researcher bias.

3) Study-1 Results

For the question, “Which country do you think the typography below belongs to?”, the participants received two images of a new Munja-do with Hangeul and the traditional Munja-do and then chose each country of origin based on their presumption.

For the question about the cultural origins of the Munja-do designs using Hangeul, Korea was the most commonly selected country, followed by China, Japan, and Vietnam.

For the question about the cultural origins of the traditional Munja-do, participants most selected China, followed by Japan, Korea, Thailand, and Vietnam. This result shows that, regardless of the origin of Munja-do, expression with Chinese calligraphy leads the average person to think that it originates from China. Most participants selected the correct answer for the first question. However, for the second question, despite the participants having awareness of the Korean culture, it was found that they could not identify the cultural background of the traditional Munja-do image without Hangeul

typography. Even though traditional Munja-do originated in China before the invention of Korean Hangeul, the participants were not aware of the fact that traditional Munja-do has been inherited by other cultures and has developed its own cultural modes that are independent of other cultures. This clearly showed that even if people had personal experiences of the Korean cultural, using Hangeul in Munja-do is more likely to increase their understanding of the origin country of Munja-do.

When interviewees were asked which category of images more effectively delivered Korean images, category-2 was indicated as the most effective set of pattern designs. All participants, excluding three of them, chose the new patterns (category-2) (Table 2).

Table 2. Interviewees' choices
-which category of images more effectively delivers Korean images?

	Group	Familiarity	Category 1	Category 2
P-1	China	2	0	1
P-2		3	0	1
P-3		4	0	1
P-4		3	0	1
P-5		3	0	1
P-6		4	0	1
P-7	EU	3	0	1
P-8		1	0	1
P-9		3	0	1
P-10		4	0	1
P-11	Mixed	2	0	1
P-12		1	0	1
P-13		1	1	0
P-14		3	1	0
P-15	UK	2	0	1
P-16		1	0	1
P-17		3	0	1
P-18		2	0	1
P-19		2	1	0
P-20		1	0	1
P-21		1	0	1
Total			3	18

The use of Korean typography, which was expressed in different ways (e.g., text, Korean typography, letters, and Hangeul), was revealed as a more effective way for delivering Korean images compared to motifs. For category-1, participants stated that it was difficult to know where the patterns originated. “Asian images,” “elements that are generally used everywhere,” and “ambiguous where it comes from” were common comments about category-1. This is because participants with limited knowledge of Korean culture think of Minhwa image motifs as Asian images.

A significant finding of this study is that, regardless of prior exposure to Korean culture, Hangeul effectively helps people identify a design's origin, conveying cultural

information without the need for additional context. Thus, the use of Hangeul in a design is effective in allowing people to associate the design with Korean culture.

In the next phase of the interview, Minhwa artists were invited to consider the possibilities of using Hangeul with Munja-do and the essentials of using Munja-do before developing design motifs. The discussions raised cautions and essential points to be considered before using Munja-do.

Study-2 method: Interviews with Minhwa specialists

1) Method

Qualitative interviews were conducted to identify Minhwa specialists' perceptions of Munja-do and gain insight based on their knowledge and experience. The interview format allowed the investigator to examine possibilities as well as to supplement and the essentials of using Munja-do before developing design motifs. The data collection and analyses were based on a qualitative software program.

2) Data collection

In-depth face-to-face interviews were conducted with Minhwa artists to gain insights into their experiences and perspectives. A purposive sampling approach was used, as participants' responses and explanations were expected to vary based on their knowledge of the subject. Four South Korean participants, who had been practicing Minhwa art for a minimum of 26 years, were selected for the study. Despite differences in their approaches to Minhwa, all participants had significant real-world exposure to various forms of this traditional art. The interviewees' demographic information is shown

in Table 3, and they were anonymized using identifiers such as "M" followed by a number.

