

# Consumers' Challenges in Online Shoe Purchasing and Attitude Towards 3D Virtual Shoe Fitting Technology: A Qualitative Study of Women in China

**Authors** Cao, Luying<sup>1</sup>; Koh, Chai Lin Pouline<sup>2</sup>; Wong, Sook Khuan<sup>3</sup>

**Affiliation** <sup>1,2</sup>The Design School, Taylor's University, Malaysia, <sup>3</sup>Saito University College, Malaysia

**Email** 907472547@qq.com

31 January 2023

**Abstract** *The increasing number of Internet users has made online shopping increasingly popular, with significant growth in e-commerce recently. The high return rate of online purchases, especially shoes, has been a common effect of online e-commerce for many years. The reasons behind the high return rate of shoes are wrong shoe types or sizes and poor shoe material. This study aims to explore online customers' acceptance of the digital 3D virtual shoe fitting technology and apply it to online retailing. The findings reveal that most women consumers experience various difficulties during online shoe purchasing, and they wish the design of 3D fitting technology could recommend the right shoe type and size. Therefore, 3D shoe fitting technology can create a better online shopping experience for women consumers. The study contributes significantly towards helping e-customers select the most appropriate size during their online shopping experience and improving customer satisfaction. The study limitations include sample size and consumer market representation. Future research should emphasize the technical issues of 3D virtual shoe fitting, such as developing a fabric simulation effect and providing customers with a complete fitting evaluation.*

**Keywords** Online shopping, virtual fitting, shoe purchasing, shopping experience

## Introduction

The increasing number of internet users also increases the popularity of online shopping. This is evident in the significant growth of the e-commerce sector in recent years. Online payment users in China have reached 805 million, which accounts for 85.7% of Internet users. Furthermore, the mobile payment market ranked first in the world for three years. The National Bureau of Statistics reported that clothing, shoes, hats, and home textiles account for approximately 30% of online shopping.

Nonetheless, the high return rate for online purchasing has been a common outcome of online e-commerce for many years. The average return rate for online purchases was 30% (Milehighcre, 2020). Return Magic is the most trusted return software with over 2,000 e-commerce merchants. They surveyed 1,000 businesses in multiple industries with compiled data from over 800,000 Shopify customers. In the survey, consumer preference-based return reasons (size, fit, and style) would account for approximately 72% of all returns in fashion product categories. The top two reasons for returns include "size too small" and "size too large," which account for 30% and 22%, respectively (Orendorff, 2019). Footwear holds the highest proportion of all the fashion product categories, with high return rates. The online shoe retailer Running Warehouse estimated that 65% of all returns are concerned with the shoe not fitting the anatomy of the customer's foot.

This study fills the research gap by solving the complexities of purchasing shoes online. The study objectives include exploring online customers' acceptance of the digital 3D virtual shoe fitting technology and applying this technology to online retailing based on two research questions:

RQ1: What are the challenges of purchasing shoes online among women?

RQ2: What is the women's perception of the application of 3D virtual shoe fitting on purchasing shoes online?

The research outcome is that most female consumers experience various difficulties in online shoe purchasing and wish the design of the 3D fitting technology could help recommend the right shoe type and size.

## Problem Statement

According to Bizen et al. (2021), the new online shopping model creates several issues, including consumers failing to accurately judge whether the shoe fits comfortably and purchases being made with

a certain degree of blindness and uncertainty. Moreover, Revkov & Kanin (2020) highlighted the difficulty of finding the correct shoe size from online stores due to the inability to try on the selected shoe. Consequently, sellers receive a large number of returns and incur additional shipping costs. Many people choose not to buy shoes online as they cannot try them on in person and do not want the inconvenience caused by inappropriate returns. Many researches indicate that choosing a suitable shoe is not as easy as expected as shoes have a wider variety in materials and sizing, specifically in online stores. Currently, only shoe size exists as the reference standard for consumers to buy shoes online, but the size standards differ in various countries. Moreover, the differences between different brands of shoes are significant. Choosing shoes that fit based on a single-size standard is complicated. The virtual shoe testing system enables accurate judgment of the comfort of the shoes and prevents consumers from buying shoes that are unfit for their feet. This system also reduces returned goods, improves consumers' online shopping experience, and reduces logistics costs and unnecessary economic losses for businesses. Therefore, virtual shoe testing is undoubtedly a subject with practical research value and application background (Jalali et al., 2020; Kim & Do, 2019; Piperi et al., 2014; Wu et al., 2018).

### Literature Review

This section discusses online shopping, the global shoe market, and its demand among women. Subsequently, the application of 3D virtual clothes fitting in online stores was used as a reference for 3D virtual shoe fitting. The section also highlights the importance of examining the improvement of 3D virtual shoe fitting.

China has the world's largest online shopping market. In China's first-tier cities, approximately 80% of adults shop online (The Economist, 2017). Despite the rapid development of the industry, consumers and sellers still encounter challenges that need to be overcome. The industry is fiercely competitive and multi-faceted as consumers demand a good online experience and higher shopping satisfaction (Amoah & Marriott, 2021). According to Agarwal (2019), online shopping behavior has become a field of interest among researchers. Understanding why online shoppers behave a certain way has become increasingly important among marketers and other stakeholders, such as academics, researchers, companies, and retailers.

Research and Markets (2021) states, "The global market for footwear is projected to reach US\$403.2 billion by 2025, driven by new design trends and rising discretionary spending among the expanding base of the middle-class population." Hence, the shoe

market is gaining significant attention in the fashion industry. A crucial aspect involves comprehending consumers' mentality and the reasons for their preferences in order to indicate their purchase intention (Moreira, 2017). The increase in the number of professional women worldwide has raised the demand for fashionable shoes for formal and casual occasions. The global footwear market in 2020 is estimated at 365.5 billion U.S. dollars and is expected to reach 530.3 billion U.S. dollars by 2027. Meanwhile, the Compound Annual Growth Rate (CAGR) for 2020-2027 is 5.5% (Chouhan & Vig, 2020). Furthermore, the women's global footwear market in 2018 is estimated to be 152.2 billion U.S. dollars, with sales predicted to reach 219.5 billion U.S. dollars by 2027 and a CAGR of 4.2% (Future Market Insights, 2018).

According to Zhang (2016), 95% of consumers who buy clothes online hope it is similar to the ones in the physical store with the same 'touch clothes' feel to experience the comfort of clothes. Wang (2017) discovered that over 95% of consumers felt a strong desire to try the 3D virtual fitting room, over 80% of people supported establishing a virtual fitting room in the clothing entity shops, while more than 60% of the respondents expressed willingness to upload their photos or human data to build their personalized models. In e-commerce, the consumer hopes to preview the fitting effect online to make purchase decisions (Hu et al., 2017). Lee et al. (2020) mentioned that virtual fitting rooms enable consumers to virtually try on products using a personalized model, which is created or simulated based on their body measurements through various data input methods.

Most current studies on 3D fitting technology emphasize garments, while research on 3D shoe fitting is extremely new. Few studies have highlighted the present virtual try-on theory. Gong et al. (2015) suggested that shoe enterprises and their flagship stores need to build a massive number of customers' foot types to form an integrated product database. When the customer tries the product on, the network terminal will automatically provide the matching product based on the customer's unique ID to depict a more 'real' fitting effect.

### Methodology

This research paradigm applied a post-positivism and quantitative approach. The research subject included the 18-40 years old female group with a certain purchasing power in China. As the group is highly relevant to the entire online purchasing process, a questionnaire is organized to investigate the female customers' challenges and focus while purchasing shoes online. Their opinions on the 3D fitting technology application in the e-store are also gathered. This study was conducted between June and July 2021 using a convenience sample with targeted respondents comprising 18 to 40 years old

female consumers. The questionnaire survey was sent to Wechat groups, which included college students, enterprise staff, self-employed individuals, and homemakers. The survey was only open to women. Participation in the survey was voluntary, and consumers' consent was obtained before the survey started. Moreover, the confidentiality of the participant's response was guaranteed.

The questionnaire was designed in Mandarin as the participants were all Chinese women, and some might not understand English. An English version of the questionnaire was also available. The introduction was provided to clarify the research purpose, and participants were informed of confidentiality. The questionnaire contains three sections with a total of nine questions.

Section One covered the participants' basic information, such as their age group and occupation. In Section Two, respondents had to share their shopping experience during online shoe purchasing, whether or not they bought shoes online, and if so, the frequency. Additionally, respondents were tasked to identify the type of shoe (provided in text and pictures) that is most difficult to purchase online. In the third section, respondents had to rate influencing factors when purchasing shoes online based on their perceived importance. The questionnaire also asked whether the respondents have used 3D virtual shoe fitting when purchasing shoes online. Finally, respondents had to elaborate on their expectations about the 3D virtual shoe fitting function when purchasing shoes online.

**Findings and Discussion**

This study examined the female customers' challenges and focus when purchasing shoes online and their opinions on applying 3D fitting technology in e-stores. After designing and distributing the online questionnaires, 111 surveys were collected between June and July 2021. The results revealed that 3.6% (n = 4) of respondents were under 18 years old, 36.04% (n = 40) were 18 to 24 years, 37.84% (n = 42) were 25 to 34 years, 15.32% (n = 17) were 35 to 40 years, and 7.21% (n = 8) were 41 years and above (see Figure 1). Therefore, 89.2% (n = 99) of participants fit the target group.

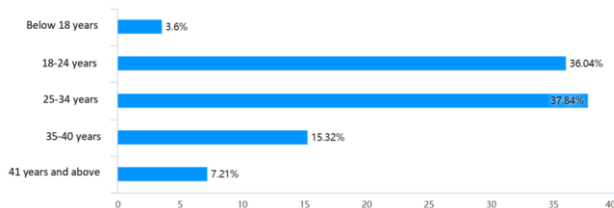


Figure 1. Age demography of survey respondents

The results in Fig. 2 demonstrate that 53.15% of respondents are employed. Excluding the students, working women (employed and self-employed) contributed to 78.3% of the total respondents. This statistic explains the increasing demand for fashionable and comfortable women's shoes. Generally, more women go to work and therefore need to purchase work-appropriate shoes. They prefer to buy shoes online when they do not have enough time to go shopping in physical stores.

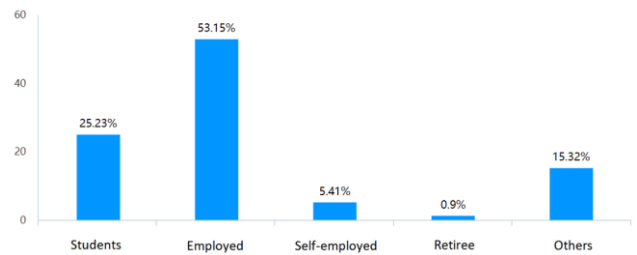


Figure 2. Occupation of survey respondents

Results in Fig. 3 revealed that 98.2% (n = 109) of respondents have an online shopping experience in buying shoes; hence almost every woman has purchased shoes in online stores.

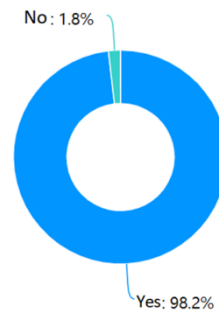


Figure 3. Women consumers survey response to purchasing shoes online

Fig. 4 presents another comparison in the online shopping experience where the percentage of "sometimes" (64.86%; n = 72) is approximately double the percentage of "all the time" (33.33%; n = 37). The percentage is consistent with consumer demand for fashion products. Women consumers who regularly buy shoes online account for one-third of the total, which outlines that the online shoe-purchasing experience is worth to be examined.

Interestingly, the "only once" percentage is 0% (n = 0), which suggests that all those who have experienced buying shoes online have also purchased shoes online more than once.

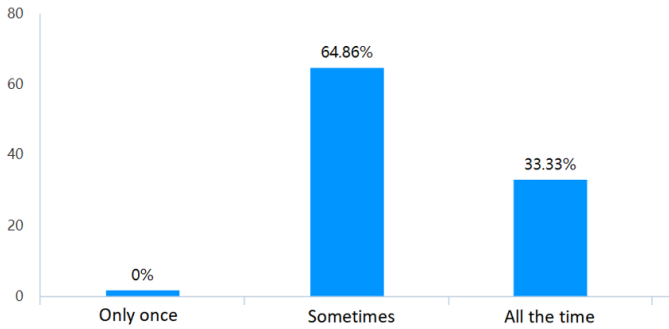


Figure 4 The frequency of women purchasing shoes online.

The respondents had to choose one type of shoe they find the most difficult to purchase online (see Fig. 5), and 51 (46.85%) of them selected heels. Meanwhile, 8% to 20% of respondents chose sandals, flat leather shoes, sneakers, and boots.

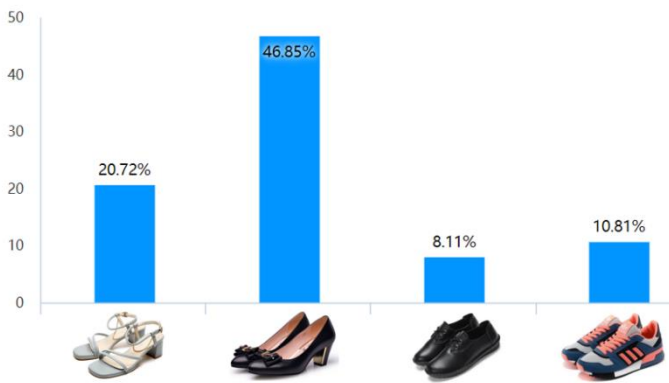


Figure 5 The most difficult typology of shoe to purchase online.

In the final part of Section Two, respondents had to identify the difficulties when they purchase shoes online with five multiple-choice options presented, including “wrong size,” “the shoes are not comfortable,” “poor material,” “actual colors are different from the visuals shown online,” or “hard to match clothes.” Based on Fig. 6, “the shoes are not comfortable,” “wrong sizes,” and “poor material” were the top three options chosen, which accounted for 69.37% (n = 77), 59.46% (n = 66), and 49.55% (n = 55), respectively. Hence, most women consumers find it hard to feel the actual material, texture and fit when purchasing shoes online.

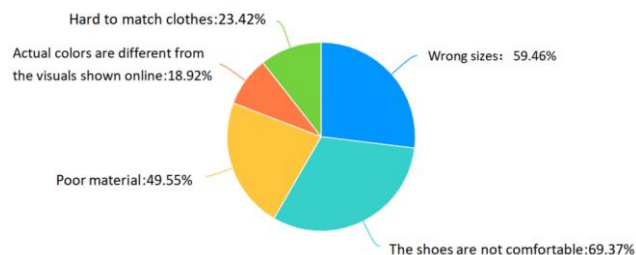


Figure 6 The difficulties women face when purchasing shoes online.

The third part of the survey disclosed women consumers’ perceptions of 3D shoe fitting technology used in online shoe stores. Before introducing the 3D shoe fitting technology, it is essential to understand the respondents’ opinions on factors influencing their online shoe purchases (see Figure 7). Notably, “Whether the shoe type fits my foot type” (66.67%; n = 74) ranked first among the four options. Hence, most respondents may find it hard to choose shoes that fit their foot type when purchasing shoes online. If the online store could provide shoes that accurately fit their foot shape, they would probably be more willing to buy shoes online. “The accuracy of size” and “Whether the actual product looks the same with the online pictures” were tied for second, which accounted for 62.16% (n = 69) and 63.96% (n = 70), respectively. Although the last option, “Whether the shoes can be virtual try on,” accounted for merely 26.13% (n = 29), the percentage does not imply that 3D shoe fitting is futile but might depict no actual experience of using this service. Figure 8 presents that only 5.41% (n = 6) of respondents have used 3D virtual shoe fitting when purchasing shoes online.

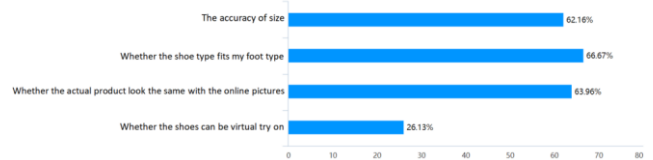


Figure 7 Respondents’ opinion on the factors that influence their online shoe purchase



Figure 8 If the respondents have used 3D virtual shoe fitting when purchasing shoes online.

The last question aims to determine the women consumers’ expectations for 3D fitting technology in online shoe purchasing. Based on Figure 9, almost every option provided was chosen by half or more respondents. Hence, women consumers’ hopes for 3D shoe fitting are relatively high. Additionally, 79.28% (n = 88) of the respondents want the design of 3D fitting technology to help recommend the right shoe type. Apart from the right shoe type, recommending the accurate size (69.37%, n = 77) is also crucial based on the respondents’ perspective. Moreover, “It should

provide me better shopping experiences” was chosen by 66.67% (n = 74) of the respondents who want to experience improvement in their online shoe shopping experience. Meanwhile, approximately 50% of respondents selected “The purchase process should be smooth and fast,” “It should help me save time and energy of returning and exchanging goods,” and “It should provide purchase satisfaction for online shopping.”



Figure 9 Respondents' expectations regarding the 3D fitting technology function that could help them with online shoe purchasing.

## Conclusion

A total of 111 respondents participated in the study; 36.04% (n = 40) were 18 to 24 years old, 37.84% (n = 42) were 25 to 34 years, and 15.32% (n = 17) were 35 to 40 years. Thus, 89.2% (n = 99) of the participants fit the target age group. The study aimed to determine whether 3D virtual shoe fitting technology significantly impacted online shoe retailing. Summarily, most customers embraced the 3D shoe fitting technology and are willing to try shoes virtually before making purchases in e-stores. Secondly, the improvement of the 3D shoe fitting system can be demonstrated by adding the effect of wearing the clothes after matching the overall style and representing the fit of the shoes. This option avoids concerns about buying shoes that do not fit their feet and giving up online shopping. Thirdly, the 3D clothing fitting system will exist simultaneously to completely showcase the overall try-on effect to encourage impulsive consumption and create profit for the retailer.

The study discovered that most women consumers experience various difficulties in online shoe purchasing, and they wish the design of 3D shoe fitting technology could help recommend the right shoe type and size.

Although 94.59% of the participants have not used 3D virtual shoe fitting when purchasing shoes online, the women displayed great willingness to try. Therefore, the findings outlined the importance of introducing 3D fitting technology to create a better online shopping experience for women consumers.

After introducing an application that allows purchasers to seek more accurate information on the shoe size they need, returns were reduced by 23% (Case, 2018). Undoubtedly, solving the problem of

virtual fitting to help e-customers select the most appropriate size during their online shopping experiences is the key to improving customer satisfaction to reduce the number of shoes returned.

Although the current study has a commendable contribution to the literature and practice, the findings must be considered with the following limitations. First, the study only focused on the Chinese market. Thus, further studies should be conducted on the entire global online market, including different shoe size standards and wearing habits with various cultures. Meanwhile, due to the small sample size, the results of the surveys and interviews did not fully represent the general public. Moreover, the relevant background information is insufficient, and most can only refer to 3D fitting on clothing. In future research, the author intends to emphasize the technical issues of 3D virtual shoe fitting, such as developing a fabric simulation effect and giving customers a complete fitting evaluation.

## References

- Agarwal, A. (2019). *Online customer experience: A literature review*. *Parikalpana: KIIT Journal of Management*, 15(1and2), 189-198.
- Bizen, H., Yoshida, M., Jimbu, M., & Kawai, Y. (2021). *Virtual Shoe Fitting System that Uses Augmented Reality to Measure Feet and Try on Shoes*. In *2021 IEEE 3rd Global Conference on Life Sciences and Technologies (LifeTech)* (pp. 217-219). IEEE.
- Case, D. D. (2018, July 13). *How to reduce your footwear eCommerce return rate*. Message posted to <https://blog.addi.fit/how-to-reduce-your-footwear-ecommerce-return-rate>
- Chouhan, N., & Vig, H. (2020). *Allied Market Research: Footwear Market by Type (Athletic and Nonathletic)*
- Future Market Insights. (2018). *Womens Footwear Market: Women's Footwear Market: Manufacturers Offering Diversified and Innovative Products to Expand Customer Base: Global Industry Analysis 2013-2017 and Opportunity Assessment 2018-2027. An Incisive, In-depth Analysis on the Womens Footwear Market*. Retrieved from <https://www.futuremarketinsights.com/reports/womens-footwear-market>
- Gong, T., Li, S., Tan, g Y., & Wan, P. (2015). *Modular construction of virtual shoe fitting system*. *Leather Science and Engineering*, 25(002), 53-57.
- Hu, S., Wang, R., & Zhou, F. (2017). *An efficient multi-layer garment virtual fitting algorithm based on the geometric method*. *International Journal of Clothing Science and Technology*, 29(1)

Jalali, A., Azadinia, F., Jalali, M., Saeedi, H., Shahabi, S., & Rajabi Moghadam, A. (2020). Evaluating shoe fit in older adults using a 3D scanner: a cross-sectional observational study. *Footwear Science*, 12(3), 161-171.

Kim, N., & Do, W. (2019). Developing elderly men's footwear sizing system based on their foot shapes. *Fashion and Textiles*, 6(1), 1-18.

Lee, H., Xu, Y., & Porterfield, A. (2020). Consumers' adoption of AR-based virtual fitting rooms: from the perspective of theory of interactive media effects. *Journal of Fashion Marketing and Management: An International Journal*, DOI 10.1108/JFMM-05-2019-0092

Moreira, A. C., Fortes, N., & Santiago, R. (2017). Influence of sensory stimuli on brand experience, brand equity and purchase intention. *Journal of Business Economics and Management*, 18(1), 68-83.

Piperi, E., Galantucci, L. M., Kaçani, J., Shehi, E., & Spahiu, T. (2014). From 3D foot scans to footwear designing and production. In 6th International Conference of Textile.

Research & Markets. (2021). *Global Footwear Market Report 2021-2025: Companies Eye Other Outsourcing Destinations beyond China*. Retrieved from <https://www.globenewswire.com/en/news-release>

Revkov, A., & Kanin, D. (2020). FITTINTM-Online 3D Shoe Try-on. 11th Int. Conference and Exhibition on 3D Body Scanning and Processing Technologies, 17-18 Nov. 2020, Online/Virtual

The Economist, (2017), "Online retail is booming in China", Retrieved from <https://www.economist.com/special-report/2017/10/26/online-retail-is-booming-in-china>

Wang, M., Yu, C., & Fang, F. (2017). Consumer cognition and functional requirements of three-dimensional virtual fitting. *Wool Textile Journal*, 45, 11.

Wu, G., Li, D., Hu, P., Zhong, Y., & Pan, N. (2018). Foot shape prediction using elliptical Fourier analysis. *Textile Research Journal*, 88(9), 1026-1037.

# Higher Education Engagement in Community Festivals: A Case Study of Hong Kong

**Author** Fan, Sixin

**Affiliation** The Chinese University of Hong Kong

**Email** cyxinfan@gmail.com

31 January 2023

**Abstract** *Festivals are often seen as mirrors that reflect on social issues. This paper examines the festival management course offered by an institution of higher learning in Hong Kong. Community festivals, initiated by higher education institutions, aim to give voice to different local groups and strive for social change. Higher education imparts knowledge and skills through curating and managing community festivals as part of their learning outcomes. The community festival is then nurtured, developed, and transformed into an independent arts organization. The relationship between higher education and community festivals is further investigated. Several qualitative research methods are adopted, including content analysis, ethnography, participant observations, and semi-structured interviews. The evolution of community festivals has witnessed the changes of the times and curriculum in higher education. As an experimental pedagogy, community festivals enable students to apply theoretical knowledge to the practical world while the practice further points towards a new future direction in festival studies.*

**Keywords** Higher Education, Festival Management, Community Festival, Engagement, Hong Kong

## Introduction

Festivals are an important aspect of human civilization. Since ancient times, festivals have permeated our culture and tradition from generation to generation. Festivals allow people to escape mundane daily life. Sociologists have often used the word "utopic" to describe the atmosphere at festivals

(Gardiner, 1992). In modern times, festivals are integrated into the cultural landscape and connected to people's needs and lifestyles. The distinct characteristic of a festival is its transience, which takes place in a special space and time with a specific community (Gilbert and Lizotte, 1998). Throughout the years, the evolution of festivals has often portrayed the changes of times. As a dynamic phenomenon, festivals are formulated from social, anthropological, economic, and geographical perspectives (Falassi, 1987; Ma and Lew, 2012; Fournier, 2019).

As the increasing number of festivals grows worldwide, there is a great demand for professional talents serving the cultural industries. Higher education institutions have successively offered courses related to festivals at diploma, degree, and master levels in Hong Kong. Some courses combine festival knowledge in business management, hospitality, cultural tourism, and cultural management, while others focus entirely on festival management. HKU School of Professional and Continuing Education, in collaboration with Edinburgh Napier University, is offering a B.A. in International Festival & Event Management. This research aims to examine festivals through the lens of higher education.

## Problem Statement

Between 2018 and 2020, the researcher served as a teaching assistant at the M.A. in Cultural Management Programme at the Chinese University of Hong Kong. The programme offered the course *Curating and Managing Cultural Festivals* in the second semester. The course addresses the curation and management of festivals, with a particular focus on performing arts festivals. Issues and future trends are discussed alongside local and overseas case studies. Additionally, students are required to plan and execute an arts festival in Hong Kong as part of the course's learning outcome. Faculty members and students are involved in the community festival project "*Along the Edge Arts Festival*". The arts festival attempts to focus on different communities and stories through a multidisciplinary art form. The role of the researcher is to support the curriculum implementation and facilitate the process of festival management.

Since the outbreak of COVID-19, many festivals around the world have been cancelled or postponed. Higher education institutions developed safe and socially distanced alternative ways to hold a festival by going online. Curating and managing online festivals became the new teaching practice. The first online festival in Hong Kong was held as student output during the pandemic. Building on the festival's track record, the faculty team subsequently handed over the festival project to an interested party,

supporting the festival's development into an externally operated organization in 2021. The researcher is currently taking the lead in managing the festival professionally. The festival is an experiential pedagogy creating opportunities and challenges. This research delves into the case study of *Along the Edge Arts Festival* from the perspectives of teaching staff and festival practitioners. Previous festival experiences triggered the researcher's research interest in examining the relationship between the community festival and higher education.

## Literature Review

Festivals are defined as “themed, public celebrations” (Getz, 1998). The modern approach to the definition ties to varying social and cultural constructs from place to place. Festivals directly impact three distinct variables: place, visitors, and community (Gibson and Connell, 2011). In the age of experience, economy, arts, and culture, “festivalization” has become an urban planning strategy to boost local economic development (Bennett, Taylor, and Woodward, 2014). The transience of the festivals encourages visitors to visit the place and interact with the local community. Festivals themselves are viewed as tourist attractions to extend the tourist season in the surrounding region (O'Sullivan and Jackson, 2002). It helps to create new employment opportunities and increase income from cultural tourism expenditures. On the other hand, the growth of community arts festivals also gives a voice to different local communities to reflect on social and political issues (Derrett, 2003). Festivals provide a platform for people to come together and share their culture, which helps to develop a sense of local identity and strengthen community ties. Festivals also serve as intermediaries for students and higher education institutions to engage with the public.

Higher education is defined as tertiary education leading to the award of an academic degree after completing secondary education. Higher education has always played an important role in economic and social development. The primary purposes of contemporary higher education are talent cultivation, research, and social services (Altbach, 1998). Besides teaching and research, community engagement is regarded as a “third mission” of universities. Community engagement is the collaborative efforts between universities and external communities to address social issues (Brien, Veidemane, Farnell, and Schmidt, 2021). Higher education is viewed as a field where students compete for valuable resources, which are different forms of capital. The establishment and flow of capital are more likely achieved through curriculum design and implementation in higher education (O'Neill, 2015).

The relationship between higher education and community festivals is reviewed in the existing

literature. Experiential learning has been proven beneficial in festival and event management education (McDonald and McDonald, 2000). The UK universities have indicated five ways for students to engage in festivals (Buckley, McPhee, and Jensen, 2011). One of the formats proposed includes festival work as part of student courses in event management. The collaborative festival models are analyzed in the Australian curriculum (Yekanians, Sweeney, and Lewis, 2019). The pedagogical practices provide students with industry-focused real-world experiences while enabling them to study independently in a supportive setting. There is not much research examining the festival scenario from the perspective of higher education in Hong Kong.

## Methodology

The study aims to investigate the relationship between higher education and community festivals in Hong Kong. Several qualitative research methods have been adopted. Firstly, content analysis is conducted on the course curriculum *Curating and Managing Cultural Festivals* from 2018 to 2020. The research had to be based on data available from primary and secondary sources. Comparative analysis is the process of reviewing the course content, teaching methods, and learning outcomes. The analysis describes the differences and similarities between curriculum design and implementation.

