



Innovative Illustration Design for the Cultural Content and Emotional Elements of *Sichuan Opera* Arts for China's Gen Z

Duan Mingyue^{1✉}, Wong Shaw Chiang²

¹UCSI University, Malaysia

²Raffles University, Malaysia

Submitted: October 26, 2024. Revised: November 15, 2024. Accepted: December 7, 2024

Abstract

With society rapidly evolving alongside digital technology and pan-entertainment, there is a notable decline in appreciation and understanding of *Sichuan Opera* among China's Generation Z (Gen Z). This study aims to develop and evaluate the potential of innovative illustration as a tool to promote the cultural content and emotional elements of *Sichuan Opera* arts among China's Gen Z. This qualitative participatory action-based research was guided by an iterative cycle of planning, acting, observing, and reflecting. This study comprised three stages. In the pre-design stage, nine (9) experts were selected through purposive and snowball sampling to explore their views on the cultural content and emotional elements of *Sichuan Opera* arts. Thematic analysis with NVivo 12 yielded six (6) cultural content, i.e., a form of expression, performance occasions, performance techniques and dance movements, performance repertoire, character roles, costumes and make-up. The emotional elements encompassed the emotions expressed within *Sichuan Opera* itself (such as the characters' roles and personalities and traditional morals and philosophies), as well as people's emotions towards *Sichuan Opera* (including their yearning for its sentiment and their awareness of the need to protect traditional culture). These content and elements were visually expressed through three (3) innovative illustrations in the design stage. In the post-design stage, a sample of 25 China's Gen Z from *Chengdu* was conveniently selected to evaluate the effectiveness of the illustrations. The use of innovative illustrations as a medium to promote the dissemination of the art of *Sichuan Opera* among China's Gen Z has successfully merged traditional culture with modern aesthetics.

Keywords: *Sichuan Opera*; cultural content; emotional elements; innovative illustration; semiotics

How to Cite: Mingyue, D., & Chiang, W. S. (2024). Innovative Illustration Design for the Cultural Content and Emotional Elements of *Sichuan Opera* Arts for China's Gen Z. *Harmonia: Journal of Arts Research and Education*, 24(2), 323-342

INTRODUCTION

The art of *Sichuan Opera* is an outstanding traditional Chinese culture formed during the *Qianlong* period, with a history of more than 300 years (Luo & Zhan, 2020). It is one of China's many magnificent cultural heritages (Dong, 2018). *Sichuan Opera* is an excellent performing art with a long history.

It incorporates a variety of elements, including singing styles (e.g., *Gaoqiang*, *Huqin*, and *Kunqiang*), colourful costumes, stylish make-up, literature, dialects, and music to impress the audience during performances (Luo, 2013; Hu, 2019; Liu, 2020). In recognition of its cultural significance and unique contribution to the performing arts, *Sichuan Opera* was listed as a UNESCO's World In-

✉ Corresponding author:
E-mail: 1002163658@ucsiuniversity.edu.my

tangible Cultural Heritage (ICH) in 2006.

Despite being an excellent traditional theatre culture, the current situation of *Sichuan Opera* is not encouraging. According to the financial media of the *Chongqing NPC Citizen's Herald*, statistics from the Ministry of Culture (2022) showed that there were 373 genres of *Sichuan Opera* in 1983, but to date, only slightly more than 200 genres remain. The research team of the Municipal People's Congress Standing Committee (Hu, 2019) discovered that the *Dazu District opera Artists Association* in *Chongqing* had 97 members. Only 10% of the members were under 40, 30% were between 40 and 60, and 60% were over 60. In *Hechuan district*, *Sichuan Opera* artistic talents are concentrated mainly among individuals aged 50 and above. Hu (2019) noted that there is a scarcity of *Sichuan Opera* talents between the ages of 30 and 50. This observation indicates a broader issue of a lack of young talents who are in touch with *Sichuan Opera* in China.

Due to the advances in the information technology revolution, the traditional forms of performance no longer meet modern young people's aesthetic preferences (Luo, 2020; Wu, 2023; Luo & Zhan, 2020). Specifically, the distinctive rules of theatre appreciation in *Sichuan Opera* culture have hindered its dissemination in contemporary times. Therefore, scholars such as Du (2023), Xiang (2023), and Luo and Zhan (2020) have suggested that innovating the promotion of *Sichuan Opera* is crucial for its sustainable development. Li (2019), Wu (2023), Wen and Li (2021), and Gao and Liu (2020) have all advocated for making the younger generation in China the primary focus in preserving and developing the heritage of *Sichuan Opera*. They argued that the future of *Sichuan Opera's* inheritance and development depends on young people's appreciation of and engagement with the traditional art form. Additionally, Dong (2018) suggested that *Sichuan Opera*, a Chinese ICH and art form, must find innovative ways to promote itself to Gen Z in the digital age. Meanwhile, Wu (2023) emphasised that it is important to promote *Sichuan Opera* to this generation so that they can better understand and appreciate

the value of this long-developed cultural heritage.

Given the lack of interest and engagement of younger audiences in traditional art forms such as the *Sichuan Opera*, the universal appeal of visual languages such as illustration becomes increasingly relevant. Illustration is a visual language that is universally understood. Due to the continuous development of digital technology and commercialisation, it has gained popularity as an art form for promotional purposes in contemporary society (Liu, 2014). Illustration can convey a wide range of themes in different contexts through the treatment of artistic elements and styles, thus satisfying modern people's pursuit of spiritual fulfilment (Zou, 2021; Zhong, 2011; Wei & Liu, 2020). According to Zhang (2021), innovative illustration is an art form that easily resonates with Gen Z, especially when created in an 'innovative' and 'fashionable' way.

Both Wu (2022) and Zhou (2019) emphasised that innovative illustrations of ICH elements occupy a large proportion of the Chinese market today. Innovative visual symbols can be used as the basic elements to communicate the art and culture of *Sichuan Opera* (Luo, 2020). They integrate the traditional aesthetic characteristics of *Sichuan Opera*, which not only inherit its traditional artistic characteristics such as writing and virtuality, but also transcend the limitations of time, space, and carriers or medium, where this adaptation aligns more closely with the viewing habits and preferences of modern audiences (Luo, 2020; Qiu, 2020; Yin & Zhu, 2024; Liu, 2020). Therefore, the application of modern visual elements in the cultural communication of *Sichuan Opera* represents the preservation of traditional culture and its innovative development in contemporary society, which is of great significance for the cultural inheritance and artistic development of local operas.

Historical and Cultural Characteristics of *Sichuan Opera*

With its rich and long history, Sichuan

Opera is mainly popular in *Sichuan*, *Chongqing*, *Yunnan-Guizhou*, and parts of *Hubei* and *Xizang* provinces. *Sichuan Opera* is a traditional type of opera that integrates the five major tones of *Kun*, *Gao*, *Hu*, *Tan*, and *Deng* (Luo & Zhan, 2020). Characterised by *Sichuan Opera*, its long history and culture, unique high-accent music, exquisite performance techniques, diverse classic plays, and distinctive regional characteristics, *Sichuan Opera* has emerged as the most influential opera genre in southwest China, boasting the largest audience in history (Dong, 2018). Additionally, *Sichuan Opera* is one of the first local operas announced by The State Council to enter the national ICH list, and alongside *Kunqu Opera*, it is the only local opera that has been recommended twice as a representative project for the United Nations' selection of the Oral and ICH of Humanity (Zhou, 2019).

As an ICH, *Sichuan Opera*, with its unique performance form, rich repertoire types, local characteristics, musical elements, actors' talents, as well as exquisite make-up and costumes, has become a treasure in Chinese traditional opera culture, where this prominence underscores its important role in the inheritance and promotion of Chinese traditional culture (Zhou, 2019; Li, 2023; Yin & Zhu, 2024). Diversity, locality, designation, and cultural are the key characteristics of *Sichuan Opera's* art.

