

Title	サステイナブルファッションのための感情的および美的要因を促進におけるアート由来ファッションデザイン方法の提案
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Doctoral Dissertation

A Proposal of Art Derivative Design Methods in Fashion to  
Promote Sustainable Consumption Through Enhancing  
Emotional and Aesthetic Factors

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## Abstract

The two forms of art and fashion appear in today's society in an increasingly close relationship. Fashion brands are willing to release avant-garde and trendy images through collaboration with artists. Regarding the combination of art and fashion, the most relevant research has focused on the exploration of commercial value and the analysis of forms of art and fashion brands' cooperation. However, there is little research on art derivatives from the perspective of design ethics to explore sustainable design methods. It is important to understand whether the lasting and stable characteristics of artworks can play a role in prolonging the life cycle of fashion products when art is integrated into fashion.

This doctoral research conducted a unique navigation experiment on extending the life cycle of fashion products through art derivative design method. The research clarifies the impact of aesthetic emotions on consumers' emotional durability of fashion products, and examined whether art-derived design can be used as an effective approach to promote the inconspicuous consumption of fashion products. The research conducted quantitative approaches to understanding the characteristics of fashion art derivatives which differentiate them from common fashion products and other categories of art derivatives. These findings can be valuable to provide guidance for the theoretical research of sustainable fashion design. The Main Research Objective (**MRO**) is to recommend a set of design methods to promote sustainable fashion through a collaborative design approach of fashion as an art derivative. Accordingly, two sub-objectives are set. The first sub-objective (**SRO1**) of this thesis is to identify emotional factors in art derivative design for consumers to extend the life cycle of fashion products. The second sub-objective (**SRO2**) is to propose art derivative design methods to relieve the irrational and unsustainable problems of fashion design.

The first study to fulfill **SRO1**, namely **Study 1**, clarifies the impact of aesthetic emotions on consumers' emotional durability of fashion products. Four design methods of fashion art derivatives were proposed, and 24 samples were selected for testing. There were two questions in the questionnaire. For question 1, respondents were required to select five

favorite products from the reference list of emotion words and rank them in order of favorite to general. For question 2, respondents need to truthfully select the two emotional words to express their emotional feelings for the five products based on Russell's 'pleasure-arousal' emotional model (Russell, 2003). The second study to achieve the *SRO2*, i.e., *Study 2*, conducted a unique experiment on whether art-derived design can be used as an effective approach to promote the inconspicuous consumption of fashion bags. As there is a strong correlation between inconspicuous consumption and brand image, this study selected 87 bag designs from 19 fashion brands and 46 artists and art institutions as a sample. The study classified how brand image is presented in bags to analyze the relationship between brand image, art-derived design methods, and brand groups.

The finding of *Study 1* suggested that the direct participation of artists in design is conducive to better emotional value. Interviewees have the highest recognition of products produced by artists' direct participation in design. Besides, a significant correlation was found between the developed period of derivatives and respondents' preferences. The result shows that compared to ordinary fashion products, fashion derivatives designed five years ago can still be enjoyed by consumers, which supports that the lifecycle of art derivatives may longer than that of common fashion products. Derivatives that experience time precipitation may be more popular with respondents. Moreover, the study shows that the emotions evoked by respondents' preferred samples were mainly in-depth emotions, which indicated that collaborative design could distinguish fashion derivatives from common fashion products and obtain longer lifespans.

The finding of *Study 2* shows that although art-derived design methods are inconsistent across the different fashion brand groups, printing is still the most common way to present artistic elements in fashion bags. Besides, the inherently highly distinct brand image of fashion brand bags is weakened by incorporating an art element, which may demonstrate that art-derived design methods can aid in developing inconspicuous design and consumption, which can be important for a more diversified and rational fashion industry.

By evaluating the impact of aesthetic emotions on consumers' emotional durability of art-

derived fashion products, *Study 1* demonstrates that art-derivative design can trigger consumers' reflective-level emotions, making art-derivative fashion products different from common fashion products and could have longer lifespans. In addition, the direct participation of artists in design is conducive to better emotional value as consumers love the freshness and artistic taste brought about by such cross-border cooperation. Accordingly, it contributes to the literature on methods of improving fashion products' emotional value. From *Study 2*, it is recommended that future art-derived design need focus on multi-material design and in-depth collaboration with artists. The study further demonstrates the importance of artistic image expression goes beyond the brand image in fashion art derivatives which supports that art-derived designs can be used as an effective design method to promote the inconspicuous consumption of fashion. The research provides an innovative design method for sustainable fashion study by promoting rational consumption of fashion through art derivative design.

**Keywords** Art derivative, sustainable fashion, co-design method, emotional durability, inconspicuous consumption

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The decision to pursue a doctoral program at Japan Advanced Institute of Science and Technology has been the best decision I have ever made. The infinite creativity of Japanese design always has been a strong attraction to me. Out of my love for art and cultural creative industry, I choose fashion art derivative design as my main research project and have great honor to be a doctoral student of JAIST to carry out my research. It is clearly impossible for me to accomplish my research and this dissertation without receiving a great deal of support and assistance from the people around me. I would like to express my sincere gratitude toward them.

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## Chapter 1 Introduction

Fashion is only the attempt to realize art in living forms and social intercourse.

Francis Bacon

The prosperity and popularity of art and fashion collaboration have gradually become an inevitable trend of "art popularization". Art derivative is a kind of special commodity, which has both artistic value and certain use value by combining art and commodity. This particularity makes the design methods of art derivatives different from that of traditional commodity. Recently the phenomenon of associating with artists has become quite notable in the fashion market as part of a "crossover trend". Through fashion collaborations with artists or art institutions, the design elements of fashion brands can become more stylized, diverse, and fresh (Joy & Belk, 2022). However, regarding the combination of art and fashion, the most relevant research has focused on the exploration of commercial value and the business model of art and luxury fashion brands' cooperation (Chailan, 2018; Roederer 等, 2020). As luxury businesses are prone to collaborate with contemporary artists or absorb artistic elements from classical artworks to maintain the fiction of rarity, exclusivity and sophistication. (Kapferer & Valette-Florence, 2016). However, there is little research on art derivatives from the perspective of design ethics to explore sustainable design methods. Excellent artworks have the characteristics of persistence, profound spiritual connotation. Therefore, in addition to the economic value gained by fashion brands in the commercial field, it is more important to transfer the spiritual connotation and aesthetic value of art to fashion products through art-derived design methods. Thus, it is important to understand whether art derivative design can play a role in enhancing the emotional durability and prolonging the life cycle of fashion product.

## 1.1 Research background

### *1.1.1 The status of fashion art derivative design*

With the rapid growth of social material productivity, the arrival of the era of creative economy, and the gradual expansion of the creative class, People's consumption focus is gradually shifting from material consumption to spiritual consumption Besides, the development of network media enables the general public to understand today's art information, and then begin to consume art symbols. The rise and popularity of the development of art derivatives have gradually become an inevitable trend of "art popularization". The sense of fashion is extremely sharp, and in the process of the gradual commercialization of art, fashion has played an extremely important role. With the help of the characteristics of fashion, art has completed its own full commercialization process in the process of frequent communication and dialogue with fashion.

Cooperation between art and fashion has long existed. For instance, the famous lobster dress was co-created by the Spanish surrealist artist Salvador Dalí and fashion designer Elsa Schiaparelli(Cohen & Stone-Richards, 2021). In addition, pop artists, for example Andy Warhol, not only became a source of inspiration for fashion brands, but themselves constantly approached and collaborated with fashion brands. These cases can show that there are many similar attributes between art and fashion, so that their boundaries are difficult to distinguish (Kastanakis & Balabanis, 2012). However, in the early days of fashion and art cooperation, there was no large-scale commercial cooperation until the 1960s, pop culture developed rapidly, and was greatly sought after by the young generation, which led to subversive breakthroughs and changes in the fields of art and fashion, changing the aesthetic taste of the public across the times. The value of art is no longer only displayed in museums for tourists to visit, it is more in a variety of media as the carrier of People's Daily life. Fashion is also no longer only for the upper class exclusive haute couture, it has become a new fashion vane with faster mass garment production.

Fashion products absorb elements of art and culture to increase the brand premium, and the brand value comes from many elements such as history, culture, art, craft and service.

Artistic elements make the value of the brand constantly enlarge. In terms of the combination of art and fashion, the most relevant research focuses on the relationship between luxury brands and artists or art institutions. However, nowadays fast fashion brands were taken as cases to illustrate the form and significance of cooperation between mass fashion and artists (Michel & Willing, 2020). Behind the boom of art derivatives, the related design methods and theoretical research are not systematic. Therefore, it is necessary to conduct research on the design of art-derived fashion products, and to explore the rational art-derived cooperation forms of fashion products from the perspective of sustainable fashion development.

### ***1.1.2 Existing sustainable problems of fashion art derivatives***

The fashion industry is one of the most dynamic and profitable industries, yet it is also one of the most polluting industries in the world. After the rapid rise of fast fashion brands, popular products quickly occupy the market and quickly die out at the speed of lightning. Modern fashion presents the trend of products with short service life and a lack of intrinsic value. The rise of the cultural and creative industry, on the one hand, drives the linkage of the art and fashion industry, on the other hand, because a large number of products lack thinking about environmentally sustainable design in the design and development stage and are more chasing business benefits, so the homogenization problem appears. And the artworks are mostly reflected in the form of simple pattern printing and replication. It can be seen from the current art design and product positioning of major museums in the online platform that there is design homogenization in art derivatives. Art derivatives should possess artistic beauty, high quality, and sustainable significance, rather than fast fashion products that can easily be abandoned.

At present, there is a lot of research on the sustainability of fashion industry, mainly from the sustainable development of environment-friendly fabrics. In addition, Fletcher (2013) has studied the influence of people's emotions on the life cycle of fashion products. However, there are few scholars involved in the sustainable design research of art derivatives. Regarding the combination of art and fashion, the most relevant research has

focused on the relationship between luxury brands and artists or art institutions (Codignola & Rancati, 2016). Besides, lots of research have been conducted around art shops and art products in art institutes, such as art gallery, and museum (Caldwell, 2000; Kaya & Yagiz, 2015). But regardless of whether fashion brands collaborate with artists to maintain the fictions of rarity, exclusivity and sophistication (Kapferer, 2014; Kapferer & Valette-Florence, 2016) or whether artists enhance their reputation through cooperation with fashion brands, most of the current art derivatives design practices are based on commercial cooperation models. Similarly, related studies on art derivatives mostly focus on the exploration of commercial value (Kim et. al., 2018) and the analysis of forms of cooperation (Kaya & Yagiz 2015; Michel & Willing, 2020). However, there is little research on art derivatives from the perspective of design ethics.

Besides, fashion art derivatives have its special characteristics which makes it different from other fashion products. Art and fashion have different characteristics. It is difficult to reasonably integrate the two to retain the characteristics and aesthetics of the art in line with fashion trends and popular needs. In the current design research, many people think that art derivatives are simply printing a picture on a silk scarf, bag, or shrinking a sculpture into jewelry. This straightforward design approach is the most common design way currently. These designs have many disadvantages, which will directly lead to the public's misunderstanding of art derivatives and reduce the quality of art derivatives.

In addition, the characteristics and concept of *fashion art derivatives* are unclear. The unclear concept of fashion art derivatives will affect the relevant design practice and theoretical research. As the concept of Fashion art derivatives has a certain similarity with other concepts, such as '*Cultural and Art Authorization*', '*Creative Product*', and '*Fashion Art*'. How to distinguish the characteristics and concept of 'fashion art derivatives from others need to be analyzed and defined.

## 1.2 Research objective

The Main Research Objective (***MRO***) of this thesis is to recommend a set of design methods to promote sustainable fashion through enhancing emotional factor in derivative.

Accordingly, two sub-objectives are set. The first sub-objective (***SRO1***) of this thesis is to identify emotional factors in art derivative design for consumers to extend the life cycle of fashion products. The second sub-objective (***SRO2***) is to propose art derivative design methods to relieve the irrational and unsustainable problems of fashion design. There is a strong relationship between ***SRO1*** and ***SRO2***. While achieving ***SRO1*** the key emotional factors of fashion art-derived can be determined to further propose innovative sustainable fashion design methods through art derivative. And the fulfillment of ***SRO2*** will provide rational and sustainable design methods by effectively enhancing the emotional value of fashion products through art-derived design. In essence, achieving the ***SRO1*** and ***SRO2*** will accomplish the ***MRO***. Figure 1 demonstrates the flow of sub-objectives to fulfill the ***MRO***.

In addition, Figure 2 shows the relationship between research questions and three studies taken in the research. It can be seen that Study 1 was conducted in order to solve ***SRO1*** to test the relationship between respondents' preferences and aesthetic emotions and the effectiveness of promoting emotional durability and sustainable fashion consumption through art derivatives design methods. Thus, the results of study 1 can answer the ***SRO1***. For ***SRO2***, study 2 take fashion art derivative bags as an example, tests the role of art derivatives in promoting inconspicuous consumption. Besides, during the Pilot Study, The Chinese Spring Festival clothing were taken into analysis as a case study on consumer preferences for design characteristics to understand if art derivative can be a sustainable design method in spring festival clothing design.



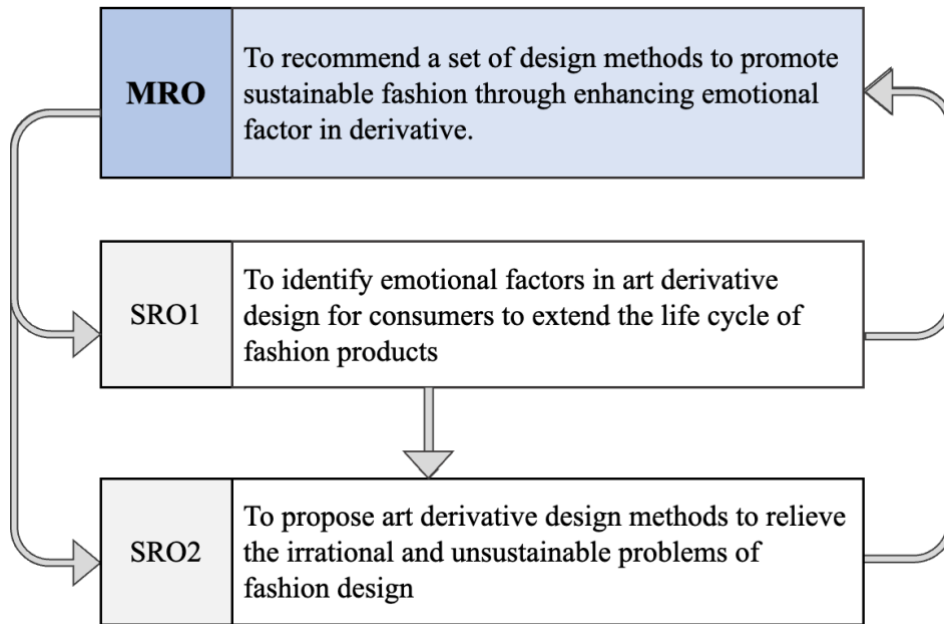


Figure 1 The flow of research objectives

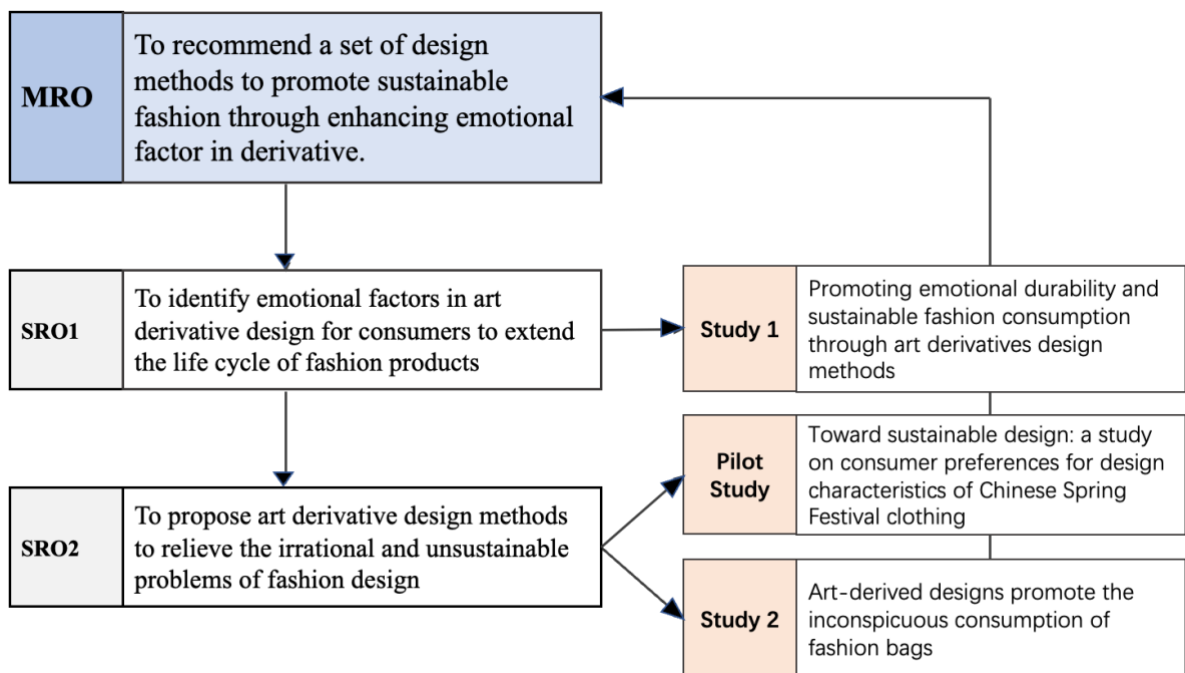


Figure 2 The relationship between research objectives and studies

### **1.3 Significance of this research**

This doctoral research conducted a unique navigation experiment on extending the life cycle of fashion products through art derivative design method. The research clarifies the impact of aesthetic emotions on consumers' emotional durability of fashion products, and examined whether art-derived design can be used as an effective approach to promote the inconspicuous consumption of fashion products. The research conducted quantitative approaches to understanding the characteristics of fashion art derivatives which differentiate them from common fashion products and other categories of art derivatives. The design method proposed in this paper will provide valuable suggestions for art derivative design and sustainable fashion design. In particular, through the exploration of design research methods in the aspect of emotional design, it is hoped that the research will propose the design methods of extending the life cycle of fashion products from the emotional level.

Through Study1, this research clarifies the impact of aesthetic emotion on consumers' emotional durability of fashion products. The design method which may enhance the lifespans of fashion art derivatives by arousing consumers' aesthetic emotions are investigated. The study further clarify the influence of different derivative design methods on consumer emotional durability.

Then, in Study 2, fashion bags were taken as research object to investigate how art-derivative design can be helpful to promote inconspicuous consumption in fashion. In addition, this study expands the brand research scope of inconspicuous consumption, innovatively analyzing and comparing the brand image performance of accessible core brands, affordable luxury brands, and mass fashion brands. This study proposes a co-design method for promoting the inconspicuous consumption of art-derived fashion bags by exploring the current design methods used for art-derivative fashion bags and identifying the correlation between art-derived fashion bags and the characteristics of inconspicuous consumption.

## 1.4 Structure of the thesis

As shown in Figure 3, this thesis is comprised of the following seven chapters:

**Chapter 1 (Introduction)** presents an overview of the Doctoral Research, which includes the research background, research objectives, significance, and structure of the study.

**Chapter 2 (Literature Review)** states the contextual frame of the research based on the related literature of fashion art derivative, emotional aesthetics and durability, inconspicuous consumption, and sustainable fashion design methods. Thus to understand the research gap of current research of art derivatives and sustainable fashion.

**Chapter 3 (Product classification and design methods of art derivative)** presents the current classification, cooperation forms of art derivatives, then the design methods of fashion and art collaboration concluded. This study classified art derivatives into three categories according to function, theme, and artistic form. Thus, the research scope involved in the research of fashion art derivatives was determined. In addition, there are four forms of cooperation derived from art, including Independent development, Authorization development, and Cooperative development. Then the main design methods of the cooperation between fashion brands and art institutions or artists are summarized. The summary of the classification and design methods of fashion art derivative design in this part will help to select and classify cases in study 1 and study 2. A case study is carried out to further verify which design method is more effective for sustainable design.

**Chapter 4 (Study 1)** interprets the research methods and approaches were used to obtain data for study 1. Details of the research experiment design, process, sampling, the conditions of the experiment, and data analysis procedures are provided in this chapter.

**Chapter 5 (Pilot Study)** explains the literature review of spring festival costume, design methods, questionnaire design and survey process. Then, the results and conclusion are summarized.

**Chapter 6 (Study 2)** introduced the current research status of fashion bags. Then design methods and approaches used to obtain data for study 1 were interpreted. Details of the

research experiment design, process, sampling, the conditions of the experiment, and data analysis procedures of study 2 are provided in this chapter.

**Chapter 7 (Discussion and Conclusion)** Discuss and conclusion from study 1, Pilot Study research, and from study 2. Besides, the study’s contribution to Knowledge Science, as well as the limitations and future research.

**Chapter 8 (Limitations, contribution, and future study)**

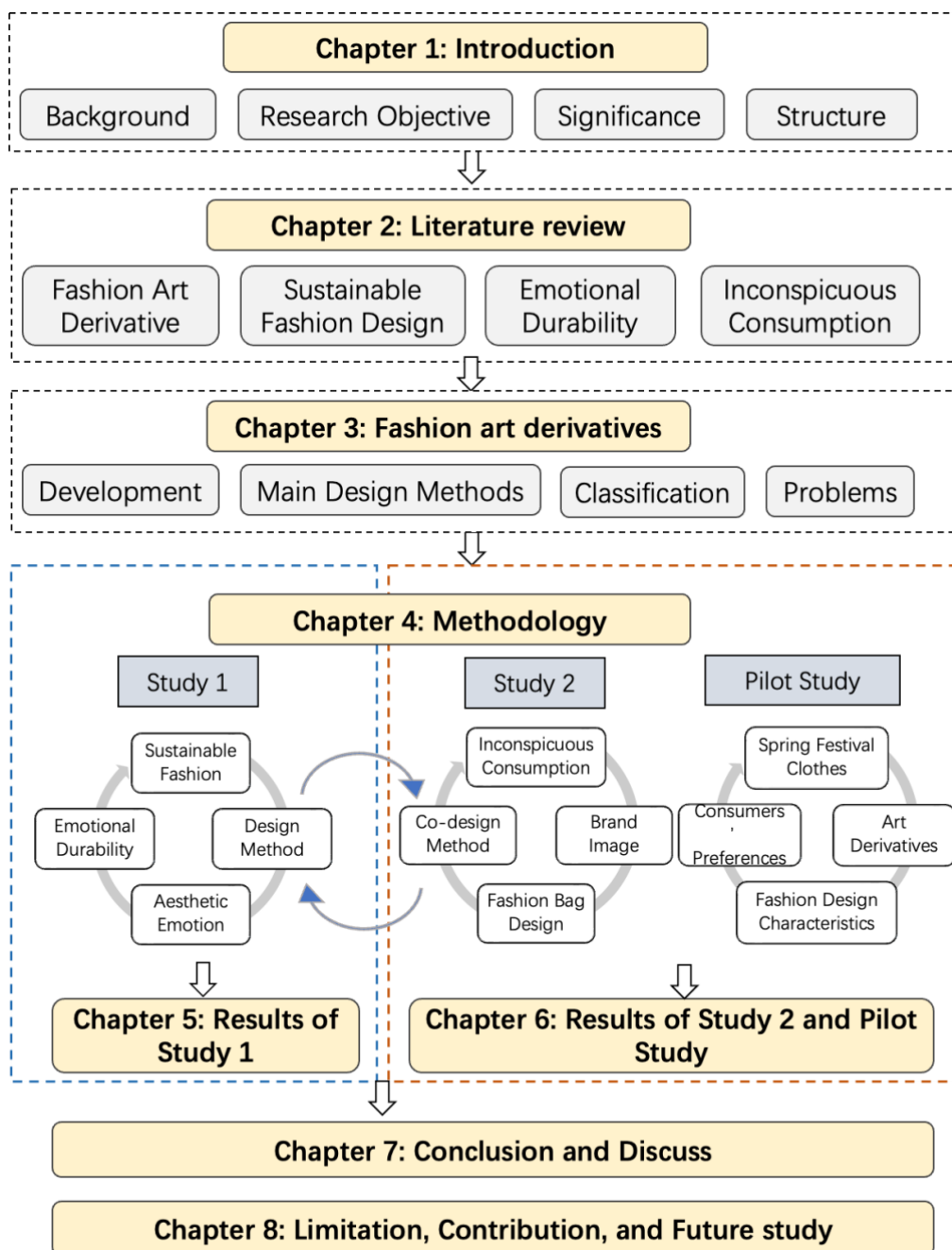


Figure 3 Diagram of the Structure of the thesis

## **Chapter 2 Literature review**

The literature review of this study is divided into four parts. Firstly, the study understands the definition and development status of fashion art derivatives and preliminarily understand the basic characteristics of art derivatives. Secondly, the research status and definition of emotional durability are discussed, so as to determine people's aesthetic emotional needs on fashion products. Thirdly, the definition and characteristics of inconspicuous consumption will be analyzed to determine the demand for the intrinsic value of fashion products. Then, based on the above literature review, this study summarizes the research gap existing in the current research status of fashion art derivatives.

### **2.1 Review of fashion art derivatives design**

#### ***2.1.1 Art derivative***

Art derivative borrowed the term 'derivatives' from the financial industry. There is no generally agreed definition of art derivatives. The vocabulary most closely related to it is derivative work. Derivative work can be broadly understood as a transformation of human knowledge and culture, including cultural, scientific and artistic aspects (Scotchmer, 1991). From a copyright perspective, derivative work should have its integrity and independence rather than rote and uncreative work (630 F.2d 905 (2d Cir, 1980); 536 F.2d 2008). As derivative work needs to create 'New Work', art derivative also needs to be an independent creative product, which may recast, adapt or represent the original artwork.

As a kind of cultural capital, art can be transformed into social and economic capital through specific carriers, and Art derivative is one of the main forms of transformation (Ranson, 1987). The concept of art commercialization is not uniform. The concept of 'Aritification' is also frequently used. 'Aritification helps social stratification motivation of consumer demand and fosters more humanistic motivations (Kapferer, 2014). In China, scholars and the public are used to the term art derivatives. Art derivatives are defined as

public consumer products derived from art symbols with certain artistic added value (Gao, 2016; Li, 2015). Art derivatives are essentially industrialized works with characteristics of “*production, standardization and homogenization*” (Liu 2018, p.111).

The rise and development of art derivatives are directly related to the development of cultural and creative industries around the world. The term "cultural and creative industries" originates from the 1980s in the UK. Howkins (2002), a British economist, defined the concept of creative economy, covering the essence of creativity, how to have creativity, business model operation and intellectual property rights, and comprehensively explained the feasibility of creative economy and its foresight for the future. British researcher Hesmondhalgh & Pratt (2005) focused on a series of key discussions and arguments on the generation of cultural industries, discussed the change and continuation of cultural industries, and evaluated the influence of cultural and creative industries on the generation of the future world by evaluating the mutual influence among politics, economy, and culture.

In addition, there are many studies on the art economics of museums, which also enlightens this study. As Ernst et al put forward suggestions for the sustainable design and development of art economy in museums, arguing that artworks can be a tool for imagination and cooperation to help create a sustainable business culture (Ernst et. al., 2016).

### ***2.1.2 Fashion art derivatives***

The term *fashion art derivatives* focuses on fashion products based on art derivatives, which combines the characteristics of fashion and art derivatives. The combination of art and fashion has long existed. Fashion brands are willing to release avant-garde and trendy images through collaboration with artists. Through art collaboration, fashion brands show Avant-grade brand characteristics and a more advanced image, and it can be refreshing and obtain a new life (Chailan, 2018). Fashion cooperating with artworks is usually called ‘co-branding’ or ‘Artification fashion’. By collaborating with the arts, fashion brands can enhance their brand image and deepen their influence. Art and fashion integration tend to

display a win-win scenario for both sides (Kim et al., 2018).

As table 1 shown, previous research which related to the collaboration between fashion and art can be mainly divided into three sections: The relationship between art and fashion, Artists collaborate with luxury brands, and the relationship between art derivatives and consumer needs.

Table 1 Previous research on the collaboration between fashion and art

Categories	Author	Title
Art and fashion	Saisselin & Remy (1959)	From Baudelaire to Christian Dior: The Poetics of Fashion
	Boodro, Michael. (1990)	“Art and Fashion.”
	Zelenko, Lori Simmons. (1981)	“Is Fashion Art?”
Artists collaborate with luxury brands	Chailan, C. (2018).	Art as a means to recreate luxury brands’ rarity and value.
	Joy, A., & Belk, R. W. (2022)	Why luxury brands partner with artists.
	Kapferer, J. N. (2014)	The artification of luxury: From artisans to artists.
	Riot, E., Chamaret, C., & Rigaud, E.(2013)	Murakami on the bag: Louis Vuitton’s decommo-ditization strategy.
	Joy, A. (Ed.). (2022).	The Future of Luxury Brands: Artification and Sustainability. Walter de Gruyter GmbH & Co KG.
	Stefania Mase, et al., 2022	Multivariate Statistical Analysis of Artification Effect on Customer-Based Brand Equity in Luxury Brands
	Castriota, G. (2022).	The transition to the new world: how luxury and art are dealing with NFTs: Bulgari as a case study.

	Massi, M., & Turrini, A. (2020)	When Fashion Meets Art: The Artification of Luxury Fashion Brands. In The Artification of Luxury Fashion Brands
	Chailan, C (2018)	Art as a means to recreate luxury brands' rarity and value.
	Kapferer, J. N. (2014)	The artification of luxury: From artisans to artists
	Codignola, F., & Rancati, E. (2016)	The blending of luxury fashion brands and contemporary art: A global strategy for value creation.
	Zhang, J., & Kim, C. Y. (2020).	Research on the Influence of the Collaboration between Fashion Brands and Artists on Consumer Needs-Centered on the Collaboration Series between Uniqlo and KAWS
Art derivatives and consumer needs	Kim, K., Ko, E., & Lee, Y. I. (2012)	Art infusion in fashion product: The influence of visual art on product evaluation and purchase intention of consumers
	Hagtvedt, H., & Patrick, V. M. (2008).	Art infusion: The influence of visual art on the perception and evaluation of consumer products.

Firstly, the relationship between fashion and art has long been debated. The French artist, Saisselin (1959) asserted that fashion is a part of art, and that aesthetics are the main characteristic of both fashion and art. Wilson (1987) considered fashion as a form of visual art. However, Zelenko (1981) firmly insists that fashion can not be seen as art, because the vitality of art is invisible and higher than life, while fashion is a material product closely related to daily life.

Secondly, most research on the combination of art and fashion is on luxury fashion. From a business value point of view, Chailan (2018) believes that fashion brands show Avant-grade brand characteristics and a more advanced image through artistic collaboration.



Collaboration with art is a way for brands to upgrade products and enhance creativity and brand influence (Kapferer, 2014). Through fashion collaborations with artists or art institutions, the design elements of fashion brands can become more stylized, diverse, and fresh., thus attracting the attention of consumers (Joy & Belk, 2022). The fashion bag industry is facing de-commoditization changes due to the emerging markets of developing countries (Conejo et. al., 2016). Mass fashion brands have strongly influenced traditional luxury brands: The younger positioning of mass brands has prompted the transformation of these traditional luxury brands (Truong et. al., 2009). While collaborating with artists is an effective way for luxury brands to innovate and rejuvenate (Michel & Willing, 2020).

Thirdly, as there is a huge market potential for art and fashion cooperation, some researchers pay attention to consumer needs of fashion art derivatives. Kim analyze the fluence of visual art in fashion brands and tried to understand if art infusion can help to enhance consumers' positive impression of fashion brands (Kim et. al., 2012). Hagtvedt & Patrick (2008) argue that the sense of luxury would spill over from artworks into products, leading to better product reviews by consumers. However, in contrast to a large amount of design cooperation cases, the studies on art-derived fashion products from the perspective of consumer demand is very limited.