Besides the content analysis, ethnographic methods are chosen to examine festival practices in organizing the *Along the Edge Arts Festival*. The researcher participated in the community festival as the facilitator and manager for five festival editions. Starting in 2018, the community festival explored how we can embark on an 'Along the Edge' discourse. People who fall into this category comprise the socially marginalized and those who autonomously choose to stand along the edge themselves. In 2019, the festival told important stories that reflected various marginalized groups' cultural and social experiences. These stories were private, ignored, or regarded as insignificant. In 2020, the first online festival investigated the meaning of being young and the wishes of young people in Hong Kong and elsewhere during troublesome times. In the spirit of adventure and resilience, the 2021 edition of the festival broke through boundaries. It explored new possibilities and perspectives to build global connections through online cultural and creative expressions. The theme for 2022 was “FEAR NOT!”. The festival investigated the stories of individuals or communities wrestling with fear, embracing emotion, and seeking transformation. Participation observation enabled the researcher to observe and comprehend different higher education stakeholders engaging in the community festival, which helped reflect on the researcher's personal experience.



Finally, semi-structured interviews are carried out with course instructors. A series of open-ended questions about higher education and festival practices are included. Based on the existing literature and case studies, gaps in theoretical knowledge and practical experience for festival management can be identified by interviewing outcomes.

## Findings and Discussion

Higher education equips students with professional knowledge, practical skills, and experience of the festival. Curating and Managing Cultural Festivals is a special elective course of the M.A. in Cultural Management programme under the Division of Cultural Studies. This course enables learners to understand, discuss and evaluate the management of festivals in a wider industry and social context. Festival curation and management involve conceptualization, planning, programming, human resources, marketing, logistics, risk management, execution, and evaluation. In addition to understanding the management concepts, students were exposed to the concept of cultural mediation and critical assessment, which provokes future thinking.

### *Festivals as experimental pedagogy*

The course instructor combined practical and teaching experience to identify the festival's potential. Adhering to experiential learning, the festival is regarded as a teaching tool for students to learn festival-related knowledge and skills. The community festival has become important for showcasing students' learning outcomes. Festivals are the medium that is actively responding to the current social and cultural issues in Hong Kong. Students connect academic knowledge to real-world practice. Managing and staging successful cultural festivals requires effective planning, great programming philosophy, and a clear execution and evaluation process. It also requires students to use multiple learning techniques and interpersonal skills, such as leadership, communication, and teamwork. Students seek hands-on experience through practice, trial, and error. Constrained by limited time and resources, students may lack the knowledge and skills to manage the festival professionally.

### *Festivals from a knowledge transfer perspective*

Getz (2010) attempts to systemise the knowledge of festivals by formulating festival studies as part of the wider field of event studies. Festival management is becoming a distinct sub-field of event management. Many researchers conduct festival studies to define the scope of their field further. The modern approach to the definition ties to varying social and cultural constructs from place to place. As festival management is an emerging field, the scope of knowledge and skills are fairly broad. This provides an

opportunity for academic institutions to flexibly provide course content, which helps establish festival knowledge as a complex and multidisciplinary field.

The global pandemic encouraged new art practices among students while exploring new territories by evaluating online teaching quality, rationale, and sustainability. The curriculum design reflects the environmental and demographic change within the festival industry.

The curriculum design and delivery of festival courses are highly influenced by higher education institutions, the economic structure, policy guidance, budget allocation, administrative means, and the festival industry. As an important stage of talent training, higher education, directly and indirectly, affects the festival industry's professionalism and ecology. The instructors design, enrich, modify and evaluate the curriculum to accommodate the needs of students. As the students are placed at the centre of the educational process, the curriculum design and implementation tend to revolve around their interests, needs, abilities, and capabilities. On the other hand, professional stakeholders indicate that knowledge, competencies, work capabilities, conditions, and career development are required in the industry.

### *Higher education as an incubator*

The community festival provides a platform for students, individual artists, and arts groups who can give different perspectives and voices to society. It is worth considering that the initiator of art festivals are academics with expertise in the field of festival management or relevant. The festival provokes academia and society to practice more in-depth thinking and dialogue. The festival itself may only offer opportunities for brief encounters. These initial connections can lead to a broader exchange of knowledge, networks, trades, goods, and services that may lead to longer-term networks (Duffy and Mair, 2018). The community festival was incubated, developed, and transformed into an independent arts organization. Consequently, the researcher shifted roles from facilitator to manager. The ownership of festivals also makes a potentially huge difference to the nature of its management and the experiences offered to audiences.

## Conclusion

Festivals are often seen as mirrors that reflect social issues. This paper examines the festival management course offered by an institution of higher learning in Hong Kong. The community festival initiated by higher education institutions aims to give voice to the different local groups and strive for social change. The community festival was incubated, developed, and transformed into an independent arts organization.

The evolution has witnessed the changes of the times and stakeholders.

Higher education institutions engage the community festival through disseminating knowledge, research, and incubating community festivals. The paper critically assesses the role of higher education institutions in community festivals in Hong Kong. As cultural mediator and educator, higher education institutions has the mission to provide accessibility, strengthen the community's quality of life, and raise engagement of the arts and culture in society. The curriculum programs in festival management need to keep pace with industry, community, and higher education needs. Student-run festivals equip students with academic knowledge and professional skills to build their capital and increase their employability. A joint effort between higher education and the festival industry is required to identify similarities and differences to improve professionalism in festival management. Cultural practitioners in the festival industry should be educated to take on a responsible view of people, communities, and places. There is a considerable practical value from the feedback of different stakeholders.

Getz (2010) emphasized the absence of cultural perspectives in festival studies. Most of the literature related to the festival comes from the West. When studying non-western cultural phenomena, Mair and Weber (2019) further pointed out that festivals should be studied from comparative and cross-cultural perspectives. The existing festival literature is empirical rather than conceptual and theoretical. In addition, much research on festivals has taken a case-study approach. Festival management education should focus on social, cultural, physical, environmental, political, and economic impacts in local and global contexts. This study's theoretical contributions and practical implications are discussed to point the way toward the future development of festival management in higher education.

## References

- Ager, L. C. (2016). *Universities and festivals: cultural production in context*. University of Salford (United Kingdom).
- Altbach, P. G. (1998). *Comparative higher education: Knowledge, the university, and development*. Greenwood Publishing Group.
- Bennett, A., Taylor, J., & Woodward, I. (2014). *The festivalization of culture*. Ashgate.
- Buckley, N., McPhee, J., & Jensen, E. (2011). *University engagement in festivals: Top tips and case studies*. Bristol: National Co-ordinating Centre for Public Engagement.
- Derrett, R. (2003). *Festivals & regional destinations: How festivals demonstrate a sense of community & place*. *Rural Society*, 13(1), 35-53.
- Duffy, M., & Mair, J. (2018). *Engaging the senses to explore community events*. *Event Management*, 22(1), 49-63.
- Falassi, A. (1987). *Festival: Definition and morphology*. *Time out of Time: Essays on the Festival*, 1.
- Fournier, L. S. (2019). *Traditional festivals: From European ethnology to festive studies*. *Journal of Festive Studies*, 1(1), 11-26.
- Gardiner, M. (1993). *Bakhtin's carnival: Utopia as critique*. In *Bakhtin: carnival and other subjects* (pp. 20-47). Brill.
- Getz, D. (1998). *24 Event tourism and the authenticity dilemma*. *Global tourism*, 409.
- Getz, D. (2010). *The nature and scope of festival studies*. *International journal of event management research*, 5(1), 1-47.
- Gibson, C., & Connell, J. (Eds.). (2011). *Festival places: revitalising rural Australia* (Vol. 27). Channel View Publications.
- Gilbert, D., & Lizotte, M. (1998). *Tourism and the performing arts*. *Travel & Tourism Analyst*, (1), 82-96.
- Ma, L., & Lew, A. A. (2012). *Historical and geographical context in festival tourism development*. *Journal of Heritage Tourism*, 7(1), 13-31.
- Mair, J., & Weber, K. (2019). *Event and festival research: A review and research directions*. *International Journal of Event and Festival Management*.
- O'Brien, E., Ilić, B. Č., Veidemane, A., Dusi, D., Farnell, T., & Schmidt, N. Š. (2021). *Towards a European framework for community engagement in higher education—a case study analysis of European universities*. *International journal of sustainability in higher education*.
- O'Neill, G. (2015). *Curriculum design in higher education: Theory to practice*.
- O'Sullivan, D., & Jackson, M. J. (2002). *Festival tourism: a contributor to sustainable local economic development?*. *Journal of sustainable tourism*, 10(4), 325-342.
- Yekanians, S., Sweeney, D., & Lewis, R. (2019, June). *Festivals as creative pedagogy*. In *The Australasian Association for Theatre, Drama and Performance Studies*.

## Appendix 1

Year	Festival Name	Researcher's Role	Nature
2018	Along the Edge Arts Festival	Teaching Assistant	Course
2019	Along the Edge Arts Festival- The Stories My City Tells Me	Teaching Assistant	Course
2020	Along the Edge Arts Festival: The Age of Being Young (Online)	Teaching Assistant	Course
2021	Along the Edge Arts Festival: Boundless (Online)	Manager	Research Project
2022	Along the Edge Arts Festival: Fear Not! (Online)	Manager	Research Project

## Appendix 2 Along the Edge Arts Festival (2018–2022)



# Audience Development and China's Double Reduction Policy: Taking Practices of a State-Funded Theatre Company as an Example

**Author** Gong, Yidan.

**Affiliation** Taylor's University, Malaysia.

**Email** yidan\_g@hotmail.com

31 January 2023

**Abstract** *In 2021, Chinese authorities issued the “double reduction” policy to ease the burden of excessive homework and off-campus tutoring for students undergoing compulsory education, regarded as the springtime for arts education. Consequently, arts institutions and companies seized this opportunity to develop audiences and potential new business opportunities. However, they were cautious about cost input and effectiveness. This study is based on Steven Hadley’s research framework and methodology that used a state-funded theatre company’s practices to examine audience development under a specific policy background. The impacts on equal access to publicly funded arts are discussed as well. The study contributions include filling the gap in audience development research based on Chinese cultural policy, enhancing the knowledge of practitioners and scholars across cultural and political ecologies, and providing strategies towards a public subsidy system that offers a more equitable policy balance between the democratization of culture and cultural democracy.*

**Keywords** cultural policy, audience development, double reduction policy

## Introduction

Over the past two decades, narratives and research topics of audience development predominantly focused on leadership, fundraising, and various audience participation (education, outreach, social inclusion, and diversity). The research topics mainly

highlighted the conception and practice of developing audiences for arts within the arts management scope. Similarly, the discipline and practices of arts management in China were behind times and remained static in that initial phase. Research on audience development is limited to the management domain and introduced in foreign research and findings of other disciplines, which are then interpreted in the Chinese context and management practices. Zheng Xinwen, Liang Lizhen, Gu Li, Xie Dajing, Zhang Chaoxia, Jiang Rong, and Xiao Mingxia write examples of these interpretations. They primarily emphasized the connotation and classification of audiences, audience development, audience development strategies, and functions of audience development in the performing arts management domain (Xu & Bai, 2019). Wang Yong and Zan Tong recently investigated Audience Development Strategies in the Chinese Performing Arts Industry from the Perspective of Arts Management (Wang, 2021; Zan, 2019). Moreover, practitioners and policymakers are slowly shifting their focus from production to performances and from creatives and artists to audiences (Lin, 2021; GOCPCCC & GOSC, 2021).

In 2021, Steven Hadley’s latest book, Audience Development and Cultural Policy, presents a narrative of audience development, its relationship to cultural policy, and its place in broader debates over democracy and democratization, which disrupts the idea of a linear narrative of audience development. He highlighted the democratic and moral imperative to ensure equal access to publicly funded culture, reflecting how cultural policy can advance audience development, engagement, and cultural democracy. As a practitioner of the performing arts industry, he has inspired the author to discuss audience development in the context of a new policy.

Based on Steven Hadley’s research findings, framework, and methodology, this study examined the audience development of a state-funded theatre company through in-school arts and arts education practices (experiences, lessons, and outlook), its relationship to the “double reduction” policy (the Policy) and its impact on equality of access to publicly funded arts. The findings could fill the gap in audience development research from the Chinese cultural policy perspective and provide researchers, policymakers, educational and cultural practitioners, and parents with useful examples and perspectives. They can also enhance practitioners’ and scholars’ understanding across cultural and political ecologies and contribute to the monumental task of working towards a system of public subsidy that offers a more equitable policy balance between the democratization of culture and cultural democracy.

## Problem Statement

The General Office of China Central Committee of the CPC and the General Office of the State Council jointly issued new educational guidelines on 24 July 2021, the Opinions on Further Reducing the Burdens of Homework and Off-Campus Training for Students During the Period of Compulsory Education (six years of primary school and three years of junior middle school) (Archive of the State Council P.R.C., 2014), with immediate effect. The Policy intends to improve the overall quality of school education, reduce excessive study burdens, protect students' health, relieve parents' burdens and anxiety, reduce social inequity, further regulate and standardize off-campus training (online and offline training), and strictly implement the Compulsory Education Law 1986, the Law on the Protection of Minors (2020 Amendment), and other laws and regulations governing the education industry. This enforcement contributed to the downfall of the tutoring industry in China, which is estimated to be worth over 56 billion dollars (T Hatch, 2021).

Guo Shengjian and Wu Xiaoli (2022) stated that the Policy's enforcement also had profound and lasting effects on arts education despite not being specifically arts and arts education relevant. Guo and Wu considered the Policy an extraordinary opportunity for arts education in school. First, the Policy reduces students' in-school study burdens and gives them more time and opportunities to participate in arts activities. Second, a considerable increase in time for students to receive arts education and training as they are listed as "non-subject-based." In contrast, all existing "subject-based" (the subjects taught in compulsory education schools, such as Chinese literature, history, geography, math, foreign languages, physics, biology, and morals and law) off-campus and after-school training institutions must be converted into or registered as "non-profit organizations." Meanwhile, local authorities will no longer approve new "subject-based" off-campus and after-school training institutions. Third, objectively, it is the first time arts education evoked significant concern from society, which lays an epistemic foundation for the mass (Guo Shengjian & Wu Xiaoli, 2022).

As a theatre practitioner in a state-funded theatre company in southwest China affiliated with the aforementioned department, the author has witnessed the Policy's influences on the performing arts industry. The theatre company at all levels has considered the Policy an excellent opportunity for audience development and a potential pointcut to the education and arts training market because its "identity" is "state-funded." The term "state-funded" indicates an official endorsement that reflects recognition of art quality, reliability, and security. Meanwhile, "state-funded" means that

"social benefits" should be the company's top priority, which raises the reasonableness for internal and external parties to develop in-school arts education. Moreover, at a personal level, the author has undertaken several in-school arts and arts education activities through school invitations, including primary, middle, and senior high schools, that cover all phases affected by the Policy. The author also provided details of the three representative experiences in post-texts.

The main research questions are how does the "double reduction" policy influence the cultural and arts sector? What is the relationship between "audience development" and the "double reduction" policy? And why? What are the potential challenges and opportunities in practice?

## Literature Review

What is the relationship between cultural policy and the "double reduction" policy? Cultural policy is concerned with the regulation and management of culture, specifically the administration of the institutions that produce and govern the form and content of cultural products. Generally, cultural policy concerns the totality of government interventions and activities in the arts field, including the for-profit cultural industries, humanities, and heritage (Schuster, 2002; Miller and Yúdice, 2002). Thus, cultural policy expresses a relationship between a political system and the cultural field (Vestheim, 2012). In China, cultural policies are the basic guidelines, norms, and measures formulated by CPC committees and governments at all levels to guide, promote, and support the development of various public welfare and business-oriented cultures to protect the people's fundamental cultural rights and interests and achieve cultural development (Chen Xiyan & Chen Lixu, 2021). Therefore, despite belonging to different political and economic contexts, the two major branches of cultural policy (regulation and subsidy) are the same (Lewis, 2000) and are guiding ideologies across variegated contexts (Hadley, S., 2021). Thus, the relationships and practices in the Chinese context should still be discussed.

The introduction of the "double reduction" policy revealed challenges, such as the quantity and quality of teachers for arts education and activities and improving the curriculum system and teaching methods (Guo Shengjian & Wu Xiaoli, 2022). Therefore, social resources must be integrated. Authorities of various sectors and levels have issued supporting regulations and policies in response to the Policy. For example, the Sichuan Provincial Cultural and Tourism Department, Education Department, and Administration of Cultural Heritage issued the Implementation Plan of Utilizing Culture, Tourism, and Heritage Resources to Improve

Adolescent All-round Development (Sichuan Cultural and Tourism, 2022). The implementation plan specifies that public libraries, cultural centers, galleries, museums, memorial halls, exhibition halls of intangible cultural heritage, theatres, and red tourist attractions will be established as bases for adolescent education practices. These bases effectively serve the social practices of primary and middle schools by providing venues, equipment, and teachers, which create excellent work and planning activities, especially for adolescents. The “double reduction” policy extends beyond the education sector into a “cultural policy” to influence the cultural and arts sector with supporting policies issued by various local cultural authorities.

This section concerns audience development and its relation to cultural policy in the Chinese context. The Audience Agency defines audience development as a planned and organization-wide approach to extending the range and nature of relationships with the public. The Agency facilitates a cultural organization to achieve its mission, balancing social purpose, financial sustainability, and creative ambitions (Audience Agency, 2022). Nonetheless, Steven Hadley discovered significant ambiguity in defining audience development in literature. He investigated audience development as a practice that appears to have been proactively (on a practical and ideological level) attempting to achieve the democratization of culture (Hadley, S., 2021).

According to the Comparison Table of Democratization of Culture and Cultural Democracy (Appendix 1), the subsidy system of art in the Chinese context tends to be the Democratization of Culture embodied in its annual social benefit evaluation, which is one of the most vital supporting materials for a state-funded performing arts company to justify its annual funding. Instructions to Social Benefit Evaluation (Appendix 2) of the theater company demonstrate that artistic creation indicators account for 40% of the evaluation. Moreover, the fulfillment of mandatory performances required by government departments, such as participating in official celebration activities, being praised by the government, and being positively reported by official media, are indicators that account for 11%. Correspondingly, indicators of public art education and training, public interest, and pro-people performances only account for 16%. Summarily, as data is collected and reported by the company, government awards and honors are the most accurate and easiest indicators for quantitative evaluation. These statistics indicate that the focus of funding is the artwork, and connotations of “social benefit” in the Chinese context are significantly related to recognition from authorities.

The ambiguity and complexity of defining audience development in the Chinese context are also reflected in the conflict and unification of the three unstable roles of a state-funded performing arts company: political-ethical, artistic-industrial, and marketable-operational. The company will have to serve the needs of different entities: audiences, enterprises, institutions, and the government and the party. Meanwhile, the marketable-operational role is strongly constrained by its political objective and ethical role (Fu Caiwu, 2004). In other words, audience development on an ideological level concerns the imperative of state-funded arts companies to achieve “social benefit” or the democratization of culture. On a practical level, whatever and however they do, they can still stand at the finish line.

### Methodology

This study addresses the abovementioned issues through literature research, empirical investigation, and subsequent analysis to investigate how the discourse of “social benefits” functions within the general field of cultural policy and how social benefits as a discourse can legitimate the practice of public subsidy and simultaneously perpetuate vested interest and advantages. The study analyzes the evolution process of “double reduction” as an education policy to a “cultural policy,” the causes that impact the conception and practices of the state-funded theatre company (e.g., the ambiguity of audience development), and the connotation of audience development in the Policy context by introducing the comparison table of the democratization of culture and cultural democracy. This research also explores three in-school arts and arts education experiences. Finally, the study outlines the potential challenges and opportunities for a more equitable policy balance.

### Findings and Discussion

The three typical experiences that reflect the practices and perception of a state-funded arts company are as follows:

#### *Being a Performance Instructor at Shude Senior High School*

Shude Senior High School is a senior high school in Chengdu with good hardware conditions, a cultured atmosphere, and quality students, which suggests a high pass rate for the College Entrance Examination. Theatre festivals are held on campus annually for first and second-grade senior high school students. As a guiding teacher, the author entered the campus to support the rehearsal of an English short play for a class. The author went “in-school” via social connection rather than government instruction. The school completed the planning and organizing of

theatre festivals, and the teachers and students of the class completed the rehearsal of the mentioned play. The support process mostly focused on text analysis, performance, and other technical support. The immense pressure of the College Entrance Examination could be witnessed everywhere on the campus. While waiting to enter the rehearsal room in the corridor and on the playground, students wrote exercises or recited knowledge points during the rehearsal interval. Even the headteacher was correcting students' test papers in the rehearsal room. In recalling this situation, the author could not justify the benefits of art activities to students at this stage, nor can they be regarded as the targeted audience for "audience development," even though the impact could have occurred subtly. Appendix 3 shows a student's weekly journal stating that he was in love with theatre by participating in the in-school theatre activity provided by the theatre company.

#### *Being a Judge of a Drama Competition in the Yucai School of No. 7 Middle School*

After the release of the "double reduction" policy, the Yucai School of No. 7 Middle School of Chengdu, one of the essential middle schools in the city, held a school drama competition to enrich the teaching methods of Chinese literature and discipline. The author, who was qualified in the drama performance field and as a representative of the theatre company, was invited as a "professional" judge. The competition was planned entirely by teachers, students, and some of their parents. Although the principal and teachers expressed their willingness to deepen the collaboration with the theatre company regarding drama festival planning, a gap remained between the input of human and financial resources and the uncertainty of "output." Why should the school increase its resource input since arts education or activities can be done by the school? Moreover, art activities are not educational services parents and students should buy. The issue is who should pay for them?

#### *Being a Drama Course Service Provider at Fangcao Primary School*

After the "double reduction" policy, Fangcao Primary School attached great importance to diversifying its development courses ("non-subject based" courses) and began seeking collaborations with the theatre company. Many private teachers or teachers from the school also participated in the course teaching. Nevertheless, the level of teachers and the quality of courses were disproportionate. The school had great autonomy in the construction of courses and teacher selection. Furthermore, these courses are not limited to the art category. The list of development courses is listed below:

Drama Class, 3D Printing, Magic, Traditional Chinese Painting, Street Dance, Basketball, Chinese Chess, Go Game, Rithmomachy, Ancient Poetry, Picture Book Reading, Calligraphy, Watercolor Painting, Robot, and Programming (Fangcao Primary School, 2022).

Thus, the collaboration was based on the premise that the theatre company is from the drama category. The identity of being state-funded is not a significant issue.

The teaching results of the "in-school" arts education services were not ideal. The government provided the school autonomy to establish courses but without any subsidies. The expenditure of teachers, administration, and sundry fees was paid from student fees. Additionally, the following fee standard was strictly required: 50 Yuan/person/class, which is substantially lower than the market price because public good, universal welfare, cost recovery, and non-profit are the principles for those services. The basic logic is that more students mean higher teacher income. However, the class capacity is normally 20 to 25. Thus, the course fee can only cover the cost of hiring teachers rather than the theatre company's management or curriculum development costs. As for the theatre company, internal, professional, and experienced teachers were unwilling to join the school through the company as this meant a relatively lower income per class. Concerning the opportunity costs, the teachers could obtain a part-time job with a higher income or collaborate directly with the school as private teachers. Therefore, the author could only choose younger and relatively inexperienced staff as the service provider; hence the teaching results were not ideal. Secondly, parents and students pay little attention to art courses. After the "double reduction" issue, parents waited for art disciplines or art education to be included in the entrance examination, which created a new round of assessment pressure. The parents were not eager to adjust to the education plan (Guo Shengjian & Wu Xiaoli, 2022). In practice, many students were absent from the curriculum when the final examination was near. Many students asked for a leave of absence for personal reasons, and the class arrangement and progress were significantly affected. "If students and parents can get refunds for missing class, we believe that the number of absent students could be larger," stated a teacher. A contradiction could be observed between "a big class is good for income" and "a small class is good for teaching." The school hoped to display the "teaching achievements" of art courses. The supposed "achievements display" for arts education was "performances." Nevertheless, the discontinuous teaching model (once a week), large class capacity, short course duration (1.5 hours with a 10-minute interval), and the age difference and mobility of students caused by cross-year course selection prevented them from producing a good performance. Instead, the direction should be

changed to promoting practical knowledge and the engagement process for each student, as arts education is methodical and gradual. In the early stages of primary school, students should be provided with opportunities of familiarizing with the arts and create aesthetic experiences (Zhou Xing & Yu Ying & Cui Yifan et al., 2013). Nonetheless, this practice demands a high consensus from all sides. Conceptual deviation of arts and arts education needs a long development time to bridge. Although the concept can be changed, the issue of who shall pay for the cost of subject integration, curriculum development, and teacher cultivation remains.

The study also highlighted the issue of the right to access. Can theatre companies participate in curriculum development, or should educators and researchers develop it? All-round development education involves many directions, and art education is merely one of them. In education practice, art has not been sufficiently recognized. Although one can place art education in the new curriculum standard and the scope of test subjects in the Senior High School Entrance Examination, any kind of art form is merely one of the directions where many forms can be used to replace. The theatre company has no authority in this subject.

The above three in-school activities were all facilitated by school leaders or teachers in charge of curriculum planning with a social connection with the theatre company. Specifically, the spontaneous behaviors of different entities under the macro policy established active exchanges between the cultural and educational sectors. Regardless of the author's role, whether as a performance instructor in a senior high school, a drama competition judge in a junior high school, or a development course service provider in a primary school, they all had one common aspect: all are "result-oriented," which indicates that the "double reduction" Policy has not brought rapid and dramatic changes to the stereotype of "theatre education is equal to teaching performance" in the practice of in-school activities.

Interestingly, Fangcao Primary School, at the end of the semester, summarized and reflected on the enrollment process of the courses and suggested that "face-to-face" course communication and the display were insufficient. Thus, course selection exhibitions will be held in the subsequent semester to provide parents and students the right to choose and encourage teachers with the "drive of economic benefits" to compete for more students by displaying course content and improving teaching quality. Therefore, the theatre company can keep providing course services by participating in the competition, which could reverse the right of choice. Nonetheless, could it be a certain token of "cultural democracy"? A major concern involves the state-funded theatre company completely withdrawing from the in-

school arts activities. Under these circumstances, the subjective initiative of practitioners is particularly important.

## Conclusion

Considering that "learning is not a burden and also 'burden reduction' cannot reduce competition" (Zhang Jie, 2022), the "double reduction" Policy only changes the supply side as the demand for education and training is constantly present. The counter-intuitive aspect is that the time and opportunities for students to participate in off-campus or after-school art activities are reduced rather than increased. This scenario occurs because as the time students stay in school lengthens, constricting the time for inelastic demand of "subject-based" training, time for arts training is reduced. The data from 20 adolescent music training schools showed that "80% of them are operating at a loss with the problems of student loss and increased operating costs after the release of 'double reduction' policy" (Yong Dunquan & Liu Li, 2021). If the Policy suddenly causes a gap between supply and demand, should the authority be responsible for making up for the cost input required by the supply side?

As for schools, parents, and students, "in-school art education" is only a means of education, and "opportunities to appreciate art or receive art education" are not valued from the perspective of concept and practice. As for the theatre company, no continuous internal drive would exist if in-school art activities cannot bring considerable economic benefits or a wider range of social influence. The area is merely one of the ways of "audience development," which the company can reach through a more efficient and convenient alternative method at any time and occasion. In this context, the connotations of "audience development" and "audience" are ambiguous.

Moreover, the national culture and art development orientation and the theatre company development strategy still mainly emphasize the production and creation side and awards and honor. These awards and honors recognized by the government are the most accurate and easiest way to quantify "social benefit" evaluation indicators where no extra funding is raised or there are no changes in the subsidy structure from the policy level. Structural subsidy policy changes such as establishing a special funding program or putting art education, in-school activities, or teachers' training into the grant scope of Art Fund at all levels should be adopted. Additionally, no specific targets for arts companies to support in-school arts activities, and no workable mechanisms are established to break the barrier between the art and the education sectors. Thus, a state-funded performing arts company to contribute



to society towards more accessible publicly funded arts for all citizens through in-school arts activities remains complicated.