Inheritance and Protection of *Sichuan Opera*

Review of the literature suggests that several subjective and objective factors might have contributed to the declining engagement with *Sichuan Opera*, particularly among the younger generation. Subjectively, there are several issues within the *Sichuan Opera* itself, which include a gap in the cultivation of talents in *Sichuan Opera* (Yao & Wang, 2012; Wen & Li, 2021), a need to cultivate a younger generation of audience for *Sichuan Opera* (Li & Wan, 2021), a call for innovation in the repertoire of *Sichuan Opera* (Zheng et al., 2020), and the disparities in performance venues, environments, and equipment (Pan & Jiang, 2021).

Meanwhile, the objective factors in-

clude China's Gen Z lack of awareness and knowledge about *Sichuan Opera* (Wang, 2018 & Zheng et al., 2020), and the influence of other cultures (Mu, 2017; Mou, 2019). In other words, in addition to the inherent challenges within the *Sichuan Opera* itself, ineffective promotion among the younger generation in China has led to the current decline of the art form. Consequently, the key to the inheritance and development of this traditional culture of *Sichuan Opera* is its effective promotion among the younger generation (Li, 2019; Wu, 2023; Wen & Li, 2021; Gao & Liu, 2020).

Application of ICH and Innovative Illustration Design

ICH is an important symbol of national spirit and national culture, encapsulating a nation's unique way of thinking, imagination, and cultural awakening; in short, it represents the DNA of a nation's cultural life (Wu, 2022). The ICH of *Sichuan Opera* is the crystallisation of the collective wisdom of folk working people across various historical periods, bringing together the people's aesthetic experiences and artistic heritage. This aesthetic commonality of *Sichuan Opera* also provides rich materials for the creation of innovative illustration elements (Zhou, 2019; Luo & Zhan, 2020; Zhao, 2021). In recent years, the field of innovative illustration has captivated the attention of younger groups with its high technical standards and high artistic aesthetic characteristics, thereby placing more demands on the creative inspiration and source materials used in innovative illustration art (Song, 2021; Wang, 2013; Chen & Wu, 2021). Consequently, when presenting ICH through innovative illustration design, attention needs to be paid to the following three aspects, including (1.) cultural content, (2.) emotional elements, and (3.) visual depiction (Chen, 2021; Ge, 2019).

Wu (2022) argued that the modern value of intangible cultural elements is best highlighted by effectively linking them with modern, regional, and fashionable culture. In terms of modern culture, intangible cultural elements are indispensable

highlights in artistic innovation. Moreover, ICH elements encompass tangible items with specific visual expressions, embodying a variety of meanings, where these elements can be refined and sublimated from various national cultural characteristics and artistic elements (Xia & Gao, 2022). Therefore, respecting national cultures and continually innovating cultural elements is highly important. On the other hand, in response to the demands of modern cultural and artistic development, it is also necessary to incorporate the national cultural elements from various regions and countries into the creative and design activities to fully ensure a thorough exploration of these elements (Wu, 2022; Zheng et al., 2020). Lastly, the deep integration of modern culture and ethnic cultural elements is also diverse, with some penetrating into every aspect of work and life, while some gradually evolve in the direction of fashionable culture, capable of highlighting the innovativeness of ethnic cultures that can resonate more easily with the public (Wu, 2022; Miao & He, 2022).

Previous Studies on Illustration for ICH and Sichuan Opera Arts

ICH is increasingly being promoted through innovative illustrations, a topic that has garnered substantial scholarly interest among researchers who have conducted various research in this area (e.g., Liu, 2019; Fan, 2017; Zhang, 2021; Song, 2021). For example, Chen (2021) explored the application of *Miao* costume patterns in modern design by analysing the evolution of these patterns, aiming better to integrate cultural creative products with traditional *Miao* culture. By doing so, Chen (2021) sought to design artworks that resonate with the characteristics of modern times and contribute to preserving and disseminating the excellent culture.

Zhang's (2021) design project which involved creating three series of 'national fashion' illustration works, where these works distinctly blend the traditional plastic arts of *Shanxi Buhu* with modern techniques, highlighting the regional cul-

tural characteristics. Subsequently, Zhang (2021) designed a series of cultural creative derivatives, including items for daily life, stationery, and general use, effectively translating traditional art into functional modern products.

Ren (2021) used *Alashan Buddhist* stone carvings as the basis for an interdisciplinary and integrated application of cultural and creative design. Ren (2021) explored innovative design thinking by combining various artistic and aesthetic views of *Alashan Buddhist* stone carvings, effectively merging traditional art forms with modern design methodologies.

Based on the previous theoretical and practical exploration of the combination of *Sichuan Opera* characters and digital illustration, Liu (2020) integrated the characters of *Sichuan Opera* into digital illustration creation in an innovative way. Liu (2020) took the characters in the classic 'The Legend of the White Snake' *Sichuan Opera* as the theme and utilised the background of the narrative and the distinct visual characteristics of these characters to create digital illustrations. By using three expression styles of digital illustration, namely realistic, stylised (cute) and flattened, the characters of *Sichuan Opera* were applied in the digital illustration for modelling.

In addition to illustration, several scholars have conducted theoretical research on the visual symbols used in *Sichuan Opera*, specifically examining the art of *Sichuan Opera* art faces (e.g., Luo & Li, 2022; Liu, 2021; Ji, 2014) and costumes (e.g., Jin, 2014; Zeng, 2021; Tang & Zeng, 2017; Liu, 2015). In the area of applied research, Cheng (2020) investigated the use of *Sichuan Opera* face styling elements in visual design by taking the facial makeup elements of the characters from the 'Romance of the Three Kingdoms' as examples.

Shen (2021) explored the expression of costume elements from *Sichuan Opera* in oil paintings, focusing specifically on the *Sichuan Opera* art itself. The study analysed the visual elements of the costumes, focusing on their interpretative characteristics

and emotional expression unique to this type of opera. By diverging from existing research methodologies using reverse analysis, Shen's (2021) research explored the connotation of *Sichuan Opera's* costume elements within the emotional and spiritual dimensions.

However, based on preliminary observations in this study, the current illustrative method of depicting the art of *Sichuan Opera* is relatively traditional. Additionally, the illustrative content presented in earlier studies seems relatively homogeneous, which makes it difficult to reflect the rich cultural content and emotional elements of the art of *Sichuan Opera*. Liu's (2020) study focused on the combination of the characters of *Sichuan Opera* with digital illustration, while Cheng (2020) and Ji (2014) used the facial features of the *Sichuan Opera* as modelling elements in the visual design. Tang and Zeng (2017) and Shen (2021) studied the application of *Sichuan Opera* costume elements in animation modelling and oil painting creation, respectively. Therefore, there is a need to conduct a comprehensive exploration of the cultural content and emotional elements in the art of *Sichuan Opera*.

The researchers of the present study argue that the visual symbolic elements of *Sichuan Opera*, an ICH, which also serves as a type of traditional Chinese culture, can be used to communicate the history and culture of *Sichuan Opera* as well as convey its emotional resonance to the younger generation in China (Luo, 2020; Liu, 2021; Cheng, 2020). Luo (2020) noted that the visual symbolic elements in *Sichuan Opera* communicate its visual content and, through artistic processing, convey emotional and aesthetically appealing representational characteristics to audiences across multiple carriers.