In addition, the study collects a large number of related research on the characteristics of fashion and art, so as to summarize the characteristics of fashion art derivatives. As shown in Figure 4, the characteristics of fashion products, Čiarnienė & Vienažindienė (2014) advocates that the characteristic of the fashion industry is “*volatility, velocity, variety, complexity and dynamism*” (p. 63). Fashion has aesthetic value and attracts consumers through its external aesthetic sense (Saisselin, 1959). However, as a commodity, the commercial attributes of fashion products are its most basic characteristics. Fashion products are used by consumers and have use value (Zelenko, 1981). The relevant analysis of the characteristics of artworks is comprehensive. A large number of art critics, and art research literature provide interpretations on the characteristics of art for this study. It can be seen that art has aesthetic value, and is a reaction of social culture, with strong cultural value. In addition, art has stronger vitality than other types of objects. No matter the original

pottery or Renaissance artworks they still retain their artistic vitality and are constantly being passed down and moved by generations of people. In addition, it is often said that art has no borders and that excellent works of art can be loved by people of different regions and races (Wang, 2010).

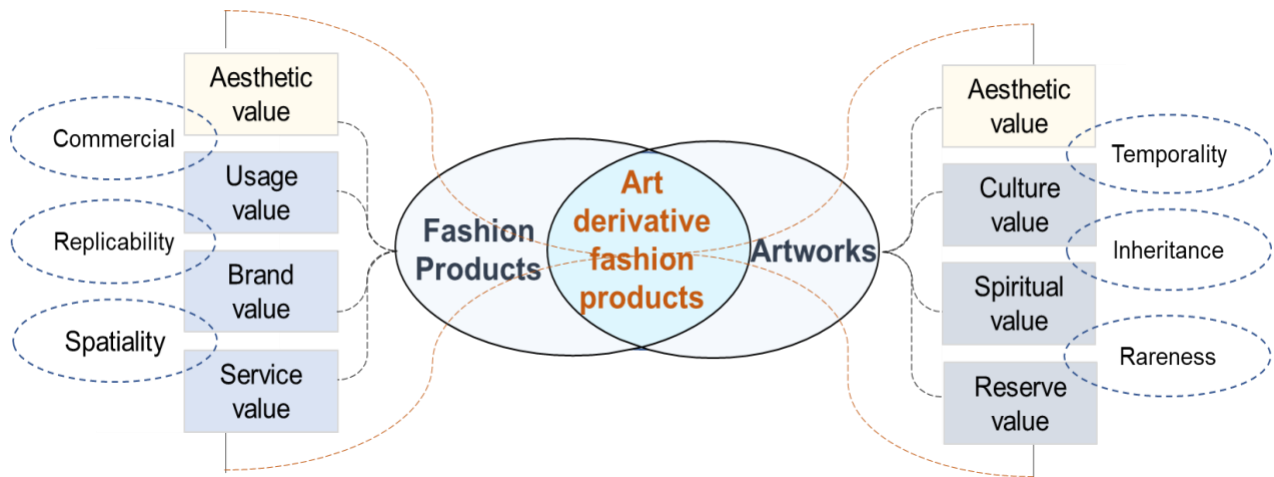


Figure 4 The characteristics of fashion products and artworks

Based on the above explanation of art and fashion, Figure 5 illustrates the position of fashion art derivatives, art derivatives versus normal fashion products, artworks in the 2\*2 dimension. Due to the biggest difference between art derivatives and common fashion commodities lies in artworks' cultural, aesthetic, and spiritual value, which need to be inherited and reflected in derivatives through innovation (Kapferer, 2014. 375). Jiaru and Kim (2020) admitted that, by cooperating with artists, fashion products could stimulate the emotional characteristics of artworks. The value of art derivatives comprised the value of art itself and the value of its art carrier (Zhang, 2017). Zhang (2019) affirmed that the personal charm of an artist could contribute to the enhancement of the individuality of

fashion brands.

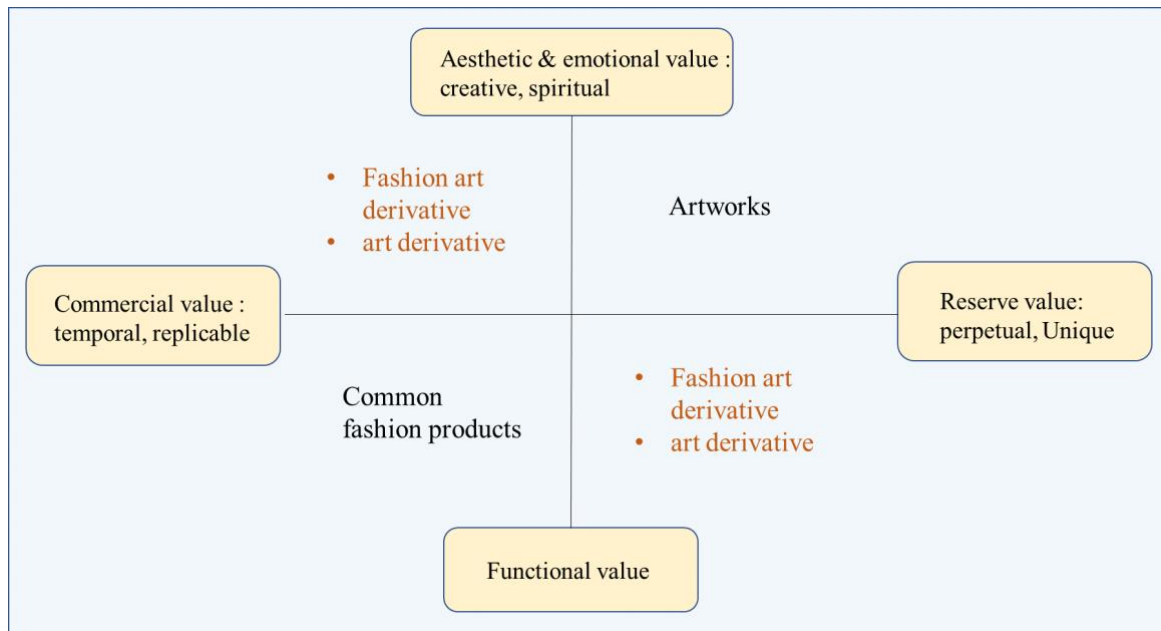


Figure 5 The characteristics of fashion art derivatives

## 2.2 Review of sustainable fashion

Fashion and sustainability seem to be a pair of contradictory words (Chouinard, 2008). Fashion is characterized by innovation (Aakko & Koskennurmi-Sivonen, 2013) and fashion is always pursuing change. As a result, the rapid development of the fashion industry makes it face serious social problems, such as environmental degradation, the exploitation of labor in undeveloped areas, excessive chemical substances and water consumption, and harm to animals (Fletcher, 2013). What's worse, irresponsible consumption propaganda and planned obsolescence fast fashion industry bring endless harm to our society (Bly et al., 2015). Thus, sustainable fashion has emerged as a widespread term that try to reduce the harm to the environment and society. Since 2001, a lot of research on sustainable fashion has begun to emerge, and has reached a peak of research in 2017 (Mukendi et al., 2020). Therefore, it can be said that the research scope of sustainable fashion is the whole process of fashion products from design and production, supply chain, sales and marketing, consumer purchase and use, to the termination of product service life and recycling. Since this research is based on the correlation research of two key factors of consumer demand and design of sustainable fashion, In the following, literature review will be conducted on both

sustainable fashion consumption and sustainable fashion design. Through combination with the relevant theories of sustainability in recent years, this study will understand the current research basis and find out the existing research gap. Table 2 shows the main previous study on sustainable fashion consumption and design.

Table 2 Previous study on sustainable fashion consumption and design

Categories	Author	Title
Sustainable fashion and consumption	Tey, Y. S., Brindal, M., & Dibba, H. (2018)	Factors influencing willingness to pay for sustainable apparel: A literature review
	Lundblad, L., & Davies, I. A. (2016).	The values and motivations behind sustainable fashion consumption
	Mukendi et al. (2020)	Sustainable fashion: current and future research directions.
	McNeill & Moore (2015)	Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice
	Han et al., (2017)	Staging luxury experiences for understanding sustainable fashion consumption: A balance theory application
	Brandão & da Costa (2021)	Extending the theory of planned behaviour to understand the effects of barriers towards sustainable fashion consumption
	Bly et al., (2015).	Exit from the high street: An exploratory study of sustainable fashion consumption pioneers
Sustainable fashion design	Niinimäki, (2012)	Proactive fashion design for sustainable consumption.
	Alberta Bernardi et al. (2022)	Key success factors to be sustainable and innovative in the textile and fashion industry: Evidence from two Italian luxury brands.
	Fletcher, K. (2013)	Sustainable fashion and textiles: design journeys.

	Aakko & Koskennurmi, (2013)	Designing sustainable fashion: Possibilities and challenges
	Armstrong & LeHew (2011)	Sustainable apparel product development: In search of a new dominant social paradigm for the field using sustainable approaches
	Claxton & Kent (2020)	The management of sustainable fashion design strategies: An analysis of the designer's role

### ***2.2.1 Sustainable fashion consumption***

Sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” in Our Common Future, also known as the Brundtland Report (Keeble, 1987). As the nature of fashion is based inherently on the continuous process of change and the pressure to become new or be perceived as new, the fashion industry always strives for novelty, producing new garments in response to fast-moving consumer demand. Conversely, the term ‘sustainable’ is essentially associated with longevity or maintenance at a certain level; it is derived from the function of ecosystems that assist themselves over periods of time.

Fashion is also a complicated concept to define. Fashion can be a broad concept, including one in a certain period or region in the field of clothing, lifestyle, and so on. Fashion can be seen as a cultural industry that establishes the aesthetic and practical dimensions of our clothing habits. Researchers of fashion philosophy regard modern fashion consumption as a tragedy. Svendsen (2006) stated that fashion can be seen as an aesthetic philosophy or ideology of consumption, and modern fashion consumption is no longer driven by demand but by desire. According to the famous fashion philosopher Georg Simmel, the objective spirit of modern fashion consumption overwhelmed the subjective spirit, which causes the subject to passively always follow changes in fashion trends (Wild, 2016). Jonathan Chapman(2009, 31) states a trend from “Human-to-human engagement” to “Human-to-product engagement”, which contributes to endless desires and a wasteful society. Fashion

is irrational, and its key feature is the pursuit of 'new', which leads to the tragedy of fashion consumption (Svendsen 2006; Zhang Aihong 2015). Mukendi et al (2020). sorted out 465 articles of research significance from 6200 studies related to the theory of sustainable fashion, and divided sustainable theory into two types, "pragmatic change" and "radical change". The pragmatic change is a step-wise approach to promote sustainable fashion, which retains traditional models and sales channels. A radical change insists on a fundamental revolution, which holds a negative attitude towards the previous fashion industry and hopes to achieve sustainability through the innovation of fashion. Both theories of sustainability involve the process from production to purchase, use and recycling.

According to 'the fashion system' by Barthes (1990), the difference between practical, functional fashion products and fashion images leads to the 'continuous desire' of fashion consumption(Cox et al., 2013). Users' participation may promote attachment but is not necessarily positively correlated with products' lifespans because consumers will treasure the products rather than use them. Scholars advocate for ethical fashion, and the overlap of fashion and sustainability started its movement in the early 2000s. Currently, more consumers are concerned about fashion ethics, and consumers are willing to pay more for sustainable fashion (Niinimäki, 2012). Fletcher (2012) believed that sustainable fashion lies not only in the sustainable research of materials and styles themselves but also in the sustainable research of consumers' consumption behaviors. Fletcher further indicated that there is no practical benefit for the fashion industry in extending the product's life cycle, so it is effective for consumers to extend the durability of fashion products proactively.

### 2.2.2 Sustainable fashion design

Design is an important bridge between consumer needs, social economy, and culture, as well as the ecological environment. The importance of design to the sustainability of all aspects of the fashion industry is beyond doubt. The design will affect and even determine the sustainability of all aspects, including the selection of raw materials, fabric production, printing and dyeing, production, marketing, use, and final recycling (Armstrong & LeHew, 2011; Lawless & Medvedev, 2016). Hur and Cassidy further emphasized that the early design and development process can affect 80% of the life cycle of a product, but many design practitioners lack an understanding of sustainable design and adopt very limited methods for sustainable design (Hur & Cassidy, 2019). As figure 6 shows, today's sustainable products can rely on professional sustainable software in the design phase, such as, Life Cycle Analysis (LCA), Eco-design Web, and The Life-Cycle Design Strategy (LiDS) Wheel. However, there is a lack of understanding and use of these existing sustainable design tools (Kozlowski et al., 2019). However, existing tools mainly focus on evaluating existing products and their impact on the environment, and tools are less focused on innovative design solutions to support sustainability. Thus, there is lack of design-oriented approaches and tools to support sustainability in fashion design.



Figure 6 The methods of sustainable fashion design

However, designers often find it difficult to balance other design criteria such as aesthetics, style, color patterns of fabrics, and cost with sustainability. For example, Kumar suggests promoting sustainability by combining traditional crafts with fashion. The use of traditional techniques such as embroidery, batik dyeing and pleat can enhance the appearance and beauty of clothing and thus make clothing have a longer life cycle (Rajeev Kumar & TJPRC, 2017), but these methods are often time-consuming and require more funds. Therefore, a large number of researches on sustainable fashion focus on the research and development of environmentally friendly fabrics for clothing (Ibharim & Tajuddin, 2021). According to Braungart and McDonough (2009), sustainable fashion needs to be sustainable from raw materials, and it is recommended to achieve sustainability through material recycling and reuse. Fletcher advocated the design for recycling (DFR) as well as design for disassembly (DFD) which take the source of clothing fabric as the starting point of sustainable design (Fletcher, 2012). Besides, environmentally friendly dyes, printing, and surface treatments of fabrics can also take into consideration as sustainable design strategies. A theoretical model of "considered take and return" is drawn by (Aakko & Koskennurmi-Sivonen, 2013), which advocates sustainable design from the source, improves the functional design of clothing, and encourages slow fashion design. On this basis, people's understanding of the importance of environmental protection has been further improved due to the ravages of COVID-19 around the world. Niu, et al. (2020) emphasized that the worldwide pandemic impact is an opportunity to re-adjust traditional clothing purchasing and wearing habits and suggested simplified and neutral clothing style design as a method of sustainable design. Niu, et al. (2020) further suggests removing the complicated decoration and advocating green environmental protection.

Therefore, it is suggested that sustainable fashion design should have very clear goals and concepts to practice sustainability. It can be seen that the current approach to sustainable fashion design focuses on the sustainability of clothing fabrics and sustainability from the perspective of clothing recycling and reuse (Claxton & Kent, 2020). However, fashion is an extremely complex system, and consumer attitudes and emotional needs have a great impact on the sustainability of clothing, but related research is still relatively scarce.



Mukendi et al (2020) believe that design is necessary to meet the needs of consumers in terms of design concept, process and production from the perspective of consumer preferences and the complexity of sustainability. Niinimäki (2012) advocated a sustainable design for fashion products that through emotional satisfaction and enhancing the quality of products can extend the fashion products' lifetime. Kate Fletcher (2012), who explores the optimized fashion lifecycle in her book *Sustainable Fashion Design*, says that clothing is discarded not because of quality, but because the user's emotion for the garment is lost. Therefore, it is very necessary to conduct further research on sustainability from the perspective of emotional needs.

### **2.3 Review of emotional durability and Aesthetic emotion**

Consumption of fashion products includes three main aspects, the purchase, use procedure, and discarding (Mukendi et al., 2020). These three aspects are directly related to the psychology of consumers. Therefore, based on the understanding of fashion and sustainability, this study will further explore the innovative methods of sustainable design from the perspective of consumers' emotional needs towards fashion products. This study mainly studies and sorts out the literature from two aspects: the Emotional durability of fashion products and the aesthetic emotion of fashion products.

#### ***2.3.1 Emotional durability of fashion products***

As early as the end of the last century, scholars began to pay attention to the impact of emotion on sustainable design. Jonathan Chapman, an important scholar in the study of sustainable design, is an important advocate of Emotionally durable design, Through the emotional test of more than 2,000 electronic product users, he proposed six main factors that affect durability and influence effectiveness. Among them, "Narrative" accounts for the highest proportion (24%), which mainly comes from the special connection between consumers and products, such as access methods or special story expression of products. In addition, the "Surface", that is, the physical changes of the product during use, and the "Detachment" ability of the product, whose function and connotation are gradually

discovered during use, both play an important role in prolonging the life cycle of the product (Chapman, 2009). Besides, Donald A. Norman, a famous cognitive psychologist, divided emotional design into three levels: the instinctive level, the behavioral level and the reflective level (Bagnara & Smith, 2006). Fashion products mainly trigger consumption desire from instinctive sensory stimulation, which is easy to cause consumers to lose interest and discard after a short period of use of the products (Norman, 2002). There is an important connection between the weak durability problem of Volkswagen products and the "planned obsolescence design" initiated by General Motors (Wang & Zhang, 2011).

Studies show that the actual service life of many products is only about 60% of the reasonable life of items (Ji & Lin, 2022). However, studies show that when people assign specific values to products from emotional aspects, they will cherish and use these products more carefully, and they are willing to continue to use them through repair even if they are damaged. From this point of view, enhancing emotional durability design can also be regarded as the advocacy and inheritance of the good virtue of industriousness and frugality.

In 1966, Raymond Vernon, an American economist, put forward the product life cycle theory, which pointed out that once a product came out, it would go through the process from birth to maturity until aging (Vernon, 1966). Current product life cycle theories are mainly divided into two types: the economic life cycle of marketing and the material life cycle of sustainability theory. From the perspective of economic life cycle, product life cycle refers to the effective marketing time after the product is put on the market. From the perspective of sustainable design, the life cycle of a product is the whole process from the extraction and processing of raw materials, use, recycling and final waste disposal. As we all know, modern fashion updates are constantly accelerating. There is always a gap between the image and function of the product and the latest fashion products advertised by the media, which leads to the "continuous desire" of fashion consumption (Barthes, 1990). As Barthes (1990) emphasized in *The Fashion System*, the intrinsic value of fashion products is gradually missing. In the past, people need to pay more money, time and labor to get the clothes they desire, and they have strong emotional sustenance for the purchase of clothes. However, nowadays, fast fashion allows consumers to constantly

update their wardrobe at a low price, and users' feelings for clothing become more shallow. Clothing has become a "lifelessly object" and a "means to achieve business goals". Thus, how to improve the intrinsic emotional value of products is an effective way to study the improvement of product durability. Chapman (2009) proposed factors to improve product durability based on consumers' behaviour and experience, among which narrative, surface and attachment are confirmed to account for the heaviest proportion in the experimental results. Burns (2010) categorises the causes of products obsolescence, which include aesthetic, social, technological and economic.

Norman (2003) concluded three levels of design: reaction level, routine level and reflection level. Norman believed that the real aesthetic feeling comes from the level of reflection, which goes beyond appearance to the overall impression and deep thinking of the product. Concurrently, he believed that most fashion products achieve pleasing effects through sensory stimulation belonging to the instinct level. Besides, the real aesthetic feeling comes from the level of reflection, which goes beyond appearance to the overall impression and deep thinking of the product. Through the combination of Fletcher's concept, it can be realised that the research of consumer behaviour and the reflective of products need to be considered.

### ***2.3.2 Aesthetic emotion***

The process of aesthetic emotions is complicated. Regarding the perception of artistic aesthetics, traditionally, the interpretation of aesthetics is often associated with the positive emotional response related to beauty. Contemporary art critics hold the opinion that the aesthetics of artworks can generate both positive and negative (Shimamura 2012). Li (2013) proposed four main measurement items for psychological research on aesthetic experience: reaction time, fluency of cognitive processing, pleasure and arousal, and cognitive load. Wang described art appreciation as a complex thought activity of 'sensual pleasure and rational satisfaction' (Wang, 2010, 99). The complexity of the aesthetic process can thus be found.

Artistic aesthetic emotion is subjective. So it is essential for viewers to have high arousal,

attention and cognitive engagement to achieve aesthetic experience. Creusen and Schoormans (2005) believed that aesthetic value expressed by the shape, colour or size of characteristic products is very personalised and varies from person to person. Besides, Wang (2010) pointed out that the emotion of art is constant from creation to appreciation. The aesthetic emotion contains abundant rational factors, and the sympathetic emotion aroused by the aesthetic process will remain an aftertaste in the heart of the object.

Figure 7 shows the relationship between Russell's emotional level theory and Chapman's emotional durability theory. The aesthetic process is pleasurable. Russell (2003) argued that aesthetic value and hedonic value appear simultaneously. Successful product design often provides consumers with these two values (Li, et al., 2013). Neuroscientific research has confirmed that aesthetic visual stimuli are associated with higher reward values in the brain than ugly visual stimuli (Capó et al., 2008). "visual properties bear the potential to be aesthetically experienced or at least affect aesthetic preferences" (Leder et al, 2004, 490). According to Bloch et al. (2003) the aesthetic response to a product is a positive emotional response. Products with high aesthetic value can trigger stronger profit-oriented emotions, such as happiness and excitement (Desmet et al., 2001). Related research demonstrated the positive emotional impact of 'art infusion', arguing that the sense of luxury would spill over from artworks into products, leading to better product reviews (Hagtvedt & Patrick, 2008). Jiaru and Kim (2020) admitted that, by cooperating with artists, fashion products could stimulate the emotional characteristics of artworks. Related research demonstrated the positive emotional impact of 'art infusion', arguing that the sense of luxury would spill over from artworks into products. Based on the above relevant theoretical research, aesthetic emotion is characterised by complexity of process, subjectivity, emotional continuity and aesthetic pleasure. The complexity and subjectivity of the process of art can promote the expression of narrative, while the persistence of emotion and aesthetic pleasure can enhance attachment emotion. Besides, according to the interpretation of fiction (Chapman, 2009), consumers feel delighted through an in-depth understanding of the product, which is consistent with the emotion of fiction.

Therefore, it can be seen that enhancing artistry in the product may help consumers reflect complex artistic emotions in the process of relationship with the product through purchase and use. Such a design method based on a reflective layer may be helpful to improve a product's emotional durability.

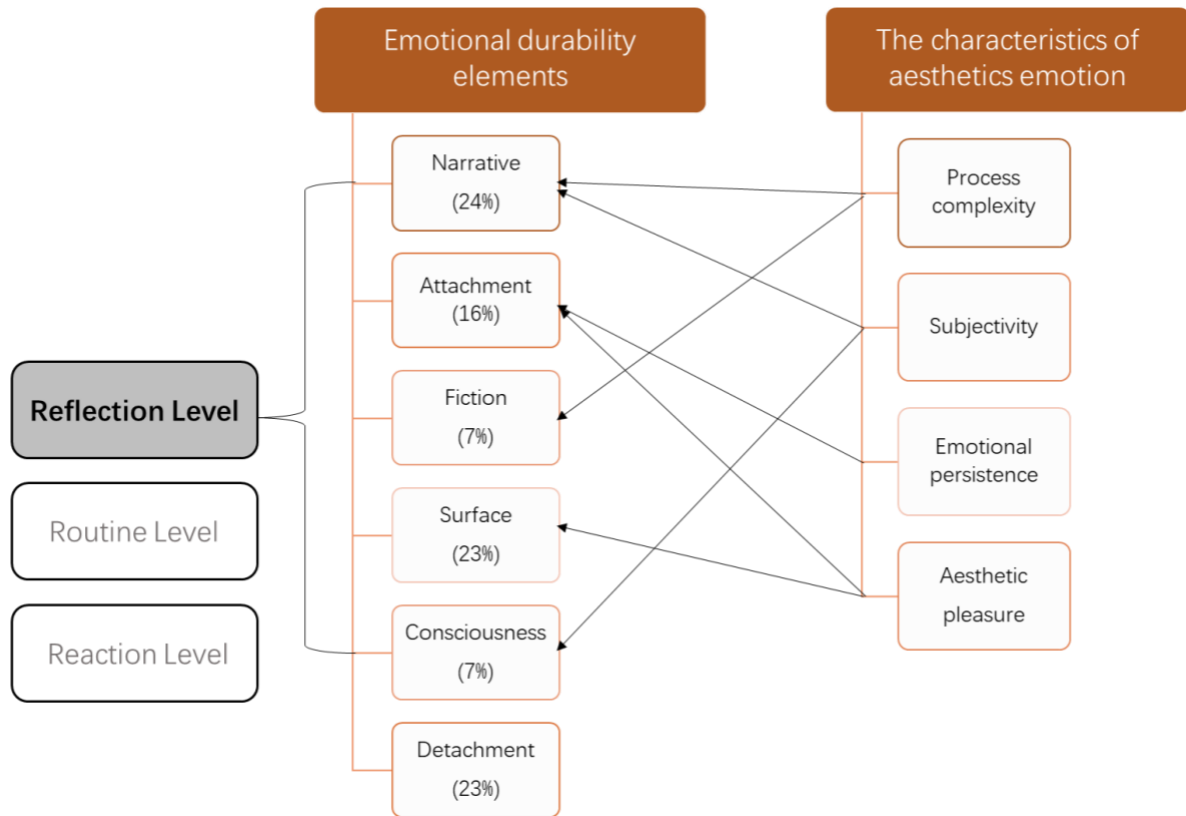


Figure 7 The relationship between emotional level theory and emotional durability theory

## 2.4 Conspicuous and inconspicuous consumption

Collaboration with artists was taken as a method for luxury brands to maintain their uniqueness. Therefore, the research on art-derived fashion products cannot jump out of the research on luxury garments. However, the cooperation between fashion and luxury garments has been studied in both commercial value for luxury brands and how artists can enhance their own popularity through fashion cooperation. This study innovatively discusses the effectiveness of art derivatives towards the non-conspicuous consumption of fashion based on the research purpose of sustainable fashion. In the process of collecting

and organizing the cases of cooperation between art and fashion, it is gradually found that the highly conspicuous brand logo of fashion products is constantly replaced by artistic images. Therefore, in the study of fashion luxury consumption, the increasingly important relationship between non-conspicuous consumption and art-derived design will be reflected.

#### ***2.4.1 Conspicuous consumption***

The term “conspicuous consumption” can be traced back to Thorstein Bunde Veblen’s prominent book, *The Theory of the Leisure Class* (Banta, 1973), which describes the term as the wealthy class showing off their economic power, wealth, and status to others through extravagant consumption. Previous studies have mostly defined “conspicuous consumption” as the behavior of purchasing goods of high quality and high price (Bagwell & Bernheim, 1996). Veblen and Galbraith pointed out that conspicuous consumption mainly has two motives: discrimination contrast consumption and status-promoting consumption (Banta, 1973). Discrimination contrast consumption means that the higher classes want to be distinguished from the lower social class through conspicuous consumption. Status-promoting consumption is when a lower social class emulates a higher social class through conspicuous consumption, thereby promoting its own social status. A similar argument is that there are two typical consumer tendencies in luxury consumption, namely, the Bandwagon and Snob Effects (Kastanakis & Balabanis, 2012). These motivations are similar to the bandwagon effects and snob effects often mentioned in relation to fashion consumption. The main characteristics of bandwagon effects are conformity and assimilation (Bindra et al., 2022); however, bandwagon effects emphasize attachment to a certain group rather than showing off, while status-promoting consumption emphasizes the realization of class crossing through consumption. Discrimination contrast consumption, conversely, means that higher classes want to be distinguished from lower classes through conspicuous consumption. Discrimination contrast consumption is similar to snob effects in that it reduces the consumption of a certain product that people are keen to buy and turns to the consumption of unique and niche products to show their uniqueness (Das et al., 2021).

Conspicuous consumption is influenced by individualism and materialism ((Płudowska et al., 2021). Therefore, when conspicuous consumption continues to expand and individualism cannot be realized through conspicuous consumption, the psychology and demand of discrimination contrast consumption manifested as conspicuous consumption slowly turn to inconspicuous consumption. Throughout history, however, conspicuous consumption has become more visible in the discrimination and comparisons of the upper classes due to the relative scarcity of materials and the long-standing ban on luxury goods. Take the prohibition of luxury goods in ancient Rome as an example, the power class passed laws to restrict the gradually emerging wealthy people from sending signals through a lavish lifestyle (Dari-Mattiacci & Plisecka, 2010). The same happened in ancient China, valuable colors, as well as precious jade decorations, were not available to ordinary people. In this social context, the social significance of having a luxury that can only be used by the privileged is self-evident. However, with the development of the social economy, today's conspicuous consumption has become a common mass consumption behavior. The extensive population mobility further encourages people's desire to identify themselves through conspicuous consumption (O'Cass & McEwen, 2004). In addition, the popularity of credit cards has allowed more ordinary people to spend in advance, making it easier to buy luxury goods and encouraging conspicuous consumption among the middle class (McCollough, 2020). Previous studies have found that the motives for conspicuous consumption differ according to gender (Segal & Podoshen, 2013). Conspicuous consumption by men aims at embodying status and wealth and attracting women; however, the direct motivation for women's conspicuous consumption is the comparison with other women and the psychology of vanity (Wang & Griskevicius, 2014). But with the improvement of women's social status, women's consumption are also more rational and independent (Titton, 2019). And more women are starting to think about the sustainability and ethics of fashion. In terms of regional conspicuous consumption, Chipp et al. (2011) argued that conspicuous consumption is more pronounced in less economically developed regions. Long-standing restrictions on consumption in emerging consumer markets have led to conspicuous consumption psychology, meaning goods imported from developed

countries are more attractive in underdeveloped or emerging consumer markets. In other words, when the market expands, consumers gradually step out of the psychology of conspicuous consumption and spend more rationally, linking the gradual emergence of a trend of inconspicuous consumption with the development of the economy.

#### ***2.4.2 Inconspicuous consumption***

Luxury for the masses and the death of class are important causes of inconspicuous consumption (Eckhardt et al., 2015). Newly affluent consumers tend to obtain social recognition by imitating the luxury consumption behavior of the upper class and distinguishing themselves from the “ordinary people” with lower consumption abilities. Thus, the symbolic function of luxury goods weakens, and the upper class begins to deliberately avoid “popular” luxury goods (Berger & Ward, 2010). Previous studies have defined inconspicuous consumption as avoiding obviously labeled consumer goods and using subtle signals to help people communicate and understand each other (Berger & Ward, 2010; Han et., 2010). Inconspicuous consumption products usually carry subtle labels that are understood and appreciated only by a limited number of people (Eckhardt et al., 2015; Zhan & He, 2012). However, Phudowska et al. (2021) argued that this explanation of inconspicuous consumption is overly narrow and proposed two types of inconspicuous consumption: cost-of-information inconspicuous consumption and cost-prohibitive inconspicuous consumption. Cost-of-information inconspicuous consumption refers to the consumption habits of people who have a disciplined life. They are willing to pay more than for ordinary goods to buy low-carbon and environmentally friendly goods but look for low-key and simple commodities. Cost-prohibitive inconspicuous consumption is biased toward experiential consumption, such as education, self-investment, and travel. These high expenses are mainly focused on high quality and environmental health, reflecting effective cultivation and, thus, personal values and uniqueness. In a broad sense, inconspicuous consumption can be considered as the consumption behavior of more refined consumers with an elevated taste that focuses on personal experience and high quality.



People who stand at the top of the pyramid intentionally distance themselves from the image of luxury symbols to obtain wider social recognition by conforming to the behavior of the mass group (Belk, 1985). There are three main forms of non-conspicuous consumption: shunning obvious brand logos, avoiding products with high visibility and recognition, and paying extra attention to cultural and spiritual experiences (Zhao, 2019). With the maturing of consumer psychology, increasing numbers of consumers demonstrate inconspicuous consumption psychology and behaviors, preferring low-key and rational consumption (Eckhardt et al., 2015). In purchasing luxury goods, more consumers tend to pay attention to intangible elements such as a sense of quality, cultural artistry, and experience instead of superficial, formalized, and tangible symbolic elements. Additionally, Eckhardt et al. (2015) suggested that it is necessary to consider whether inconspicuous consumption is a new way of showing off.