## References

- Archive of the State Council, P.R.C (2014), [https://english.www.gov.cn/archive/china\\_abc/2014/09/02/content\\_281474985266262.htm](https://english.www.gov.cn/archive/china_abc/2014/09/02/content_281474985266262.htm).
- Audience Agency (2022), <https://www.theaudienceagency.org/solutions/audience-development>.
- Chen Xiyan&Chen Lixu. (2021). Practice and Process of Improving Cultural Policy in China since the Reform and Opening up. *Observation and Thinking* (08), 80–88.
- Fangcao Primary School of Chengdu Gaoxin District (2022). Fragrant Weekends Begin in this Warm Spring. Article 2022-03-10 18:29, from <https://mp.weixin.qq.com/s/qAJSSYXboLaQeejkPZFhDQ>.
- Fu Caiwu, Discuss the Approaches of Chinese Performing Arts Organizations Reform——Discuss the Reform of China Cultural System[N]. *Newspaper of Jiangnan Universities: The Page of Social Science* (Wuhan) 2004(01):61–68.
- General Office of the CPC Central Committee and General Office of the State Council (2021), *Opinions on Deepening the Reform of State-funded Art Troupes*, [http://www.gov.cn/gongbao/content/2021/content\\_5621193.htm](http://www.gov.cn/gongbao/content/2021/content_5621193.htm).
- Guo Shengjian & Wu Xiaoli (2022). Development Opportunities and Reform Priorities of School Aesthetic Education under the "Double Reduction" Policy [J]. *Journal of Educational Science of Hunan Normal University*, 2022,21 (01): 1–6.
- Hadley, Steven. (2021). Hadley, S. (2021) Audience Development and Cultural Policy – COVER. 10.1007/978-3-030-62970-0.
- Lewis, J. (2000). Designing a Cultural Policy. In G. Bradford, M. Gary, & G. Wallach (Eds.), *The Politics of Culture: Policy Perspectives for Individuals, Institutions, and Communities* (pp. 79–93). New York: The New Press.
- Lin Hongming (2021). Taking Performace as the Centre to Deepen the Reform of State-funded Art Troupes, *Guangming Daily* 2021-04-27, from [https://www.sohu.com/a/463508416\\_162758](https://www.sohu.com/a/463508416_162758).
- Miller, T., & Yúdice, G. (2002). *Cultural Policy*. London: Sage.
- Schuster, J. M. (2002). *Informing Cultural Policy: The Research and Information Infrastructure*. New Brunswick: Rutgers University Center for Urban Policy Research.
- Sichuan Cultural and Tourism. (2022). *Implementation Plan of Utilizing Culture, Tourism and Heritage Resources to Improve Adolescent All-round Development*. Sichuan Provincial Cultural and Tourism Department [2022] 28.
- T Hatch (2021), Surprise, Controversy, and the “Double Reduction” Policy in China, *International Education News*, November 3, 2021.
- Vestheim, G. (2012). Cultural Policy and Democracy: An Introduction. *International Journal of Cultural Policy*, 18(5), 493–504.
- Wang Yong. (2021). Research on Audience Development Strategy of the Performance Market from the Perspective of Arts Management, *Art Evaluation* (04), 157–159.
- Xu Hengzhe&Bai Jiahui. (2019). Literature review on Audience Development of Chinese Performing Arts Industry, *Art Evaluation* (03), 168–170.
- Yong Dunquan & Liu Li (2021). Research on the Status Quo and Countermeasures of Sichuan's Music Education and Training Industry [J]. *Music Exploration*, 2021 (2): 91–98.
- Zan Tong. (2019). Audience Development Strategy of the Performance Market from the Perspective of Art Management, *Peony* (30), 68–69.
- Zhang Jie (2022). Learning is not A Burden, also 'Burden Reduction' cannot Reduce Competition", *ZHANG Jie Financial Watch* 2022-08-10, from <https://mp.weixin.qq.com/s/RCSEqmw50aD13ySyg4j7-A>
- Zhou Xing & Yu Ying & Cui Yifan, et al. Calling for the Return of Arts Education ——Research on the Problems and Improvement of Art Education in China's Compulsory Education Phase [J] *Theorists*, 2013 (7): 186–189. DOI: 10.3969/j.issn.1003-6547.2013.07.059.

# A Study on Miao Ethnic Batik Elements for Everyday Womenswear Design

**Authors** Tang, Diya<sup>1</sup>; Koh, Chai Lin Poulaine<sup>2</sup>; Wong, Sook Khuan<sup>3</sup>

**Affiliation** <sup>1,2</sup> The Design School, Taylor's University, Malaysia; <sup>3</sup>Saito University College, Malaysia

**Email** diyadiyatang@foxmail.com

31 January 2023

**Abstract** Ethnic elements have become a more apparent theme in contemporary fashion product development. Exploring suitable ethnic elements for product innovation is important for designing successful products. This study aims to identify the types of Miao batik elements which can be used in everyday womenswear through visual details and ethnic characteristic expressions to identify suitable Miao elements for product development. This study employed content analysis to further examine eight visual images collected from Miao habitations in Guizhou, China, based on the shape, color, pattern, and texture to summarize the design elements. The findings from Miao batik revealed that the pattern elements depict the Miao people's aesthetics in pattern design and composition and their traditional totem worship culture. This study specifically focused on the visual analysis of Miao batik elements. These elements can be applied to womenswear and combined with modern fashion trends, expressing Miao characteristics based on color, pattern, texture, and shape. Future research should examine how fashion designers present these elements in womenswear.

**Keywords** Miao batik elements, Miao characteristics, Womenswear design

## Introduction

In terms of global economic integration, frequent international exchanges have led to a serious homogenization phenomenon. Some ethnic cultures and traditional handicrafts are gradually vanishing.

The importance of cultural pluralism and the continuation of traditional ethnic culture has become increasingly prominent. Fashion often expresses a moment of civilization through aesthetics of style (Pop et al., 2018). Embodying cultural heritage in a brand may be a tool to form authentic values and strengthen competitiveness (Urde, 2007).

In the past two decades, the use of ethnic elements in fashion practice has been emphasized, and these elements have become a popular theme in contemporary fashion product development. Combining ethnic elements with modern fashion products enables the insertion of cultural values in modern fashion and brings innovation into fashion products.

## Problem Statement

A survey in China (Xu, 2017, p.75) stated that most participants displayed interest in fashion with ethnic elements, but this type of product is currently in an inferior position in China's market competition. According to Ko and Lee, some designs crucial for fashion brand competitiveness can gain creativity and originality via cultural heritage (2011, p.89). Miao is an ancient ethnic group in China with a long history of cultural development. The original Miao culture has been well preserved and boasts a relatively complete Miao traditional cultural system (Ma, 2014). As a representative ethnic group in China, Miao's architecture, costumes, jewelry, and embroidery have great aesthetic value, unique characteristics, and exquisite craftsmanship. In 2006, Miao ethnic batik was inscribed on China's National Intangible Culture Heritage List (Ministry of Culture and Tourism of the PR China, 2006). As the product of cultural heritage, the cultural archetype can transform into cultural content, including mental and physical attributes and cultural patterns (Lim & Yoon, 2008). Miao is an ethnicity with abundant material civilization. Thus combining Miao ethnic elements with modern fashion could preserve the Miao culture and bring innovation to fashion. Nonetheless, the fundamental issues in Miao ethnic fashion product development involve determining the elements that can be extracted from the Miao batik and how they could be combined with modern fashion while expressing Miao ethnic characteristics.

This study aims to identify the types of Miao elements used in everyday womenswear through visual details and ethnic characteristic expression to seek suitable Miao batik elements for product development. This study suggests the visual and cultural characteristics expressing Miao batik elements that suit fashion design. The findings could help designers interested in creating everyday fashion products with ethnic elements by encouraging innovation to increase the market share of everyday fashion products with ethnic elements in

China. The study outcome provides the foundation for future research discussions on the relationships between designers' intentions and consumers' wants for everyday womenswear with Miao elements concerning China's cultural context.

### Literature Review

Historically, culture results from the evolution of "human language, environmental adaptation, settlements, and economic systems" (Mohammed, 2011, p. 9). Culture can be defined based on three levels or stages: technological, social, and ideological aspects. Technology refers to the "material culture, the physical things used in adaptation to one's physical and social environment, the techniques for their use, and the ways these are organized for use in the cultural system" (Hamilton, 1987, p. 3). For example, the sub-cultural system of dresses consists of fabrics and techniques.

Miao is a globally distributed ancient ethnicity mainly in Guizhou, Hunan, Hubei, Sichuan, Yunnan, Guangxi, Hainan, and other provinces and regions in China, including Laos, Vietnam, Thailand, and other countries and regions in Southeast Asia (Shi, 2011, p. 4). Miao costumes maintain the traditional craftsmanship of Chinese folk weaving, embroidering, picking, and dyeing. A primary crafting technique is often used while interspersing with other craftsmanship, which reflects distinctive ethnic and artistic characteristics. Most costume patterns are based on various living images in daily life, which play a crucial role in expressing and identifying groups, branches, and languages (Torimaru, 2008). Apart from displaying its rich material culture, Miao's handicrafts also embody the history and cultural connotations of the ethnic group. Thus, this research examines Miao's material culture to explore its cultural value.

A vital element in all areas of design is to study culture (Khoza & Workman, 2009; Westwood & Low, 2003). In the *Fashion Theory Journal*, Valerie Steele (cited in Nandoolman Landis, 2012, p.139) defined fashion as "the cultural construction of the embodied identity." Hence, culture and fashion interact and promote each other constantly. According to Kawamura Y, fashion is the immaterial dimension of modern culture (2005, p. 124). In marketing, fashion is used as a working tool to comprehend the relationships between people and objects of creativity and culture.

The relationship between aesthetic values and product experience plays a crucial role in cultural studies as "implicit and explicit values are usually considered as critical, decisive factors of culture" (Williams, 1961).

Miao culture is a popular research topic in numerous studies, such as examining Miao's life customs, costumes, embroidery, and silver accessories. However, there is very few research that is based on visual details and ethnic characteristics expression to seek suitable Miao batik elements for product development.

### Methodology

Content analysis was employed as the research method in this study. The main instrument was visiting Miao habitations and observing their handicrafts and costumes to collect suitable materials. The location selection to collect material is based on the Miao people living in this habitation being from representative branches of Miao ethnicity, and their costumes and handicrafts have typical Miao characteristics. Miao people are distributed mainly in southwest China, as well as Laos, Vietnam, Thailand, and other countries in Southeast Asia. This study was based explicitly on Qiandongnan Miao and Dong Autonomous Prefecture in Guizhou, China. Eight representative Miao branches live in Qiandongnan Miao and Dong Autonomous Prefecture in Guizhou. The Miao costumes, embroidery, ethnic batik, silver accessories forging techniques, and building construction technology inscribed under the National Intangible Culture Heritage List of China are all from these Miao habitations.

A purposive sampling method was used, and the criterion for selecting material samples is that the samples must be able to present the Miao ethnic characteristics. Therefore, the materials were selected from Miao handicrafts and techniques included in China's National Intangible Culture Heritage List. The fashion design elements for appearance had space, line, shape or form, color, texture, pattern, and light. Each stimulates emotions, which were determined by manipulating these variables known as design principles (Cassidy & Kettley, 2015). Based on the characteristic elements of Miao ethnic, the important design elements for womenswear appearance that need to be considered are shape, color, texture, and pattern. Hence, eight materials were collected from Miao ethnic batik for content analysis, which presents Miao ethnic characteristics from the shape, color, pattern, and texture.

The primary data collection procedure is visiting the Miao villages, handicraft workshops, and local museums in Qiandongnan Miao and Dong Autonomous Prefecture in Guizhou to collect materials by photographing and collecting material objects.

Over 60 pieces of material were collected during the Miao habitation visit, but only eight samples were

selected for data analysis. The study aims to determine the elements that can be used in everyday womenswear design; hence samples that represent Miao's typical characteristics and contain various design elements were selected based on priority.

A three-step process was used to analyze the data.

### 1. Data grouping

The raw data were tabulated under the Raw Data Summary Table based on four categories: shape, texture, color, and pattern.

### 2. Design elements and Miao characteristics summary

In this step, the design elements were summarized based on each sample's shape, texture, color, and pattern in the Raw Data Summary Table. Meanwhile, the specific Miao Characteristics conveyed through the sample were indicated at the end. For example, the table displays eight photographs that present different Miao batik pieces, and each sample involves various shapes, patterns, and colors of Miao batik, including texture. Moreover, close-up visuals and color capture samples with clear descriptions were provided in each category based on the Miao characteristics explanation.

### 3. Overall data classifying and concluding

In the last step, the overall data table classified and summarized the design elements and Miao characteristics, while the Summary Raw Data Table finalized the data and revealed the results. For instance, the design elements and Miao characteristics were all listed based on each category of shape, color, and pattern of samples, and the frequency of the elements appearing was summarized. As only one element was discovered from the texture category, it was considered an unimportant aspect of Miao batik handicrafts, thus, excluded from the overall data table. Several categories were more frequent than one Miao characteristic, and the design elements in those categories were classified based on the reflected Miao characteristics.

## Findings and Discussion

The overall data table demonstrates the design elements extracted from the three categories of

shape, color, and pattern in Miao batik and the Miao characteristics expressed.

Miao batik is a dying technique that does not produce any special texture on the fabric surface and only appears in two simple colors, normally indigo and the native color of fabrics. Meanwhile, this unadorned color match is usually considered a Miao characteristics expression when applied in the womenswear design.

As the key element for batik pieces are patterns, the overall table of Miao batik and the form and meaning of the batik pattern are the most crucial parts of this classification. Furthermore, the shape category mainly focuses on pattern form, while the pattern category emphasizes pattern meaning. Shape and pattern categories summarized various design elements, and some elements frequently appear in various samples. As an ethnic group without a written language, the development, and evolution of Miao's history depend on word of mouth and the records of traditional patterns in Miao's batik and embroidery. These aspects also unravel this mysterious and primitive ethnic group (Zhang & Cai, 2020). Two types of samples in Miao batik include the traditional Miao batik pieces, such as batik on Miao costumes and traditional Miao quilt covers, and contemporary batik design work by Miao batik inheritors. The pattern form and meanings of these two types differ. The pattern forms of traditional Miao batik pieces are geometric patterns and natural patterns of fish, insects, and plants. In contrast, contemporary Miao batik works mainly contain figure activities as the three characteristics summarized in the "shape" category of the overall data table. Yang (2021) mentioned that the geometric patterns in Miao batik are passed down by ancestors and are unchangeable.

Nonetheless, natural patterns, including birds, butterflies, and flower shapes, are smoother and free from restrictions compared to geometric patterns, developed and innovated since ancient times with a strong decorative nature. The basic outline of bird, insect, and plant images in Miao batik is generally drawn by combining simple points, lines, and surfaces of geometric graphics to express their characteristics. Meanwhile, the sense of layers is depicted in the two-dimensional plane through varying image sizes in the pattern. Hence, Miao traditional patterns in batik present a unique and primitive simplicity of ethnic style.

Although contemporary Miao batik pieces use character activities as the theme, which differs from traditional patterns, the same drawing method is used to express the same unique and primitive simplicity of ethnic style.

The pattern category focuses on the pattern meaning, two Miao characteristics that summarize traditional Miao style images, Miao daily life, and vivid human images. These two characteristics correspond to the three characteristics in the shape category. Specifically, characteristic 1 of this category corresponds to characteristics 1 and 2 in the shape category, which means geometric and natural shapes are the traditional Miao images. Meanwhile, characteristic 2 corresponds to characteristic 3 in the shape category, which is the Miao daily life and vivid human images. In these traditional Miao-style images, some images are patterns representing totem worship, while others are decorative patterns. For example, the “Wotuo” motif containing swirly and circle shape elements appeared in sample 1 of Raw Data Table 2. Additionally, the bird, butterfly, and fish motifs in other samples are all typical totemism patterns. Other geometric patterns in the data, as well as all the flowers and plant motifs, are decorative patterns. As one of the most representative totem patterns in Guizhou Miao batik, the “Wotuo” motif usually appears at the back directly under the neckline of the Miao dress from the Dudan branch. Scholars speculate its implied meaning as a remembrance of ancestors or a symbol of ethnic identity and dignity (Jia, 2010). In Miao legend, the butterfly is the creator of all things in the world, and the original ancestor of the Miao ethnicity is called the “mother butterfly” by the Miao people. This character has had a supreme position in the Miao ethnic since ancient times. Birds helped the “mother butterfly” to hatch Miao ancestors; hence birds are considered lifesavers among the Miao people (Yang, 2021). Therefore, the butterfly and bird are the most typical totem images in all Miao branches and widely appear in various Miao handicrafts, including batik. As for the Miao branches around Danzhai, the bird and fish represent reproduction. Thus fish sometimes appear in the pattern as the totem image to imply procreation (Yang, 2021). Hence, shape, flower, and plant images are the most common decorative patterns that appear most frequently in all samples. In contrast, birds and butterflies as the totem pattern for all the Miao branches appear in several samples frequently.

Contemporary Miao batik artists prefer to express Miao's daily life and vivid human images by depicting various life and production activities of Miao people in batik. The Miao batik technique is often combined with other Miao elements.

Figure 1 illustrates the inheritor of intangible cultural heritage Yiping Zhang using Miao bamboo houses as the pattern to present the Miao architecture through batik. This combination method is a technique to apply Miao elements to fashion design.



Figure 1. The Batik Work by Y Zhang

### Conclusion

This research summarized Miao elements based on four categories of shape, texture, color, and pattern. The findings revealed that Miao batik expresses unique ethnic characteristics. The overall data table demonstrates that the elements appearing more frequently in different samples have more typical representativeness in presenting Miao characteristics.

In Miao batik, the pattern category contains abundant elements which present the Miao people's aesthetics in pattern design and composition and the traditional totem worship culture of the Miao people. Apart from the image elements in the patterns, the unique way of pattern expression, such as the pattern design techniques of drawings and animal and plant images linearized in a strong Miao ethnic style, can be considered when bringing Miao elements into everyday womenswear fashion pattern design.

This study emphasized the visual analysis of Miao batik elements. When applying these elements to everyday womenswear and combining them with modern fashion trends, the Miao characteristics present Miao culture from the color, shape, pattern, and texture. These characteristics are also the visual presentation of the Miao ethnic culture in modern fashion products. For instance, the unadorned color match displays the Miao style of primitive simplicity, and shape characteristics express the Miao people's aesthetic judgment of pattern design. Moreover, the

patterns in Miao batik present the totem worship culture and decorating taste. Nonetheless, this study is initial research exploring suitable Miao batik elements. Future research should examine how fashion designers present these elements in womenswear and whether consumers will be satisfied with these designs.
















## References

- Cassidy, T., & Kettley, S. (2015). *Fashion Design*. In Edwards, C., (Edition: Volume 2.), *The Bloomsbury Encyclopaedia of Design* (p. 5-11). London: Bloomsbury.
- Hamilton, J. A. (1987). *Dress as a cultural sub-system: A unifying meta theory for clothing and textiles*. *Clothing and Textiles Research Journal*, 6(1), 1-7.
- Jia, J (2010). *Comparative study of swirled pattern in Batik-with the batik of Puyi and Miao in Zhenning Guizhou as the example*, *Journal of Zhejiang Fashion Institute of Technology*, 9(03), p. 65-70.
- Kawamura, Y. (2005). *The Japanese revolution in Paris fashion*. Oxford, UK: Berg.
- Kawamura, Y. (2011). *Doing Research in Fashion and Dress*. Oxford: Berg.
- Khoza, L. S., & Workman, J. E. (2009). *Effect of culture and training on perceptual learning style and spatial tasks performance in apparel design*. *Clothing and Textile Research Journal*, 27(1), 62-79.
- Ko, E., & Lee, S. (2011). *Cultural Heritage Fashion Branding in Asia*. Woodside. A.G. (Ed.) *Tourism Sensemaking: Strategies to Give Meaning to Experience (Advances in Culture, Tourism and Hospitality Research, Vol. 5)*, Bingley: Emerald Group Publishing Limited, p. 89-109.
- Li, X. (2016). *Research on the Application of the Miao Style Elements in the Design of creative Costume*. *Graduate Theses and Dissertations*. Retrieved from [https://kreader.cnki.net/Kreader/CatalogViewPage.aspx?dbCode=cdmd&filename=1017061363.nh&tablename=C MFD201702&compose=&first=1&uid=WEEvREcwSlJHSld TTEYzVDhUSFJNSU5URnlUQXBUIV5aUdPdUdESlRqazo=\\$9A4hF\\_YAuvQ5obgVAqNKPCYcEjKensW4IQMovwHtwkF4VYPoHbKxjw!!](https://kreader.cnki.net/Kreader/CatalogViewPage.aspx?dbCode=cdmd&filename=1017061363.nh&tablename=C MFD201702&compose=&first=1&uid=WEEvREcwSlJHSld TTEYzVDhUSFJNSU5URnlUQXBUIV5aUdPdUdESlRqazo=$9A4hF_YAuvQ5obgVAqNKPCYcEjKensW4IQMovwHtwkF4VYPoHbKxjw!!)
- Lim, K. H., & Yoon, J. S. (2008). *A study on culture content using cultural archetype*. *Korean Design Forum*, 19, p. 169-177.
- Ma, L. (2014). *Traditional Culture of Miao Ethnic*. *New West*, (02), p. 20-27.
- Ministry of Culture and Tourism of the PR China, (2006). *National Intangible Culture Heritage List of China*.
- Mohammed, S. N. (2011). *Communication and the globalization of culture: Beyond tradition and borders*. London: Lexington Books.
- Pop, M., Toma, S., Frigy, N., & Pop, A. (2018, November). *Cultural Work Instruments in Fashion Technology- Practical Method of Generating Emotional Design*. *Journal of Textile Science & Fashion Technology*, Retrieved from [https://www.researchgate.net/publication/328783185\\_Cultural\\_Work\\_Instruments\\_in\\_Fashion\\_Technology-Practical\\_Method\\_of\\_Generating\\_Emotional\\_Design/references](https://www.researchgate.net/publication/328783185_Cultural_Work_Instruments_in_Fashion_Technology-Practical_Method_of_Generating_Emotional_Design/references).
- Shi, C. (2011). *Miao Studies of China*. Guiyang: Guizhou University Press.
- Torimaru, T. (2008). *One Needle, One Thread : Miao embroidery and fabric piecework from Guizhou, China*. Hawaii: University of Hawaii Art Galle.
- Urde, M. (2007). *Corporate brands with a heritage*. *Brand Management*, 15(1), p. 4-19.
- Steele, V., 2012. *Costume and Fashion In: Nadoolman Landis, D, ed. 2012. Hollywood Costume*. London: V&A Publishing.
- Wang, Y. (2020). *The study on the aesthetic connotation of Miao batik patterns in Guizhou*, *Tomorrow Fashion*, (03), p. 163-164.
- Williams, R. (1961). *The Long Revolution*, London: Chatto & Windus
- Xu, X. (2017). *An Analysis of the Effective Application of National Elements in Modern Costume Design*, *Art and Design*, 2(08), p. 74-76.
- Yang, S. (2021). *The study on aesthetic connotation of Danzhai Miao batik pattern*, *Oriental Collection*, (19), p. 53-54.
- Zhang, X., & Cai, Q. (2020). *The aesthetic characteristics of Guizhou Miao batik from the perspective of artistic aesthetics*, *West Leather*, 42(24), p. 87-88.

## Picture Credits





Zhang, Y. (2020). *A contemporary batik artwork created by Zhang, picture taken by Diya Tang at Lanjin Batik Studio, Danzhai, China*.

## Appendices

Raw Materials		Shape	Texture	Colors	Pattern	Miao Characteristics (Specific Miao Characteristics that can be conveyed through fashion products)
<p><b>Sample 1</b></p> <p>Batik pattern on the back of Dudan branch Miao dress</p> <p>Date &amp; Location material is collected?</p>	 <p>Pan Huangyi's studio, Danzhai, Guizhou</p> <p>06. 09. 2021</p>	<p>Geometric shapes and swirly shapes.</p> 	N/A	<p>Indio + Beige (The native color of Miao cloth)</p> 	<p>'Wotuo' motif of Dudan branch Miao (The pattern is composed of swirling geometric patterns, which is the totem of Dudan branch Miao.)</p> 	<p>3. The The ethnic style images design in the pattern.</p> <p>4. The unadorned color matching.</p>
<p><b>Sample 2</b></p> <p>Miao batik work (Dudan branch Miao)</p> <p>Date &amp; Location material is collected?</p>	 <p>Lanjin Batik Studio (Danzhai Batik Intangible Cultural HeritagCultural and Creative Base)</p> <p>06. 09. 2021</p>	<p>Circle and swirly shapes, and natural shapes of flowers and butterflies.</p> 	Faint tie dye texture	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>A complicated geometric pattern which is composed by 'wotuo' motif, abstract line patterns of flower and butterfly, and tiny repeated motifs.</p>  <p>Tiny repeated motifs</p>	<p>1. The The ethnic style images design in the pattern.</p> <p>2. The unadorned color matching.</p>
<p><b>Sample 3</b></p> <p>Part of Miao batik work</p> <p>Date &amp; Location material is collected?</p>	 <p>Lanjin Batik Studio (Danzhai Batik Intangible Cultural HeritagCultural and Creative Base)</p> <p>06. 09. 2021</p>	<p>Circle and natural shapes of birds.</p>  <p>Geometric shapes</p>  <p>Natural shape of bird</p>	N/A	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>1. A circle geometric pattern with strong Miao ethnic style composes by several annular motifs and two birds in the centre.</p>   <p>2. Linear birds images.</p> 	<p>1. The The ethnic style images design in the pattern.</p> <p>2. The unadorned color matching.</p>

<p><b>Sample 4</b></p> <p>Part of Miao batik work</p>		<p>Natural shape of human being</p> 	<p>N/A</p>	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>Scene of Miao wedding banquet</p> 	<ol style="list-style-type: none"> <li>1. The The ethnic style images design in the pattern.</li> <li>2. Miao daily life and vivid human images.</li> <li>3. The unadorned color matching.</li> </ol>
<p><b>Sample 5</b></p> <p>Part of Miao batik work</p>		<p>Natural shape of human being and plants</p> 	<p>N/A</p>	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>The scene of Miao people celebrating the festival by dancing and playing lusheng.</p> 	<ol style="list-style-type: none"> <li>1. The The ethnic style images design in the pattern.</li> <li>2. Miao daily life and vivid human images</li> <li>3. The unadorned color matching.</li> </ol>
						
<p><b>Sample 6</b></p> <p>Miao batik quilt cover</p>		<p>Natural and smooth shape of flowers and butterflies.</p> 	<p>N/A</p>	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>Symmetrical pattern, natural motifs and smooth shape.</p> <ol style="list-style-type: none"> <li>1. Linear flower</li> <li>2. Abstract flower</li> <li>3. Abstract butterfly</li> </ol> 	<ol style="list-style-type: none"> <li>1. The The ethnic style images design in the pattern.</li> <li>2. The unadorned color matching.</li> </ol>
<p><b>Sample 7</b></p> <p>Miao batik quilt cover</p>		<p>Natural and smooth shape of birds, flowers and butterflies.</p> 	<p>N/A</p>	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>Symmetrical pattern, natural motifs and smooth shape</p> <ol style="list-style-type: none"> <li>2. Linear flowers</li> <li>3. Linear bird</li> <li>3. Linear butterfly</li> <li>4. Ancient Chinese character</li> </ol> 	<ol style="list-style-type: none"> <li>1. The The ethnic style images design in the pattern.</li> <li>2. The unadorned color matching.</li> </ol>



<p><b>Sample 8</b></p> <p>Miao batik quilt cover</p>		<p>Geometric pattern fits in diamond shape.</p> 	<p>N/A</p>	<p>Indio + Ivory (The native color of cotton cloth)</p> 	<p>Diamond shape repeated geometric pattern</p> 	<ol style="list-style-type: none"> <li>1. The The ethnic style images design in the pattern.</li> <li>2. The unadorned color matching.</li> </ol>	
<p>Date &amp; Location material is collected?</p>	<p>Lanjin Batik Studio (Danzhai Batik Intangible Cultural Heritage Cultural and Creative Base)</p> <p>06. 09. 2021</p>						

Appendix 1 Table 1 The Summary of Miao Batik Raw Data

Categories	Characteristics	Elements	Counts
Shape	1. Ethnic style geometric shape	1. Swirly shape	2
		2. Circle shape	2
		3. Diamond shape	1
	2. The natural shape of birds, inserts, flowers and plants in an ethnic style design	1. The natural shape of flowers and plants	4
		2. The natural shape of butterflies	3
		3. The natural shape of birds	2
3. The natural shape of human beings in an ethnic style design	The natural shape of <u>Miao</u> people in different postures.	2	
Colors	1. The unadorned color match of indigo dye and the native color of <u>Miao</u> cloth	Indio + Ivory	7
	2. The unadorned color match of indigo dye and the native color of cotton cloth	Indio + Beige	1
Pattern	1. The traditional <u>Miao</u> style images design in the pattern.	1. <u>Totemism</u> pattern	5
		2. Decorative pattern	5
	2. <u>Miao</u> daily life and vivid human images.	1. Scene of <u>Miao</u> wedding banquet	1
		2. The scene of <u>Miao</u> people celebrating the festival by dancing and playing <u>lusheng</u> .	1

Appendix 2 Table 2 Overall Data Table

# Ethical Dilemmas in Performing Arts Management During Covid-19: A Case Study in Hong Kong

**Author** Tang, Xiaoyi

**Affiliation** The Chinese University of Hong Kong

**Email** tangxiaoyi99@outlook.com

31 January 2023

**Abstract** *Given the profound effects of the Covid-19 pandemic on the arts field, arts managers have to face fast-shifting work patterns and unprecedented ethical dilemmas. In addition to their original role of developing the arts, they also need to consider the health and rights issues of participants in artistic production and the management of special situations. Arts managers also help represent multiple parties, such as artists in the game, and deal with local policies. As they hold the most vital communication role in the arts industry, the ethical decisions made by arts managers and the factors influencing them will affect artists, arts organizations, audiences, and the local arts ecology. Using a performing arts organization in Hong Kong as a case study, this paper attempts to discover the ethical dilemmas faced by performing arts managers in Hong Kong during Covid-19 and their solutions, as well as the critical factors at play. It is hoped that this study will highlight the dilemmas performing arts organizations in Hong Kong encountered during the pandemic, including the shifts in the power relationships of the arts industry and cultural ecology. In the long term, this paper also seeks to provide insights into how to promote better equality and good moral principles in the arts industry in the post-pandemic era.*

**Keywords** Ethics, arts management, Covid-19, arts organizations in Hong Kong

## Introduction

As the volume and the scale of arts organizations in the industry expand, it is inevitable that workers in arts organizations also face more ethical problems in their working practices, such as the problem of intellectual property rights of cultural products, self-censorship, and integrity in the issue of marketing artworks. The existence of these problems also affects the development of the art organization and can furthermore have a negative impact on society. Therefore, the ethical issues arising in arts management are widely discussed in academic circles. However, discussions still focus mainly on the visual arts and less on the performing arts. This focus does not mean that the area has less research value, the ethical issues of performing arts management also reflected a different cultural ecology, which significantly impact practice.