Furthermore, the literature on innovative illustrations of *Sichuan Opera* is limited. A search on *Zhi.com* using the keyword '*Sichuan Opera*' revealed that most studies have only focused on theoretical research (e.g., Yin & Zhu, 2024; Ying, 2024; Wu, 2023; Li, 2023; Zhou et al., 2020; Fan,

2017), with little practical research or integration of theory and practice. This study suggests that connecting the art of *Sichuan Opera* with young people through innovative illustrations can help address the issues and challenges it currently faces. The present study also emphasises the need to explore and implement ways to promote and enhance the connection between Gen Z and the art of *Sichuan Opera* in China.

Zhou (2019) argued that innovative forms of illustration can be used to depict ICH in the context of rapid economic and technological development. As evidenced by Luo (2020), Wang (2013), Wu (2022), and Song (2021), the combination of visual and promotional elements can effectively publicise the art and culture of *Sichuan Opera* to the younger generation. In this context, the present study aimed to promote *Sichuan Opera* arts' cultural content and emotional elements to selected members of China's Gen Z through innovative illustrations.

To allow the process of design to be more theoretically sound, Morris (1938) semiotics theory was applied. Semiotics is the study of symbols and includes research on their connotations or meanings, the law governing their development and change, and their relationship to human activities (Guo, 2004). This study adopted the definition of semiotics provided by American philosophers Pierce and Morris, based on logic and semantics. According to Morris (1938), semiotics, as a meta-language, can be divided into three branches: syntactics, which involves the study of structural and formal relationships between symbols; semantics, which is the study of the relationship between symbols and the objects they represent; and pragmatics, which is the study of the relationship between symbols, their environments, and interpreters.

The research questions addressed in this study are as follows: What cultural content and emotional elements of *Sichuan Opera* art can be used for innovative illustration?; How can the identified cultural content and emotional elements be used to develop innovative illustrations?;

How do the selected China's Gen Z view the effectiveness of the developed innovative illustrations in promoting *Sichuan Opera* art?

This study mainly adopts Morris's (1938) semiotic trichotomy as a theoretical framework to explore the interpretation and innovative use of cultural elements from the views of syntactic, semantics and pragmatics. The conceptual framework outlined in this study, as shown in Figure 1, illustrates the application of semiotic theory to analyse the complex relationship among three important concepts examined in the study: the art of *Sichuan Opera*, innovative illustration, and Gen Z in China.

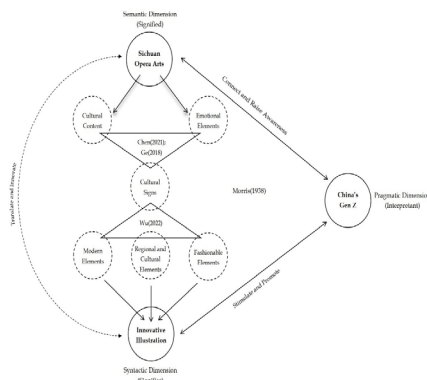


Figure 1. Conceptual Framework of the Study

METHOD

Research Design

Qualitative action-based research was employed as the research design for this study due to several factors. First, it is situated in social practice; second, it requires the participation of both the researcher and the stakeholders; and third, continuous refinement of the design process is needed to achieve an optimised conclusion. According to both Swann (2002) and McNiff and Whitehead (2012) action research follows a cyclical, four-step research process consisting of planning, action, observation, and reflection.

Drawing on past studies by Wang (2013), Wang and Xing (2016), and Cao (2018), the research design of this study was structured into three main phases: pre-design, design, and post-design, where

each phase was tailored to address the research questions posed in this study. The specific objectives and methodologies of each phase are discussed separately in detail in the following sections.

Phase One: Pre-Design Stage

In this action research study, the pre-design phase comprised the 'planning' step. This phase began with identifying a problem or a theme that requires exploration or examination and establishing the stage to envision the approach (Elliott, 1987; Karlsen, 1991). Hence, prior to the creation of the design, the researchers conducted an extensive review of the relevant literature to understand the problems and challenges associated with promoting the art of *Sichuan Opera* and to investigate the possibility of using innovative illustration ideas. In addition, Chen (2021) and Ge (2019) mentioned that the integration of ICH and illustration design needs to consider three critical aspects: cultural content, emotional elements, and artistic depiction.

To gain a deeper understanding and clearer definition of the cultural content and emotional elements needed for designing the innovative illustrations and to obtain the stylistic direction and inspiration, the researchers selected nine (9) experts in Chengdu within the field of *Sichuan Opera* through purposive and snowball sampling methods to conduct in-depth interviews. These experts included three (3) *Sichuan Opera* costume embroidery designer, stage performance artist, and *Sichuan Opera* theatre scriptwriter, respectively. The eligible experts must firstly reside in Chengdu, Sichuan Province and have extensive experience in promoting the art of *Sichuan Opera* to the younger generation in China. In addition, the candidates had to satisfy at least one of the following criteria: having held a senior position in a relevant civil organisation or association for at least five years; having worked in the field of *Sichuan Opera* for at least five years; having published literature in the field of the art of *Sichuan Opera* in the last five years; or having received an achievement or title in

one of the fields of the art of *Sichuan Opera* in the last five years.

Semi-structured interview is considered effective for this phase of the study as it would allow the researchers to delve deeper into the thoughts, feelings, and beliefs of the research experts regarding the art of *Sichuan Opera* and innovative illustration by building on the data collected in the earlier stages of the research (Kallio et al., 2016). Moreover, semi-structured interviews offer flexibility and can create a comfortable setting for both the researcher and participants during the data collection process (Schmidt, 2004). This approach encouraged the participants to provide more personalised responses and enabled the researcher to gather more in-depth and detailed information from the experts regarding the cultural content and emotional elements of *Sichuan Opera*.

Twelve (12) interview questions were developed based on the literature review and their content validity (Tomkins et al., 2017; Lee et al., 2013) was reviewed by three invited experts with extensive academic and professional work experience in the relevant fields.

Thematic analysis process (Braun & Clarke, 2012; Edhlund & McDougall, 2018; Lopezosa, 2020; Di Gregorio, 2000), i.e., familiarising the data; creating initial codes; generate themes; reviewing themes; defining and refining themes; and interpreting and reporting findings, was employed in this study. NVivo 12 was selected for use in analysing the data collected in this study.

The insights gained from this pre-design stage of the research would then be carefully 'planned' and subsequently applied in the second phase of the study, i.e., the design stage.

Phase Two: Design Stage

The design phase of the study refers to the 'action' step in the action research framework. As described by Karlsen (1991), 'action' involves the purposeful and systematic 'doing' or execution of tasks after the researcher has gained in-

formed understanding of and carefully thought about the context and the actions to be taken.

This phase is integral to the research process since it involves the actual creation of the design, which is an extension of the research process itself (Deng, 2017). In this study, the aim of this stage was to integrate and apply the insights and information collected from the first phase to the creative process of developing the innovative illustrations. As suggested by Wu (2022), three main considerations are required for innovative illustration, namely modern, regional, fashionable culture, which are vital to ensure that the illustrations resonate with the young audience while retaining their cultural authenticity.

In this study, the artistic innovation process, as applied by Li and Yang (2021), and the concept of semiotics as suggested by Morris (1938) were put into practice in the creative process. The semiotic approach, with specific considerations of 'semantic dimension' and 'syntactic dimension' of the illustrations were emphasised. It is believed that by considering these dimensions, the innovative expression of *Sichuan Opera's* cultural elements in the illustrations could be better achieved, thereby enhancing their impact on the final artworks (Chen, 2021).