Figure 8 illustrates this process and the main reasons for the formation of inconspicuous consumption. Firstly, in the traditional conspicuous consumption stage, due to the obvious social class status, material shortage, and many other social factors, discriminatory conspicuous consumption was formed (Belk, 1985). This kind of consumption is obvious in the consumption of luxury products that are more difficult to obtain or require a lot of labor cost and time cost to make. Conspicuous consumption has become more visible in the discrimination and social comparisons of the upper classes due to the relative scarcity of materials and the long-standing ban on luxury goods. Then, the second stage is the prevalence of conspicuous consumption. Social welfare and public education has brought cultural homogenization which weakens the boundaries of consumption classification. And luxury for the masses and the death of class are important causes of inconspicuous consumption (Eckhardt et al., 2015). In addition, the popularity of credit cards has allowed more ordinary people to spend in advance, making it easier to buy luxury goods and encouraging conspicuous consumption among the middle class (McCollough, 2020). As the symbolic function of luxury goods weakens and the upper class begins to deliberately avoid “popular” luxury goods (Woodside, 2012), when the market expands, consumers gradually step out of the psychology of conspicuous consumption and spend more

rationality, linking the gradual emergence of the trend of inconspicuous consumption with the development of the economy (Halwani, 2021). Thirdly, the rise of inconspicuous consumption, consume luxury goods no longer for showing off, but for the pursuit of high-quality life, especially in countries such as France and Italy, which have a tradition of luxury consumption (Sedikides & Hart, 2022). Besides, consumers are aware of the negative effect of conspicuous consumption, which causes them to appear narcissistic and brings about debt (Sedikides & Hart, 2022), which in turn leads to more sensible consumption. Social factors have led to the gradual collapse of the basis of conspicuous consumption, and inconspicuous consumption has become a new consumption orientation. With the maturing of consumer psychology, increasing numbers of consumers preferring low-key and rational consumption (Berger & Ward, 2010; Eckhardt et al., 2015). In purchasing luxury goods, more consumers tend to pay attention to intangible elements such as a sense of quality, cultural artistry, instead of superficial, and tangible symbolic elements (Eckhardt et al., 2015)

Previous studies have defined inconspicuous consumption as avoiding blatantly labeled consumer goods and instead using subtle signals to help people communicate and understand each other. However, Phudowska et al. (2021) argued that this explanation for inconspicuous consumption is overly narrow, and proposed two types of inconspicuous consumption: cost-of-information inconspicuous consumption and cost-prohibitive inconspicuous consumption. Cost-of-information inconspicuous consumption refers to the consumption habits of people who have a disciplined life. They are willing to pay more than for ordinary goods to buy (e.g.) low-carbon and environmentally friendly goods but look for low-key and simple commodities.

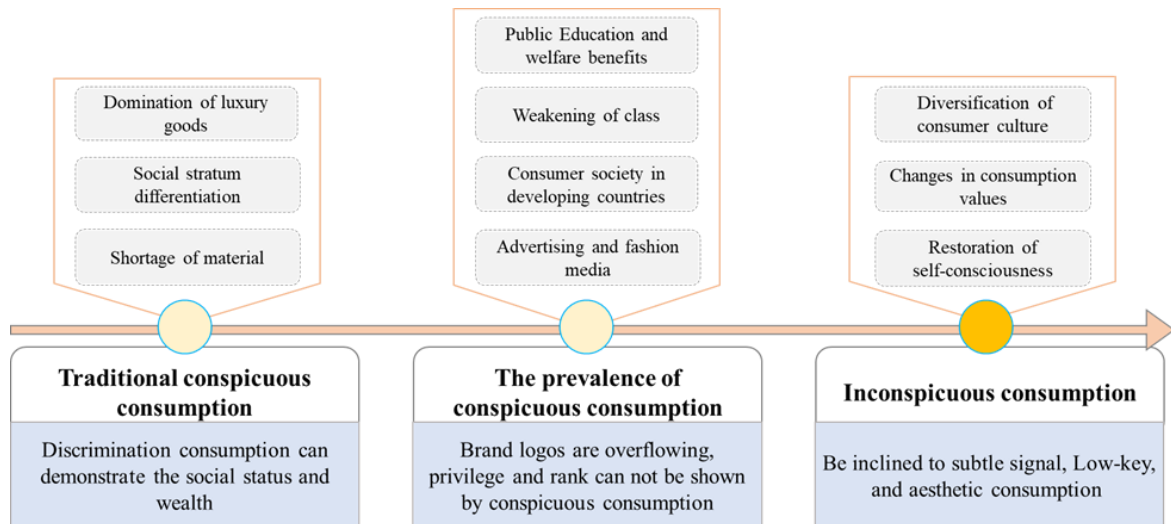


Figure 8 Influential elements of conspicuous and inconspicuous consumption.

## 2.5 Synthesis of research findings

Figure 9 shows the relationship between the four parts of the literature review in this section. According to the definition and development of relevant literature on art derivative, fashion art derivative possesses commercial value, aesthetic value, and functional value with creative and spiritual significance. Different from common fashion products which pay more attention to the development of commercial value and satisfies basic use function, fashion art derivatives pay more emphasis on artistic expression. In addition, some fashion art derivatives can also have the characteristics of longer vitality than ordinary products because of the transfer of artistic value.

Besides, aesthetic emotion is characterized by complexity of process, subjectivity, emotional continuity and aesthetic pleasure. The complexity and subjectivity of the process of art can promote the expression of emotional durability elements, such as narrative and attachment. Therefore, through collaboration with artists or art institutes, fashion product may help consumers reflect complex artistic emotions to improve fashion product's emotional durability. Artistic derivatives can transform certain artistic emotions into fashion products and enhance the emotional value of fashion products.

In addition, the rich connotation of artistic derivation can not only arouse aesthetic feelings

but also conform to the characteristics of inconspicuous consumption which emphasizes internal value. Inconspicuous consumption products usually carry subtle labels and emphasize the cultural connotation behind the products and avoid the consumption of superficial symbols. Rather than showing off the characteristics of consumption which is similar to the characteristics of artistic derivation.

From the current literature review on sustainable design, it can be seen that the sustainability of clothing has always been a problem that perplexes society and is also a problem that the fashion industry is trying to solve. At present, the research on the use of sustainable design evaluation tools and the development of sustainable fabrics is relatively in-depth, but research on the promotion of sustainable fashion from the emotional aspect is very scarce. Therefore, this study advocates art-derived design methods to enhance the intrinsic and emotional value of fashion products with artistic emotion and artistic aesthetics, so as to achieve sustainable design, which is of great research significance and innovative in theoretical research.

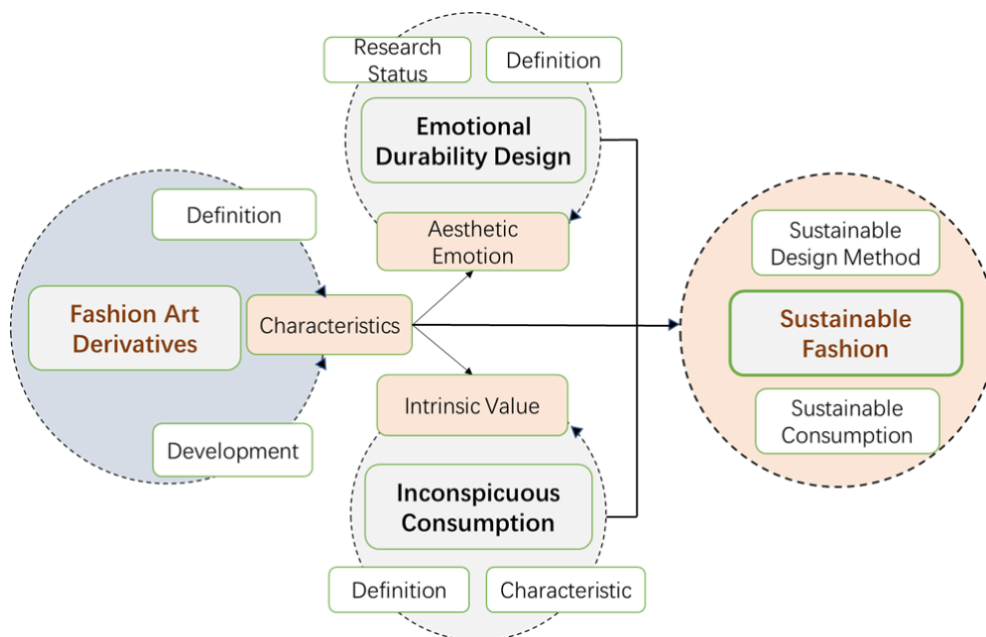


Figure 9 The synthesis of research findings

# Chapter 3 Product classification and design method art derivatives

The third part of the dissertation is to sort out and analyze the classification methods and main design methods of art derivative products. This will help to understand the research scope of fashion art derivatives and support relevant samples for further analysis. Besides, the classification and grouping of design methods lay a foundation for Study 1 and Study 2. Some of the content of part three comes from the analysis of the product classification and design method of art derivatives mentioned in the previous references. Some comes from the relevant information in the official websites of fashion brands and online stores of art institutions participating in art derivative design.

## 3.1 Product classification of art derivatives

Based on the literature review of art derivatives, this study classified art derivatives in three categories according to function, theme, and artistic form (Fig. 10). This classification can clearly explain the type and scope of products involved in the fashion art derivatives of this study. Accurate and comprehensive classification can help to determine the scope of research.

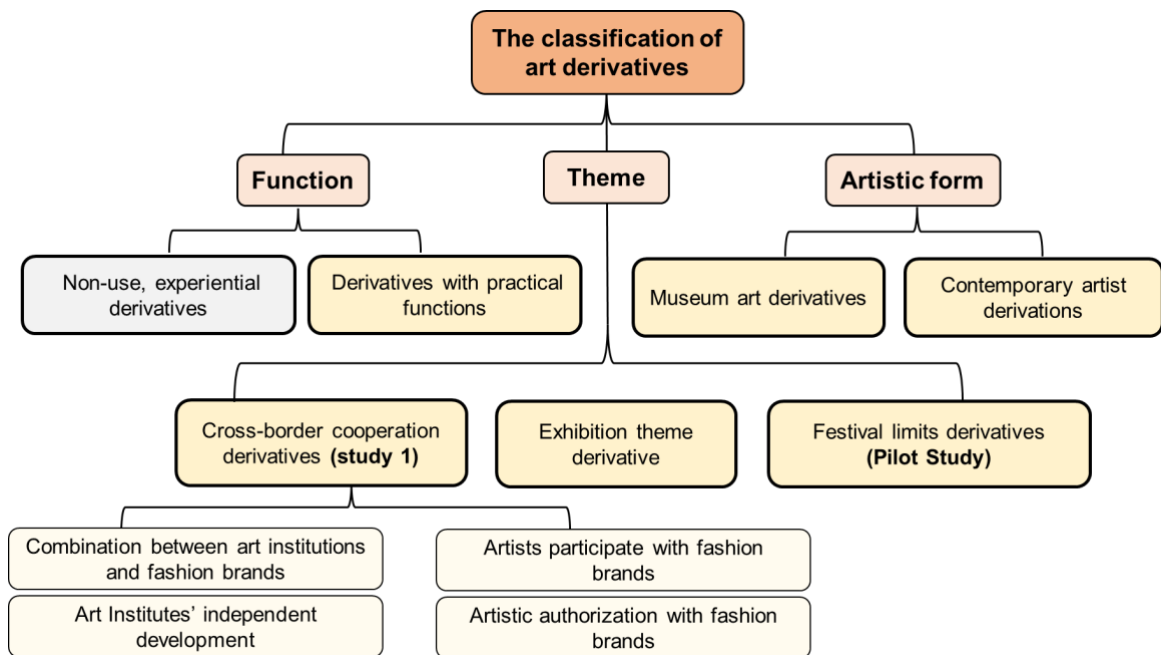


Figure 10 The classification of art derivatives

### 3.1.1 Classification according to the function

According to the practical functions, art derivatives can be divided into two types, that is derivatives with practical functions and non-use, experimental derivatives.

Derivatives with practical functions include clothing, household goods, stationery, and many other category products which not only continue the characteristics and beauty of the artwork but also has practical value. Take the product classification on the official website of the British Museum shop and the Palace Museum shop of China as an example, there are many similar product types between the two museum stores, that fashion is one of the major categories which belongs to the derivatives with practical functions. As shown in the figure 11, jewelry, fashion, and accessories can be seen in the two museum stores. In addition, the British Museum also has products specially developed for children, which involve children's clothing products. As practical derivative products, after absorbing iconic elements from the original artworks, fashion products have become more valuable, which have a connection with the original while maintaining independence. Thus fashion art derivatives have a wide range of markets, and the importance of related research is beyond doubt. The counterpart of practical derivatives is experiential derivatives which are mainly composed of a game or theme park adapted from the artistic symbols in film and television and animation works.

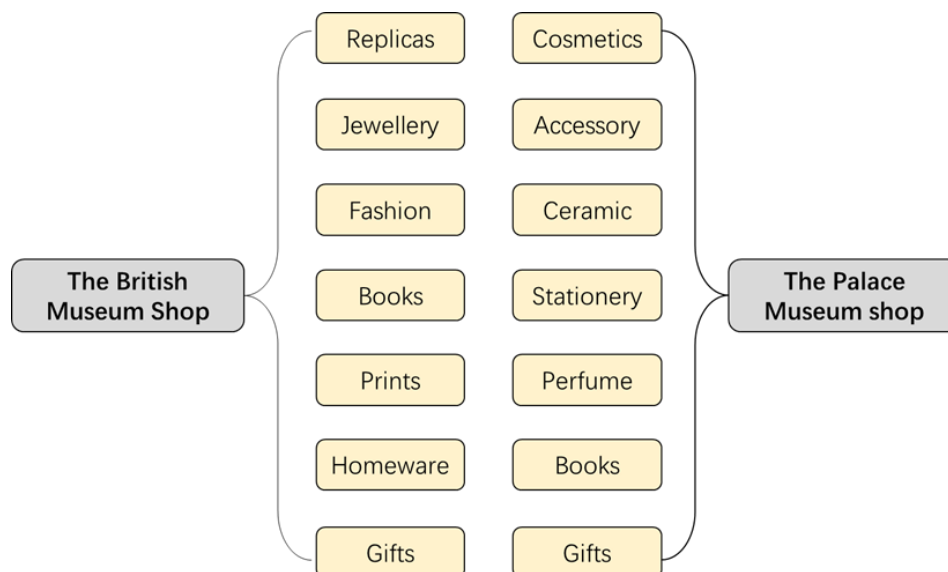


Figure 11 Product classification of the British Museum shop and the Palace Museum shop

It can be seen that the products in museum art stores are basically products with use functions, rather than used. Experience-based art derivatives have become increasingly popular in recent years, and the most popular one is NFT (Non-fungible Token). Consider the case of Blake Kathryn, a 3D artist with a surrealist futuristic aesthetic whose multidimensional creations span a wide range of subjects and industries. Catherine is currently one of the leading digital artists in illustration, icon and branding. Kathryn have cooperated with fashion brands such as Jimmy Choo and Fendi, which can be shown in figure 12. In addition, the famous artist Takashi Murakami is also keen to release digital encrypted art products on NFT platforms.



Figure 12 NFT art derivatives by Kathryn

### ***3.1.2 Classification according to the theme***

Through sorting out the design works of art derivative products, it is found that art derivative products seem to have many types of products, but their basic themes are fixed. Art derivatives can be divided into four types according to the theme, they are Cross-border cooperation derivatives, Exhibition theme derivative, Festival limits derivatives, and Film and anime theme derivatives.

#### **Cross-border cooperation derivatives**

Because of the added value of art, art derivatives will be favored by brands in business, thus giving rise to derivatives of cross-border cooperation. The diversity of art derivatives makes the objects of cooperation also diversified. Cross-border cooperation derivatives

have two main modes, that is cooperation between institutions and brands, and cooperation between artists and brands.

Firstly, is Art institutions collaborate with fashion brands. Some brands with cultural vision hope to improve the added value of their products, and they will cooperate with institutions related to culture and art to improve the cultural attributes of their products, so as to achieve topical and profitable effects by means of art. Among them, fashion brands or some household brands often use this cooperation strategy. The museum also hopes that through cooperation with the outside world to enhance their own cultural influence, while the income from the cooperation is incorporated into the daily operating expenses of the organization. For example, the classic cases include the cooperation between the Taipei National Palace Museum and the famous Italian designer Alessi, the collection of sneakers developed by China Dunhuang Art Academy and Sports fashion brand Li Ning in 2020 are typical cases of cooperation between brands and institutions. There are basically two types that art institutions can cooperate with fashion brands: the combination between art institutions and fashion brands and art institutes carry out independent research and develop fashion art derivatives for their own art shops.

Then is the artists collaborate with fashion brands. The relationship between fashion brands and art seems to be inextricably linked, especially for luxury brands with artists. Collaborations between artists and fashion brands can take two forms, artists can directly cooperate with fashion brands and participate in the design of fashion derivatives, taking fashion products as a material carrier to convey their own artistic ideas. Besides, Artists can grant fashion brands the right of their artworks by means of artistic authorization, and the fashion designers can make appropriate innovations based on the original artworks.



### Exhibition theme derivative

Specific exhibitions by artists or representative artwork of art institution often accompanied by artistic derivatives of the relevant exhibition theme. Take The British Museum Shop as an example, its official website store is dedicated to artworks inspired by its collection or specific art exhibitions. Including, inspired by Ancient Egypt, Inspired by Greece, Inspired by Lewis Chessmen, etc. As Figure 13 shows, There are 53 fashion products under the ancient Egypt theme, and 11 fashion products the Ancient Greece theme of the British Museum shop.

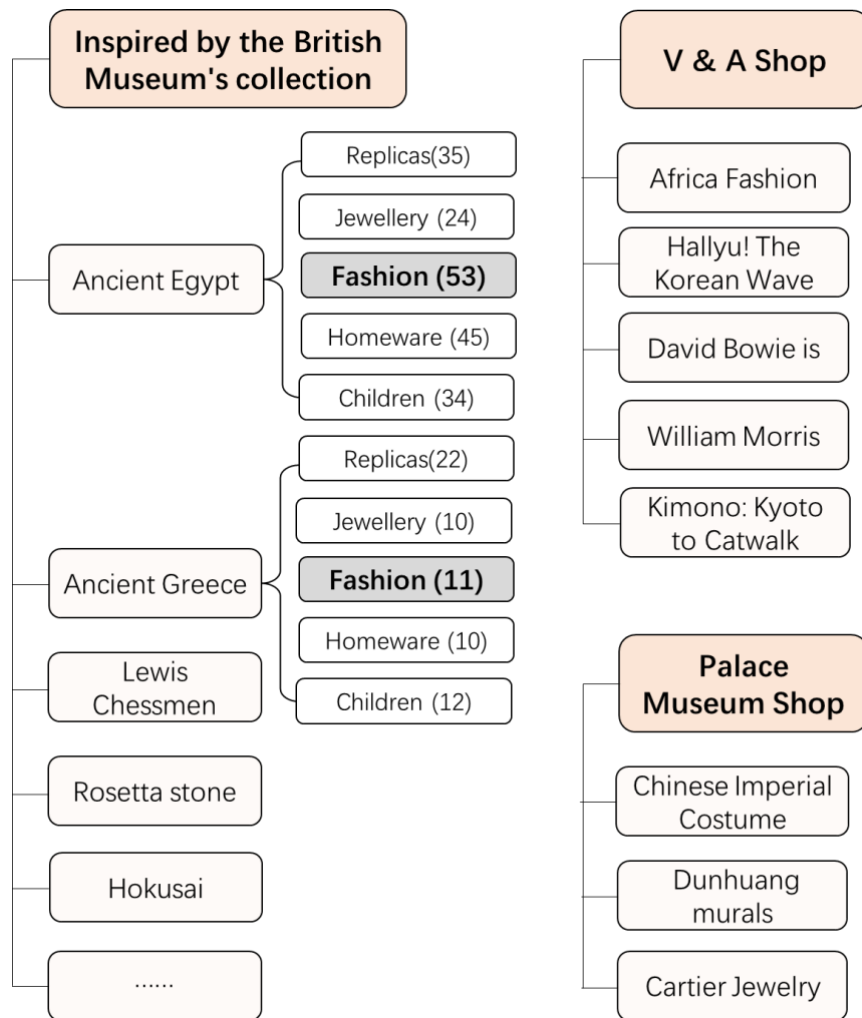


Figure 13 The theme of art derivatives of four museum shops

The importance of fashion in the museum's thematic art derivatives is visible. In addition, in the website of the art store of the Victoria and Albert Museum in the UK as well as the Palace Museum in China, fashion art theme derivative are profound in different art theme

exhibition. This shows that the study museum thematic derivatives are an important design method research content of fashion art derivatives, based on this, this study will carry out a specific analysis on the design method of museum art derivative products in study1.

### **Festival limits derivatives**

Festivals can create huge business opportunities. The development of derivatives will refer to the sales mode of festivals. Festival theme derivatives vary differently in countries and regions because the regional customs and festival culture are distinctive. For example, in winter, China will launch many art derivatives according to the festival theme of the Spring Festival. Many art institutions or artists are involved in the design and promotion of related derivatives. For instance, in the special collection “Lunar New Year 2022” the French fashion brand Dior and the American artist Scharf cooperated to create the totem series of tiger stripes, which mainly reflected the Chinese charm with blue and white porcelain. In addition, Gucci launched a special collection of clothing inspired by the early paintings of the brand illustrator Vittorio Accornero in 2022 which is popular for its romantic and artistic style. In addition, festival derivatives will also reflect seasonal characteristics, and the design of festival art derivatives needs to take seasonality into account. Such as Christmas holiday limited clothing products, often winter clothing which reflects a strong festive atmosphere.

## **3.2 The derivate modes of art derivatives**

### ***3.2.1 Independent development***

As the name implies, independent development means that institutions or individuals develop art derivatives by themselves and supply the entire industrial chain, including sales. This development mode can be close to the original intention of the developer, as well as the temperament and spiritual connotation of the original work itself, and its advantages are reflected in the following: first, the developer can fully control the design process of the derivative products, have absolute autonomy over the derivative products developed,

and the products produced can best meet the requirements of the developer. Besides, developers can make full use of their rich art background, rich collection resources and other advantages to efficiently develop derivative products with unique styles, so that consumers can form a better memory of the museum or art gallery when purchasing the products. In addition, the self-development method eliminates the cost of commissioning others to design, and the profits from the sale of art derivatives can maximally support institutions and artists. For example, the development of art derivatives by Han Meilin, a famous Chinese artist, belongs to the mode of authorization. The artist Han Meilin has a perennial cooperative factory to help complete the production of products. The factory is only mechanically executing electronic data and extremely explicit design ideas for art derivatives. The cooperation over the years makes the cooperation between the artist and the factory more tacit, guiding what kind of materials and what kind of process can better achieve the effect. For some designers, as an intermediate link, there is often a big gap between the design draft and the object, such as color difference, luster of the fabric, texture, and fineness of the process, which are difficult to control and regulate (Zhou, 2016). The art derivatives of the National Museum of China are also typical forms of independent development. The National Museum of China has set up its own design department, which is affiliated with the museum's exhibition planning and artwork department. In the design and development process, the designer mainly designs independently, and then displays the design scheme in the digital platform of the museum, and then cooperates with the corresponding factory for production. The museum's own design department has a good understanding of its own museum collection, so the design can achieve an in-depth exploration of the value of the museum art.

### ***3.2.2 Authorization development***

Some institutions and individuals have difficulties with independent research and development in the development of art derivatives and lack designers and product production equipment proficient in creativity. Therefore, cooperation with commercial brands to design and develop derivative products has become a common choice for institutions, which has also given rise to institutions specializing in "art authorization", and

among them, the crucial point is "authorization". art authorization covers the exploitation, reproduction, operation, and marketing of artistic copyright. Internationally, the art derivative market is called the "authorization" market, which essentially indicates that "authorization" is the "core" for the development of art derivatives. At present, there are three main forms of art authorization in the world: product authorization, digital authorization, and original copy authorization.

Among them, product authorization refers to the cooperation relationship between the brand and the artist or the owner of the intellectual property rights of the artwork to obtain the authorization for the production of the artwork, and transfer the representative characteristics of the artwork, such as shapes, patterns, and other images, to the product, so that it becomes an art commodity with artistic characteristics that can be copied and sold. Compared with ordinary products, art derivatives have higher added value. Digital licensing refers to the acquisition of digital pictures of artworks by photographing the original artwork and then applying the pictures to various kinds of media. Original reproduction authorization is the right to obtain equal reproduction of the original artwork for the sale of imitation products. For example, the reproduction of prints and the imitation of artworks in the museum's collection. The art derivatives of the Palace Museum in China are more in the form of authorized development. In 2011, the Palace Museum formulated its product development guidelines to provide standard guidance for the development of derivatives related to the Palace Museum. Besides, V&A Museum's art derivative development system also belongs to authorization development. V&A Museum has suppliers in many countries around the world, which can design and develop according to local needs. However, the development is limited. Out of respect for artworks, the development of derivatives is strictly limited, which also restricts the innovation of derivatives to a certain extent.

### ***3.2.3 Cooperative development***

Some brands hope to improve the added value of their products and will cooperate with institutions related to culture and art or cooperate with artists to develop specific products by means of art to enhance the cultural attributes and social status of the brand. Therefore,

cooperative development is a common means for the development of art derivatives.

There are many modes of cooperative development, depending on the identity of the partner, most of them are two-party cooperation, or three-party cooperation, or even multi-party cooperation, usually cooperation between institutions and manufacturers, or tripartite cooperation between institutions and manufacturers and artists, etc. The advantage of cooperative development is that it can realize the sharing of resources, and also make the original art have a broader communication channel.

In addition, art brands are keen on holding modern art exhibitions, take Salvatore Ferragamo as an example, has been associated with the Biblioteca Nazionale Centrale, Gallerie degli Uffizi, Museo Marino Marini and many other museums. Let the fashion brand not only launch fashion products but also in the promotion of art and high-grade style. Dior and Hermes have held many exhibitions in collaboration with artists. In addition, some fashion brands even have their own museums, which often display exhibitions on fashion-related topics. The fashion show of many fashion brands actually combines the language of artists, and the fashion show becomes more like a visual art exhibition, which is another place for art and fashion cooperation.

### **3.3 Design methods of fashion art derivatives**

The cooperation between actual art and fashion has long existed. The famous Spanish surrealist artist Dali cooperated with fashion (Cohen & Stone-Richards, 2021). In addition, Pop artists represented by Andy Warhol can not only become the source of inspiration for fashion brands, but also artists themselves are constantly approaching fashion and cooperating with fashion brands, such as Louis Vuitton's cooperation with the famous contemporary pop artist Yayoi Kusama and Jeff Koons (Castriota, 2022). These cases can show that there are many similar attributes between art and fashion, so their boundaries are difficult to distinguish (Kastanakis & Balabanis, 2012). In addition, LVMH, the world's largest fashion group, is also regarded as the contemporary Medici, the patron of art, constantly cultivating and supporting the development of art (Castriota, 2022). or the

famous fashion designer Schiaparelli is also an art, is also fashion design works (Stent, 2011). It has been 16 years since the China-Korea fashion art Exhibition was held in China in 2007, and a theme has been launched every year. The design cases provide a rich research object for this study, based on this, as figure 14 shown, this research proposes three design methods for fashion art derivatives, that is copying the images of artworks, reprocessing the images of artworks, and diversifying the expression of artistic language.

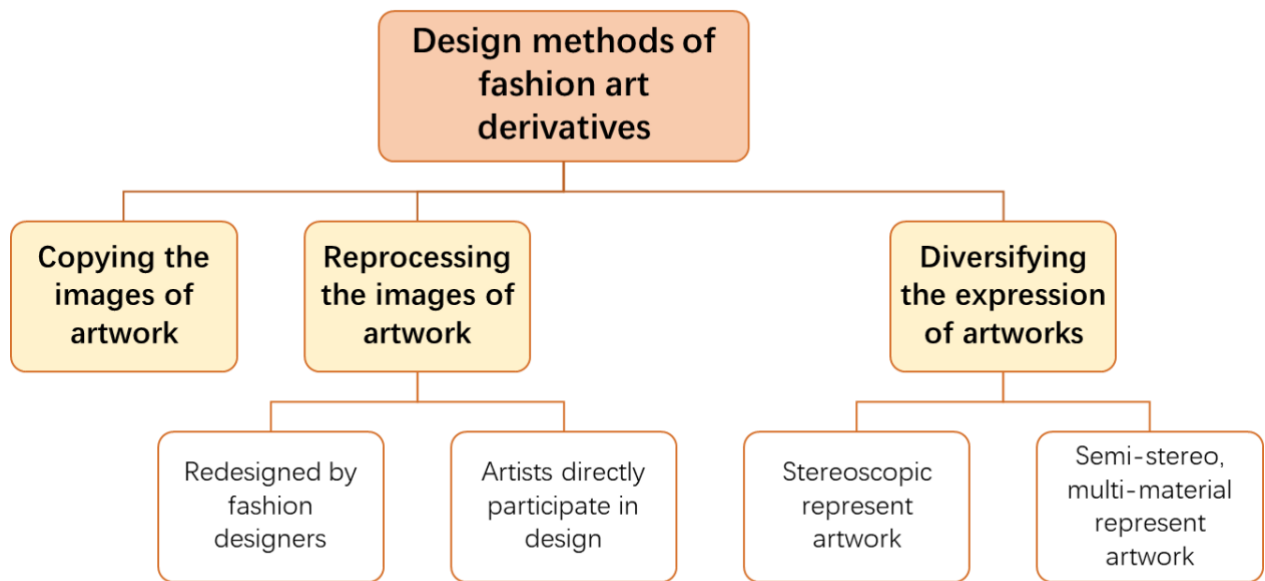


Figure 14 Design methods of fashion art derivatives

### 3.3.1 Copying the images of artwork

The most common way of artistic derivation to reflect artistic elements in clothing is to choose the image of the original artworks and then transfer it to the fabric through the method of printing. The methods can be used in fashion products such as clothes, bags, scarves and so on. It can be tried in almost any situation where the image can be applied, but this approach is a common development method in the early days of the popularity of art derivatives, and such derivatives tend to appear uncreative and crude.

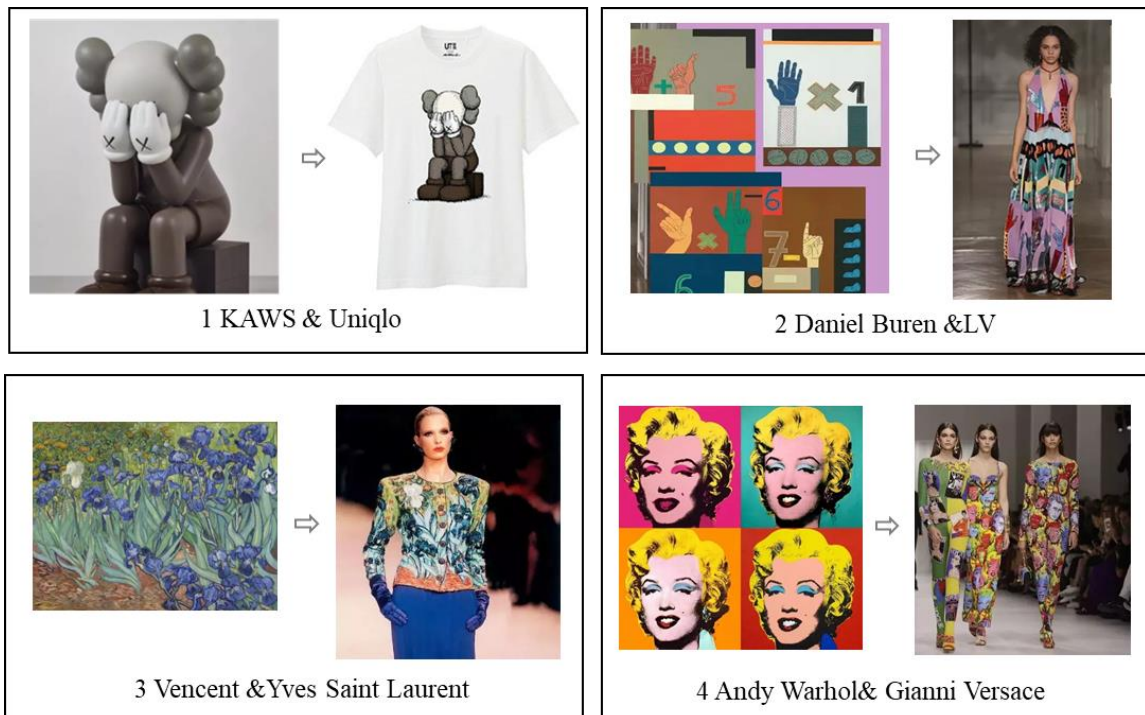


Figure 15 Copying the images of artwork method

As figure 15 shows, image selection is the most widely used and most effective way in the design strategy of art derivatives. The originality lies in the different processing methods of an image used by designers. Such as zooming in locally or grabbing an interesting part of the image and redesigning it. These wonderful parts are fully extracted and utilized to make the products interesting and influential, and more attractive to consumers. Copying and printing the images of artworks are the most used methods for art derivatives. Take the V&A museum for example, as an internationally licensed museum in art and design, V&A was founded at the Great Exhibition of 1851 in London and is now the world's largest museum of decorative and applied arts. Its collections have many patterns, which can be

directly placed on the products, such as mobile phone cases. The database of the V&A museum has established a completely digital system that supports the designer's derivative works. In addition, the bags of the "Master" series by Jeff Koons, the famous American contemporary pop artist's collaboration with Louis Vuitton, also uses the method of copying the images of classic artworks. Jeff Koons takes the images of Van Gogh, Rubens, Titian, Monet, and other Masters of the works the replica is directly printed on the surface of the bag.