Moreover, the ethical issues facing performing arts organizations have become more multifaceted with the impact of Covid-19. From the start of the pandemic to the beginning of 2022, China and Hong Kong Special Administrative Region (HKSAR) have adopted the Zero-Covid policy (Mallapaty, 2022). Strict pandemic prevention and control policies have brought performing arts in these regions to a temporary standstill. Caught between these policies and maintaining the work of the organization, arts managers have had to face ethical dilemmas when considering the health and rights of individuals in the organization and the well-being of the organization. These managers also communicate with different parties and make decisions involving ethical considerations. Such dilemmas are new and unprecedented for the entire industry, so all decisions and options are worth investigating.

## Problem Statement

During the pandemic, there is a lack of academic discussion on ethical issues in performing arts management. Therefore, this paper identifies and explores the ethical issues encountered by performing arts managers during the Covid-19 pandemic in the Hong Kong region, analyzes these challenges from a performing arts management perspective, and finds good solutions for communications among parties in the performing arts industries.

Therefore, the main research questions under consideration were:

1. What ethical dilemmas did performing arts managers encounter in their practice during the pandemic?
2. How did they cope with the ethical dilemmas they encountered?

3. What were their thought processes when making ethical decisions?

Sub-research questions in this area were:

1. To what extent do government cultural policies and company ethical management influence decision-making, and what other factors are involved?
2. What is the impact of this ethical decision-making?

The research utilizes a case study to search for representative moral dilemmas and understand the ethical decision-making faced by workers in performing arts management in Hong Kong.

Ethical dilemmas refer to a situation when people regard themselves as having moral reasons to do each of two actions in a conflict, but doing both actions is not possible. Some scholars further narrowed it to a moral dilemma in which the moral values at stake are equally important (Kvalnes, 2019). When it comes to art ethics, the overall aesthetic quality of the artistic production or exhibition has long been the only ethical value deemed important. (Johansson, 2021). However, during Covid-19, some newly generated values were placed at an equal level with this artistic value, creating an ethical dilemma for arts administrators when dealing with different power relationships (Wood, 2003).

Most profoundly, the health concerns arising from Covid-19 and policy compliance have impacted arts managers' commitment to the ethical value of artistic pursuits. At the beginning of the pandemic, the Hong Kong government closed performance venues to prevent gatherings (The Government of the HKSAR, 2020) as there is an informal consensus that the health of the individual is more valuable during this period (Kniffin, 2021). During this time, performing arts managers had to explore online modes of presentation to weather the crisis (Cheng, 2022).

However, during the late stages of the pandemic, as the new variant presented milder symptoms (Wu Yu, 2022), people began to retake some of the work that still needed to be done offline. At this point, when weighing work versus health or human rights, the value of life and health seems to decline, and the moral choices people face become more difficult to make. Such a dilemma can be seen in the repeated closure of the Hong Kong government venues for developing the arts during the five waves of the pandemic (The Government of the HKSAR, 2022). Meanwhile, the more nuanced management of employee health in the post-disaster pandemic era also involves a discussion of the value of fairness (Gerke, 2021) and trust (Yeong-Tsyr Wang, 2021). This is particularly evident in the management of

performing arts organisations, which are closely related to public health.

Regarding these ethical dilemmas and their influence on decision-making, this paper will adopt a framework of explanation proposed by scholars O. C. Ferrell and John Fraedrich. This framework is commonly used to analyze the ethical decisions made by employees in business organizations in the face of ethical dilemmas and to explain the reasons for the decisions. Through this framework, this paper presents a more systematic and structured analysis of the arts managers' decision-making process when coping with ethical dilemmas, including finding the factors that play a role in it. (O. C. Ferrell & John Fraedrich, 2021)

Ferrell and Fraedrich explained that the model of the ethical decision-making process in business includes:

- (1) Ethical Issue Intensity: can be defined as the relevance or importance of an ethical issue in the eyes of the individual, work group, and organization.
- (2) Individual Factors: such as gender, education, nationality, age, and locus of control, can affect the ethical decision-making process.
- (3) Organizational Factors: based on corporate culture, an organization's values often have a greater influence on an individual's decisions than the individual's values.
- (4) Opportunity: which results from conditions that provide rewards.

These factors are interrelated and influence the ultimate ethical decision.

### Methodology

This paper describes the ethical dilemmas encountered in the Hong Kong region in performing arts management regarding the pandemic using interviews and observations. The data is analyzed and interpreted using the framework chosen in the literature review.

Given that the objective of this paper is to explore the ethical issues encountered in practice in the field of performing arts, the empirical and social data gathered is very personal for arts managers. Hence, this paper adopts interpretivism as the methodological paradigm. As a study of a social issue, this research analyzes and interprets the ethical dilemmas encountered by art managers during the pandemic through detailed observations and conversations, then organizes and describes them systematically.

In selecting the case study, I have chosen a large performing arts organisation with a good reputation and a wide audience base in Hong Kong. I have selected this company because of its diverse departmental structure and large staff; thus, I could find a greater and more varied amount of ethical dilemmas. It should also be noted that although this organisation can demonstrate, to a relative degree, some of the ethical dilemmas encountered by the managers of performing arts organisations in Hong Kong, it cannot be considered representative of the overall industry's ecology.

During the four-month-long research, I contacted three employees from this company for interviews. These employees are referred to as A, B, and C to facilitate the descriptions in the following. Interviewees A and B are from the artistic administration department and are responsible for handling the administration and management of the artists. Interviewee A has been in the profession for over five years and is the department head, while interviewee B has been in the profession for about one year, both of whom are female. Interviewee C is a male employee from the marketing department of this company and has been with the company for about a year. Prior to that, he worked for other performing arts organizations in Hong Kong. He also has a master's degree in arts management from Hong Kong.

Due to the pandemic, the interviews were conducted in a combination of online and offline sessions. The author conducted at least two one-on-one interviews with each interviewee, each lasting between an hour and a half and two hours. During this time, the company decisions and experiences mentioned by the interviewees were taken from their oral accounts, while some paper materials were provided to help understand the company's internal policies.

## Findings and Discussion

On the assumption that the interviewees confirmed the definition of ethical dilemmas and the ethical values of the arts administrators themselves, I categorised the ethical dilemmas in the interview results according to type while analysing the analysis of the decisions they made.

### *Policies and Communication with the Hong Kong Government*

To prevent Covid-19 infection, the government of Hong Kong closed down performing arts venues and rehearsal spaces and called for people to work online. However, it is not realistic for performing arts organisations to work entirely online. In addition to the KPI pressure from sponsors, executives, and society, arts managers know that performers must practice in professional rehearsal studios or risk their

physical deterioration or injury. In the longer term, arts managers have to face the ethical dilemma of whether to protect their staff from Covid-19 according to government regulations or stick to offline work to protect their artist's bodies and develop their artwork as much as possible.

Interviewee C said that working completely online was unrealistic in the prolonged pandemic environment, both personally and as an employee of the company. At the beginning of the pandemic, they tried approaches such as rehearsals and filming at home, but the number for the works were not promising, and the actors were injured as a result. So up until the fifth wave of the pandemic in Hong Kong, the opportunity factor played an important role in the decision. The company kept interpreting the latest government regulations, keeping their work offline to the greatest extent possible as long as the government did not explicitly prohibit it.

Such a hybrid working pattern did not stop but continued to emerge as the pandemic developed, with arts managers playing a key role in the changing moral intensity of the impact of the new pandemic on employees. Arts managers were initially more inclined to follow government policy and stay away from the Covid-19 virus. As the pandemic lasted longer and the virus became more subtle, arts managers' moral intensity in response decreased. They gradually became more inclined towards the advancement of the arts. However, it is worth noting that they did not completely abandon compliance with government policy at this point of the pandemic, suggesting that this decision was still a moral consideration.

### *Management Dilemmas*

Interviewees A and B from the arts administration department felt that the emerging policies of quarantine and vaccination had increased the content and difficulty of their work and opened their eyes to the ethical dilemmas in themselves and others. For instance, from A and B's perspectives, the employees' vaccination and mask requirements are individual rights. Still, failure to comply with them could harm the whole community and create a huge obstacle to the development of the company's arts programme. However, instead of a profound discussion on the dilemma of individual rights versus community welfare, the Hong Kong government adopted a much simpler approach where they do not discuss whether they are violating human rights but only discuss the fact that work can only be carried out with compliance to their requirements. For example, the Hong Kong government requires people to have vaccination permits to enter the workplace. The ethical dilemma thus arises for arts managers: should they respect the freedom and rights of their employees, or should they

impose additional requirements on them to advance their artistic programmes?

The management dilemma is not only in preventing the virus but also in a dilemma faced after an employee's infection clears up. From the employee's perspective, information about the infected person is private. However, to protect other employees, art managers must also consider whether information about the infected person should be disclosed. Whichever side is chosen will be harmful to the other side.

In this case study, the arts managers generally considered the long-term impact of this decision on the organisation. To maintain the organisation's long-standing international, equal, and liberal organisational culture, they decided not to demand that artists undergo vaccination and always wear masks. They only advised them on the issue of vaccines and gathering. However, while this decision appeared to be a choice to respect the rights of the artists, the reality of this decision also led to the arts managers dismissing employees who refused to be vaccinated the following year on the grounds that without a vaccine pass, these employees could not work for the company.

### *Ethical Changes in The Post-Pandemic Era*

In the early days of the pandemic, arts managers had to weigh the value of developing their artistic work with the value of protecting the lives of their staff in favor of life and health. The factors considered included knowledge of the virus, consideration of the company's decisions, and implementation of government policies. In times of more serious pandemics, the government adopts strict control policies for safety reasons. In this environment, the company chooses the value of protecting life for the sake of its reputation and the health of its employees, thus influencing arts managers to choose the latter in developing the arts and protecting health. However, the work could not be stagnant for long, so the company was under realistic pressure to shift and find a balance between the existing environment and artistic development.

As the protracted battle line with the virus continued to lengthen, arts managers realized that the virus would coexist with humans for a long time, so continuing to work during the pandemic became the only option. In the midst of one moral dilemma after another, the scales for arts managers gradually tipped in favor of developing artistic work. This also means that in the post-pandemic era, the ethics of art managers have gradually shifted back to their original state.

Meanwhile, it is still questionable whether the hybrid working model that emerged during the pandemic

will be retired from history. After three years of hybrid working, art managers have gradually found ways to work online while maintaining the quality of the art and have found that working online allows for more efficient communication and more possibilities for the art team. The company established a professional creative team to promote and film the art programme online after the fifth wave of the pandemic. Both interviewees, A and C, found it a valuable experiment that worked well and said they would continue to explore hybrid working if the pandemic ended, based not only on the advantages of hybrid working but also on the uncertainty of future developments.

### **Conclusion**

In conclusion, arts managers inevitably encountered unprecedented ethical dilemmas during the pandemic. In this case study, three arts managers from different departments were surveyed to explore the ethical dilemmas and coping mechanisms faced by the performing arts management industry in Hong Kong during the pandemic.

The interviews revealed that the ethical dilemmas faced by the artistic managers were mostly about the dilemma between artistic development and the protection of life and health. As the artistic managers became more aware of the virus, the value of protecting life and health gradually evolved into considering the government's pandemic prevention policy requirements. At the same time, the ethical dilemmas faced by arts managers have shifted to the value of advancing their work.

This coping mechanism, however, also reflects the ethical considerations behind the judgments made by art managers. In response to the evolving pandemic, arts managers' ethical intensity regarding the event gradually waned in favor of continuing to advance the work of the arts. Values from the company and staff were also particularly important in the decision-making process, leading to decisions at the company level because individual management became more insistent on risking the pandemic to move forward. At the same time, government policies also provided opportunities for these ethical choices, such as the government's failure to ban offline work altogether, allowing the company to continue to advance artistic projects during the outbreak, and the government's hard-line approach to vaccination that forced the company to increase its vaccination rates.

All of these coping mechanisms changed the industry as a whole, as the company was forced to move to an online work model in the face of the pandemic, along with changes in the ethics of artistic managers and changes in the ecology of the industry as a whole.

Although this study investigated the ethical dilemmas encountered by artistic managers within a large

performing arts organisation in Hong Kong, the ethical dilemmas presented lacked representativeness because it was only a single case study, and the number of interviewees was small. The analysis of the characteristics and mechanisms of the dilemmas summarized cannot represent the overall industry ecology.

However, for the choices made by art managers in the face of these ethical dilemmas, the subsequent impact has not yet been fully revealed due to the relatively short time the pandemic has existed. Therefore, this paper is only an analysis based on the facts described by the interviewees, and no closer quantitative investigation has been conducted.

The pandemic was a unique time when arts managers faced many ethical dilemmas they had never encountered. Yet, these dilemmas could either disappear with the pandemic or affect the ecology of the performing arts industry in the long term. Therefore, this paper, unfortunately, cannot analyze more ethical dilemmas compared to the norm in the pandemic due to space limitations.

In future research, more cases will be selected to study the ethical difficulties faced by the arts management industry in Hong Kong, making this study more representative and providing more scientific communication insights for arts managers when dealing with different power relationships.

## References

Ferrell, O. C., & Fraedrich, J. (2021). *Business ethics: Ethical decision making and cases*. Cengage learning.

Gerke, S., Katznelson, G., Reiss, D., & Shachar, C. (2021). COVID-19 antibody testing as a precondition for employment: ethical and legal considerations. *Journal of Law, Medicine & Ethics*, 49(2), 293–302.

Johansson, J. Z. (2021). *Artistic Freedom or the Hamper of Equality? Exploring Ethical Dilemmas in the Use of Artistic Freedom in a Cultural Organization in Sweden*. *Journal of Business Ethics*, 1–15.

Pizam, A., Mansfeld, Y., & Chon, K. S. (1999). *Consumer behavior in travel and tourism*. Psychology Press.

The government of the HKSAR. (2020, November 24). *The Government of the HKSAR Press*

Releases: <https://www.info.gov.hk/gia/general/202011/24/P2020112400555.htm>

The Government of the HKSAR. (2022, Jan 5). *Latest arrangements on LCSD public services*. The Government of the HKSAR – Press Releases: <https://www.info.gov.hk/gia/general/202201/05/P2022010500734.htm?fontSize=1>

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., ... & Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, 76(1), 63.

Kvalnes, Ø. (2019). *Moral reasoning at work: Rethinking ethics in organizations* (p. 11–19). Springer Nature.

Mallapaty, S. (2022). *China's zero-COVID strategy: what happens next?*. *Nature*, 15–16.

Wood, G., & Rentschler, R. (2003). *Ethical behaviour: the means for creating and maintaining better reputations in arts organisations*. *Management decision*.

Wu, Y., Liu, J., Liu, M., & Liang, W. (2022). *Epidemiologic Features and Containment of SARS-CoV-2 Omicron Variant*. *Chinese General Practice*, 14–19.

Yeong-Tsy Wang, K., Wen-Hui, T., Chuang, T. Y., & Lee, H. J. (2021). *Rethinking four social issues of the COVID-19 pandemic from social work perspectives*. *Asia Pacific Journal of Social Work and Development*, 31(1–2), 45–51.

陳國慧. (2022 March). 第5波疫情殺得表演藝術團隊措手不及. *PAR 表演藝術*, 345.

# Inclusive Communication Strategies for Mindful Slow Fashion

**Author** Vaibbhavi Pruthviraj Ranavaade  
**Affiliation** Dean Department of Fashion Design, Chitkara Design School, Chitkara University  
**Email** vaibbhavi.ranavaade@chitkara.edu.in; vaibbhavip@gmail.com

31 January 2023



Figure 1. Women Weaver of Maheshwar

**Abstract** *The new world emerges from several centuries of human evolution based on the need to innovate and discover the changing dynamics of sociocultural, technological, geopolitical, and economic factors that impact people, communities, and the environment. Understanding communication barriers leading to rising disparity in society and humankind's clothing consumption is crucial for this study, which focuses on remedial communication strategies. Slow fashion is the opposite of fast fashion, which is based on human and ecological exploitation, overconsumption and eventually adding tons of synthetic waste to landfills. Slow fashion is about the ethical treatment of people and communities involved in making clothes and sensitizing wearers to the process involved in making the clothes. This exploratory paper is*

*based on a review of the literature and primary observations. The case study discussions of craft-based slow fashion communication are further analyzed. The study aims to understand the impact on the well-being of the people making and wearing the clothes and the planet Earth. It also identifies effective communication strategies for a robust future in the mindful, slow fashion industry. The study reveals that the empathetic and collective action of various stakeholders in the handloom value chain is vital in implementing communication strategies for inclusive opportunities for growth and cultural sustainability.*

**Keywords** Human, Communities, empathy, sustainability, disparity

## Introduction

The cultural interconnectedness of different civilizations flourishing across the globe is intriguing. The way these diverse communities communicate within themselves and with outsiders is also a matter of great interest in decoding the way forward for mindful communication strategies.

The new world emerges from several centuries of human evolution based on the need to innovate and discover the changing dynamics of sociocultural, technological, geopolitical, and economic factors that impact people, communities, and the environment. Understanding communication barriers leading to rising disparity in society and clothing consumption across humankind is crucial for this study, which focuses on remedial communication strategies. The main objective of this paper is to identify the role of the three core stakeholders (Maker, Wear, and the Environment) for slow fashion communication. Also, to discuss the various slow fashion communication strategies towards making mindful choices in the future.



Figure 2. Graphic depicting the process for craft-based slow fashion label Vaibbhavi P

**Problem Statement**

The communication stories in current fast fashion businesses are based on persuading people to buy more and more products. Moreover, while the word sustainability is trending, there are rampant greenwashing campaigns by fashion conglomerates. The consumer will need to be ahead of these greenwashing communication stories. Understanding communication barriers that lead to rising disparity in society and clothing consumption across humankind is crucial.

This study focuses on remedial actions and communication strategies for slow fashion. Slow fashion is the opposite of fast fashion, which is based on human and ecological exploitation. The people working in the garment business need to be aware of the exploitation and demand for fair living wages and a safe working environment free from health and safety hazards. Fashion businesses need to engage in ethical human resource management, sourcing, and production techniques in the entire supply chain. They are also encouraged to engage in mindful communication of authentic stories about their product to the consumers.

Building transparency is about the attention paid to a product’s lifecycle during production, packing, and shipping after it reaches people’s wardrobes, as well as post-consumer disposal of that product. An aggressive campaign to fuel overconsumption, which results in financial profits and often flouts human values and ethics and eventually adds tons of synthetic waste to the landfill, is counterproductive. There is a great need to identify effective communication strategies for a robust future and mindful slow fashion industry.



Figure 3. Slow fashion communication story by label Vaibbhavi P

**Literature Review**

According to the Merriam-Webster dictionary, communication is a process by which information is exchanged between individuals through a common system of symbols, signs, or behaviour. Communication can be verbal, non-verbal, visual, and audio too. Notably, the interconnected nature of communities is based on communication between the members and the larger world. The broad definition of a community is a group of people with a common characteristic or interest living together within a larger society.

Fasel (2000) defines communication as the ongoing interchange among people of thoughts, ideas, opinions, impressions, information, and data through speech, writing, or signs. Interestingly, communication is an ongoing interchange process that involves the expression of thoughts, views, ideas, opinions, information, and data in the human environment; to influence people’s actions for improved living conditions in society. The concept of communication can also be viewed as an exchange of information between the sender and the receiver in society.

Communication is very critical for community development in society. The focus is on enhancing the interaction between the people promoting change that will positively impact the living conditions of members (makers and wearers) of the participating communities and the people with whom they work to achieve the goals. Craft-based practices often involve marginalised communities based on social stigma, caste, and gender. Thus, there is a need for inclusive and sustainable



development. Slow fashion is about consuming and creating fashion consciously and with integrity. It connects social and environmental awareness and responsibility with the pleasure of wearing beautiful, well-made, and lasting clothing and is the opposite of fast fashion's immediate gratification. Kate Fletcher first coined it from the Centre for Sustainable Fashion.

The 'slow approach' intervenes as a revolutionary process in the contemporary world because it encourages taking time to ensure high-quality production, give value to the product, and contemplate the connection with the environment. Slow fashion is the intersection of ethical, eco, and lasting fashion. A piece of clothing or a brand does not necessarily need to check off all three boxes to be considered "slow," but the more an item or a brand encompasses these three things, the closer it comes to a true embodiment of slow fashion. Strategic communication is important in fashion.

This importance can be observed in the way Artisan Tags are made by craft-based NGOs like Kala Raksha, Kutch, Gujarat, and India. Each Artisan Tag had the artisan's photo and name. This helps the consumers give credit to the artisan involved in making the handcrafted product, their story, and how that garment was made. Similarly, FAB India has info about the craft technique on many of its handmade products to communicate to the consumer the exact, painstaking process of making the product.

### Methodology

The author has been a practicing designer and design educator for more than two decades, sharing observations for this exploratory study based on qualitative research analysis and presenting recommendations from the study. Case studies of the author's design interventions in handloom weaving in West Bengal, Telangana, and Madhya Pradesh as professional practices have brought deeper insights into handloom weavers' challenges. Detailed craft studies at major handloom craft clusters (community-based practices in specific geographic regions) pan India have been documented and analysed as academic design projects under the mentorship of the author as an educator and researcher.

The author understands ethnographic research methods and design practice as a co-founder of the slow fashion design label Vaibbhavi P, engaging actively with textile-based crafts and slow artisanal fashion. The author has travelled extensively across various craft clusters in the Indian subcontinent, reinforcing robust and pragmatic strategies for the handloom sector.

This exploratory paper is based on a robust literature review through secondary sources like library books, online portals, blogs, articles, databases, e-books, and research papers. A vital method of data collection is through in-depth primary observations and detailed qualitative interviews, specific case studies, and interaction with craftspeople across India and fashion consumers from a broad range of socio-economic sectors.

The case study discussions of craft-based slow fashion communication were discussed in depth according to the objectives of this paper. Due to the artisans speaking various regional languages, local research assistants speaking the languages (Bangla, Telugu, Gujarati, and Hindi) helped share the interview questions and later transcribed them in English for analysis. Purposive sampling was deployed for selection in this qualitative study based on case studies in India's various handloom weaving clusters.

The study is focused on the contextual paradigm of design and explores it in alignment with slow fashion and its inclusive communication strategies. The study aims to understand the impact on the well-being of the three major stakeholders in the slow fashion value chain. The first group is the people making clothes from fibre to garment. The second stakeholder group comprises those on the chain's end, the consumers wearing the clothes.

The third stakeholder is the planet Earth, which is home to all living creatures and the ecosystem. The detailed discussions with respective stakeholders led to a meticulous qualitative result analysis of the outcomes. The result analysis further led to the formulation of effective communication strategies identified for ensuring a robust future and nurturing a caring slow fashion industry.

### Findings and Discussion

The data has been examined qualitatively and analyzed through the lens of the three paradigms of inclusive stakeholders.

#### 1. **Maker: Craft sustenance and sustainable livelihoods without displacing rural artisans.**

The craft heritage has been passed on for generations, and each craft technique is testimony to evolving cultural heritage. These craft techniques are time-tested and perfected with the changing availability of resources and socio-economic environment. Human skill is intrinsic for these crafts to flourish. Therefore, for craft sustenance, the skilled artisan deserves a place of dignity in the fashion value chain. The rural artisans should be able to earn a sustainable livelihood in their native places

without being displaced. Many craftspersons are women who also have the responsibilities of homemakers and child-rearing.

Working from home or in local neighbourhoods gives them the flexibility to manage all these roles. They can provide a secure and unexploited future to their family. They continue to be inspired by the beauty of natural habitats, use local resources, excel in their craftsmanship, and train the next generation of artisans. There are various artisan training schools like the Kala Raksha Vidhyalaya and Somiya Vidyalaya in Kutch, The Handloom School in Maheshwar, and The Kalhat School in Lucknow, which train artisans in design, entrepreneurship, market opportunities, and technology usage.

### **2. Wearer: empowered to make mindful choices and responsible consumption.**

Strategies that communicate to the wearer the power they exercise when supporting or endorsing a fashion look. The wearer needs to be mindful of the effect of the clothing on their well-being in the long term and possible health hazards to themselves and the maker. Knowing the processes involved in making the garment and how it affects the environment, the maker, and themselves will help them make informed decisions. We need effective communication strategies that encourage adopting a lifestyle that supports choices made mindfully, where wearers appreciate handcrafted products and practice responsible consumption.

### **3. Environment: natural fibres, organic farming, mindful consumption of resources (water, energy, fuel, material), eco-friendly laundry and aftercare, effluent treatment.**

Traditional hand-crafted products were handmade with frugal consumption of natural resources in the neighbouring regions. Natural resources are grown or obtained naturally and organically. These natural resources include organic farming for cotton and other cellulosic fibres like jute, linen, hemp, etc., local wool from cattle rearing, wild and cultivated silk reeling, and natural dyes derived from plant and mineral resources. Regional water bodies like rivers & lakes have a mineral composition conducive to yielding brilliance quickly to the naturally dyed textiles of that specific region, along with specific sunlight and humidity levels. Examples are products from Bagru, Sanganer, Ajrakhpur, etc. Due to mindless deforestation and chemical farming, environmental hazards have increased.

The commercial constraints posed are due to the availability of cheaper man-made fibers and brighter chemical dyes. The relatively higher cost of producing organic, naturally dyed crafts due to the tedious and time-consuming processes which are perfected over time is gradually falling out of favour

with the masses. Therefore, there is an urgent need to sensitize people about the evident environmental and human damage due to abuse of nature; air, water & soil pollution; and landfills of discarded non-biodegradable clothes for future damage control. The need to adopt eco-friendly laundry practices and aftercare, effluent treatment, and reuse and recycling of natural resources will be helpful too.

### **Inclusive Communication Strategies for Mindful Slow Fashion**

Communication strategies that inform, sensitize, provoke positive action, and build transparency and trust in the value chain have been discussed briefly. These strategies must be taken forward in the branding campaigns through print, digital media, packaging design, and interfaces for all stakeholders. These strategies must be extrapolated in copywriting, infographics, imagery, model casting, and material selection and built into robust, impactful stories customised to each product.

1. The story behind who made your clothes. Do you know how many human hands have touched the garment before it reaches you? A farmer, spinner, weaver, dyers, embroiders, pattern maker, tailor, ironing, packaging, retail staff, etc.
2. The branding story for sustainable livelihoods without displacing the rural artisans.
3. A safe working environment and fair wages help support a dignified living.
4. No child labour is involved, and proper medical facilities are available for the people and their families.
5. There should be a creche facility for young children if there are working mothers.
6. The appreciation for artisanal luxury and good quality. Buy less, Buy well.
7. Slow clothes that are environmentally friendly.
8. Slow clothes that give dignity and security to the maker.
9. Slow clothes allow the wearer to choose responsible options.
10. Mindful consumption, frugal approach, upcycling, re-using, and DIY fashion.
11. Trans-seasonal styling and classic silhouettes.
12. Global designs, everyday clothes for mindful slow-getters.
13. The appreciation for cultural sustainability- Respecting, nurturing, and preserving culture and passing tangible and intangible artistic expressions to future generations.

## Conclusion

The communication strategies which effectively inform the stakeholders about the authentic and painstaking handmade process involved in the product development empower them to make responsible choices. The true success story of craft-based slow fashion lies in how the artisans' lives are enriched by the practice. Also, the way marginalised communities and women are engaged in purposeful economic growth is truly inclusive and empowering. The social enterprises committed to community development based on empathy and sustainability will go a long way in narrowing the prevalent disparities.

The emotional connection developed with craft-based slow fashion products leads to people cherishing and caring for their well-loved pieces for extended periods of time. Many users would be inspired to upcycle or repurpose the end use of handloom textile or clothing, or home furnishing before it is passed on or discarded. Effective communication strategies will sensitize a larger community of makers and consumers to adopt a responsible lifestyle and contribute towards craft-based slow fashion. The findings of this study can be extended further for developing effective strategies for various categories of handcrafted products worldwide.

Therefore, this paper will be useful in disseminating effective communication strategies across the sectors. These communication strategies that are developed can be most effective only if they are inclusive of all the stakeholders in the slow fashion system. The findings of this paper focused on handloom-based slow fashion have the potential to be extended to other slow manufacturing processes, sustainability practices, and sectors. The process of practicing mindfulness is gradual and can be adopted through deliberate choices made in every role one plays in the slow fashion system. Stakeholders need to accept a major opportunity to take up the primary role of a creator or maker of fashion products. The role of content creators in developing inclusive and mindful communication strategies is pragmatic.

The consumer of slow fashion is the major catalyst in bringing about any paradigm shift in how fashion stories are embraced and endorsed. The empathetic and collective action of various stakeholders in the handloom value chain is crucial for implementing communication strategies for inclusive opportunities for growth and cultural sustainability. Inclusivity is no longer a choice but the only way forward for sustainable development in every sector to nurture a truly interconnected fashion system on a global platform.