Phase Three Post-Design Stage

The last phase of this study, which is the post-design phase, involved the 'observation' and 'reflection' step in action research. During the 'observation' step, researchers either record their own observation of the actions taken using various effective methods or they gather observations of others; however, observation conducted from multiple views is more conducive and particularly beneficial as it results in a more comprehensive and profound understanding of the action process (Zhang, 1992). Given that social activities are influenced and constrained by many factors in the actual environment, where many of them are unpredictable and uncontrollable and cannot be predetermined in advance,

it is therefore crucial that observation becomes a prerequisite for subsequent reflection, revision of plans, and determination of next steps in action research (Kemmis, 2014). In contrast, ‘reflection’ marks the end of a cyclical process. According to Karlsen (1991), reflection involves organising and describing relevant phenomena such as processes and outcomes, and analysing, interpreting, and evaluating these to provide insights and information to facilitate improvement in the next cycle.

The purpose of the third stage in this study was to evaluate the effectiveness of the designed innovative illustrations in promoting *Sichuan Opera* art among Gen Z in China by seeking their views. To achieve this, the innovative illustrations of *Sichuan Opera* art created were exhibited physically at two purposively selected locations, i.e., *Sichuan Theatre - Jinjiang Theatre* and *People’s Park - Heming Tea House*. It is believed that to collect data in places with cultural industries related to *Sichuan Opera* can better disseminate *Sichuan Opera* and traditional Chinese art and culture. This setup would allow for direct observation of the audience’s reaction to the innovative illustrations during the exhibition, in alignment with Morris’s (1938) ‘pragmatics dimension’.

Additionally, street interviews would be conducted with 25 conveniently selected participants from the China’s Gen Z demographic to collect detailed feedback for further reflection and analysis.

RESULT AND DISCUSSION

Phase One: Pre-Design Stage
Participants Profile

As mentioned earlier, nine (9) experts, including *Sichuan Opera* costume stylists, *Sichuan Opera* stage performance artists, and *Sichuan Opera* theatre script writers. To protect the privacy of the participants and to facilitate the researcher’s next analyses, the participants were anonymised and labelled with the identifiers of Participant A-I as presented in Table 1 which also provided information regarding each

participant’s profile or background.

Table 1. Participants’ Profile in Phase One

Expert	Field of Expertise	Age	Experience (years)
A	Stage Performance Artist	28	14
B	Stage Performance Artist	26	20
C	Stage Performance Artist	27	13
D	Theater Script Writer	27	7
E	Theater Script Writer	26	8
F	Theater Script Writer	28	11
G	Costume Stylist	25	6
H	Costume Stylist	28	20
I	Costume Stylist	27	12

Among the nine participants, five were male and four were female, with their age ranging from 25 to 28 years old. Despite the relative youth of the participants, they possessed a lot of experience in the industry. Specifically, three of them were *Sichuan Opera* stage artists, who had been engaged in *Sichuan Opera* performance for at least 10 years and participated in several stage plays. One is recognised as “*Sichuan ICH Inheritor*”, while the other two held the title “national first-class actors”, which is the highest honour in the field bestowed by China to actors who have outstandingly contributed to the prosperity of the country’s literature and art (Liang, 2022). Additionally, three participants were script writers of *Sichuan Opera*, all of whom had been engaged in the production and direction of *Sichuan Opera* for more than five years at the *Sichuan Opera* Research Institute, with two of them having published research related to *Sichuan Opera*. The remaining three participants were *Sichuan Opera* costume designers, each holding a national stage design level four title. No-

tably, one of them contributed to the dance design for the 2023 *Chengdu* International University Games.

Data Analysis

Table 2 showcases the structured and condensed themes that emerged from the analysis of the data collected from the experts for the cultural content and emotional elements of *Sichuan Opera*, as well as the suggested innovative illustration approaches.

To identify the cultural content and emotional elements in the art of *Sichuan Opera* for innovative illustration, the researcher engaged nine experts in fields related to the art of *Sichuan Opera* for semi-structured interviews. The interview questions addressed the three aspects of culture, emotion and visual depiction as outlined by Chen (2021). The interviews were subsequently analysed using thematic analysis to arrive at the following conclusions.

In terms of cultural content, 37 elements were identified, including traditional aesthetics, literary allusions, and historical traditions. While traditional aesthetics were less prevalent compared to the other two, this does not imply its lack of importance within the cultural content of *Sichuan Opera*. Instead, it reflects the limited representation of traditional aesthetics in the interview samples. Literary allusions emerged as the most frequently mentioned element, aligning with the assertions of previous scholars who noted that much of the *Sichuan Opera* repertoire is based on literary allusions (Zeng, 2021; Wang, 2020; Du, 2023; Yin & Zhu, 2024), which is a finding that indirectly supported by this study's data collected from experts in the field of *Sichuan Opera* art. However, certain historical and traditional elements such as "dialect" and "singing voice" were not selected for the final design due to the challenges in their visualisation, and others were omitted because they were less frequently mentioned. In the end, 26 cultural elements were chosen for incorporation in the creation of the innovative illustrations.

Concerning emotional elements, 14 were identified, comprising the expression of *Sichuan Opera* itself and the audience's attitudes and perceptions. A majority of the experts suggested that the emotional elements in *Sichuan Opera* could be conveyed in illustrations by depicting the scenes of the theatre, in integration with the scripts' content and the characters' traits, and then selecting the corresponding visual elements for use in the illustrations. Given this potential, the researcher identified and summarised the ten most frequently mentioned emotional elements that aligned with the cultural content. These elements included the theatre and tea-house as scenic elements, "The Legend of the White Snake", "Romance of the Three Kingdoms", and "Dream of Red Chamber" as script content, and the traits of pivotal characters such as Bai Suzhen, Abao, and Zhang Fei.

In the existing studies, it is mentioned that the emotion carried by intangible cultural heritage includes four aspects: sense of identity, inheritance emotion, emotional resonance, and aesthetic emotion (Wei & Liu, 2020; Wu, 2023; Ma, 2021; Xue, 2022; Qu, 2021; Hou, 2018). Both experts in the field of *Sichuan Opera* art and members of the China's Gen Z in the *Chengdu* area highlighted several emotional aspects in the interviews. These included a strong sense of identity with the art and culture of *Sichuan Opera*, the importance of its heritage, a deep affection for the opera, and the emotional resonance triggered by its performance styles and presentation techniques. They also mentioned the aesthetic enjoyment and appreciative emotions experienced by the performers and the audience alike during performances or while engaging with the works of *Sichuan Opera*.

In relation to innovative illustration, the researchers also considered the opinions of experts. However, in relation to the first research question (RQ1), the elements discussed in the interviews were less numerous and lacked specificity; initially, 11 related concepts were identified, including conceptual innovation, idea

Table 2. Advanced Thematic Coding in Phase One

Advanced Themes	Primary Themes	Original Concepts	Concrete Concepts
Cultural Content	Traditional aesthetics	Costume	<i>Tuanhua</i>
			<i>Mangpao</i>
			Cloud shoulder
			Head wear
			Palace robe
			Embroidery
		Make-up	Facial makeup
			Female character
		Form of expression	Traditional instrument
			One table and two chairs
			<i>Gaoqiang</i>
			Realistic props
			Singing tune
			Dialects
			Curtain
	Historical inheritance	Perform occasion	Theatre
			Tea house
		Perform the actions	Face-changing
			Spitting fire
			Sword dance
			Water sleeves
			Long silk dance
			Pheasant tail feathers on warriors' helmets (opera)
			Ring of flames
			Fan
		Role	Bai Suzhen
			Zhao Yun
			Zhang Fei
			Guan Yu
	Literary allusion	Repertoire	The Legend of the White Snake
			Romance of the Three Kingdoms
			Dream of the Red Chamber
			The Sigh of Love
			Journey to the West

innovation, and form innovation. These specific innovative elements were further explored during the creation phase.