### ***3.3.2 Reprocessing the images of artwork***

Reprocessing the images of artwork is a more creative design method compared with the direct copying of the image of the artwork. Designers seize a certain feature of the original art (such as an ornament, font, pattern, color, material, or image) from the original art, refine and highlight it for the redesign. After sorting out the relevant works, it is found that there are two main ways to reprocess the image of the artwork. One is that the designer absorbs the image of the artwork as inspiration and re-designs. The other is that artists directly participate in the design and actively combine their own artistic characteristics and symbols with the brand and product categories they participate in the design.

Firstly, it is a very common design method for designers to draw on the image of artworks as inspiration for redesign. For example, the Palace Museum selected the famous dyeing and weaving patterns of the clothes of the imperial concubines as patterns and applied them to clothing products. However, the patterns are not used directly but restructured and colors are reprocessed, and the clear logo pattern has a high degree of identification. These patterns of the Palace Museum are widely used in the Tote bags and umbrellas in the Museum shops. Compared with simple and direct pattern copying, this design strategy obviously requires designers to have keen judgment and the ability to refine symbols, and understand consumer needs and market needs, so as to design products that meet the public aesthetic and maintain their own artistic quality in the process of continuous exploration. In addition, Figure 16 shows other cases of designers redesigning artistic images. Among them, No.1 is the cooperation model between the Louvre and the Japanese fashion brand Uniqlo. The most representative work of the Louvre, Mona Lisa, is combined with the



classic works of Mondrian. The image of Mona Lisa is redesigned, the hand part is enlarged, and the tone is reprocessed. Breaking the classical temperament of the Mona Lisa, the T-shirt pattern is more fashionable. No. 3 also adopts a similar design method to segment and integrate two classic oil paintings in the Louvre, reflecting a sense of modern fashion. No. 4 shows the most famous example of artists participating in the redesign is the collaboration between LV and Takashi Murakami. In the design cooperation, Murakami carried out a rich imagination to design the new Monogram, the classic totem of LV, so as to combine the century-old brand culture with the new artistic image and bring new development prospects to the brand. After continuous creation and modification, in 2003, Murakami made a design for the classic 'Monogram Multi' of LV. The unique application of mushroom, cherry blossom and other patterns, created a "cherry blossom bag", that attracted the attention of consumers. Before that, LV's classic pattern had always been three colors. Takami Murakami replaced the original three colors with dozens of bright and beautiful colors, which made LV's calm and even somewhat old style suddenly become young and lively, and also won the love of young consumers and expanded the customer group. Murakami also used his artistic style and work to redesign Louis Vuitton's flagship store in Paris in 2006.

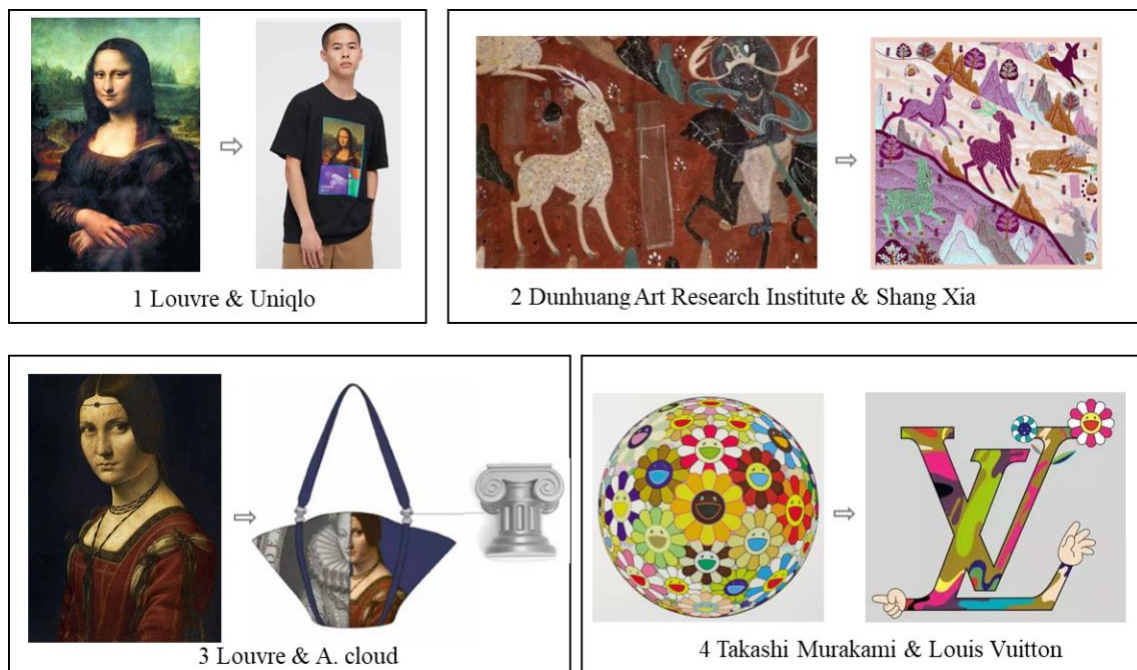


Figure 16 Redesigning artistic images method

It can be seen that the method of redesigning artworks can retain the characteristics and temperament of artworks, but also in line with the needs of the structure and pattern modeling of fashion products so that the product arrangement is more harmonious and more fashionable.

### ***3.3.3 Diversifying the expression of artistic language***

Diversifying the expression of artistic language refers to the derivative expression of artistic images in a way with diversified materials and three-dimensional design expression. It can be mainly divided into two categories: Stereoscopic representation artistic language and Semi-stereo, multi-material represents artistic language. Among them, part of the three-dimensional representation of artistic images is aimed at three-dimensional artworks, such as sculpture, fiber art, and other art forms, and the artistic images are reduced and functionalized. Sculpture works are used as local decorations, such as necklaces, metal decorative parts of bags, and local decorations of shoes. In addition, there are also planar paintings after language extraction, and then converted into a three-dimensional form. This way of expression in the museum art derivative has a variety performance.

In addition, the semi-stereoscopic artistic language which uses a variety of materials to reflect the artistic language through texture effect, such as collage, fold, hollow out and other processing methods. Compared with the planar artistic language, it is richer in the aesthetic sense of technology. In addition, compared with the three-dimensional design method, it has a wider usage space.

However, due to the cost of semi-three-dimensional processing, there are very few cases in the current art derivative design. As shown in Figure 17([Dior Lady Art 2: Dior Taps 10 New Artists To Reinvent Their Signature Bag | Sleek Magazine \(sleek-mag.com\)](#)), the famous Lady Dior handbag invites artists from different countries to participate in the artistic design of the handbag. The artist's unrestrained imagination and superb artistic expression have given Dior bags with new life, but the texture technology of these handbags is complex, so it is only a limited product for high-end consumers. However, these artistic designs can give inspiration to the fashion industry. Through technological

innovation, it is also feasible to design and apply this semi-three-dimensional artistic processing method in mass fashion products.



Figure 17 Lady Dior by artists

## **Chapter 4 Methodology**

### **4.1 A Summary of Research Design**

This study mainly uses questionnaire survey and professional evaluation method to obtain data and further carry out analysis. Study 1 is an analysis of the effectiveness of art derivation as a design method for promoting aesthetic emotion (SRQ1). On this basis, through the case of Chinese traditional Spring Festival clothing in Pilot Study and the case of fashion bags in Study 2, this paper analyzes the promotion effect of art derived design method on fashion sustainability and inconspicuous consumption (SRQ2).

### **4.2 Research method of *Study 1***

#### ***4.2.1 Hypothesis and experiment design***

The aesthetic nature of artwork is non-utilitarian, stable and permanent (Ognjenovi'c 1997). Therefore, it is important to understand whether the lasting and stable characteristics of artworks can play a role in prolonging the life cycle of fashion products when art is integrated into fashion. In this research, art derivation will be tested as a sustainable design method that has the potential to prolong the life cycle of fashion products. The main objective of this study is to investigate the design methods that may enhance the lifespans of fashion art derivatives by arousing consumers' aesthetic emotions. The sub-objective is to clarify the influence of different derivative design methods on consumer emotional durability.

In this research, we tested the following hypothesis:

Hypothesis 1: Consumers are most interested in derivatives designed by artists in collaboration with fashion brands.

Hypothesis 2: AD developed by art institutions is least liked by consumers.

Hypothesis 3: Most of the respondents' choices of emotional words for their favourite products are in the range of Pleasant-Calm and Pleasant-Excited, which shows a positive

aesthetic emotion and emotional durability towards fashion art derivatives.

Hypothesis 4: Respondents' age has a certain influence on their preferred design methods.

Hypothesis 5: Respondents' age has a certain influence on their aesthetic emotion towards AD.

Hypothesis 6: There is no direct correlation between the designed year of AD and how many consumers like it. Products designed 5–10 years ago can still be welcomed by consumers.

Hypothesis 7: Different design methods may affect respondents' aesthetic emotions towards fashion art derivatives.

As figure 18 shows, the research method and process can be divided into four parts. The first part includes the design of the experiments and determining the art derivative samples. The second part includes the two-question survey. The third part includes data collection and the sorting of the responses to the questionnaire, including data on interviewees' ages, favorite derivatives, and emotional words. The fourth part includes comparative analyses of the variable factors of the derivative samples and the variables generated by the questionnaire.

The questionnaire design and survey process draws on theoretical foundations and research methods of Kansei Engineering. As Kansei Engineering is a comprehensive interdisciplinary discipline developed in the 80s of the 20th century between design, engineering, and other disciplines (Lee et al., 2002; Nagamachi, 1995), its concepts and research contents will not be repeated here. Lokman explained many research models of kansei engineering, which is an important theoretical basis (Lokman, 2010). This study draws on the theoretical basis and research methods of emotion research to design the survey to obtain respondents' emotional feelings about the samples. As the 18th-century German philosopher Baumgarten believed that aesthetics was actually the science of perceptual cognition (Gregor, 1983). Therefore, it will be helpful for the study of aesthetic emotions to learn from the analysis of the aspects of emotional perception research.

Based on this, this study collected respondents' feelings about stimuli in different fashion product samples mainly through questionnaire and convert these feelings into quantitative data.

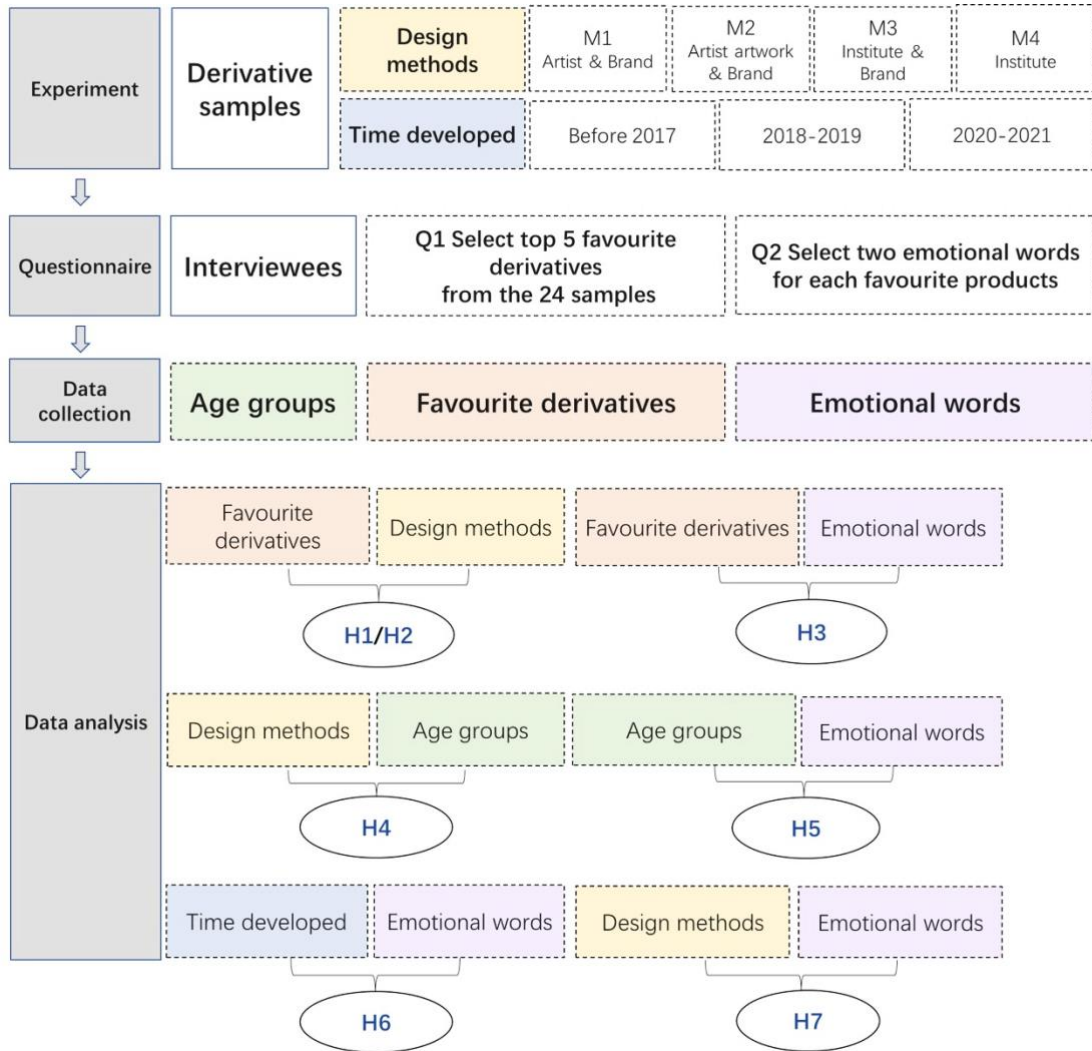


Figure 18 Diagram of research process and hypothesis

#### 4.2.2 Grouping of design methods

To test H1, H2 and H3, it is essential to clarify different design methods of AD. Based on relevant research on museum AD design methods (Kaya, 2015) and collaboration between artists and luxury brands (Michel & Willing 2020), this study summarises four design methods of fashion art derivatives:

Artists can directly or indirectly participate in the design (Jiaru & Kim, 2020). Researchers divide artists' cooperation with fashion brands into the following two categories, according

to the way artists participate in the brands: Method 1 (M1): Artists directly cooperate with fashion brands and participate in the design of fashion derivatives, such as Louis Vuitton launching graffiti bags, which were designed by Stephen Sprouse (Michel & Willing 2020). Method 2 (M2): Artists grant fashion brands the right to use their artwork using artistic authorisation, and fashion designers can make appropriate innovations based on the original artwork.

The art derivative design methods of art institutions mainly include being designed by the institutions' own design team and entrusting other brands to design and produce (Gao 2016). Researchers divide art derivative design methods of art institutions into the following two categories: Method 3 (M3): The combination of art institutions and fashion brands. A typical example is the collaboration between museums and luxury brands (Kastner 2014; Bai 2017). Fashion brands can collaborate in the form of a tribute to a deceased artist whose artwork belongs to an art institution to recreate the artist's classic works in fashion (Zhang & Kim 2020); Method 4 (M4): Art institutes conduct independent research and develop fashion art derivatives for their own art shops. The design methods are mainly the patternization of classical art elements, equal scaling of original works of art and the redesign of original artworks based on the aesthetics and needs of modern people (Kaya & Yagiz 2015).

#### ***4.2.3 Data collection***

An experiment was designed to measure the emotional durability and sustainable consumption of fashion art derivatives. Using a questionnaire survey, respondents will answer two questions based on observations and impressions of high-definition images. The experiment was conducted in a college with an art design major and a shopping mall with a high concentration of fashion consumers in northeast China through field research and interviews. Sixty-five respondents took part in the experiment, including 10 teachers majoring in art design, 28 undergraduates and postgraduates majoring in art design, five clothing store managers and 22 customers in a shopping mall. The age distribution of the interviewees is from 18 to 50 years, which was divided into three groups: 28 respondents

in the 18–25-year-old group; 21 people in the 26–35-year-old group; 16 respondents were over 36 years old. The researchers mainly used interviews and questionnaire methods to communicate with the interviewees and guide them to answer the corresponding questions.

The experiment was divided into three parts. First, samples of the experiment were determined, and then a questionnaire was designed. Finally, the questionnaire results were statistically analysed.

#### ***4.2.3.1 Determination of Samples***

Considering the influence of AD based on different design methods on consumers' aesthetic emotions, the samples used in this study will be selected according to the type of design method.

In this study, great attention was given to the comprehensiveness of the artistic expression styles of the samples. The researchers selected 24 fashion art derivatives, six pieces in each group, according to the four main design methods of the AD (Fig. 18). Our samples were selected based on numerous papers on AD, microblog articles related to AD in online media, and products with great attention on online sales platforms. Therefore, the distribution of samples should not be too concentrated on one type of fashion item. Instead, samples may cover the main fashion product types and design methods of current AD. The samples we chose in the experiment possess the following characteristics:

First, the design and development years of the samples are from 2007 to 2021 as fashion products updated rapidly. For example, among the 24 products, eight samples were designed five years ago; nine were designed in 2–3 years, and seven new products were designed within one year. Through the analysis, researchers may judge the endurance of fashion art derivatives. Second, the classification of the samples is evenly distributed. Each group included a mix of high-end brands and mass fashion. In addition, each group had



both clothing and accessories samples.

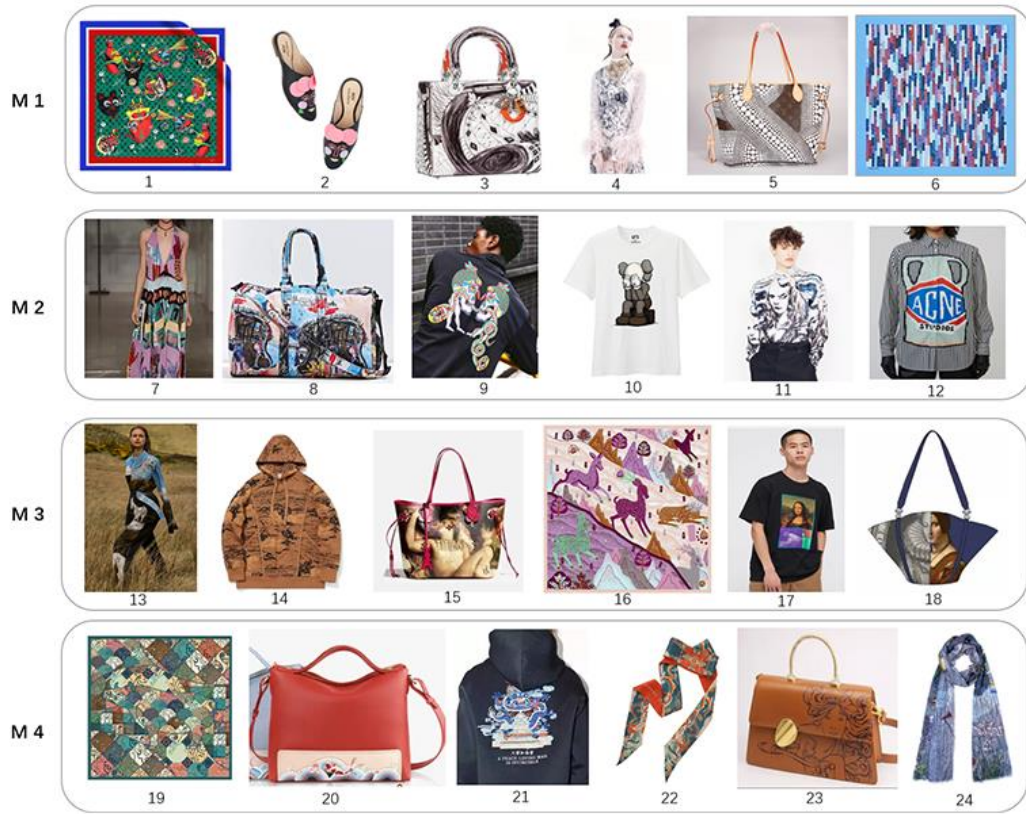


Figure 19 Samples of study 1

Table 3 shows the category distribution of the 24 samples, with a total of 10 clothing, accounting for 41.7%, and 7 bags, accounting for 29.2%. In addition, there are 6 scarves and 1 pair of shoes. Since the study mainly considered the relationship between sample design methods and respondents' emotion, thus the categories of sample were not used as an analysis variable. And the possible influence of the categories of sample on respondents' selection was not taken into consideration. The study mainly analyzes emotional vocabulary on 24 samples, and the following is a detailed explanation of the research survey process.

Table 3 The items of the 24 samples

Design method	Scarf	Shoes	Bag	Cloth	Total
M1	2	1	2	1	6
M2	0	0	1	5	6

M3	1	0	2	3	6
M4	3	0	2	1	6
Total	6	1	7	10	24

Table 4 The information of samples

No.	Group	Artist	Fashion brand	Artistic style	Year
1	M1	Kzeng Jiang	Louis Vuitton	Pop art	2018
2	M1	Bukky Baldwin	Josefinas	Pop art	2019
3	M1	Jack Pierson	Dior	Pop art	2017
4	M1	James Jean	Prada	Illustration art	2018
5	M1	Yayoi Kusama	Louis Vuitton	Pop art & abstract art	2012
6	M1	Ding Yi	Hermes	Abstract art	2007
7	M2	George Sowden & Nathalie du Pasquier	Valentino	Abstract art	2017
8	M2	Jean-Michel Basquiat	Herschel	Pop art	2020
9	M2	Gilbert&George	Supreme	Pop art	2019
10	M2	KAWS	Uniqlo	Pop art	2016
11	M2	Raymond Pettibon	Dior	Pop art	2019
12	M2	Grant Levy-Lucero	Acne Studios	Pop art	2019
No.	Group	Art Institution	Fashion brand	Artistic style	Year
13	M3	George Stubbs	Stella McCartney	Classical art	2017
14	M3	Dunhuang Academy China	Ling Ning	Classical art	2021
15	M3	Jeff Koons	Louis Vuitton	Classical art	2017
16	M3	Dunhuang Academy China	Shangxia of Hermes	Classical art	2017
17	M3	Louvre	Uniqlo	Classical art& abstract art	2021
18	M3	Louvre	A. Cloud	Classical art	2020
19	M4	National Museum of China	None	Classical art	2021
20	M4	The Palace Museum	None	Classical art	2019
21	M4	Summer Palace	None	Classical art	2018
22	M4	Dunhuang Academy China	None	Classical art	2020
23	M4	Tian Jin Art Museum& Mucha	None	Classical art	2019
24	M4	V&A & Kristjana S Williams	None	Illustration art	2020

Third, the design methods of the samples are obvious. For example, No. 6 is a free artistic creation by Chinese artist Ding Yi's. The artist used abstract cross-symbols to express 'Chinese rhythm'. No. 5 is a famous case of collaboration with artists in the fashion industry.

Besides, the artists or archetypes of artworks involved in the samples abound in artistic styles. For example, M1, M2 are mainly pop and abstract art, and M3 and M4 are mainly

classical art. Thus, the researchers can clearly understand consumers' emotions about combining different artistic styles and fashion.

Moreover, the samples selected in the experiment eliminated logos and other brand identification. The researchers wanted to understand consumers' judgments based on the design of the product itself rather than the brand or the age of the product. During the investigation process, the researcher only showed the respondents the picture of the product in figure 19. Still, the background information of the product in table 3 was uninformed to the respondents.

#### ***4.3.3.2 Questionnaire design***

There were two questions in the questionnaire. For Q1, respondents were required to select five favourite products from the reference list of emotion words and rank them in order of favourite to general. Besides, for the Q2, respondents need to truthfully select the corresponding emotional words from the table 4 to express their emotional feelings for the five products. The requirement is that each sample corresponds with two emotional words. The most important thing during the questionnaire design is the choice of emotional words; determining the accurate sentimental words can help researchers quickly obtain and sort out consumer comments. Regarding collecting and defining emotional vocabulary, American psychologist James A. Russel believed that human emotion has two relatively independent dimensions: the 'pleasant and unpleasant' dimension and the 'excited and calm' dimension. Through in-depth interviews, Edwardson (1998) summarised the most commonly used emotional words of consumers. Marsha(1997)summed up 16 categories of consumer emotions. Jia et al. (2016) classified the sentiment vocabulary of product evaluation based on a fine-grained sentiment analysis model. Jia et al. (2016) proposes a fine-grain sentiment analysis method and classifies Chinese emotional vocabulary based on HowNet dictionary. The emotional vocabulary and sentiment analysis in this paper are used as the theoretical basis for determining key emotional vocabulary, which is of great help to the selection of emotional vocabulary in this study. Kousta' research shows that abstract words have advantages in dealing with

the choice of emotional vocabulary(Kousta et al., 2011)。 Abstract emotional words such as novelty, surprise, and excitement are often used in the public perception of art (Pelowski & Akiba, 2011). Therefore, in this study, based on Norman's (2003) theory of emotional hierarchy, abstract emotional vocabulary was sorted out from three emotional levels. As figure (20) shows, first, the reaction level feeling is mainly from the color, shape, theme elements for the interviewee stimulus, this type of emotional vocabulary is relatively more exciting and strong, such as excited, frightening, dizzy, etc. Secondly, for the emotion of Routine level, the feeling of comfortable and functional of the samples need to have need to be understand, the main emotional vocabulary in this aspect is relatively mild, such as comfortable, relaxed, harmonious and so on. For the emotion of Reflection level, as The aesthetic experience was regarded as the ‘appreciation of beauty’ (Gregor, 1983). However, contemporary art critics believe that the aesthetics of artworks can generate positive emotions alongside anger, fear and other emotions (Shimamura 2012). Therefore, the deeper emotional vocabulary selection in this part to show a more permanent emotional impact of the artwork on people, including, thought-provoking, imaginative, uncontrolled, et al. The study was based on Russell’s ‘pleasure-arousal’ emotional model, Jia et al.’s (2016) and Kousta et al. classified sentiment vocabulary of product evaluation, Different dimensions, positive and negative words are involved, commonly used for aesthetic emotional evaluation 20 emotional keywords were determined.

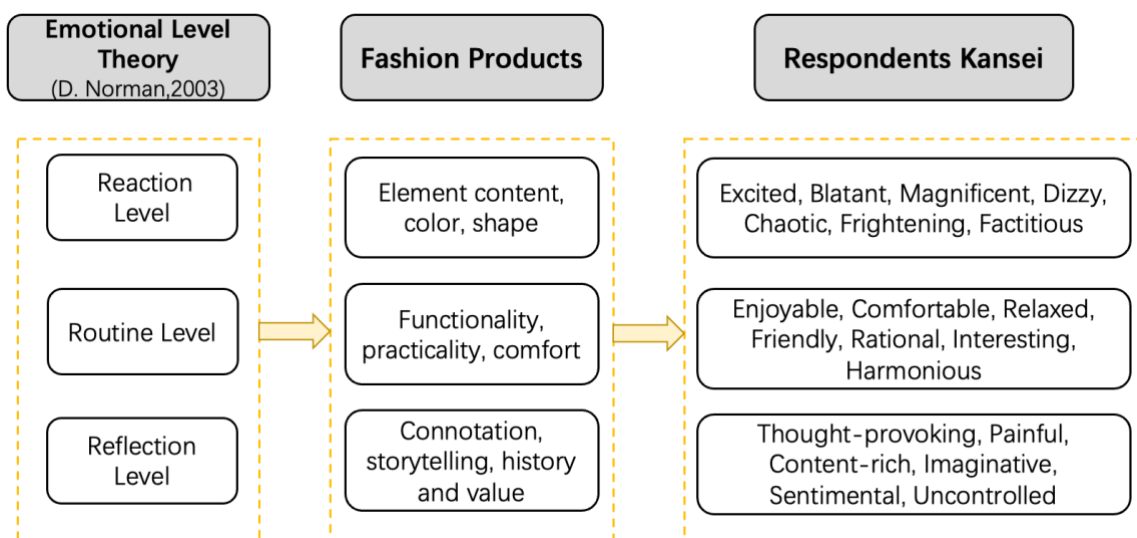


Figure 20 The method of emotional vocabulary selection

Table 4 Emotional vocabulary set in the questionnaire and the distribution of the most frequently selected emotional words

Reference list of emotion words							
<b>W1</b>	Enjoyable	<b>W2</b>	Excited	<b>W3</b>	Blatant	<b>W4</b>	Magnificent
<b>W5</b>	Interesting	<b>W6</b>	Comfortable	<b>W7</b>	Relaxed	<b>W8</b>	Friendly
<b>W9</b>	Content-rich	<b>W10</b>	Rational	<b>W11</b>	Harmonious	<b>W12</b>	Thought-provoking
<b>W13</b>	Imaginative	<b>W14</b>	Uncontrolled	<b>W15</b>	Painful	<b>W16</b>	Dizzy
<b>W17</b>	Sentimental	<b>W18</b>	Chaotic	<b>W19</b>	Frightening	<b>W20</b>	Factitious

#### 4.2.3.3 A Survey of personal wardrobe analysis

Based on the research above, this study also launched an analysis on wardrobe survey for young people. So as to collect more data about the relationship between the use cycle of clothing and emotion. This survey adopts an intensive survey of the relationship between young people' emotions and clothing life cycle. Each one need to organize and analyze his/her wardrobe within one week. Figure 21 specifically shows the content of the wardrobe survey. Firstly, each participant needs to organize his or her closet and find clothing or accessory (bag, shoes, etc.) which has been worn for the longest time. Then, questions need to be unanswered. 1) How the clothing and accessories were obtained? there are three alternatives to the question, self-purchase, gifts from others, and DIY (do it by myself). 2) How long have the clothes or accessories been worn? 3) Answer in depth the reasons for getting used to the item.

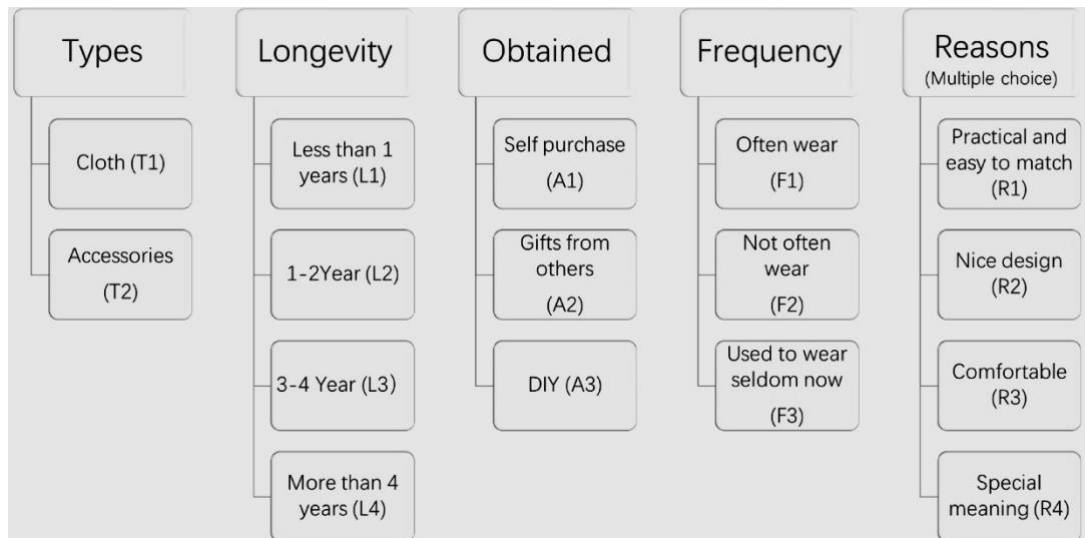


Figure 21 Content of personal wardrobe survey

### 4.3 Method of Pilot Study

#### 4.3.1 An overview of Pilot Study

Chinese people have the tradition of wearing new clothes on the first day of the lunar New Year, which means a huge business opportunity for the clothing industry. However, from the perspective of environmental protection and sustainable design, festive clothing has caused a great waste of resources. This is because many of the clothes with a strong Spring Festival flavor are not suitable for daily wear after the Spring Festival is over. In the Spring Festival of the following year, new-year clothes will be purchased again, resulting in a low utilization rate and a serious waste of clothes. Besides, the Spring Festival is in the coldest season of the year, and most of the clothes require more materials and are harder to degrade than the clothes for other seasons. However, there are very few studies on Spring Festival clothing from the perspective of sustainable design. Therefore, this study is of great research value not only from the perspective of market economy and enterprise demand but also from the perspective of environmental resources. The main purpose of this study is to propose a sustainable design of Chinese Spring Festival clothes based on consumers' preferences. To that end, this study seeks to answer two questions: What are the preferences of consumers at different ages in purchasing Spring Festival clothing (RQ1)? Can the

design characteristics combining art derivation and Spring Festival theme better meet the preferences of consumers (RQ2)?