## References

Bhandari, V. (2001). *India's World of Design*. In National Institute of Design, Ahmedabad, India.

Bhandari, V. (2018). *Connecting and Building Craft Communities*. In: 20th Annual conference for the International Foundation of Fashion Technology Institutes. Fashion Futures. Shanghai: Donghua University, pp.97-102.

Ranavaade, V. (2019) *Slow Fashion Approach to Sustainable and Circular Design Innovation*. 5th International Textiles and Costume Congress, Vadodara, India, *Indigenous Textile Crafts: Global Markets and Trends*, pp.131-142

Salenga, M. (n.d.). *Why the Rise of the Purpose Economy Will Change How We Work Forever*. Retrieved from <https://www.tbd.community/en/a/why-rise-purposeeconomy-will-change-how-we-work-forever>

## Websites

<https://www.eajournals.org/wp-content/uploads/Roles-of-Communication-in-Community-Development.pdf>

<https://www.nift.ac.in/cluster-projects> Viewed on August 3, 2022

<http://www.vaibbhavip.com/> Viewed on August 8, 2022

<https://vaibbhavip.com/index.php/2020/08/07/the-warmth-of-handloom-textiles-part-1/> Viewed on August 8, 2022

<https://vaibbhavip.com/index.php/2020/08/31/the-warmth-of-handloom-textiles-part-2/> Viewed on August 8, 2022

<http://www.womenweave.org/> Viewed on August 8

# Defining Queer Art Parameters in Asia: Hong Kong, Singapore, and South Korea

**Author** Wong, See Huat Kenneth  
**Affiliation** The Chinese University of Hong Kong  
**Email** peopleideasculture@gmail.com

31 January 2023

**Abstract** *This paper uses queer aesthetics to define what is queer art in a reverse manner to develop parameters for Asian queer art. Three queer artworks from Hong Kong, Singapore, and South Korea have been chosen. The analysis assesses their logic of creation, medium, thought process, creative output, and visual display. Subsequently, their inputs through the zoom interview have been consolidated as the main discussants. In short, this study has established five parameters for deepening the understanding of Asian queer art. In terms of “queer as a visual narrative”, the artists have consciously seen queer subjectivity as conversational material. With the “body as identity politics”, one of the most evident approaches in queer art creation is choosing the deceased queer artists (with AIDS) as the protagonist. However, all the art creation is, in one way or another, “set as artistic intervention” and not just queer art only. Given the short period of the exhibition, the queer art exhibition could be traced back as an excellent “ephemeral as archival” proof in outreach, let alone the possible iterations after. With the last parameter, “queer urbanism as sociological turn”, the younger Asian queer artist today is gaining visibility while the same dynamic has become passé in the West. Indeed, it is a consistent effort to undertake an active role in activism, artmaking, and history-making of queer art in Asia.*

**Keywords** Queer art, Asian queer, parameters, queer aesthetics, queer kinship

## Introduction

Queer art as a term is widely observed, but the definition remains fluid thanks to its non-conforming nature. However, the definition of Asian queer art is discussed very little, and it also seems to be very gender diversity inclined, especially in the region's curatorial practice. This study is a branch of knowledge production under the purview of Asia as Method (Chen, 2010) by comparatively assessing queer art as a subject within Asian countries. Chiang and Wong (2016) have also suggested the significance of emphasising critical regionalism and locality in deepening the understanding of queer subjectivity in Asia. By exploring the queer aesthetics discourse, this study hopes to deploy a possible outlook for Asian queer art. This paper hypothesises a plurality of queer art representation in Asia, the comparison amongst the queer art created by Hong Kong, Singaporean, and South Korean artists merely aim to bring out the nuances within Asia and is not necessarily extensive. The five parameters developed in this paper provide further pointers in understanding the unique characteristic of Asian queer art to advance the queer art exhibition discourse and curatorial narrative specifically for Asia.

This study noticed that the selection of the artworks analysed by most of the aesthetics scholars was usually inclined toward Western artists. Hence, this paper has aptly chosen queer art representation from Asia's three countries: Hong Kong, Singapore, and South Korea. Generally, the coupling method of Hong Kong and Singapore, Hong Kong and Taiwan, and South Korea and Taiwan are standard in the academic circle, especially within queer and postcolonial studies. Hence, this study has decided to drop Taiwan as the combination to fill the research gap. In previous research, I have compared the relationship between queer art and queer politics by comparing the curatorial approach of *Spectrosynthesis* claimed as Asia's first LGBT art exhibition in the region (Wong, 2019). *Spectrosynthesis I* exhibition (2017, Taipei) received criticism that the selection of the artworks was at most LGBT art, gay-dominated, and not strictly queer art. The second iteration after two years in Bangkok, *Spectrosynthesis II*, improved with the inclusion of more binary, transgender, and asexual representation as queer representation. The *Spectrosynthesis III* exhibition was anticipated to be held in Tai Kwun (Hong Kong) in December 2022; hence the anchor on “queerness” and “queer aesthetics” is much more crucial in this paper rather than on gender diversity.

I contend that queer art, as the product of modernity in Asia, is still in the infancy stage compared to the West, with visibility gained over the past two decades. *Spectrosynthesis* surfaced mostly LGBTQ+ artists as *Sunpride Foundation* promotes identity pride and equity as their motto. Unavoidably, the curatorial

framework emphasised a broad spectrum of gender diversity and the issues faced by the LGBTQ+ community. Hence, I sustain that queerness functions in various accounts, including queer art: How can queer aesthetics widen the queer art parameter other than gender diversity?

### Literature Review

In recognising the fluidity of queer art and to ease the task of identifying the suitable respondents and the artworks, this study follows the queer art definition framed by Katz and Söll (2018): -

- (i) Auditioning queer biography on individual artists
- (ii) Acknowledging the queer themes in their artwork
- (iii) Completing the execution of exhibitions that make a sexual difference as their theoretical and socio-historical frame

In other words, the queer art that this study has identified is whether the artists are self-identified as LGBTQ+ or their artwork consistently responds to the queer subject. If none of the above, the artists have been invited for an exhibition with the curatorial framework or ideology on LGBTQ+ representation. This study excludes the definition by Getsy (2016) and Patel (2017), which I deemed too broad to encompass or to embark with: sculpture, abstract art, agitprop, and street art with their attributes of silence performative and provocative, mutability, and transformation.

Since the definition of queer art remains contested and fluid, it is crucial to scrutinise the fundamental attribute of queer art, which leads this paper to investigate queer aesthetics. The usual school of affection theory has built on the primary value of aesthetics: to make a connection between artwork and the audience. This study pursues the affection theory that emphasises queerness, be it the artist's attitude or the message of the artwork conveyed. Most scholars have opined that queer aesthetics could transmit from the embodiment of the artwork, visual output, text, or body, primarily via its queer sense of belonging (Fleishmann, 2019, as cited in Keating, 2021) and disorientation (Ahmed, 2007). Keating (2021) has further coined the term "sticky aesthetics" and has aligned her arguments with the intensity of queer aesthetics conveyed through the audience who "reads into it" (Getsy and Doyle, 2013).

### Methodology

With the scholars' debate mentioned above, this study decided to gain an overview of queer art from

interviews with three selected queer artists from the three countries mentioned. As a limitation, they merely serve as a representation of qualitative study and do not aim as an extensive sampling exercise of quantitative study here. The interviewed artists have been contacted, offering their insight into the local queer politics, their understanding and aspiration of queer art, and the reception from the audience. There were initially more female voices for the interview purposes. However, Ellen Pau and Jes Fan (from Hong Kong) have not responded to the interview request, and Lee Yeon Sook (from South Korea) fell ill from Covid. Hence, the following three gay artists are finally identified based on their achievement in the art sector, their seniority in the circle, the openness of their sexuality, and the three criteria set at the beginning of the literature review.

Subsequently, only one artwork from these three artists interviewed has been further assessed from their context, visual outputs, and approaches. The selected artworks aim to articulate and mediate the normative conceptions of queerness and queer art in Asia. The discussion on queer aesthetics is supported by the extracts of their interview clips, art critics' articles, and the affection school of thought mentioned earlier. The artworks chosen are Jason Wee's "Bao Bei" (Singapore, 2005), Samson Young's "Muted Chorus" (Hong Kong, 2016), and Lee Kang Seung's "Queer Arch" (South Korea, 2019) for a better variation in time, medium, and thought process behind. With that, the findings are grouped into five parameters based on the consistency of the feedback, aspiration, and observation made from the similarities and dissimilarities of the three Asian queer art artworks chosen.

### Queer Art Representation Chosen

As reported in Luxuo magazine, "Descendants of the Eunuch Admiral" is a play written by Kuo Pao Kun in 1995, revolving around Ming Dynasty admiral Cheng Ho who served as a eunuch in the Imperial Palace. Jason Wee recreated such a treasure chamber in "Bao Bei" (2005) at The Substation (see Figure 1), with hundreds of gay pornographic images. Wee had recast the sexual imagery appropriated from the websites and chatrooms, with the homoerotic spectrum and light sadomasochism obfuscated by a pixelated effect.

"Muted Chorus" is Samson Young's fifth series of "Muted Situation" where Young staged a chorus performance without projecting the musical notes (see Figure 2). He has persevered the ensemble, phrasing, body engagement and other factors of the performative intent of the "Bach: Christmas Oratorio, Part 5" and consciously omitted the sound-producing component of that performance.



Figure 1. "Bao Bei" installation at Substation, Singapore in 2005 (Source: Luxuo, 2018)



Figure 2. "Muted Situation #5: Muted Chorus" 2016, single-channel video with sound. Performed by Hong Kong Voices; Antonio Lotti: *Crucifixus a 8*, Bach: *Christmas Oratorio Part 5* (Source: Samson Young, 2016)



Figure 3. Queer Arch at Gwangju Biennale (2021), an expansion of Queer Arch version in 2019 (Source: Kang Seung Lee, n.d.)

In "Queer Arch", Lee Kang Seung juxtaposed the diary of a transgender woman in Queer Arch (the Korean Queer Archive) to a cactus, a symbolic belonging to Harvey Milk, as the first queer politician in the U.S. The cactus was co-opted in "Queer Arch" as the shared solidarity to Queer Arch, which was established in Seoul in 2002. The archival collection started mainly with the personal archive of a prominent local activist, Chae Voon Hahn. (See Figure 3).

### Findings and Discussion

Higher education equips students with professional Analysis of Queer Aesthetics: Queer Kinship and Intimacy

In general, the artists have deployed the tactics of subtle, upfront, and layering messages of the different queer subjects to suit the political climate at a juncture: whether approved or not, for such content to be exhibited. They have chosen different mediums and approaches yet still respond to marginalised voices with queerness. Young opined that there is a difference between saying a work performs a specific queering function and the self-identified queer. He was more interested in queering the discourse, unsettling the idea; thus, queer art is not so much focused on the identity but the conversation of the work. Lee agrees as he highlighted, "Queer art is not a genre or sub-genre of art that talks about the queer experience. I do not think that it is problematic to define queer art according to the criteria you mentioned, like myself is Asian, Korean, etc., but it will only be problematic when it is only being categorised that way." This response implied that queer art is not limited only to responding to queer orientation but more about lobbying for boundary-pushing.

Second, whether queer art is provocative or not is indeed subjective. Lee was aware that he was setting an example as the first timer in representing queer art in commercial galleries and public museums. Art can alienate a lot for most of the public, but it hardly invokes any kind of unusual violence in person. I initially would also like to substantiate the provocative role of queer art with Young's artist talk at the Chicago Institute of Art, "...war could be ideological and inter-personal, and not just physical", and prompted him whether he also see queer art as against heteronormative. However, Young does not see his work in *Spectrosynthesis I* as a controversial issue anymore in Hong Kong. "There is an ongoing battle between the civilian and the government, and recently, there is public housing ruling for a same-sex couple to apply." If political suppression will not allow the provocative gesture of the artworks, what could queer art still serve? "Yet, in a way, Hong Kong is kind of a queer child, isn't it?"

when Young reflected on the marginalised situation of Hong Kong in the last decade.

Having covered the similar queer aesthetics that were engaged by other scholars beforehand, let us discuss the element of intimacy and closeness. Much of the time, Lee's work is project-based and ongoing. The subject is about one or two protagonists in a particular historical event. Lee sees himself sum up what came before him and touched him. Gearing toward the exhibition showcase, Lee's work usually becomes very poetic and ambiguous, and he is very much interested in the audience's feelings in that exhibition space eventually. Lee is also interested in this inter-generation connection through the body of his work. That element of closeness tells us why Lee is interested in an artist with a similar background or situation. On this note, we have witnessed how Lee has pursued the inter-generation queer kinship in artmaking via queer archival effort. A similar train of thought applies to Young's work on the close-up shot of the body and breath and Wee's work on the sexual images in the private sphere.

#### *Possible Parameters for Asian Queer Art*

With the above analysis of queer aesthetics, it is viable to return to the core attributes of the subjectivity of queer art in Asia. I would argue as follow: -

##### (i) Queerness as Visual Narrative

Queerness implies less emphasis on sexual orientation and more on the alternate discourse of otherness. For Wee, he sees no distinction between queerness and otherness. Lee also reminded us to assess how western art history looks in the same regard, which appeared in a similar hierarchy in queer art history: very much western and white. That is why the artists he touched on are Asian or Asia in origin, and that is how queer history could be written.

##### (ii) Body as Identity Politics

Queer art is not a genre solely but often has a political position. For instance, some queer art in Korea fuses traditional art techniques, foregrounding historical figures and events to create the narrative and how LGBTQ+ deals with the refusal of military service and Confucius's ideas of family.

Young contended that "my intention was not to address queer or consciously to make queer art. Some artists deal with that much directly and provocatively... However, I am an ally, and I felt it is an important and valid conversation in Hong Kong society if non-binary sexuality continues to be a

problem." It focuses on listening to others and learning about specific contexts and history.

##### (iii) Set as Artistic Intervention

Lee and Wee's works revealed that their installation works focus very much on the intersection of history and visual culture, centring on the marginalised or unrecognised. Their approaches also led us to think the exhibition space creates a special aura for the viewers to access their queer worldview. Sometimes, a flip of the queer thought will lighten up the possible reductive role of queer art.

##### (iv) Ephemeral as Archive

If an exhibition usually does not last more than three months, the footprint or the visibility of queer art can be seen as ephemeral. Nonetheless, the documented material online, the artist interview clips available on YouTube and social media, are considered long-lasting over the research process. As an effort of archival, the visibility of queer art seemed to have a longer life span and more significant impact.

##### (v) Queer Urbanism as Sociological Turn

Having more queer art iterations in the exhibition venue is indeed a power negotiation in the urban space and society, just as how Ahmed (2007) narrated, "A queer phenomenology would involve an orientation toward queer, a way of inhabiting the world by giving 'support' to those whose lives and loves make them appear oblique, strange, and out of place" (p.179). For instance, Wee is not only the artist but also running an artist cum residency space called Grey Projects that groom the younger local queer art artists.

#### **Conclusion**

In recognising the fluidity of queerness, queer art can be queer art but can also be many other entities. Art is always more than one facet, and most art is about knowledge production, not just queer art. In that regard, seeing queer art as queer art will be very limiting. Queer art should not be limited by itself; it is about expanding. Having said that, the queer art chosen in this study has carried some sensitivity in their works, which comes from their queerness and Asianness. There might be more general issues in cultural differences and social and political backgrounds that distinguish them. The artworks have reflected their personal and homeland's history and reality in terms of locality. Such visibility negotiation may appear as passé in the West, which has been rampant since the 80s.

The similarities among these three queer art artists are that they have transformed the subject into

intimate portraits— a quotidian yet intimate connection shared between the artist, the artwork, and hopefully with audiences. They have also adopted a similar strategy to deploy sensitive cultural consciousness in presenting queer subjectivity in their home country. I argue that they have deployed much more intimacy to communicate queer affection through their works with the audience as an invitation rather than confrontational. The affection and bonds of queer people are thus delineated through the work they displayed in their final visual output, be it the sexual images captured from the private chatroom, the subtle sound of the body movement and breath, the cross-generational personal archival material, as well as the special aura created in the exhibition space.

This study has witnessed the possible sociological turn among these three countries through queer art lens. Even though this paper only has three artists to represent their respective countries, the in-depth interviews have brought to light the unique social and political conditions for the cultural production of their queer art, respectively. Singapore queer art needs to strive with guerrilla tactics against the possible ban from the government check, whereas Korean queer art has strived to the museum as a public institution and the Biennale as international exposure. Hong Kong queer art, on the other hand, has been bold all this while with its appearance but possibly will dim down if the scrutinisation of the National Security Act of China is tightened further. Again, this is the generalisation based on the interview input and the contextual analysis, and we could always spot the sporadic exception. The Asianness, Confucianism, and conservative Christian protest still bound these three countries.

The regional solidarity and the queer alliance could be formed if the artists stepped out of their comfort zone or the curator pulled them together intentionally for regional exhibitions to promote diversity awareness in advancing queer politics. I believe art is an activity of making visible what is essential and reluctant of the era while creating a different language, expression, and communication. In art history, all movements have appeared for both reasons, fundamentally inspiring other's way of seeing. In this sense, I think that queer art contains the queerness of art while talking about issues in society, such as the right to marriage for the LGBTQ+ community, identity issues over a generation, sex, region, race, economic status, corporeality and even the state's tactic in manoeuvring queer interests into its national identity. As reflected, queer art partly becomes activism when it crosses with particular social needs and issues, but I also consider that the fundamental spirit of queerness is embedded as one of art expressions and languages. In sum, queer art should be seen as differing from the heteronormative and queering context itself.

## References

- Chen, K.H. (2010). *Asia as Method: Toward Deimperialization* [Electronic Resource: Project Muse]. Duke University Press. pp.212-255. Retrieved March 23, 2022, <https://muse-jhu-edu.easypass2.lib.cuhk.edu.hk/chapter/2610171/pdf>
- Chiang, H. & Wong A.K. (2016). *Queering the Transnational Turn: Regionalism and Queer Asias*. *Gender, Place & Culture*, 23(11), 1643-1656, DOI: 10.1080/0966369X.2015.1136811
- Katz, J., & Söll, Ä. (2018). *Queer Exhibitions/ Queer Curating*. On Curating Online Journal, 37, 3, <https://www.on-curating.org/issue-37-reader/editorial-queer-exhibitions-queer-curating.html>
- Getsy, D. (2016). *Queer: Documents of Contemporary Art Series* (pp.13-22). London: Cambridge, Massachusetts: Whitechapel Gallery; The MIT Press.
- Patel, A. (2017). *Productive Failure: Writing Queer Transnational*. *South Asian Art Histories* (pp.40-52). Manchester: Manchester University Press.
- Keating A. (2021). *Sticky Aesthetics, Sticky Affect: Connecting through Queer Art*. *Polish Journal of Aesthetics*, 60 (1), 75-91, DOI: 10.19205/60.21.4
- Ahmed, S. (2007). *Queer Phenomenology: Orientations, Objects, Others*. (2nd ed., pp.157-179). Durham: Duke University Press.
- Keating A. (2021). *Sticky Aesthetics, Sticky Affect: Connecting through Queer Art*. *Polish Journal of Aesthetics*, 60 (1), 75-91, DOI: 10.19205/60.21.4
- Doyle, J., & Getsy, D. (2013). *Queer Formalisms: Jennifer Doyle and David Getsy in Conversation*. *Art Journal* (New York. 1960), 72(4), 58-71. DOI:10.1080/00043249.2013.10792864
- Wong, S.H. (2021). *From Margin to Spectrum: A Critical Analysis on Queer Art Representation in Spectrosynthesis I and Spectrosynthesis II* [Master dissertation, National Taipei University of Education]. National Digital Library of Theses and Dissertation in Taiwan. <https://hdl.handle.net/11296/h6uhga>
- The Art Institute of Chicago (2016, February 18). *Artist Talk: Samson Young* [Video]. Youtube. Retrieved April 24, 2022, from <https://www.youtube.com/watch?v=rdfovyw2NjE>



Getsy, D. (2016). *Queer: Documents of Contemporary Art Series* (pp.15). London: Cambridge, Massachusetts: Whitechapel Gallery; The MIT Press.

Ahmed, S. (2007). *Queer Phenomenology: Orientations, Objects, Others*. (2nd ed., pp.179). Durham: Duke University Press.

#### Picture Credits

Luxuo (2018, September 5). *Queer Eyes: Jason Wee's Works Compel New Ways of Seeing*. Retrieved April

23, 2022, from <https://www.luxuo.sg/culture/art/jason-wees-works-new.html>

Young, S. (2016). *Muted Situation #5: Muted Chorus*. Retrieved April 23, 2022, from <https://www.thismusicisfalse.com/muted-chorus>

Lee, K.S. (n.d.). *QueerArch at Gwangju Biennale (2021)*. Retrieved April 23, 2022, from <https://kanglee.net/artwork/4979592-QueerArch-at-13th-Gwangju-Biennale-installation-view.html>

# The Development of Functional Pants Design Method For Paralyzed Women Using Anthropometric Data

**Authors** Xing, Lin<sup>1</sup>; Norsaadah Zakaria<sup>2</sup>  
**Affiliation** The Design School, Taylor's University,  
Malaysia  
**Email** xinglin@sd.taylors.edu.my

31 January 2023

**Abstract** This review summarizes the most rational and practical design method based on the current technology by reviewing nine anthropometric-based designs of functional pants for female wheelchair users from 2017 until 2021. This study uses the horizontal comparison method to analyze the differences between the design paradigms. The design paradigm can be divided into anthropometry, pattern making, and trial-fitting experiment. The review finds that 3D anthropometry and virtual human modeling are the most popular technologies in wheelchair functional pants design. Although the measurement tools and modeling methods are different, capturing human data more quickly and constructing block patterns more accurately is the general trend.

**Keywords** Functional pants, Design method, Anthropometric data, 3D scanning, Virtual model

## Introduction

According to ISO 8559 - 2: 2017, the standard pants design and anthropometrics are based on the standing posture and human body dynamics. The ease allowance guarantees the human body's upright shape, considering the demands of walking, squatting, and sitting. However, the standard design method is not reasonable for wheelchair users, who are primarily in a sitting position (Pojilov-Nesmiyan, Ivanov, and Suprun, 2017). The different design paradigm leads to paraplegic wheelchair users who cannot buy suitable clothes, which is unfavorable to the patient's leg health, hindering blood circulation

and causing various diseases such as pressure sores (Cui, 2015).

Tailor shops on the street used to provide tailor-made help for paraplegic wheelchair users. However, the traditional tailor shop has gradually been closed or transformed into advanced customization in the recent 20 years (Docin. Com, 2018). There are fewer places to make clothes, but the number of paraplegic wheelchair users, especially women, has not decreased. Over 15% of people around the globe are living with disabilities, and half are women and girls (WHO & World bank, 2011). In China, twenty-seven thousand female wheelchair users are added to the state statistics every year (Zhao, 2021). This vulnerable group has a right to access suitable, adaptive clothing to help them live with dignity.

With this in mind, this paper reviews the previous diagrams designed for functional pants of female wheelchair users, focusing on the measurement method of sitting body shape data and the design scheme of sitting pants. Based on a broader understanding of the development frontier of functional sitting pants. This research aims to find the best adaptive design diagram for local female paralyzed wheelchair users.

## Literature Review Method

A research project was constructed to systematically review the design of functional pants for paralyzed women based on anthropometric results in the apparel technology and innovation industry (see Figure 1). Criteria for the inclusion and exclusion of papers were established according to the purpose of this study. Firstly, the research content of the paper must focus on the design of functional pants. Secondly, the description of the whole paper should include a description of the design process. Finally, specific anthropometric methods should be included in the data collection stage of the paper. The authors selected peer studies published between 2017 and 2021 because they represent the most advanced and commonly used measurement and design methods.

The databases used in the search include ProQuest, SCOPUS, IEEE, Taylor & Francis, Web of Science, and Springer Link. In the early retrieval process, medical and health journals such as Disability and Rehabilitation were considered in the screening. However, a few articles related to the clothing of the disabled and anthropometric methods were not included. In the initial search for relevant research papers, synonyms were repeatedly replaced to ensure that the search was broader.

In the search based on theme and keywords, the expression of 'paralyzed women' also uses keywords such as 'disabled women,' 'paraplegic women,' 'female wheelchair users', and 'sitting women.'

'Functional pants design' is also described as 'adaptive pants design' and 'barrier-free lower garment design.' 'Anthropometry' is also expressed as 'body shape measurement.' A preliminary search yielded 232 nonrepetitive papers. Based on each journal title and abstract, 195 papers were deleted because they were not related to the design of functional pants. The deleted studies included research focused on exoskeleton design, wheelchair design, furniture design, space design, and wearable devices for the disabled.

Among the 37 papers selected for full-text browsing and screening, 28 did not fully include the content this study was looking for, such as the design process. Apart from paralysis, the paper's target group involves various diseases, such as dialysis and fistula, which have also been deleted in this step. Finally, a total of nine papers were considered.

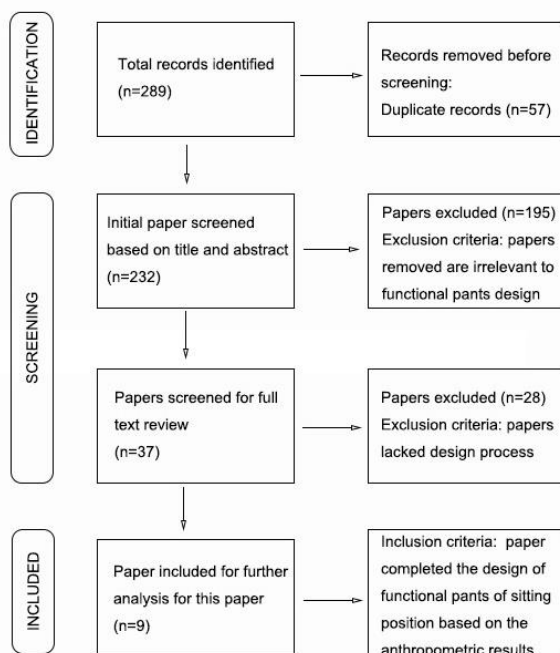


Figure 1. The research progress

## Findings and Discussion

Findings and Discussion: Based on the nine articles chosen, the design steps of functional pants can be summarized into three parts: anthropometry and construction of a virtual body model, pattern making, and trial-fitting assessment. Table 1 shows the main themes and concepts covered by the selected papers. Regarding anthropometric methods, 78.8% of the studies used 3D scanning (n=7) and constructed a virtual human body model based on the scanning results. Virtual clothing design was used in four studies to test the design effect more intuitively before making samples. In addition, six of the nine studies used either virtual body fitting or actual body

fitting to validate the design. (refer to appendices section for Table 1 Summary of themes and concepts of included papers)

Table 2 shows the demographic characteristics of the subjects involved in the selected articles. All participants were female, with an average age of 36.75 years. As for the geographical distribution of the research, one-third of the research was carried out in Australia (n = 3), two studies were carried out in Slovenia, and the others were from Croatia, Ukraine, Japan, and Mexico.

See Appendice 1: Table 1 Summary of themes and concepts of included papers

See Appendice 2 section for Table 2: Demographic characteristics of included papers

### 1. Anthropometric methods

#### 1.1 3D scanning and manual measurement

Six articles used 3D scanning technology to collect human body data and construct a virtual human body, improving measurement efficiency. Rudolf et al. (2017) found that the sitting posture of paraplegic patients will not affect the scanning accuracy. The source of error is mainly the influence of breathing at different depths on the dimension of the schedule during the scanning process (Rudolf and Stefanovic, 2017). The laser measurement used in the included papers has controlled the measurement accuracy error within the allowable range ( $0.05 < \sigma < 0.81$ ) (Rudolf and Stefanovic, 2017). 3D scanning plays a positive role in providing more body data. However, considering the measurement cost and quantity, manual measurement is still commonly used in recent years.

Manual measurement is usually accompanied by a 1-on-1 interview, providing a more in-depth understanding of a single research sample (Pojirov-Nesmiyan et al., 2017). Two of the included papers used manual anthropometry, which focuses more on the individual differences and needs of the subjects. This method is different from 3D scanning, which aims to obtain more data quickly (Ichikari, Onishi, and Kurata, 2018). During the measurement process, Rizo-Corona et al. (2019) found that the measurement site does not limit the advantage of manual measurement and does not have to be carried out on a specific experimental site. The primary source of error is the clothing the subject is wearing. Clothing that is too loose can lead to a more significant measurement size.