Additionally, the researchers based the data collection around the three key aspects of culture, emotion, and illustration, which need to be considered to integ-

rate the intangible cultural heritage with illustration design, as Chen (2021) noted. The results obtained further verified the three major considerations essential for innovative illustration, namely modern culture, regional culture, and fashionable culture, as suggested by Wu (2022).

Advanced Themes	Primary Themes	Original Concepts	Concrete Concepts
Emotional Elements	Sichuan Opera expresses itself	Roles and Characters in <i>Sichuan Opera</i>	Law is greater than love
			Young and handsome
			Ungrateful
			Brave
			Righteous
			Loyal
		Traditional Morality and Philosophy	Principle of feudal moral conduct
			Loyalty, filial piety
			Morality and ethics
			Family and national sentiments
Innovative Illustration	Audience attitude	Yearning for <i>Sichuan Opera</i>	Childhood memory
			The feeling of old <i>Chengdu</i>
		Protection of traditional culture	<i>Sichuan and Shu culture</i>
			Opera culture
	Conceptual innovation	Film combined	-
		Process combined	-
		Local building combined	-
		Festival combined	-
		Game combined	-
	Idea innovation	Activity promotion	-
		Visual element	-
		Auditory element	-
		Modern elements	-
	Form innovation	Traditional culture combined	-
		Modern pop culture elements	-

Phase Two: Design Stage
Design Framework and Flow

To ensure that the entire innovative illustration process adequately incorporates the artistic and cultural content as well as the emotional elements of *Sichuan Opera* (Chen, 2021; Ge, 2018), the second stage of this study adopted a structured design approach. Drawing from the design process proposed by Li and Yang (2021) and incorporating the two dimensions of semiotics described by Morris (1938), an illustration design framework appropriate for this study was developed. The framework included the syntactic and semantic

aspects essential for effective communication through art.

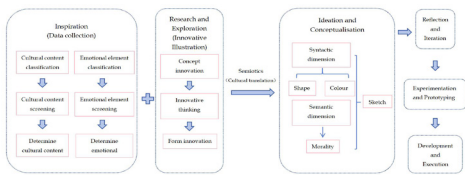


Figure 2. Innovative Illustration Design Framework

As shown in Figure 2, the framework of innovative illustration emphasised in the second phase of this study included six stages: inspiration, research and explora-

tion, ideation and conceptualisation, reflection and iteration, experimentation and prototyping, as well as development and execution.

The first stage of the second phase of this study, focusing on innovative illustration design, began with 'inspiration'. This stage involved collating information on the cultural content and emotional elements of the art of *Sichuan Opera* identified in the first phase of the study, including classification and screening until these elements were finalised. Subsequently, the second stage, which is research and exploration, involves selecting innovative elements that could be applied by drawing from the previous case studies of innovative illustration and the innovative content identified from analysis (conceptual innovation, innovation thinking, and form innovation), as well as further interaction and communication with experts.

In the third stage, the focus was on ideation and conceptualisation which involved using the two dimensions of syntactic and semantics in Morris's (1938) semiotics to extract and visualise the cultural content, emotional elements, and innovative elements, including their moral, shape and colour (Zhu, 2004; An, 2023; Zhang, 2022). This process involved an attempt to integrate these elements to generate three concept sketches. The fourth stage involved reflection and reiteration of the sketches produced, mainly through seeking expert advice. The fifth stage marked the beginning of experimentation and prototyping, during which the innovative illustrations were redesigned based on the experts' suggestions until the final image was achieved. In the sixth stage, the researchers detailed and coloured the final three illustrations and implemented the final enhancements to the finished product, based on three Sichuan Opera themes, namely: "The Legend of the White Snake", "Romance of the Three Kingdoms", and "A Dream of Red Chamber".

Creative Output 1: Dance of Fate

The main elements in the illustration

"Dance of Fate" integrated the key elements from the plot of "The Legend of the White Snake" into its design, presenting the dual personas of "Wen" and "Wu" as portrayed in *Sichuan Opera*. The illustration featured the storylines of "Meet at Broken Bridge", "Borrow an Umbrella" and "Water Man Jinshan Temple", and incorporated the relevant performance techniques, including water sleeves, face-changing, and the fire ring. The character "Fahai" is distinctively portrayed in a punk mechanical style. The "snake" image was derived from the narrative, representing the green and white snakes that have been transformed into humans and are related to the *Dragon Boat Festival*. The illustration also included other elements such as local architecture, traditional cultural symbols, and modern elements such as VR glasses. These were treated with warm tones, which were chosen to enhance the overall visual impact of the illustration while retaining the original colours associated with the characters' form.



Figure 3. Completed Illustration of "The Legend of the White Snake" *Sichuan Opera* Theme

Creative Output 2: Legacy of Heroes

The main elements in the illustration "Legacy of Heroes" comprised characters from "Romance of the Three Kingdoms", including Zhang Fei, Guan Yu and Zhao Yun, which were depicted using Sichuan Opera characters' traditional shapes and colours. The narrative and interpretation of "Romance of the Three Kingdoms", mainly revolve around political struggles,

wars and heroes in the Three Kingdoms, reflecting the changes of the times. Therefore, the selected innovative cultural elements mainly included local architecture, modern architecture, and high-speed rail. The juxtaposition of ancient architecture which was contrasted with high-speed rail and modern architecture visually reflected the changes of the times. Additionally, as the costumes of the three main characters feature python patterns, which are usually embroidered, the embroidery process was emphatically showcased in the artwork. In selecting other traditional cultural elements, the kite was incorporated as a symbolic element within the artwork due to the consideration of its semantic significance. In terms of overall colour usage, warm tones were employed as the main tone following expert recommendations.



Figure 4. Completed Illustration of “Romance of the Three Kingdom” *Sichuan Opera* Theme

Creative Output 3: Memories of Rounge

The main elements in the illustration “Memories in Rouge” primarily featured characters from “Dream of Red Chamber”, including Jia Baoyu, Lin Daiyu, Wang Xifeng and Xue Baochai, which were rendered in the original shapes and colours of *Sichuan Opera* characters. Because the characters in the play are all “Dan”, “Dan” styling on the headdress is very beautiful, according to the expert’s advice, other cultural elements in the “Diancui” as an innovation, and The details were drawn. Following the advice of the experts, the “Diancui”, which is a technique from other

cultural elements, was incorporated as an innovative element where the details were drawn into the illustration. Additionally, in the depiction of scenes set in theatres and teahouses, the researcher also implemented the suggestions of experts to portray the scenes of *Sichuan Opera* performers in a more specific and vivid manner, including the depiction of traditional and western instruments (pianos), and the crafting of the atmosphere experienced by audiences while watching *Sichuan Opera* performance. The colour scheme throughout the illustration utilised warm tones to set off the atmosphere of the performance.



Figure 5. Completed Illustration of “A Dream of Red Chamber” *Sichuan Opera* Theme

Phase Three: Post-Design Stage

Participants Profile

To gauge the perception of China’s Gen Z on the effect of the innovative illustrations in promoting *Sichuan Opera* art, the researcher selected individuals born between 1995 and 2010 (aged 14-29 years) and conducted street interviews during the offline exhibition. By considering the amount of foot traffic (Zhang, 2022) and the association with cultural industries (Wang, 2023), the two selected venues were: *Sichuan Theatre* - Jinjiang Theatre and People’s Park - Heming Tea House

A total of 25 individuals were interviewed on the street using convenience sampling. The specific demographic breakdown of the interviewee sample is presented in Table 3.