Based on a questionnaire survey and analysis of consumers' preferences for Spring Festival clothing, this study attempts to compare the traditional design characteristics with the art-derived design characteristics to test whether the latter is more in line with consumers' preferences, and thus can be more sustainable. A questionnaire survey was conducted concerning festival costume consumption during the period when consumers most intensively purchased Spring Festival products for the 2022 Chinese Spring Festival. The survey results indicated that consumers have greater interest in incorporating classic artworks (art-derived design characteristics) into the costumes than simply incorporating obvious auspicious symbol elements (traditional design characteristics). In addition, it was found that the tradition of purchasing and wearing new clothes still prevails in China nowadays, and Spring Festival clothing continues to be in great demand. Because of this, research about how to design sustainable festival costumes is of great social and practical value.

### ***5.3.2 Questionnaire design***

A questionnaire survey and statistical analysis of the collected data were conducted. The specific research process includes three stages: questionnaire design, questionnaire survey, and questionnaire data analysis. As shown in Figure 22, in order to answer the two research questions raised in this study, the designed questionnaire was mainly divided into two parts: understanding of consumers' preference for spring festival clothing at different ages (RQ1) and comparison of traditional and art-derived design characteristics based on consumer preference for spring festival clothing (RQ2). In addition, the respondents were divided into three age groups: 18-25, 26-35, and 36-45. The study then analyzed whether

there is a significant difference in the responses across different age groups.

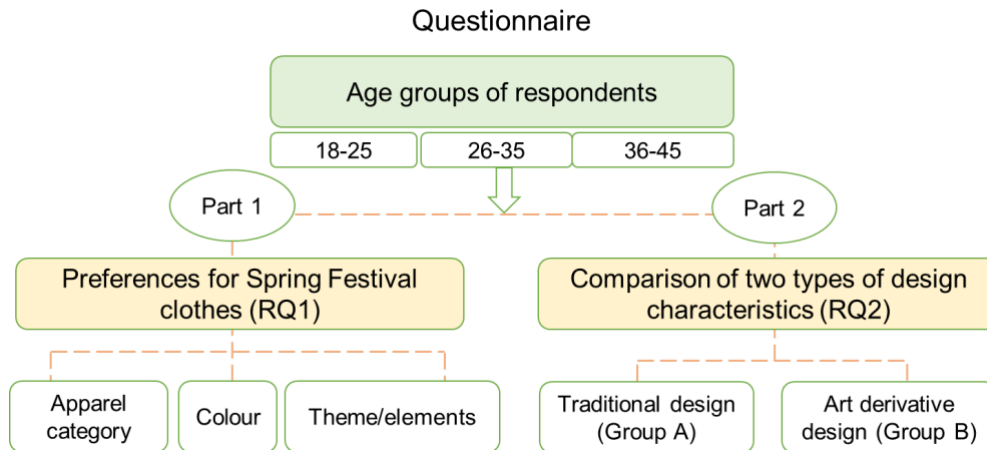


Figure 22 The relationship between the questionnaire and the research questions

Figure 22 shows the two demographic questions (see, Part 1 of the questionnaire consisted of ten questions (Q3-Q12). The purpose of these questions was to understand the consumers' tendencies toward buying Spring Festival clothes, and their preferences for categories, styles, and colors of spring festival clothes across different age groups. The second part of the questionnaire evaluated the preference of the respondents for products grouped according to two design characteristics: clothes with traditional design characteristics and clothes with artistically derived design characteristics.

From a large number of Spring Festival fashion products available in the market, the authors selected ten Spring Festival costumes with different characteristics to be evaluated by the respondents (see Figure 24). The sample of ten pieces of clothing was divided into two equal groups for analysis. Clothing items in Group A were of traditional festival style and two obvious features could be observed. Firstly, bright colors such as rich red and golden color were frequently employed as the main color in the product design. Secondly, the Spring Festival elements were prominent as well.

For example, elements like zodiac images were often adopted straightforwardly and displayed prominently, so that people can feel the theme of the Spring Festival at a glance. Clothing items in Group B had a more artistic style of design expression. Three of the five items were jointly created by artists and fashion brands (No.6, 7, and 8). No. 9 is a museum art derivative, and No. 10 is an artistic silk scarf created by students of art colleges based



on the theme of the Spring Festival. Group B expressed the elements of the Spring Festival in a restrained or implicit way. The colors used are not limited to traditional red and gold, but are more diverse, such as high-brightness colors, black and white colors, as well as Chinese blue and white porcelain colors. The design of Group B did not directly highlight the festive atmosphere of the Spring Festival but presented it in a romantic, free and implicit way. Take the zodiac theme for example, the image of the zodiac in No.1 highlighted the festive atmosphere with bright red and gold colors. However, the same zodiac theme in No. 6, 7, and 8 did not explicitly create any festival atmosphere in design.

**Spring Festival clothing survey**

**Q1, Q2** Basic Information of interviewees

**Part 1**

**Q3** Spring Festival is coming, will you buy new clothes for yourself? Yes No

**Q4** Do you usually buy yourself new Spring Festival clothes every year? Yes No

**Q5** What kinds of new clothes do you plan to buy this Spring Festival? (Multiple options) Outwear Dress Sweater Trousers / Skirt Accessories

**Q6** Did the Spring Festival clothes you bought last year have auspicious colors (such as red, gold, etc.) or auspicious patterns (Chinese zodiac, "fu" charact, Chinese knot, etc.)? Yes No

**Q7** Do you often wear the auspicious colors and patterns of Spring Festival clothes you bought last year in your daily life? Yes No

**Q8** Which of the following clothes do you prefer when buying Spring Festival clothes?

Clothes with joyous feeling of Spring Festival

Don't care whether the clothes have festival theme, just good-looking and practical is OK

**Q9** What color do you prefer when choosing clothes for the New Year?

Joyous colors such as red and gold

Don't care if it's a festive color, just choose my favorite color

**Q10** Do you prefer clothes with auspicious elements when buying Spring Festival clothes for your family (parents, children)? Yes No

**Q11** Do you prefer to buy limited-edition clothing or accessories with the theme of Spring Festival? Yes No

**Q12** Would you like it better if the auspicious traditional elements of artworks in museums were integrated into Spring Festival clothes and accessories? Yes No

**Part 2**

Rate the following spring-theme fashion products according to your own personal preference. (Minimum 1 point, maximum 5 points)

Figure 23 Survey questions of Pilot Study

Finally, it should be noted that when designing the questionnaire, the authors deliberately presented the two groups of products in a disordered way to avoid potential bias in the responses.



Figure 24 Grouping of sample clothing items according to their design characteristics

#### 4.3.3 Data collection

The data for this study was obtained through a combination of online and offline random questionnaires. Firstly, the researchers randomly surveyed customers in two shopping malls in northeast China and collected 36 valid questionnaire responses (29% of the total). Secondly, the researchers published an online questionnaire through a website and received a total of 90 valid questionnaire responses (71% of the total) from different regions of China. Thus, a total of 126 valid cases was the effective sample size for this study.

A key aspect of this questionnaire survey was timing. In order to truly understand the preferences of consumers during the holiday period, the researchers decided to conduct the survey from January 10 to February 4, 2022. This questionnaire survey period is from the Laba Festival of the Chinese lunar calendar until the first solar term of spring. This is the time when people make preparation for the Spring Festival. Thus, the data obtained during this period was accurate to analyze the consumer preferences for the purchase of Spring Festival clothing.

## 4.4 Research Method of Study 2

The research process of study 2 was divided into three parts: 1) Determining the samples for the survey; 2) collating the basic information of the samples, including whether printing technology was adopted and the year of sample generation; and 3) selecting five peer experts with many years of experience in design and art to evaluate the design method of the sample, brand image, and clarity of the design.

### 4.4.1 Determining the survey sample

The samples were of great importance to this study. A collection of artists and arts institutions that infuse artistic elements into fashion brands to inspire design innovation have created several products that are eagerly sought after by consumers and highly regarded by the fashion industry, with art-derived design bags being particularly prominent. The brands' classic bags provide the canvas for artistic collaborations, and among the numerous fashion bag brands, research samples were selected according to Rambourg's (2014) widely accepted brand grade division method, the "pyramid of luxury brands", shown in Figure 25.

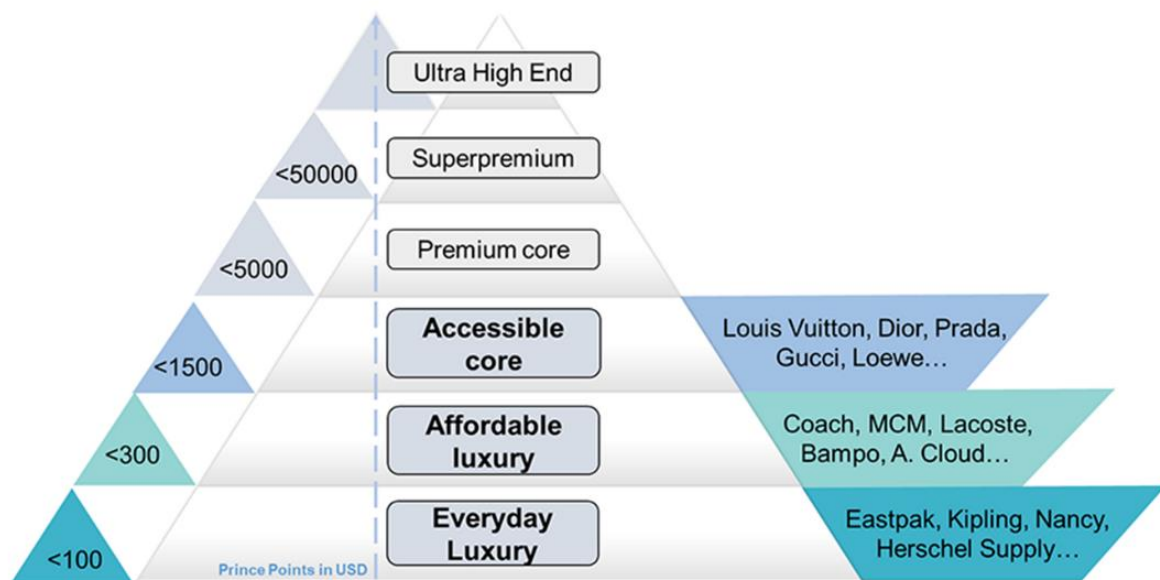


Figure 25 Brand grouping according to the pyramid of luxury brands

This method categorizes fashion brands into six luxury categories based on brand positioning and product price range. According to the pyramid theory of brand division standards, Premium core brands are those whose products cost more than \$5,000, Accessible core brands are those whose products cost between \$1,500 and \$5,000, and Affordable luxury brands are those whose products cost between \$300 and \$1,500; those priced under \$100 are called Everyday luxury brands. According to this division principle, Hermes, a top fashion brand, is located at the dividing line between super premium and premium core, with most luxury fashion brands being categorized between accessible core brands and affordable luxury brands. However, Hermes has only ever worked with artists to develop scarves or art exhibitions, so it will not be included in this study. Another influential luxury bag brand, Louis Vuitton, is keen on art co-branding and is located at the dividing line between the premium core and accessible core groups. Gucci, Prada, and other brands are in the accessible core group according to most of their handbags' market prices, while Coach, MCM, Lacoste, and others are in the affordable luxury group. Everyday luxury, at the lowest end of the pyramid, mostly comprises everyday life products, including cosmetics, perfume, and coffee, as well as fashion brands such as Eastpak, Kipling, Herschel Supply, which are included according to their market prices. In this study, these brands are referred to as mass fashion brands (MFBs), which is the more commonly used name in the fashion industry research (Lee, 2018; Lloyd, 2010), replace the everyday luxury category in Rambourg's pyramid model.

Figure 24. Brand grouping according to the pyramid of luxury brands (Rambourg, 2014). To select specific bag brands, this study referred to the classification of luxury bag brands by Doss and Robinson (2018) and the Apparel Ranking 50 produced by the British brand evaluation agency Brand Finance (2022). Sample selection was carried out by combining market pricing, brand concepts, and other relevant information about fashion brands that use art derivatives. This led to the selection of six accessible core brands (ACBs), six affordable luxury brands (ALBs), and seven MFBs, for a total of 19 fashion brands for the analysis.

The next step was determining the specific design cooperation cases of art-derived fashion bags. The samples in this study included fashion products that are aesthetically pleasing, functional, and have marketing value. In addition, our sample selection included no more than two samples for each art-derived design series, and the two samples needed to have different styles, colors, patterns, and other aspects. As Table 5 illustrates, 86 art-derived fashion bags were chosen as samples for the study, which were collaborations between 19 fashion brands and 46 artists (the work of the artist Jean-Michel Basquiat has been used by both Coach, an ALB, and Herschel Supply, an MFB). The co-branded fashion bag designs of four art institutions were also selected, including two handbag collections by the British Museum and the National Museum of China in collaboration with Chinese brand Bampo, which specializes in “original art handbags.” A chic casual handbag collection by China’s Yongle Palace Museum and Belgian brand Kipling and a collaboration between the Louvre and A. Cloud were also included. Judging by the distribution of the samples, the collaborations between ACBs and artists were the largest in terms of the number of participating artists and the number of works. In addition, ACBs had the longest collaboration duration with artists, beginning in 2001, while ALBs and MFBs only started working with artists 15 years later. Among the numerous design collaborations, the highest proportion of artists (60%) participated in ACBs.

Table 5 Description of the three sample groups

<i>Categories of brands</i>	<i>Number of brands</i>	<i>Number of artists</i>	<i>Number of samples</i>	<i>Year groups of samples</i>		
				<i>2001–2010</i>	<i>2011–2017</i>	<i>2018–2022</i>
Accessible core brands (ACBs)	6	31	51	6	21	24
Affordable Luxury brands (ALBs)	6	14	22	0	3	19
Mass fashion brands (MFBs)	7	8	13	0	1	12
Total	19	53	86	6	25	55

#### ***4.4.2 Basic information of the samples***

To understand the trends of fashion brands involved in art-derived fashion, it is necessary to demonstrate the clarity of brand identities of art-derived design bags at different periods. In terms of the brands involved in the design of art-derivative bags, we found that from 2001, when LV released a design collaboration with Stephen Sprouse with its graffiti collection, until 2022, if we divided the year group according to the average distribution time (from 2001 to 2022, according to the average distribution time), there would be very few cases in the first two year groups (2001–2007 and 2008–2014), and most bag designs would be concentrated in the most recent year group (2015–2022). Thus, we divided the 86 samples into three year groups, 2001–2010, 2011–2017, and 2018–2022, so that the case distribution would be more suitable for analysis and comparison. But even with this division, all bags in the three groups from 2001 to 2010 accounted for only 7% (6), while 2011–2017 accorded for 29% (25), and those produced after 2018 accounted for 64% (55). As Table 6 shows, only after 2011 did a small number of ALBs and MFBs begin using art-derived designs. However, from 2018 to 2022, numerous art-derived design works appeared in the three brand groups. This demonstrates that art-derived design is a design trend dominated by luxury brands, which has become recognized by the public in recent years.

However, in the analysis of the basic information of the bag samples, apart from the obvious information of the year groups of these samples, the information of whether there is an obvious logo on the bag can also be used for preliminary statistics. An analysis of whether the brand images were reflected in the art-derived fashion bags showed that 80% (41) of ACBs, 40% (6) of ALBs, and 25% (5) of MFBs retained their brand image. The chi-squared results illustrated a significant difference between a bag displaying a brand image and the three brand groups, indicating that the performance of ACBs' brand image is still very important: Even with the integration of artistic elements, the brand image was still visible. But this analysis only focused on the obvious message of whether the bag contained a brand identity. Next, the relationship between the bag design method and the brand image will be analyzed in more detail.

Table 6 Contingency table showing the brand images of the three brand groups

<i>Brand image</i>	<i>Accessible core brands</i>	<i>Affordable luxury brands</i>	<i>Mass fashion brands</i>	<i>Total</i>
<b>No image</b>	10	9	15	34
<b>Have image</b>	41	6	5	52
<b>Total</b>	51	15	20	86

**The chi-square statistic is 21.6229. The p-value is .00002. The result is significant at p < .05.**

#### 4.4.3 Evaluating the samples

To determine the bags' brand image visibility and primary design method, five design and art professionals were selected to evaluate the samples. Due to the large number of samples, the experts selected for the analysis needed to be patient, have excellent observational abilities, and be sensitive to patterns. As illustrated in Table 7, the participants in the evaluation were over 30 years old, and all were female. Years of edification in art and design and women's fashion acumen made them well-suited for this assessment, which required rapid image capturing in a short time.

Table 7 Basic information about the professionals involved in the evaluation of samples

<i>NO.</i>	<i>Gender</i>	<i>Age</i>	<i>Occupation</i>	<i>Working experience</i>
<b>No.1</b>	Female	37	Fashion design	13 years
<b>No.2</b>	Female	40	Fashion design	16 years
<b>No.3</b>	Female	39	Painting	13 years
<b>No.4</b>	Female	33	Art and crafts	8 years
<b>No.5</b>	Female	43	Graphic design	19 years

The five professionals involved in the evaluation needed to analyze 86 samples. Due to the large number of samples to be evaluated, the problem was simplified. As illustrated in Figure 26, the estimator needed to answer two questions. The first question (Q1) was about the performance of the brand logo. We divided the bag brand image into three categories: the brand image was extremely distinct, or the logo appeared in the main location (T1); the logo was not in the main location, but the brand image was still visible (T2); and the brand image was barely visible (T3). For the second question, the participating researchers categorized the bag design methods. Based on a preliminary analysis of the design methods of the art-derived fashion bags in the sample, four main design methods emerged.







		Q1 Which of the following three options accord with your feelings about the brand image of the bag (single choice)			Q2 Which of the following design methods do you think this bag uses? (single choice)			
		Type 1 (T1)	Type 2 (T2)	Type 3 (T3)	M1	M2	M3	M4
Sample Number	Samples	Brand image is distinct/logo in the main location	Logo is not in the main location, but the brand image is still visible	Brand image barely visible	Rebranding the brand image	Strengthening the art style	Dominated by brand image and supplemented by artistic elements	Multiple materials
1								
2								
3								
4								
.....								
85								
86								

Figure 26 The two questions for the evaluation

*Method 1 (M1).* The artist’s typical artistic style or artistic elements are combined with the brand’s monogram or logo to rebrand the brand through artistic elements. Louis Vuitton and Takashi Murakami are typical cases of this method. Gucci’s collaboration with Ken Scott in 2021 is also an artistic expression of the brand’s traditional logo. The logo or brand monogram is endowed with the personality of the artist or contains unusual and interesting



patterns. This changes the traditional pattern of silence and monotony, giving the brand new vitality.

*Method 2 (M2).* The main part of the bag reflects the artistic pattern and elements; when seeing the bag, people see the art of the bag, or the artist's temperament is very prominent. The collaboration between Louis Vuitton and Yayoi Kusama is a typical sample of this category, as the overall pattern featured on the bags comes from Kusama's representative works.

*Method 3 (M3).* The bags are still dominated by brand image and supplemented by artistic elements. With this method, the brand logo or image is prominent, and artistic elements are only featured on part of the bag or appear in a relatively fuzzy pattern.

*Method (M4).* The main basic characteristics of the bag do not change, but the artist makes small changes to the local and traditional materials and adds adornments such as metal buckles or handles. This partial participation in the design does not change the brand image of the bag and differs from the decorative form of patterns as in M3. While this design method may increase the difficulty of the production process, the artistry is reflected in interesting ways.

As Figure 3 illustrates, each participant gave their evaluations on all 86 samples one by one based on their personal feelings and judgments. As a result, answers from the five participants provide 430 answers for each question, which will be sorted for further analysis.

# Chapter 5 Results of Study 1: identify emotional factors in art derivative design for consumers to extend the life cycle of fashion products (SRQ1)

## 5.1 Results of study 1

For H1 and H2 of study 1, the study calculated the relationship between the favourite products of 65 interviewees and the design method derived from art. According to the questionnaire, each respondent gave five favourite products, with a total of 325 choices. As shown in Table 8, derivatives belonging to the design method of M1 Artist + Brand are selected the most times, which shows that H1 is established. However, among the four design methods, the number of IDs selected for the M4 Institute was not the least. Therefore, the data shows that the design method of M4 did not affect the interviewees' preference which means hypothesis 2 is not true.

Table 8 The results of respondents' preferences and design methods (H1 & H2)

Design Method	Count of Respondents ID
Artist + Brand	96
Artist artwork	63
Institute + Brand	89
Institute	77
Sum	325

As figure 27 shows, through the corresponding selection of emotional words for the five favourite designs, the top five are W14 Uncontrolled, W13 Imaginative, W9 Content-rich, W17 Sentimental and Interesting. It can be seen that the emotions evoked by the respondents' favourite products are diversified. Consumers like the products' own rich content that can enable the respondents to be uncontrolled and arose in-depth thinking, not just sensual stimulation and external beauty. This supports the research objective of study 1 that good design of fashion art derivatives can trigger consumers' reflective-level

emotions, making AD different from common fashion products and could have longer lifespans.

Words No.	Emotional words	Frequency	Ranking
W14	Uncontrolled	82	1
W13	Imaginative	77	2
W9	Content-rich	73	3
W17	Sentimental	48	4
W5	Interesting	47	5
W7	Relaxed	46	6
W12	Thought-provoking	38	7
W10	Rational	38	7
W11	Harmonious	37	8
W2	Excited	35	9
W6	Comfortable	31	10
W1	Enjoyable	31	10

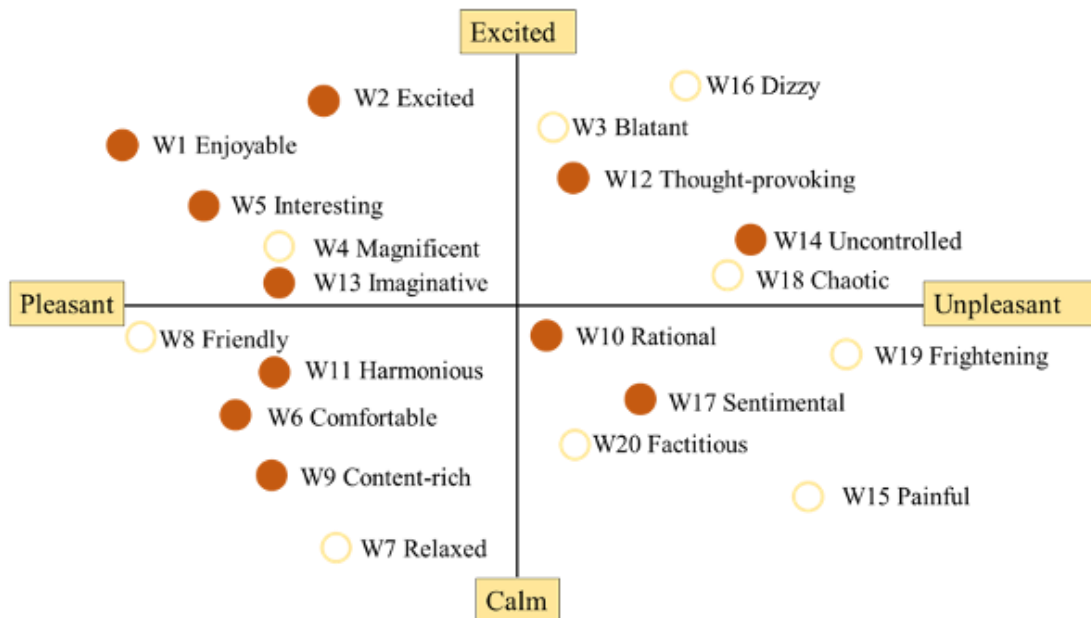


Figure 27 The distribution of the most frequent selected emotional words

In the theory of emotion classification, Russell's emotion classification model based on happiness and intensity has been widely recognized (Larsen&Diener,1992; Reisenzein,1994) . Based on Russell's 'pleasure-arousal' emotional model, this study analysed the distribution interval of emotional words selected by respondents to their favourite five products. In this study, the study divide these emotional words into four sections: Unpleasant Excited, Unpleasant Calm, Pleasant Calm and Pleasant Excited.

Researchers divided the samples into less preferred and preferred groups according to the count of samples of the top five products being selected. Thus, explain the relationship between preference and aesthetic emotional (H3). According to Table 9, the distribution of the most preferred and less preferred emotional words was both in the range of Pleasant Excited and Pleasant Calm. A chi-square test was performed to examine the relationship between preference and emotion. The relationship between these variables was insignificant,  $X^2(1, N = 650) = 1.17, p = .75$ . The result indicates that regardless of whether the respondents preferred or less preferred, the aesthetic emotions of respondents towards fashion products were positive. It can be further informed that AD can transform the artistic value of artists or original works into fashion products and provide consumers with positive emotions.

Table 9 The relationship between preference and the range of aesthetic emotions

	Unpleasant Excited	Unpleasant Calm	Pleasant Calm	Pleasant Excited	Totals
<b>Less preferred</b>	58 (55.93) [0.08]	41 (37.16) [0.40]	70 (73.95) [0.21]	75 (76.95) [0.05]	244
<b>Preferred</b>	91 (93.07) [0.05]	58 (61.84) [0.24]	127 (123.05) [0.13]	130 (128.05) [0.03]	406
<b>Totals</b>	149	99	197	205	650

The chi-square statistic is 1.1739. The *p*-value is .759262. The result is *not* significant at  $p < .05$ .

As shown in Table 10, all interviewees were divided into three groups according to their age. First, the researcher made a statistic test to examine the significance of design methods and respondents' age. The 18–25 years old group liked M1 Artists + Brand the most and M4 Institute the least. However, M4 Institute is the most popular design method for the 26–35-year-old group, followed by M1 and M3. The selection of the above 36 group was relatively average, and M1 was slightly higher than the other three design methods. The Chi-square statistic results show that the *P*-value was .54, indicating that there is no obvious relationship between age and design method (H4).

Table 10 The relationship between respondents' age, preferred design methods and

emotional words

	Pleasant Excited	Pleasant Calm	Unpleasant Calm	Unpleasant Excited
<b>18-25</b>	87 (88.31) [0.02]	85 (84.86) [0.00]	40 (42.65) [0.16]	68 (64.18) [0.23]
<b>26-35</b>	65 (66.23) [0.02]	67 (63.65) [0.18]	34 (31.98) [0.13]	44 (48.14) [0.36]
<b>Above 36</b>	53 (50.46) [0.13]	45 (48.49) [0.25]	25 (24.37) [0.02]	37 (36.68) [0.00]
<b>Totals</b>	205	197	99	149
<b>P-value</b>	The chi-square statistic is 1.4913. The <i>p</i> -value is .960068. The result is <i>not</i> significant at $p < .05$ .			

	M1	M2	M3	M4
<b>18-25</b>	42 [0.01]	31 [0.55]	41 [0.18]	26 [1.55]
<b>26-35</b>	28 [0.29]	18 [0.27]	28 [0.02]	31 [1.51]
<b>Above 36</b>	26 [0.24]	14 [0.15]	20 [0.17]	20 [0.06]
<b>Totals</b>	96	63	89	77
<b>P-value</b>	The chi-square statistic is 4.9941. The <i>p</i> -value is .544568. The result is <i>not</i> significant at $p < .05$ .			

Then, the researchers compared the emotional words associated with favourite products chosen by all three age groups. The statistical results showed that most of the emotional words selected by the three age groups belonged to the range of Pleasant–Excited and Pleasant–Calm. Word range in unpleasant was the least selected by respondents. However, through the Chi-square test, the *p*-value of the relationship between the four emotional words groups and the three age groups is not significant, the *p*-value is .096, which shows that there is no obvious difference between respondents’ age groups and their aesthetic emotion towards their favourite products (H5). However, in this research, we divided the 24 samples into three periods according to the samples’ development time, which is between 2017, 2018–2019 and 2020–2021. The researchers made a statistic on the preference of the samples selected as the top five favourites in the three time periods to illustrate the relationship between the developed time of the samples and respondents’ preference. As most of the preferred products were developed before 2017. As shown in

Table 11, the AD, which was developed five years ago, is still popular with the respondents. Considerably, this result can support that fashion art derivatives are different from common fashion products and that their artistic vitality is longer. Besides, a Chi-square test of independence was performed to examine the relationship between preference and the developed time group. The relationship between these variables was significant,  $\chi^2(1, N = 325) = 59.14, p < .00$ . The time of products will influence respondents' preferences.

Table 11 The relationship between the developed time of samples, respondents' preference and aesthetic emotion

	Preferred	Pleasant Excited	Pleasant Calm	Unpleasant Calm	Unpleasant Excited
<b>Before 2017</b>	118 (84.95) [12.86]	72 (61.18) [1.91]	53 (58.80) [0.57]	28 (29.55) [0.08]	41 (44.47) [0.27]
<b>2018–2019</b>	42 (60.59) [5.70]	52 (58.03) [0.63]	61 (55.77) [0.49]	29 (28.02) [0.03]	42 (42.18) [0.00]
<b>2020–2021</b>	43 (57.46) [3.64]	81 (85.78) [0.27]	83 (82.44) [0.00]	42 (41.43) [0.01]	66 (62.35) [0.21]
<b>Total</b>	203	205	197	99	149

The chi-square statistic is 4.4801. The  $p$ -value is .611992. The result is *not* significant at  $p < .05$

	Preferred	Less Preferred
<b>Before 2017</b>	118 (84.95) [12.86]	18 (51.05) [21.40]
<b>2018–2019</b>	42 (60.59) [5.70]	55 (36.41) [9.49]
<b>2020–2021</b>	43 (57.46) [3.64]	49 (34.54) [6.06]
<b>Total</b>	203	122

The chi-square statistic is 59.1494. The  $p$ -value is  $< 0.00001$ . The result is significant at  $p < .05$ .

Table 12 also shows the relationship between the samples in different periods and the emotional range of the interviewees' aesthetic emotion words. Also, Chi-square test result was 4.4801, and the P-value was .618, which shows there is no significant relationship

between samples' developed time and respondents' aesthetic emotion.

Through the statistic of the relationship between the four design methods and the four emotional ranges measure the influence of different design methods on the aesthetic emotions of interviewees (H7). Table 12 shows that both M1 (artist + Brand) and M2 (artist artwork) have a significant impact on consumers' Pleasant Excited emotions. M3 (Institute + Brand) and M4 (Institute) may raise the emotion of Pleasant and Calm the most. Through Chi-square statistic, it can be seen that there is a relationship between consumers' emotions and different design methods. The significance of the test is 0.00, which supports hypothesis 7.

Table 12 Comparison of the relationship between design methods and aesthetic emotion

	<b>Unpleasant Excited</b>	<b>Unpleasant Calm</b>	<b>Pleasant Calm</b>	<b>Pleasant Excited</b>	<b>Row Totals</b>
<b>Artist + Brand</b>	48 (44.01) [0.36]	24 (29.24) [0.94]	50 (58.19) [1.15]	70 (60.55) [1.47]	192
<b>Artist artwork</b>	39 (28.88) [3.54]	26 (19.19) [2.42]	18 (38.19) [10.67]	43 (39.74) [0.27]	126
<b>Institute +Brand</b>	37 (40.80) [0.35]	28 (27.11) [0.03]	69 (53.95) [4.20]	44 (56.14) [2.62]	178
<b>Institute</b>	25 (35.30) [3.01]	21 (23.46) [0.26]	60 (46.67) [3.80]	48 (48.57) [0.01]	154
<b>Column Totals</b>	149	99	197	205	650

The chi-square statistic is 35.1101. The  $p$ -value is .000057. The result is significant at  $p < .05$ .