The interviews were conducted following rigorous ethical standards. Participants were provided with comprehensive information about the study's objectives and methods

Table 3. Interviewees' profiles

No.	Name	Age	Occupation		Career
M1	Ms. Gong-im Seo	51-60	Minhwa artist	The head of the Wuri Minhwa association	40 years
M2	Mr. Jae-kwon Eum	51-60		The head of the Korean folk painting association	30 years
M3	Ms. Jung-ye Nam	51-60		Independent Minhwa artist	26 years
M4	Ms. Gui-ja Jung	61-70		Seoul intangible cultural heritage No.18 folk painting (a teaching assistant)	40 years

and signed consent forms before participating. Their anonymity was preserved, and audio recordings of the interviews were made with their explicit consent. All collected data were securely stored to ensure confidentiality. This consistent adherence to ethical practices ensured the integrity of the study throughout all stages of data collection.

The first set of questions was related to the characteristics of Munja-do, such as the essential elements used in Munja-do, and the forms of the characters and their details. The second set of questions dealt with materials and techniques that form the different criteria of Munja-do. Additional questions were asked to understand the potential of the cultural elements of Munja-do depending on their answers. The final set of questions focused on the combining of Hangeul and Munja-do. The questions included the following: “How do you feel about applying Hangeul into Munja-do?”, “What are the challenges in using Munja-do with Hangeul?”, and “Please share your opinions and further ideas about using Munja-do.” Depending on the answers, additional questions were asked. An audio recording was used to collect data with the permission of the interviewees. Each interview took approximately 90 minutes, and the author listened to each recording several times to fully understand each answer. Then all the interviews were transcribed into English. A portion of the interviews was segmented and transcribed

using the NVivo tool. Even though there could have been misinterpretations, each transcription was reviewed for accuracy by repeated comparing.

3) Study-2 Results

There are multiple relevant findings from these interviews with Minhwa artists. Based on these interviews, the characteristics and essential elements of Munja-do considered by the artists included symbolic meaning, functionality, vividness of colors, and a variety of subjects similar to those of Minhwa. The results obtained from each category of the interview are shown in Figure 4. Through the search for and identification of common categories extending across the set of interviews, thematic analysis was conducted to draw findings

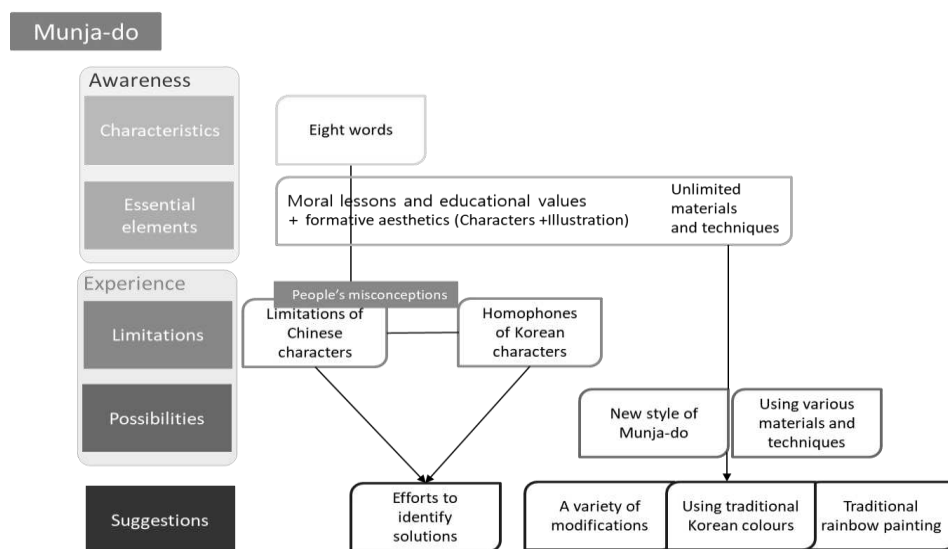


Figure 4 Minhwa artists' awareness, experience and suggestions in the interview findings.

First, the essential finding related to Munja-do is that fundamental characteristic of Munja-do comprises the eight virtues of Confucianism that describe the essential attitudes necessary to live in society. When asked about characteristics of Munja-do, all Minhwa artists pointed to 'eight words' in particular – Hyo (filial piety), Che (brotherly love), Chung (loyalty), Shin (trust), Yae (propriety), Ui (righteousness or justice), Yom (a sense of honour) and Chi (sensitivity), the eight virtues of Confucianism—which describe the essential attitudes necessary to live in society. Participants mentioned that

when Minhwa artists draw Munja-do, they keep these eight words in mind and the associated stories that have been passed down through many generations. Participants agreed that ‘eight words, which symbolize moral lessons and educational values, are essential elements to Munja-do.’