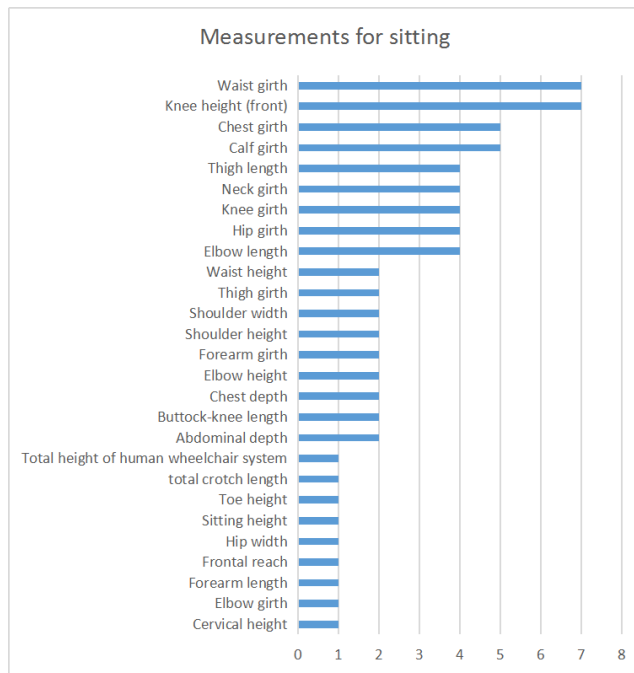


Figure 2. Measurements for sitting posture

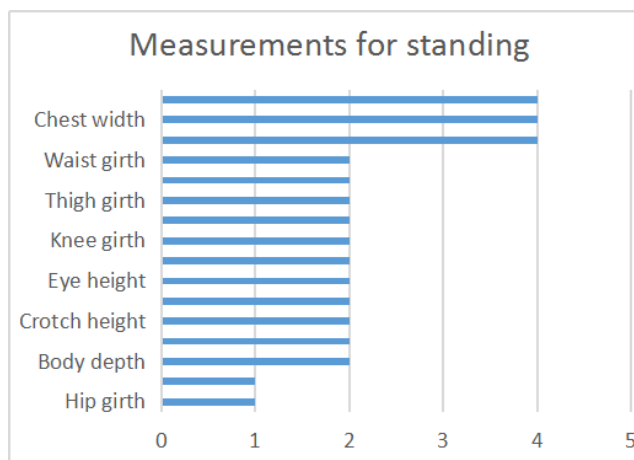


Figure 3. Measurements for standing posture

None of the measurements were statistically analyzed, and there was no region-specific population-type feature, nor was there any further subdivision of different sizes. The anthropometric data in the nine articles were used only for the subsequent design and development of customized functional pants.

### 1.3 Virtual body models

Seven studies used virtual mannequins for functional clothing design. The specific purposes of the virtual mannequins include displaying measurement methods, pattern making, and virtual garment detection. See Appendix 3: Table 3

In three of the studies, the virtual human model is a derivative of 3D measurement, mainly used to show the measurement site and method more intuitively. Two of the modeling processes used Artec Eva 3D optical hand scanners. The measured part is presented in perspective with the scanning diagram. Another study used Anthroscan 2016 (3.4.0.), where points mark the measured sites. To be more intuitive, the study used a large number of virtual models to show the measurement points from different angles.

In pattern making research, Marija and Slavica (2019) used an intelligent radio scanner to research a virtual manikin in pattern making. Its model generation principle is similar to Petrak and Naglic (2017), which is based on point measurement to generate a scattered grid and then create a manikin by filling in the blank of the grid. Cupar, Rudolf, and Stjepanović (2021) used the kinematic construction method and innovated the approach method. Based on the skeleton structure, this method constructs the standard shape of muscle and skeleton and completes the calculation of the simulated human body in combination with the measured BMI. It can achieve a more accurate expression of delicate parts and corners.

## 2 Pattern making

The pattern making process discussed in the nine articles mainly includes two methods, real-life and virtual. Pojilov-Nesmiyan, Ivanov, and Supran (2017) focused on the fabric function and wearing experience, so the traditional natural pattern making method was used to complete the production of a sample garment. Other studies used different methods of virtual pattern making.

In virtual pattern making, considering the lifestyle of paraplegic women, Rudolf et al. (2017) introduced the sum of three-segment lengths from waist to thigh, thigh length, and front knee height as the value of pants length. The algorithm is similar to traditional manual pattern making, except that it relies on 3D virtual human body data.

Ichikari, Onishi, and Kurata (2018) developed Graphical User Interface for virtual pattern making. The virtual design and fitting effect can be constructed by importing the anthropometric measurement data into the system and selecting the clothing type desired by the user. The whole system is in the research and development stage. It is moderately friendly to the standard body shape. At present, the accuracy error is about 1.9% to 4.8%. Similarly, there is the pattern making method of Marija and Slavica (2019). The method is based on the rules of M. Müller & Son, and the Opti Tex CAD/PDS construction system can directly generate the plane structure drawing after completing the

effect drawing design only on the virtual human body to realize the output from 3D to 2D.

Cupar, Rudolf, and Stjepanović (2021) use the same pattern making software as Marija and Slavica (2019). Still, the result of Cupar, Rudolf, and Stjepanović (2021) will be more accurate due to the different methods of virtual human construction in the early stage. The specific method is shown in Figure 4; the construction of the virtual human model is based on skeleton, muscle, and skin. Therefore, in the pattern making progress, only the reverse weighting algorithm for the virtual model skin needs to be completed to obtain the block pattern of the tights. See Figure 4 at Appendices section.

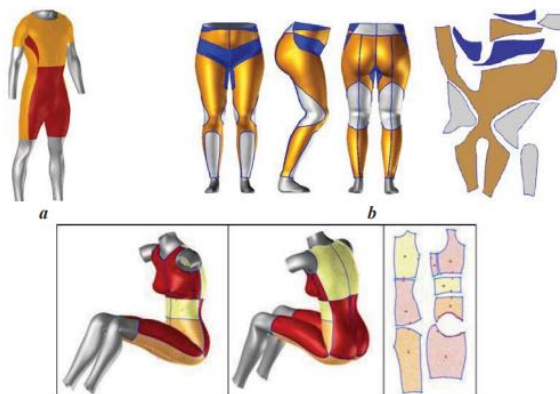


Figure 4. 3D virtual pattern making based on kinematic human models

### 3 Trial-fitting assessment

The trial-fitting assessment in the nine articles mainly includes the structural test of the pants silhouette and the experience test of the material properties. The silhouette assessment is based on various software for quantitative analysis, while the wearing demand test is constructed by the method of interview for investigation.

#### 3.1 Silhouette assessment

The trial-fitting assessment can be divided into simulation fitting and real-person fitting. Four studies involve using a 3D virtual body for fitting detection. The primary purpose is to test whether the pants' structural design and relaxation are reasonable to optimize the design scheme before production.

Unlike the other three items using the observation method to judge the ease allowance of virtual fitting, Rudolf, Stjepanović, and Cupar (2021) used blender 3D software to show the loose amount in the form of surface tension. As shown in Figure 5, X and Y

represent the magnitude of the tension in the horizontal and vertical directions, respectively, and the color distinguishes the strength of the tension. The red area has the most significant pulling force, the yellow and green areas have a little better, and the blue area has the most negligible pulling force. Areas with high tension indicate that ease allowance needs to be added to improve the pattern design.

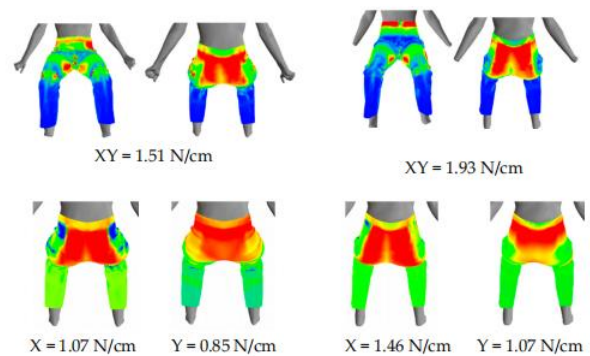


Figure 5. Virtual prototypes without ease allowances and tension in trouser fabric

#### 3.2 Material properties assessment

Pojilov-Nesmiyan, Ivanov, and Supran (2017) tested wheelchair users' demand for functional pants in terms of fabric through interviews and questionnaires after trial-fitting. The test item contained 15 properties: air permeability, water absorption, dustproof, antistatic, tensile strength, and friction-breaking strength. As shown in Figure 6, air permeability, dustproof, and no irritation to the skin were ranked in the top three, accounting for 19%, 17%, and 15%, respectively.

In addition, at the end of the interview, most respondents also expressed the hope that the designer would pay attention to the performance and comfort of the functional pants, which could provide a clear direction for the design and management of the wheelchair in the future.

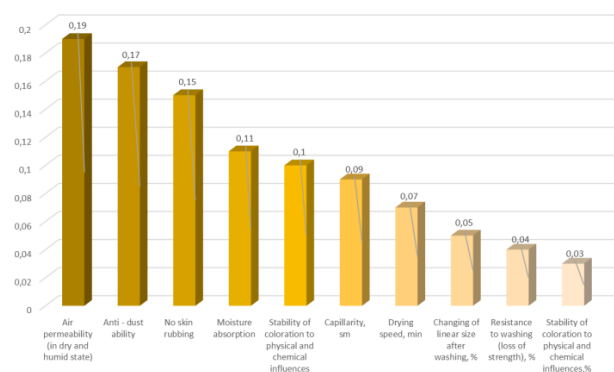


Figure 6. Statistical bar chart of fabric performance demand

## Conclusion

The design method of functional pants for wheelchair users can be summarized based on the review of 9 selected papers. The design of functional pants for paralyzed female wheelchair users has strong customization characteristics. It is necessary to repeatedly test and adjust the design diagram, which can be divided into roughly six steps, including demand investigation, pants design, pattern making, assembly and construction, quality control, and comprehensive evaluation. In anthropometry and design, the most advanced technology is 3D kinematic virtual modeling, which has the characteristics of accuracy and can quickly capture human anthropometric data. In pattern making, the reverse weighting algorithm of virtual human skin can complete the structural transformation from 3D to 2D. It is the most intuitive and convenient method to generate a pants prototype.

## References

- Cui, X. (2015). *Market survey of functional clothing demand for physically disabled people in China. Modern trade and industry*. 2015(4), pp 68-69.
- Cupar, A., Rudolf, A., & Stjepanović, Z., (2021) *Design of Garments Using Adaptable Digital Body Models. TEXTEH Proceedings*. 11(2). pp 1-10.
- Ichikari, R., Onishi, M., & Kurata, T. (2018). *Fitting simulation based on mobile body scanning for wheelchair users. Journal on Technology and Persons with Disabilities*. pp297-311.
- Leipner, A., & Krzywinski, S. (2013, November). *3D Product Development Based on Kinematic Human Models. In Proceedings of the 4th International Conference on 3D Body Scanning Technologies, Long Beach, CA, USA*. pp. 19-20.
- Petrak, S., & Naglic, M. M. (2017). *Dynamic Anthropometry-Defining Protocols for Automatic Body Measurement. Tekstilec*, 60(4).pp254-262.
- Pojilov-Nesmiyan, G., Ivanov, I., & Suprun, N (2017). *Adapted clothes for the mobility impaired. IV-D INTERNATIONAL SYMPOSIUM CREATIVITY TECHNOLOGY MARKETING*. pp 206-217.
- Rizo-Corona, L., Leal-Pérez, A., Rey-Galindo, J., Aceves-González, C., & González-Muñoz, E. (2019). *Development of an Anthropometric Protocol for Wheelchair Users: Guiding the Decision-Making for Designing Inclusive Spaces. In International Conference on Applied Human Factors and Ergonomics. Springer, Cham*. pp. 196-205
- Rudolf, A., & Stjepanovic, Z. (2017). *Protective Garments for Wheelchair Users. In 1st International Conference "Engineering and Entrepreneurship" Proceedings, Tirana, Albania. https://www.researchgate.net/profile/Zoran\_Stjepanovic/publication/326930632\_Protective\_Garments\_for\_Wheelchair\_Users/links/5b6d3cd792851ca6505435ad/Protective-Garments-for-Wheelchair-Users.pdf*.
- Rudolf, A., Görlichová, L., Kirbiš, J., Repnik, J., Salobir, A., Selimović, I., & Drstvenšek, I., (2017). *New technologies in the development of ergonomic garments for wheelchair users in a virtual environment. Industria textila*, 68(2), pp 83-94.
- Rudolf, A., Stjepanović, Z., & Cupar, A. (2021). *Study Regarding the Kinematic 3D Human-Body Model Intended for Simulation of Personalized Clothes for a Sitting Posture. Materials*, 14(18), pp 1-23.
- Marija, N., & Slavica, B. (2019). *Computational Design of Functional Clothing for Disabled People. Tekstilec*, 62(1). pp 23-33.
- World Health Organization & World Bank. (2011). *World report on disability 2011. World Health Organization. Retrieved from https://apps.who.int/iris/handle/10665/44575*
- Zhao, P, (2021). *Experts call for more scientific convenience and skin management after white Paper on quality of life of Chinese patients with spinal cord Injury is released. [ONLINE] Available at: https://hope.huanqiu.com/article/44fvZNYsu5h. [Last Accessed 2, March, 2022].*

## Appendices

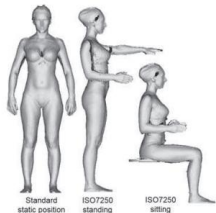
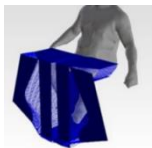
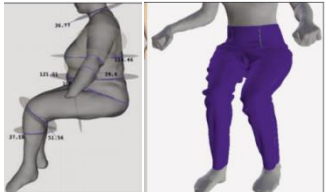
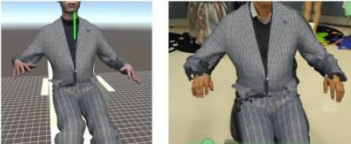
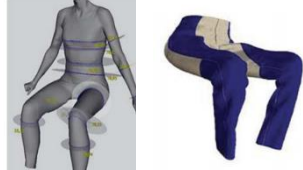
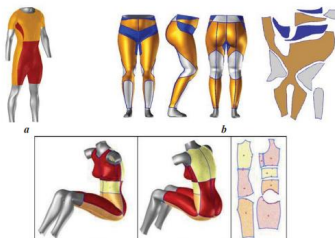
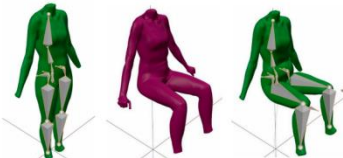
Year	Author	Themes and concepts from the paper								
		Reuirements survey	Special material	Trial-fitting	Antropometric	Virtual 3D scanning	Kinematic 3D models	Pattern making	Virtual garment design	Surface dimensions
2017	Petrak,S., Naglic, M.M.				x	x	x			x
2017	Rudolf. A., Stjepanovic, Z	x	x	x	x	x			x	
2017	Pojilov-Nesmiyan, G, Ivanov, I., & Suprun, N	x	x	x	x					
2017	Rudolf, A., et al.,			x	x	x				
2018	Ichikari, R., Onishi, M., & Kurata, T.		x	x	x	x				
2019	Rizo-Corona, L., et al.				x					
2019	Marija, N., & Slavica, B.			x	x	x		x	x	
2021	Cupar, A., Rudolf, A., & Stjepanović, Z.,			x	x	x	x	x	x	
2021	Rudolf, A., Stjepanović, Z., & Cupar, A				x	x	x		x	x

Appendice 1: Table 1 Summary of themes and concepts of included papers

Table 2 shows the demographic characteristics of the subjects involved in the selected articles. All participants were female, with an average age of 36.75 years. As for the geographical distribution of the research, one-third of the research was carried out in Australia (n = 3), two studies were carried out in Slovenia, and the others were from Croatia, Ukraine, Japan, and Mexico.

Demographic characteristics				
Reference	Sample size	Gender	Age	Nationality
Petrak,S., Naglic, M.M. (2017)	80	F	26.5	Croatia
Rudolf. A., Stjepanovic, Z (2017)	20	F	51.5	Slovenia
Pojilov-Nesmiyan, G, Ivanov, I., & Suprun, N (2017)	—	F	—	Ukraine
Rudolf, A., et al., (2017)	6	F	38.5	Australia
Ichikari, R., Onishi, M., & Kurata, T. (2018)	—	F	—	Japan
Rizo-Corona, L., et al. (2019)	14	F	34.5	Mexico
Marija, N., & Slavica, B. (2019)	—	F	27	Slovenia
Cupar, A., Rudolf, A., & Stjepanović, Z., (2021)	—	F	—	Australia
Rudolf, A., Stjepanović, Z., & Cupar, A (2021)	22	F	22	Australia

Appendice 2: Table 2. Demographic characteristics of included papers

Designers	Virtual body models	Tools	Usages
Slavenka Petrak, Maja Mahnic Naglic		Anthroscan 2016 (3.4.0.)	The simulatn shows the measuring method according to ISO 20685:2010, the international standard of measurement, marking the position
Andreja Rudolf, Zoran Stjepanović		Artec Eva 3D  optical hand scanner	Try on the design effect to detect the stress of the fabric on the body surface
A. Rudolf, J. Repnik, I. Drstvenšek, L. Görlichová, A. Salobir, J. Kirbiš, I. Selimović		Artec Eva 3D  optical hand scanner	The purpose of using the virtual model is to display the measurement site and simulate fitting accurately
Ryosuke Ichikari, Masaki Onishi, Takeshi Kurata		Adjusted Dhaiba model	Simulated fitting experiment
Marija Nakić, Slavica Bogović		Intellifit radio scanner;  The Virtual Dressing Room	In addition to displaying the measured parts, the virtual human body can also be used for pattern making based on existing technology
Andreja Cupar, Andreja Rudolf, and Zoran Stjepanović		Autodesk Maya 2012;  Maya  software plug-in MuscleCreator	The inverse weighting calculation method of creating human skin from 3D modeling can obtain the block pattern of tights in a simulated human body
Andreja Rudolf, Zoran Stjepanović, and Andrej Cupar		Atos V6.0.2-6 software;  Blender 3D	Creating the simulated human body model aims to improve the 3D measurement method, the weighted analysis of bone, muscle, and BMI, and the calculation accuracy of small parts in the scanning process

Appendice 3: Table 3. Virtual body models and usages



# A Study on Multimedia Design Used in Shaping the City Image in Zhengzhou, China

**Authors** Xu, Chen<sup>1</sup>; Koh, Chai Lin Pouline<sup>2</sup>; Wong, Sook Khuan<sup>3</sup>

**Affiliation** <sup>1,2</sup>The Design School, Taylor's University, Malaysia; <sup>3</sup>Saito University College, Malaysia

**Email** xuchen@sd.taylors.edu.my

31 January 2023

**Abstract** *Multimedia design in the city has become a trend presently. City image design reflects the unique city brand and the personality of cities. Nevertheless, numerous existing static displays are applied on the city signs, which do not meet the needs of today's smart city evolution. Hence, the situation limits the public communication of the city's image and decreases the emotional interaction between the city and its citizens. This study aims to examine the application of multimedia used in shaping Zhengzhou's city image. Observably, 51.97% of the respondents stated that the city image of Zhengzhou did not make a deep impression on them, while 38.21% viewed the city image as a poor "visual symbol" promotion. Meanwhile, 12.36% perceived that the city has a good image with considerable room for improvement. The results also disclosed that 48.66% of the respondents regarded the "Erqi Tower" as the most representative element of the city. Additionally, 50.29% of the citizens highlighted the "Erqi Tower" as the landmark of Zhengzhou in the new city construction as an important image. The study limitation is that the survey used a convenience sampling method, which is only suitable for preliminary pilot tests.*

*Future research should invite professional designers to conduct interviews on designing multimedia display content to explore the combination of culture and technology further. This study contributes to the body of*

*knowledge by improving Zhengzhou's city brand and the construction of a smart city.*

**Key words** Visual symbol; Multimedia; City image; Zhengzhou; Smart city

## Introduction

Nowadays, smart cities have gained more attention in academic, industrial, and government reports concerning the utilization of new media technologies in city construction. Smart cities are mostly used to describe and spread technologies that make city infrastructures more efficient while personalizing the city experience (De Lange, & De Waal, 2017). Every city possesses a unique personality and regional culture where multimedia design is a form of high technology and makes the city image creation and more general public works, which are perceived as operable, interactive, and interesting. With the development of multimedia, it has become popular to make traditional design dynamic and interactive. A designer can now choose various dynamic verbal and visual media instead of the traditional combination of text and pictures on a static medium. Furthermore, computer-based interactive graphical presentations are more effective than printed materials (Narayanan & Hegarty, 2002). Many cities in China have gradually emphasized the significant influence of city image development while the image is a brand card of the city and the embodiment of inner-city competitiveness. A good city image can bring more opportunities to effectively improve the quality of citizens' lives and the economic level of residents. Nonetheless, many existing static displays on the city signs do not meet the needs of today's smart city evolution, hence limiting the public communication of the city's image and decreasing the emotional interaction between the city and citizens. This study aims to examine the application of multimedia used in shaping Zhengzhou's city image.

## Problem Statement

Currently, the competition between cities has changed from the competition of pure economic index to comprehensive strength, including the city image, which has become a critical part of the city competition. Nevertheless, with the development of modern science and technology, the unidirectional communication of traditional artistic expression techniques can no longer meet the requirements of interaction and public participation in modern smart city image design (Tan, 2014).

In the 2017 National Central City Development Report, a comprehensive assessment of China's eight existing national central cities revealed that the top three cities were Beijing, Shanghai, and Guangzhou followed by Chongqing, Tianjin, Wuhan, Chengdu, and Zhengzhou. The survey revealed that the

international image of Zhengzhou city in the center of the eight major domestic rankings is not as high as Beijing, Shanghai, and Guangzhou, which left clear impressions on citizens. Conversely, Zhengzhou did not create a deep imprint despite its convenient transportation location and the profound culture of the central plains. Additionally, no clear visual symbols of the city image exist. Therefore, promoting Zhengzhou's cultural soft power and shaping its unique city image are essential issues in constructing its city image.

**Literature Review**

This section is divided into three parts: "City Image," "Citizens," and "Multimedia." The study aims to examine the multimedia design used in shaping Zhengzhou's city image using a conceptual framework (see Figure 1) to guide the research.

The prominent American scholar Kevin Lynch (1960) highlighted five elements in "City Image": Path, Edge, District, Node, and Landmark, which play a crucial role in the intentionality of cities. A unique city image can be formed if these five elements are properly organized and designed, which grants citizens a sense of security and enhances the connection between citizens and cities. A city's visual symbols in city image design can show the static graphics and the dynamic processes. The static elements include print ads, city construction, and city sculpture. Dynamic performance is generally combined with various media platforms for the show, including app interface, cultural venues interaction experience, and city-building dynamic video playing (Zhang & Luo, 2020).

Traditional city image building primarily uses a traditional artistic expression with a relatively fixed and single form. After including various media designs in city image shaping, the creation expression forms of city images are enriched to a large extent. The development of a series of online platforms, such as smart travel, online registration, bus stop signs, illegal inquiry, and city circle develops an intangible connection to the human context. The relationship between cities and citizens is constantly connected (Liang et al., 2019). The emergence and rapid spread of smart city applications facilitate the city life of citizens and effectively promote city culture.

The creative design of museum applications, such as the Palace Museum, has effectively enhanced citizens' cultural awareness.

Compared to traditional mass media, such as printed material with features that have little interaction with users, multimedia design is a form of communication that uses a combination of numerous content forms, such as text, audio,

images, animations, or video into an interactive presentation (Vellaichamy & Jeysankar, 2015). The prominent feature of multimedia systems is the incorporation of continuous media, such as voice, video, and animation (Furht, 1994). Wilson (1991) suggested that visitors that use interactive multimedia create a more appealing, useable, and effective product for the audience. Tang and Zhao (2022) added that the smart city public art planning and design system under the multimedia Internet of Things environment that integrates scene elements positively affects smart city design.

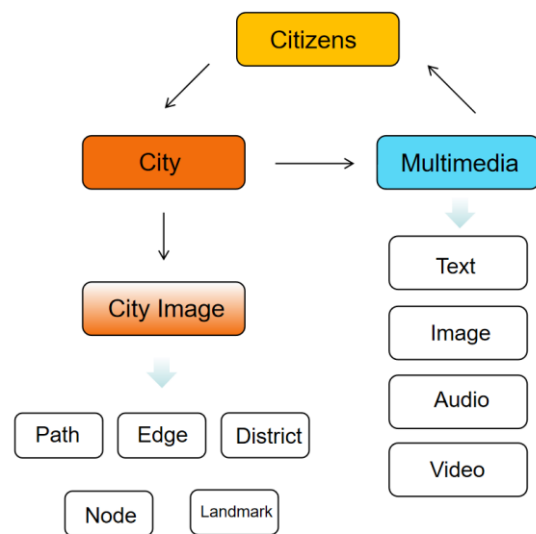


Figure 1. Conceptual framework for multimedia design in Zhengzhou city image

**Methodology**

A convenience sampling method was used in the survey, which is an uncomplicated and economical type of non-probability sampling. Roscoe (1975) proposed that a sample size of over 30 and under 500 is suitable for most behavioral studies. The survey was conducted on January 2022 for approximately one month via an online questionnaire among Zhengzhou residents. The respondents were mainly permanent residents of Zhengzhou contacted using Wen Juanxing (WJX) and the major Chinese social application platform, Wechat. Finally, 150 questionnaires were selected for the survey. The survey mainly evaluated Zhengzhou in three parts: the first impression of Zhengzhou city, citizens' attention to the construction of Zhengzhou's city image, and the way citizens obtain information from the city of Zhengzhou. After data collection, results were analyzed using the Statistical Package for Social Sciences (SPSS) by univariate analysis to interpret the data.

**Findings and Discussion**

The results revealed that 51.97% of the respondents perceived that Zhengzhou's city image did not make a deep impression on them. Additionally, 38.21% of citizens perceive Zhengzhou as a city with poor visual symbols and only 12.36% think that the city has a good image. Hence, Zhengzhou has considerable room for improvement in the process of city image construction. Meanwhile, the most representative elements of Zhengzhou city were investigated where the respondents were presented with the following options: Erqi Tower, Central Business District (CBD), Henan Museum, Shangcheng Ruins, Huangdi's Hometown, Shaolin Temple, Bronze ware, Braised Noodle, Spicy Soup, and Zhongyuan Tower. Finally, 48.66% of the citizens selected Erqi Tower, which was considered the most representative element of Zhengzhou. Moreover, 50.29% of the citizens hoped that the "Erqi Tower" would be highlighted as Zhengzhou's landmark and important image in the new city construction. In the survey of ways to obtain information from Zhengzhou city, we found that 66.14% of the respondents "study, live, and travel in Zhengzhou" and 33.86% of citizens chose through the "internet." Thus, these citizens tend to interact with the city through their real feelings.

Based on the questionnaire, people have great expectations for the "Erqi Tower" landmark and hope to interact more with the city. The following suggestions were proposed to explore the application of multimedia design in Zhengzhou's city image.

**Path:** LED media in the city's main road

"Path" is the route for citizens to walk, take vehicles, and move, such as busways, walking ways, city expressways, tunnels, or railroads. Path is the dominant element in the city image. The integration of new media art installations into the space on both sides of the surrounding environment of the main road complements the elements of the city image and expands the creative space for multimedia art. For example, in designing and communicating modern city images, LED display media has been extensively used, which can play dynamic videos in a loop through advanced LED technology. The efficiency and interaction of the city image can be further improved if the LED display is placed in commercial centers, cultural centers, and transportation roads with significant traffic flow.

**Edge:** Interactive landscape installation on the riverbank

"Edge" is the boundary between two types of space, which is often in the form of a riverbank line, shoreline, railway, and city wall. The interactive landscape installation can be placed in Zhengzhou's representative riverbank or scenic lake area. The audience and space can be integrated through the

contact and interaction between people and multimedia technology, hence the citizens can enjoy the interactive experience in the city.

**District:** An immersive art display at the city square

A medium or large area is a category of space element. Public art in city squares usually tends to attract people. Zhengzhou can utilize the city square to integrate immersive interactive media into large activity squares, such as "Erqi Square," "Greentown Square," and "Qianxi Square" to drive other activity programs in the area and improve citizens' intimate perception of the city image.

**Node:** Interactive installation artworks in public space

Typical nodes in the city mainly comprise road intersections, squares, and subway stations. These nodes are located strategically, such as hubs, traffic interchanges, or road interchanges, which people easily remember. Citizens have high expectations for new media art installation designs for public art in Zhengzhou, such as the "Erqi Tower." "Erqi Square" is considered a live theater and interactive communication environment to produce a sense of reality and further promote the interactive ability between public art and citizens.

**Landmark:** Multimedia art display of city landmarks

Multimedia art can strengthen the characteristics of city markers (Tan, 2014). It is suggested that on certain nights of important festivals in the future, citizens can enjoy 3D mapping or music performances interacting with lighted landmark buildings, such as "The Erqi Tower" of Zhengzhou. This interaction between landmark buildings and citizens during festivals could improve Zhengzhou's image and citizens' recognition of the city.

Sculptures that represent the city image should also be designed and placed in representative places in the city center to increase the possibility of interaction with citizens. These fixtures should also be molded and packaged in various media forms to present the characteristics of the city.

Meanwhile, animated short films related to the city image should be created and broadcasted through the Internet and TV to fully display Zhengzhou's vitality and charm as a prominent historical and cultural city.