## 5.2 Data analysis of wardrobe analysis experiment

A total of 48 young people aged between 18 and 20 years participated in the personal wardrobe analysis experiment. Through sorting out the results of participants' analysis, the study made data statistics according to five items: Types, Longevity, Access ways, Frequency, and reasons. From Table 13, it can be seen that R4 has the greatest impact on longevity by comparing the relationship between longevity and reasons. The Chi-square test was conducted, and the result shows that the  $p$ -value is .562633, which shows that there is no obvious connection between the life cycle and reasons. The practicability, comfort,

and special meaning of clothing have a great influence on the life cycle of clothing, but the experimental data shows that the special meaning is of great importance. This shows that the study of emotional design is as important as the aesthetic feeling and comfort of clothing or accessories.

According to Table 14, 19 of the 48 students kept their longest-lived clothes for three to four years. Two students had the longest-lived clothes that lasted less than a year. By comparing the relationship between service life and usage frequency in Table 12, it can be seen that clothing or accessories that have been kept for 3-4 years are the most frequently used, and no one chooses F2 during this period. The results suggest that clothing that is not newly purchased may have a longer lifespan, clothing that is three or four years old is often retained for its usefulness. Unfortunately, the chi-Square test cannot be carried out for further detection due to the existence of digit 0 in the data.

Table 13 Data analysis of the relationship between longevity and reasons

<b>Longevity</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R4</b>
less than 1 year	2	1	1	1
1-2years	8	3	5	7
3-4 years	10	10	8	10
more than 4 years	5	10	2	11
<b>Sum</b>	<b>25</b>	<b>24</b>	<b>16</b>	<b>28</b>

The chi-square statistic is 7.7196. The p-value is .562633. The result is not significant at  $p < .05$ .

Table 14 The relationship between frequency and longevity

<b>Frequency</b>	<b>Less than 1 year</b>	<b>1-2 year</b>	<b>3-4 year</b>	<b>More than 4 years</b>	<b>Sum</b>
F1	2	8	15	5	30
F2	0	2	0	5	7
F3	0	2	4	5	11
<b>Sum</b>	<b>2</b>	<b>12</b>	<b>19</b>	<b>15</b>	<b>48</b>

According to Chapman's theory, the service life of the product would be affected by six factors, including Narrative, Detachment, Surface, Attachment, Consciousness, and Fiction.



The top three factors were narrative (24 percent), surface (23 percent), and attachment (16 percent). According to students' emotional descriptions of their clothes, it can be found that the clothes with the longest life cycle can be divided into two types, shown in Figure 28, 29. The cloth or accessory has special meaning to the student. The cloth or accessory is convenient and practical, and the classic style is easy to match. The emotional factors carried by the clothing selected by students in this research can be classified into two categories: attachment and Narrative. For example, the three clothes in the top row of Figure 27 are received as birthday gifts or commemorative gifts, which have special emotional significance for the student. The three clothes in the bottom row of Figure 4 are mostly related to attachment. According to the description of students, some of these clothes accompany them through the most difficult time of the college entrance examination, some of the clothes are considered to be lucky clothes.

The clothes in Figure 28 are not emotionally related to the students' description but are simply considered to be of good quality, simple and practical.

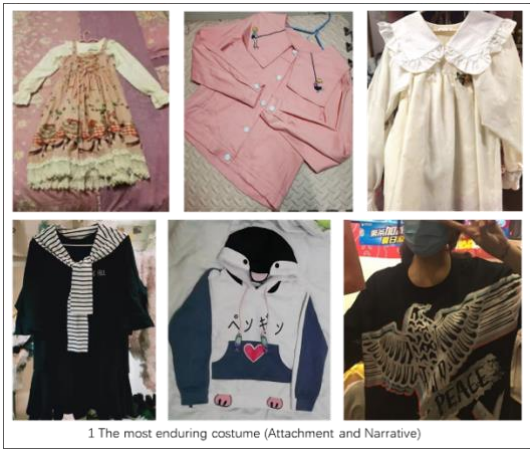


Figure 28 The samples with special meaning      Figure 29 The samples with classical style

## **Chapter 6 Results of Pilot Study and Study 2: propose innovative art derivative design methods to relieve the irrational and unsustainable problems of fashion design (SRQ2)**

### **6.1 Results of Pilot Study**

40 males and 86 females participated in the questionnaire survey. In terms of age distribution, 40% (51) of the respondents were 18-25 years old, 23% (29) of the respondents were 26-35 years old group, and 37% (46) of the respondents were 36-45 years old.

#### ***6.1.1 Results of Part 1 of the questionnaire***

Regarding Q3 of the questionnaire, Table 15 shows that a larger proportion, about 71% (90 respondents) of the respondents indicated that they would buy new Spring Festival clothes for the 2022 Spring Festival, and only about 29% (36 respondents) indicated otherwise.

In order to estimate whether there is a significant relationship between the “willingness to buy”(new Spring Festival clothes) and the “age range” of the respondents (a relationship between two categorical variables), Pearson’s Chi-square test is appropriate (Field, 2015, 721). Because the significance value (p-value) from the chi-square test was not less than .05, then no significant association was found between number of respondents willing to buy and the age range they belong to.

Regarding Q4 of the questionnaire, Table 16 shows that about 53% (67) of the respondents stick to the tradition of buying new clothes every year and about 47% (59) of the respondents indicated that they do not buy Spring Festival clothes every year. The results of the Pearson Chi-Square test show that there is a significant association between the “tendency to buy every year” and the “age range” of the respondents ( $p = .03$ ). And a closer inspection reveals that the lower the age, the more the number of respondents who seem to usually buy Spring Festival clothes every year (depicted with blue arrows in Table 14).

Table 15 Contingency table showing the number of respondents willing to buy this year according to their age range

		Q3 (Will you buy new Spring Festival clothes for yourself this year?)		
		Yes	No	Row totals
Age range	18-25	39	12	51
	26-35	19	11	30
	36-45	32	13	45
Column totals		90	36	<b>126</b>
Chi-square statistic =1.6, p-value = .45 (not significant at $p < .05$ )				

Table 16 Contingency table showing how many respondents usually buy every year according to their age range

		Q4 (Do you usually buy yourself Spring Festival clothes every year?)		
		Yes	No	Row totals
Age range	18-25	30	21	51
	26-35	20	10	30
	36-45	17	28	45
Column totals		67	59	<b>126</b>
Chi-square statistic = 7.13, p-value = .03 (significant at $p < .05$ )				

Regarding Q7 of the questionnaire, the data summarized in Table 17 indicates that most of the respondents don't often wear the auspicious colors and patterns of Spring Festival clothes in their daily life. About 40% (50) of the respondents wear the auspicious colors and patterns of Spring Festival clothes they bought last year in their daily life, and about 60% (76) of the respondents don't wear the clothes. A Chi-square test was conducted to analyze the association between the utilization rate of "auspicious colors and patterns of

Spring Festival clothes bought last year” and respondents’ age. However, no significant association was found between utilization rate of Spring Festival clothes bought last year and the age range of the respondents ( $p = .20$ ).

Table 17 Contingency table showing the utilization rate of auspicious colors and patterns of Spring Festival clothes bought last year and respondents’ age range

		<b>Q7 Do you often wear the auspicious colors and patterns of Spring Festival clothes you bought last year in your daily life?)</b>		
		Yes	No	Row totals
<b>Age range</b>	18-25	17	34	51
	26-35	16	14	30
	36-45	17	28	45
<b>Column totals</b>		50	76	<b>126</b>
Chi-square statistic = 3.26, p-value = .20 (not significant at $p < .05$ )				

Regarding Q12 of the questionnaire, the results in Table 18 show that most of the respondents –up to 76% (96)– indicated they would like it better if the auspicious traditional elements of artworks in museums were integrated into Spring Festival clothes and accessories. However, the results of the Pearson Chi-Square test show that there is no significant association between the “preference for integration of auspicious traditional elements of artworks in museums and Spring Festival clothes and accessories” and the “age range” of the respondents ( $p = .57$ ).

Table 18 Contingency table showing respondents’ “preferences of elements of artworks in museums integration with Spring Festival clothes and accessories” and their age range

<b>Q12</b>
<b>(Would you like it better if the auspicious traditional elements</b>

		<b>of artworks in museums were integrated into Spring Festival clothes and accessories?)</b>		
		Yes	No	Row totals
<b>Age range</b>	18-25	41	10	51
	26-35	23	7	30
	36-45	32	13	45
Column totals		96	30	<b>126</b>
Chi-square statistic =1.14, p - value = .57 (not significant at p < .05)				

### **6.1.2 Results of Part 2 of the questionnaire**

Figure 30 shows the results of the second part of questionnaire. The respondents rated ten Spring-Festival-themed fashion products according to their personal preference. A 5-point scale was used (1 was the minimum rating and 5 was the maximum rating). An initial descriptive analysis shows that a larger number of respondents gave highest ratings to Group B products (art-derived design characteristics) than to Group A products (traditional design characteristics) –142 cases vs 123 cases. Conversely, more respondents gave lowest ratings to products of Group A (traditional design characteristics) –84 cases vs 61 cases. But did the respondents give higher ratings to Group B products than to Group A products? To answer this question, a paired-samples t-test analysis was conducted to compare the mean ratings of Group A with the mean ratings of Group B.

The test result shows that the sig. (2 - tailed) by paired Samples test = -2.360, Sig. (2 - tailed) = 0.020 < 0.05. Table 19 shows, the test result indicates that there is a significant difference between the evaluations of Group A and Group by respondents.

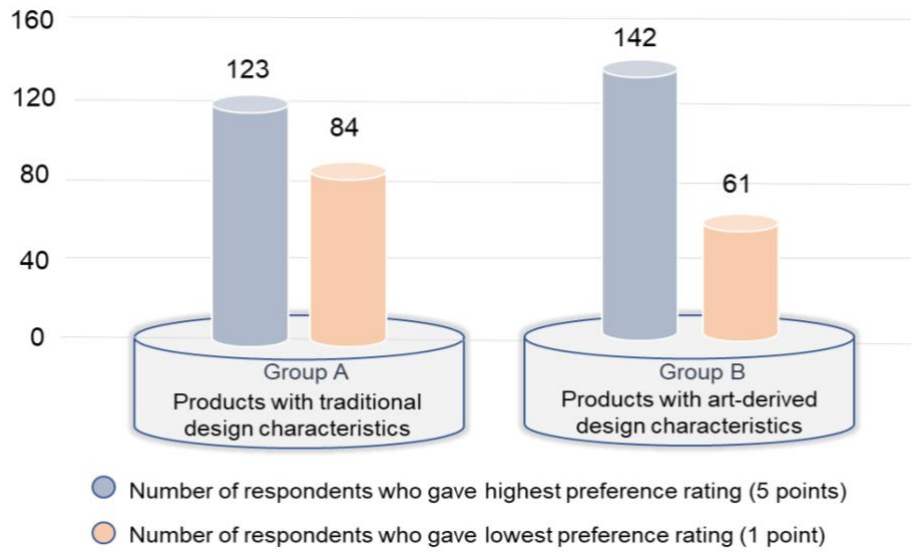


Figure 30 Number of respondents giving the highest and lowest preference scores

Table 19 Paired Sample T-test of mean ratings of Group A and Group B

<b>Paired Samples Test</b>						
<b>Group A Products</b>	<b>Paired Differences</b>			<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
<b>(Average ratings) -</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>			
<b>Group B Products</b>						
<b>(Average ratings)</b>	-0.165	0.785	0.070	-2.360	125	0.020

<b>Paired Samples Correlations</b>			
	<b>N</b>	<b>Correlation</b>	<b>Sig.</b>
<b>Group A Products (Average ratings) - Group B Products (Average ratings)</b>	126	0.585	0.000

## 6.2 Results of study 2

The researchers organized all the collected data in Excel sheets, and then summarized them through pivot tables and analyzed the relationship between each variable by chi-squared test. To address the hypotheses, the analysis factors involved include: Brand group, Year group, Type of brand image, and Design method of 86 samples. To test H1, the relationship between the three brand groups and the three types of logo or brand image was examined. The chi-squared results demonstrated a significant correlation, and different brand groups performed differently in the presence or absence of a brand logo. As illustrated in Table 18, in the ACB group, 22% (55) of the samples belonged to T1; that is, the brand image was very distinct, or the logo appeared in the main location. Additionally, in 40% (103) of the samples, the logo or brand image was not in the main location, but the brand image was still visible (T2), and 38% (97) of the samples in the ACB group had barely visible brand images. For ALBs, the proportion of cases where the brand image was obvious was even less at 4% (5), and in 80% (87) of the samples, the brand logo or image was barely visible. As shown in Table 20, the chi-squared statistic result is 58.38, and the p-value is  $< 0.05$ , supporting H1 (there is a significant relationship between brand group and brand image).

Table 20 Correlation between brand groups and brand image

<i>Brand Group</i>	<i>T1</i>	<i>T2</i>	<i>T3</i>	<i>Totals</i>
Accessible core brands (ACBs)	55	103	97	255
Affordable luxury brands (ALBs)	5	18	87	109
Mass fashion brands (MFBs)	4	22	39	66
Totals	64	143	223	430

**The chi-square statistic is 58.39. The p-value is  $< 0.00$ . The result is significant at  $p < .05$ .**

To test H2, which predicted that the art-derived fashion bag design method is inconsistent in different fashion bag brand groups, the study conducted a chi-squared test on the

relationship between the three brand groups and the four design methods. The chi-squared statistic is 51.98. The p-value is  $< 0.00$ . The results demonstrated a significant correlation between brand groups and design methods, and different brand groups used different art-derived design methods. The M2 method was the most used among the three brand groups. This result also supports H3 as it demonstrates that strengthening the artistic image and highlighting artistic works are the most important methods for art-derived fashion bag design. As Table 21 shows, there are significant differences in the design methods used among the different brand groups. In the ACBs, all four design methods were used, but among the ALBs and MFBs, M2 was the predominantly used method, and the use of the other design methods was very limited.

Table 21 The correlation between design methods and brand image

<i>Brand Type</i>	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>	<i>Total</i>
T1	17	20	18	9	70
T2	32	74	23	15	144
T3	32	146	6	38	220
Totals	81	240	47	62	430

**The chi-square statistic is 51.9806. The p-value is  $< 0.000$ . The result is significant at  $p < .05$ .**

To test H4, which predicted that the stronger the artistry of the bag, the less prominent the logo of the brand, the relationship between design method (M1–M4) and type of brand image (T1–T3) was tested. As the data illustrates (Table 21), the brand identity of the bags was the least obvious for M2 and M4, which represented 61% of the samples. However, the data demonstrated that 56% (146) of the samples used M2, and only 14% (38) of the samples used M4, further highlighting that future art-derived designs should carry out design innovation using multi-materials, bag accessories, and decoration designs. The chi-squared test shows in Table 22 demonstrat that the asymptotic significance (2-sided) of the Pearson chi-squared and likelihood ratio was  $< 0.00$ . The linear-by-linear association result



was .830, which means that design method strongly influences the presence of a clear brand image.

Table 22 Chi-square tests of the relationship between design methods and brand image

	<i>Value</i>	<i>df</i>	<i>Asymptotic Significance (2-sided)</i>
Pearson Chi-Square	52.573 <sup>a</sup>	6	0
Likelihood Ratio	53.976	6	0
Linear-by-Linear Association	0.046	1	0.83
N of Valid Cases	430		

0 cells (0.0%) have an expected count less than 5. The minimum expected count is 7.00.

The correlation between design methods and brand image

Table 23 shows, in testing H5, which posited that there are differences in the clarity of the brand image in different year groups, it is found a significant relationship between the year groups and the three logo types. The data demonstrated that, among the three year groups, the proportion of samples in the more recent time group that had not-obvious brand images (T3) continued to increase, while cases that demonstrated slight brand images (T2) significantly declined. However, the samples featuring prominent brand images (T1) did not change significantly. In addition, from Table 24, it can be seen that M2 was the most important design method, and there was an obvious relationship between M2 and T2 and T3.

Table 23 The correlation between year groups and brand image types

<i>Brand Type</i>	<i>2001–2010</i>	<i>2011–2017</i>	<i>2018–2022</i>	<i>Totals</i>
T1	3	24	37	64
T2	19	38	87	144
T3	8	63	151	222
Totals	30	125	275	430

The chi-square statistic is 15.2703. The p-value is .004172. The result is significant at  $p < .05$ .

Table 24 Difference between brand groups and design methods

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>	<i>Sum</i>
ACBs	69	103	38	45	255
ALBs	9	83	6	12	110
MFBs	3	54	3	5	65
	81	240	47	62	430

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Brand groups	4929.167	2	2464.583	24.07734	0.00136	5.143253
Design methods	7996.333	3	2665.444	26.03962	0.0007723	4.757063
Error	614.1667	6	102.3611			
Total	13539.67	11				

## Chapter 7 Discussion and Conclusion

### 7.1 From study 1

This research selected 24 design samples of AD to analyse the survey results of 65 respondents. Via the questionnaire survey and result analysis, researchers tested the relationship between four design methods and respondents' preference and aesthetic emotion. It can be concluded that: 1) Direct participation of artists in design is conducive for better emotional value. Interviewees have the highest recognition of products produced by artists' direct participation in design. Artists can design and create according to the needs of fashion brands. Consumers love the freshness and artistic taste brought about by such cross-border cooperation. However, there is no obvious difference between the two authorisation design methods and the independent design by art institutions regarding consumers' preferences. 2) There is a significant correlation between the design period of AD and consumer preferences. The respondents preferred derivatives designed five years ago better than recently designed AD. The reason for this result may be because that artists' creations being forward-looking. There may be a marked difference between the popular aesthetic and the creative expression of the artist (Levinson 2010). Valsesia et.al (2016) points out that art is critically acclaimed in the art world may not on, the whole, be tolerated. Valsesia et al. (2014) emphasized that artistic creation should not be dictated by consumer demand. Just like the design of the Pompidou Centre and Van Gogh's paintings, the artist's personalized artwork needs time to become familiar to and accepted by the public. In addition, fashion products will go through the process of Introduction, Rise, Peak and Decline of popular trends (Diantari 2021) .The nature of fashion art derivatives are fashion products. It will take time for the public to understand and accept the fashion art derivatives. However, compared to ordinary fashion products, fashion derivatives designed five years ago can still be enjoyed by consumers, which may help explain why the life cycle of AD is longer than that of common fashion products.

3) There was no significant difference in the choice of product design methods among

respondents of different age groups. Besides, there was also no clear link between age and emotion for the preferred product. The most selected emotional words of the three age groups were concentrated in the range of Pleasant–Excited and Pleasant–Calm.

This result may indicate that the persistence of art, to some extent, has been transferred to fashion products due to the addition of artistic elements. In addition, respondents' aesthetic emotion for their preferred samples is mainly in-depth emotion rather than physical attraction, which shows that art-derived fashion products can arouse consumers' emotions with unlimited thinking and aftertaste. And these emotions are at the reflective level, indicating that a good fashion art derivatives design method may enhance the lifespan of fashion art derivatives by arousing consumers' in-depth emotions.

Through the experiment of personal wardrobe analysis, it is found that 1) the study of emotional design is as important as the aesthetic feeling and comfort of clothing or accessories; 2) Most students wear clothes for 3-4 years with high frequency. However, the frequency has a significant decline after more than 4 years. 3) The analysis of the experimental results shows that clothing with a long life cycle can be divided into two types: first, the clothing is retained with a specific emotional basis. Second, the classic style is easy to match. Among the emotion towards the longest lifespan clothing, there are two main factors: attachment and narrative. Through this course, students analyze the relationship between emotion and clothes' life cycle not only by individuals but by the whole class communicating. The students understand the importance of emotion in fashion design and lay a foundation for sustainable fashion design in the future. However, a limitation of this study is that the participants of the questionnaire survey were concentrated in one university, and a limited number of students participated in the experiment. In addition, the experiment required students to select only one garment or accessory for analysis, which resulted in insufficient samples. The researchers will absorb more samples for further analysis.

## **7.2 From Pilot Study**

The results of the questionnaire survey and data analysis can answer the two questions raised by the study.

To answer the first question: What are consumers' preferences at different ages in purchasing Spring Festival clothing? A significant was found between respondents' purchases of spring Festival clothes for themselves every year and their age range. Moreover, the lower the age of the respondents, the more they seem to usually buy Spring Festival clothes every year.

For question 2: Can the design characteristics combining art derivation and the Spring Festival theme better meet the preferences of consumers? Data analysis shows that there is no correlation between respondents' age range and the design of integrating museum art elements into Spring Festival clothing design (Q12). But the lower the age of the respondents, the more they seem to show preferences for integrating auspicious traditional elements of artworks in museums into Spring Festival clothes and accessories. Besides, the rating given by the respondents of two different characteristic groups shows that fashion products derivative from traditional art may capture the interests of more consumers.

## **7.3 From study 2**

This study innovatively proposes a co-design method to promote inconspicuous consumption through the analysis of 3 fashion brand groups' art-derived fashion bags. A total of 87 art-derived fashion bags were selected from the ACB, ALB, and MFB groups to test if the art-derived design method is effective for promoting inconspicuous consumption. The basic information of the selected samples of art-derived fashion bags was first classified and analyzed, and the brand image clarity and design methods of the samples were then examined.

From the analysis of the relationship between the year group and brand group, only a limited number of ACB art-derived bags were designed from 2001 to 2010. From 2018 to 2022, however, many art-derived design works appeared in all three brand groups,

indicating that the art-derived design trend is dominated by luxury brands and continues to influence the public, becoming well-known and recognized in recent years. Additionally, the chi-squared statistic results demonstrate a significant relationship between brand image and brand groups. We found that the proportion of bags that distinctly retained their brand image was 80% (41) in the ACB group and 40% (6) in the ALB group. However, only 25% (5) of the bags in the MFB group retained a clear brand image.

The categorized bag brand images were then classified into three types based on their clarity or placement, and four main design approaches were summarized for additional analyses. Thereafter, five art and design professionals participated in the evaluation of brand image clarity and selected appropriate design methods for the 86 samples. The data classification and analysis found that different brand groups perform differently in the presence or absence of a brand image. In addition, art-derived design methods are inconsistent across the different fashion bag brand groups. The M2 method was the most used among the three brand groups. Comparing the relationship between the four design approaches and the three brand groups demonstrated that enhancing the artistic image and highlighting artistic works were the most prominent design approaches for art-derived fashion bag design. The data demonstrated that the bag's brand image was the least pronounced under M2 and M4, the bag with the most pronounced brand image mostly using M3. The results may suggest that the M2 and M4 design methods should be recommended when using art-derived designs, which is conducive to weakening the brand image and to the design of inconspicuous bags. However, the data also revealed that the M2 method was used in most cases, and the M4 method was used less often. This demonstrates that future art-derived design should focus on artistic innovation in the design of multi-material and bag accessories.

Additionally, comparing the relationship between the year groups of the bags and the clarity of the brand image demonstrated that the proportion of samples in the more recent period that did not demonstrate obvious brand images (T3) continues to increase, while the cases that demonstrated slight brand images (T2) had significantly declined. This result provides some support for H5, which posited that the more recent the design, the less

obvious the logo. However, the samples demonstrated that brand images (T1) did not shift significantly.

Based on the above analytical results, the current design approach for art-derived fashion bags focuses on highlighting the artistry of the bag, using printing to display the artistic image presented on the main body of the bag. In addition, the involvement of artists in the artistic redesign of brand images is also an influential design approach. The characteristics of art-derived bags suggest that the inherently highly distinct brand image of fashion brand bags is weakened by incorporating an art element, which is related to avoiding obvious brand logos through inconspicuous consumption. The results demonstrate that art-derived design methods can aid in developing inconspicuous design and consumption, which can be important for a more diversified and rational fashion industry.

This research is an extension of previous research on design collaboration between art fashion by Chailan (2018) and Kapferer (2014) and the characteristics analysis of inconspicuous consumption by Eckhardt et al. (2015). The results of this study can provide theoretical support for future fashion bags, to enhance the value of the bags and of diversified design through art derivatives. In addition, the analysis method of brand image and the design suggestions proposed in this study can be further analyzed based on clothing, shoes, and other fashion items of fashion art derivatives in the future, so as to have a more comprehensive understanding of the promotion effect of the integration of art and fashion on the development of inconspicuous consumption in the fashion industry.

#### **7.4 Synthesis of discussion and conclusion**

Overall, the first sub-objective (SRO1) of this thesis is to test the effectiveness of artistic aesthetics and emotions in extending the life cycle of fashion products, and then in the second Sub-objective (SRO2) is to propose innovative art derivative design methods to relieve the irrational and unsustainable problems of fashion design. Figure 31 is a general illustration of the conclusions of the three studies.

Through Study 1, the data analysis showed a very interesting result, which is that the oldest age group (products developed 5 years ago) fashion art derivatives are the most popular.

This is very different from our previous perception of fashion products. In a society where fashion products are changing so rapidly, consumers tend to chase the latest fashion products, and unless the design is gradually widely accepted as a classic style, such as Hermès' Kelly bag and Burberry's trench coat, most fashion products will be quickly eliminated with the trend. The results that the products designed five years ago can still be populated by responders shows that art itself is forward-looking. The artist's thinking and the aesthetic value of the artwork itself may contribute to enhancing the life cycle of the product. Based on this, the survey of Wardrobe Analysis in Study 1 also illustrates the positive relationship between emotional factors and longer retention times for fashion products. Thus, it can be concluded that the emotional factors proposed in SRO1 are effective in extending the life cycle of fashion products. In addition, the distribution analysis of emotional vocabulary in Study 1 shows most selected emotional words were in the range of Pleasant-Excited & Pleasant-Calm, which means respondents' aesthetic emotion for their preferred samples is mainly in-depth emotion rather than physical attraction.

In the second part, taking Chinese Spring Festival clothing as an example, the results of Pilot study shows that artistic elements which combine traditional Spring Festival holiday blessings with artistic elements can better meet the needs of current consumers. The study proposes the design methods that integrating auspicious traditional elements of artworks in museums into Spring Festival clothes and accessories. The design approach can help solve the problem of low utilization of traditional holiday fashion products because they highlight the festive atmosphere and cannot be worn on weekdays. The design method proposed in this study can provide a theoretical basis for the holiday clothing design in both China and other countries.

In addition, Study 2 take fashion bags as a case to deeply analyze another potential sustainable research value of art-derived, that is, the relationship between the intrinsic value of art and the subtle signal promoted by inconspicuous consumption. The results show that the current design approach focuses on highlighting the artistry of the bag. Art-derived design can aid in developing inconspicuous consumption through enhancing intrinsic art



value and avoid obvious brand images. Inconspicuous consumption is also an important concept which helps to promote rational consumption.

Through the analysis of the three studies, it can be concluded that art derivatives is not only a commercial collaboration with artists and art institutes that promotes fashion product innovation, but also has great potential for sociological research. Through the design methods, such as, participatory design approach of artists, combines classical art with traditional festivals, and promotes inconspicuous consumption, the sustainable and rational consumption of fashion can be promoted.

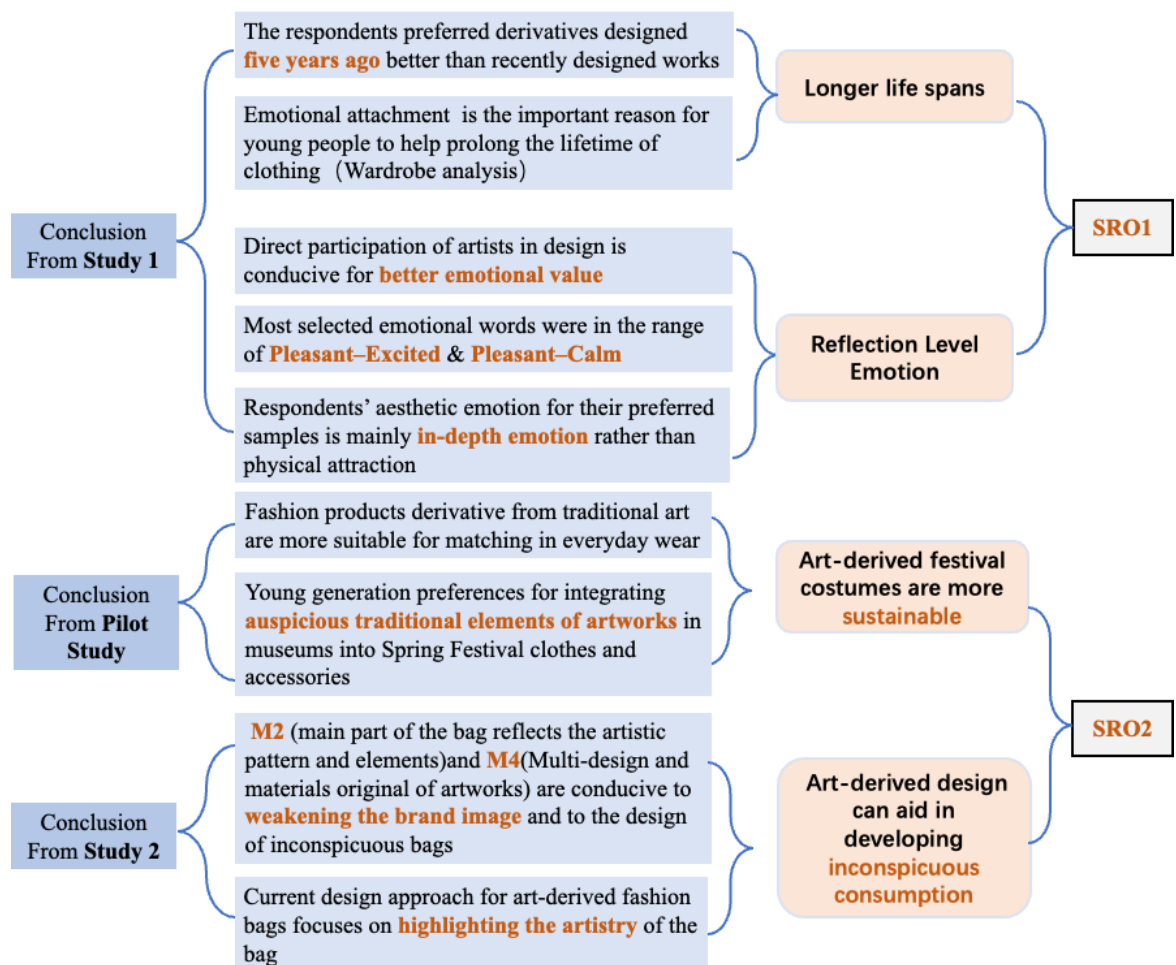


Figure 31 Synthesis of the three studies

## **8 Limitation, contribution, and future study**

### **8.1 Limitations**

#### *8.1.1 Limitation of Study 1*

The experimental limitations need to be acknowledged. First, the experiment was conducted in one area. Nearly half of the survey participants were concentrated in one design-related school. Although these interviewees may have artistic background and most of them are AD consumers, the participants' education level and regional culture could greatly influence this study. Second, samples of the research were not rich enough. Considering that too many questions in the questionnaire might affect the quality of answers, we analysed only 24 samples of AD. In future studies, the study hopes to use eye tracker and electroencephalograph to conduct experimental analysis on more samples.

Besides, through this study, the researcher realised the importance of emotional design in the whole process of production, use and discarding. The artistic expression ought to be reflected through sustainable processes and environmentally friendly materials. The researchers believe that artistic expression should not be achieved at the cost of complex technological processes. It is hoped that the researcher can provide theoretical help for the future design of art derivatives. Fashion brands and art institutions can create more excellent art derivative works and achieve sustainable design by enhancing the artistic appeal of clothing and consumers' aesthetic attitudes and prolonging the life cycle of fashion products. In this survey, the interview process is to describe the emotional vocabulary of the five favorite samples, and the difference in the type of sample may affect the choice of respondents. Therefore, it may have a certain impact on the results of the questionnaire. Taking the lessons of this, a survey of single fashion category in Study 2 is carried to obtain more convincing results.

### ***8.1.2 Limitation of Pilot Study***

There are several weaknesses for the questionnaire design. As the preference for buying clothes for family members (Q10) is not strongly correlated with the research purpose. And there are many different factors that need to take into consideration when buying clothes for family members than buying clothes for oneself. The content of Question 11 (Q11) and question 12 (Q12) are repetitive, and the results are also quite similar. In addition, this study only explores the Spring Festival clothes as a popular commodity to convey the Spring Festival culture and meet people's demand but has not taken the design characteristics of high-end Spring Festival clothes into concern.