Table 3. Participants’ Profile in Phase Three

Item	Classification	Frequency
Gender	Male	9
	Female	16
Age Group	Stage Performance Artist	9
	Theater Script Writer	7
	Theater Script Writer	9
Identity	Student	14
	Worker	11

The results of the advanced themes and the specific frequency of their corresponding primary themes are presented in Table 4. The process involved further categorisation of the nine relevant primary themes to determine the corresponding names for the advanced themes.

Table 4. Advanced Thematic Coding in Phase Three

Item	Classification
Visual attraction	Visual attraction
	Innovative format
	Picture-rich
Emotional expression	Emotional expression
Youth acceptance	Youth acceptance
	Social media communication
Awareness of traditional culture	Cultural preservation
	Cultural promotion

During the sample data analysis, the researcher observed that in terms of visual attraction, most participants could directly identify the content expressed in the illustrations, such as the *Sichuan Opera* repertoire and the character roles. However, a small number of participants were initially drawn to the innovative illustrations’ modern cultural and technological elements before engaging with the content of the illustrations. Some participants first noticed that the characters in the illustrations were from literary works and then recognised the theme of *Sichuan Opera* in the illustrations through their observation of

the depiction of the characters’ costumes.

Regarding emotional expression, most participants mentioned that the depiction of the teahouse, theatre scenes, and local architecture resonated deeply with them and evoked strong emotional connections as locals. Furthermore, the portrayal of the characters’ relationships and the storyline evoked memories of classic moments and enabled them to relate directly to the emotions conveyed in the plays. The participants’ responses validated the experts’ advice’s pivotal role at this research project stage.

In terms of acceptance by young people, the innovative illustrations incorporated diverse cultural elements that extended across different cultures, backgrounds and themes, meeting Gen Z’s aesthetic preference for diversity and inclusiveness. For example, in the group of 14- to 19-year-olds, many highlighted that this cultural diversity including the integration of modern elements comprising the space elements, VR glasses, and high-speed rail made the illustrations more appealing to Gen Z.

Concerning social media communication, the study found through observation that participants were engaged in exploratory behaviours during the exhibition, including taking photographs and conducting searches online. These behaviours promoted the art of *Sichuan Opera* to a certain extent through the sharing of photos and associated keywords on social media. Moreover, the participants themselves acknowledged that illustrations are easy to share and spread via social media. Considering that members of Gen Z are the main users of social media, it can be concluded that utilising innovative illustrations to promote the art of *Sichuan Opera* is reasonably effective in terms of social media communication from their view.

Regarding awareness of traditional cultural preservation, most participants believed that the innovative illustrations piqued their interest in *Sichuan Opera* and motivated them to explore the opera in depth. Some participants remarked that

these innovative illustrations can serve as educational tools to convey information about the history, culture, and performance styles of *Sichuan Opera*. Such an approach helps young people better understand and appreciate Sichuan Opera and raise awareness of traditional cultural preservation and inheritance.

CONCLUSION

This study explored the effectiveness of using innovative illustrations to promote the art of *Sichuan Opera* among Gen Z in China. It entailed an in-depth analysis of the characteristics of Gen Z and an exploration of the cultural content and emotional elements in the art of *Sichuan Opera*. The research was structured around three key views: visual attractiveness, emotional expression, and dissemination of innovative illustrations.

Through this study, the traditional art of *Sichuan Opera* has been successfully presented to Gen Z through innovative illustrations. As a form of visual expression in the digital age, the researcher utilised innovative illustrations to incorporate modern graphic elements and unique design styles with cultural and emotional elements of *Sichuan Opera* to visually cater to Gen Z's aesthetic and cultural needs for personalisation and multiculturalism. This approach has made the art of *Sichuan Opera* more accessible and appealing to the younger generation, effectively bridging the gap between traditional culture and contemporary youth.

Additionally, the study found a balance between tradition and innovation in depicting the art of *Sichuan Opera*. The illustrations preserve the traditional elements of Sichuan opera while captivating the interest of the Gen Z audience through modernised forms of expression. The innovative illustrations promote the art and play an educational function in cultural transmission. By integrating cultural content, emotional elements and innovative elements in the innovative illustrations, these artworks resonated with Gen Z, faci-

litating their understanding and acceptance *Sichuan Opera's* cultural connotations and promoting the preservation, education, and inheritance of traditional culture among the younger generation.

Finally, the study discovered that, in the short term, the use of innovative illustrations to promote the art of *Sichuan Opera* achieved positive outcomes in terms of visual appeal, social communication, and acceptance among the younger generation, with Gen Z demonstrating a high level of receptivity towards this type of promotion.

Overall, the use of innovative illustrations as a medium to promote the dissemination of the art of *Sichuan Opera* among China's Gen Z has successfully merged traditional culture with modern aesthetics. This fusion has introduced young people to the art of *Sichuan Opera* in a novel and engaging manner. However, it is also crucial to consider the potential differences between short-term effects and long-term impacts that may arise in the promotional process and the variability among different Gen Z subgroups. Future research should further delve into the long-term effects of this promotional approach and examine the variations in responses among Gen Z across different geographical and cultural contexts.

REFERENCES

- Aesthetic Perspective. *Hunan Packaging* (01), 49-51+63. doi:10.19686/j.cnki.issn1671-4997.2021.01.015.
- An, J. (2023). The occurrence of modern Chinese art semiotics and its perceptual dialectic. *Journal of Renmin University of China*, 37(3), 150.
- Braun, V., & Clarke, V. (2012). Thematic analysis. *American Psychological Association*.
- Cao, Y.R. (2018). Teaching action research of mind mapping in the field of art design-application in junior high school (*Master's thesis, Tianshui Normal College*). <https://kns-cnki-net-443.bjmu.98tsg.com/KCMS/detail/detail.as>

- px?dbname=CMFD201901&filename=1018137105.nh
- Chen, H.W., & Wu, Y.Q. (2021). Visual Design and Packaging Illustration of Non-Heritage Cultural and Creative Brands under Modern
- Chen, L.Z. (2021). The interaction and development of non-heritage culture and illustration design. *Art View* (24), 57-58.
- Chen, Q.Y. (2021). Design Research on the Application of Miao Clothing Patterns in Cultural and Creative Products (Master's thesis, Xijing College).
- Cheng, X.L. (2020). Research on the Application of Sichuan Opera Facebook Modelling Elements in Visual Design (Master's thesis, Sichuan Normal University).
- Deng, Z.S. (2017). Creative practice and research: a pathway to creative learning. *Art Review*, (32), 23-50.
- Di Gregorio, S. (2000, September). Using NVivo for your literature review. In *Strategies in qualitative Research: Issues and Results from Analysis Using QSR NVivo and NUD* IST Conference at the institute of Education, London* (pp. 29-30).
- Dong, J. (2018). Research on Digital Promotion of Sichuan Opera Art IP. *Theatre House* (25), 7-8.
- Du, J.H. (2023). The innovation of Sichuan Opera. *Sichuan Theatre* (05), 4-7.
- Du, J.H. (2023). The innovation of Sichuan Opera. *Sichuan Theatre* (05), 4-7.
- Edhlund, B., & McDougall, A. (2018). *NVivo 12 essentials*. Lulu. com.
- Elliott, J. (1987). Educational theory, practical philosophy and action research. *British journal of educational studies*, 35(2), 149-169.
- Fan, J. (2017). Research on the Application of Chengdu Culture in Digital Illustration Design. *Beauty and Times* (Previous) (09), 76-78. doi:10.16129/j.cnki.mysds.2017.09.031.
- Gao, J.Q., & Liu, Y. (2020). Balance of Artistic Innovation and Insistence on the Individuality of Sichuan Opera--A Brief Discussion on the Comprehensive Qualities that Contemporary Directors of Sichuan Opera Should Possess. *Theatre House* (14), 9-10.
- Ge, F. (2019). Research on the Use and Development Path of Folk Non-legacy Cultural Art Forms in Digital Illustration--Taking Huangmei Puppet Theatre as an Example. *Journal of Chizhou College* (06), 90-92. doi:10.13420/j.cnki.jczu.2019.06.027.
- Ge, H. (2018). Introduction to the interaction and development of non-heritage culture and illustration design--Taking Linwu Nuo culture as an example. *Art Science and Technology* (01), 50.
- Guo, H. (2004). A comparison of Saussurean semiotics and Piercean semiotics. *Chinese Foreign Languages*, (2), 26-29.
- Hu, B.H. (2019). Research on the current status of inheritance and protection of intangible cultural heritage--Taking Chongqing Sichuan Opera as an example. *Art Research* (03), 68-71. doi:10.13944/j.cnki.ysyj.2019.0196.
- Hu, B.H. (2019). Research on the current status of inheritance and protection of intangible cultural heritage--Taking Chongqing Sichuan Opera as an example. *Art Research* (03), 68-71. doi:10.13944/j.cnki.ysyj.2019.0196.
- Ji, R.X. (2014). Research on the inheritance and application of Sichuan Opera face painting art. *Modern Decoration (Theory)*, (10), 125-126.
- Jin, Q. (2014). On the art of Shu embroidery in Sichuan Opera costumes. *Popular literature and art* (13), 103.
- Jingjing Zhao (2021). Analysis on The Application of Cultural Creative Product Design in Sichuan Opera. *Communication International Journal of Higher Education Teaching Theory* Volume (4), 2.
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, 72(12), 2954-2965.
- Karlsen, J. I. (1991). Action research as a