**Conclusion**

Presently, city image has become a critical part of city competition but traditional artistic expression techniques can no longer meet the requirements of interaction with modern smart cities. A significant issue involves promoting Zhengzhou city's cultural soft power to shape its unique city image. Therefore, this study examined the multimedia design method used to shape Zhengzhou's city image. Finally, based on the survey of citizens in Zhengzhou and Kevin Lynch's city image theory, the study proposed to integrate multimedia applications into Zhengzhou's city image. The findings demonstrated an interaction between the city and its citizens. Therefore, Zhengzhou can create a more diversified, dynamic, and human-computer interactive city image to improve the city brand and economic value. The limitation of this study is that the survey used a convenience sampling method, which is only suitable for the preliminary pilot test. Future research should design more rigorous and detailed questionnaires and investigate the attitudes of different groups, such as professional designers to determine how to design multimedia display content to further explore the influence of culture and technology on multimedia design in Zhengzhou's city image.

## References

- De Lange, M., & De Waal, M. (2017). *Owning the city: New media and citizen engagement in urban design. In Urban land use* (pp. 109-130). Apple Academic Press.
- Furht, B. (1994). *Multimedia systems: An overview. IEEE MultiMedia*, 1(1), 47-59.
- Jianbo, Z. H. O. U. (2020). *VR-based Urban Landscape Artistic Design. Journal of Landscape Research*, 12(1).
- Liang Tian, Peng Guochao & Xing Fei. (2019). *Status and problem analysis of Smart city APP in China. Library and information work*(08),65-73. doi:10.13266/j.issn.0252-3116.2019.08.009.
- Ling Min. (2013). *Five Characteristics of American Public Art in perspective. Decoration* (9), 5.
- Lynch, K. (1964). *The image of the city. MIT press*.
- Narayanan, N. H., & Hegarty, M. (2002). *Multimedia design for communication of dynamic information. International journal of human-computer studies*, 57(4), 279-315.
- Psomadaki, O. I., Dimoulas, C. A., Kalliris, G. M., & Paschalidis, G. (2019). *Digital storytelling and audience engagement in cultural heritage management: A collaborative model based on the Digital City of Thessaloniki. Journal of Cultural Heritage*, 36, 12-22.
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences (Second ed.)*. New York: Holt Rinehart and Winston.
- Tan Liang. (2014). *Research on the application of new media Art based on Guangzhou City Brand Image. Beauty and The Times: Creativity (Part 1)* (8), 6.
- Tan Liang. (2014). *The shaping of city image by new media art from the perspective of city image. Research on Design Art*(3), 7.
- Tang, C., & Zhao, L. (2022). *Smart City Public Art Planning and Design in a Multimedia Internet of Things Environment Integrating Scene Elements. Scientific Programming*, 2022.
- The Ministry of Education in China, Institute of Urban Sciences Shanghai Jiao Tong University. (2018). *2017 National Central City Development Report*. <https://gz.focus.cn/zixun/f3ab289234854877.html>.
- Vellaichamy, A., & Jeyshankar, R. (2015). *Information and communication te among the physical education students in Alagappa University, Tamilnadu. In Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries* (pp. 340-360). IGI Global.
- Wang Liyan. (2019). *Research on visual symbols of urban culture based on improving urban competitiveness. Beauty and The Times: The City* (8), 2.
- Wang, M. (2021, May). *Research on urban architecture landscape design based on virtual reality technology. In Journal of Physics: Conference Series* (Vol. 1904, No. 1, p. 012013). IOP Publishing.
- Wilson, K. S. (1991). *Multimedia Design Research. In Hypermedia & interactivity in museums: Proceedings of an international conference* (Vol. 14, p. 26). Archives & Museum Informatics.
- Yang Guting, & Ma Zhenlong. (2011). *Multimedia technology application of urban image communication in the Internet era. Art and Design: Theory Edition* (10X), 3.
- Zhang Shu & Luo Li. (2020). *Research on the construction of visual symbols of Wuhan city image. Design*(06),146-148

# Lighting Design for Human Gathering During the Pandemic: A Case Study of Public Light Art “Urban Sun”

**Authors** Yang, Yi Hsuan Rochelle<sup>1</sup>; Roosegaarde, Daan<sup>2</sup>

**Affiliation** <sup>1</sup>Art and Design Program, The Hang Seng University of Hong Kong; <sup>2</sup>Studio Roosegaarde

**Email** rochelleyang@yahoo.com

31 January 2023



Figure 1. The Urban Sun installation uses far-UVC lights to make outdoor spaces safer during the pandemic. It can only be used at night, and people still need to wear masks and observe social distancing. (Image source: Studio Roosegaarde, 2021)

**Abstract** During the pandemic, social distancing affected our social life and took a toll on our emotional health. Many people turned to the arts for comfort and to cope with social isolation and frustration. Historically, humans have always been visually expressive beings. Art has delivered messages and created an impact on us over the centuries. In recent years, innovative digital technology has enabled lighting design to reach new horizons and go beyond its fundamental functions of illumination and decoration, especially during critical times. Investigating the development, contribution, and effectiveness of lighting design in the field of environmental design is now needed.

*The study utilizes lighting sanitization to combat viruses and provide people with a “safe zone” in public spaces. It is an experiment of the human psychology and social impact of creating a space for art where viruses cannot be transmitted. The UV light, part of the artistic expression, is also used to neutralize the coronavirus. How does lighting design facilitate human interaction and communication? Do people respond to art differently when they feel safe without their masks on? How do we raise environmental awareness through the art of light?*

*The paper presents a case study of “Urban Sun” by Dutch Artist Daan Roosegaarde and his team. It is the world's first large-scale light display that also cleans public spaces of the coronavirus to facilitate human gatherings. There will be an in-depth discussion on methods used to combine creativity, technology, and science to enhance environmental protection and awareness through public light installation.*

**Keywords** UVC light, sanitization, public art, installation, Urban Sun

## Introduction

Let’s be the architects of our future and create better places to meet and interact.” – Daan Roosegaarde.

The blend of technology and light art can generate the emotional power of art, touching and connecting people’s hearts and conveying profound messages. Multifaceted digital art and visual presentations can trigger human reactions, create awareness, address critical social issues and relieve stress. According to a report by the Arts Council England in 2021, the pandemic has caused significant economic and psychological hardships like anxiety and loneliness. Many people turned to the arts as a vital means of coping with these challenges. Through artistic interaction, we feel deep emotions together, find connections, share common experiences, and create impact.

The innovations of “Urban Sun” by Dutch artist Roosegaarde are designed to use digital light art to raise awareness, relieve people of anxiety, trigger human sentiments, and inspire and connect people. “Urban Sun” purifies public spaces of the coronavirus with a far-UVC 222nm light, setting people free from mask-wearing by providing a safe,

sanitized space. It encourages people to step into public spaces and re-energize themselves under the “Sunlight” that is vital and natural to all humankind. The paper will analyse and summarize the methods of combining digital creativity, aesthetics, technology, and science to re-connect people in public and nature; and further explore the impact on people’s well-being.

## Problem Statement

### *The Unseen Smile*

Since the spring of 2020, the COVID-19 pandemic has emerged as a global health threat. Consequently, social distancing was made a requirement and was practiced worldwide. In the early days of the pandemic, people were willing to suppress themselves to minimize social connections. Social interactions like hugging family and friends, neighbourhood and group gatherings, and activities in gyms and malls were limited or banned altogether. Wearing face masks was also encouraged or made mandatory in most countries. Even though social distancing orders have been relaxed in some countries recently, wearing masks has become “the new normal” in post-pandemic Asia and many other places worldwide. However, face masks pose challenges in comprehending facial expressions (Mheidly et al., 2020), resulting in a lack of closeness in face-to-face interpersonal communication. Humans are inherently social creatures. Hence interpersonal communication covered by a face mask would increase social anxiety, confusion, and, eventually, a sense of loneliness.

It is undeniable that artwork in any form normally expresses a view, emotion, or concept. Art that combines scientific research meant to improve human well-being is uncommon. Roosegaard claimed that he was determined to explore the potential of far-UVC after reading about it in *Nature*, one of the most cited science journals in the world. The artist and his team brainstormed the idea of utilising light to clean the cities during the pandemic so that the simulated sunlight could provide a safer public area for people to interact.

This brings several questions necessary for further research: 1) Can public art installations help relieve anxiety and social isolation? 2) How do we raise environmental awareness? 3) What impact can we foresee with “Urban Sun”? 4) How does it reduce the risk of infection in public spaces? 5) How does light work as a disinfectant, and how long would it take to sanitise one pocket of space? 6) Can the “Urban Sun” be brought into walled spaces, and is it also effective in the daytime?

The study will use “Urban Sun” as a case study to examine the role of art installations in bringing

people together and the methods used to combine art, science, technology, and nature. It will identify the most significant factors of the installations through interviews and literary reviews.



Figure 2. “Urban Sun” is designed to make human gatherings safer without wearing face masks and to shorten the distance between people. (Image source: Studio Roosegaard, 2021)

## Literature Review

The world has been under turbulence in recent years. During the critical times of the pandemic, people sought more comfort, humanity, and strength that the arts could express from a distance. Public art and installations that can deliver messages from afar boomed, generating positivity and giving a sense of community and hope during social distancing times.

Public installations to raise awareness became very popular during the pandemic. For example, dozens of colourful, human-shaped sculptures entitled “The Gratitude installation” was assembled in Manchester and a few city centres in the UK. There were 51 sculptures dedicated to those who sacrificed themselves and saved lives on the frontlines of the pandemic. The sculptures offered thanks to the NHS staff and volunteers from diverse backgrounds who displayed tremendous effort and courage during the pandemic. The public sculptures symbolized community strength and were created by a number of artists involved in this theme. The sculptures were accompanied by real-life audio stories about these key workers and their heroics, recorded by famous voices (Jason, 2021) (View Appendix 1).

In 2021, Argentinian artist Tomás Saraceno created a permanent and unique art installation to help the public visualize the difference a single degree Celsius can make in our warming world. He envisioned the Aerocene as an international movement for environmental awareness. He fleshed out this concept with an air balloon shaped like a big black berlingot sweet, a poetic and utopian mode of transport for people, goods, and services. (National Geographic, 2021) This art installation aims to free

the air from fossil fuels, moved by the wind, and lifted only by the sun and air (View Appendix 2).

In 2021, Roosegaarde and his team of designers, external experts, and scientists challenged themselves to discover how the power of light can be used to cleanse viruses and enhance people’s well-being by providing them with a worry-free social space.

It is undeniable that artwork in any form expresses views, emotions, or concepts, but art combined with scientific data set to improve human well-being is uncommon. Roosegaard was determined to explore the potential of far-UVC light after reading about the information in Nature, one of the world’s most cited scientific journals. The artist and his team brainstormed the idea of utilising light to clean the cities during the pandemic. The simulated sunlight could help provide a safer and cleaner zone so people could interact in public.

Although scientific research was not the aim of this study, “Urban Sun” was regarded as a unique innovation utilising UV light as the key element to create public art. It brought people hope and comfort. The image of the Sun is often associated with its role as a source of energy, luminance, and natural disinfectant. The objective of “Urban Sun” was to take these roles further by combining them with digital technology, light science, and art installation. It aims to facilitate the interaction of people under social distancing rules by removing face masks under UV light.

**Methodology**

The aim of “Urban Sun” is to make public spaces virus-free with UVC light. To discover the probability of converging scientific function with public art, the study adopts comprehensive data search on 1) the functions of sunlight and 2) scientific reports and case studies on the effectiveness of artificial UVC light, as well as 3) the role of public art’s impact on mental support during the pandemic.

A study that forms the basis of the project for “Urban Sun” was published in Nature Magazine in 2020.

The science behind the project is based on multiple-reviewed journal articles authored by scientists from Columbia University and Hiroshima University (Roosegaard, 2021). It stated that "The sensitivity of the coronaviruses to far-UVC light, together with extensive safety data which suggests that it may be feasible to have the lamps providing continuous low-dose far-UVC exposure in public places – potentially

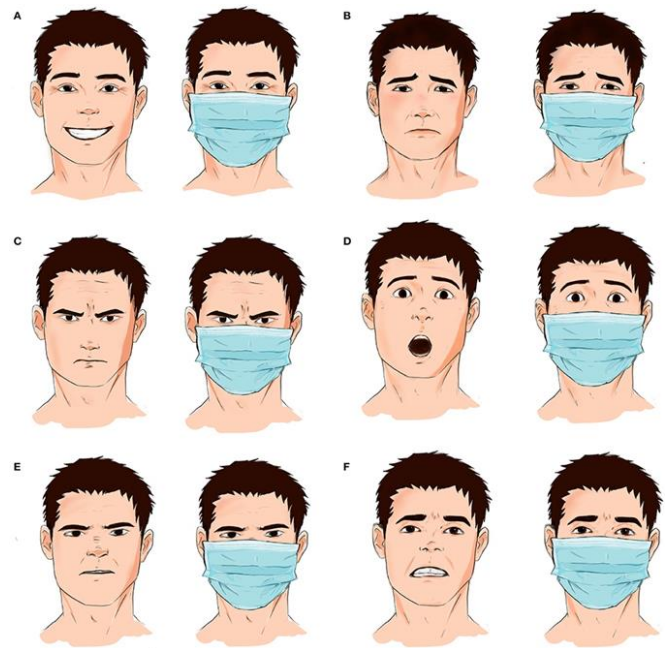


Figure 1. Face masks cover the middle and lower portions of the face. As such, facial expressions involving the mouth, lips, teeth, and nose are masked during interpersonal communication. (Image source: PERSPECTIVE article. Public Health, 09 December 2020)

reducing the probability of person-to-person transmission of coronavirus as well as other seasonal viruses such as influenza."

Research shows that though traditional 254 nm UV light is harmful, the new far-UVC light with a wavelength of 222 nanometres can actually sanitize viruses safely (M Buonanno, 2020). Often called germicidal UV, UVC light is a chemical-free and the most effective form of sterilization and air purification.

The project streams concentrated 222 nm UVC light from an aerostat, stationary light aircraft. Virtual simulations have shown how the installation can cleanse an area ranging from 95 square metres within minutes, which is suitable for small exhibitions, Roosegaard claims. The above scientific reports make the virus reduction function evident for “Urban Sun.” (View Appendix 3)

**Conclusion**

According to the Sun Institute, recent research shows that natural sunlight kills potentially harmful bacteria and improves air quality in indoor environments. It has long been known that sunlight is a powerful disinfectant and bactericide (Sorenson, 2014). The “Urban Sun” art installation has created a meaningful and significant association with the natural sun. The artificial sunshine shaped like an eclipse can offer people a safe area to walk in. The psychological connection with hope and energy with

“Urban Sun” was immediate for pedestrians, according to observations by the design team after a few months.

<https://www.studio Roosegaard.net/project/urban-sun>

Pedestrians were informed of the scientific background behind “Urban Sun” so they could be comfortable unmasking. Mask removal was not intuitive while interacting with “Urban Sun.”

Nevertheless, it was evident that the “Urban Sun” concept was innovative in combining light technology and public art, and it does work scientifically to reduce the threat of infection. Based on the artist’s statement, the project is not intended to create a guaranteed safe space but to give people hope and warmth in a public space. It has provided a unique public art that can reconnect people, strengthen the sense of community, and relieve people from anxiety during social distancing.

## References

Buonanno, M., Welch, D., Shuryak, I., & Brenner, D. J. (2020). Far-UVC light (222nm) efficiently and safely inactivates airborne human coronaviruses. *Scientific Reports* 10, 10285

D’Alesio (2021). Virtual simulations indicate a positive impact of the Urban Sun in reduction of airborne coronaviruses in public spaces. *Politecnico di Milano*.

Dowell, Lindsley, Brooks (2022). Reducing SARS-CoV-2 in Shared Indoor Air, *Jama Journal of American Medical Association*.

Hardwick (2021). Use of 222nm far-UVC in public space, as in Urban Sun, should prove to be both safe and effective. *ResInnova Laboratories, Washington D.C.*

Markus (2021). *Urban Sun, Dezeen Magazine*.

Mheidly N, Fares MY, Zalzale H and Fares J (2020) Effect of Face Masks on Interpersonal Communication During the COVID-19 Pandemic. *Front. Public Health* 8:582191. doi: 10.3389/fpubh.2020.582191

Miller (2021). Can art help raise awareness about climate change? *National Geographic*.

Slim (2021) *About UVC. Klaran University*.

Sorenson (2014). *Sanitizing with sunlight: The best disinfectant know, Sunlight Institute*.

Studio Roosegaard (2021). *WORLD’S FIRST URBAN SUN CLEANS PUBLIC SPACE OF CORONAVIRUS FOR BETTER HUMAN GATHERINGS. Press Release.*  
<https://www.studio Roosegaard.net/project/urban-sun>



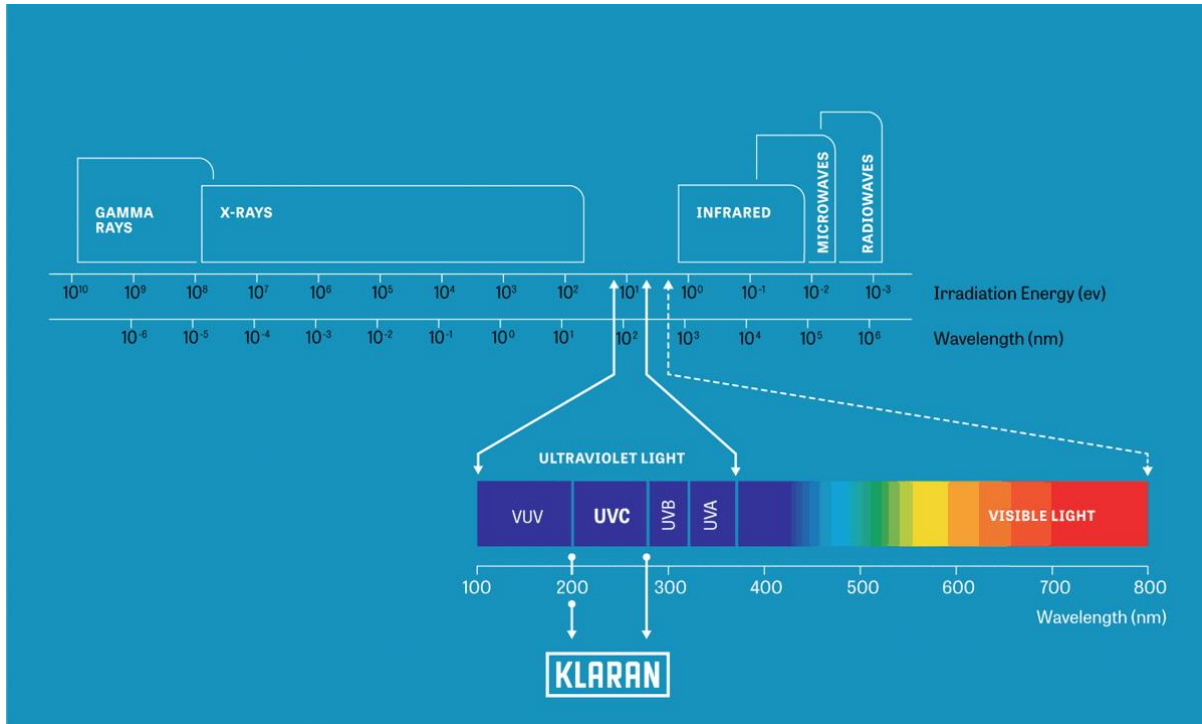
## Appendices



Appendix 1. Gratitude statues at the Central Library, "a message of unity and togetherness," organisers said (Image: David Oates Photography)



Appendix 2. Lifted only by the sun and the energies of the atmosphere – without lithium, solar panels, helium, or fossil fuels – Tomás Saraceno's flying sculpture, a synthesis of art, science, and environmental activism, took off on 28 January 2020 at Salinas Grandes, in the province Jujuy, Argentina. (Photo credit: Tomás Saraceno, Aerocene Foundation, 2021)



Appendix 3. 200 nm to 280 nm UVC –functional for disinfection and sensing (Image source: Crystal IS Company, 2018)

# Factors Affecting Music Promotion on Short Video Platforms—A Case Study of TikTok in China

**Author** Zhou, Mengchen  
**Affiliation** Shenzhen University, China  
**Email** ammengchen@163.com

31 January 2023

**Abstract** *Short videos play an increasingly crucial role nowadays, enabling users to obtain more information quickly and engage spontaneously. Douyin (a Chinese version of TikTok) is the leading and most popular music-based app among short video platforms in China. The music usage on TikTok mainly serves two purposes: background music and music marketing. Regardless of the aim, the use of music will encourage more people to engage in video production. This action leads to viral videos where the music used gains instant popularity. Nevertheless, little research has examined the elements of music promotion on short-time platforms and whether these apps are a friendly marketing strategy for unknown musicians. This study used a text analysis method with data from TikTok to identify the factors leading to successful music promotion and uncover possibilities for musicians to gain fame in the digital world.*

**Keywords** Music Promotion, Short Video Platform, Music factors, Video factors

## Introduction

The entire music industry has undergone significant changes due to digital technology. The technology in the Internet era facilitates the spreading of information and enables instant communication and interaction with accurate analysis of customer preferences. New product forms, such as digital music, online concerts, and short music videos, have emerged, including digital platforms. As one of the

new forms of digital platforms, TikTok is significantly distinct. In 2016, TikTok launched in China and entered the international market in 2017. Subsequently, the app has gained massive popularity and become the most downloaded application in the United States and globally by 2020 (Nakafuji, 2021).

TikTok is a short video platform using music as its product differentiation. Therefore, music is equivalent to TikTok's DNA, which plays an irreplaceable role in short videos. Every short video on the platform is accompanied by music where the role of music varies. Several videos use songs as background music to spark the atmosphere or arrange plots based on the music's rhythm. Other videos are produced for music promotion, such as covering artists' songs, performing a novel song, and recording it as a short video. Although the original aim for one user to cover others' songs is for entertainment on a user-generated content platform, the popularity of these cover versions popularizes the original versions immediately.

Regardless of the role of music, the popularity of these videos is inseparable from the operation mechanisms of the short video platform, such as the mature algorithm, information push principle, and interactive experience centered on interest. These mechanisms enable a short video with music to be precisely pushed to the target audience. Upon gaining sufficient interaction on a small scale, the system will regard the video as a potential and drive the video to a larger pool of audience. After several times in a short period, the video becomes famous on TikTok, thus making the music clip popular. TikTok users who feel the clip is interesting will continue searching for the complete song on music streaming platforms, creating a new music promotion strategy.

See Appendice 1: Figure 1. An Evaluation Index System of Music Short Videos on TikTok

See Appendice 2: Table 1. 48 Music Short Videos with Music and Video Factors

## Problem Statement

Therefore, TikTok has become an efficient platform for musicians to present their works to the public. All types of musicians, famous figures or novices, have started to promote their music on TikTok. Traditional record companies are also willing to collaborate with TikTok. Unlike early consumers who only believed in the brand of singers and record companies, TikTok audiences tend to use the music from singers with little or no fame, which brings unknown musicians more exposure and opportunities to be famous.

Contrary to the depression of live music performance, digital platforms have gained economic benefits and continue to prosper during

the COVID-19 pandemic (Zhang & Negus, 2021). Thus, the questions worth considering are: How does this digital short video platform, as an intermediate, influence the interaction between listeners and musicians? How do musicians promote music on TikTok, and what factors are involved in successful music promotion?

See Appendice 3: Table 2. Music Factors

## Literature Review

### *Digital platforms and music*

The various music products are digital music, albums, and online concerts (Jiang et al., 2021). These products started in the 2001 iPod press conference where Steve Jobs stated, "It's a thousand songs in your pocket," thus gradually making digital music a trend of cultural products for consumers. At present, short videos have become a new form of music product.

In addition to traditional record companies that produce music content, new music content providers have emerged, such as search engines, music studios, original individuals, and music websites (Jiang et al., 2021). Music streaming services and short videos have become new platforms that help music creation and promotion.

Nancy believes music is usually presented on digital platforms by playlists that suit users' specific scenes, such as music for dinner, fitness exercises, or learning (Hanrahan, 2018). Most playlists are named after emotions and specific activities rather than music styles, genres, or artists (Hanrahan, 2018).

### *Digital platforms and music promotion*

From the art marketing perspective, music has been transferred from traditional media, such as TV and broadcasting, to digital platforms. For instance, music streaming platforms, such as Spotify, and social media platforms, namely Facebook, YouTube, Weibo, and TikTok, where music can be promoted with unprecedented efficiency (Zhang & Negus, 2021). The technical characteristics of digital platforms enable listeners to choose music with higher personalization and interactivity (Botstein, 2020).

Digital platforms are no longer limited to being marketing channels but have gradually become content producers. Music is a good example. In China, short video platforms (such as TikTok) and music streaming platforms (such as QQ Music and Netease Cloud Music) have launched the "Musician Training Plan," which encourages musicians to create original content. These mediums offer musicians more opportunities to showcase their talent and provide more high-quality content for the platform (Zhang & Negus, 2021). The audience

becomes an active participant instead of a passive receiver, which allows them to participate positively due to the real-time interaction, thus establishing a good connection with musicians.

### *Music function*

Since the advent of gramophone records, whether portable gramophones players in the 1920s, transistor radios in the 1950s, cassette players and beatboxes in the 1970s, or contemporary personal stereos and iPods, recorded music has provided an ambiance for various specific venues and activities (Zhang & Negus, 2021). People did not focus on the music when playing it but regarded it as an accompaniment while performing other activities (Zhang & Negus, 2021). Hence, music has gradually become an indispensable background in various scenes.

Consequently, the emotional value of music (instead of music style, music genre, or artists) could be the main reason people are willing to listen to it. In Nancy's study, subjects had eclectic listening habits where they listened to different music in varying emotional states. The music style is not the most critical factor affecting consumers' music consumption, but the determinant is how to connect with consumers' moods and match the current situation (Hanrahan, 2018).

### *Video function*

Compared with photos, videos can transmit more information, including more details of emotions and atmosphere (Du, Liechty, Santos, & Park, 2020). Using sound in videos, especially music sound, is essential. Studies have highlighted that voice plays a dual role in the experience, which makes people focus and intensifies people's actions. Meanwhile, voice can enhance the emotional experience (Liu, Shi, Teixeira, & Wedel, 2018). Therefore, video is a media form with multiple overlays of images, sounds, emotions, and scenes.

Research revealed that the multisensory integration of interaction, scenery, sound, and feeling in short videos aroused their desire for travel consumption (Du, Liechty, Santos, & Park, 2020). Tourism videos can stimulate the pleasure of imagination and enable the audience to enter the scene (Du, Liechty, Santos, & Park, 2020). Therefore, video form significantly aids the expression of emotion. In the past, emotional factors were often used in movie trailers, as emotion (similar to the content and performance of movies) also plays a vital role in experiencing movies (Liu, Shi, Teixeira, & Wedel, 2018).

### *Literature gap*

Many scholars have conducted in-depth discussions on how digital platforms affect user participation, consumer behavior, and other social and psychological factors (Lee, Lee, Moon, & Sung, 2015; Jiang et al., 2021; Du, Liechty, Santos, & Park, 2020). Studies have also outlined related communication subjects (Wang Chaoyang & Wu Ke, 2022) and user participation influence factors (Du, Liechty, Santos, & Park, 2020) on TikTok. Nevertheless, these studies are not related to music. Little research has examined how to produce and promote music on the short video platform.

### Research questions

1. What factors affect music promotion on the TikTok platform?
2. And how do they influence?

### Methodology

This study used various research methods, including case studies, judgmental sampling, and text analysis. First, TikTok (Chinese version) was selected as the research case by classifying the composition factors of short music videos and creating an evaluation index system of short music videos that influences users' participation in TikTok. Second, in selecting the TikToker, the study chose the 16 most popular songs from the 2021 TikTok best song list officially launched by Chinese TikTok using judgmental sampling. Finally, a video search related to these 16 songs was conducted on TikTok to identify the top three short music videos with the most likes for each song. Overall, 48 videos were used as research samples and analyzed using a text analysis method.

As the research is aimed at studying the factors of short music videos, selecting an official song list is not enough as it only proves the degree of music popularity. Nevertheless, due to limited data available during research, the study identified the order of video likes using the search function on TikTok. Hence, the likes on these short videos were used to judge the degree of user participation. Three short videos with the most likes were included as samples corresponding to each song. Judgmental sampling was used due to the large volume of short videos on TikTok. Specifically, the study selected videos that successfully attracted users to participate. Therefore, TikTok's official top song list and the music in short videos with the most likes represent successful short music videos.

Inspiration for the factor of music in short videos originated from the presentation factors on TikTok by Wang Chaoyang & Wu Ke. Additionally, the author's observation on the characteristics of short music videos on TikTok was used to create an evaluation index system of music in short video factors affecting music promotion on TikTok, including music and video factors. The music factors

include mood, melody, rhythm, lyrics, style, and singer identity. In contrast, video factors include video scenes, facial expressions, body movements, video effects, and the identity of performers (see Figure 1). Furthermore, the connection between the music short video factors and user engagement was determined using the indicators of the research samples, including short video publishers, number of fans, short video likes, short video types, topics, and duration (see Appendix 2: Table 1).

### Findings and Discussion

Out of 48 short music videos selected, the publishers were from official accounts, online celebrity accounts, and TikTok musician accounts. Video likes ranged from 328,000 to 6280,000, while video duration ranged from 10 seconds to 4 minutes.