However, as the original eight words have stories with traditional viewpoints that many believe cannot be understood in the modern world, reinvention is necessary to help Munja-do fit into the spirit of the current age. M1 pointed out that the eight virtues of Confucianism needed to be replaced with modern terms, ‘The eight words should be changed to keep up with the stream of times and reflect the spirit of the age.’. Essential elements of Munja-do prevail because people want to teach these moral lessons and educational values. Thus, these aspects are expressed through formative aesthetics. As far as materials and techniques are concerned, traditional ink sticks were mentioned. However, there are no limits concerning techniques and materials. People could use any method, provided it is appropriate for the intended purpose.

Second, a negative opinion persists when it comes to using traditional Munja-do for Korean cultural designs because some people have misconceptions regarding this art form. Since Chinese characters are still used to draw Munja-do, some people cannot understand that it is actually a Korean art. There are also people who think that Munja-do comes from China. Regarding the application of Hangeul typography to Munja-do, there is a limitation because of homophones, which are sets of two or more words having the same pronunciation but different meanings, origins, or spelling. For example, suppose designers use words relating to Shin (trust). In that case, the original meaning may be lost in translation because the Korean form of Shin (신) has several definitions, including trust,

shoes, and god. Therefore, he stated the designer must discover solutions to address this limitation if they want to use Munja-do (Figure 5).

信 신 믿음		
Chinese character of 'trust'	Writing a Chinese pronunciation with Korean	A word meaning 'trust' in Korean

Figure 5. Example using a word meaning in Korean

Therefore, it is important to identify solutions to address these limitations, such as using the meaning of a word in Hangeul instead of writing a Chinese pronunciation with Hangeul.

Last but not least, nevertheless, there are positive aspects. Using Hangeul typography is one such possibility, because it will help create a new style of Munja-do. This could thus introduce a variety of visual art into Korean culture in a new way. M4 intimated she has a plan to create Munja-do using Korean characters. Three participants (M1, M3 and M4) agreed that using Korean characters will help create a new style that will promote Munja-do by introducing a unique, Korean design. Moreover, using various materials and techniques also has possibilities. A new modification, for example, a rainbow painting using traditional colors for people to feel the unique aesthetics of Korea could be attempted.

4. Discussion and Conclusion

This study aimed to explore the possibilities of combining Hangeul typography with Munjado. While Hangeul typography has been applied in fashion design and Munjado has been developed as a traditional art form, there have been limited attempts to integrate these two elements. Lee (2014) and Choi (2003) highlighted the potential of traditional Korean design elements in contemporary fashion. However, their studies were limited by subjective judgments, leading to the recommendation that future research

should analyze the awareness and preferences of non-Koreans to identify the key factors in combining Hangeul and Munjado as examples of traditional cultural elements.

This research reviewed the current state of typography and the use of Hangeul with Munjado in fashion, aiming to propose innovative ways to utilize Hangeul. Focus group interviews were conducted to explore and discuss the views and perceptions of non-Koreans regarding the use of Munjado combined with Hangeul. Additionally, interviews were held with Minhwa artists to gain insights into their opinions on the integration of Munjado and Hangeul.

The primary findings revealed that incorporating Hangeul significantly enhances the ability to identify the cultural origins of a design. Hangeul proved effective in conveying the origin of a design without requiring additional explanation or cultural experience. Participants with limited knowledge of Korean culture often perceived Minhwa and Munjado motifs as generic Asian designs. In contrast, when Hangeul was incorporated, non-Koreans more readily associated Munjado with Korean culture than with traditional Chinese character-based designs. This finding underscores the potential of Hangeul as an effective element for strengthening the cultural identity of fashion products.

The study also identified that the symbolic meaning of Munjado remains its most important element, especially for artists. Essential components of Munjado exist because they aim to teach the eight virtues of Confucianism, which describe the moral attitudes necessary for living in society. However, alternative methods of highlighting these implied meanings are necessary to adapt Munjado to contemporary contexts. Minhwa artists noted limitations related to homophones when using Korean characters in Munjado but emphasized the need for creative solutions and modifications in Hangeul typography

to express diverse visual art forms originating from Korean culture.