- method. *Participatory action research*, 143-158.
- Karlsen, J. I. (1991). Action research as a method. *Participatory action research*, 143-158.
- Kemmis, S. (2009). Action research as a practice-based practice. *Educational action research*, 17(3), 463-474.
- Lee, C. J., Sugimoto, C. R., Zhang, G., & Cronin, B. (2013). Bias in peer review. *Journal of the American Society for Information Science and Technology*, 64(1), 2-17.
- Li, D., & Yang, C. (2021). Research on regional tourism cultural and creative product design method. *Design* (17), 61-65.
- Li, J.Z. (2019). The Inheritance of Opera in the Information Society (*Doctoral dissertation, Shanxi Normal University*). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2020&filename=1020010007.nh>
- Li, Y. (2023). The multiple landscapes of contemporary Sichuan theatre - Observations on the first *Sichuan Opera* performance in 2023. *Sichuan Theatre* (12), 17-20.
- Liang, W. (2022). Han Tongsheng, actor of the National Theatre of China, national level: Art workers should have a sense of responsibility. *China's Children* (03), 54-57.
- Liu, P. (2021) Performance and research of cultural creative design of *Sichuan Opera* face painting. *Oriental Collection*(9)
- Liu, S.Y. (2020). The fusion of intangible cultural heritage *Sichuan Opera* and new media. *Media Forum* (15), 174.
- Liu, W.L. (2015). Status and Development of *Shu* Embroidery Craft in *Sichuan Opera* Costumes. *New Campus: Reading Edition*, (8), 181.
- Liu, Y.Z. (2019). Research on the application of *Sichuan Opera* art elements in digital illustration. *Journal of Jiamusi Vocational College*(03),206-207.
- Liu, Y.Z. (2020). Research on the application of modelling of *Sichuan Opera* characters in digital illustration (*Master's thesis, Sichuan Normal University*). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202002&filename=1020746740.nh>
- Liu, Y.Z. (2020). Research on the application of modelling of *Sichuan Opera* characters in digital illustration (*Master's thesis, Sichuan Normal University*). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202002&filename=1020746740.nh>
- Liu, Z.Q. (2014). The development prospect of Chinese illustration from the world illustration market. *Heilongjiang Education (Theory and Practice)* (05),17-18.
- Lopezosa, C. (2020). Entrevistas semiestructuradas con NVivo: pasos para un análisis cualitativo eficaz. Lopezosa C, Díaz-Noci J, Codina L, editores *Metodos Anuario de Métodos de Investigación en Comunicación Social*, 1. *Barcelona: Universitat Pompeu Fabra*; 2020. p. 88-97.
- Luo P. (2013). Research on inheritance and protection strategies of *Sichuan Opera* from the perspective of intangible cultural heritage. *Sichuan Drama* (01),43-45.
- Luo, M., & Li, T. (2022-09-06). Theatre props designer *Xiong Qi*, the new generation of the pear garden, hand-paints more than 2,000 *Sichuan Opera* faces. *Sichuan Daily*,010.
- Luo, S.W. & Zhan, R.T. (2020). The Inheritance and Preservation of *Sichuan Opera* in *Ba Shu* Culture. *Theatre House* (06), 29+31.
- Luo, Y.X. (2020). Research on the Role of Visual Symbolic Elements in the Cultural Communication of *Sichuan Opera* Master's Degree Thesis, (*Chengdu University of Technology*).<http://link--cnki--net--https.cnki.mdjsf.utuvpn.utu-edu.com:9000/doi/10.26986/d.cnki.gcdlc.2020.000539> doi:10.26986/d.cnki.gcdlc.2020.000539.
- Luo, Y.X. (2020). Research on the Role of Visual Symbolic Elements in the Cultural Communication

- of *Sichuan Opera Master's Degree Thesis*, (Chengdu University of Technology).<http://link--cnki--net--https.cnki.mdjsf.utuvpn.utu.edu.com:9000/doi/10.26986/d.cnki.gcdlc.2020.000539> doi:10.26986/d.cnki.gcdlc.2020.000539.
- Ma, J.Y. (2021). Master's thesis on the application of traditional *Shu* brocade colours in modern poster design, (Lanzhou University of Technology).<https://link.cnki.net/doi/10.27206/d.cnki.gsgsu.2021.001470>doi:10.27206/d.cnki.gsgsu.2021.001470.
- McNiff, J., & Whitehead, J. (2012). Action research for teachers: A practical guide. *David Fulton Publishers*.
- Miao, M.H., & He, J. (2022). Design elements and artistic characteristics of Chinese style illustration. *Design* (05), 54-57.
- Morris, C. W. (1938). Foundations of the Theory of Signs. In *International encyclopedia of unified science* (pp. 1-59). *Chicago University Press*.
- Mou, X.Y. (2019). Reflections on the inheritance and development of *Sichuan Opera* art. *Art Appreciation* (30), 199-200.
- Pan, Y., & Jiang, H.L. (2021) The Enlightenment of *Italian Opera* to the Development of Chinese Opera. *Open Access Library Journal*, 8, 1-6. doi: 10.4236/oalib.1107593.<https://www.scirp.org/journal/paperinformation.aspx?paperid=110116>
- Qiu, W.B. (2020). Research on Animation Design of *Sichuan Opera* Characters Master's Degree Thesis, (Xihua University). <http://link--cnki--net--https.cnki.mdjsf.utuvpn.utu.edu.com:9000/doi/10.27411/d.cnki.gscgc.2020.000380> doi:10.27411/d.cnki.gscgc.2020.000380.
- Qu, X. (2021). Path of synergistic development of folk art and art design in the context of non-heritage. *Knowledge Base* (09), 117-118.
- Ren, J. (2021) Design and Research on Cultural and Creative Products of Buddhist Rock Carvings in Alashan under the Background of "Non-Heritage+". (Doctoral dissertation, Inner Mongolia University).
- Schmidt, C. (2004). The analysis of semi-structured interviews. *A companion to qualitative research*, 253(41), 258.
- Shen, X.C. (2021). Exploration on the application of *Sichuan Opera* costume elements in oil painting creation (Master's thesis, *Sichuan Normal University*).
- Song, W. (2021). "Research on CG Illustration Design of Kaifeng Non-legacy Culture (Master's thesis, Henan University). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202301&filename=1021776006.nh>
- Swann, C. (2002). Action research and the practice of design. *Design issues*, 18(1), 49-61.
- Tang, J., & Zeng, J. (2017). The use of *Sichuan Opera* costume elements in animation modelling. *Silk Road Vision*, (15), 68-69.
- Tomkins, A., Zhang, M., & Heavlin, W. D. (2017). Reviewer bias in single-versus double-blind peer review. *Proceedings of the National Academy of Sciences*, 114(48), 12708-12713.
- Wan, P., & Cai, S.B. (2010). Historical inheritance and equipment improvement of *Sichuan Opera's* spitting fire and face-changing stunts. *Sichuan Theatre*(02), 111-114.
- Wang N. (2023). Witness of archives: park city, new scene of happy life. *Sichuan Archives* (06), 54.
- Wang, N., & Xing, Y.Z. (2016). Exploration of Action Research in the Field of Public Welfare and Philanthropy: An Example of the Programme Design of "Essence of Help - Beautiful Countryside". *China Nonprofit Review* (01), 245-254.
- Wang, Y.. (2013). A new breakthrough in the field of oral communication-An action research on the design and implementation of the teaching unit of second grade "I say you draw" based on the comparison between