From the perspective of music elements (see Table 2), most of the 16 popular songs expressed positive emotions, with only one sad song indicating that most audiences prefer music with positive emotions. Additionally, nearly 69% of songs contained a strong rhythm, which brought the audience a sense of being positive, inspired, and energetic. Moreover, five songs with weak rhythms presented a lyrical melody. Ordinary people, non-singers, and professionals easily understood most lyrics.

From the perspective of video elements (see Table 3), approximately 67% of TikTokers preferred to use the indoor environment for shooting due to being more casual and not worrying about the weather, light intensity, and other issues. Secondly, 77% of video producers displayed positive facial expressions, while only 5 of 48 short video producers did not show their faces. These five producers might be highly concerned about their privacy and are talented enough to use voice to attract the audience. Thirdly, 43% of video producers used gestures, specifically auxiliary gestures, which were consistent with the music's rhythm or lyrics. Several producers used interactive gestures to interact with the viewers on screen. For example, Duan Yi used interactive gestures to communicate with the audience on the screen, although he did not show his face when singing Dangerous Party. Moreover, 13 videos used full-body movements, with only two using full-body dance movements to fit the music rhythm. Finally, over half of the short music videos used lyrics to offer a better sense of hearing. A total of 10 short videos were edited using functions such as splicing, slow motion, and filters, while 25% of the samples did not use any video effects.

The study combined the short video types, topics, music elements, and video elements and revealed the following findings based on the research questions:

1. The emotion, rhythm, and difficulty level of the music lyrics can affect the type of user engagement.

Specifically, those songs with strong lyricism and simple melodies are more likely to be covered. Music with a strong rhythm that is complex for non-professional musicians to sing is easier to be used as visual content, which fits the rhythm. After rhythm and content were adapted, the cover version with positive emotions was more popular than the original songs with negative emotions, such as Fenghuang Chuanqi's cover of Seabed.

2. Video scenes, facial expressions, and video effects have no direct impact on user engagement. The body movements in the video change to fit different music emotions or lyrics. Actors with a high appearance in the video would relatively make it easier for the video to be popular, while the song only functions as background music.

3. The interaction function on TikTok is important for music success. Certain musicians, such as the famous Chinese artist Li Yugang or Little Ghost, know how to interact with audiences excellently and are easily popular. Music short videos from user-generated content gain popularity easier if the contents contain unique phenomena or popular topics in society, while the music is simply for setting off the atmosphere.

4. Influencers are important but not necessary for music promotion. If the musicians are influencers and cover the songs or promote others' new songs, the song can become popular in a short time. Therefore, influencer plays a vital role in music promotion. Interestingly, although some musicians are not influencers, their short videos can also be viral as long as they sing well.

#### Critical Discussion:

The short video platform has brought great changes to music production and distribution. In terms of production and compared to the music streaming platform, most music formations in the short video are clips with shorter duration. Based on the author's observation, the production process of music is shortened, and only computers can be used to form a preliminary demo, which could reduce the creation threshold and stimulate producers' creative enthusiasm. Unlike music streaming media that mostly use playlists to curate music, music can be displayed through popularity or recommendations on short video platforms. Moreover, most successful contents are interactive and include popular topics to attract the audience's attention. This change in music visualization allows music products to no longer rely solely on auditory comfort and emotion but emphasize social presence through visual arts. Thus, involved parties should comprehend how to use the platform's special topics and algorithm logic to create new content.

The platform has also changed musicians' creative thinking. The platform acts as a bridge that connects

the audience and musicians to gain feedback from users and optimize their content easily. Meanwhile, musicians also tend to identify the potential needs of users during interactions, thus indicating the direction for future work. In the past, the fame of musicians and the references from authoritative experts played an important role in the traditional distribution process. Nevertheless, these elements are no longer the decisive factors for the success of music works.

From the perspective of power, the platform has increased the visibility of musicians and their pieces. Non-professional singers or new musicians can gain traffic and attention through their high-quality music content, which brings more visibility to newcomers. This situation raises the possibility of becoming popular and enhances the equality of power. Nonetheless, this power diminishes when musicians and music depend on the platform as they must comply with the platform rules. For example, musicians must follow the standards and requirements of the platform when uploading their videos, or otherwise, they will fail. Furthermore, creators who do not follow the platform rules when creating and operating music works (such as following hot topics to create content or buying traffic) may lose traffic, thus losing visibility among viewers. Consequently, musicians are forced to create videos based on the platform rules, which would significantly damage their artistic expression and equality. See Appendix 4: Table 3. Video Factors

#### Conclusion

This study highlighted the factors that affect music promotion on TikTok, which can be classified into music and video factors. Concerning the research question "how the factors influence music promotion," the short video types, topics, and music and video elements play a role in music promotion, which interact with each other. The contributions of this study include enabling musicians who intend to use the short video platforms to do art marketing using the aforementioned music and video factors with the assistance of popular topics and influencers (if necessary). Finally, the study critically discussed how the short video platform affects music production and distribution and its inequality.

This study attempted to identify the factors influencing music promotion on TikTok by using the text analysis method to discuss the main factors. Future research should consider employing a quantitative approach using more data to establish the mutual effect between these factors. Additionally, further discussions about the impact and transformation of music production and promotion should be conducted.

#### References

Botstein, L. (2020). *The Future of Music in America: The Challenge of the COVID-19 Pandemic*. *The Musical Quarterly*, 102(4), 351-360.

Du, X., Liechty, Toni., Santos, C. A., & Park, J. (2020). 'I want to record and share my wonderful journey': Chinese Millennials' production and sharing of short-form travel videos on TikTok or Douyin. *Current Issues in Tourism*, 25(2), 1-13.

Hanrahan, N. W. (2018). *Hearing the Contradictions: Aesthetic Experience, Music and Digitization*. *Cultural Sociology*, 12(3), 1-14.

Jiang, M., Lin, L., Zhang, W., Zhuang, W., Jin, M., & Lin, Y. (2021). *A Study on the Influencing Factors of Mobile Digital Music Selection in Subhealthy People Based on Perceived Value Theory*. *Wireless Communications and Mobile Computing*, 2021, 5547044.

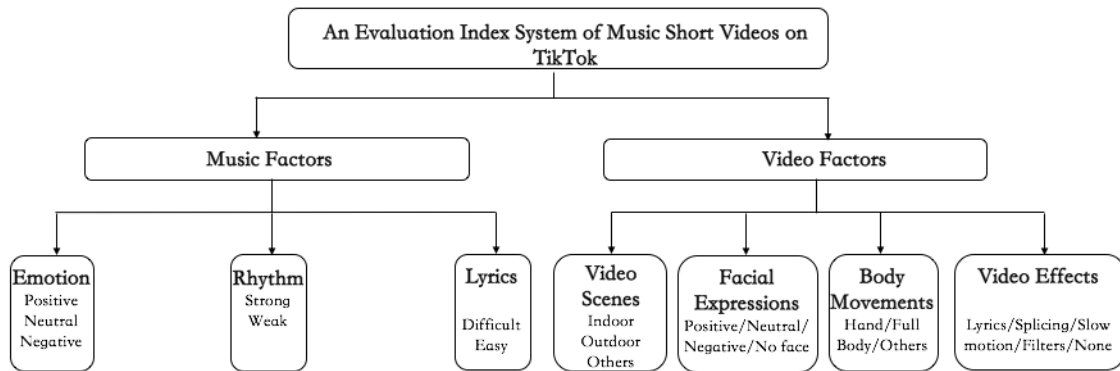
Lee, E., Lee, J., Moon, J. H., & Sung, Y. (2015). *Pictures Speak Louder than Words: Motivations for Using Instagram*. *Cyberpsychology, Behavior, and Social Networking*, 18(9), 552-556.

Liu, X., Shi, S. W., Teixeira, T., & Wedel, M. (2018). *Video Content Marketing: The Making of Clips*. *Journal of Marketing*, 82(4), 86-101.

Nakafuji, R. (2021, August 9). *TikTok overtakes Facebook as world's most downloaded app*. *Nikkei Asia*. <https://asia.nikkei.com/Business/Technology/TikTok-overtakes-Facebook-as-world-s-most-downloaded-app>.

Zhang, Q., Negus, K. (2021). *Stages, Platforms, Streams: The Economies and Industries of Live Music after Digitalization*. *Popular Music and Society*, 44(5), 539-557.

Appendices



Appendix 1: Figure 1. An Evaluation Index System of Music Short Videos on TikTok

Name of Songs	Music Factors			Music short videos					Video Factors				
	Emotion	Rhythm	Lyrics	No.	Publisher	Subscribers	Likes	Category	Actors	Video scenes	Facial expression	Body movements	Video effects
1. 这世界那么多人 莫文蔚	Neutral	Weak	Easy	1.1	抿抿甜	550k	1299k	2 cover	None	Outdoor	No face	Others	Lyrics
				1.2	池文慧	805k	1213k	2 cover	池文慧+两个吉他伴奏	Indoor	Positive	Others	Lyrics
				1.3	旺仔小乔	13900k	886k	2 cover	旺仔小乔	Indoor	No face	Others	Lyrics
2. 万疆 李玉刚	Positive	Strong	Easy	2.1	人民日报	1.6亿	6287k	2 cover	张桂梅; 华坪女高高考学生	Outdoor	Negative	Others	None
				2.2	李玉刚	11300k	3510k	2 cover	李玉刚	Indoor	Positive	Hand	None
				2.3	李玉刚	11300k	3337k	2 others	李玉刚+保洁大叔	Outdoor	Positive	Others	Splicing
3. 漠河舞厅 柳爽	Positive	Strong	Easy	3.1	湖南卫视	23230k	3554k	2 cover	言承旭	Indoor	Negative	Hand	Lyrics
				3.2	村里的孩儿	803k	1955k	2 cover	黑龙江村里学生们	Indoor	Positive	Hand	Lyrics
				3.3	普及现场live	322k	1618k	1 Original	柳爽	Indoor	Neutral	Hand	Lyrics
4. 风吹过八千里 苏星婕	Positive	Weak	Easy	4.1	爱豆研究室	1768k	1066k	2 others	马天宇	Outdoor	Negative	Others	Splicing
				4.2	是大飞鸟哇	66k (婚礼跟拍)	681k	2 others	新娘素人	Outdoor	Positive	Full body	Splicing
				4.3	拽哥毛豆	234k	447k	2 others	哈里波特演员艾伦	Indoor	Negative	Others	Splicing
5. 海底 (Live) 凤凰传奇	Positive	Strong	Easy	5.1	凤凰传奇玲花为歌而赞 (综艺)	4515k	4246k	1 Original	凤凰传奇	Indoor	Positive	Hand	Lyrics
				5.2	浙江卫视	26343k	659k	1 Original	凤凰传奇	Indoor	Positive	Hand	Lyrics
				5.3	檀健次	4282k	3636k	2 dance	檀健次	Indoor	Positive	Full body	None
6. 风吹一夏 DP龙猪 / Sweil / Rays陈袁	Positive	Strong	Easy	6.1	张晋max	10211k	2989k	2 dance	张晋+小汤圆	Outdoor	Positive	Full body	None
				6.2	彭十六elf	34036k	1427k	2 others	彭十六elf	Outdoor	Positive	Full body	None
				6.3	跑酷俊文	3252k	2777k	2 others	The Kid LAROI & Justin Bieber	Indoor	Positive	Full body	Splicing
7. STAY The Kid LAROI & Justin Bieber	Positive	Strong	Difficult	7.1	_13	235k	2426k	2 others	前奏无人声	Outdoor	Positive	Hand	Slow motion
				7.2	SWINGMAN.ZE	1748k	2339k	1 Original	Justin Bieber	Indoor	Positive	Hand	Lyrics
				7.3	天赐的声音 (综艺)	6839k	2505k	1 Original	胡海泉; 希林娜依高	Indoor	Negative	Hand	Lyrics
8. 唯一 告五人乐团	Negative	Weak	Easy	8.1	阿谣音乐	2253k	2148k	1 Original	告五人乐团	Indoor	Positive	Hand	Lyrics
				8.2	这是李萝卜	791k	1476k	2 cover	这是李萝卜	Indoor	Positive	Others	Lyrics
				8.3	街崽	1546k	1049k	2 others	游戏场景	Others	No face	Others	Splicing
9. 好久不见 LilJet(陆政廷 LilJet)	Positive	Strong	Easy	9.1	街崽	1546k	540k	2 others	游戏场景	Others	No face	Others	Splicing
				9.2	U米	1273k	516k	2 cover	U米	Indoor	Positive	Full body	Lyrics
				9.3	V仔	1847k	1973k	2 cover	V仔	Indoor	Positive	Others	Lyrics
10. 爱就一个字 (弹唱版) 李巍 (V仔)	Positive	Weak	Easy	10.1	小郑嘻嘻	3699k	557k	2 others	小郑嘻嘻	Indoor	Positive	Full body	Filters
				10.2	V仔	1847k	516k	2 cover	V仔	Indoor	Positive	Others	Lyrics
				10.3	段弋	2517k	1253k	2 cover	段弋	Indoor	No face	Hand	Lyrics
11. 危险派对 王以太/刘至佳	Positive	Strong	Easy	11.1	赤热城市 (综艺)	804k	440k	2 cover	乃万 王以太	Indoor	Positive	Full body	Lyrics
				11.2	刘至佳	3745k	420k	1 Original	刘至佳	Indoor	Positive	Full body	Lyrics
				11.3	扎根措	1635k	2457k	2 cover	扎根措	Outdoor	Positive	Hand	Lyrics
12. Mood 24kGoldn/iann dior	Positive	Strong	Difficult	12.1	Lil ghost小鬼	7320k	1809k	2 cover	Lil ghost小鬼+24kGoldn	Indoor	Positive	Hand	Lyrics
				12.2	原唱才排到第三r0	1997k	1603k	1 Original	24kGoldn/iann dior	Outdoor	Positive	Hand	Lyrics
				12.3	落日放映室	1095k	1126k	1 Original	沙一汀EL	Indoor	Positive	Hand	Lyrics
13. Red lips 沙一汀EL	Positive	Strong	Difficult	13.1	homie音乐馆	122k	501k	1 Original	沙一汀EL	Indoor	Positive	Hand	Lyrics
				13.2	HipHop说唱诗人	19k	328k	1 Original	沙一汀EL	Indoor	Positive	Hand	Lyrics
				13.3	风风	71k	2491k	1 Original	泥鳅	Outdoor	Positive	Hand	None



ID	Title	Emotion	Strength	Difficulty	Views	Comments	Views	Comments	Genre	Environment	Emotion	Body	Effects	
14.	花, 太阳, 彩虹, 你 Mai/法老/肯迪仔	Positive	Strong	Difficult	14.2	法老_Pharaoh	2245k	1404k	1 Original	法老_Pharaoh	Outdoor	Positive	Hand	Lyrics
					14.3	一栗小莎子	11871k	1323k	2 others	一栗小莎子	Indoor	Positive	Hand	None
					15.1	少年管家 科比布莱恩特之家	1538k	2656k	2 others	素人体育生	Outdoor	Positive	Others	None
15.	银河与星斗 yihui 苡慧	Positive	Weak	Easy	15.2	科比布莱恩特之家	1189k	1717k	2 others	科比、奥巴马等	Indoor	Positive	Full body	None
					15.3	JoJo也是铲屎官	1381k	1605k	2 others	素人, 小猫, 孩子	Indoor	Positive	Others	None
					16.1	爆胎草莓粥	14502k	2164k	2 others	爆胎草莓粥	Indoor	Positive	Full body	None
16.	Dancing in My Room 347aidan	Positive	Strong	Difficult	16.2	Real机制张	11281k	1435k	2 others	Real机制张	Indoor	Positive	Full body	Filters
					16.3	铁岭县刘辉商店	7554k	1347k	2 others	铁岭县刘辉商店	Indoor	Positive	Full body	None

Appendix 2: Table 1. 48 Music Short Videos with Music and Video Factors

Music Factors		Number of songs	%
Emotion	Positive	14	87.50
	Neutral	1	6.25
	Negative	1	6.25
Rhythm	Strong	11	68.75
	Weak	5	31.25
Lyrics	Difficult	5	31.25
	Easy	11	68.75

Appendix 3: Table 2. Music Factors

Video Factors		Number of short videos	%
Video scenes	Indoor	32	66.66
	Outdoor	14	29.17
	Others	2	4.17
Facial expressions	Positive	37	77.08
	Neutral	4	8.33
	Negative	2	4.17
	No face	5	10.42
Body movements	Hand	21	43.75
	Full body	13	27.08
	Others	14	29.17
Video effects	Lyrics	26	54.17
	Splicing	7	14.58
	Slow motion	1	2.08
	Filters	2	4.17
	None	12	25

Appendix 4: Table 3. Video Factors

# Liberalisation of Indian Graphic Design as a cultural paradigm

**Author** Ayushi Jain

**Affiliation** Lasalle College of the Arts

**Email** ayushijain3001@gmail.com

31 January 2023

**Abstract** *When a piece of design fails to convey who it is for, where it comes from, and why it looks a certain way, it loses its purpose. During 19th-century British rule, colonists selfishly appropriated India's art and design culture to suit their aesthetic sensibilities. This takeover kick-started India's design identity depreciation and put Euro-American design at the forefront. Furthermore, globalisation created design standards focusing on western norms and portrayed Indian ornamentation and aesthetics as kitsch. With the development of the digital era, international design became very easy to access through media platforms; hence Indian designers started getting more influenced. This toxic cycle continued to push India's ethnic identity to the back burner, and design in India began to lose its cultural context. This dissertation aims to identify the circumstances that led to the loss of a defined ethnic identity and emphasizes the role of Indian designers in building it back up.*

**Keywords** Indian design, cultural semiotics, nationalism, Westernisation, ethnic inspiration

## Introduction

When you come across your favourite laundry detergent in an Indian supermarket, you question what makes it visually "Indian." Does the choice of font, colours, and illustration style help define a cultural identity? Globalisation changes almost all life functions and finds itself in visual identities. Keeping up with international norms has inevitably led to a distorted view of the Indian design discourse. Whether in posters or packaging, Indian design has

stopped communicating the local scent of the nation. Identities are being borrowed from international sources, leading to the dilution of cultural representation in Indian graphic design. A few factors contribute to the weakening of India's decorative identity. For a long time, the colonial administration shaped the development of Indian design during the 19th-century British Raj in India. The ruling brought in western influences that depreciated the value and craft of Indian design. Colonial modernity put its foot down on the pillars of authentic Indian design that honoured handiwork, ornamentation, and the use of local natural materials. Besides the visual culture, routine activities such as transportation, language, and public facilities favoured British consumption and utility. This shift created a blanket of colonial modernism over the Indian ways of being, eventually leading to an unintentionally skewed idea of the true nature of India's ethnic design identity.

## Problem Statement

Consumer goods can represent the ethnic identity of a country through distinctive design features and cultural preferences. The excessive westernisation of emblematic brand identities dilutes the ethnic identity of a nation and disregards its historical worth.

The British influence has sustained itself in the contemporary environment for alternative design mediums such as digital. As technology advances, so does society's demand for digital art and design. Today's generation is more tech-savvy, which leads to a greater reliance on social media and digital media platforms for creative inspiration. The digital landscape has made it easier for artists to gain exposure to their work, leading to an increasing number of talented individuals joining the scene. Visual research is an excellent methodology for understanding what the public is looking for in art and design. Designers' most common source of inspiration comes from digital media platforms such as Pinterest. The ubiquity of Pinterest is so prevalent that it has become an adjective. Drawing inspiration from existing designs is not the issue here. Designers look at the Zeitgeist through inspirational pictures, often resulting in the loss of a cultural context. When designers collectively draw inspiration from similar sources, designs look homogenous. Arjun Appadurai highlights the issues of digital networks and their relationship with an object's fundamental design purpose: its ability to generate contexts (Appadurai, 2014). Design elements can act as cultural motifs that represent a nation and its people. It is only natural that exposure to digital media leads to shifts in cultural narratives because of the accessibility to cross-cultural exposure.

“The design carries the flow of cultural materials, and cultural materials convey the essence of a nation” (Hall, n.d.).

The increasing pattern of design outcomes that cling to western graphic design norms is compromising the structure of Indian design. My research aims to describe the semiotic role of local visual identities in strengthening India's ethnic design identity and cultural unification by restoring traditional forms and practices. It seeks to emphasise the lack of local resources that can help raise awareness around the background of Indian design and its impact on culture. The research aims to create a sense of urgency surrounding the need to educate younger generations who entertain cosmopolitan consumerism and have higher exposure to western media. There is an emphasis on considering the importance of retaining a local identity instead of fostering an international one. The research highlights a designer's role as a tool of cultural transfer. It demonstrates how digital platforms increase the absorption of international design styles for ethnic design identities. The purpose is to underline the insecurity that surrounds Indian design as a result of a digital compulsion created by design platforms.

## Literature Review

### Theme 1: National identities

a) In the book *Design and National Identity*, Martinez creates a framework that correlates design with national identities. The relationship between form and function is best understood through a theoretical approach using existing design examples. It attempts to define the role of design in forming a nation's identity with the impact of globalisation. It describes a top-down approach to design by weighing modernist theories and primordial theories linked to objects of everyday life. Javier creates interventions with theorists who have attempted to connect design and national identities. The book tries to understand this concept through the lens of Banal Nationalism. It focuses on design history that weighs high design with everyday commodities (Martinez, 2016).

### Theme 2: Visual Culture

a) *Visual Culture* by Margarita Dikovitskaya articulates the role of visual imagery in strengthening a cultural context. The book starts by giving a background on Visual Culture. It outlines the emergence of visual culture and its adoption by historians to explore cultural contexts. It claims that culture is a figurative, symbolic, and linguistic system that prompts political, economic, and social discourse. Dikovitskaya further describes the different interpretations of the term Visual Culture by philosophers and theorists. It talks about material culture and its impact on people. The conclusion states

*the possibility of imagery having a conceptual basis as a tool for understanding a cultural environment (Dikovitskaya, 2006)).*

### Theme 3: Semiotics

a) In his book *Mythologies*, Barthes takes the meaning of a myth as a cultural signifier and lays down a collection of examples, using them to prove that anything can be a myth. He expresses Levi-Strauss's perception of a myth stating that every symbol has a meaning. Barthes wants people to know that every cultural product has a meaning conditioned by a myth. He drew upon the ideologies of Saussure and used myths to express cultural associations. The book defined connotations and denotations and expanded on their relationship. It describes how myths can be used as forms of speech. Each example is deeply analysed to prove the second stage of decoding as a deeper communicator of an ideology (Barthes, 2015).

### Theme 4: Indian Visual Culture

a) A chapter from *World History of Design* by Victor Margolin explains where Indian design comes from in lavish detail. Margolin lays down a detailed timeline starting from the role of crafts, the Swadeshi movement, the Orientalists and Crafts Romanticism, foreign designers and Indian consumers, Gandhi and the politics of Khadi, Industrialisation and the British policy, Industrialisation and the Indian response, Typography, Publications, Advertising, finally ending at film posters. The book identifies a crucial feature of Indian graphic design being pieced together from various unconventional sources. The detailed history behind the foundation of Indian design imposes a question of whether it can be defined clearly (Margolin, 2017).

The themes of national identity, visual culture, semiotics, and the Indian visual culture are brought into tangency when discussing how semiotics of cultural design play a role in building an identifiable and distinct national design identity. Within the realm of research, we are trying to identify how the colonising of Indian design led to a loss of cultural identity. What key factors played a role in weakening the local visual communication system? Why did the manipulation of the root base of India's visual cultural identity lead to a holistic distortion?

## Findings and Discussion

This research's semiotic and ethnological nature requires research methods that collect qualitative outcomes. It was essential to determine whether other Indian designers and students sensed a lack of usage and awareness surrounding ethnic Indian design. The first methodology used was the unconventional Love/Break Up Letter research method requiring participants to personify a

provided concept or object and then write a love letter or a breakup letter for it (Tsai, 2022). This method effectively gathers data about the empathetic qualities the participants attach to India as a country. Using design as a symbol of a nation's unique cultural values is a potent way of communicating national identity. The letters are divided into adjectives that refer to ethnic objects. The

Love/Break Up Letter methodology flows into the second part of the research. Visual ethnography is the study of concepts or society using imagery. The ethnography was carried out through an interdisciplinary approach of photographic documentation and gathering visuals from secondary sources such as local Indian digital archives. There was also a need to understand the reason behind the continued lack of representation in the modern age. To understand this, I conducted unstructured interviews with experienced Indian design agencies. The open-ended nature of the interviews facilitated expressive and qualitative dialogues expressed through subjective experiences or encounters with industry practice. Each interview began with the primary question of whether they thought India had a defined graphic identity. The interviewees were asked to give reasons for their opinion and describe what made them feel this way. Other informal sources of discussion and research included podcasts and conferences on discord servers.

The Love letter and breakup letter method yielded an array of positive and negative adjectives. Many letters emphasised India's physical beauty and traditional Indian design methods such as raw materials, print, iconography, typefaces, and so on, highlighting the country's long history of design in all forms. Others discussed emotional connections between people, longing, nostalgia, and the emergence of negative emotions. Landscapes, diversity, natural beauty, secretive, zestful, homeliness, modernism, cross-cultural, motherly, idiosyncratic, toxic love, pain, corruption, sanctuary, and so on were among the adjectives. These adjectives were enough to conjure up images of India as seen through the eyes of its people.

The research's theme and purpose were stated for the unstructured interviews with the Indian designers. Rachit Tank from Tankr design claimed that many reputed design agencies he worked at in his college days were blatantly copying work from Pinterest and borrowing from international designers. He expressed that designers who have existed in the design system for a long time cannot be wholly blamed as they are exhausted even after contributing to multiple cultural designs. Rachit Tank believes that if his co-workers immerse themselves in the physical nature of India, it produces something more authentic to Indian

culture. He explained how finding the visual elements of design should be the last step in the design process to eliminate bias. He illustrated it with a simple example of designing house icons for different countries, which naturally vary according to their architectural features. Therefore, design needs to start from inspiration. He claimed, "If the point of inspiration available is international, you will end up with an international-looking design." Sunidhi Nangia, an art director from Animal Co. India, claimed the advent of globalisation was because Indian design was considered inferior and goods were required to compete in an international market. She thinks the gap exists because India has always had a richer history in art than design. Sunidhi drew from her personal college experience in which she and her classmates had to draw out or paint their ideas first, be it advertisements or typography. She described how the first instinct to open Pinterest or Behance for visual referencing was primitive to a designer as opposed to local Indian art archives. She felt it is not useful to gather research from Indian archives as they lack a designer's perspective. India. She claimed that design needs to be addressed at a grass-root level. It should start with the design education systems in India and implement basic design fundamentals like Indian-type design. Manav Dhiman, a well-known Indian type designer, began by expressing dissatisfaction with the amount of documentation available for European and American design. He felt there was no other alternative source because of this. The only way to source Indian design is by looking at unchanged physical products such as Tobacco boxes and fireworks packaging. Manav expressed the inescapable reality of globalisation but spoke about how one can be conscious of its usage. Manav talked about how people have a wrong impression of India not having a defined design language.

## Conclusion

The nature of Indian design is heavily multidisciplinary. Identifying the gaps in its representation requires extensive research into India's timeline of art and design. There is also the possibility of not being able to define Indian graphic design, which is still being explored. Since Indian design and its identity gap have not been spoken about much and are a relatively new discussion within the community, there aren't enough traditional secondary research sources available as references. Most research comes from informal sources such as articles, podcasts, interviews, and websites. The research must rely heavily on primary research, which requires extensive and diverse user research. The study would benefit researchers from various backgrounds to produce qualitative results.

Expanding the conversation about Indian design will prevent the deterioration of the country's ethnic design identity. It is in the hands of Indian design

educators, designers, and students to become conscious of the distorted ways of creativity that digital media channels foster. They need to raise awareness about the importance of designing with a context and for a nation. Design says a lot about a country and its people. Indian design is rich with influences from all four of its geographical boundaries. The beauty lies in its expansiveness, so it doesn't matter whether it can be clearly defined. Inspiration is necessary but choosing the right source of inspiration is crucial. There is a need to change the way Indian billboards, advertisements, packaging, and brand identities look and the entirety of its visual culture. Design is one of the few inanimate tools to connect with people and tell stories. It must be done correctly.

## References

- Appadurai, A. (2014). *the future as cultural fact. essays on the global condition. Social Anthropology*, 22(2), 227–228. [https://doi.org/10.1111/1469-8676.12072\\_1](https://doi.org/10.1111/1469-8676.12072_1)
- Barthes, R. (2015). *Mythologies. Éditions du Seuil.*
- Dikovitskaya, M. (2006). *Visual culture: The study of the visual after the cultural turn. MIT.*
- Margolin, V. (2017). *World history of design. Bloomsbury Academic.*
- Martínez, J. G. (2016). *Design and national identity. Bloomsbury Academic, an imprint of Bloomsbury Publishing Plc.*
- Tsai, E. (2022). *The Love Letter Breakup Letter. Medium.* Retrieved October 30, 2022, from <https://medium.com/research-methods-group-3-spring-2021/the-love-letter-breakup-letter-ef6b66cbc7c>.