The findings demonstrated that incorporating Hangeul enhances the cultural recognition of designs. For instance, interview participants identified Hangeul-based Munjado motifs as distinctly Korean, in contrast to the ambiguity surrounding traditional Chinese-character-based designs. This highlights the communicative power of Hangeul in strengthening the cultural identity of fashion products. Furthermore, the study identified key symbolic elements of Munjado, such as the eight virtues of Confucianism, which offer opportunities for modern reinterpretation in fashion.

Building on these findings, concrete examples from the interviews illustrate how these elements can be adapted for practical applications. For instance, Minhwa artists suggested using Hangeul to reimagine Munjado motifs in contemporary textiles, such as incorporating bold typographic patterns into fashion collections. One artist proposed blending traditional colors with simplified geometric Hangeul forms to create visually striking and culturally rich designs for global markets. These examples underscore the versatility of Hangeul and Munjado in producing innovative and marketable fashion products. The prototypes of each design were created to increase understanding of the example items below (Figure 6). The designs reflect insights from interviews with Minhwa artists and explore cultural expression through wearable and decorative forms. The Munja-do patterns shown in Figure 6 were designed by the author in Adobe Illustrator 2024 and Adobe Photoshop 2024 (version 25; Adobe Inc., San Jose, CA). The patterns were then applied to the garment mock-ups using the Generative Fill feature (powered by Adobe Firefly) in Adobe Photoshop to visualise how the designs would appear on finished products



Figure 6. Prototypes of fashion and lifestyle products incorporating Hangeul-based Munjado designs (designed by the author in Adobe Illustrator and Photoshop; product mock-ups visualised using Adobe Photoshop Generative Fill)

The integration of Hangeul typography with Munjado underscores its transformative potential in reinforcing Korea's national identity, creating innovative and visually distinctive designs, and enhancing the country's global competitiveness in the design industry. The originality of this approach lies in the unique synergy between the geometric elegance of Hangeul and the cultural symbolism embedded in Munjado. This combination not only elevates the storytelling aspects of the designs but also provides a competitive edge by producing highly creative and differentiated products for contemporary markets.

The fusion of Hangeul and Munjado further strengthens Korea's national identity by serving as a visual emblem of "Made in Korea." This integration intuitively communicates Korean cultural heritage, amplifying the recognition and value of Korean design and branding on a global scale. By embedding these traditional elements into modern design practices, the approach effectively positions Korea as a leader in culturally driven innovation.

Lastly, designs incorporating Hangeul and Munjado hold significant potential in premium markets that prioritize cultural narratives and traditional aesthetics, while also demonstrating strong competitiveness in the global market. By reinterpreting traditional elements through a modern lens, these designs can appeal to international consumers

seeking innovation with cultural depth. This approach not only enhances Korea's competitiveness in the global fashion and design industries but also contributes to creating new opportunities for growth and expansion.

Despite these promising findings, this study acknowledges its limitations, particularly the small sample size, which restricts the generalizability of the results. Additional research with a larger and more diverse participant pool is necessary to fully understand public perceptions of contemporary cultural pattern designs. Addressing these limitations will allow for a more comprehensive exploration of the potential of Hangeul typography in global cultural representation.

In conclusion, this research highlights the transformative potential of combining Hangeul typography with Munjado to create innovative designs that resonate with both local and global audiences. Further studies should expand on these findings to explore new design strategies that bridge tradition and modernity while reinforcing Korea's cultural identity in the global market.

Declaration of Generative AI Use

The Munja-do patterns presented in this study were conceived and designed by the author using Adobe Illustrator 2024 and Adobe Photoshop 2024 (version 25; Adobe Inc., San Jose, CA). The Generative Fill feature (powered by Adobe Firefly) within Adobe Photoshop was used in 2024 solely to apply these author-created patterns onto garment mock-ups for visualisation purposes in Figure 6. Generative AI was not used to create research data, generate the original pattern designs, or produce any analytical content. All design and analytical decisions were made by the author, who takes full responsibility for the integrity of the work.

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