- China and Japan. *Talent* (04), 176-177.
- Wang, Y.. (2013). A new breakthrough in the field of oral communication-An action research on the design and implementation of the teaching unit of second grade "I say you draw" based on the comparison between China and Japan. *Talent* (04), 176-177.
- Wang, Y.L. (2018). A review of papers related to the inheritance and protection of *Sichuan Opera*. *Theatre House* (25),23.
- Wei, N., & Liu, L. (2020). A Study on the Application of Illustration and Cultural Derivatives in the Promotion of Non-heritage. *Hebei Pictorial* (2), 3.
- Wen, J., & Li, C.Y. (2021-07-30). How young people can inherit Chinese traditional culture. *China Ethnic News*, 005.
- Wu, H.Y. (2023). Research on the current situation and protection of non-legacy culture in China. *Popular Literature and Art* (12), 1-3. doi:10.20112/j.cnki.ISSN1007-5828.2023.12.001.
- Wu, J. (2022). Ethnic elements and artistic creativity. *Art Appreciation* (24),24-27.
- Wu, P. (2023). The spatial and temporal dimensions and narrative orientation of current *Sichuan Opera* cultural dissemination: Reflections on pan-mediaisation, post-metaphor culture and the "Belt and Road" initiative. *Sichuan Theatre* (12), 21-24.
- Wu, P. (2023). The spatial and temporal dimensions and narrative orientation of current *Sichuan Opera* cultural dissemination: Reflections on pan-mediaisation, post-metaphor culture and the "Belt and Road" initiative. *Sichuan Theatre* (12), 21-24.
- Wu, T. (2022). Research on the performance of illustration art in the design of non-heritage cultural derivatives. *Culture Industry*(14),83-85.
- Xia, C.C. & Gao, W.R. (2022). Exploring the contemporary application of traditional Chinese New Year paintings. *Shanghai Arts & Crafts* (01), 50-51.
- Xiang, H.Y. (2023). Thinking about the development and inheritance of *Sichuan Opera* into national reading. *Sichuan Theatre* (10),142-144.
- Yao, Y., & Wang, B. (2012). The Dilemma of Sichuan Opera: A Report on the Present Situation of the "No. 1 Opera in the World". *New West*, (3), 19-21.
- Yin, D. J. & Zhu, R. W. (2024). Exploring the Aesthetic Gene of Song and Dance in Opera: An Example from the *Sichuan Opera*"The Story of Red Plum". *Chinese Theatre* (02), 73-75.
- Yin, D. J. & Zhu, R. W. (2024). Exploring the Aesthetic Gene of Song and Dance in Opera: An Example from the *Sichuan Opera*"The Story of Red Plum". *Chinese Theatre* (02), 73-75.
- Ying, Y.L. (2024). "Digital dissemination and development of *Sichuan Opera* under cloud technology. *Theatre House* (02), 31-33.
- Zeng, W.W. (2021). Study on the Costume of Traditional *Sichuan Opera*"The Legend of the White Snake" (Master's Thesis, Beijing Institute of Fashion Technology). <https://link.cnki.net/doi/10.26932/d.cnki.gbjfc.2021.000235doi:10.26932/d.cnki.gbjfc.2021.000235>.
- Zhang, L.J. (2021). A Study on the Creative Design and Promotion of Mountain West Heritage Cloth Tigers in the Context of Visual Culture (Master's thesis, Guilin University of Electronic Science and Technology).
- Zhang, L.P. (2022). Master's thesis on stay preference study in Chengdu People's Park based on PPGIS, (*Sichuan Agricultural University*). <https://link.cnki.net/doi/10.27345/d.cnki.gsnyu.2022.000885doi:10.27345/d.cnki.gsnyu.2022.000885>.
- Zhang, M.X., & Minxuan, Z. (1992). A study of "action research". *Journal of East China Normal University (Education Science Edition)*, 10(1), 63.
- Zhang, Y. (2022). Properties and applications of art design semiotics. *Culture Industry*.
- Zhang, Y. (2022). Properties and applications of art design semiotics. *Culture Industry*.
- Zheng, X.Y., Zhou, L.F., Song, J.X., Zeng,

- X., & He, W.J. (2020). Study on the Application of *Ba Shu* Cultural Elements in the Modelling Design of Cultural and Creative Products--Taking the Cultural and Creative Product Design of *Sichuan Opera* as an Example. *Western Leather* (21), 108-109.
- Zheng, X.Y., Zhou, L.F., Song, J.X., Zeng, X., & He, W.J. (2020). Study on the Application of *Ba Shu* Cultural Elements in the Modelling Design of Cultural and Creative Products--Taking the Cultural and Creative Product Design of *Sichuan Opera* as an Example. *Western Leather* (21), 108-109.
- Zhong, Q.S. (2011). The Professional Development of Illustration in China's Cultural and Creative Industries Doctoral Dissertation, (*China Academy of Art*). http://kns--cnki--net-https.cnki.mdjsf.utuvpn.utuedu.com:9000/kcms2/article/abstract?v=aHgEko1xHjgbH0JLTx9Ge1gaNc8ktEXiLSIkvx3-q2bVuY_wliYgz3On-QTd-HZbI7cLrjhWwHEP9i99mX8c-90T36QvkGCg2g3qK-kXJu4xsY5sQ9Xdq0krdmNoYgnzA9XmoS4qKPGWbJ7FfJtSnFVg==&uniplatform=NZKPT&language=CHS
- Zhou, H. (2019, November). The Application of Chinese Folklore Intangible Cultural Heritage Elements in Contemporary Commercial Illustration Design. In 3rd International Conference on Art Studies: Science, Experience, Education (ICASSEE 2019) (pp. 245-248). *Atlantis Press*.
- Zhu Y.M. (2004) Graphics, Symbols and Language in Visual Communication Design[J]. *Journal of Nanjing Art Institute (Art and Design Edition)*, 2004(1): 58-62.
- Zhu, S.S., & Luo, S.J. Recycling of heritage elements based on design semiotics in product design[J]. *Journal of Zhejiang University (Engineering Edition)*, 2013, 47(11): 2065-2072.
- Zou, X.Y. (2021). Research on the Use of Intangible Cultural Elements in Illustration Design--Taking *Qiang Culture* as an Example. *Peony* (10), 190-191.