### ***8.1.3 Limitation of Study 2***

A limitation of this study lies in the number of people involved in the sample evaluation: Only five professionals who were concentrated in one region participated in the evaluation. Although these participants can give effective feedback on the research content in a short time. However, the perception ability of these participants with professional background of fashion design and art is different from that of ordinary fashion consumers. It is suggested that research and experiments can be carried out among mass consumers in the future. In addition, because the number of bags in the evaluation is too large, the analysis and judgment in a period of time will make the participants feel tired and may affect the accuracy of the answer. Future research suggests that the number of bags in the sample should be appropriately reduced or one of the brand groups, such as light luxury brands or luxury brands, can be analyzed. Moreover, the evaluation was based on photos of the fashion bags rather than the physical objects, which may have affected the evaluation. It is suggested that if the samples for analysis are reduced, videos or pictures appreciated from multiple angles can be used for analysis.

## **8.2 Contribution to knowledge science**

This research is to put forward innovative methods for the problems existing in the development of the historical process of the continuous mutual communication between the two fields of art and fashion. Figure 32 illustrates the contribution to knowledge science of this study. The contribution can be divided into three aspects, the role of scholars' research, the impact on fashion education, and the role of fashion design and cultural creative design practice.

Firstly, to the scholars' research, the research exploring the sense of fine arts discipline, including painting, sculpture, pop art, contemporary art and many other art forms, and the way to dialogue with fashion design. As art and fashion promote and enhance each other. The research deeply explores the role of art aesthetics in the life cycle of fashion products, design ethics, design sustainability and other important issues. Therefore, this research is helpful for the study Affective cognition and Aesthetic emotion research. As little previous study has investigated art-derived fashion design, despite the ever-increasing market. This research is an extension of previous research on design collaboration between art and fashion by Chailan (2018) and Kapferer (2014) and the characteristics analysis of inconspicuous consumption by Eckhardt et al. (2015).

Secondly, this research is also helpful for future fashion design education. At present, sustainable fashion education mostly focuses on the environmentally friendly materials of clothing, multi-wear design, etc., without paying attention to the important role of emotional design in sustainable fashion. This research emphasis the importance of emotion for sustainable fashion by leading students to organize and analyze their wardrobes in the course, and thus guides the fashion courses from the perspective of emotional design.

Finally, the study analyzes the cooperation methods between fashion brands and artists or art institutions, and puts forward suggestions for sustainable fashion design methods, which gives some inspiration for future brand fashion product development. The study also has some creative suggestions for product development in cultural and creative industries, as well as festival product development.

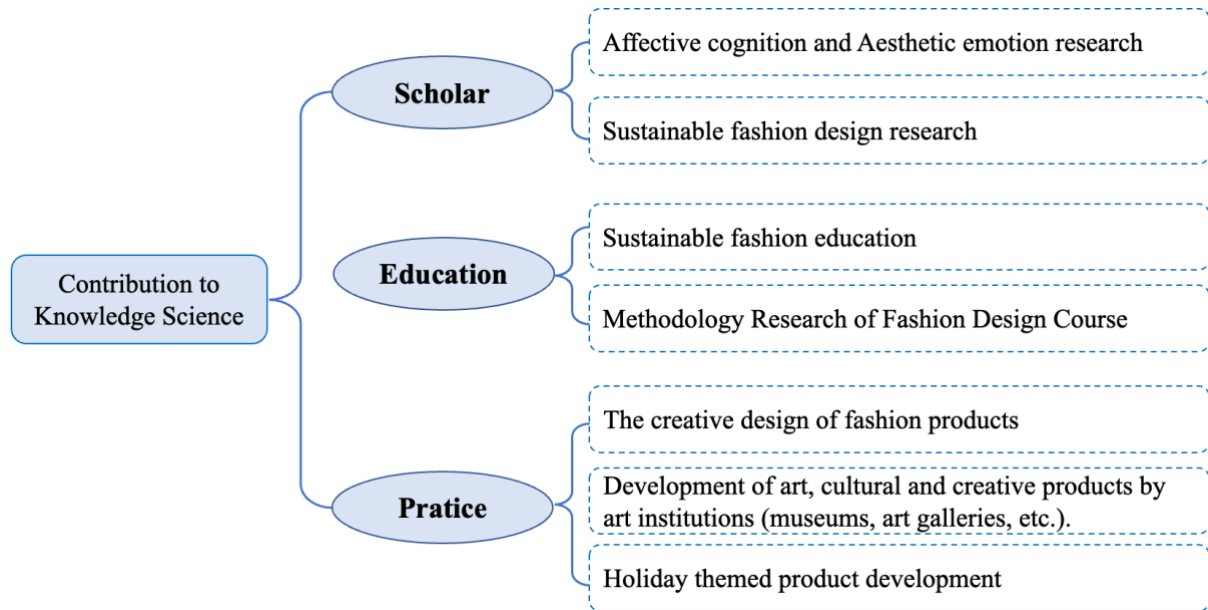


Figure 32 Contribution to Knowledge Science

### 8.3 Future study

There are still many shortcomings in this study that need to be supplemented by follow-up research.

Firstly, the analysis of the relationship between art style and fashion design methods. Different art styles have an important impact on the temperament, shape, color pattern, and even target customer positioning of fashion products. For example, the free creative ideas and rich colors of pop artists are completely different from the rigorous structure in classical painting, and the language conveyed by the narrative artistic expression with historical connotations, and there may be obvious differences in the design methods acting on fashion products. As all the samples in Study 1 and Study 2 have clear information about artists and art styles. In the future, research will focus on the influence of different art styles on fashion design, and the relationship between art style and design methods. In this way, it can give suggestions for the research of different art styles and fashion products design method.

Secondly, eye trackers and brain trackers will be used as tools to conduct in-depth research on art derivatives and the emotional perception of interviewees in the future. Capturing the

perception of the respondents through eye trackers and brain trackers can be effective complement to this study. More multi-dimensional images, short vedios about art derivatives products can be used as case studies for use in research. In addition, for the research on NFT virtual art derivatives that are being carried out by many fashion brands, it is also very suitable for the analysis of brain trackers devices and eye trackers as a case in the future study.

The design method proposed in this study can also be studied specifically by more clothing items such as women's clothing and shoes of fashion art derivatives in the future, so as to have a more comprehensive understanding of the promotion effect of the integration of art and fashion on the sustainable fashion design.

## List of publications and presentations

### Journal Paper

[1] Wang Manqian, Kim Eunyong, and Du Bo, “Promoting Emotional Durability and Sustainable Fashion Consumption through Art Derivatives Design Methods”. *The Design Journal*, 25(5), 789-806, 2022. DOI: [10.1080/14606925.2022.2088095](https://doi.org/10.1080/14606925.2022.2088095).

[2] Wang Manqian, Kim Eunyong, Du Bo, “Art-derived designs promote the inconspicuous consumption of fashion bags”, *Journal of global fashion marketing*, 2023, 1-16, DOI: [10.1080/20932685.2023.2186462](https://doi.org/10.1080/20932685.2023.2186462).

### Conference proceedings and presentations

[1] Wang Manqian, Kim Eunyong, and Man Yang, “Redesigning a jade design course through integration of three-dimensional technology”, *The 22nd International Conference on Engineering and Product Design Education*, Denmark, 2020. 10.

[2] Wang Manqian, Kim Eunyong, “The role of emotional value as a factor in sustainable fashion design education”, *The 24th International Conference on Engineering and Product Design Education*, London, 2022. 09.

[3] Wang Manqian, Kim Eunyong, “Improving Fashion Bag Creative Design Curriculum Teaching Based on Gen-Y Usage Behavior and Consumption Needs”, *Oral Presentation, The IAFOR International Conference on Education in Hawaii (IICE2023)*, Hawaii, 2023. 01.

[4] Wang Manqian, Jader Zelaya, “Toward Sustainable Design: A Study on Consumer Preferences for Design Characteristics of Chinese Spring Festival Clothing”, *The IAFOR International Conference on Arts & Humanities in Hawaii (IICAH2023)*, Hawaii, 2023. 01.

# References

- Aakko, M., & Koskennurmi-Sivonen, R. (2013). Designing Sustainable Fashion: Possibilities and Challenges. *Research Journal of Textile and Apparel*, 17(1), 13–22. <https://doi.org/10.1108/RJTA-17-01-2013-B002>
- Armstrong, C. M., & LeHew, M. L. A. (2011). Sustainable Apparel Product Development: In Search of a New Dominant Social Paradigm for the Field Using Sustainable Approaches. *Fashion Practice*, 3(1), 29–62. <https://doi.org/10.2752/175693811X12925927157018>
- Bagnara, S., & Smith, G. C. (ed). (2006). Designers and Users: Two Perspectives on Emotion and Design. *Theories and Practice in Interaction Design* (125–138). CRC Press. <https://doi.org/10.1201/9781482269536-15>
- Bagwell, L. S., & Bernheim, B. D. (1996). Veblen effects in a theory of conspicuous consumption (Revised edition). *The American Economic Review*, 86(3), 349–373.
- Barthes, R. (1990). The fashion system. University of California Press.
- Banta, M. (1973). *The Theory of the Leisure Class*.
- Berger, J., & Ward, M. (2010). Subtle Signals of Inconspicuous Consumption. *Journal of Consumer Research*, 37(4), 555–569. <https://doi.org/10.1086/655445>
- Bindra, S., Sharma, D., Parameswar, N., Dhir, S., & Paul, J. (2022). Bandwagon effect revisited: A systematic review to develop future research agenda. *Journal of Business Research*, 143, 305–317. <https://doi.org/10.1016/j.jbusres.2022.01.085>
- Bly, S., Gwozdz, W., & Reisch, L. A. (2015). Exit from the high street: An exploratory study of sustainable fashion consumption pioneers: Sustainable fashion consumption pioneers study. *International Journal of Consumer Studies*, 39(2), 125–135. <https://doi.org/10.1111/ijcs.12159>
- Braungart, M., & McDonough, W. (2009). *Cradle to cradle*. Random House.
- Burns, B. (2010). “Re-evaluating Obsolescence and Planning for It.” In T. Cooper (ed.) *Longer Lasting Products: Alternatives to the Throw-away Society*, 39–60.
- Caldwell, N. G. (2000). The emergence of museum brands. *International Journal of arts management*, 28-34.
- Chailan, C. (2018). Art as a means to recreate luxury brands’ rarity and value. *Journal of Business Research*, 85, 414–423. <https://doi.org/10.1016/j.jbusres.2017.10.019>
- Chapman, J. (2009). Design for (Emotional) Durability. *Design Issues*, 25(4), 29–35. <https://doi.org/10.1162/desi.2009.25.4.29>
- Chipp, K., Kleyn, N., & Manzi, T. (2011). Catch Up and Keep Up: Relative Deprivation and Conspicuous Consumption in an Emerging Market. *Journal of International Consumer Marketing*, 23(2), 117–134. <https://doi.org/10.1080/08961530.2011.543053>
- Chouinard, Y. 2008, ‘Foreword’, In: J. Hethorn, & C. Ulasewicz, eds. *Sustainable Fashion*:



Why Now? A conversation about issues, practices, and possibilities, Fairchild, New York, p. ix–x.

Claxton, S., & Kent, A. (2020). The management of sustainable fashion design strategies: An analysis of the designer's role. *Journal of Cleaner Production*, 268, 122112. <https://doi.org/10.1016/j.jclepro.2020.122112>

Codignola, F., & Rancati, E. (2016). The blending of luxury fashion brands and contemporary art: A global strategy for value creation. In *Handbook of research on global fashion management and merchandising*. IGI Global, 50-76.

Cohen, J. R., & Stone-Richards, M. (2021). *Introduction, Special Issue on Fashion*.

Conejo, F. J., Cunningham, L. F., & Cunningham, L. (2016). *Current Issues in Luxury Brand Research*. 4(1).

Cox, J., Griffith, S., Giorgi, S., & King, G. (2013). Consumer understanding of product lifetimes. *Resources, Conservation and Recycling*, 79, 21–29. <https://doi.org/10.1016/j.resconrec.2013.05.003>

Čiarnienė, R., & Vienažindienė, M. (2014). Management of contemporary fashion industry: characteristics and challenges. *Procedia-Social and Behavioral Sciences*, 156, 63-68.

Creusen, M. E., & Schoormans, J. P. (2005). The different roles of product appearance in consumer choice. *Journal of product innovation management*, 22(1), 63-81.

Dari-Mattiacci, G., & Plisecka, A. E. (2010). Luxury in Ancient Rome: Scope, Timing and Enforcement of Sumptuary Laws. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1616712>

Das, M., Habib, M., Saha, V., & Jebarajakirthy, C. (2021). Bandwagon vs snob luxuries: Targeting consumers based on uniqueness dominance. *Journal of Retailing and Consumer Services*, 61, 102582. <https://doi.org/10.1016/j.jretconser.2021.102582>

Eckhardt, G. M., Belk, R. W., & Wilson, J. A. J. (2015). The rise of inconspicuous consumption. *Journal of Marketing Management*, 31(7–8), 807–826. <https://doi.org/10.1080/0267257X.2014.989890>

Ernst, D., Esche, C., & Erbslöh, U. (2016). The art museum as lab to re-calibrate values towards sustainable development. *Journal of Cleaner Production*, 135, 1446–1460. <https://doi.org/10.1016/j.jclepro.2016.06.196>

Fletcher, K. (2012). Durability, Fashion, Sustainability: The Processes and Practices of Use. *Fashion Practice*, 4(2), 221–238. <https://doi.org/10.2752/175693812X13403765252389>

Fletcher, K. (2013). *Sustainable fashion and textiles: design journeys*. Routledge.

Gao Feng. (2016), Analysis of the definition, classification and main characteristics of art derivatives in modern patterns of industry, *Northern Art*, 79-81.

Hesmondhalgh, D., & Pratt, A. C. (2005). Cultural industries and cultural policy. *International Journal of Cultural Policy*, 11(1), 1–13. <https://doi.org/10.1080/10286630500067598>

Howkins, J. (2002). The creative economy: How people make money from ideas. Penguin UK.

Hur, E., & Cassidy, T. (2019). Perceptions and attitudes towards sustainable fashion design: Challenges and opportunities for implementing sustainability in fashion. *International Journal of Fashion Design, Technology and Education*, 12(2), 208–217. <https://doi.org/10.1080/17543266.2019.1572789>

Ibharim, M. S. R., & Tajuddin, R. M. (2021). *A Zero-Waste Concept of Multifunctional Clothing Design*.

Ji S, Lin P. Aesthetics of Sustainability: Research on the Design Strategies for Emotionally Durable Visual Communication Design [J], *Sustainability*, 2022 (14): 4649

Jia W., Zhang H., Yang C., Zhao X., Li B. (2016), User sentiment model oriented to product attribute, *Journal of Computer Applications*, 36(1), 175-180, Doi: 10. 11772/j.issn. 1001-9081. 2016.01.0175.

Jiaru, Z., & Kim, C.-Y. (2020). *Research on the Influence of the Collaboration between Fashion Brands and Artists on Consumer Needs*.

Joy, A., & Belk, R. W. (2022). Why luxury brands partner with artists. In P.-Y. Donzé, V. Pouillard, & J. Roberts (Eds.), *The Oxford handbook of luxury business*. New York: Oxford University Press, 309–330.

Kapferer, J.-N. (2014). The artification of luxury: From artisans to artists. *Business Horizons*, 57(3), 371–380. <https://doi.org/10.1016/j.bushor.2013.12.007>

Kapferer, J.-N., & Valette-Florence, P. (2016). Beyond rarity: The paths of luxury desire. How luxury brands grow yet remain desirable. *Journal of Product & Brand Management*, 25(2), 120–133. <https://doi.org/10.1108/JPBM-09-2015-0988>

Kaya, Ç., & Yagiz, B. (2015). Appropriation in souvenir design and production: A study in museum shops. *ITU A|Z*, 12(1), 127-146.

Kastanakis, M. N., & Balabanis, G. (2012). Between the mass and the class: Antecedents of the “bandwagon” luxury consumption behavior. *Journal of Business Research*, 65(10), 1399–1407. <https://doi.org/10.1016/j.jbusres.2011.10.005>

Keeble, B. R. (1987). The Brundtland commission: Environment and development to the year 2000. *Medicine and War*, 3(4), 207–210. <https://doi.org/10.1080/07488008708408769>

Kim, K., Ko, E., & Lee, Y.-I. (2012). Art Infusion in Fashion Product: The influence of Visual Art on Product Evaluation and Purchase Intention of Consumers. *Journal of Global Fashion Marketing*, 3(4), 180–186. <https://doi.org/10.1080/20932685.2012.10600848>

Kim, P., Vaidyanathan, R., Chang, H., & Stoel, L. (2018). Using brand alliances with artists to expand retail brand personality. *Journal of Business Research*, 85, 424–433. <https://doi.org/10.1016/j.jbusres.2017.10.020>

Kozłowski, Bardecki, & Searcy. (2019). Tools for Sustainable Fashion Design: An Analysis of Their Fitness for Purpose. *Sustainability*, 11(13), 3581. <https://doi.org/10.3390/su11133581>

- Lawless, E., & Medvedev, K. (2016). Assessment of sustainable design practices in the fashion industry: Experiences of eight small sustainable design companies in the Northeastern and Southeastern United States. *International Journal of Fashion Design, Technology and Education*, 9(1), 41–50. <https://doi.org/10.1080/17543266.2015.1116616>
- LI, D., LI, Y., & WU, R. (2013). Consumer aesthetic experience in product design. *Advances in Psychological Science*, 21(2), 336-346.
- Li Y., (2015) the characteristics and value of art derivatives, *Journal of Zhengzhou University of light industry*, 10.3969/j.issn.1009-3729.2015.01.020, 99-104
- Liu W., (2018). A Comparative study on Chinese Contemporary art derivatives and art brands “X+Q” in the consumption era. *ZHUANGSHI*, 110-112
- McCollough, J. (2020). The impact of consumers’ time constraint and conspicuous consumption behaviour on the throwaway society. *International Journal of Consumer Studies*, 44(1), 33–43. <https://doi.org/10.1111/ijcs.12545>
- Michel, G., & Willing, R. (2020). *The art of successful brand collaborations: Partnerships with artists, designers, museums, territories, sports, celebrities, science, good cause ... and more*. London and New York: Routledge.
- Mukendi, A., Davies, I., Glozer, S., & McDonagh, P. (2020). Sustainable fashion: Current and future research directions. *European Journal of Marketing*, 54(11), 2873–2909. <https://doi.org/10.1108/EJM-02-2019-0132>
- Nadal, M., Munar, E., Capó, M. À., Rossello, J., & Cela-Conde, C. J. (2008). Towards a framework for the study of the neural correlates of aesthetic preference. *Spatial vision*, 21(3), 379.
- Niinimäki, K. (2012). *Proactive Fashion Design for Sustainable Consumption*.
- Niu, L., Miao, X., Jiang, G., Wan, A., Li, Y., & Liu, Q. (2020). Biomechanical energy harvest based on textiles used in self-powering clothing. *Journal of Engineered Fibers and Fabrics*, 15, 1558925020967352.
- Norman, D. A. (2003). *MEASURING EMOTION*.
- O’Cass, A., & McEwen, H. (2004). Exploring consumer status and conspicuous consumption. *Journal of Consumer Behaviour*, 4(1), 25–39. <https://doi.org/10.1002/cb.155>
- Pludowska, M., Bartczuk, R. P., Cichy-Jasiocha, B., & Sękowski, A. E. (2021). *Inconspicuous Consumption Scale—Development and validation* [Preprint]. PsyArXiv. <https://doi.org/10.31234/osf.io/wj54c>
- Rajeev Kumar, R. K. & TJPRC. (2017). Prospects of Sustainable Fashion Design Innovation. *International Journal of Textile and Fashion Technology*, 7(6), 5–14. <https://doi.org/10.24247/ijftdec20172>
- Ranson, B. (1987). The Institutional Theory of Capital Formation. *Journal of Economic Issues*, 21(3), 1265–1278. <https://doi.org/10.1080/00213624.1987.11504703>
- Roederer, C., Revat, R., & Pallud, J. (2020). *Does Digital Mediation Really Change the*

- Museum Experience? Museomix in the Lyon-Fourvière Archaeological Museum, 22(3).
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110(1), 145–172. <https://doi.org/10.1037/0033-295X.110.1.145>
- Saisselin, R. G. (1959). From baudelaire to Christian Dior: The poetics of fashion. *The Journal of Aesthetics and Art Criticism*, 18(1), 109-115.
- Scotchmer, S. (1991). Standing on the Shoulders of Giants: Cumulative Research and the Patent Law. *Journal of Economic Perspectives*, 5(1), 29–41. <https://doi.org/10.1257/jep.5.1.29>
- Segal, B., & Podoshen, J. S. (2013). An examination of materialism, conspicuous consumption and gender differences: Materialism, conspicuous consumption and gender differences. *International Journal of Consumer Studies*, 37(2), 189–198. <https://doi.org/10.1111/j.1470-6431.2012.01099.x>
- Shimamura, A. P., & Palmer, S. E. (Eds.). (2012). Aesthetic science: Connecting minds, brains, and experience. OUP USA.
- Svendsen, L. (2006). *Fashion: A philosophy*. London: Reaktion Books.
- Titton, M. (2019). Afterthought: Fashion, Feminism and Radical Protest. *Fashion Theory*, 23(6), 747–756. <https://doi.org/10.1080/1362704X.2019.1657273>
- Truong, Y., McColl, R., & Kitchen, P. J. (2009). New luxury brand positioning and the emergence of Masstige brands. *Journal of Brand Management*, 16(5–6), 375–382. <https://doi.org/10.1057/bm.2009.1>
- Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics*, 80(2), 190. <https://doi.org/10.2307/1880689>
- Wang, Y., & Griskevicius, V. (2014). Conspicuous Consumption, Relationships, and Rivals: Women’s Luxury Products as Signals to Other Women. *Journal of Consumer Research*, 40(5), 834–854. <https://doi.org/10.1086/673256>
- Wang H., (2010), Introduction to art, *Culture and Art Publishing House*.
- Wang Z., Zhang H., (2011) Fashion, Consumption and Design Symbols: Interpreting the Abolition of Planned Goods from the Perspective of Consumer Culture, ZHUANGSHI, 5 (3) , 94-96。 DOI: CNKI: SUN:ZSHI.0.2011-05-034
- Wild, B. (2016). Imitation in fashion: Further reflections on the work of Thorstein Veblen and Georg Simmel. *Fashion, Style & Popular Culture*, 3(3), 281–294. [https://doi.org/10.1386/fspc.3.3.281\\_1](https://doi.org/10.1386/fspc.3.3.281_1)
- Wilson, E., 1987. Adorned in Dreams. Berkeley: University of California Press
- Zelenko, L. S., 1981. “Is Fashion Art?” American Artist, June: 12, 87–8.
- Zhang A., (2015), The tragedy of fashion consumption and its significance - thoughts of existence in Lars Svenderson's fashion philosophy , *Social Scientist*

Zhang Ju., (2017). The Customer Value Thinking Foundation of Art Derivatives Design, *Journal of the National Academy of Art*, 78-81. <http://www.cqvip.com/QK/81397X/201711/673984331.html>

Zhang Y Y. (2019). Sustainable Design of Cultural Creative Products Based on Museum Cultural Derivatives, *IOP Conference Series: Materials Science and Engineering*. 573.1 (2019)9.

Zhao X. Y. (2019). A study on inconspicuous consumption tendency in luxury consumption. *Journal of Northeastern University (Social Science Edition)*, 21, 350–359.

536 F.2d 486 (2d Cir.) (en banc), available at <http://www.altlaw.org/v1/cases/554959> and "Archived copy". Archived from the original on 5 September 2008. Retrieved 15 November 2008.

# Appendix

## 1 Link of Image source

Figure 12

[Blake Kathryn's Sleek 3D Collaboration with Fendi \(trendland.com\)](#)

Figure 15

No.1 [KAWS Discusses His Uniqlo Collaboration | Vogue](#)

No.2 [Valentino Fall 2017 Ready-to-Wear Collection | Vogue](#)

No.3 [Yves Saint Laurent at Couture Spring 2002 | Haute couture details, Yves saint laurent couture, Couture \(pinterest.com\)](#)

No.4 [Moda ve Sanatın Efsanevi Buluşmaları | Vogue Türkiye](#)

Figure 16

No.1 [UNIQLO dévoile une collaboration avec le musée du Louvre - Le Site de la Sneaker](#)

No.2 [SHANG XIA 上下九色鹿真丝桑蚕丝印花围巾丝巾送长辈女生生日礼物品-tmall.com 天猫](#)

No.3 [Cloud \(sohu.com\)](#)

No.4 [Amis de la Maison | LOUIS VUITTON | Takashi murakami, Murakami, Takashi \(pinterest.com\)](#)

Figure 17

[Dior Lady Art 2: Dior Taps 10 New Artists To Reinvent Their Signature Bag | Sleek Magazine \(sleek-mag.com\)](#)

Figure 19

No.1 [BAWEIMAO Scarf – SOIE JARDIN](#)

No.2 [Josefinas colabora com designer britânica lbukun Jesusanmi \(fashionnetwork.com\)](#)

No.3 [CHRISTIAN DIOR Calfskin Quilted Jack Pierson Art Lady Dior White Black Multicolor 740160 | FASHIONPHILE](#)

- No.4 [James Jean - Prada \(pinterest.com\)](#)
- No.5 [LOUIS VUITTON Monogram Kusama Waves Neverfull MM White 121248 | FASHIONPHILE](#)
- No.6 [奢侈品牌发展的新阶段：与艺术联袂\\_艺术中国 \(china.cn\)](#)
- No.7 [Valentino Fall 2017 Ready-to-Wear Collection | Vogue](#)
- No.8 [Jean-Michel Basquiat x Herschel Supply Co.: los nuevos lienzos del s.XXI \(ocimagazine.es\)](#)
- No.9 [潮闻快食 | 首波 adidas Originals 艺术家联名别注系列公布; READYMADE 为村上隆打造专属太阳花军布短裤\\_品牌 \(sohu.com\)](#)
- No.10 [KAWS Discusses His Uniqlo Collaboration | Vogue](#)
- No.11 [Dior Taps Raymond Pettibon for Men's Winter 19/20 Collection \(highsnobiety.com\)](#)
- No.12 [The Milanese. » Untitled, Hand-painted ceramics by Grant Levy-Lucero for Acne Studios, 2019.](#)
- No.13 [Match #399Stella McCartney Fall 2017 | A Horse Frightened by a Lion by George Stubbs, 1770More match - Tumblr Pics](#)
- No.14 [李宁三十周年 敦煌雅丹魔鬼城时尚大秀! \(huanqiu.com\)](#)
- No.15 [Louis Vuitton and artist Jeff Koons take on the masterpieces in collaborative bag collection \(snobette.com\)](#)
- No.16 [SHANG XIA 上下九色鹿真丝桑蚕丝印花围巾丝巾送长辈女生日礼物-tmall.com 天猫](#)
- No.17 [UNIQLO dévoile une collaboration avec le musée du Louvre - Le Site de la Sneaker](#)
- No.18 [Cloud \(sohu.com\)](#)
- No.19 [中国国家博物馆云犀围巾披肩女士真丝羊绒方巾春秋撞色礼物情侣-tmall.com 天猫](#)
- No.20 [【RAEPA 瑞葩 手提包】RAEPA/瑞葩【锦归】女士手提包 故宫文化&瑞葩品牌 联合出品 牛皮【正品 价格 图片】 - 寺库网 \(secoo.com\)](#)
- No.21 [颐和园百鸟朝凤系列再登场，文创同质化的“死结”还能解开吗?\\_产品 \(sohu.com\)](#)
- No.22 [国风系列敦煌九色鹿飘带丝带汉服文创长条窄丝巾手工发饰束发发带 - 淘宝网 \(taobao.com\)](#)
- No.23 [让“穆夏”走进你的生活\\_腾讯新闻 \(qq.com\)](#)
- No.24 [Patterned, Designer & Limited Edition Scarves | V&A Shop \(vam.ac.uk\)](#)

Figure 24

- No.1 [LV 发布牛年限定款, 网友: 牛劈叉很牛叉!\\_经典 \(sohu.com\)](#)
- No.2 [领略东方魅力 耀启活力新年——海瑞温斯顿 2019 中国农历新年献礼|腕表之家 xbiao.com](#)
- No.3 [2022“开运”穿搭 | 品牌虎年限定图鉴|印花|丝巾|虎纹|发饰 网易订阅 \(163.com\)](#)
- No.4 [香港时尚报价: 猴年特别版潮物集合 \(CONVERSE、KATE SPADE、VIVIENNE TAM、TOD'S 等\) - - 3hk 上香港网](#)
- No.5 [奢侈品大牌是如何玩转春节的? 窗花、中国结都成设计灵感\\_红包 \(sohu.com\)](#)
- No.6 [COS 新春系列虎年限定 \(xiaohongshu.com\)](#)
- No.7 [奢侈品牌新春限定系列驾到, 洋码头见证“东西方文化思维的碰撞” 中国经济导报—中国经济导报网 \(ceh.com.cn\)](#)
- No.8 [解说 | GUCCI 2022 中国新春限定系列包包: 猛虎与花园 \(baidu.com\)](#)
- No.9 [国潮 IP 周边|你有一份来自紫禁城的春节包裹\\_故宫 \(sohu.com\)](#)
- No.10 Original design work

## 2 Emotional words in Study 1

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### Reference list of emotion words (in Chinese)

<b>W1</b>	愉快的	<b>W2</b>	兴奋的	<b>W3</b>	炫耀的	<b>W4</b>	华丽的
<b>W5</b>	有趣的	<b>W6</b>	舒适的	<b>W7</b>	放松的	<b>W8</b>	友好的
<b>W9</b>	内容丰富的	<b>W10</b>	理性的	<b>W11</b>	和谐的	<b>W12</b>	发人深省的
<b>W13</b>	富有想象力的	<b>W14</b>	自由的	<b>W15</b>	痛苦的	<b>W16</b>	晕眩的
<b>W17</b>	多愁善感的	<b>W18</b>	混乱的	<b>W19</b>	可怕的	<b>W20</b>	不自然的

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### Reference list of emotion words

<b>W1</b>	Enjoyable	<b>W2</b>	Excited	<b>W3</b>	Blatant	<b>W4</b>	Magnificent
<b>W5</b>	Interesting	<b>W6</b>	Comfortable	<b>W7</b>	Relaxed	<b>W8</b>	Friendly
<b>W9</b>	Content-rich	<b>W10</b>	Rational	<b>W11</b>	Harmonious	<b>W12</b>	Thought-provoking

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**W4 Imaginative**

**W14** Uncontrolled

**W15** Painful

**W16** Dizzy

**W5 Sentimental**

**W18** Chaotic

**W19** Frightening

**W20** Factitious

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### 3 Raw data of study 1

Respondents	Age	Top 1	Emotional words of top 1		Top 2	Emotional words of top 2		Top 3	Emotional words of top 3		Top 4	Emotional words of top 4		Top 5	Emotional words of top 5	
1	25	13	W6	W14	22	W11	W14	11	W5	W17	2	W1	W5	16	W13	W9
2	35	3	W2	W14	4	W7	W13	11	W14	W5	19	W5	W9	21	W12	W9
3	34	13	W7	W17	4	W1	W13	22	W9	W13	11	W5	W14	20	W1	W6
4	38	3	W2	W7	16	W5	W9	5	W6	W10	23	W6	W17	24	W1	W14
5	30	10	W5	W13	21	W7	W12	14	W14	W17	24	W8	W14	3	W12	W14
6	39	21	W4	W11	9	W5	W14	22	W1	W7	12	W5	W14	10	W6	W5
7	38	20	W10	W11	13	W11	W14	4	W1	W7	22	W13	W17	5	W6	W11
8	22	4	W1	W7	13	W7	W14	11	W13	W17	16	W10	W11	22	W13	W17
9	35	12	W12	W16	10	W5	W13	6	W9	W10	4	W7	W14	5	W6	W9
10	27	24	W14	W8	3	W2	W14	16	W10	W9	23	W10	W17	20	W10	W11
11	36	16	W5	W13	4	W13	W18	3	W14	W12	18	W9	W17	11	W5	W13
12	23	16	W9	W11	10	W13	W15	1	W2	W3	4	W1	W5	13	W7	W14
13	20	19	W7	W13	22	W9	W7	18	W4	W11	6	W5	W9	5	W6	W10
14	21	3	W2	W14	4	W1	W13	5	W14	W9	11	W14	W5	22	W6	W17
15	21	13	W7	W14	3	W2	W14	8	W12	W14	16	W9	W11	5	W9	W16
16	23	13	W10	W17	18	W4	W12	23	W6	W10	9	W5	W12	19	W9	W12
17	20	13	W2	W11	3	W7	W14	5	W6	W10	4	W1	W7	16	W5	W13
18	20	8	W12	W14	4	W1	W11	22	W7	W13	21	W9	W12	1	W5	W14
19	23	24	W1	W5	8	W12	W15	5	W6	W9	14	W5	W4	21	W11	W7
20	22	7	W1	W14	8	W19	W12	15	W12	W16	16	W17	W14	24	W6	W17
21	22	7	W8	W7	8	W5	W12	9	W5	W16	14	W14	W9	17	W12	W8
22	23	13	W1	W13	4	W1	W7	10	W13	W15	5	W5	W14	21	W9	W11
23	21	3	W5	W14	5	W12	W15	7	W10	W13	8	W13	W17	13	W2	W11
24	32	4	W7	W13	2	W3	W14	24	W5	W1	19	W9	W17	18	W11	W12
25	21	3	W2	W7	6	W9	W12	8	W12	W14	2	W1	W5	11	W7	W14
26	28	11	W14	W5	14	W4	W7	21	W4	W2	22	W13	W17	9	W2	W5
27	18	4	W1	W13	11	W13	W17	16	W13	W9	13	W10	W14	9	W9	W2
28	36	16	W5	W13	11	W7	W14	13	W13	W17	22	W9	W17	6	W9	W16
29	35	3	W2	W14	18	W10	W11	24	W1	W5	13	W7	W17	7	W14	W7
30	36	21	W4	W5	10	W5	W13	9	W5	W14	14	W4	W9	1	W14	W16
31	46	22	W9	W13	5	W2	W17	3	W3	W12	13	W1	W7	18	W11	W10
32	38	16	W12	W10	3	W2	W13	5	W5	W14	6	W9	W10	11	W17	W14
33	34	13	W2	W11	19	W9	W10	4	W13	W17	6	W4	W10	22	W7	W13
34	29	6	W9	W10	12	W9	W16	13	W7	W17	14	W7	W14	3	W2	W9
35	18	2	W1	W5	1	W1	W9	4	W14	W9	16	W9	W13	9	W9	W16
36	22	13	W13	W17	22	W17	W6	11	W7	W14	19	W13	W17	16	W9	W13
37	28	22	W8	W13	24	W9	W16	16	W13	W9	6	W7	W17	13	W7	W14
38	30	5	W4	W9	6	W10	W9	13	W6	W14	11	W13	W17	18	W10	W11
39	33	18	W9	W17	16	W9	W1	24	W1	W5	4	W17	W6	6	W9	W12
40	40	13	W6	W14	3	W5	W9	5	W2	W14	6	W10	W13	18	W13	W11
41	42	24	W17	W9	20	W10	W6	5	W2	W14	18	W13	W11	22	W2	W14
42	26	6	W10	W13	5	W2	W14	13	W2	W11	19	W13	W12	23	W13	W11
43	26	11	W13	W17	18	W9	W17	22	W7	W14	21	W11	W8	1	W13	W9
44	30	16	W14	W11	22	W8	W14	11	W7	W14	13	W2	W14	6	W10	W13
45	18	4	W13	W17	16	W4	W13	7	W9	W10	2	W1	W6	24	W6	W14
46	34	11	W17	W13	9	W9	W12	8	W13	W15	14	W4	W9	21	W4	W9
47	33	13	W11	W14	17	W3	W5	6	W10	W13	3	W14	W16	19	W4	W9
48	36	22	W14	W1	13	W2	W14	3	W2	W13	2	W5	W17	18	W10	W11
49	35	24	W1	W5	21	W2	W9	9	W15	W18	11	W6	W13	13	W6	W14
50	39	6	W9	W12	8	W18	W16	17	W9	W5	13	W10	W14	7	W10	W13
51	35	13	W1	W17	19	W4	W3	22	W17	W13	1	W13	W18	6	W9	W11
52	46	5	W2	W14	10	W13	W15	21	W6	W9	24	W9	W11	6	W9	W12
53	28	11	W7	W12	13	W13	W14	16	W9	W17	22	W13	W14	18	W9	W17
54	19	11	W13	W17	3	W16	W18	5	W12	W16	1	W13	W20	17	W11	W3
55	22	2	W2	W5	4	W13	W17	16	W9	W10	17	W11	W10	12	W5	W14
56	20	21	W2	W14	17	W6	W14	10	W10	W12	5	W3	W12	14	W10	W11
57	24	13	W7	W12	14	W6	W12	22	W6	W14	24	W14	W5	8	W13	W15
58	21	4	W14	W17	3	W7	W12	13	W7	W12	22	W7	W13	2	W1	W5
59	20	9	W9	W16	10	W13	W15	21	W13	W9	22	W7	W9	24	W13	W11
60	20	11	W17	W12	13	W14	W13	3	W9	W2	16	W9	W8	22	W13	W1
61	19	4	W9	W10	22	W2	W14	10	W16	W19	16	W9	W16	13	W2	W11
62	21	14	W14	W7	16	W13	W7	5	W6	W10	13	W13	W6	24	W2	W14
63	40	20	W9	W12	9	W15	W9	16	W13	W17	12	W16	W17	10	W5	W13
64	39	20	W10	W11	13	W7	W14	4	W18	W7	22	W12	W17	5	W2	W3
65	50	24	W11	W6	19	W14	W7	3	W2	W13	4	W6	W1	13	W14	W6

## 4 Raw data of study 2

Respondent	Sample Number	Sample group	Brand	Year Group	T1	T2	T3	M1	M2	M3	M4
No. 1	1	ACB	LV	2011-2017		1			1		
No. 1	2	ACB	LV	2011-2017		1			1		
No. 1	3	ACB	LV	2001-2010		1		1			
No. 1	4	ACB	LV	2001-2010		1		1			
No. 1	5	ACB	LV	2001-2010	1			1			
No. 1	6	ACB	LV	2001-2010		1		1			
No. 1	7	ACB	LV	2001-2010		1		1			
No. 1	8	ACB	LV	2001-2010		1		1			
No. 1	9	ACB	LV	2011-2017			1		1		
No. 1	10	ACB	LV	2011-2017		1			1		
No. 1	11	ACB	LV	2018-2022		1					1
No. 1	12	ACB	LV	2018-2022		1					1
No. 1	13	ACB	LV	2018-2022		1					1
No. 1	14	ACB	LV	2011-2017			1	1			
No. 1	15	ACB	LV	2011-2017			1	1			
No. 1	16	ACB	LV	2011-2017		1			1		
No. 1	17	ACB	LV	2011-2017			1		1		
No. 1	18	ACB	LV	2018-2022	1				1		
No. 1	19	ACB	LV	2018-2022	1				1		
No. 1	20	ACB	LV	2018-2022	1			1			
No. 1	21	ACB	DIOR	2011-2017		1			1		
No. 1	22	ACB	DIOR	2011-2017	1			1			
No. 1	23	ACB	DIOR	2018-2022		1		1			
No. 1	24	ACB	DIOR	2018-2022		1		1			
No. 1	25	ACB	DIOR	2011-2017		1			1		
No. 1	26	ACB	DIOR	2011-2017		1			1		
No. 1	27	ACB	DIOR	2011-2017		1					1
No. 1	28	ACB	DIOR	2011-2017			1				1
No. 1	29	ACB	DIOR	2011-2017		1					1
No. 1	30	ACB	DIOR	2018-2022	1			1			
No. 1	31	ACB	DIOR	2018-2022	1			1			
No. 1	32	ACB	Cucci	2018-2022	1				1		
No. 1	33	ACB	Cucci	2018-2022		1			1		
No. 1	34	ACB	Cucci	2011-2017		1			1		
No. 1	35	ACB	Cucci	2011-2017	1				1		
No. 1	36	ACB	Cucci	2011-2017			1		1		
No. 1	37	ACB	Cucci	2011-2017	1				1		
No. 1	38	ACB	Cucci	2018-2022		1			1		

No. 1	39	ACB	Cucci	2018-2022	1	1	
No. 1	40	ACB	Prada	2018-2022	1		1
No. 1	41	ACB	Prada	2018-2022		1	1
No. 1	42	ACB	Prada	2018-2022	1		1
No. 1	43	ACB	Prada	2018-2022		1	1
No. 1	44	ACB	Prada	2011-2017		1	1
No. 1	45	ACB	Fendi	2018-2022	1		1
No. 1	46	ACB	Fendi	2018-2022	1		1
No. 1	47	ACB	Loewe	2018-2022		1	1
No. 1	48	ACB	Loewe	2018-2022		1	1
No. 1	49	ACB	Loewe	2018-2022		1	1
No. 1	50	ACB	Loewe	2018-2022	1		1
No. 1	51	ACB	Loewe	2011-2017		1	1
No. 1	52	ALB	Coach	2018-2022	1		1
No. 1	53	ALB	Coach	2018-2022		1	1
No. 1	54	ALB	Coach	2018-2022		1	1
No. 1	55	ALB	Coach	2018-2022		1	1
No. 1	56	ALB	Coach	2018-2022	1		1
No. 1	57	ALB	Coach	2018-2022		1	1
No. 1	58	ALB	Coach	2018-2022	1		1
No. 1	59	ALB	Coach	2018-2022	1	1	
No. 1	60	ALB	Coach	2011-2017		1	1
No. 1	61	ALB	MCM	2011-2017	1		1
No. 1	62	ALB	MCM	2018-2022	1		1
No. 1	63	ALB	Mulberry	2018-2022		1	1
No. 1	64	ALB	Mulberry	2018-2022		1	1
No. 1	65	ALB	Lacoste	2018-2022		1	1
No. 1	66	ALB	Coach	2018-2022		1	1
No. 1	67	MFB	Eastpak	2018-2022	1	1	1
No. 1	68	MFB	Eastpak	2018-2022	1		1
No. 1	69	MFB	Kipling	2018-2022	1		1
No. 1	70	MFB	Kipling	2018-2022	1		1
No. 1	71	MFB	Kipling	2018-2022	1		1
No. 1	72	MFB	Kipling	2018-2022		1	1
No. 1	73	MFB	Nancy	2011-2017		1	1
			Gonzalez				
No. 1	74	ALB	A Cloud	2018-2022		1	1
No. 1	75	ALB	A Cloud	2018-2022		1	1
No. 1	76	ALB	Bampo	2011-2017		1	1
No. 1	77	ALB	Bampo	2018-2022		1	1
No. 1	78	ALB	Bampo	2018-2022		1	1
No. 1	79	ALB	Bampo	2018-2022		1	1

No. 1	80	ALB	Bampo	2018-2022		1	1	
No. 1	81	MFB	Hongna	2018-2022		1	1	
No. 1	82	MFB	Hongna	2018-2022		1	1	
No. 1	83	MFB	Sofitte	2018-2022		1	1	
No. 1	84	MFB	Proenza Schouler	2018-2022		1	1	
No. 1	85	MFB	Proenza Schouler	2018-2022		1	1	
No. 1	86	MFB	Herschel Supply	2018-2022		1	1	
No. 2	1	ACB	LV	2011-2017		1	1	
No. 2	2	ACB	LV	2011-2017		1	1	
No. 2	3	ACB	LV	2001-2010			1	1
No. 2	4	ACB	LV	2001-2010		1		1
No. 2	5	ACB	LV	2001-2010	1		1	
No. 2	6	ACB	LV	2001-2010		1		1
No. 2	7	ACB	LV	2001-2010		1	1	
No. 2	8	ACB	LV	2001-2010		1	1	
No. 2	9	ACB	LV	2011-2017		1		1
No. 2	10	ACB	LV	2011-2017		1		1
No. 2	11	ACB	LV	2018-2022			1	1
No. 2	12	ACB	LV	2018-2022			1	1
No. 2	13	ACB	LV	2018-2022			1	1
No. 2	14	ACB	LV	2011-2017			1	1
No. 2	15	ACB	LV	2011-2017			1	1
No. 2	16	ACB	LV	2011-2017		1		1
No. 2	17	ACB	LV	2011-2017			1	1
No. 2	18	ACB	LV	2018-2022	1			1
No. 2	19	ACB	LV	2018-2022			1	1
No. 2	20	ACB	LV	2018-2022		1		1
No. 2	21	ACB	DIOR	2011-2017			1	1
No. 2	22	ACB	DIOR	2011-2017	1			1
No. 2	23	ACB	DIOR	2018-2022	1			1
No. 2	24	ACB	DIOR	2018-2022		1	1	
No. 2	25	ACB	DIOR	2011-2017	1			1
No. 2	26	ACB	DIOR	2011-2017	1			1
No. 2	27	ACB	DIOR	2011-2017	1			1
No. 2	28	ACB	DIOR	2011-2017			1	1
No. 2	29	ACB	DIOR	2011-2017	1			1
No. 2	30	ACB	DIOR	2018-2022	1		1	
No. 2	31	ACB	DIOR	2018-2022		1	1	
No. 2	32	ACB	Cucci	2018-2022	1			1
No. 2	33	ACB	Cucci	2018-2022			1	
No. 2	34	ACB	Cucci	2011-2017	1			1

No. 2	35	ACB	Cucci	2011-2017	1			1	
No. 2	36	ACB	Cucci	2011-2017	1			1	
No. 2	37	ACB	Cucci	2011-2017	1		1		
No. 2	38	ACB	Cucci	2018-2022		1		1	
No. 2	39	ACB	Cucci	2018-2022		1	1		
No. 2	40	ACB	Prada	2018-2022		1		1	
No. 2	41	ACB	Prada	2018-2022			1	1	
No. 2	42	ACB	Prada	2018-2022		1		1	
No. 2	43	ACB	Prada	2018-2022		1		1	
No. 2	44	ACB	Prada	2011-2017			1	1	
No. 2	45	ACB	Fendi	2018-2022		1		1	
No. 2	46	ACB	Fendi	2018-2022		1		1	
No. 2	47	ACB	Loewe	2018-2022			1	1	
No. 2	48	ACB	Loewe	2018-2022			1	1	
No. 2	49	ACB	Loewe	2018-2022	1			3	1
No. 2	50	ACB	Loewe	2018-2022	1			3	1
No. 2	51	ACB	Loewe	2011-2017		1		1	
No. 2	52	ALB	Coach	2018-2022		1		1	
No. 2	53	ALB	Coach	2018-2022			1	1	
No. 2	54	ALB	Coach	2018-2022			1	1	
No. 2	55	ALB	Coach	2018-2022			1	1	
No. 2	56	ALB	Coach	2018-2022		1			1
No. 2	57	ALB	Coach	2018-2022			1	1	
No. 2	58	ALB	Coach	2018-2022		1			1
No. 2	59	ALB	Coach	2018-2022		1		1	
No. 2	60	ALB	Coach	2011-2017			1	1	
No. 2	61	ALB	MCM	2011-2017			1	1	
No. 2	62	ALB	MCM	2018-2022	1				1
No. 2	63	ALB	Mulberry	2018-2022			1	1	
No. 2	64	ALB	Mulberry	2018-2022			1	1	
No. 2	65	ALB	Lacoste	2018-2022			1	1	
No. 2	66	ALB	Coach	2018-2022			1	1	
No. 2	67	MFB	Eastpak	2018-2022			1	1	
No. 2	68	MFB	Eastpak	2018-2022			1	1	
No. 2	69	MFB	Kipling	2018-2022		1		1	
No. 2	70	MFB	Kipling	2018-2022		1		1	
No. 2	71	MFB	Kipling	2018-2022		1		1	
No. 2	72	MFB	Kipling	2018-2022		1		1	
No. 2	73	MFB	Nancy Gonzalez	2011-2017			1	1	
No. 2	74	ALB	A Cloud	2018-2022			1	1	
No. 2	75	ALB	A Cloud	2018-2022			1	1	

No. 2	76	ALB	Bampo	2011-2017		1	1	
No. 2	77	ALB	Bampo	2018-2022		1	1	
No. 2	78	ALB	Bampo	2018-2022		1	1	
No. 2	79	ALB	Bampo	2018-2022		1	1	
No. 2	80	ALB	Bampo	2018-2022		1	1	
No. 2	81	MFB	Hongna	2018-2022		1	1	
No. 2	82	MFB	Hongna	2018-2022		1	1	
No. 2	83	MFB	Sofitte	2018-2022		1	1	
No. 2	84	MFB	Proenza	2018-2022		1	1	
			Schouler					
No. 2	85	MFB	Proenza	2018-2022		1	1	
			Schouler					
No. 2	86	MFB	Herschel	2018-2022		1	1	
			Supply					
No. 3	1	ACB	LV	2011-2017	1		1	
No. 3	2	ACB	LV	2011-2017	1		1	
No. 3	3	ACB	LV	2001-2010		1		1
No. 3	4	ACB	LV	2001-2010		1		1
No. 3	5	ACB	LV	2001-2010		1		1
No. 3	6	ACB	LV	2001-2010			1	1
No. 3	7	ACB	LV	2001-2010		1		1
No. 3	8	ACB	LV	2001-2010		1		1
No. 3	9	ACB	LV	2011-2017			1	1
No. 3	10	ACB	LV	2011-2017		1		1
No. 3	11	ACB	LV	2018-2022			1	1
No. 3	12	ACB	LV	2018-2022		1		1
No. 3	13	ACB	LV	2018-2022			1	1
No. 3	14	ACB	LV	2011-2017			1	1
No. 3	15	ACB	LV	2011-2017			1	1
No. 3	16	ACB	LV	2011-2017		1		1
No. 3	17	ACB	LV	2011-2017			1	1
No. 3	18	ACB	LV	2018-2022		1		1
No. 3	19	ACB	LV	2018-2022		1		1
No. 3	20	ACB	LV	2018-2022	1			1
No. 3	21	ACB	DIOR	2011-2017			1	1
No. 3	22	ACB	DIOR	2011-2017			1	1
No. 3	23	ACB	DIOR	2018-2022			1	1
No. 3	24	ACB	DIOR	2018-2022		1		1
No. 3	25	ACB	DIOR	2011-2017		1		1
No. 3	26	ACB	DIOR	2011-2017		1		1
No. 3	27	ACB	DIOR	2011-2017		1		1
No. 3	28	ACB	DIOR	2011-2017			1	1
No. 3	29	ACB	DIOR	2011-2017		1		1
No. 3	30	ACB	DIOR	2018-2022		1		1

No. 3	31	ACB	DIOR	2018-2022			1		1	
No. 3	32	ACB	Cucci	2018-2022			1	1		
No. 3	33	ACB	Cucci	2018-2022			1	1		
No. 3	34	ACB	Cucci	2011-2017			1		1	
No. 3	35	ACB	Cucci	2011-2017			1		1	
No. 3	36	ACB	Cucci	2011-2017			1		1	
No. 3	37	ACB	Cucci	2011-2017			1		1	
No. 3	38	ACB	Cucci	2018-2022			1		1	
No. 3	39	ACB	Cucci	2018-2022			1		1	
No. 3	40	ACB	Prada	2018-2022			1		1	
No. 3	41	ACB	Prada	2018-2022				1	1	
No. 3	42	ACB	Prada	2018-2022			1		1	
No. 3	43	ACB	Prada	2018-2022				1	1	
No. 3	44	ACB	Prada	2011-2017				1	1	
No. 3	45	ACB	Fendi	2018-2022			1		1	
No. 3	46	ACB	Fendi	2018-2022		1			1	
No. 3	47	ACB	Loewe	2018-2022				1	1	
No. 3	48	ACB	Loewe	2018-2022				1	1	
No. 3	49	ACB	Loewe	2018-2022				1		1
No. 3	50	ACB	Loewe	2018-2022				1		1
No. 3	51	ACB	Loewe	2011-2017				1		1
No. 3	52	ALB	Coach	2018-2022		1			1	
No. 3	53	ALB	Coach	2018-2022				1	1	
No. 3	54	ALB	Coach	2018-2022				1	1	
No. 3	55	ALB	Coach	2018-2022				1	1	
No. 3	56	ALB	Coach	2018-2022			1			1
No. 3	57	ALB	Coach	2018-2022				1		1
No. 3	58	ALB	Coach	2018-2022			1			1
No. 3	59	ALB	Coach	2018-2022				1		1
No. 3	60	ALB	Coach	2011-2017				1		1
No. 3	61	ALB	MCM	2011-2017				1		1
No. 3	62	ALB	MCM	2018-2022			1			1
No. 3	63	ALB	Mulberry	2018-2022				1	1	
No. 3	64	ALB	Mulberry	2018-2022				1		1
No. 3	65	ALB	Lacoste	2018-2022				1		1
No. 3	66	ALB	Coach	2018-2022				1		1
No. 3	67	MFB	Eastpak	2018-2022			1			1
No. 3	68	MFB	Eastpak	2018-2022			1		1	
No. 3	69	MFB	Kipling	2018-2022			1			1
No. 3	70	MFB	Kipling	2018-2022			1			1
No. 3	71	MFB	Kipling	2018-2022				1	1	
No. 3	72	MFB	Kipling	2018-2022				1	1	



No. 3	73	MFB	Nancy Gonzalez	2011-2017		1	1	
No. 3	74	ALB	A Cloud	2018-2022		1	1	
No. 3	75	ALB	A Cloud	2018-2022		1	1	
No. 3	76	ALB	Bampo	2011-2017		1	1	
No. 3	77	ALB	Bampo	2018-2022		1	1	
No. 3	78	ALB	Bampo	2018-2022		1	1	
No. 3	79	ALB	Bampo	2018-2022		1	1	
No. 3	80	ALB	Bampo	2018-2022		1	1	
No. 3	81	MFB	Hongna	2018-2022		1	1	
No. 3	82	MFB	Hongna	2018-2022		1	1	
No. 3	83	MFB	Sofitte	2018-2022		1	1	
No. 3	84	MFB	Proenza Schouler	2018-2022		1	1	
No. 3	85	MFB	Proenza Schouler	2018-2022		1	1	
No. 3	86	MFB	Herschel Supply	2018-2022		1	1	
No. 4	1	ACB	LV	2011-2017	1			1
No. 4	2	ACB	LV	2011-2017		1		1
No. 4	3	ACB	LV	2001-2010			1	1
No. 4	4	ACB	LV	2001-2010		1	1	
No. 4	5	ACB	LV	2001-2010	1			1
No. 4	6	ACB	LV	2001-2010			1	1
No. 4	7	ACB	LV	2001-2010		1		1
No. 4	8	ACB	LV	2001-2010		1		1
No. 4	9	ACB	LV	2011-2017			1	1
No. 4	10	ACB	LV	2011-2017		1		1
No. 4	11	ACB	LV	2018-2022			1	1
No. 4	12	ACB	LV	2018-2022	1			1
No. 4	13	ACB	LV	2018-2022	1			1
No. 4	14	ACB	LV	2011-2017			1	1
No. 4	15	ACB	LV	2011-2017			1	1
No. 4	16	ACB	LV	2011-2017		1		1
No. 4	17	ACB	LV	2011-2017			1	1
No. 4	18	ACB	LV	2018-2022		1		1
No. 4	19	ACB	LV	2018-2022	1			1
No. 4	20	ACB	LV	2018-2022		1	1	
No. 4	21	ACB	DIOR	2011-2017			1	1
No. 4	22	ACB	DIOR	2011-2017			1	1
No. 4	23	ACB	DIOR	2018-2022			1	1
No. 4	24	ACB	DIOR	2018-2022			1	1
No. 4	25	ACB	DIOR	2011-2017			1	1
No. 4	26	ACB	DIOR	2011-2017			1	1

No. 4	27	ACB	DIOR	2011-2017			1		
No. 4	28	ACB	DIOR	2011-2017			1		1
No. 4	29	ACB	DIOR	2011-2017		1			1
No. 4	30	ACB	DIOR	2018-2022	1		1		
No. 4	31	ACB	DIOR	2018-2022			1	1	
No. 4	32	ACB	Cucci	2018-2022			1	1	
No. 4	33	ACB	Cucci	2018-2022			1	1	
No. 4	34	ACB	Cucci	2011-2017		1	1		
No. 4	35	ACB	Cucci	2011-2017		1		1	
No. 4	36	ACB	Cucci	2011-2017			1	1	
No. 4	37	ACB	Cucci	2011-2017	1				1
No. 4	38	ACB	Cucci	2018-2022		1		1	
No. 4	39	ACB	Cucci	2018-2022			1	1	
No. 4	40	ACB	Prada	2018-2022		1		1	
No. 4	41	ACB	Prada	2018-2022			1	1	
No. 4	42	ACB	Prada	2018-2022		1			1
No. 4	43	ACB	Prada	2018-2022			1	1	
No. 4	44	ACB	Prada	2011-2017			1	1	
No. 4	45	ACB	Fendi	2018-2022		1			1
No. 4	46	ACB	Fendi	2018-2022	1				1
No. 4	47	ACB	Loewe	2018-2022			1		1
No. 4	48	ACB	Loewe	2018-2022			1		1
No. 4	49	ACB	Loewe	2018-2022			1	1	
No. 4	50	ACB	Loewe	2018-2022		1			1
No. 4	51	ACB	Loewe	2011-2017		1			1
No. 4	52	ALB	Coach	2018-2022			1	1	
No. 4	53	ALB	Coach	2018-2022			1	1	
No. 4	54	ALB	Coach	2018-2022			1	1	
No. 4	55	ALB	Coach	2018-2022			1	1	
No. 4	56	ALB	Coach	2018-2022			1		1
No. 4	57	ALB	Coach	2018-2022			1		1
No. 4	58	ALB	Coach	2018-2022			1	1	
No. 4	59	ALB	Coach	2018-2022			1	1	
No. 4	60	ALB	Coach	2011-2017			1	1	
No. 4	61	ALB	MCM	2011-2017			1	1	
No. 4	62	ALB	MCM	2018-2022			1		1
No. 4	63	ALB	Mulberry	2018-2022			1		1
No. 4	64	ALB	Mulberry	2018-2022			1		1
No. 4	65	ALB	Lacoste	2018-2022			1	1	
No. 4	66	ALB	Coach	2018-2022			1	1	
No. 4	67	MFB	Eastpak	2018-2022		1		1	
No. 4	68	MFB	Eastpak	2018-2022		1			1

No. 4	69	MFB	Kipling	2018-2022		1		1
No. 4	70	MFB	Kipling	2018-2022	1			1
No. 4	71	MFB	Kipling	2018-2022		1		1
No. 4	72	MFB	Kipling	2018-2022			1	1
No. 4	73	MFB	Nancy Gonzalez	2011-2017		1	1	
No. 4	74	ALB	A Cloud	2018-2022		1	1	
No. 4	75	ALB	A Cloud	2018-2022		1	1	
No. 4	76	ALB	Bampo	2011-2017		1		1
No. 4	77	ALB	Bampo	2018-2022		1		1
No. 4	78	ALB	Bampo	2018-2022		1	1	
No. 4	79	ALB	Bampo	2018-2022		1		1
No. 4	80	ALB	Bampo	2018-2022		1		1
No. 4	81	MFB	Hongna	2018-2022		1	1	
No. 4	82	MFB	Hongna	2018-2022		1	1	
No. 4	83	MFB	Sofitte	2018-2022		1	1	
No. 4	84	MFB	Proenza Schouler	2018-2022		1		1
No. 4	85	MFB	Proenza Schouler	2018-2022		1		1
No. 4	86	MFB	Herschel Supply	2018-2022		1	1	
No. 5	1	ACB	LV	2011-2017	1			1
No. 5	2	ACB	LV	2011-2017	1		1	
No. 5	3	ACB	LV	2001-2010			1	1
No. 5	4	ACB	LV	2001-2010			1	1
No. 5	5	ACB	LV	2001-2010		1		1
No. 5	6	ACB	LV	2001-2010		1		1
No. 5	7	ACB	LV	2001-2010		1		1
No. 5	8	ACB	LV	2001-2010			1	1
No. 5	9	ACB	LV	2011-2017			1	1
No. 5	10	ACB	LV	2011-2017		1		1
No. 5	11	ACB	LV	2018-2022			1	1
No. 5	12	ACB	LV	2018-2022	1			
No. 5	13	ACB	LV	2018-2022	1			
No. 5	14	ACB	LV	2011-2017			1	1
No. 5	15	ACB	LV	2011-2017			1	
No. 5	16	ACB	LV	2011-2017			1	1
No. 5	17	ACB	LV	2011-2017			1	1
No. 5	18	ACB	LV	2018-2022	1			1
No. 5	19	ACB	LV	2018-2022	1			
No. 5	20	ACB	LV	2018-2022		1		
No. 5	21	ACB	DIOR	2011-2017			1	1
No. 5	22	ACB	DIOR	2011-2017			1	

No. 5	23	ACB	DIOR	2018-2022			1		1
No. 5	24	ACB	DIOR	2018-2022			1	1	
No. 5	25	ACB	DIOR	2011-2017	1				1
No. 5	26	ACB	DIOR	2011-2017		1		1	
No. 5	27	ACB	DIOR	2011-2017	1				1
No. 5	28	ACB	DIOR	2011-2017			1		1
No. 5	29	ACB	DIOR	2011-2017	1				1
No. 5	30	ACB	DIOR	2018-2022	1		1		
No. 5	31	ACB	DIOR	2018-2022		1		1	
No. 5	32	ACB	Cucci	2018-2022	1			1	
No. 5	33	ACB	Cucci	2018-2022			1	1	
No. 5	34	ACB	Cucci	2011-2017	1		1		
No. 5	35	ACB	Cucci	2011-2017	1		1		
No. 5	36	ACB	Cucci	2011-2017		1		1	
No. 5	37	ACB	Cucci	2011-2017	1			1	
No. 5	38	ACB	Cucci	2018-2022		1		1	
No. 5	39	ACB	Cucci	2018-2022		1	1		
No. 5	40	ACB	Prada	2018-2022	1			1	
No. 5	41	ACB	Prada	2018-2022		1	1		
No. 5	42	ACB	Prada	2018-2022	1			1	
No. 5	43	ACB	Prada	2018-2022		1		1	
No. 5	44	ACB	Prada	2011-2017			1	1	
No. 5	45	ACB	Fendi	2018-2022	1		1		
No. 5	46	ACB	Fendi	2018-2022			1		
No. 5	47	ACB	Loewe	2018-2022			1	1	
No. 5	48	ACB	Loewe	2018-2022			1		1
No. 5	49	ACB	Loewe	2018-2022			1		1
No. 5	50	ACB	Loewe	2018-2022					1
No. 5	51	ACB	Loewe	2011-2017					1
No. 5	52	ALB	Coach	2018-2022				1	
No. 5	53	ALB	Coach	2018-2022	1		1		
No. 5	54	ALB	Coach	2018-2022			1	1	
No. 5	55	ALB	Coach	2018-2022			1	1	
No. 5	56	ALB	Coach	2018-2022		1			1
No. 5	57	ALB	Coach	2018-2022		1		1	
No. 5	58	ALB	Coach	2018-2022		1		1	
No. 5	59	ALB	Coach	2018-2022		1		1	
No. 5	60	ALB	Coach	2011-2017		1		1	
No. 5	61	ALB	MCM	2011-2017			1	1	
No. 5	62	ALB	MCM	2018-2022	1			1	
No. 5	63	ALB	Mulberry	2018-2022			1		1
No. 5	64	ALB	Mulberry	2018-2022			1		1

No. 5	65	ALB	Lacoste	2018-2022	1	1	
No. 5	66	ALB	Coach	2018-2022	1	1	
No. 5	67	MFB	Eastpak	2018-2022	1	1	
No. 5	68	MFB	Eastpak	2018-2022	1	1	
No. 5	69	MFB	Kipling	2018-2022	1	1	
No. 5	70	MFB	Kipling	2018-2022	1	1	
No. 5	71	MFB	Kipling	2018-2022	1	1	
No. 5	72	MFB	Kipling	2018-2022	1		1
No. 5	73	MFB	Nancy Gonzalez	2011-2017	1	1	
No. 5	74	ALB	A Cloud	2018-2022	1	1	
No. 5	75	ALB	A Cloud	2018-2022	1	1	
No. 5	76	ALB	Bampo	2011-2017	1	1	
No. 5	77	ALB	Bampo	2018-2022	1		1
No. 5	78	ALB	Bampo	2018-2022	1	1	
No. 5	79	ALB	Bampo	2018-2022	1	1	
No. 5	80	ALB	Bampo	2018-2022	1	1	
No. 5	81	MFB	Hongna	2018-2022	1		1
No. 5	82	MFB	Hongna	2018-2022	1	1	
No. 5	83	MFB	Sofitte	2018-2022	1	1	
No. 5	84	MFB	Proenza Schouler	2018-2022	1	1	
No. 5	85	MFB	Proenza Schouler	2018-2022	1	1	
No. 5	86	MFB	Herschel Supply	2018-2022	1	1	